15 ANIVERSARIO ENCUENTROS INTERNACIONALES EN BIOMEDICINA

FIFTEEN YEARS OF BAEZA'S WORKSHOPS

CURRENT TRENDS IN BIOMEDICINE 2004-2019

Universidad Internacional de Andalucía

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Universidad Internacional de Andalucía

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José Ignacio García Pérez. Rector.

PRESENTATION
15 YEARS OF BAEZA WORKSHOPS

The Universidad Internacional de Andalucía (UNIA) was established as a meeting point for knowledge, teaching and cutting-edge research. It is a unique institution in that it does not rely on its own teaching staff. But this is actually one of its strengths, allowing it to connect Andalusia's public system, both within and outside of the community. It is consistently attentive to the needs of society, especially with regard to individual progress and well-being.

In this context, the *Current trends in Biomedicine* workshops were created in 2004. These workshops are spaces for dialogue and reflection on the latest advances on topics such as the nervous system, genetic transcription or the role of bacteria in human health. Approximately 1,000 people have participated in these workshops, in which the UNIA contributes all of its logistic capacity and has made a million-euro investment.

This publication commemorates the 15th anniversary of the project. It is the quality of the proposals received, rather than the time of its existence, that best indicates that the consolidation phase has been reached. The current objective is to improve the project's notoriety and the intensity of the debates. This will ensure that these seminars are essential events on international scientific calendars.

A review of the trajectory of the workshops makes it possible to identify three main success factors. The first, without a doubt, is the involvement of the UNIA's Biomedicine Advisory Council. This includes the participation of renowned researchers such as José Luis Gómez-Skarmeta, Aurora Bueno Cavanillas, Josep Casadesús and Diego Rodríguez Puyol, under the leadership of José López Barneo. Their work, a testament

to academic rigour and excellence, consists of assessing and defining which proposals will be included in the yearly workshop programming.

This leads to the second key factor, the creation of a world-class plural forum. Year after year, top international experts come together, including five Nobel prize winners, such as Professor Thomas C. Südhof, who received the call from Sweden just minutes after arriving at the Universidad Internacional de Andalucía. This anecdote provides a glimpse into the level of the workshops' speakers and attendees, leaders in their respective fields. They are at the forefront of knowledge.

As expected, there is a large presence of the Andalusian scientific community at the workshops. The UNIA is committed to supporting local R&D+i, ensuring that its scope extends beyond the regional borders. Therefore, the biomedicine workshops open up the doors to the creation of new connections, promoting the implementation of shared projects and introducing young researchers to the international dynamics.

Finally, a third factor relates to the proper development of this initiative in its setting. The Antonio Machado campus boasts a privileged location, the Palacio de Jabalquinto, in Baeza (Jaén). This city, declared a UN World Heritage Site, is filled with incredible architectural works and natural beauty, promoting reflection and coexistence. Here, the UNIA has a residence and work facilities that assist in workshop preparation, offering an excellent climate for study.

The seminar model developed by the UNIA has become a useful instrument for science and society in general. Therefore, since its inception, efforts have been made to replicate this formula in other areas and at other locations. At the time of the publication of these pages, the UNIA has opened additional Baeza workshops on the environment and cultural heritage. And the goal is to advance even further... to northern Africa, considering the historic link. And to Ibero-America, where several encounters have already been created under the leadership of the La Rábida group. Spreading knowledge for social development.

José Ignacio García Pérez
Rector of Universidad Internacional de Andalucía

PRESENTACIÓN
15 AÑOS DE LOS *WORKSHOPS* DE BAEZA

La Universidad Internacional de Andalucía nace como un punto de encuentro del conocimiento, la docencia y la investigación de vanguardia. Como institución es singular: no dispone de profesorado propio. Pero esto es, a su vez, una fortaleza, ya que la sitúa como un instrumento que conecta el sistema público andaluz tanto dentro como fuera de la comunidad. Atenta en todo momento a las necesidades sociales, en particular aquellas que inciden en el progreso y el bienestar de las personas.

Bajo esta premisa, en 2004 se ponen en marcha los workshops *Current trends in Biomedicine*. Un espacio destinado al diálogo y la reflexión en torno a los últimos avances sobre el sistema nervioso, la transcripción genética o la implicación de las bacterias en la salud humana, entre otras materias. Cerca de 1.000 personas han participado en esta cita, donde la UNIA ha puesto toda su capacidad logística y una inversión que, hasta la fecha, suma el millón de euros.

Esta publicación conmemora el 15 aniversario de este proyecto. Pero no es el tiempo, sino la calidad de las propuestas recibidas, el mejor indicador de que se ha alcanzado una fase de consolidación. Conscientes de su juventud, el objetivo ahora es incidir en mejorar la notoriedad y la intensidad de los debates. Haciendo de estos seminarios una visita cada vez más imprescindible en el calendario científico internacional.

Un repaso a la trayectoria de estos *workshops* hace posible identificar tres factores de éxito. El primero, no cabe duda, es la implicación del Comité Asesor de la UNIA en Biomedicina. En él participan destacados investigadores, como son José Luis Gómez-Skarmeta, Aurora Bueno Cavanillas, Josep Casadesús y Diego Rodríguez Puyol,

bajo el liderazgo de José López-Barneo. Su labor, desde el rigor y la excelencia académica, es evaluar y definir qué propuestas componen cada año la programación de seminarios.

Esto permite, como segunda clave, configurar un foro plural del más alto nivel. Edición tras edición se reúne a destacados expertos internacionales, incluidos entre ellos cinco premios Nobel, como el profesor Thomas C. Südhof, quien recibía la llamada de la academia sueca minutos después de llegar a la Universidad Internacional de Andalucía. Una anécdota que permite entrever cómo ponentes y asistentes ocupan la primera línea en sus respectivos campos del saber. Están en la linde del conocimiento.

La presencia de la comunidad científica andaluza es, como no podría ser de otra forma, numerosa. La UNIA tiene la encomienda de favorecer que la I+D+I de la región alcance proyección más allá de sus fronteras. Así, los *workshops* sobre Biomedicina abren la puerta a establecer nuevos vínculos, favorecer la puesta en marcha de proyectos compartidos e introducir a jóvenes investigadores en las dinámicas internacionales.

Por último, un tercer factor implicado en el buen devenir de esta iniciativa es su entorno. La Sede Antonio Machado ocupa un espacio privilegiado, como es el Palacio de Jabalquinto, en Baeza (Jaén). Una ciudad declarada Patrimonio de la Humanidad por Naciones Unidas, de enorme belleza arquitectónica y paisajística, que invita a la reflexión y a la convivencia. Allí, la UNIA cuenta con una residencia y unas instalaciones de trabajo que facilitan el desarrollo de los *workshops*, creando un clima propicio para el estudio.

El modelo de seminario desarrollado por la Internacional de Andalucía demuestra ser un instrumento útil para la ciencia y la sociedad. Es por ello que, desde la institución, se trabaja en replicar esta fórmula en otras áreas y en otros lugares. Cuando se publican estas páginas, la UNIA ha abierto los *workshops* de Baeza también al medioambiente y al patrimonio cultural. Pero aspira a llevarlo fuera. Al norte de África, retomando un vínculo histórico, y a Iberoamérica, donde ya están en marcha una decena de encuentros bajo el paraguas del Grupo La Rábida que preside. Expandiendo el conocimiento para el desarrollo social.

José Ignacio García Pérez
Rector de la Universidad Internacional de Andalucía

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

INTRODUCTION

INTRODUCTION

The International University of Andalusia (UNIA) considers Biomedicine as a preference field. In this context, the University started in 2004 the programme "Current Trends in Biomedicine". Until 2018, fifteen editions and 60 Biomedicine workshops were organized. The UNIA had the collaboration of the "Instituto de Salud Carlos III" (an autonomous public research organism of the Spanish Government) in the period 2005-2008, but in the other editions the UNIA was the only organizative institution of these workshops.

The aim of these workshops is to promote and improve both international cooperation and scientific exchange in the area of Biomedicine. Particularly, the workshop series programme "Current Trends in Biomedicine" pretends to foster and facilitate scientific interaction between Andalusian researchers and the whole international scientific community.

Another objective of the workshops "Current Trends in Biomedicine" is to become a reference, a top-level event in the Biomedicine field. After fifteen editions, we have received many prestigious scientists as organizers or invited speakers (even as participants) from Spain, Europe, USA and many other countries, who are now familiar with our workshop series. Therefore, these workshops are approaching that goal of becoming more known and relevant for the international scientific community.

These workshops are held in English language, during three days, and take place at the "Sede Antonio Machado" in Baeza (Andalusia, Spain), a XVII century building turned into a Conference Center of the International University of Andalusia (UNIA). It is placed in the old historic centre of the town, at "Plaza de Santa María", in front of the

Cathedral. The "Sede Antonio Machado" has the necessary equipment in order to be the venue of this kind of workshops: computer room, library, meeting rooms... It has also a residence, where participants and speakers are accommodated. This is ideal in order to promote interaction and favour informal discussion among all who participate in the workshop, because the group keeps together almost the whole time.

In addition to the very good quality of the "Sede Antonio Machado", the venue of the workshop is not isolated; it is placed in a town, Baeza, with such dimensions (17.000 inhabitants) that isolation feeling is avoided, as well as typical disadvantages of big cities. Moreover, Baeza is a World Historic Heritage town, which is a very interesting additional incentive. The Renaissance architectural complexes of Úbeda and Baeza, UNESCO World Heritage cities since 2003, are among the most desirable destinations for lovers of history, art and heritage. In Baeza, the Jabalquinto Palace of the Sede Antonio Machado of the university, with a Flamboyant Gothic facade with Renaissance elements, is one of the most photographed sights in the province

The programme of the workshops "Current Trends in Biomedicine" is decided according to the criteria and opinions of the members of the Advisory Board for Biomedicine of the International University of Andalusia, which has the following members currently:

- José López-Barneo (Director of the Institute of Biomedicine of Seville). Coordinator of the Programme of Workshops "Current Trends in Biomedicine".
- Aurora Bueno Cavanillas (Professor of Preventive Medicine and Public Health, Faculty of Medicine, University of Granada).
- Josep Casadesús (Professor of Genetics at the University of Seville).
- José Luis Gómez-Skarmeta (Professor of the Spanish National Research Council, CSIC, at the Andalusian Center of Developmental Biology, CABD, Seville).
- Diego Rodríguez-Puyol (Professor of Medicine at the University of Alcalá, Madrid).

These five scientists have the task of analyzing and evaluating the received proposals in order to organize a workshop. The UNIA decides the number of workshops to be held in the next editions, according to quality and economic reasons, but once the number of workshops is fixed, the Advisory Board for Biomedicine is completely autonomous, free and independent in order to select the proposals which will be awarded with the organization of a workshop for the next edition. The contribution of the Advisory Board for Biomedicine is fundamental for the programme "Current Trends in Biomedicine", to guarantee the high scientific level and interest of the workshops with respect to the addressed topics and the prestige of organizers and invited speakers.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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BIOMEDICINE ADVISORY BOARD

JOSÉ
LÓPEZ-BARNEO

José López-Barneo (MD & PhD) is a professor of Medical Physiology and Biophysics at the University of Seville Medical School (1986), General Coordinator of Research at the University Hospital "Virgen del Rocío" (1999) and founding director of the Institute of Biomedicine of Seville (IBiS) (2006). Between 1978-1983 he did postdoctoral stays at the CNRS (Paris), University of Pennsylvania Medical School (Philadelphia) and New York University Medical Center (New York). He has been a visiting professor at Stanford University School of Medicine (Palo Alto, Ca) and Columbia University (New York). Dr. López-Barneo main research interests are related to the study of the mechanisms of acute oxygen sensing in mammals, specifically by the carotid body and other peripheral chemoreceptor organs, as well as the cellular adaptations to hypoxia. He also works on the modulation by hypoxia of the peripheral and central neurogenic centers and the molecular bases of dopaminergic neuroprotection and neurodegeneration. Dr. López-Barneo has served as an editor in the Journal of Physiology, Pflügers Archiv/European Journal of Physiology and Physiological Reviews, among other scientific journals. Some of his most representative academic awards are: the national research prize King Juan Carlos I (1993), Medal of Andalucía (1993) (in 2019 in representation of IBiS), national research prize King Jaime I (1998), research prize "Maimónides" of the Andalusian Government (2002), and Medal of the Order of Civil Merit by King Felipe VI (2015). He has been past president of the Spanish Neuroscience Association and the Spanish Society for Gene and Cell Therapy, as well as founding Director of CIBERNED

(Spanish Excellence Network for Research on Neurodegenerative Diseases). He is a member of the Academia Europea (1997), the European Molecular Biology Organization (2000), Royal Academy of Sciences of Seville (2005), Royal Academy of Medicine and Surgery of Seville (2010), corresponding member of the National Royal Academy of Sciences (2005) and doctor "Honoris Causa" by the University of Jaén (2018). Dr. López-Barneo has received grants from the Spanish and Andalusian Governments and European Union as well as from the Juan March and Botin Foundations. Currently he has an active "Advanced grant" of the "European Research Council".

AURORA
BUENO CAVANILLAS

I am full Professor of Preventive Medicine and Public Health in the University of Granada (UGR) from May of 2007. My research career started after my degree in Medicine and Surgery. I began as a Medical Internal Resident in Preventive Medicine and Public Health. I got a research grant for doing a PhD, which commenced in UGR in January 1988. I tool and active part in lectures and seminars in several degree programmes, including pharmacia, odontology, and medicine. In April 1990, I presented my Doctoral Thesis, accruing the higher mark: Sobresaliente "cum laude". In November 1990, I became a tenured Professor, with undergraduate and postgraduate activities, including Master and PhD supervision. Until now, 31 of my PhD students have defended their Doctoral Thesis, all with very good marks.

I have collaborated in several funded Research Projects, in eight as Principal Investigator. I am the PI of the Research Group 44 of the CIBER in Epidemiology and Public Health (CIBERESP, Spain) from 2007 until now. I am a member from inception, and Principal Investigator from October 2019, of the Research Group "Preventive Medicine and Public Health", Code CTS-137 of the Regional Ministry of Economy, Innovation, Science and Employment. Also, I am Investigator of the Biohealth Research Institute in Granada (ibs.GRANADA). My outputs are published through more than 20 book chapters, around 150 papers in high quality journals, and 1 patent. I have been Academic Secretary of the Department of Preventive Medicine and Public Health, and Director of the Doctoral School in Health Sciences. Currently, I am Academic

Secretary of the Faculty of Medicine and Health Chair in "La Madraza" Centre for Contemporary Culture of the UGR. I have worked for the National Agency for Evaluation and Prospective (ANEP) and for the Andalusian Foundation "Progress and Health" evaluating research project in national and regional calls. Also, I have worked in the National Agency for Quality Assessment and Accreditation (ANECA) in several committees addressing accreditation of Master and PhD programs. For three years I have been collaborating with the National Commission for the Evaluation of Research Activity (CNEAI) in the field of health. I have led the successful Beatriz Galindo grant to appoint an international expert in UGR medical faculty.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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JOSEP **CASADESÚS**

Josep Casadesús obtained his Ph. D. at the Estación Experimental del Zaidín, CSIC, Granada, Spain. As a postdoc, Casadesús received training at the University of Sussex (Falmer, England) and the University of Utah (Salt Lake City, USA). He is currently Professor of Genetics at the University of Seville (Spain). His main research interests are the formation of bacterial lineages by epigenetic mechanisms and the lifestyle of *Salmonella* in the mammalian gall bladder. His research has been funded by grants from the Spanish and Andalusian governments and from the European Union. He has been visiting professor at the University of Basel (Switzerland) and the University of Sassari (Sardinia, Italy). From 2005 to 2010, Casadesús was Ambassador of the American Society for Microbiology (ASM) in Europe. He is editor of the Prokaryotic Genetics section of PLOS Genetics, fellow of the American Academy of Microbiology and member of the Royal Academy of Sciences of Barcelona.

JOSÉ LUIS **GÓMEZ-SKARMETA**

José Luis Gómez-Skarmeta is Full Professor of the Spanish National Research Council (CSIC) at the Andalusian Centre for Developmental Biology in Seville (CABD). During his 29 years of research experience he has published 117 research articles, being at the forefront of Developmental Biology and Evolution, Functional Genomics and Epigenomic fields. He has pioneered the integration of developmental biology, epigenetic and chromatin dynamics to understand the mechanisms of gene regulation during development, evolution and human disease. The impact of his work is reflected by the publication record of the past years, including articles in prestigious journals such as Nature, Cell, Nature Genetics or PNAS. In 2017 JLGS has been awarded the ERC Advanced grant "EvoLand" and the "Carmen and Severo Ochoa" Molecular Biology Spanish award. In addition, JLGS has received the prestigious Marine Biological Laboratory Whitman Center Investigator Reseach Award in 2015 and 2018. JLGS is the current Scientific Director of the "Decision-Making in Cell Collectives" María de Maeztu Unit of Excellence, a very special distinction from the Spanish Government to research units in the country. He has also recently appointed Director of the Department of Gene Regulation and Morphogenesis of CABD. In 2019, he was been selected EMBO Member. He has presented his work in more than 100 invited seminars, Courses, Workshops and Research Institutes.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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DIEGO **RODRÍGUEZ-PUYOL**

Diego Rodríguez-Puyol (M.D & Ph.D.) is a Professor of Medicine at Alcalá University (1989), and Chief of Nephrology at University Hospital "Príncipe de Asturias" (1990). He was a fellow of nephrology at Fundación Jiménez Díaz, in Madrid (1980 – 1983), and performed a predoctoral stage at INSERM (Unité 64, Paris, 1983 – 1984). He worked at the Segovia General Hospital (1986 – 1987), and since 1987 at University Hospital "Príncipe de Asturias", in Alcalá de Henares. He was a visiting Professor at Paris VI University (1998 – 1999). Dr. Rodriguez-Puyol main research interests are related to the study of the progression of chronic renal and vascular diseases, particularly concerning the role of reactive oxygen species and the interaction extracellular matrix – cells, as well as the analysis of ageing-related renal dysfunction. He is a regular reviewer of various scientific journals, he has been awarded by the "Íñigo Álvarez de Toledo" Foundation, he has published more than 150 papers in high impact journals, and he is regularly founded by the "Instituto de Salud Carlos III", the Spanish Ministry of Education, and the Madrid Government. Between 2005 and 2010 he was the main responsible of the ANEP (Spanish Agency for research Evaluation) in the area of Clinical Medicine, and from 2105 to this year Director of the University Hospital "Príncipe de Asturias" Research Foundation.

Antonio Machado was a spanish poet and one of the leading figures of the spanish literary movement know as the Generation of 98. He went to live in Baeza, where he stayed until 1919. Here he completed the definitive edition of Campos de Castilla- from "Proverbios y cantares" in Campos de Castilla, 1912.

Caminante, son tus huellas
el camino y nada más;
Caminante, no hay camino,
se hace camino al andar.
Al andar se hace camino,
y al volver la vista atrás
se ve la senda que nunca
se ha de volver a pisar.
Caminante, no hay camino
sino estelas en la mar.

Wanderer, your footsteps are
the road, and nothing more;
wanderer, there is no road,
the road is made by walking.
By walking one makes the road,
and upon glancing behind
one sees the path
that never will be trod again.
Wanderer, there is no road –
Only wakes upon the sea.

from "Proverbios y cantares; XXIX"
in *Campos de Castilla*, 1912.
English translation: Betty Jean Craige.

Bust of Antonio Machado. UNIA (Baeza).

Baeza Landscape.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS "CURRENT TRENDS IN BIOMEDICINE"

For the past decades Spain (and Andalusia) have undergone a tremendous and admirable social and economic development due to the democratization of their political system and the efficient implementation of reforms necessary to become a solid and competitive member of the European Union. As a consequence of all these changes, Spain is now one of the most liberal and socially progressive countries in the world. A relevant aspect of this socio-economic development has been scientific growth. In the late 1980s, the creation of the "National Plan for Research and Development" (with the addition of the word "Innovation" in subsequent editions) provided the foundations for the education of scientists over the following decades and for the creation of research centers distributed all over the country. These legislative actions were in some cases, as it occurred in Andalusia, complemented by policies of local Autonomous Governments. Although the reforms were less radical and the progress slower and less notable than most scientists would had liked, it is undisputable that after a long-lasting period of abandonment of science by the governments and neglection of science by the society, Spain has become a medium-to-high level scientific power, placed around the 10th position in the ranking of scientifically productive nations. In this scenario, Andalusia, which was among the most underdeveloped regions in Spain, has had an outstanding progress, with a scientific production only behind Catalonia and Madrid. Although still retarded in comparison with leading

European regions, Andalusia has now several internationally recognized research centers, and a large number of scientists, who in some cases have active leadership in their disciplines.

It is within this historical context that the series Workshops "Current Trends in Biomedicine" organized by the International University of Andalusia (UNIA) started in 2004. A year before Sebastián Chávez, a young Professor of Genetics at the University of Seville, was appointed Vice-Rector of Research at UNIA and had the inspiration that this institution could be the siege of scientific activities complementing the notable development of biomedical research in Andalusia. He invited a scientific advisory board (SAB), formed by Miguel Beato (Director of the Centre of Genomic Regulation in Barcelona), Josep Casadesús (Professor of Genetics at the University of Seville) and José López-Barneo (Director of the Institute of Biomedicine of Seville), to define, evaluate and select the future activities carried out by UNIA within the field of Biomedicine. Frank Gannon (Executive Director of the European Molecular Biology Organization, EMBO) was also invited to be a member of SAB but he was active only for a short time as he retired soon thereafter. Professor Chávez and the SAB realized that the promotion of scientific excellence and international cooperation as well as the dissemination of scientific knowledge were objectives that perfectly fitted UNIA's foundational goals. They proposed the organization of international workshops on Biomedicine to increase the international presence and exposure of the Andalusian biomedical research system and to increase social awareness on the importance of biomedical research. From the beginning, the SAB gave special relevance to the participation of Ibero-American scientists in the workshops, in accordance with UNIA's principles and tradition.

International workshops are a common form of scientific cooperation and dissemination that allows a selected group of scientists to intensely focus and discuss on specific and relevant topics of their discipline. During workshops, scientific data (in may cases still unpublished) are subjected to the scrutiny of top scientists and can therefore receive direct support and criticism. If properly organized, workshops, better than large meetings, allow attendees to establish direct personal contact with colleagues and leaders in the field. There are numerous excellent international workshops on Biomedicine regularly organized in different countries. In Spain, the most relevant were those organized for almost two decades by the Juan March Foundation, which were attended by the most prestigious scientists and scientific editors in the world. It was precisely the unfortunate end of the Juan March Foundation's meetings what moved the SAB to suggest the celebration of workshops with a similar format at UNIA.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

It was decided that the series Workshops "Current Trends in Biomedicine" would be held during the fall at the UNIA's "Antonio Machado" campus located in Baeza. This campus has the optimal size and structure required for celebration of workshops. In addition, the city of Baeza (declared Cultural Heritage of Humanity by UNESCO) offers a superb environment full of medieval/renaissance buildings. Some such buildings are decorated with the coat of arms of the Emperor Charles the Fifth's House of Habsburg, which always causes strong impression upon our central European colleagues. Joaquín Torreblanca, a PhD in Biology, was appointed as executive secretary of the SAB and the person responsible for the organization and operation of the Workshops "Current Trends in Biomedicine" series.

For the last 15 years successive annual calls and a rigorous competitive scientific selection have resulted in the celebration of 60 workshops (usually 4 per year, each workshop lasting for 2-3 days) covering topics at the forefront of modern Biology and Medicine. Among the most representative areas are neuroscience, epigenetics, genome integrity, RNA biology, microbial pathogenesis, and molecular diagnostics and therapy. This scientific tradition has been made possible thanks to the continuous support by the successive Rectors and Vice-Rectors of UNIA who have been in office as well as by the personnel involved in UNIA's administration and maintenance. On 2005 the National Medical Research Council (Instituto de Salud Carlos III, ISCIII) of the Spanish Ministry of Health decided to contribute to support the UNIA's workshops and in this context Diego Rodríguez-Puyol (Professor of Medicine at the University of Alcalá, Madrid) was appointed as a member of the SAB. Professor Rodríguez-Puyol has continued being a member of the SAB even though the ISCIII stopped sponsoring the workshops on 2009 (last edition supported by ISCIII was 2008). Around the same time Miguel Beato was replaced with José Luis Gómez-Skarmeta (Professor of the Spanish National Research Council, CSIC, at the Andalusian Centre of Developmental Biology, CABD).

The Baeza's Workshops "Current Trends in Biomedicine" are a nice example of great success as with a relatively low budget the program has been able to reach the highest level of quality and international reputation. From the very beginning the workshops were attended by top biomedical scientists in Spain and worldwide, either as organizers or as invited speakers. The workshops have been frequently honored by the presence of highly influential "personalities", including Nobel Prize laureates (as for example Drs. Erwin Neher and Bert Sakmann), or founders/editors of high-profile scientific journals. The workshops "intra-story" is full of touching anecdotes, as it was the phone call from Stockholm that Dr. Tom Südhof received while driving from Madrid to

Baeza informing him that he had won the Nobel Prize in Physiology and Medicine in 2013. Years later, while attending another workshop, Professor Südhof received a tribute by the city of Baeza in a nice ceremony celebrated in the Town Hall. The Baeza's workshops are a genuine story of excellence and cooperation, with worldwide impact, that have become a patrimony of Andalusia. As such, they must be supported and promoted to further strengthen Andalusia's social and economic development and to boost our region's commitment to the cooperative mankind scientific endeavor.

José López-Barneo
Aurora Bueno Cavanillas
Josep Casadesús
José Luis Gómez-Skarmeta
Diego Rodríguez-Puyol

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Main facade / UNIA, Baeza.

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UNIA, Baeza.

UNIA, Baeza.

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GENERAL INDEX OF WORKSHOPS

#2004

W1.
Origin and Evolution of Human Pathogens

20-23 October

Organizers: **Josep Casadesús** (University of Seville. Seville, Spain).
Eduardo A. Groisman (Washington University. St. Louis, USA).

Meeting Report: Eduardo A. Groisman and Josep Casadesús (2005), The origin and evolution of human pathogens. *Molecular Microbiology*, 56: 1–7, April 2005. DOI 10.1111/j.1365-2958.2005.04564.x.

W2.
Coupling between Transcription and RNA Processing

8-10 November

Organizers: **Miguel Beato** (Centre for Genomic Regulation (CRG). Barcelona, Spain).
Juan Valcárcel (Centre for Genomic Regulation (CRG). Barcelona, Spain).

Meeting Report: Manuel Ares Jr. and Nick J. Proudfoot (2005), The Spanish Connection: Transcription and mRNA Processing Get Even Closer. *Cell*, Vol. 120, 163-166, January 28, 2005. DOI 10.1016/j.cell.2005.01.002.

#2005

W3.
Imaging Synapses: From Individual Molecules to Brain Circuits

2-5 October

Organizers: **Rafael Fernández-Chacón** (University of Seville. Seville, Spain).
Arthur Konnerth (Technical University of Munich. Munich, Germany).
Thomas C. Südhof (UT Southwestern Medical Center. Dallas, USA).

W4.
Cardiovascular Development: Towards Biomedical Applicability

23-26 October

Organizers: **Marina Campione** (University of Padua. Padua, Italy).
Diego Franco (University of Jaén. Jaén, Spain).
Robert Kelly (University of Marseilles. Marseilles, France).

W5.
Epigenetic Mechanisms in Development and Disease

13-16 November

Organizers: **José C. Reyes** (University of Seville. Seville, Spain).
Moshe Yaniv (Pasteur Institute. Paris, France).

W6.
Synaptopathies and Mental Disorders

11-14 December

Organizers: **Guillermo Álvarez de Toledo** (University of Seville. Seville, Spain).
Reinhard Jahn (Max Planck Institute for Biophysical Chemistry. Göttingen, Germany).

#2006

W7.
RNA in Disease and Therapy

2-4 October

Organizers: **Alfredo Berzal-Herranz** (Institute of Parasitology and Biomedicine "López-Neyra". Granada, Spain).
Bryan R. Cullen (Duke University Medical Center. Durham, USA).
Mariano A. García-Blanco (Duke University Medical Center. Durham, USA).

W8.
Pathocycles: Role of Cell Cycle Regulators in the Induction of Virulence Programme in Pathogenic Fungi

23-25 October

Organizers: **Jaime Correa-Bordes** (University of Extremadura. Badajoz, Spain).
Paul Nurse (The Rockefeller University. New York, USA).
José Pérez-Martín (National Centre for Biotechnology, CNB-CSIC. Madrid, Spain).

Meeting Report: Peter E. Sudbery, Amy S. Gladfelter (2008), Pathocycles. *Fungal Genetics and Biology*, Vol. 45, 1-5, January 2008. http://dx.doi.org/10.1016/j.fgb.2007.02.009.

W9.
Mechanisms and Biological Consequences of Recombinational DNA Repair-Mediated Genome Instability

6-8 November

Organizers: **Andrés Aguilera** (Andalusian Molecular Biology and Regenerative Medicine Centre (CABIMER), University of Seville. Seville, Spain).
Roland Kanaar (Erasmus MC. Rotterdam, The Netherlands).

W10.
Mitochondriopathies.
Diverse Origin of Mitochondrial Diseases

27-29 November

Organizers: **Salvatore DiMauro** (Columbia University College of Physicians and Surgeons. New York, USA).
Plácido Navas (Andalusian Centre for Developmental Biology (CABD), CSIC-Pablo de Olavide University. Seville, Spain).

#2007

W11.
Mechanistic and Integrative Aspects of mRNA Synthesis

1-3 October

Organizers: **Ramin Shiekhattar** (Centre for Genomic Regulation (CRG). Barcelona, Spain).
Marc Timmers (University Medical Centre Utrecht. Utrecht, The Netherlands).

W12.
Deciphering the Regulatory Genome: Development, Evolution and Disease

8-10 October

Organizers: **Thomas S. Becker** (Sars Centre for Marine Molecular Biology, University of Bergen. Bergen, Norway).
Fernando Casares (Andalusian Centre for Developmental Biology (CABD), CSIC-Pablo de Olavide University. Seville, Spain).
José Luis Gómez-Skarmeta (Andalusian Centre for Developmental Biology (CABD), CSIC-Pablo de Olavide University. Seville, Spain).

W13.
Fragile X-Related Syndromes: From Molecular to Clinical Approach

16-18 October

Organizers: **Randi J. Hagerman** (MIND Institute, University of California Davis. Davis, USA).
Ben A. Oostra (Erasmus MC. Rotterdam, The Netherlands).
Elizabeth Pintado (University Hospital "Virgen Macarena", University of Seville. Seville, Spain).

W14.
Stress, Stress Responses and Mechanisms of Evolvability

22-24 October

Organizers: **Jesús Blázquez** (National Centre for Biotechnology, CNB-CSIC. Madrid, Spain).
Ivan Matic (Necker Institute, University René Descartes-Paris 5. Paris, France).
Susan M. Rosenberg (Baylor College of Medicine. Houston, USA).

José Ignacio García Pérez. Rector.

#2008

W15.
Understanding Pain: From Transduction to Sensation

6-8 October

Organizers: **David Julius** (University of California San Francisco. San Francisco, USA).
Félix Viana (Institute of Neurosciences / Miguel Hernández University-CSIC. Sant Joan d'Alacant (Alicante), Spain).

W16.
Bacterial Type IV Secretion Systems in Human Disease

14-16 October

Organizers: **Christoph Dehio** (Biozentrum, University of Basel. Basel, Switzerland).
Matxalen Llosa (University of Cantabria, Institute of Biomedicine and Biotechnology of Cantabria (IBBTEC, UC-CSIC). Santander, Spain).
Craig R. Roy (Yale University School of Medicine. New Haven, USA).

Meeting Report: Matxalen Llosa, Craig Roy and Christoph Dehio (2009), Bacterial type IV secretion systems in human disease. *Molecular Microbiology*, 73: 141–151, July 2009. doi: 10.1111/j.1365-2958.2009.06751.x.

W17.
Germ Cell-Soma Interactions in Gonadal Development and Germ Cell Tumours

20-22 October

Organizers: **Mónica Bullejos** (University of Jaén. Jaén, Spain).
Peter Koopman (Institute for Molecular Bioscience, The University of Queensland. Brisbane, Australia).
Niels E. Skakkebæk (Rigshospitalet, Copenhagen University Hospital. Copenhagen, Denmark).

W18.
Role of RNA Structures in the Translation of Viral and Cellular RNAs

27-29 October

Organizers: **Graham J. Belsham** (National Veterinary Institute, Technical University of Denmark. Lindholm, Denmark).
Jordi Gómez (Institute of Parasitology and Biomedicine "López- Neyra", CSIC. Granada, Spain).
Encarna Martínez-Salas (Centre for Molecular Biology "Severo Ochoa", CSIC-Autonomous University of Madrid. Madrid, Spain).

Meeting Report: Lisa Roberts & Martin Holcik (2009), RNA structure: new messages in translation, replication and disease. Workshop on the role of RNA structures in the translation of viral and cellular RNAs. *EMBO reports* (2009) 10, 449 – 453, May 2009. doi:10.1038/embor.2009.56.

#2009

W19.
RNA-Protein Interactions in Development and Cancer

1-3 October

Organizers: **Fátima Gebauer** (Centre for Genomic Regulation (CRG). Barcelona, Spain).
Luiz O. F. Penalva (University of Texas Health Science Center at San Antonio. San Antonio, USA).
Jernej Ule (MRC Laboratory of Molecular Biology. Cambridge, UK).

Meeting Report: Douglas L. Black & Myriam Gorospe (2010), Tapas and RNA in Renaissance Spain. *RNA Biology*, 7:2, 130-132, March/April 2010. http://dx.doi.org/10.4161/rna.7.2.11060.

W20.
Mechanisms of Organ Regeneration in Model Systems

5-7 October

Organizers: **Shawn M. Burgess** (National Human Genome Research Institute, NIH. Bethesda, USA).
Hernán López-Schier (Centre for Genomic Regulation (CRG). Barcelona, Spain).
Kenneth D. Poss (Duke University Medical Center. Durham, USA).

W21.
Active Zones as Organizers of Neuronal Communication

22-24 October

Organizers: **William J. Betz** (University of Colorado Medical School. Aurora, USA).
Lucía Tabares (University of Seville. Seville, Spain).

W22.
Developmental Origins of Neurological Disorders: From Neurogenesis to Circuit Formation

26-28 October

Organizers: **Douglas J. Epstein** (University of Pennsylvania School of Medicine. Philadelphia, USA).
Michael P. Matise (University of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medical School. Piscataway, USA).
Ricardo Pardal (Institute of Biomedicine of Seville (IBiS). Seville, Spain).

W23.
Chromatin Domains and Insulators

9-11 November

Organizers: **Víctor G. Corces** (Emory University. Atlanta, USA).
Lluís Montoliu (National Centre for Biotechnology, CNB-CSIC. Madrid, Spain).
Félix Recillas-Targa (National Autonomous University of México. México DF, México).

W24.
Bacterial Regulatory Networks

12-14 November

Organizers: **Bonnie L. Bassler** (Princeton University. Princeton, USA).
Eduardo A. Groisman (Washington University. St. Louis, USA).
Igor Zwir (University of Granada. Granada, Spain).

#2010

W25.
The Dynamics of Peptidoglycan Structure and Function: New Insights into the 'Great Wall'

4-6 October

Organizers: **Miguel A. de Pedro** (Centre for Molecular Biology "Severo Ochoa", CSIC-Autonomous University of Madrid. Madrid, Spain).
Joseph P. Dillard (University of Wisconsin-Madison. Madison, USA).
Margaret J. McFall-Ngai (University of Wisconsin-Madison. Madison, USA).

W26.
Cell Replacement for Regeneration in the Nervous System: Lessons from Adult Neurogenesis

13-15 October

Organizers: **Benedikt Berninger** (Institute of Physiology, Ludwig-Maximilians University of Munich. Munich, Germany).
José Manuel García-Verdugo (Príncipe Felipe Research Center. Valencia, Spain).
Alejandro F. Schinder (Leloir Institute-CONICET. Buenos Aires, Argentina).

Meeting Report: Guillermina López-Bendito, Paola Arlotta (2012), Cell Replacement Therapies for Nervous System Regeneration. *Developmental Neurobiology*, 72: 145-152, February 2012. doi 10.1002/dneu.20897.

W27.
Ion Channels and Diseases of the Nervous System

2-4 November

Organizers: **Ricardo Dolmetsch** (Stanford University School of Medicine. Stanford, USA).
Isabel Pérez-Otaño (Center for Applied Medical Research (CIMA), University of Navarra. Pamplona, Spain).
Álvaro Villarroel (CSIC-University of the Basque Country. Leioa (Biscay), Spain).

W28.
Pseudomonas aeruginosa: Opportunistic Pathogen and Human Infections

8-10 November

Organizers: **Sophie de Bentzmann** (CNRS, Institute of Microbiology of the Mediterranean. Marseilles, France).
Søren Molin (Technical University of Denmark. Lyngby, Denmark).
Juan Luis Ramos (Zaidín Experimental Station, EEZ-CSIC. Granada, Spain).

Meeting Report: Sophie de Bentzmann and Patrick Plésiat (2011), The *Pseudomonas aeruginosa* opportunistic pathogen and human infections. *Environmental Microbiology*, 13: 1655–1665, July 2011. doi: 10.1111/j.1462-2920.2011.02469.x

W29.
The Centrosome: Structure, Function and Dynamics

15-17 November

Organizers: **José María Carazo** (National Centre for Biotechnology, CNB-CSIC. Madrid, Spain).
Rosa M. Ríos (Andalusian Molecular Biology and Regenerative Medicine Centre (CABIMER), CSIC. Seville, Spain).
Luis Serrano (Centre for Genomic Regulation (CRG). Barcelona, Spain).

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

#2011

W30.
Frontiers in Epigenomics

17-19 October

Organizers: **Jorge Ferrer** (August Pi i Sunyer Biomedical Research Institute, University Hospital Clínic de Barcelona. Barcelona, Spain).
Klaus H. Kaestner (University of Pennsylvania School of Medicine. Philadelphia, USA).

W31.
The Biology of Intracellular Bacterial Pathogens

24-26 October

Organizer: **Francisco García-del Portillo** (National Centre for Biotechnology, CNB-CSIC. Madrid, Spain).

Meeting Report: Francisco García-del Portillo, Pascale Cossart (2012), A new view to intracellular pathogens and host responses in the South of Spain. *EMBO Molecular Medicine*, 4: 160–164, March 2012. doi: 10.1002/emmm.201100210.

W32.
Molecular and Cellular Bases of Redox Signaling and Oxidative Stress: Implications in Biomedicine

2-4 November

Organizers: **Santiago Lamas** (Centre for Molecular Biology "Severo Ochoa", CSIC-Autonomous University of Madrid. Madrid, Spain).
Lawrence J. Marnett (Vanderbilt Institute of Chemical Biology, Vanderbilt University School of Medicine. Nashville, USA).
Rafael Radi (Center for Free Radical and Biomedical Research, University of the Republic. Montevideo, Uruguay).

W33.
Liver and Pancreas: From Development to Disease

14-16 November

Organizers: **David A. Cano** (Institute of Biomedicine of Seville (IBiS) / University Hospital "Virgen del Rocío". Seville, Spain).
Matthias Hebrok (Diabetes Center, University of California San Francisco. San Francisco, USA).
Didier Y. R. Stainier (Liver Center and Diabetes Center, University of California San Francisco. San Francisco, USA).

W34.
The Enemy Within: Endogenous DNA Damage as a Source of Cancer and Ageing

17-19 November

Organizers: **Óscar Fernández-Capetillo** (Spanish National Cancer Research Centre (CNIO). Madrid, Spain).
Jiri Lukas (Institute of Cancer Biology and Centre for Genotoxic Stress Research, Danish Cancer Society. Copenhagen, Denmark).
André Nussenzweig (National Cancer Institute, NIH. Bethesda, USA).

Guided tour / Baeza.

#2012

W35.
The Microbiome: Role in Health and Disease

8-10 October

Organizers: **Francisco Guarner** (University Hospital "Vall d'Hebron". Barcelona, Spain).
Lora V. Hooper (University of Texas Southwestern Medical Center. Dallas, USA).
Gabriel Núñez (University of Michigan Medical School. Ann Arbor, USA).

Meeting Report: Francisco Guarner, Lora V Hooper & Gabriel Núñez (2013), Understanding the microbiota in the midst of Renaissance architecture and olive groves. *Nature Immunology*, 14, 101–105 (2013), February 2013. doi: 10.1038/ni.2512.

W36.
Systems Biology of T Cells: Clinical, Experimental and Theoretical Approaches

22-24 October

Organizers: **Balbino Alarcón** (Centre for Molecular Biology "Severo Ochoa", CSIC-Autonomous University of Madrid. Madrid, Spain).
José Faro (University of Vigo. Vigo, Spain).
Carmen Molina-París (School of Mathematics, University of Leeds. Leeds, UK).

W37.
Neuroepigenetics: A New Perspective on Memory Mechanisms and Brain Disorders

29-31 October

Organizers: **Ángel Barco** (Institute of Neurosciences / Miguel Hernández University-CSIC. Sant Joan d'Alacant (Alicante), Spain).
Richard G. M. Morris (Centre for Cognitive and Neural Systems, The University of Edinburgh. Edinburgh, UK).
Li-Huei Tsai (Picower Institute for Learning and Memory, Massachusetts Institute of Technology (MIT). Cambridge, USA).

W38.
Molecular Mechanisms of Inner Ear Development

5-7 November

Organizers: **Fernando Giráldez** (Pompeu Fabra University, Barcelona Biomedical Research Park. Barcelona, Spain).
Matthew W. Kelley (National Institute on Deafness and Other Communication Disorders (NIDCD), NIH. Bethesda, USA).
Doris K. Wu (National Institute on Deafness and Other Communication Disorders (NIDCD), NIH. Rockville, USA).

Guided tour / Baeza.

#2013

W39.
Membrane Traffic at the Synapse. The Cell Biology of Synaptic Plasticity

7-9 October

Organizers: **José A. Esteban** (Centre for Molecular Biology "Severo Ochoa", CSIC-Autonomous University of Madrid. Madrid, Spain).
Juan Lerma (Institute of Neurosciences / Miguel Hernández University-CSIC. Sant Joan d'Alacant (Alicante), Spain).
Thomas L. Schwarz (F.M. Kirby Neurobiology Center, Children's Hospital Boston, and Harvard Medical School. Boston, USA).

W40.
The Hemato-Vascular System: Development and Disease

21-23 October

Organizers: **Simón Méndez-Ferrer** (Spanish National Center for Cardiovascular Research (CNIC). Madrid, Spain).
María-José Sánchez (Andalusian Centre for Developmental Biology (CABD), CSIC-Pablo de Olavide University. Seville, Spain).
Elaine Dzierzak (Erasmus MC Stem Cell Institute. Rotterdam, The Netherlands).

W41.
Gene Expression as a Circular Process: Cross-Talk between Transcription and mRNA Degradation in Eukaryotes

4-6 November

Organizers: **Sebastián Chávez** (University of Seville / Institute of Biomedicine of Seville (IBiS). Seville, Spain).
Mordechai Choder (Technion – Israel Institute of Technology. Haifa, Israel).

Meeting Report: Martine A Collart & Joseph C Reese (2014), Gene expression as a circular process: Cross-talk between transcription and mRNA degradation in eukaryotes; International University of Andalusia (UNIA) Baeza, Spain. *RNA Biology*, 11:320-323; PMID: 24646520; April 2014. http://dx.doi.org/10.4161/rna.28037.

W42.
The Regulatory Roles of ncRNA

18-20 November

Organizers: **Maite Huarte** (Center for Applied Medical Research (CIMA), University of Navarra. Pamplona, Spain).
John L. Rinn (Harvard University / Broad Institute of MIT and Harvard. Cambridge, USA).

Guided tour / Aula Antonio Machado.

#2014

W43.
Cardiovascular Extracellular Matrix in Health and Disease

6-8 October

Organizers: **Harry C. Dietz** (Institute of Genetic Medicine, Johns Hopkins University School of Medicine. Baltimore, USA).
Nadia Mercader (Spanish National Center for Cardiovascular Research (CNIC). Madrid, Spain).
Paul R. Riley (University of Oxford. Oxford, UK).

Meeting Report: **Enrique Lara-Pezzi**, **Elke Dworatzek** and **Fernando Rodríguez-Pascual** (2015), Workshop on cardiovascular extracellular matrix in health and disease in Baeza, Spain. *Fibrogenesis & Tissue Repair*, (2015) 8:2, February 2, 2015. DOI 10.1186/s13069-014-0018-1.

W44.
Proteases at Work: Cues for Understanding Neural Development and Degeneration

20-22 October

Organizers: **Paola Bovolenta** (Centre for Molecular Biology "Severo Ochoa", CSIC-Autonomous University of Madrid. Madrid, Spain).
Paul Saftig (Institute of Biochemistry, Christian-Albrechts University of Kiel. Kiel, Germany).

Meeting Report: Paul Saftig and Paola Bovolenta (2015), Proteases at work: cues for understanding neural development and degeneration. *Frontiers in Molecular Neuroscience*, 8:13, May 5, 2015. doi:10.3389/fnmol.2015.00013.

W45.
RNA Meets DNA:
On the Road to Genome Instability

3-5 November

Organizers: **Andrés Aguilera** (Andalusian Molecular Biology and Regenerative Medicine Centre (CABIMER), University of Seville-CSIC. Seville, Spain).
Karlene A. Cimprich (Stanford University School of Medicine. Stanford, USA).
Marco Foiani (IFOM Foundation - FIRC Institute of Molecular Oncology / University of Milan. Milan, Italy).

W46.
Comparative and Functional Genomics of Fungal Pathogens

17-19 November

Organizers: **Antonio Di Pietro** (University of Córdoba. Córdoba, Spain).
Toni Gabaldón (Centre for Genomic Regulation (CRG) and Pompeu Fabra University. Barcelona, Spain).
Neil A. R. Gow (Institute of Medical Sciences, University of Aberdeen. Aberdeen, UK).

#2015

W47.
Development and Adult Neurogenesis in the Central Nervous System

5-7 October

Organizers: **Salvador Martínez** (Institute of Neurosciences / Miguel Hernández University-CSIC. Sant Joan d'Alacant (Alicante) / IMIB-Arrixaca. Murcia; Spain).
Harukazu Nakamura (Frontier Research Institute for Interdisciplinary Science (FRIS), Tohoku University. Sendai, Japan).

Meeting Report: Harukazu Nakamura (Editor in Chief); Salvador Martínez (Editor for the issue (2016), Preface to the special issue, 'Embryonic and adult neurogenesis in vertebrate'. *Development, Growth & Differentiation*, (2016) 58, 425-426 425-426, June 2016. doi 10.1111/dgd.12304.

W48.
Cell Division: Molecular Machineries and Cancer Targeted Therapies
EMBO Workshop with co-sponsorship from UNIA

19-21 October

Organizers: **Amancio Carnero** (Institute of Biomedicine of Seville (IBiS), CSIC-University of Seville. Seville, Spain).
Marcos Malumbres (Spanish National Cancer Research Centre (CNIO). Madrid, Spain).
Guillermo Montoya (Novo Nordisk Foundation Center for Protein Research, University of Copenhagen. Copenhagen, Denmark).

W49.
Adaptation and Communication of Bacterial Pathogens

26-28 October

Organizers: **Laurent Aussel** (Institute of Microbiology of the Mediterranean, CNRS – University of Aix-Marseilles. Marseilles, France).
Carmen R. Beuzón (Institute for Mediterranean and Subtropical Horticulture "La Mayora", University of Málaga-CSIC. Málaga, Spain).
Eric Cascales (Institute of Microbiology of the Mediterranean, CNRS – University of Aix-Marseilles. Marseilles, France).

Meeting Report: Laurent Aussel, Carmen R. Beuzón & Eric Cascales (2016), Meeting report: Adaptation and communication of bacterial pathogens. *Virulence*, 7:4, 481-490, May 18, 2016. DOI: 10.1080/21505594.2016.1152441.

W50.
The Nuclear Lamina in Health and Disease

16-18 November

Organizers: **Vicente Andrés** (Spanish National Center for Cardiovascular Research (CNIC). Madrid, Spain).
Peter Askjaer (Andalusian Centre for Developmental Biology (CABD), CSIC-Regional Government of Andalusia-Pablo de Olavide University. Seville, Spain).
Tom Misteli (National Cancer Institute, NIH. Bethesda, USA).

Meeting Report: Agnieszka Dobrzynska, Susana Gonzalo, Catherine Shanahan & Peter Askjaer (2016), The nuclear lamina in health and disease. *Nucleus*, 2016 May 3;7(3): 233-248, May 3, 2016. DOI: 10.1080/19491034.2016.1183848.

#2016

W51.
Chaperones in the Maintenance of Cellular Proteostasis

17-19 October

Organizers: **Ana María Cuervo** (Institute for Aging Studies, Albert Einstein College of Medicine. New York, USA).
Cintia Roodveldt (Andalusian Molecular Biology and Regenerative Medicine Centre (CABIMER). Seville, Spain).
José María Valpuesta (National Centre for Biotechnology, CNB-CSIC. Madrid, Spain).

W52.
Steps towards Personalized Therapy: Functional Genomics, Genetic Screenings and Animal Models

7-9 November

Organizers: **Fernando Casares** (Andalusian Centre for Developmental Biology (CABD), CSIC-Pablo de Olavide University-Regional Government of Andalusia. Seville, Spain).
Marcelo A. Nóbrega (University of Chicago. Chicago, USA).
Luiz O. F. Penalva (Children's Cancer Research Institute, University of Texas Health Science Center at San Antonio. San Antonio, USA).

#2017

W53.
Synapse Formation, Specification and Elimination: From Molecules to Circuits

25-27 September

Organizers: **Rafael Fernández-Chacón** (Institute of Biomedicine of Seville (IBiS), CSIC-University of Seville and CIBERNED. Seville, Spain).
Thomas C. Südhof (Stanford University School of Medicine. Stanford, USA).

W54.
Understanding the Beneficial Role of the Microbiota in Animals and Plants

9-11 October

Organizers: **Gabriel Núñez** (University of Michigan Medical School. Ann Arbor, USA).
Paul Schulze-Lefert (Max Planck Institute for Plant Breeding Research. Cologne, Germany).

W55.
Noncoding RNA-Mediated Metabolic Regulation in Health and Disease

6-8 November

Organizers: **Carlos Fernández-Hernando** (Yale University School of Medicine. New Haven, USA).
Santiago Lamas (Centre for Molecular Biology "Severo Ochoa", CSIC-Autonomous University of Madrid. Madrid, Spain).

W56.
Chromosomal Instability: From Molecular Mechanisms to Disease

13-15 November

Organizers: **Guillermo de Cárcer** (Spanish National Cancer Research Centre (CNIO). Madrid, Spain).
Pablo Huertas (Andalusian Molecular Biology and Regenerative Medicine Centre (CABIMER), University of Seville. Seville, Spain).
Andrés J. López-Contreras (Center for Chromosome Stability (CCS) and Center for Healthy Aging, Panum Institute, University of Copenhagen. Copenhagen, Denmark).

Meeting Report: Guillermo de Cárcer, Pablo Huertas, Andrés J. López-Contreras (2018), Chromosome instability: From molecular mechanisms to disease. *DNA Repair*, 66-67 (2018) 72-75, June–July 2018. https://doi.org/10.1016/j.dnarep.2018.04.006.

Inauguration / Organizer Pablo Huertas, Director, M. Ángeles Peinado Herreros, organizer Guillermo de Cárcer, organizer Andrés J. López-Contreras.

#2018

W57.
Chromosome Architecture and Topological Stress

8-10 October

Organizers: **Felipe Cortés-Ledesma** (Andalusian Molecular Biology and Regenerative Medicine Centre (CABIMER), CSIC-University of Seville-Pablo de Olavide University. Seville, Spain).
Erez Lieberman Aiden (Baylor College of Medicine and Rice University. Houston, USA).
André Nussenzweig (National Cancer Institute, NIH. Bethesda, USA).

W58.
The Cell Biology behind the Oncogenic PIP3 Lipids

15-17 October

Organizers: **Richard A. Anderson** (University of Wisconsin-Madison School of Medicine and Public Health. Madison, USA).
Ana C. Carrera (National Centre for Biotechnology, CNB-CSIC. Madrid, Spain).
Bart Vanhaesebroeck (UCL Cancer Institute, University College London. London, UK).

Meeting Report: Ana C. Carrera and Richard A. Anderson (2019), The cell biology behind the oncogenic PIP3 lipids. *Journal of Cell Science*, (2019) 132, jcs228395, January 2, 2019. doi:10.1242/jcs.228395.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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W59.
Genomic Parasites and Noncoding RNA in Evolution and Disease

29-31 October

Organizers: **Jordi Gómez** (Institute of Parasitology and Biomedicine "López-Neyra", CSIC. Granada, Spain).
Andreas Werner (Institute for Cell and Molecular Biosciences, Newcastle University. Newcastle upon Tyne, UK).

W60.
Contribution of Bacterial Injection Systems to Human Disease

5-7 November

Organizers: **Sophie Bleves** (Institute of Microbiology of the Mediterranean, CNRS – University of Aix-Marseilles. Marseilles, France).
Jorge E. Galán (Yale University School of Medicine. New Haven, USA).
Matxalen Llosa (University of Cantabria, Institute of Biomedicine and Biotechnology of Cantabria (IBBTEC, UC-CSIC). Santander, Spain).

Meeting Report: Sophie Bleves, Jorge E. Galán, Matxalen Llosa (2020), Bacterial injection machines: Evolutionary diverse but functionally convergent. *Cellular Microbiology*, 2020;e13157, December 31, 2019. https://doi.org/10.1111/cmi.13157.

Guided tour / Baeza.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

FULL PROGRAMS OF WORKSHOPS

#2004

W1.
Origin and Evolution of Human Pathogens

20-23 October

Scope: The emergence of bacterial pathogens involves an interplay between environmental factors. Each host-pathogen interaction is based on signals, and relies on the acquisition of pathogen-specific gene assortments. In the last decades, the identification of pathogenic determinants, together with the information provided by whole genome sequencing, has uncovered a dynamic picture of pathogen evolution. The roles of mutation, horizontal gene transfer, lysogeny, and other pathogen-associated factors will be discussed, together with the host-associated traits that modify or create ecological niches.

Organizers: **Josep Casadesús** (University of Seville. Seville, Spain).
Eduardo A. Groisman (Washington University. St. Louis, USA).

Wednesday, October 20

19.00-19.15 **Sebastián Chávez**, Vice-Rector of the UNIA.
Welcome address.

19.15-19.30 **Eduardo Groisman, Josep Casadesús.**
Workshop aims.

19.30-20.20 Opening lecture:
Brian Spratt.
Using multilocus sequence data to explore bacterial population biology.

Thursday, October 21

Session I
Chair: Richard Moxon

9.50-10.40 **Howard Ochman.**
Evolution of genome repertoires in free-living and host-associated bacteria.

11.10-12.00 **Roberto Kolter.**
Insights into the evolution of *Pseudomonas aeruginosa* gained from comparative genomic studies.

12.00-12.20 **Antonio Juárez.**
Regulation of virulence in Gram negative bacteria: multiple protein-protein interactions among members of the H-NS and Hha families of proteins.

12.20-12.40 **Ana I. Prieto.**
Bile-induced DNA damage in *Salmonella enterica*.

12.40-13.00 **Ana Babic.**
Real-time monitoring of *Escherichia coli* conjugation by fluorescence microscopy.

13.00-13.20 **Jesper Larsen.**
The evolution of leukotoxin regulatory regions in genus *Mannheimia* by interspecies comparisons.

Session II
Chair: Roberto Kolter

16.00-16.50 **Cristina Escarmís.**
An evolutionary transition towards defective RNAs that are infectious by complementation.

16.50-17.40 **Andrés Moya.**
The architecture of fitness in a RNA virus.

18.10-19.00 **Paolo Monini.**
HAART and AIDS-associated malignancies: HIV protease inhibitors as anti-tumor drugs.

19.00-19.20 **Camille Szmaragd.**
New modelling approach based on phylogenetic analysis to understand clinical outcomes of hepatitis B virus.

19.20-20.50 Poster viewing.

Friday, October 22

Session III
Chair: Brian Spratt

9.00-9.50 **Dan Andersson.**
Compensatory mutations as an evolutionary driving force.

9.50-10.40 **M. Mercedes Zambrano.**
Persistence and survival in *Mycobacterium tuberculosis*.

11.10-11.30 **Uri Gophna.**
Archaeal contributions to bacterial pathogens.

11.30-11.50 **Dirk Linke.**
The evolution of the ß-barrel.

Session IV
Chair: John Roth

16.00-16.50 **Eduardo Groisman.**
Regulation of *Salmonella* virulence.

16.50-17.40 **Lionello Bossi.**
The prophage arsenal of epidemic *Salmonellae:* chance or necessity?

18.10-19.00 **Josep Casadesús.**
DNA adenine methylation: a signal for orderly DNA-protein interactions.

19.00-19.20 **M. Pilar Garcillán.**
Plasmids and pathogens: close encounters on the conjugative system.

19.20-20.50 Poster viewing.

Saturday, October 23

Session V

9.00-9.50	**John Roth.** Adaptive mutation and the origins of mutations during growth under selection: distinction between evolution of the pathogen and evolution of the disease.
11.10-12.00	**Richard Moxon.** Adaptive strategies of bacterial pathogens: the role of phase and antigenic variation.
12.00-13.00	General discussion and farewell address.

UNIA, Baeza.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W2.
Coupling between Transcription and RNA Processing

8-10 November

Scope: The process of gene expression has been traditionally divided into various individual steps including transcription, RNA processing, mRNA export to the cytoplasm and translation. Recent progress indicates that there is extensive coordination between these processes, and that the molecular mechanisms underlying their coupling open up new possibilities for regulation. Examples of this include the identification of proteins with dual function as transcriptional co-activators and splicing regulators, or the realization that promoter architecture and/or the processivity of RNA polymerase can modulate alternative splicing. The emerging picture is that the real substrate for processing reactions is the nascent transcript, and that transcriptional and processing machineries interact physically and functionally.

We propose to organize a meeting focused on the mechanisms that couple transcription and the different steps of RNA processing that lead to mature mRNAs. We intend to include both scientists that have uncovered some of these links as well as researchers that can illustrate the complexity, opportunities for regulation and cellular organization of the "expresosome".

Organizers: **Miguel Beato** (Centre for Genomic Regulation. Barcelona, Spain).
Juan Valcárcel (Centre for Genomic Regulation. Barcelona, Spain).

Monday, November 8

Session I
Chair: Jim Manley

9.00-9.40 **Danny Reinberg.**
Regulation of RNA Polymerase II Transcription by Multiple Histone Modifications.

9.40-10.20 **Tito Baralle.**
The role of RNA processing defects in human genetic diseases.

10.20-11.00 **Manny Ares Jr.**
Gene expression phenotype analysis reveals functional relationships between components of the transcription, splicing, and mRNA export machineries.

11.30-12.10 **John Lis.**
Dissecting Mechanisms of Transcriptional Regulation and Coupled RNA Processing at *Drosophila* Heat Shock Loci.

12.10-12.25 **Ann-Kristin Östlund-Farrants.**
Isolation of a 2-3 Mda WSTF-SNF2h complex.

12.25-12.40 **Apostolia Guialis.**
Identification of novel multi-factorial complexes of the specific transcription factor TAFII68 (TAF15).

12.40-13.20 **Andrés Aguilera.**
The interface between transcription and mRNP biogenesis and its relevance in genomic integrity.

16.00 Poster viewing.

Session II
Chair: Andrés Aguilera

18.00-18.40 **Steve Buratowski.**
Co-transcriptional 3' end processing of mRNAs and transcription termination by RNA polymerase II.

18.55-19.30 **Juan Valcárcel.**
Mechanisms of splicing regulation.

20.00-20.15 **Janina Görnemann.**
Co-transcriptional assembly of the spliceosome in yeast *(S. cerevisiae)*.

20.15-20.30 **Monika Buresova.**
Connecting transcription with pre-mRNA processing: a role for a novel RRM-containing cyclophilin Cyp55.

20.30- 21.10 **Ullas Kolthur.**
Unique Transcription Mechanisms in Haploid Spermatids.

Tuesday, November 9

Session III
Chair: John Lis

9.00-9.40 **Torben Jensen.**
Connections between transcription, mRNP assembly and quality control in *S. cerevisiae*.

9.40-9.55 **Mariangela Morlando.**
Factory of small non coding RNAs in *Saccharomyces cerevisiae.*

9.55-10.10 **Neus Visa.**
Actin-ribonucleoprotein complexes: a platform for recruitment of chromatin modifying factors.

10.10-10.50 **Barbara Natalizio.**
Functional connections between the RNAP II elongating complex and the RNA processing machinery determine exon definition.

10.50-11.05 **Carles Suñé.**
Role of transcription elongation regulator 1 (TCERG1/CA150) in pre-mRNA splicing.

16.00 Poster viewing.

Session IV

18.00-18.40 **Jim Manley.**
Coupling of transcription and mRNA processing: Cause and effects.

18.40-18.55 **Miryam Ducasse.**
Identification and functional characterization of interaction partners of the nuclear receptor corepressor N-CoR.

18.55-19.10 **Francesc Posas.**
Regulation of gene expression by the Hog1 MAPK in response to osmostress.

19.40-19.55 **Sonia Jimeno.**
Tho1: A new RNA binding protein that interacts with the THO/TREX complex.

19.55-20.30 **Miguel Beato.**
Gene regulation by steroid hormones: chromatin remodeling and alternative splicing.

20.30-21.15 **Round table discussion.**
What does coupling really mean? The Expresosome.
Discussion leaders: Danny Reinberg, Manny Ares and Jim Manley.

Wednesday, November 10

Session V

Chair: Nick Proudfoot

9.00-9.40 **Alberto Kornblihtt.**
Control of Alternative Splicing by RNA Pol II Elongation.

9.40-9.55 **Adalí Pecci.**
Alternative promoter usage and splicing: regulation of the expression of Bcl-XL isoform through the activation of the distal promoter P4.

9.55-10.10 **Liam P. Keegan.**
RNA editing in *Drosophila*; Adar transcript editing,neural target transcripts and promoter switches.

10.10-10.25 **Marie Öhman.**
Coordination of editing and splicing by the transcription machinery.

10.25-11.05 **Nick Proudfoot.**
Interconnecting mRNA 3' end processing, transcription and chromatin structure.

11.05-12.00 Round table discussion. Discussion leaders:
Alberto Kornblihtt, Tito Baralle, Nick Proudfoot.
The future of coupling.

UNIA, Baeza.

#2005

W3.
Imaging Synapses: From Individual Molecules to Brain Circuits

2-5 October

Scope: The cognitive functions of the brain are accomplished via the coordinated communication between billions of neurons in neuronal networks. Neural communication occurs at the synapse where a presynaptic nerve terminal releases neurotransmitters that react with postsynaptic receptors. This workshop will bring together investigators devoted to advance the optical analysis and molecular mechanisms of synaptic function. The workshop will emphasize studies based on integrated physiological and genetic approaches to visualize neural function at different levels of complexity, ranging from single molecules to neural circuits in the brain.

Organizers: **Rafael Fernández-Chacón** (University of Seville. Seville, Spain).
Arthur Konnerth (Technical University of Munich. Munich, Germany).
Thomas C. Südhof (University of Texas Southwestern Medical Center. Dallas, USA).

Monday, October 3

Session I
Chair: Wolfhard Almers

8.50-9.00 Welcome by the organizers.

9.00-9.40 **Winfried Denk.**
Title T.B.A.

9.40-10.20 **Atsushi Miyawaki.**
Visualization of the spatial and temporal dynamics of intracellular signaling.

10.20-11.00 **Stephen Smith.**
Seeing Circuits Assemble: Evidence from *in vivo* imaging for multiple synaptotropic arbor guidance mechanisms in zebrafish optic tectum.

Session II
Chair: Bert Sakmann

11.30-12.10 **Thomas C. Südhof.**
Molecular Dissection of Neurexin/Neuroligin Function in Neural Circuits.

12.10-12.50 **Jeff Lichtman.**
Imaging Synaptic Circuits in Fluorescent Mice.

12.50-13.30 **Pico Caroni.**
Life-long Growth of Mossy Fiber Synapses Regulated by Activity in the Hippocampus.

15.30 Poster viewing.

Session III
Chair: Arthur Konnerth

17.00-17.40 **Jie Shen.**
Presenilins and Synapses.

17.40-18.20 **Rafael Fernández-Chacón.**
SynaptopHluorin transgenic mice: new approaches for imaging the synaptic vesicle cycle at aged nerve terminals.

18.20-18.40 **Lucía Tabares.**
Real–time measurement of exocytosis and endocytosis at the neuromuscular junction of SynaptopHluorin transgenic mice.

19.10-19.50 **Isabel Llano.**
Assessing effects of parvalbumin on presynaptic Ca^{2+} signaling and synaptic transmission.

19.50-20.30 **Wade Regehr.**
Retrograde Signaling by Endocannabinoids in the Cerebellum: Multiple Mechanisms and Multiple Roles.

Tuesday, October 4

Session IV
Chair: Thomas C Südhof

9.00-9.40 **Bert Sakmann.**
Ca^{2+} dynamics in and transmitter release from the Calyx of Held.

9.40-10.00 **Xuelin Lou.**
Submaximal release of the readily-releasable vesicle pool at a large CNS synapse.

10.00-10.40 **Wolfhard Almers.**
Protein release and recruitment during single exocytic and endocytic events in live cells.

10.40-11.00 **Ruud Toonen.**
MUNC-18 organizes SNARE-dependent tethering of secretory vesicles.

15.30 Poster viewing.

Session V
Chair: Bill Betz

17.00-17.40 **Richard W. Tsien.**
Imaging synaptic function and fusion modes at the level of single vesicles.

17.40-18.20 **Leon Lagnado.**
Fusion, collapse and closure of vesicles at synapses and neuroendocrine cells monitored using interference reflection microscopy.

18.20-18.40 **John F. Wesseling.**
Augmentation controls the fast rebound from depression at a central synapse.

18.40-19.00 **Don B. Dixon.**
A pre-synaptic component to graded, bi-directional long-term plasticity at individual hippocampal synapses.

19.30-20.30 Round table discussion.

Wednesday, October 5

Session VI

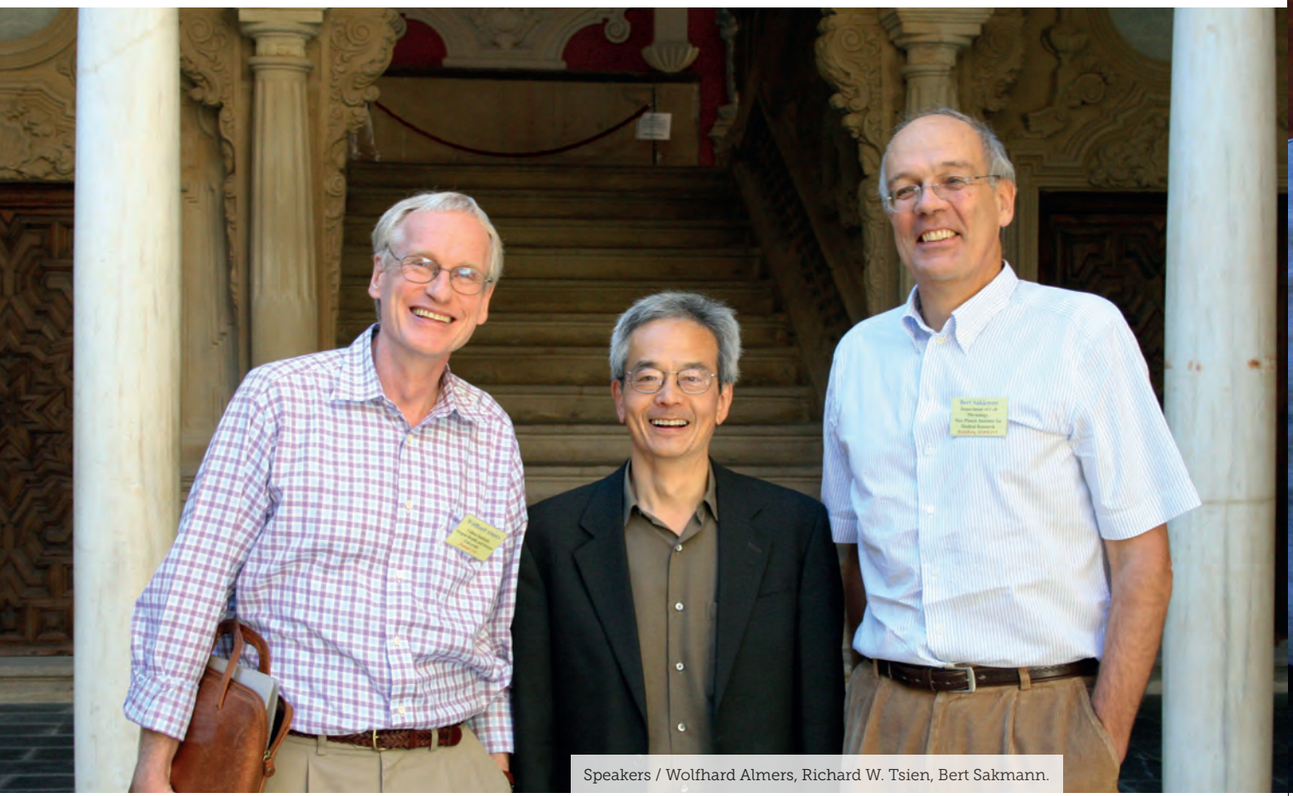
Chair: Richard Tsien

9.00-9.40 **Arthur Konnerth.**
Instantly-induced bidirectional synaptic plasticity in cortical neurons.

9.40-10.20 **Roberto Malinow.**
Postsynaptic Receptor Trafficking During a Form of Associative Learning.

10.20-11.00 **Bill Betz.**
Monitoring Synaptic Vesicle Mobility in Frog Motor Nerve Terminals.

11.30-12.00 Concluding remarks.



Speakers / Wolfhard Almers, Richard W. Tsien, Bert Sakmann.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Organizers / Arthur Konnerth, Rafael Fernández-Chacón, Thomas C. Südhof.

Nobel Prize Bert Sakmann.

W4.
Cardiovascular Development: Towards Biomedical Applicability

23-26 October

Scope: Cardiac development is a complex process leading to the formation of a four-chambered heart from a single straight tube. During cardiogenesis multiple cell types critically interact to generate a well-developed pumping adult heart. At present, we are starting to understand the molecular mechanisms that control cardiogenesis. In part, this has been possible because those mechanisms are highly conserved during evolution. Cardiac congenital heart diseases are amongst the most common congenital diseases in newborns. Over the last decade, our understanding of the molecular and genetic bases of congenital heart diseases has greatly improved. The knowledge of the molecular bases of common congenital heart diseases together with the understanding of the molecular bases for these tissue interactions will contribute to advances in cardiac modelling and tissue engineering. This workshop will gather together a number of experts in cardiac

development and regeneration, integrating morphogenetic, molecular and functional research in several model organisms. Crosstalk and interaction between acknowledged experts will contribute to generate new conceptual ideas on the development and transcriptional regulation of the heart. Active participation of students and post-doctoral researchers will be encouraged.

Organizers: **Marina Campione** (University of Padua. Padua, Italy).
Diego Franco (University of Jaén. Jaén, Spain).
Robert Kelly (University of Aix-Marseilles. Marseilles, France).

Monday, October 24

08.30-08.45 Opening of the workshop.

Session I: Comparative cardiogenesis

Chair: Margaret Buckingham and Marina Campione

08.45-09.15 **Krzysztof Jagla.**
The role of *Drosophila ladybird* genes in diversification of cardiac lineages and in the patterning of the cardiac outflow region.

09.15-09.45 **Mark Mercola.**
Natural and small molecule regulators of cardiogenesis.

09.45-10.00 **Michel Sémériva.**
Function of *Hox* genes in *Drosophila* cardiogenesis.

10.30-11.00 **Didier Stainier.**
Genetic and cellular analyses of zebrafish atrio-ventricular cushion and valve development.

11.00-11.30 **José Xavier-Neto.**
Retinoic acid signaling via RALDH2 and the heart: evolution, development and congenital disease.

11.30-11.45 **Florencia Tevy.**
In silico analysis of putative HOX target genes in *Drosophila* cardiac tube.

11.45-14.00 Poster viewing.

Session II: Cardiac precursors and lineage commitment

Chair: Mark Mercola and Diego Franco

16.30-17.00 **Margaret Buckingham.**
Rotation of the myocardial wall of the outflow tract is implicated in the normal positioning of the great arteries.

17.00-17.30 **Nigel Brown.**
Pitx2 is required in the second cardiac lineage for morphogenesis of the outflow tract.

17.30-17.45 **José Luis de la Pompa.**
Notch in the embryonic heart: establishment of a field of cardiac competence.

18.00-18.30 **Vincent Christoffels.**
Role of T-box transcription factors in the formation of the sinus venosus and the conduction system.

18.30-19.00 **Robert Kelly.**
Genetic analysis of *Tbx1* and *Fgf10* function during anterior heart field deployment.

19.00-19.15 **Nana Bit-Avragim.**
Zebrafish *nagie oko/mmp5* is required for maintenance of myocardial epithelia and cardiomyocyte morphology: its implications for human congenital heart malformations.

19.15-19.30 **Tilly Mommersteeg.**
Role of Nkx2.5 in the formation of the venous pole of the heart.

Tuesday, October 25

Session III: Tissue interactions during cardiac development

Chair: Roger Markwald and Robert Kelly

09.00-09.30 **Diego Franco.**
Signalling pathways involved during *in vivo* and *in vitro* cardiogenesis.

09.30-10.00 **Adriana Gittenberger-de Groot.**
The use of epicardium for a cardiac regeneration.

10.00-10.15 **Amelia Aránega.**
Pitx2c overexpression promotes cell proliferation and arrests differentiation in myoblasts.

10.15-10.30 **Karim Mesbah.**
A mutation in the translocon-associated protein alpha (Trapα) gene results in morphogenetic defects of the outflow tract in the mouse.

11.00-11.30 **Marina Campione.**
Genetic analysis of the role of Pitx2 in cardiac morphogenesis and disease.

11.30-12.00 **Ramón Muñoz-Chápuli.**
The Wilms´s tumor suppressor gene is involved in cardiac development through critical regulation of epicardially-derived mesenchymal cells.

12.00-12.15 **Magali Théveniau-Ruissy.**
A cardiosensor mouse line delimiting the central and peripheral conduction system.

12.15-12.30 **Jorge Domínguez.**
Expression pattern of sodium channels during mouse heart development.

12.30-14.00 Poster viewing.

Wednesday, October 26

Session IV: Stem cells and cardiac regeneration: towards applicability?
Chair: Adriana Gittenberger-de Groot and Vincent Christoffels

09.00-09.30 **Simonetta Ausoni.**
Contribution of extracardiac and cardiac stem cells to regeneration in heterotopic rat heart transplants.

09.30-10.00 **Roger Markwald.**
Cellular recruitment of marrow derived, hematopoietic stem cells into postnatal heart: potential modification of phenotype by periostin.

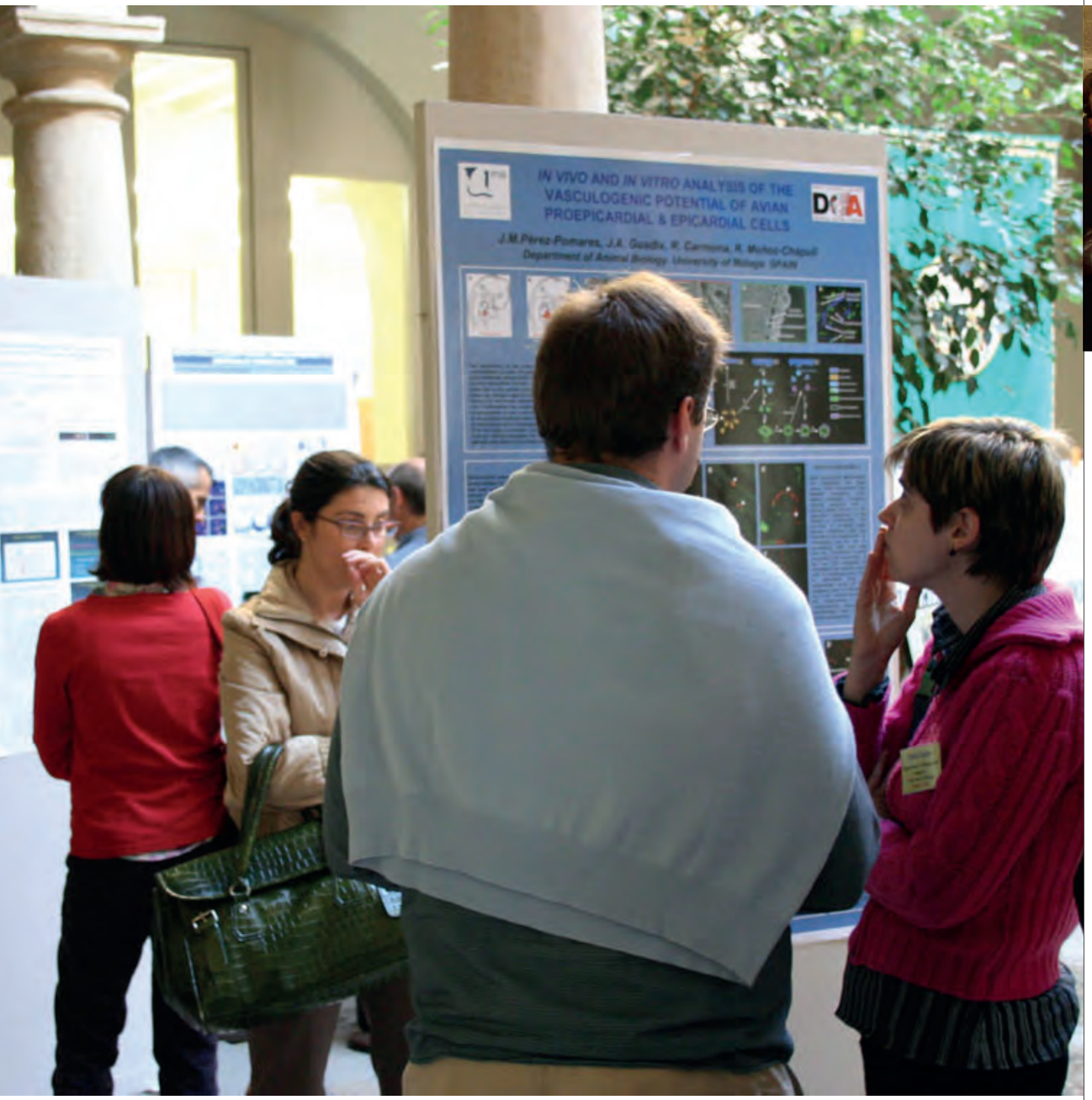
10.00-10.30 **Maria Paola Santini.**
Enhanced regeneration of the mammalian heart.

11.00-11.30 **Bernardo Nadal-Ginard.**
Myocardial Regeneration: Cell Transplantation vs Endogenous Stem Cell Activation.

11.30-12.00 **Karl Laugwitz.**
Islet-1^{+} cardiac progenitor cells-a system to study cardiogenic signaling.

12.00-12.15 **José María Pérez-Pomares.**
In vivo and *in vitro* analysis of the vasculogenic potential of avian proepicardial and epicardial cells.

Rector José María Martín Delgado.



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W5.
Epigenetic Mechanisms in Development and Disease

13-16 November

Scope: Most cells of a multicellular organism are genetically identical, but they can be structurally and functionally very different owing to differential gene expression programs. This diversity is established by an interplay between specific transcription factors and epigenetic mechanisms, which can involve both DNA and chromatin modifications, resulting in the stable inheritance of gene expression patterns without changes in the genome sequence. The workshop intends to highlight the remarkable recent progress in the understanding of the role of epigenetic mechanisms in fields as diverse as development, cancer biology, genomic imprinting, developmental abnormalities in humans, somatic gene therapy, cloning, transgenic strategies, and chromosomal stability. Topics to be treated: 1) Epigenetic silencing mechanisms. 2) Epigenetic control of development. 3) Epigenetic defects in human development. 4) Epigenetic control of cell proliferation-cancer. 5) Trithorax-group and Polycomb-group interplay in development and disease.

Organizers: **José C. Reyes** (University of Seville. Seville, Spain).
Moshe Yaniv (Pasteur Institute. Paris, France).

Monday, November 14

8.50-9.00 Welcome by the organizers.

Session I: Epigenetic silencing mechanisms

9.00-9.45 **Shiv I. S. Grewal.**
RNAi-Mediated Epigenetic Control of the Genome.

9.45-10.05 **Bogdan Mateescu.**
Evidences that HP1 proteins are recruited on the HIV-1 locus by a mechanism implying TAR and the RNAi machinery.

10.05-10.25 **Tiziana Bonaldi.**
The Heterochromatome: mass spectrometry-based analysis of the histone code and the proteome of heterochromatin.

11.00-11.45 **Wolf Reik.**
Imprinting and epigenetic reprogramming in mammalian development.

11.45-12.05 **Marian Martínez-Balbás.**
Histone-acetyltransferases as cell proliferation regulators.

12.05-12.25 **Luciano Di Croce.**
Targeting chromatin machines to promoters in leukemias.

16.00 Poster viewing.

Session II: Epigenetic defects in human development
Chair: Wolf Reik

17.00-17.45 **Cornelius F. Boerkoel.**
Genomic neighborhoods: a role for higher order epigenetic regulation in human disease.

17.45-18.30 **Jennifer Berger.**
Targets of methyl-CpG binding proteins.

19.00-19.45 **Andrea Riccio.**
Genomic imprinting and disease: Genetic and epigenetic defects in the Beckwith-Wiedemann syndrome.

19.45-20.30 **Shigeaki Kato.**
The role of Williams Syndrome Transcription Factor (WSTF) in gene regulation and chromatin remodeling through vitamin D receptor.

Tuesday, November 15

Session III: Epigenetic control of development
Chair: David Livingston

8.45-9.30 **Martin Houlard.**
An essential role of CAF-1 during early development in mouse.

9.30-10.15 **Edith Heard.**
Exploring nuclear localization and epigenetics during X-chromosome inactivation.

10.15-10.35 **Ángel García-Díaz.**
Functional and structural dissection of DNA regulatory elements found within the locus control region of the mouse tyrosinase gene.

10.35-10.55 **Miguel Vidal.**
Genetic and biochemical analysis of the regulation of Hox genes by the Ring1 and YY1 binding protein (RYBP).

15.30 Poster viewing.

Session IV: Epigenetic control of cell proliferation-cancer
Chair: Maarten van Lohuizen

16.30-17.15 **Peter Jones.**
Epigenetics and Human Cancer.

17.15-18.00 **María A. Blasco.**
Epigenetic control of mammalian telomeres.

18.20-18.55 **Manel Esteller.**
Cancer Epigenetics: Breaking the DNA Methylation and Histone Codes.

18.55-19.40 **David Livingston.**
Genetic and epigenetic abnormalities involving the X chromosome in BRCA1 -/- breast cancer and in a sporadic, BRCA1 wt phenocopy of this disease.

18.55-19.40 **Félix Recillas-Targa.**
Epigenetic silencing of *p53* and *Rb1* human gene promoters by DNA methylation and histone modifications.

Wednesday, November 16

Session V: Trithorax-group and Polycomb-group interplay in development and disease

Chair: María A Blasco

9.00-9.45 **Moshe Yaniv.**
A dual role of the SWI/SNF complex in transcription control and maintenance of genome integrity.

9.45-10.30 **Valerio Orlando.**
The role of higher order structures and non-coding RNA in Polycomb-mediated gene silencing.

11.00-11.45 **José C. Reyes.**
Polycomb and *Trithorax* proteins control development and homeotic gene expression in plants.

11.45-12.30 **Maarten van Lohuizen.**
Polycomb repressors controlling stem cell fate: Implications for cancer and development.

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W6. Synaptopathies and Mental Disorders

11-14 December

Scope: Brain function resides in the quality and quantity of neuron to neuron communication at synapses. In some psychiatric disorders, like autism and schizophrenia, some neurotransmitter systems prevail, giving rise to a complex scenario of psychiatric symptoms. In neurodegenerative disorders like Alzheimer, Huntington, ALS, etc., the loss and alteration of synaptic transmission is crucial for the progression of the disease. A better understanding of synaptic function would allow a better characterization of synaptic transmission and its correlate with brain disorders. We will bring world experts aiming to identify key steps relevant for synaptic function and to mark the points relevant for disease. The combination of functional tools (electrophysiology, imaging, etc.), molecular biology, genetics and the use of mouse models will be the key elements for research on this area in the coming years.

Organizers: **Guillermo Álvarez de Toledo** (University of Seville. Seville, Spain).
Reinhard Jahn (Max Planck Institute for Biophysical Chemistry. Göttingen, Germany).

Monday, December 12

Session I
Chair: Erwin Neher

9.00-9.40 **Gerard Borst.**
Mechanisms of short-term plasticity at the rat calyx of Held synapse.

9.40-10.20 **Nils Brose.**
The Role of Neuroligins in Synaptogenesis and Synapse Function.

10.20-11.00 **Reinhard Jahn.**
The role of SNARE proteins in neuronal exocytosis.

Session II
Chair: Matthijs Verhage

11.30-12.10 **Erwin Neher.**
Distinct Kinetic Changes in Neurotransmitter Release after SNARE Protein Cleavage.

12.10-12.50 **Thomas Kuner**.
Structural determinants of presynaptic function examined during postnatal synaptic maturation.

12.50-13.30 **Lucía Tabares (Guillermo Álvarez de Toledo).**
Real-time measurement of exocytosis and endocytosis at the neuromuscular junction of SynaptopHluorin transgenic mice.

15.30-17.00 Poster viewing.

Session III
Chair: Gerard Borst

17.00-17.40 **Peter Seeburg**.
AMPA Receptor Properties in Hippocampus and Spinal Cord Motor Neurons.

17.40-18.20 **Matthijs Verhage.**
Docking and tethering of secretory vesicles and the way these processes control synapse recovery, releasable pool size and replenishment.

18.20-19.00 **Yael Stern-Bach.**
Molecular constituents of AMPA receptor channel gating.

Tuesday, December 13

Session IV
Chair: Reinhard Jahn

9.00-9.40 **Osvaldo Uchitel.**
Functional compensation of calcium channels at synaptic terminals following gene knockout.

9.40-10.20 **Timothy Ryan**.
The Coupling of Exocytosis and Endocytosis at Nerve Terminals.

10.20-11.00 **Michela Matteoli.**
Synaptic vesicle and AMPA receptor trafficking during synaptogenesis.

Session V
Chair: Peter Seeburg

11.30-12.10 **Rostislav Turecek.**
The role of inhibition in mammalian MNTB.

12.10-12.50 **Angus Silver.**
Determinants of broad bandwidth transmission at a central synapse.

12.50-13.30 **Zoltan Nusser.**
Unique subcellular clustering of A-type K^+ channel.

15.30-17.00 Poster viewing.

Session VI
Chair: Angus Silver

17.00-17.40 **Yukiko Goda.**
Sharing of recycling synaptic vesicles between boutons.

17.40-18.20 **Christophe Mulle.**
Role of kainate receptors in the regulation of neuronal excitability and synaptic plasticity.

18.40-19.20 **Thomas Bourgeron.**
Genetic studies reveal an atypical synaptic architecture in autism spectrum disorders.

19.20-20.00 **Hannah Monyer.**
Functional role of distinct GABAergic interneurone subtypes.

20.00-20.30 Round Table: Conclusions.

Nobel Prize Erwin Neher.

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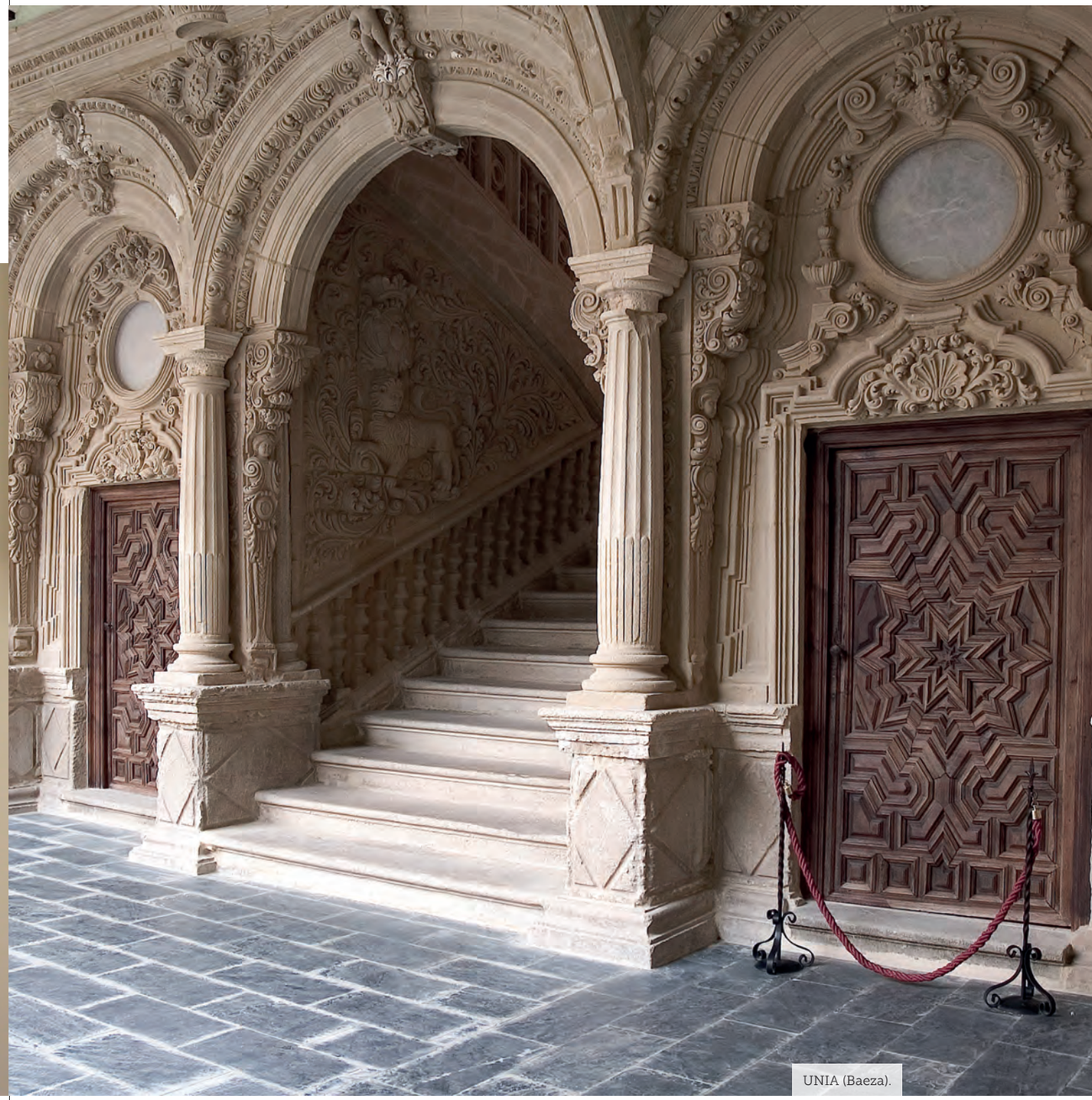

UNIA (Baeza).

#2006

W7.
RNA in Disease and Therapy

2-4 October

Scope: The full importance of RNA in disease and therapy has only recently been fully appreciated. Errors in RNA metabolism have been recognized as causal in both inherited and acquired diseases and therapies targeted to or mediated by RNAs promise unrivaled specificity. The workshop on **RNA in disease and therapy** will focus on the elucidation of the molecular mechanisms of RNA pathogenesis and on the use of RNA as a therapeutic tool. Although the workshop will cover broad areas of RNA biology the main focus will be on two areas of intense current interest: microRNAs and alternative splicing.

Organizers: **Alfredo Berzal-Herranz** (Institute of Parasitology and Biomedicine "López-Neyra". Granada, Spain)
Bryan R. Cullen (Duke University Medical Center. Durham, USA).
Mariano A. García-Blanco (Duke University Medical Center. Durham, USA).

Monday, October 2

8.50-9.00 Welcome by the organizers.

Session I: microRNAs and human disease

Chair: Mariano García-Blanco

9.00-9.45 **Scott Hammond.**
RNAi, microRNAs, and human disease.

9.45-10.30 **Bryan Cullen.**
Viruses, microRNAs and RNA interference.

11.00-11.20 **Amaia Lujambio.**
Epigenetic inactivation of miRNA expression in human cancer cells.

11.20-11.40 **Puri Fortes.**
Adenovirus VA RNA is processed to functional interfering RNAs involved in virus production.

11.40-12.25 **Greg Hannon.**
Unexpected complexity in plant and animal small RNAs.

16.00 Poster viewing.

Session II: Alternative splicing and disease

Chair: Lynne Maquat

17.00-17.45 **Tito Baralle.**
Genetic and biological relevance of alternative pre-mRNA splicing.

17.45-18.30 **Thomas Cooper.**
Alternative splicing regulation in development and disease.

19.00-19.45 **Juan Valcárcel.**
Molecular mechanisms of altered pre-mRNA splicing in human disease.

19.45-20.30 **Mariano García-Blanco.**
Imaging alternative splicing in tissues and tumors *in vivo*.

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Tuesday, October 3

Session III: From transcription to decay

8.45-9.30 **Lynne Maquat.**
NMD and SMD: Related pathways of mRNA decay with distinct purposes.

9.30-9.50 **Susana de Lucas.**
Analysis of the mRNA associated to hStaufen-containing granules.

9.50-10.10 **Carlos Suñé.**
Connections of the Transcription Elongation Regulator 1 (CA150/TCERG1) with the splicing machinery.

10.10-10.55 **Encarna Martínez-Salas.**
Functional and structural characterization of internal ribosome entry site elements.

15.30 Poster viewing.

Session IV: RNA tools and RNA targets

Chair: Juan Valcárcel

17.00-17.45 **Alfredo Berzal-Herranz.**
Redesigning ribozymes. A strategy for the development of specific RNA tools.

17.45-18.30 **Luis García.**
Rescue of dystrophin in the DMD dog model (GRMD) by multi-exon skipping using engineered U7 snRNAs.

19.00-19.45 **Adrian Krainer.**
Oncogenic activity of alternative splicing factors.

Wednesday, October 4

Session V: Mechanism and use of RNAi

Chair: Bryan Cullen

9.45-10.30 **Witold Filipowicz.**
Mechanisms and reversibility of microRNA-mediated translational repression and P-body localization of human mRNAs.

11.00-11.45 **Beverly Davidson.**
RNAi for dominant neurogenetic disease therapy.

11.45-12.30 Round table discussion.

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"CURRENT TRENDS IN BIOMEDICINE"

Guided tour / Baeza.

W8.
Pathocycles: Role of Cell Cycle Regulators in the Induction of Virulence Programme in Pathogenic Fungi

23-25 October

Scope: Plant and animal fungal diseases continue to cause human suffering and enormous economic losses. New approaches for antifungal therapy are required to meet the challenges imposed by these infections. However, the great diversity which exists among pathogenic fungi in their lifestyles and the symptoms which they cause are an important caveat for the search of common targets for antifungal research, because it is likely that different attributes will be important for different fungi to cause disease. However, all of them have in common the requirement of accurate developmental decisions for the induction of the pathogenic programme. Little knowledge has been provided to understand how the

induction of the virulence programme relates with changes in the morphogenetic and cell cycle regulation in pathogenic fungi.

The challenge of this meeting is to put together the expertise in well known fungal model systems and pathogenic fungi to coin a new research topic: regulation of the fungal pathogenic cell cycle. Crosstalk and interaction between acknowledged experts will contribute to generate new conceptual ideas that we expect to increase our links in the key topics: cell cycle and morphogenetic regulators as virulence factors. Active participation of students and post-doctoral researchers will be encouraged.

Organizers: **Jaime Correa-Bordes** (University of Extremadura. Badajoz, Spain).
Paul Nurse (The Rockefeller University. New York, USA).
José Pérez-Martín (National Centre for Biotechnology. Madrid, Spain).

Monday, October 23

08.45-09.00 Opening of the workshop.

Session I: Cell cycle regulation

Chair: Stephen Osmani

09.00-09.30 **Malcolm Whiteway.**
Pheromone mediated cell cycle arrest in *C. albicans*.

09.30-10.00 **Amy S. Gladfelter.**
AgSwe1p regulates mitosis in response to morphogenesis and nutrients in multinucleated *A. gossypii* cells.

10.00-10.15 **Ayala Ofir.**
Cyclin-dependent kinase regulation by the *C. albicans* CDK inhibitor Sol1.

11.00-11.30 **José Pérez-Martín.**
Polarity and cell cycle regulation during the formation of the infective filament in the phytopathogen *Ustilago maydis*.

11.30-12.00 **Nicholas J. Talbot.**
Genetic regulation of infection-related development in the rice blast fungus *Magnaporthe grisea*.

12.00-12.15 **Natalia Mielnichuk.**
Regulation of the G2 arrest during the infection process in the pathogenic fungus *Ustilago maydis*.

12.15-13.30 Poster viewing.

Session II: Polarity

Chair: Judith Berman

16.00-16.30 **Peter Sudbery.**
Mechanisms of hyphal growth in *Candida albicans*.

16.30-17.00 **Steven D. Harris.**
Hyphal morphogenesis in *Aspergillus nidulans*: shaping the mold.

17.00-17.15 **Ignacio Flor-Parra.**
Pcl4 and Pcl7: two Cdk2-cyclins with roles in morphogenesis and cell cycle regulation in *Ustilago maydis*.

17.45-18.15 **Jürgen Wendland.**
Candida albicans Rho-type GTPase encoding genes required for polarized cell growth and cell separation.

18.15-18.45 **Matthias Peter.**
Signalling during polarity establishment.

18.45-19.00 **Alberto Miranda.**
Analysis of the role of *MKK2* in the pathogenic fungus *Candida albicans*.

Tuesday, October 24

Session III: Transcriptional regulation

Chair: Peter Sudbery

09.00-09.30 **Alexander Johnson.**
White-opaque switching in *Candida albicans*: a cycling between two distinctive cell types.

09.30-10.00 **Olaf Nielsen.**
Fission yeast as a model for studying the switch from mitotic cell-cycle progression to sexual differentiation.

10.00-10.15 **Kathi Zarnack.**
Multisite phosphorylation of the transcription factor Prf1 effects distinct classes of target genes in *Ustilago maydis*.

10.30-11.30 Poster viewing 2.

Session IV: Morphogenesis
Chair: Gero Steinberg

16.00-16.30 **Martí Aldea.**
Trapped at the gut if too small: cell size regulation and ER release of cyclin Cln3 by the J-chaperone Ydj1 in late G1.

16.30-17.00 **Daniel Lew.**
Eavesdropping on the cytoskeleton: how yeast cells know what shape they are.

17.45-18.15 **Jaime Correa-Bordes.**
Regulation of cell separation during the morphogenetic switch in *Candida albicans*.

18.15-18.45 **Stephen A. Osmani.**
Systematic deletion and mitotic localization of the nuclear pore complex proteins of *Aspergillus nidulans*.

18.45-19.00 **Evangelina Pablo.**
Role of Cdc15p during Meiosis in *S. cerevisiae*.

19.00-19.30 Round discussion:
Paul Nurse.
Cell polarity, cell cycle: two sides of the same coin?

Wednesday, October 25

Session V: Cytoskeleton and cell cycle
Chair: Nicholas J Talbot

09.00-09.30 **Judith Berman.**
Nuclear movement, morphogenesis and cell cycle checkpoints in *C. albicans*.

09.30-10.00 **Gero Steinberg.**
Dynein-activity in anaphase B requires a Clip170-homologue in *Ustilago maydis*.

10.00-10.15 **Alois Hodel.**
Developing assays for the characterisation of novel tubulin binding compounds in plant pathogenic fungi.

11.00-11.30 Closing Remarks:
Paul Nurse.

W9.
Mechanisms and Biological Consequences of Recombinational DNA Repair-Mediated Genome Instability

6-8 November

Scope: Our genetic material is continually subjected to environmental insults from genotoxic molecules, which can damage its capacity to replicate faithfully and thereby alter the coding information. The toxic and mutagenic consequences of these insults are, however, minimized by the cell ability to promote efficient DNA repair. If left unrepaired, DNA lesions can result in genome instability, a phenomenon of biomedical importance, due to its impact on carcinogenesis and a number of genetic diseases. Among the different forms of DNA repair, recombination is a fundamental process that operates continually to shape and reshape the genomes of all organisms and to promote the segregation of chromosomes at cell

division. The aim of this meeting is to discuss the recent advances in the field of the DNA repair mechanisms that preserve genomic integrity. It will be mainly focused on repair of DNA breaks, in particular homologous and non-homologous recombination, the interconnection between recombinational repair and DNA replication, and the importance of these processes in the preservation of genomic integrity and the generation of cancer and genetic diseases. The meeting will cover structural, cell biology, genetic, molecular and biochemical approaches to the understanding of DNA repair processes.

Organizers: **Andrés Aguilera** (University of Seville. Seville, Spain).
Roland Kanaar (Erasmus MC. Rotterdam, The Netherlands).

Monday, November 6

8.55-9.00 Welcome.

Session I

Chair: Steve West

9.00-9.35 **Steve Kolwalczykowski.**
RecA/Rad51 Nucleoprotein Filament Assembly: Mechanism of Loading onto ssDNA and Visualization of Single-Filament Assembly.

9.35-10.10 **Roland Kanaar.**
Action of biological nano-machines during DNA recombination.

10.10-10.30 **John Tainer.**
Assembled Structure of the Mre11/Rad50/DNA Complex from Combined X-ray Solution Scattering and Crystallography.

11.00-11.35 **Ken Marians.**
The Mechanisms of Replication Fork Restart.

11.35-12.10 **Marco Foiani.**
Mechanisms controlling the integrity of replication forks.

12.10-12.45 **Bénédicte Michel.**
UvrD acts at replication forks.

15.00-16.30 Poster viewing.

Session II

Chair: Jan H Hoeijmakers

16.30-17.05 **Andrés Aguilera.**
Different genetic requirements for repair of replication-born DSBs by sister-chromatid recombination and break-induced replication.

17.05-17.40 **Rodney Rothstein.**
Choreography of the DNA damage response involves integrating the type of damage with the cell cycle.

17.40-18.00 **Michael Lisby.**
Compartmentalization of homologous recombination.

18.30-19.05 **Jim Haber.**
Checkpoint responses governing repair of a broken chromosome by break-induced replication.

19.05-19.40 **Alain Nicolas.**
Tandem-repeat instability in yeast *rad27/FEN1* and *pif1* cells.

19.40-20.00 **Leonard Wu.**
Role for the Bloom's syndrome helicase in the repair of damaged replication forks.

Tuesday, November 7

Session III

Chair: Alan Lehmann

9.00-9.35 **Jan H. J. Hoeijmakers.**
DNA damage repair: the connection with cancer, aging and life span.

9.35-10.10 **Steve West.**
Identification of a novel Fanconi anemia-associated protein that interacts with FANCM.

10.10-10.30 **Wojciech Niedzwiedz.**
What is the role of FANCM in FA coordinated response to DNA cross-links.

11.00-11.35 **Penny Jeggo.**
The efficacy and interplay between ATM dependent G2 checkpoint and repair functions.

11.35-12.10 **Alan Ashworth.**
Therapeutic Exploitation of the DNA Repair Defect in BRCA Mutant Tumours.

12.10-12.30 **Óscar Fernández-Capetillo.**
Chromatin decondensation facilitates the detection of DNA double-strand breaks.

12.30-12.50 **Juan C. Alonso.**
Bacillus subtilis RecN is the early detector of DNA breaks during DNA repair by homologous recombination.

16.45-18.15 Poster viewing.

Session IV
Chair: Alain Nicolas

18.15-18.50 **Michael Lichten.**
Controlling the outcome of meiotic double-strand break repair.

18.50-19.25 **Anne Villeneuve.**
Double-strand break repair in the context of *C. elegans* meiosis.

19.25-19.45 **Dan Camerini-Otero.**
The mouse Hop2 anda Mnd1 proteins in meiotic recombination and recombination hotspots in humans.

19.45-20.05 **Pedro San Segundo.**
The chromatin modulator Dot1 is required for repair of DNA double-strand breaks by sister chromatid recombination.

Wednesday, November 8

Session V
Chair: Rodney Rothstein

9.00-9.35 **Steve Jackson.**
Molecular control of the DNA-damage response.

9.35-10.10 **María A. Blasco.**
Heterochromatin assembly at telomeres controls telomere recombination.

10.10-10.30 **Yikang Rong.**
Double strand break repair and *de novo* telomere formation induced by the rare-cutting I-SceI endonuclease in *Drosophila melanogaster.*

11.00-11.35 **Alan Lehmann.**
The SMC5/6 DNA Repair Complex.

11.35-11.55 **Camilla Sjögren.**
DNA damage-induced sister chromatid cohesion.

W10. Mitochondriopathies. Diverse Origin of Mitochondrial Diseases

27-29 November

Scope: The mitochondrial respiratory chain (MRC), which generates most of the cellular ATP, is composed of five multisubunit enzyme complexes. Both the mitochondrial DNA (mtDNA) and the nuclear DNA (nDNA) encode for polypeptide components of these complexes. Also, two electron carriers, coenzyme Q and cytochrome c, are vital for mitochondrial synthesis of ATP. Hence, mutations in either genome can cause MRC dysfunction that impairs transport of electrons and/or protons and decreases ATP synthesis. As brain and skeletal muscle have high energy requirements, genetic diseases affecting MRC usually affect these tissues, and are commonly known as mitochondrial encephalomyopathies.

The scope of this workshop is to have the opportunity to join together scientists with different views of mitochondrial diseases, its variability, treatment approaches, diagnostics protocols, and particularly experience of the different participants in understanding the cooperation of mitochondrial and nuclear genomes to set respiration.

Organizers: **Salvatore DiMauro** (Columbia University. New York, USA).
Plácido Navas (Andalusian Centre for Developmental Biology. Seville, Spain).

Monday, November 27

8.50-9.00 Welcome by the organizers.

Session I: The mitochondrial machine
Chair: Plácido Navas

9.00-9.45 **Giorgio Lenaz**.
The mitochondrial respiratory chain as a mechanism for energy conservation and a source of oxygen radicals.

9.45-10.30 **Julio Montoya.**
Human mitochondrial genetic system.

11.00-11.45 **Rafael Garesse.**
Mitochondrial DNA metabolism: factors and regulation.

11.45-12.30 **Ramon Martí.**
Role of nucleotide pool in mitochondria homeostasis.

15.30 Poster viewing.

Session II: A view of mitochondrial disorders
Chair: Rafael Garesse

17.00-17.45 **Leonardo Salviati**.
The clinical heterogeneity of mitochondrial diseases.

17.45-18.30 **Francesc Palau.**
Disruption of mitochondrial dynamics as a mechanism of disease.

19.00-19.45 **Giovanni Manfredi**.
Mitochondrial involvement in familial amyotrophic lateral sclerosis.

19.45-20.30 **Massimo Zeviani.**
Mitochondrial disorders: a tale of two genomes.

Tuesday, November 28

Session III: Diagnostic strategies
Chair: Leonardo Salviati

9.00-9.45 **Pierre Rustin.**
Diseases caused by respiratory complexes dysfunction.

9.45-10.30 **Rafael Artuch**.
Diagnosis of mitochondrial disorders at the paediatric age.

10.30-10.45 **Hana Hansikova.**
Biochemical and molecular analyses in a patient with variable tissue mitochondrial DNA 3243A>G mutation load.

15.30 Poster viewing.

Session IV: Coenzyme Q deficiency
Chair: Rafael Artuch

17.00-17.45 **Gustav Dallner**.
Regulation of coenzyme Q biosynthesis.

17.45-18.30 **Michio Hirano.**
Human diseases with coenzyme Q_{10} deficiency.

19.00-19.45 **Plácido Navas.**
Functional complementation in yeast: a tool for the molecular diagnostic of coenzyme Q_{10} deficiency.

19.45-20.00 **José A. Sánchez-Alcázar.**
Physiopathology of coenzyme Q deficiency in human fibroblasts.

Wednesday, November 29

Session V: Therapeutic: current and future
Chair: Giorgio Lenaz

9.00-9.45 **Antoni L. Andreu.**
Diagnostic and therapeutic strategies in the management of mitochondrial toxicity in HIV-infected patients under antiretroviral treatment.

9.45-10.30 **Douglas C. Wallace**.
A Mitochondrial and Evolutionary Perspective on the Etiology of Common Diseases.

11.00-11.45 **Salvatore DiMauro.**
Therapeutic approaches to mitochondrial diseases.

11.45-12.30 General discussion.

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W11.
Mechanistic and Integrative Aspects of mRNA Synthesis

1-3 October

Scope: Biological complexity of eukaryotic organisms directly relates to multi-level control of gene transcription. Critical links between different steps in mRNA synthesis have been identified in recent years, stressing the importance of integrative approaches. Whereas new high-throughput technologies are providing data on protein interaction, mRNA expression and transcription factor localization at a genomic level, detailed mechanistic studies continue to provide the framework to understand the observed patterns. This workshop will focus on the integration of genomic and biochemical approaches by bringing together experts from both fields in an effort to decipher the critical steps in eukaryotic mRNA synthesis.

Organizers: **Ramin Shiekhattar** (Centre for Genomic Regulation. Barcelona, Spain).
Marc Timmers (University Medical Center Utrecht. Utrecht, The Netherlands).

Monday, October 1

08.50-09.00 **Ramin Shiekhattar and Marc Timmers.**
Opening of the workshop.

Session I: Biochemistry of transcription
Chair: Winship Herr

09.00-09.30 **Jim Kadonaga.**
Studies of the RNA Polymerase II Core Promoter.

09.30-10.00 **Steve Hahn.**
Mechanisms of RNA Polymerase II transcription initiation and activation.

10.00-10.20 **Irwin Davidson.**
Structure/function analysis of TBP provides insights into how TBP regulates cell proliferation.

10.50-11.20 **Bob Roeder.**
Integrated Functions of Diverse Transcriptional Coactivators in Biochemically-defined Systems.

11.20-11.50 **Làszlò Tora.**
TFTC/STAGA HAT complex links stress response, nuclear localization, deubiquitination dependent chromatin remodelling and transcription activation.

11.50-12.10 **Xenia Peñate.**
RPB7 Promotes RNA Polymerase I Transcription in *Trypanosoma brucei*.

12.10-13.30 Poster viewing.

Session II: Interplay modifiers and transcription machinery
Chair: Steve Hahn

16.00-16.30 **Winship Herr.**
Regulatory roles of the herpes simplex virus host-cell factor HCF-1 in the cell cycle and animal development.

16.30-17.00 **Robert Sims.**
Recognition of Trimethylated Histone H3 Lysine 4 Facilitates the Recruitment of Transcription Post-Initiation Factors and pre-mRNA Splicing.

17.00-17.20 **José C. Reyes.**
Molecular and functional characterization of the CHD8, a mammalian homolog of *Drosophila*'s Kismet.

17.50-18.20 **Ramin Shiekhattar.**
Demethylation of H3K27 regulates polycomb recruitment and H2A ubiquitination.

18.20-18.50 **Miguel Beato.**
Integration at the level of chromatin of hormonal signaling pathways.

18.50-19.10 **Sohail Malik.**
Regulation of HNF-4-dependent transcription by Mediator and ancillary factors.

19.10-19.50 Round table discussion.

Tuesday, October 2

Session III: Genome-wide localization of transcription complexes
Chair: Jim Kadonaga

09.00-09.30 **Bing Ren.**
A Map of Cis-Regulatory Elements in The Human Genome.

09.30-10.00 **Michael Meisterernst.**
Genome-wide and mechanistic analysis of RNA polymerase II transcription cofactors.

10.00-10.20 **Frank Holstege.**
Understanding regulatory circuitry using DNA microarray expression-profile phenotypes.

10.40-11.10 **Marc Timmers.**
Regulation of Activity and Distribution of the TATA-Binding Protein.

11.10-11.30 **Vicent Pelechano.**
Gene class-dependent mechanisms of transcription in yeast, or let me be transcribed on my way.

11.30-12.30 Poster viewing.

Session IV: Feedback loops in mRNA synthesis
Chair: Bob Roeder

16.30-17.00 **Sonia Jimeno.**
From THO to the Thp1-Sac3 complex: A dynamic RNA-dependent process controlling transcription and RNA export in yeast.

17.00-17.30 **David Bentley.**
Co-transcriptional association of human pre-mRNA processing factors with RNA polymerase II elongation complexes.

17.30-17.50 **Sebastián Chávez.**
New elements involved in the transcriptional effect of NTP-depleting drugs.

18.20-18.50 **Jim Goodrich.**
Non-coding RNAs that bind mammalian RNA polymerase II and regulate transcription.

18.50-19.10 **John LaCava.**
Splicing Regulation: Looking for Equilibrium.

19.10-19.30 **Miguel Sánchez Álvarez.**
Connecting transcription with pre-mRNA processing: a role for transcription elongation factor CA150.

19.30-20.10 Round table discussion.

Wednesday, October 3

Session V: Topologies of transcription units in vivo
Chair: David Bentley

09.00-09.30 **David Levens.**
Reverse engineering the c-myc promoter: dynamic supercoils and realtime regulation.

09.30-09.50 **Stéphanie Boireau.**
A dynamic view of HIV-1 splicing.

09.50-10.20 **Michael Hampsey.**
DNA loops in RNA polymerase II transcription.

10.20-11.00 Concluding remarks.

W12.
Deciphering the Regulatory Genome: Development, Evolution and Disease

8-10 October

Scope: More than 95% of the human genome sequence is non-coding, i.e. does not instruct the synthesis of proteins. This vast amount of DNA sequence contains the genes for a multitude of non-coding RNAs, as well as DNA sequences directing when, where, and how much each of the proteins and non-coding RNAs will be expressed. At present, we have a remarkably fragmentary and incomplete understanding of how these regulatory sequences operate. This workshop aims at defining the strategies to be followed towards understanding the function of non-coding regulatory DNA in development, evolution and human disease, by gathering some of the leading experts in the field of gene expression regulation, bioinformatics and genomics. The workshop will cover topics such as the development of bioinformatics approaches

to identify regulatory sequences and to build regulatory networks, functional comparative genomic and deletion studies, the characterization of regulatory sequences in animal models and other roles of non-coding DNA in development, evolution and genetic diseases.

Organizers: **Thomas S. Becker** (University of Bergen. Bergen, Norway).
Fernando Casares (Andalusian Centre for Developmental Biology. Seville, Spain).
José Luis Gómez-Skarmeta (Andalusian Centre for Developmental Biology. Seville, Spain).

Monday, October 8

08.45-09.00 Opening of the workshop:
Fernando Casares, José Luis Gómez-Skarmeta and Thomas Becker.

Session I: Gene regulation and development
Chair: Denis Duboule

09.00-09.30 **Michael Levine.**
Whole-genome analysis of Dorsal gradient thresholds in the *Drosophila* embryo.

09.30-10.00 **Patrick Charnay.**
Molecular Mechanisms of Hindbrain Segmentation.

10.00-10.15 **Emmanuelle Havis.**
Identification by «ChIP-and-cloning», and study of *Iro7* target genes during zebrafish brain development.

11.00-11.30 **Uwe Strähle.**
Conserved non-coding sequences and transcriptional regulation.

11.30-12.00 **Douglas J. Epstein.**
Identifying cis and trans regulators of *sonic hedgehog* expression in the mouse forebrain.

12.00-12.15 **Robert M. Grainger.**
Using functional genomics to analyze early embryonic development in *Xenopus*.

12.15-13.30 Poster viewing.

Session II: Gene regulation and development
Chair: Veronica van Heyningen

16.00-16.15 **José Luis Gómez-Skarmeta.**
Enhancer survey of conserved non-coding sequences from vertebrate *iroquois* A cluster.

16.15-16.30 **Fernando Casares.**
Analyzing the transcriptional regulation of the *Meis* family of paralogous genes through comparative and functional genomics in zebrafish.

16.30-16.45 **Juan Pascual-Anaya.**
Phylogenetic footprinting and highly conserved noncoding sequences identification at chordate *Hox* genes cluster.

16.45-17.15 **Denis Duboule.**
Long-range enhancer-promoter interactions in the *HoxD* complex.

Session III: Gene regulation and disease
Chair: Mike Levine

17.45-18.15 **Veronica van Heyningen.**
From disease to cis-regulation and back.

18.15-18.45 **Marcelo A. Nóbrega.**
Dissecting gene regulatory network in health and diseases.

18.45-19.00 **Mario Cáceres.**
Genomic regulation of gene-expression changes in the brain during human evolution.

Tuesday, October 9

Session IV: Genomic and computational approaches
Chair: Boris Lenhard

09.00-09.30 **Ivan Ovcharenko.**
The genomic code of tissue-specific enhancers.

09.30-10.00 **Roderic Guigó.**
THE ENCODE PROJECT: Uncovering the transcriptional complexity of the human genome.

10.00-10.15 **Atsushi Mochizuki.**
Structure of regulatory network and diversity of cell types.

10.30-11.30 Poster viewing.

Session V: Genomic structure and gene regulation
Chair: Eric Davidson

16.00-16.30 **Greg Elgar.**
How do highly conserved non-coding elements (CNEs) encoded in vertebrate genomic DNA influence the expression of developmental regulators?

16.30-17.00 **Thomas S. Becker.**
Characterization of genomic regulatory blocks through enhancer detection and transgenesis in zebrafish.

17.00-17.30 **Boris Lenhard.**
Genomic Regulatory Blocks in Metazoan Genomes.

Session VI: Chromatin and insulators
Chair: José Luis Gómez-Skarmeta

18.00-18.30 **Shawn M. Burgess.**
Controlling developmental responses through chromatin remodeling.

18.30-18.45 **Lluís Montoliu.**
Functional and structural dissection of boundary elements found in mammalian expression domains.

18.45-19.00 **Enrique Blanco.**
Beyond promoters: chromosomal clustering of genes regulated by chromatin remodelling factors.

19.00-19.15 **Luiz O. Penalva.**
In silico/in vivo identification of regulatory elements on Untranslated Regions (UTRs) of human genes.

Wednesday, October 10

Session VII: Gene regulation and evolution
Chair: Fernando Casares

09.30-10.00 **Patrick Lemaire.**
Integration of genomic and cellular information to decipher the ascidian neural GRN.

10.00-10.15 **Laurence Ettwiller.**
Evolution of cis-regulatory networks in animals.

11.00-11.30 **Eric Davidson.**
The genomic program for embryonic development: Gene regulatory networks for the sea urchin embryo, and evolutionary implications.

11.30-11.45 Concluding remarks.

Guided tour / Paraninfo Antigua Universidad.

Guided tour / Plaza del Pópulo.

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W13.
Fragile X-Related Syndromes: From Molecular to Clinical Approach

16-18 October

Scope: The discovery of the dynamic *FMR1* mutation as responsible for the fragile X syndrome was a breakthrough in medical genetics describing a previous unknown type of mutation and clarifying the intriguing phenomenon of anticipation. 15 years after its discovery, *FMR1* continues to reveal new and unexpected clinical presentations and molecular mechanisms. Loss of function of *FMR1* in patients carrying a full mutation is a model for neurodevelopmental and behavioural disorders, including mental retardation, autism, anxiety, and mood instability. In addition, overexpression of *FMR1* mRNA, observed in carriers of alleles in the premutation range, causes a late-onset neurodegenerative disorder, the fragile X-associated tremor/ataxia syndrome (FXTAS). A similar mechanism is probably involved in premature

ovarian failure (POF) affecting female carriers of premutation. The understanding of these unexpected phenotypes at the molecular level and diving into the role of RNA and RNA processing in neurodegeneration are important scientific challenges. The workshop on Fragile X-related syndromes offers unique possibilities to advance in the knowledge of these disorders, covering from screening techniques, molecular and pathophysiological mechanisms, animal models, clinical phenotypes and treatment.

Organizers: **Randi J. Hagerman** (University of California Davis. Sacramento, USA).
Ben A. Oostra (Erasmus MC. Rotterdam, The Netherlands).
Elizabeth Pintado (University of Seville. Seville, Spain).

Tuesday, October 16

8.50-9.00 Opening of the workshop.

Session I: Overview
Chair: Ben Oostra

09.00-09.30 **Randi Hagerman.**
The continuum of involvement from the premutation to the full mutation.

09.30-10.00 **Rob Willemsen.**
The expanded CGG-repeat knock-in mouse model for Fragile X-associated tremor/ataxia syndrome.

10.00-10.15 **Silvia De Rubeis.**
A new function for the Fragile X mental retardation protein in the regulation of PSD-95 mRNA stability.

11.00-11.30 **Paul J. Hagerman.**
FXTAS: The fragile X gene comes of age.

11.30-12.00 **Pablo Mir.**
Clinical differences between FXTAS and other movement disorders.

12.00-12.15 **Valentina Mercaldo.**
The Fragile X Mental Retardation Protein-RNP granules show an mGluR dependent localization in the spines.

12.15-13.30 Poster viewing.

Session II: Biochemical pathways
Chair: Paul Hagerman

16.00-16.30 **Anna Murray.**
FMR1 premutations and premature ovarian failure.

16.30-17.00 **Emily Osterweil.**
Correction of Fragile X syndrome through reduction of mGluR5.

17.00-17.15 **Liliana Dain.**
Preliminary studies of FMRP expression during rat follicular development.

17.45-18.15 **Pietro Chiurazzi.**
Microarray-based expression profiling of fragile X cells and of *Fmr1* knockout mice.

18.15-18.45 **Yolanda de Diego.**
Oxidative stress protection in the Fragile X mouse model.

18.45-19.00 **Verna Louhivuori.**
Enhanced TrkB signaling in neuronal precursors lacking FMRP.

Wednesday, October 17

Session III: Neuronal plasticity
Chair: Feliciano Ramos

09.00-09.30 **Ben Oostra.**
The neuronal network in FXR mouse models.

09.30-10.30 **Maija L. Castrén.**
Neuronal differentiation and neural plasticity in fragile X syndrome.

10.00-10.15 **Pilar Ribate.**
Mosaicism in FMRP expression in Fragile X Syndrome.

10.30-11.30 Poster viewing.

Session IV: Screening
Chair: Anna Murray

16.30-17.00 **Elias Bechara.**
RNA binding properties of Fragile X Mental Retardation Protein 1: the past, the present and the future.

17.00-17.15 **Raquel Rodríguez-López.**
New protocols for fragile X PCR evidence the complexity of FMR1 instability.

17.45-18.15 **Flora Tassone.**
Screening for Fragile X syndrome.

18.15-18.45 **Thomas J. Musci.**
Fragile X carrier screening in the prenatal population: cost effectiveness and counselling issues.

18.45-19.15 **Feliciano Ramos.**
Clinical utility of the analysis of the FMRP expression in bloodsmears and hair roots as diagnostic method for the Fragile X Syndrome.

Thursday, October 18

Session V: RNA gain-of function
Chair: Randi Hagerman

09.00-09.30 **Elizabeth Pintado.**
Epigenetic in the context of fragile X: skewed X chromosome inactivation influences phenotype in women.

09.30-10.00 **Laura Ranum.**
RNA gain-of-function effects in Spinocerebellar Ataxia Type 8 and Myotonic Dystrophy.

10.00-10.15 **Alexandra Alves-Sampaio.**
Increased levels of dendritic mRNAs in Down syndrome mice models.

11.00-11.30 Closing remarks:
Ben Oostra.

W14.
Stress, Stress Responses and Mechanisms of Evolvability

22-24 October

Scope: The goal of this workshop is to bring together leading workers in several different disciplines of modern molecular biology whose work is affecting our understanding of how biological evolution works, and its consequences for human health. Several recent advances have revealed molecular processes that have the potential to accelerate evolution under stress, specifically when organisms are poorly adapted to their environments. This includes both stress-induced and stochastic mechanisms of generation of diversity, both phenotypic (protein) and genetic, upon which natural selection acts. Cellular stress responses are important to both. Other recent findings indicate that genomes may have evolved mutable and less-mutable regions, such that genetic change, when it occurs, may produce more adaptive outcomes. Evolved

mechanisms that can affect rates or directions of future evolution are called "evolvability" mechanisms. These lines of research add newly appreciated layers of apparent regulation to the framework of Darwinian selection of favorable variants. Mechanisms affecting evolution underpin many aspects of human health from host-pathogen interactions and antibiotic resistance, to tumor formation and development in stress-provoking microenvironments. This workshop will bring together workers in mutation, phenotypic variation mechanisms, stress responses, and related topics, particularly those in which molecular mechanisms are being addressed, with the goal of identifying biological themes or strategies, which may have elements in common.

Organizers: **Jesús Blázquez** (National Centre for Biotechnology. Madrid, Spain).
Ivan Matic (University René Descartes-Paris 5. Paris, France).
Susan M. Rosenberg (Baylor College of Medicine. Houston, USA).

Monday, October 22

8.50-9.00 Welcome by organizers.

Session I: Mutation as a Stress Response
Chair: Lynn H Caporale

9.00-9.40 **Floyd Romesberg.**
Evolution and inhibition of antibiotic resistance.

9.40-10.20 **Susan Rosenberg.**
A model for the origin of a hypermutable cell subpopulation that generates stress-induced mutants.

10.20-10.40 **Josep Casadesús.**
Mutagenesis by bile salts in *Salmonella enterica*: a natural example of stress-induced mutation?

11.10-11.50 **Thomas Ferenci.**
Stress effects on evolvability and diversity in bacterial populations.

11.50-12.30 **Ivan Matic.**
Environmental tuning of mutation rates.

15.30 Poster viewing.

Session II: Epigenetic and Protein Effects on Evolvability
Chair: Christophe Herman

17.00-17.40 **Christophe Herman.**
The consequences of cellular noise on phenotypic heterogeneity.

17.40-18.20 **Suzannah Rutherford.**
Control of canalization and evolvability by Hsp90.

18.50-19.30 **Thomas Nyström.**
Damage segregation during cytokinesis and its implications in fitness and aging.

19.30-20.10 **Kim Lewis.**
Persister cells and multidrug tolerance of biofilm-producing pathogens.

20.10-20.50 **Yousif Shamoo.**
Experimental evolution within a microbial population highlights strategies towards protein adaptation.

Tuesday, October 23

Session III: Genomes, Mutagenesis and Evolution
Chair: Miroslav Radman

9.00-9.40 **Lynn H. Caporale.**
Inducible focused genetic variation: towards a genomic synthesis for evolutionary theory.

9.40-10.20 **Jan Drake.**
Mutation-rate outliers.

10.20-10.40 **Caleb González.**
On a hypermutable cell subpopulation that gives rise to stress-induced mutations in *E. coli*.

Session IV: Stress and Genomes and Evolution
Chair: Josep Casadesús

16.00-16.40 **Miroslav Radman.**
Adaptive responses to DNA damage and desiccation in bacteria.

16.40-17.20 **Philip Hastings.**
Roles of adaptive amplification in evolution.

17.20-18.00 **Larry Loeb.**
Mutator phenotype in human cancer: origin and consequences.

18.30-19.10 **Carmel Mothersill.**
Radiation-induced stress effects in biology and medicine.

19.10-19.50 **Jesús Blázquez.**
Effects of Antibiotics on Evolvability and Diversity in Bacteria.

Wednesday, October 24

Session V: Stress, Stress Responses and Mutagenesis
Chair: Suzannah Rutherford

9.00-9.40 **Erich Heidenreich.**
Spontaneous mutagenesis in starving yeast populations.

9.40-10.00 **Javier Guelfo.**
Return from hypermutation: NorM overexpression compensates the *mutT hypermutation*.

10.30-10.45 Summary:
Susan Rosenberg.

10.45-11.30 Round table discussion.

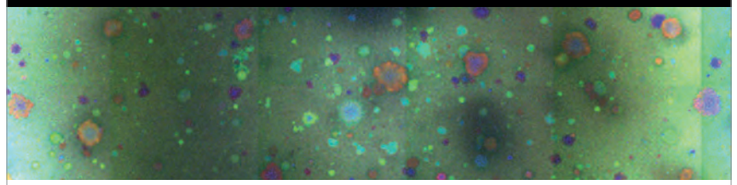
UNIVERSIDAD INTERNACIONAL DE ANDALUCÍA
SEDE ANTONIO MACHADO BAEZA, SPAIN

2007
WORKSHOPS CURRENT TRENDS IN BIOMEDICINE

ORGANIZED JOINTLY BY
THE UNIVERSIDAD INTERNACIONAL DE ANDALUCÍA
AND THE INSTITUTO DE SALUD CARLOS III

STRESS, STRESS RESPONSES AND MECHANISMS OF EVOLVABILITY

BAEZA, SPAIN 22-24 OCTOBER 2007



ORGANIZED BY

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Baylor College of Medicine. Houston, USA.

SCOPE

The goal of this workshop is to bring together leading workers in several different disciplines of modern molecular biology whose work is affecting our understanding of how biological evolution works, and its consequences for human health. Several recent advances have revealed molecular processes that have the potential to accelerate evolution under stress, specifically when organisms are poorly adapted to their environments. This includes both stress-induced and stochastic mechanisms of generation of diversity, both phenotypic (protein) and genetic, upon which natural selection acts. Cellular stress responses are important to both. Other recent findings indicate that genomes may have evolved mutable and less-mutable regions, such that genetic change, when it occurs, may produce more adaptive outcomes. Evolved mechanisms that can affect rates or directions of future evolution are called "evolvability" mechanisms. These lines of research add newly appreciated layers of apparent regulation to the framework of Darwinian selection of favorable variants. Mechanisms affecting evolution underpin many aspects of human health from host-pathogen interactions and antibiotic resistance, to tumor formation and development in stress-provoking microenvironments. This workshop will bring together workers in mutation, phenotypic variation mechanisms, stress responses, and related topics, particularly those in which molecular mechanisms are being addressed, with the goal of identifying biological themes or strategies, which may have elements in common.

FORMAT OF THE WORKSHOP

The workshop will bring together 16 speakers and a maximum of 50 participants (including speakers). The scientific programme will start in the morning of Monday, October 22, and will end around noon on Wednesday, October 24. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

VENUE OF THE WORKSHOP

The workshop will be held in Baeza, at the "Sede Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a recently restored residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

DEADLINE: 7 SEPTEMBER 2007

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SPEAKERS

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The Judith P. Sulzberger MD Columbia Genome Center, Columbia University. New York, NY, USA.

JOHN W. DRAKE
Laboratory of Molecular Genetics, National Institute of Environmental Health Sciences. Research Triangle Park, NC, USA.

THOMAS FERENCI
School of Molecular and Microbial Biosciences, University of Sydney. Sydney, Australia.

PHILIP J. HASTINGS
Department of Molecular and Human Genetics, Baylor College of Medicine. Houston, TH, USA.

ERICH HEIDENREICH
Institute of Cancer Research, Department of Medicine I, Medical University of Vienna. Vienna, Austria.

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Laboratory of Living Matter and Center for Studies in Physics and Biology, Rockefeller University. New York, NY, USA.

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MORE INFORMATION AND APPLICATION

http://www.unia.es/BiomedicineWorkshops/workshops2007.htm

UNIVERSIDAD INTERNACIONAL DE ANDALUCÍA

#2008

W15.
Understanding Pain:
From Transduction to Sensation

6-8 October

Scope: Pain is complex and multifaceted, both from the biological and psychological point of view. Our understanding of basic pain mechanisms has advanced tremendously in the last decade, as evidenced by key discoveries in the cellular and molecular mechanisms governing transduction of noxious signals, as well as the identification of novel targets for the treatment of pain. Despite this great progress, many aspects of pain sensation remain poorly understood and improved therapies are still sorely needed.

The meeting will focus on recent advances in pain research, analyzing problems at multiple levels of complexity, from single molecules to global brain function. This workshop brings together a range of specialists from various disciplines (e.g. medicine, pharmacology, biochemistry) covering

multiple aspects of pain biology, ranging from the structural analysis of signal transduction molecules to the use of imaging technologies to decipher the neural circuits involved in pain sensation. Emphasis will be placed on the discussion of cellular and molecular discoveries that may soon translate into a better diagnosis, evaluation and rational treatment of the many individuals who suffer from a plethora of chronic pain syndromes.

Organizers: **David Julius** (University of California San Francisco. San Francisco, USA).
Félix Viana (Miguel Hernández University. Sant Joan d'Alacant (Alicante), Spain).

Monday, October 6

8.50-9.00 Welcome address by the organizers.

Session I: Structure-function of Transduction Channels
Chair: David Julius

9.00-9.40 **Rachelle Gaudet**.
Structural insights into the function of TRPV ion channels.

9.40-10.20 **Eric Honoré.**
The K^{2P} channels: focus on TREK-1.

10.20-11.00 **Gary R. Lewin.**
Mechanosensitive ion channels, stomatin-like proteins and molecular tethers essential for touch.

Session II: Pain Circuits
Chair: Clifford J Woolf

11.30-12.10 **Mark J. Zylka.**
Genetic and biochemical modulation of nociceptive circuits.

12.10-12.50 **Allan Basbaum.**
Circuits engaged by and behavioral relevance of subsets of primary afferent nociceptor.

12.50-13.30 **Hanns Ulrich Zeilhofer.**
Reversal of pathological pain through subtype-selective ligands of spinal $GABA_A$ receptors.

15.30 Poster viewing.

Session III: Ion Channels in Pain
Chair: Gary R Lewin

17.00-17.40 **Stephen G. Waxman**.
Voltage-gated sodium channels and pain.

18.50-19.30 **David Julius.**
Natural products as probes of the pain pathway.

19.30-19.50 **Eva Cuypers.**
Pain induction by cnidaria venom: the crucial role of TRPV1 as a target for indirect activation by gigantoxin I from the sea anemone *Stichodactyla gigantea*.

19.50-20.10 **Jörg Grandl.**
Pore region of TRPV3 ion channel is specifically required for heat-activation.

20.10-20.30 **Natalia Cuesta-Garrote.**
Interaction between TRPV1 and CIP98: Implications in channel biogenesis.

Tuesday, October 7

Session IV: Peripheral Nociception
Chair: Stephen G Waxman

9.00-9.40 **Félix Viana.**
Pharmacology and function of native TRP channels.

9.40-10.20 **Carlos Belmonte.**
Excitability changes in injured cold sensory fibers.

10.20-11.00 **Gerald F. Gebhart.**
Ion channels and their role in visceral pain.

11.00-11.20 **Timothy K.Y. Kaan.**
Alleviation of bone cancer-induced pain with a novel P2X3 and P2X2/3 receptor antagonist *in vivo*.

15.30 Poster viewing.

Session V: Modulation of Pain Signals
Chair: G F Gebhart

17.00-17.40 **Hermann O. Handwerker.**
Translational pain research: from human nociceptors to pain perception.

17.40-18.20	**Megumu Yoshimura.** Inputs of the noxious heat sensation to the spinal dorsal horn revealed by *in vivo* patch-clamp recordings.
18.50-19.10	**Ramona Madalina Babes.** A TRPV2-like heat-activated channel in cultured rat dorsal root ganglion neurons.
19.10-19.30	**Ewan St. J. Smith.** A molecular dissection of TRPV1 sensitisation using the naked mole-rat.
19.30-20.30	Round table discussion.

Wednesday, October 8

Session VI: Central Processing of Pain
Chair: Allan Basbaum

9.00-9.40	**Patrick Mantyh.** Skeletal pain: causes, consequences and therapeutic opportunities.
9.40-10.20	**Clifford J. Woolf.** Molecular switches of persistent pain.
10.20-11.00	**M. Catherine Bushnell.** Role of the cerebral cortex in the conscious experience of pain.
11.30-12.00	Concluding remarks.

Rector Juan Manuel Suárez Japón, surrounded by other authorities and members of the Advisory Board (2008).

W16.
Bacterial Type IV Secretion Systems in Human Disease

14-16 October

Scope: Bacterial type IV secretion systems are versatile macromolecular transporters that play a dual role in bacterial infection. First, as bacterial conjugation systems these nanomachines mediate the transfer of mobile DNA elements between bacteria and thereby facilitate the spread of pathogenicity factors and antibiotic resistances within bacterial populations. Second, type IV secretion systems facilitate the direct translocation of macromolecular pathogenicity factors from the bacterial cytoplasm into the cytosol of infected host cells. Several human pathogens, such as *Helicobacter pylori*, *Legionella pneumophila*, and *Bartonella henselae*, utilize type IV secretion systems to translocate a number of different effector proteins that individually can subvert cellular functions to the benefit of the pathogen.

For many of these pathogens, important biological questions are being addressed, including the biochemical mechanisms by which effector proteins are delivered, how they function and the overall effect the full repertoire of effector proteins has on a disease process. The aim of this workshop is to bring together scientists working on different aspects of type IV secretion in order to communicate recent advances in our understanding of the role and function of type IV secretion systems in human disease. Discussions will focus on the structure of the type IV machinery, the secretion mechanism, the nature of the translocated effectors and their specific roles in manipulating the human host.

Organizers: **Christoph Dehio** (University of Basel. Basel, Switzerland).
Matxalen Llosa (University of Cantabria. Santander, Spain).
Craig R. Roy (Yale University School of Medicine. New Haven, USA).

Tuesday, October 14

8.45-9.00 **C. Dehio, M. Llosa and C. Roy.**
Opening of the workshop.

Session I: T4SS structure and function
Chair: C Dehio

9.00-9.30 **Gabriel Waksman.**
Structural Studies of the Type IV Secretion Systems.

9.30-10.00 **Peter J. Christie.**
Agrobacterium VirB/D4 Subunit and Domain Requirements for Selective Assembly of a Type IV Secretion Channel or an Extracellular T pilus.

10.00-10.30 **Patricia Zambryski.**
High Resolution Visualization of T-pili and the T4SS of *Agrobacterium*.

10.30-11.00 **Christian Baron.**
Structure and Chemical Biology Approaches to Identify T4SS Inhibitors.

11.30-11.50 **David O´Callaghan.**
Interactions between the *Brucella* VirB pilus and host cell proteins.

11.50-12.20 **Joseph P. Vogel.**
Biogenesis of the *Legionella* Dot/Icm type IV secretion system.

12.20-12.40 **Elisabeth Grohmann.**
Conjugative plasmid transfer in Gram-positive broad-host range plasmids: molecular clues and monitoring tools.

12.40-13.10 **Fernando de la Cruz.**
Inhibition of bacterial conjugation.

Session II: Nature and recruitment of substrates
Chair: R Haas

16.00-16.30 **Annette C. Vergunst.**
Type IV effector translocation: Transport signals and reporter-based assays.

16.30-17.00 **Matxalen Llosa.**
Structural and functional similarities between the Trw T4SS of *Bartonella* and plasmid R388.

17.00-17.20 **Ellen L. Zechner.**
The interface of conjugative coupling protein TraD and an IncFII nucleoprotein substrate governs transfer origin selection, activation and DNA helicase loading.

17.50-18.20 **Joseph P. Dillard.**
Secretion of chromosomal DNA by the gonococcal type IV secretion system.

18.20-18.40 **Chris van der Does.**
The type IV DNA secretion system of *Neisseria gonorrhoeae*.

18.40 Poster viewing.

Wednesday, October 15

Session III: Host-pathogen interface (1)
Chair: P Zambryski

9.00-9.30 **Christoph Dehio.**
Role of type IV secretion systems in *Bartonella* infection.

9.30-9.50 **Muriel Vayssier-Taussat.**
The Trw T4SS of *Bartonella* mediates host-specific invasion of erythrocyte.

9.50-10.20 **Rodolfo A. Ugalde.**
The *Brucella abortus virB* operon: Intracellular transcriptional regulation and identification of effectors.

10.50-11.20 **Renée Tsolis.**
T4SS-dependent activation of the caspase-1 inflammasome by *Brucella* spp.

11.20-11.40 **Suzana P. Salcedo.**
New insights in *Brucella* intracellular survival within host cells.

Session IV: Host-pathogen interface (2)
Chair: G Waksman

16.00-16.30 **Craig R. Roy.**
Subversion of Eukaryotic Vesicular Transport Proteins by *Legionella pneumophila*.

16.30-17.00 **Robert A. Heinzen.**
Potential roles of *Coxiella burnetii* Dot/Icm Type IV secretion substrates in subversion of macrophage function.

17.00-17.20 **Hiroki Nagai.**
A *Legionella* E3 ubiquitin ligase and its function in infected host cells.

17.50-18.10 **Hubert Hilbi.**
Subversion of phosphoinositide metabolism by the vacuolar pathogen *Legionella*.

18.10-18.40 **Steffen Backert.**
Role of type IV secretion in *Helicobacter pylori* pathogenesis.

18.40-19.10 **Rainer Haas.**
Novel insights into structure and function of the *Helicobacter pylori* cag-T4SS.

19.10-20.30 Poster viewing 2.

Thursday, October 16

Session V: The growing family of T4SS
Chair: C Baron

9.00 **Yasuko Rikihisa.**
Type IV Secretion System of *Anaplasma* and *Ehrlichia*.

9.30-9.50 **Wendy C. Brown.**
Immunogenicity of *Anaplasma* Type IV Secretion System Proteins.

9.50-10.10 **Anna Delprato.**
Structural and Biochemical Analysis of the *Rickettsia prowazekii* RalF protein.

10.40-11.00 **Marcin Grynberg.**
Putative type IV secretion genes in *Bacillus anthracis*.

11.00-11.20 **Mario Juhas.**
GI type IV secretion systems and their role in horizontal gene transfer.

11.20-12.00 Roundtable for general discussion, summing up and prospects: **Craig R. Roy.**

W17.
Germ Cell-Soma Interactions in Gonadal Development and Germ Cell Tumours

20-22 October

Scope: Germ cell differentiation is linked to the differentiation of the somatic cells of the gonad. In mammals, testis development is orchestrated by signals from Sertoli cells, and any alteration in their differentiation/proliferation can have consequences for germ cell development.

Altered Sertoli cell differentiation during foetal life has been observed in different testicular disorders and it has been hypothesized is the cause of what is known as testicular dysgenesis syndrome, which includes alterations like cryptorchidism, hypospadias, low sperm counts and testicular germ cell tumours (TGCTs).

Testicular germ cell tumours are the most common cancer among men aged 17-45 years in Western industrialized countries. The existing evidences indicate that the precursor

of almost all testicular germ cell tumours, the carcinoma in situ cell (CIS), originate during embryonic development, likely as result from basic breakdown of germ line-soma communication in the embryo. On the other hand, the rise in the incidence of TGCT observed in the last 50 years in developed countries clearly points to environmental factors, including endocrine disruptors, as risk factors for this and other anomalies in the male reproductive system.

To date, the mechanisms underlying TGCTs are not known. This workshop will improve the understanding of normal and anomalous testis development by covering germ cell biology and gonadal development together with research on gonadal pathologies in general and in testis germ cell tumours in particular. In this way we will improve our understanding of the aetiology of testicular tumours of germ cells and present new options for prevention, diagnosis and management of these cancers.

Organizers: **Mónica Bullejos** (University of Jaén. Jaén, Spain).
Peter Koopman (The University of Queensland. Brisbane, Australia).
Niels E. Skakkebæk (Copenhagen University Hospital. Copenhagen, Denmark).

Monday, October 20

9.00-9.15 **Mónica Bullejos**, **Peter Koopman** and **Niels Skakkebæk**.
Opening of the workshop.

Session I: Germ Cell Biology (Proliferation, Migration and Survival)
Chair: Horacio Merchant Larios

9.15-9.45 **Shinichiro Chuma.**
Mammalian Germ Cells and Germinal Granules/Nuage.

9.45-10.15 **Gary Hime.**
Signalling in the *Drosophila* testis-Genetic analysis of a stem cell niche.

10.15-10.45 **Kathleen Molyneaux.**
BMP-signaling within the urogenital ridges supports PGC survival and migration.

11.15-11.45 **Juan Aréchaga.**
Germinal cell migration vs germinal tumor invasion: two different dialogues with the stroma.

11.45-12.05 **Julia C. Young.**
BMP signalling in the induction of germline precursors from mouse embryonic stem cells *in vitro*.

12.05-12.25 **Eileen A. McLaughlin.**
Chemokines: role in germ cell migration and survival.

12.25-13.30 Poster viewing.

Session II: Germ Cell Differentiation/Germ Cell Fate in the Gonad
(Dedicated to Anne McLaren) Chair: Massimo de Felici

16.00-16.30 **Blanche Capel.**
Dnd1-/- (Ter) germ cells that escape apoptosis, fail to undergo mitotic arrest in the XY gonad, and maintain a pluripotency program.

16.30-17.00 **Peter Koopman.**
Regulation of the mitosis/meiosis switch and germ cell fate in the mouse embryo.

17.00-17.20 **Jocelyn van den Bergen.**
Male Fetal Germ Cell Differentiation.

Session III: Gonadal Development and Differentiation
Chair: Blanche Capel

18.00-18.30 **Horacio Merchant-Larios.**
SRY/SOX9 and Morphogenesis in Rabbit Gonads: The Classical Model of Mammalian Sex Differentiation.

18.30-19.00 **Mónica Bullejos Martín.**
Gonadal development: clues from exceptions.

19.00-19.30 **Kate Loveland.**
The impacts of activin signalling on testis development and spermatogenesis.

19.30-20.30 Poster viewing.

Tuesday, October 21

Session IV: Gonadal Development and Differentiation
Chair: Ewa Rajpert-De Meyts

9.00-9.20 **Brigitte Boizet-Bonhoure.**
Roles of the prostaglandin D synthases/prostaglandin D2 pathway in the male gonadogenesis.

9.20-9.40 **Orietta Radi.**
RSPO1 mutations in XX sex reversal.

Session V Hormones and Endocrine Disruptors in Gonadal Differentiation
Chair: Kate Loveland

09.40-10.10 **Massimo de Felici.**
Estrogen receptor α mediates rapid intracellular cell signalling in mouse primordial germ cells.

10.10-10.30 **Gina La Sala.**
Genomic effect of 17ß-estradiol on somatic cells of mouse fetal testis.

Session VI Hormones and Endocrine Disruptors in Gonadal Differentiation
Chair: Richard Sharpe

16.00-16.30 **Niels Skakkebæk.**
Testicular dysgenesis syndrome (TDS) and germ cell cancer: Environmental aspects.

16.30-17.00 **Jesús del Mazo.**
Altered gene expression in Sertoli/germ cells after developmental exposed to endocrine disruptors.

17.00-17.30 **Mike Skinner.**
Epigenetic Transgenerational Actions of Endocrine Disruptors on Reproduction and Disease: The Ghosts in Your Genes.

17.30-17.50 **Sarah Kimmins.**
Histone methylation and gene regulation in testicular cancer.

Session VII: Testicular Germ Cell Tumours and other Germ Cell Pathologies
Chair: Jesús del Mazo

18.30-19.00 **Richard Sharpe.**
Germ cell development in experimental animal models in relation to the origins of testicular germ cell cancer in men.

19.00-19.30 **Ewa Rajpert-De Meyts.**
Human germ cell malignancies in different somatic environments. Lessons from studies of carcinoma *in situ* testis.

Wednesday, October 22

Session VIII: Testicular Germ Cell Tumours and other Germ Cell Pathologies
Chair: Mike Skinner

9.00-9.30 **Leendert H.J. Looijenga.**
Testicular germ cell tumors and micro-environment.

9.30-10.00 **Héctor Chemes.**
Development and characterization of somatic cell testicular tumors in transgenic mice. A common precursor for Leydig and Sertoli cell neoplasms?

10.00-10.20 **Rod T. Mitchell.**
Heterogeneous expression of germ cell proteins in human testicular carcinoma *in-situ* and their relationship to maturational status of Sertoli cells.

10.50-11.10 **David M. Kristensen.**
Expression of pluripotency factors in the adult male reproductive tract-*in vivo* and *in vitro*.

11.10-11.45 Concluding remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Organizers / Peter Koopman, Mónica Bullejos, Niels E. Skakkebæk.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W18.
Role of RNA Structures in the Translation of Viral and Cellular RNAs

27-29 October

Scope: Post-transcriptional control of gene expression is a critical component of regulation within living organisms. This process can occur through a variety of different mechanisms including regulation of protein synthesis and the availability of mRNAs within the cell. These control mechanisms typically act on a subset of mRNAs that encode regulatory proteins needed to respond to specific signals. Understanding both the universal and the unique aspects of translation initiation control mechanisms are crucial objectives in modern molecular biology and recent years have witnessed enormous progress in this area. Key advances have been achieved in studies on important viruses. The genomes of certain positive strand RNA viruses, including hepatitis C virus (HCV) and picornaviruses (e.g. poliovirus), have unique properties.

In particular, the initiation of protein synthesis has been shown to be dependent on complex RNA structures termed internal ribosome entry sites (IRESs) rather than a 5′ terminal cap-structure. The viral IRES elements have also served as the paradigm for the identification of cellular IRESs. This workshop will bring together a variety of studies to clarify the mechanisms operating to achieve translational control in eukaryotic cells.

Organizers: **Graham J. Belsham** (Technical University of Denmark. Lindholm, Denmark).
Jordi Gómez (Institute of Parasitology and Biomedicine "López-Neyra". Granada, Spain).
Encarna Martínez-Salas (Centre for Molecular Biology "Severo Ochoa". Madrid, Spain).

Monday, October 27

Session I: Structural motifs in RNA molecules
Chair: M Hentze

9.00-9.35 **Eric Westhof.**
Elementary motifs and structural bioinformatics of RNA.

9.35-10.10 **Ian Brierley.**
RNA pseudoknots: versatile motifs in translation.

10.10-10.30 **Juan José García Gómez.**
Role of ribosomal proteins, putative RNA helicases and RNA binding protein Nop6p in the synthesis of the yeast ribosome.

11.00-11.35 **Catherine Florentz.**
Bizarre mitochondrial tRNAs in human neurodegenerative disorders.

11.35-12.10 **Jordi Gómez.**
A key switch element of hepatitis C virus RNA important for viral replication regulates internal ribosome entry site conformation.

12.10-12.30 **Cristina Romero-López.**
Long-range RNA-RNA interactions may mediate the circularization of the HCV genome.

15.30 Poster viewing.

Session II: Regulatory elements in non-coding regions (1)
Chair: J Pelletier

16.30-17.05 **Peter J. Lukavsky.**
Structure and Function of HCV IRES Domain II.

17.05-17.40 **Anne E. Willis.**
The Myc family of IRES: Structures, mechanisms and trans-acting factors.

17.40-18.00 **Dirk H. Ostareck.**
Cellular factors that affect HCV IRES mediated translation initiation identified by a riboproteomics approach.

18.30-19.05 **Encarna Martínez-Salas.**
Structural and functional analysis of internal ribosome entry site elements.

19.05-19.40 **Lisa O. Roberts.**
Functional analysis of hepatitis C virus-like internal ribosome entry site (IRES) elements within picornavirus genomes.

19.40-20.00 **Juana Díez.**
LSm1-7 complex binds to essential translation and replication signals in Brome Mosaic Virus RNAs.

Tuesday, October 28

Session III: Regulatory elements in non-coding regions (2)
Chair: I Brierley

9.00-9.35 **Ivan Shatsky.**
Comparative analysis of viral and putative cellular IRESs *in vivo* and *in vitro*.

9.35-10.10 **Graham J. Belsham.**
Characteristics of hepatitis C virus-like picornavirus internal ribosome entry site elements.

10.10-10.30 **Ricardo Soto Rifo.**
Translational control by the 5′-UTR and the Gag coding region in the HIV-1 and HIV-2 genomic RNAs.

10.30-10.50 **Laura E. Easton.**
Identification of a conserved interaction in Hepacivirus/Pestivirus-like IRESs that enhances translational activity.

15.30 Poster viewing.

Session IV: Translational control by miRNAs, 3´UTRs and RNA-binding proteins

Chair: E Westhof

16.30-17.05 **Fátima Gebauer.**
Sex and translation: regulation of X chromosome dose in *Drosophila*.

17.05-17.40 **Matthias W. Hentze.**
Translational control by miRNAs and RNA-binding proteins.

17.40-18.00 **Martin Bushell.**
MicroRNA-mediated translational repression is dependent upon the nuclear history of the message.

18.30-19.05 **Martin Holcik.**
Secondary RNA structure requirements of cellular IRES.

19.05-19.40 **Stephan Vagner.**
IRES trans-acting factors (ITAFs) and microRNAs (miRNAs) in metastatic breast cancer.

19.40-20.00 **Alfredo Castelló.**
HIV-1 PR inhibits poly(A)-dependent translation by means PABP cleavage.

Wednesday, October 29

Session V: Suppression of translation

Chair: A Willis

9.00-9.35 **Jerry Pelletier.**
Targeting Translation Initiation by Suppressing eIF4F Activity.

9.35-10.10 **Jean-Jacques Toulmé.**
Regulatory ligands of mRNA translation designed through combinatorial approaches.

10.40-11.15 **Nahum Sonenberg.**
Translational control of innate immunity via IRF-7.

11.15-11.35 **Verónica Truniger.**
Mechanism of plant eIF4E-mediated virus resistance: Cap-independent translation of a viral RNA controlled *in cis* by an (a)virulence determinant.

11.35-12.00 Closing remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Interview organizers / Encarna Martínez-Salas, Jordi Gómez.

Current trends in Biomedicine

Role of RNA structures in the translation of viral and cellular RNAs

2008 Workshops

Organized jointly by the

un i A Universidad Internacional de Andalucía

and the

MINISTERIO DE SANIDAD Y CONSUMO · Instituto de Salud Carlos III

Scope

Post-transcriptional control of gene expression is a critical component of regulation within living organisms. This process can occur through a variety of different mechanisms including regulation of protein synthesis and the availability of mRNAs within the cell. These control mechanisms typically act on a subset of mRNAs that encode regulatory proteins needed to respond to specific signals. Understanding both the universal and the unique aspects of translation initiation control mechanisms are crucial objectives in modern molecular biology and recent years have witnessed enormous progress in this area. Key advances have been achieved in studies on important viruses. The genomes of certain positive strand RNA viruses, including hepatitis C virus (HCV) and picornaviruses (e.g. poliovirus), have unique properties. In particular, the initiation of protein synthesis has been shown to be dependent on complex RNA structures termed internal ribosome entry sites (IRESs) rather than a 5' terminal cap-structure. The viral IRES elements have also served as the paradigm for the identification of cellular IRESs. This workshop will bring together a variety of studies to clarify the mechanisms operating to achieve translational control in eukaryotic cells.

Format of the Workshop

The workshop will bring together 17 speakers and a maximum of 50 participants (including speakers). The scientific programme will start in the morning of Monday, October 27, and will end around noon on Wednesday, October 29. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

Venue of the Workshop

The workshop will be held in Baeza, at the "Sede Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a recently restored residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

Organized by:

Graham J. Belsham. National Veterinary Institute, Technical University of Denmark. Lindholm, Denmark.

Jordi Gómez. Instituto de Parasitología y Biomedicina "López-Neyra", CSIC. Granada, Spain.

Encarna Martínez-Salas. Centro de Biología Molecular "Severo Ochoa", CSIC-UAM. Madrid, Spain.

Speakers

Graham J. Belsham. National Veterinary Institute, Technical University of Denmark. Lindholm, Denmark.

Ian Brierley. Division of Virology, Department of Pathology, University of Cambridge. Cambridge, United Kingdom.

Catherine Florentz. Architecture et Réactivité de l'ARN, Université Louis Pasteur de Strasbourg, CNRS, IBMC. Strasbourg, France.

Fátima Gebauer. Centre de Regulació Genòmica (CRG-UPF), Gene Regulation Programme. Barcelona, Spain.

Jordi Gómez. Departamento de Biología Molecular, Instituto de Parasitología y Biomedicina "López-Neyra", CSIC. Granada, Spain.

Matthias W. Hentze. EMBL, European Molecular Biology Laboratory. Heidelberg, Germany.

Martin Holcik. Apoptosis Research Centre, Children's Hospital of Eastern Ontario Research Institute. Ottawa, ON, Canada.

Peter J. Lukavsky. MRC Laboratory of Molecular Biology. Cambridge, United Kingdom.

Encarna Martínez-Salas. Centro de Biología Molecular "Severo Ochoa", CSIC – UAM. Madrid, Spain.

Jerry Pelletier. Department of Biochemistry and McGill Cancer Centre, McGill University. Montreal, QC, Canada.

Lisa O. Roberts. Faculty of Health and Medical Sciences, University of Surrey. Guildford, United Kingdom.

Ivan N. Shatsky. Belozersky Institute of Physico-Chemical Biology, Moscow State University. Moscow, Russia.

Nahum Sonenberg. Department of Biochemistry and McGill Cancer Centre, McGill University. Montreal, QC, Canada.

Jean-Jacques Toulmé. INSERM U869 and Institut Européen de Chimie et Biologie, Université de Bordeaux. Bordeaux, France.

Stéphan Vagner. INSERM U563, Université Toulouse III Paul Sabatier. Toulouse, France.

Eric Westhof. Architecture et Réactivité de l'ARN, Université Louis Pasteur, Institut de Biologie Moléculaire et Cellulaire, CNRS. Strasbourg, France.

Anne E. Willis. Centre for Biomolecular Sciences, University of Nottingham. Nottingham, United Kingdom.

Baeza, Spain
27-29 October 2008

Deadline:
5 September 2008

Venue:
Sede Antonio Machado
Universidad Internacional
de Andalucía
Palacio de Jabalquinto
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Workshop coordinator:
Joaquín Torreblanca
Universidad Internacional
de Andalucía
j.torreblanca@unia.es

More information and application:
http://www.unia.es/
biomedicineworkshops/
workshops2008.htm

#2009

W19.
RNA-Protein Interactions in Development and Cancer

1-3 October

Scope: The objective of this workshop is to discuss the roles of RNA-binding proteins and non-coding RNAs in shaping developmental processes and contributing to tumorigenesis. These regulators participate in diverse posttranscriptional events, including alternative splicing, RNA trafficking and translational control. Crosstalk between the actions of RNA-binding proteins and non-coding RNAs in regulating these processes will be explored, and pertinent new approaches in bioinformatic and high-throughput analyses will be presented.

Organizers: **Fátima Gebauer** (Centre for Genomic Regulation. Barcelona, Spain).
Luiz O. F. Penalva (University of Texas Health Science Center at San Antonio. San Antonio, USA).
Jernej Ule (MRC Laboratory of Molecular Biology. Cambridge, UK).

Thursday, October 1

9.00-9.10 **Luiz Penalva.**
Welcome.

Session I: mRNA Regulation in Development and the Nervous System
Chair: Raúl Méndez

9.10-9.40 **Anne Ephrussi.**
Visualizing Assembly and Transport of the *oskar* mRNP in the *Drosophila* Oocyte.

9.40-10.10 **Joel D. Richter.**
Translational Control of Synaptic Plasticity.

10.10-10.25 **Anna Bremer.**
Translational regulation of C/EBPα expression by TRIM37 and possible implications for Mulibrey Nanism.

10.25-10.40 **David Piñeiro.**
A novel role for Gemin5 in mRNA translation.

11.15-11.45 **Marvin Wickens.**
RNA-protein interactions and mRNA control networks.

11.45-12.15 **Doug Black.**
The alternative splicing factor nPTB is required for pre and post-natal neuronal development.

12.15-12.30 **Bernd Rattenbacher.**
Hepatitis C virus encodes an RNA-binding protein (NS5A) that antagonizes GU-rich-element mediated mRNA decay.

12.30-12.45 **David Elliott.**
Combinatorial control by Nuclear Proteins hnRNP G-T, RBMY and Tra2α regulate a Testis-Specific Exon in a human Groucho homologue.

15.30-17.30 Poster viewing.

Session II: Cross-talk between RBP and miRNA regulation
Chair: Bob Darnell

18.00-18.30 **Joan Steitz.**
Regulating the Activity of MicroRNAs in Vertebrate Cells.

18.30-19.00 **Javier Cáceres.**
Post-transcriptional regulation of microRNA processing.

19.00-19.30 **Martine Simonelig.**
Translational control in the *Drosophila* germline and early embryo.

19.30-20.00 **Myriam Gorospe.**
RNA-binding protein HuR recruits let-7/RISC to repress c-Myc expression.

Friday, October 2

Session III: RBP Regulatory networks (I)
Chair: Luiz Penalva

9.00-9.30 **Bob Darnell.**
Decoding protein-RNA regulation with HITS-CLIP maps.

9.30-10.00 **José Alberto García-Sanz.**
Towards the Identification of Translationally Regulated Transcripts in Adult Stem Cells.

10.00-10.30 **Fátima Gebauer.**
Regulatory networks controlled by *Drosophila* UNR.

10.30-11.00 **Jernej Ule.**
TIA-1/TIAR proteins control multiple steps in regulation of specific RNAs.

15.30-17.30 Poster viewing.

Session IV: RBP Regulatory networks (II)
Chair: Jernej Ule

18.00-18.30 **Graziano Pesole.**
Computational Detection and Experimental Validation of Cancer-Specific Alternative Splicing Isoforms.

18.30-19.00 **Sandro de Souza.**
Personalizing Alternative Splicing.

19.00-20.00 Round table discussion on high throughput analysis.
Jernej Ule.

Saturday, October 3

Session V: mRNA Regulation in Cancer
Chair: Fátima Gebauer

9.00-9.30 **Anne Willis.**
Polypyrimidine tract binding protein controls cell migration and proliferation by regulating both the localisation and translation of mRNAs that encode proteins that function in these processes.

9.30-10.00	**Luiz Penalva.** A Multi-Step Approach to Dissect the Gene Network Regulated by Musashi1 and its Link to Tumorigenesis.
10.00-10.15	**Sarah Brennan.** Suppression of Tristetraprolin in Many Cancers Post-transcriptionally Dysregulates Expression of Target Genes that Influence Tumorigenic Phenotypes.
10.15-10.30	**Federica Barbagallo.** The centrosomal kinase Nek2 phosphorylates Sam68 and enhances the inclusion of the CD44 variable exon v5.
11.00-11.30	**Raúl Méndez.** Mitotic cell cycle progression and tumour development are regulated by CPEB1 and CPEB4-dependent translational control.
11.30-11.45	**Martin Bushell.** Translational regulation of the oncogene c-Myc following DNA damage by the p38 MAPK-mediated induction of miR-34c controls cell cycle arrest.
11.45-12.00	Closing remarks. **Fátima Gebauer.**

W20.
Mechanisms of Organ Regeneration in Model Systems

5-7 October

Scope: One of the major trends in the biomedical sciences over the last decade is the study of stem cells as a potential agent for therapeutic intervention through tissue regeneration or replacement. While enthusiasm for the potential of stem cell therapies is well justified, our knowledge about the signals and microenvironments required to properly differentiate stem cells into useful tissues (instead of harmful teratomas) is still severely limited. In order to leverage the full potential of embryonic stem cells and iPS cells, it is critical for us to deepen our understanding of the *natural* biological phenomena involved in repair and regeneration.

Throughout the animal kingdom, there are numerous examples of organisms with remarkable abilities for self-renewal of cell populations, repair of damaged tissues, or in extreme cases, complete regeneration of resected organs or amputated limbs. Many of these organisms have become

important research models to study various aspects of regeneration, and they have the potential to provide us with essential insights into how stem and progenitor cells are controlled *in vivo* to repair damage.

By bringing researchers together with a wide variety of interests and approaches relating to tissue regeneration, it will provide for an opportunity for new and exciting interactions directly relevant to the very important field of regenerative medicine.

Organizers: **Shawn M. Burgess** (National Human Genome Research Institute. Bethesda, USA).

Hernán López-Schier (Centre for Genomic Regulation. Barcelona, Spain).

Kenneth D. Poss (Duke University Medical Center. Durham, USA).

Monday, October 5

Session I: Multi-tissue regeneration

Chair: Michael Levin

9.00-9.35 **Brigitte Galliot.**
Regeneration through cell death and compensatory proliferation: an evolutionarily-conserved mechanism?

9.35-10.10 **Phillip Newmark.**
Intestinal renewal and regeneration in the planarian *Schmidtea mediterranea*.

10.10-10.45 **Emili Saló.**
BMP and Wnt pathways control and maintain axial polarity in planarians.

11.15-11.50 **Acaimo González-Reyes**.
Support Cell-Stem Cell Signaling and Extracellular Matrix Behaviour in the *Drosophila* Ovarian Niche.

11.50-12.25 **Michael Levin**.
Bioelectric controls of morphogenesis: molecular tools and unique opportunities for regenerative biology and medicine.

15.30 Poster viewing.

Session II: Muscle regeneration

Chair: Ken Poss

16.30-17.05 **Shahragim Tajbakhsh**.
Skeletal muscle stem cells in development and regeneration.

17.05-17.40 **Elly Tanaka**.
Regeneration: how much is enough?

17.40-18.00 **Karen Echeverri**.
miR-196 is an essential early-stage regulator of tail regeneration.

18.30-19.05 **Amy Wagers.**
Regenerative potential of skeletal muscle stem cells.

19.05-19.40 **Kenneth Poss**.
Mechanisms of cardiac regeneration in zebrafish.

Tuesday, October 6

Session III: Sensory/Neural Regeneration

Chair: Hernán López-Schier

9.00-9.35 **Miguel Allende.**
Molecular Mechanisms of Regeneration in the Mechanosensory Lateral Line System of Zebrafish.

9.35-10.10 **Hernán López-Schier**.
Regeneration of Afferent Axons of the Zebrafish Lateral-Line System.

10.10-10.45 **Michael Brand**.
Zebrafish adult neurogenesis and regeneration.

10.45-11.05 **Marcia Gaete**.
Role of Sox2 and neurogenesis during Spinal Cord Regeneration in *Xenopus laevis* tadpoles.

15.30 Poster viewing.

Session IV Organ regeneration

Chair: Randall Moon

16.30-17.05 **Matthias Hebrok**.
Modulating acinar cell regeneration and cancer formation in the pancreas.

17.05-17.40 **Klaus Kaestner**.
Pathways to Beta-Cell Expansion in the Adult Pancreas.

17.40-18.00 **Francesca Spagnoli.**
Spatio-temporal mechanisms that control pancreas versus liver fate decision within the endoderm.

18.30-19.05 **Didier Stainier.**
The Mitochondrial Import Gene - *tomm22* - Is Specifically Required for Hepatocyte Survival and Provides a New Liver Regeneration Model.

19.05-19.40 **Randall Moon.**
Wnt Signaling and Tissue Homeostasis: from Regeneration to Degeneration.

Wednesday, October 7

Session V: Imaging and Genomics
Chair: Shawn Burgess

9.00-9.35 **James Sharpe.**
Molecular Imaging of dynamic morphogenetic processes: live Optical projection Tomography of mouse limb development.

9.35-10.10 **Michael Lovett.**
Genomic Approaches to Inner Ear Hair Cell Regeneration.

10.40-11.15 **Shawn Burgess.**
Dissecting the genetic network involved in hair cell regeneration.

11.15-11.35 **Jeff S. Mumm.**
Molecular Regulation of Retinal Neuron Regeneration in Zebrafish.

11.35-12.00 Closing remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Guided tour / Baeza.

Guided tour / Paraninfo, Antigua Universidad.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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W21.
Active Zones as Organizers of Neuronal Communication

22-24 October

Scope: All brain functions rely upon synapses, which are the sites of communication between neurons. Synapses are complex, each one comprising thousands of different types of macromolecules working in concert. Synapses are organized by adhesive and scaffolding molecules that align presynaptic vesicular release with postsynaptic neurotransmitter receptors, thereby allowing rapid and reliable intercellular communication. Formation of chemical synapses in the nervous system is a highly regulated, multistep process that requires bidirectional flow of information-carrying molecules across the synaptic cleft.

Active Zones (AZs) are highly organized presynaptic regions where synaptic vesicles are prepared to fuse with plasma membrane to release neurotransmitters. Most transmitter release at synapses is spatially restricted to AZs, where synaptic vesicle docking, priming, and Ca^{2+}-dependent fusion take place in

a temporally highly coordinated manner. Genetic studies have begun to reveal a critical role for scaffolding and specific proteins in such processes. AZ proteins play a fundamental role in regulating neurotransmitter release and defining release sites. The functional roles of AZs components are beginning to be elucidated.

Organizers: **William J. Betz** (University of Colorado Medical School. Aurora, USA).
Lucía Tabares (University of Seville. Seville, Spain).

Thursday, October 22

Session I: Ca^{2+} channels and vesicles
Chair: Erwin Neher

9.00-9.40 **Thomas Schwarz.**
Two independent functions for the Ca^{2+}-channel subunit $\alpha_2\delta$-3: channel localization and synaptic morphogenesis.

9.40-10.20 **Erwin Neher.**
The functional demands on active zone organization at a glutamatergic synapse.

10.45-11.25 **Kerry Delaney.**
Probing the consequences of Ca^{2+}-vesicle colocalization at neuromuscular junctions for transmitter release and paired pulse facilitation.

11.25-12.05 **Silvio Rizzoli.**
Super-resolution investigation of synaptic vesicle recycling.

15.30-16.30 Poster viewing.

Session II: Organization of AZs
Chair: Bill Betz

16.30-17.10 **Jack McMahan.**
What electron tomography is telling us about how active zones function at neuromuscular junctions.

17.10-17.50 **Robert Wilkinson.**
Cooperation among active zones in one bouton.

18.15-18.55 **Bill Betz.**
Spatial analysis of sites of exo- and endocytosis at the neuromuscular junction.

18.55-19.35 **Lucía Tabares.**
Active Zones and preferential sites of exocytosis.

Friday, October 23

Session III: Molecular components of AZs
Chair: Eckart Gundelfinger

9.00-9.40 **Pascal Kaeser.**
Molecular coordination of active zone function by RIM and ELKS proteins.

9.40-10.20 **Eckart Gundelfinger.**
Regulation of synaptic levels of Bassoon and Piccolo.

10.45-11.05 **Elena Álvarez-Barón.**
γ-RIMS: localization and functional role.

11.05-11.45 **Jeong-Seop Rhee.**
αSNAP and βSNAP Support Synaptic Vesicle Priming by Regulating the Recycling of Free SNARE Proteins.

15.30-16.30 Poster viewing.

Section IV: Neurotransmission
Chair: Guido Zampighi

16.30-17.10 **Masao Tachibana.**
Synaptic transmission from bipolar cells to ganglion cells in the goldfish retina.

17.10-17.50 **Guido Zampighi.**
Changes in the 3D-Structure of Rod Photoreceptors Ribbon Synapses during Dark-Adaptation.

18.15-18.55 **Gerald Zamponi.**
Regulation of NMDA receptor function by cellular prion protein.

18.55-19.15 **John Wesseling.**
Single parameter permutation of vesicle trafficking in synapsin knockout synapses supports a novel two-bottleneck picture of the synaptic vesicle cycle.

19.15-19.35 **Rafael Fernández-Chacón.**
Cysteine String Protein-alpha prevents activity-dependent degeneration in GABAergic synapses.

19.35-19.55 **Francisco G. Scholl.**
Dissecting the role of beta-neurexin-1 in the CNS, a gene associated with synaptopathies.

Saturday, October 24

Session V: Regulation of AZ formation

Chair: Stephan Sigrist

9.00-9.40 **Yoshimi Takai.**
Regulatory Mechanisms of Active Zone Formation by Nectin-Afadin Adhesion System.

9.40-10.20 **Stephan Sigrist.**
Shedding light on the assembly of active zone structure and function.

10.45-11.25 **Noam Ziv.**
Presynaptic tenacity: Insights from live imaging experiments.

11.25-11.45 **Ricardo Borges.**
Chromogranins as modulators of storage and release of neurotransmitters.

11.45-12.05 **Ricardo Martín.**
Metabotropic glutamate receptor 7 activates phospholipase C, translocates munc 13-1 and facilitates glutamate release.

12.05-12.20 Closing Remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Nobel Prize / Erwin Neher.

Organizers / Lucía Tabares, William J. Betz.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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W22. Developmental Origins of Neurological Disorders: From Neurogenesis to Circuit Formation

26-28 October

Scope: The development of the vertebrate nervous system occurs over a protracted period, beginning early in embryogenesis and continuing, in many brain regions, until well after birth. A variety of developmental events including neurogenesis, cell migration and neuronal connectivity must be precisely orchestrated for optimal nervous system function. An increasing number of nervous system disorders (autism, schizophrenia, epilepsy, Tourette syndrome, lissencephaly, holoprosencephaly, cerebral palsy, etc...) are known, or are postulated, to have an embryonic origin to their etiology. Basic research on nervous system development has contributed significantly towards recent advances in our

understanding of the pathogenic mechanisms of many neurological diseases and prospects for new treatment regimens using stem cell and drug based approaches. However, given the intricacies of nervous system development, there are still new principles to be revealed and poorly understood disease processes that remain to be resolved. THE GOAL of this workshop is to discuss current and future trends in developmental neurobiology research by bringing together a small group of prominent scientists with expertise in neuronal cell fate determination, neural circuit assembly, and neuronal stem cell biology. An open exchange of data and ideas will undoubtedly provide further insight into the developmental basis of neurological disorders.

Organizers: **Douglas J. Epstein** (University of Pennsylvania School of Medicine. Philadelphia, USA).
Michael P. Matise (University of Medicine and Dentistry of New Jersey. Piscataway, USA).
Ricardo Pardal (Institute of Biomedicine of Seville. Seville, Spain).

Monday, October 26

9.15-9.25 Opening remarks.

Session I: Stem Cells
Chair: Michael Wegner

9.25-10.00 **Ricardo Pardal.**
Postnatal neurogenesis in the peripheral nervous system.

10.00-10.35 **Lukas Sommer.**
Area-specific growth control in neural stem cells of the developing central nervous system.

10.35-11.10 **Todd Macfarlan.**
Epigenetic Regulation of X-linked imprinted genes.

11.40-12.00 **Victoria Moreno-Manzano.**
Activated spinal cord ependymal stem cells rescue neurological function.

12.00-12.35 **Lorenz Studer.**
Human Pluripotent Stem Cells - Applications in Neural Development and Disease.

15.00 Poster viewing.

Session II: Neural Circuit Assembly I
Chair: Kenny Campbell

16.30-17.05 **Joseph Gleeson.**
Putting together the human brain: Lessons from disease.

17.05-17.40 **Patricia Salinas.**
Wnt signaling in the regulation of neuronal circuit formation.

17.40-18.00 **Marta Nieto.**
Cux1 and *Cux2* regulate dendritic branching, spine morphology and synapse formation of the upper layer neurons of the cortex.

18.30-19.05 **Alex Kolodkin.**
Secreted Semaphorins and their receptors control distinct aspects of dendrite morphogenesis and synapse formation.

19.05-19.40 **Susan Dymecki.**
Mapping Cell Origin to Cell Fate to Cell Function in the Mouse Brain.

19.40-20.00 **Benjamin Gallarda.**
Spinal cord central pattern generator output is dependent on motor column identity.

Tuesday, October 27

Session III: Cell Fate Determination
Chair: David Rowitch

9.00-9.35 **James Briscoe.**
Graded Sonic hedgehog signaling and the control of neuronal subtype identity in vertebrate embryos.

9.35-10.10 **Michael Matise.**
Genetic and epigenetic regulation of Shh-Gli target genes by Tcf7l2/Tcf4.

10.10-10.45 **Elisa Martí.**
Patterning and proliferation of neural progenitor cells requires integration of Wnt and Sonic hedgehog activities.

15.00 Poster viewing 2.

Session IV: Cell Fate Determination II
Chair: Elisa Martí

16.00-16.35 **Michael Wegner.**
Sox10 in neural development and disease.

16.35-17.10 **David Rowitch.**
Gliogenesis is regulated according to segmental template.

17.10-17.30 **Stavros Malas.**
Sox1 links the function of neural patterning and Notch signalling in the ventral spinal cord during the neuron-glial fate switch.

18.00-18.35 **Doug Epstein.**
Selective loss of Sonic hedgehog expression in the hypothalamus results in septo-optic dysplasia.

18.35-19.10 **Paola Bovolenta.**
Beyond Wnt inhibition: the functions of secreted Frizzled-related proteins in vertebrate eye morphogenesis.

19.10-19.30 **Silvia Nicolis.**
Sox2 is required for hippocampal development and neural stem cell maintenance by an autocrine mechanism involving Sox2-dependent activation of the Sonic hedgehog gene.

Wednesday, October 28

Session V: Neural Circuit Assembly II
Chair: Paola Bovolenta

9.30-10.05 **Kenny Campbell.**
The roles of the LIM homeodomain protein Islet1 in the development of basal ganglia circuitry.

10.05-10.25 **Amélie Griveau.**
A novel role for *Dbx1*-derived Cajal-Retzius cells in early regionalization of the cerebral cortical neuroepithelium.

10.25-11.00 **Óscar Marín.**
ERBB4/NRG1 function in the development of GABAergic circuits in the mammalian cerebral cortex.

11.05-11.15 Wrap-up.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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Organizers / Ricardo Pardal, Douglas J. Epstein, Michael P. Matise.

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W23.
Chromatin Domains and Insulators

9-11 November

Scope: During the past years a number of genomes from different species, including various vertebrates and, among them, several mammalian species, have been completely sequenced. The use of powerful bioinformatics approaches has allowed the identification of evolutionary conserved sequences that spread well beyond the coding regions and, thus, include regulatory elements that appear to transduce relevant functional and/or structural constraints that have been preserved in different species, presumably originating in the genome of a common ancestor.

Boundaries or insulators are a specific type of regulatory elements, first discovered in *Drosophila* and yeast and later shown to be present in vertebrate genomes. These elements are characterised as possessing at least one of the following two features: to act as blockers, thereby preventing the communication and interaction between distal enhancers

and proximal promoters; or to act as barriers, thereby preventing the spreading of negative heterochromatic effects originating in the chromosome that could compromise the expression of neighbouring loci. To date, several types of boundary elements have been identified. They share a common function but appear to be unrelated at the structural level therefore suggesting that, throughout the evolution, the system has been using different mechanisms that have been adapted to suit the requirements of an insulator, that is: protecting a set of sequences from surrounding loci and thus allowing the internal regulatory elements to control the gene and avoiding other distal elements to alter the pattern of expression.

This workshop on "chromatin domains and boundaries" will address and discuss the most updated knowledge of how chromatin is organised in the eukaryotic nucleus and what is the role of insulators in this process. World-wide recognised and leading scientists in the field will discuss the different aspects in which this topic has been addressed in the recent literature. The workshop will cover from general descriptions of boundaries in vertebrate and invertebrate genomes, to more specific roles of boundaries in nuclear or cellular processes.

Organizers: **Víctor G. Corces** (Emory University. Atlanta, USA).
Lluís Montoliu (National Centre for Biotechnology. Madrid, Spain).
Félix Recillas-Targa (National Autonomous University of México. México D.F., México).

Monday, November 9

9.00-9.10 Víctor Corces, Félix Recillas-Targa, Lluís Montoliu.
Opening of the workshop by the organizers.

Session I: Insulator paradigms.
Chair: Félix Recillas-Targa.

9.10-10.00 **Gary Felsenfeld.**
Chromatin boundaries, genome organization, and epigenetic regulation.

Session II: Chromatin domains and epigenetic mechanisms
Chair: Víctor Corces

10.30-11.00 **Víctor G. Corces.**
Chromatin Insulators and Nuclear Organization.

11.00-11.30 **Ann Dean.**
Chromatin organization and epigenetic regulation.

11.30-12.00 **Giacomo Cavalli.**
PcG protein-mediated insulator bypass.

12.00-12.30 **Pavel Georgiev.**
Chromatin Insulators in *Drosophila melanogaster*.

12.30-12.45 **M. Lluisa Espinás.**
Boundary elements in the *Drosophila* BX-C and proteins involved in their functionality.

Session III: Other boundaries found in vertebrate genomes
Chair: Gary Felsenfeld

15.30-16.00 **Roderic Guigó.**
Chromatin marks exons.

16.00-16.30 **Victoria Lunyak.**
A new type of boundary, associated with SINE B2 elements.

16.30-17.00 **Félix Recillas-Targa.**
The function of the novel CTCF-dependent αEHS-1.4 insulator is modulated throughout erythroid differentiation and contributes to the chicken α-globin gene domain regulation.

17.00-17.15 **Pedro M. Fernández-Salguero.**
B1-X35S, a novel SINE B1 retrotransposon that binds Dioxin receptor, Slug and Snail has insulator activity.

Session IV: Barrier and boundary function in yeast genomes
Chair: Rolf Ohlsson

17.45-18.15 **Rohinton T. Kamakaka.**
tRNA promoter mediated insulation in eukaryotes.

18.15-18.45 **Marc Martí-Renom.**
Three-dimensional folding of chromosomal domains in relation to gene expression.

18.45-19.00 **Masaya Oki.**
Analysis of the heredity change of the boundary.

19.00-20.00 Poster viewing

Tuesday, November 10

Session V: Boundaries and nuclear processes

Chair: Giacomo Cavalli

9.00-9.30 **Rolf Ohlsson.**
Non-allelic transvection of multiple imprinted loci is organized by the H19 imprinting control region during germline development.

9.30-10.00 **Ann J. Feeney.**
Potential role of CTCF and cohesin in V(D)J recombination of immunoglobulin genes.

10.00-10.30 **Elena Klenova.**
CTCF and cancer: a complex relationship.

10.30-10.45 **Silvia Nicolás.**
Chicken beta-globin insulator as a tool to improve transgene expression in somatic cells used for nuclear transfer.

Session VI: Boundaries and gene transfer approaches

Chair: Lluís Montoliu

15.30-16.00 **David Emery.**
Use of Chromatin Insulators To Improve the Expression and Safety of Retroviral Vectors.

16.00-16.30 **José Luis Gómez-Skarmeta.**
Visualization of gene limits.

16.30-16.45 **Geneviève Jolivet.**
A 145kb multigene fragment of pig genome enhances production of recombinant proteins.

16.45-17.00 **José Bessa.**
The Enhancer Disruption (ED) screen in zebrafish.

17.00-17.15 **Sreenivasulu Kurukuti.**
Transcription-dependent Organization of Gene Networks in mammalian cell nucleus revealed by High Resolution Chromatin Interaction analysis and massive parallel sequencing (ChIA-Seq).

17.45-19.30 Poster viewing.

Wednesday, November 11

Session VII: Bioinformatic approaches to understand boundaries in genomes

Chair: José Luis Gómez-Skarmeta

9.00-9.30 **Bing Ren.**
Epigenomic landscapes of pluripotent and lineage-committed human cells.

9.30-10.00 **Lluís Montoliu.**
Identification and functional validation, *in vitro* and *in vivo*, of vertebrate genome insulators.

10.00-10.15 **Sílvia Pérez-Lluch.**
Genome-wide analyses confirm the association of ASH2 and H3K4me3 in *Drosophila* wing imaginal discs.

10.15-10.30 **Víctor Corces, Félix Recillas-Targa, Lluís Montoliu.**
Concluding remarks.

Organizers / Lluís Montoliu, Víctor G. Corces, Félix Recillas-Targa.

Guided tour / Plaza del Pópulo.

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W24.
Bacterial Regulatory Networks

12-14 November

Scope: Regulatory networks encompass sets of genes whose expression states are directly altered in response to an activating signal, mediated by combinations of *trans*-acting regulatory proteins, *cis*-acting sequences and regulatory RNAs. The elucidation of these network components is an essential step toward the creation of a framework for systems-based analysis of biological processes. Novel approaches that integrate the analysis of transcription mechanisms, signal transduction, *in silico* and synthetic designs of regulatory circuits are providing insights into bacterial regulatory networks. This is enabling the understanding of how pathogenic bacteria and environmental organisms respond to changes in the environment as well as the construction and characterization of engineered organisms with predictable behaviors.

Organizers: **Bonnie L. Bassler** (Princeton University. Princeton, USA).
Eduardo A. Groisman (Washington University School of Medicine. St. Louis, USA).
Igor Zwir (University of Granada. Granada, Spain).

Thursday, November 12

Session I: Gene control by nucleoid-associated proteins and transcriptional regulators

Chair: Eduardo A Groisman

9.00-9.40 **Steve Busby.**
Transcriptional regulation in *E. coli* - the big picture.

9.40-10.20 **Charles J. Dorman.**
Global and local gene regulation in Gram-negative bacteria.

10.20-10.50 **Josep Casadesús.**
Clocks and switches: transcriptional regulation by DNA adenine methylation.

11.20-12.00 **Eduardo A. Groisman.**
Differential control of ancestral and horizontally-acquired genes.

12.00-12.40 **Víctor de Lorenzo.**
Engineering vs. tinkering regulators and regulatory networks in *Pseudomonas putida*.

12.40-13.00 **Francesca Agriesti.**
Molecular architecture of Fur binding to iron-induced and –repressed genes in *Helicobacter pylori*.

Session II: Signal sensing and partner recognition in bacterial two-component systems

Chair: Bonnie L Bassler

15.30-16.10 **Bonnie L. Bassler.**
Manipulating quorum sensing to control bacterial pathogenicity.

16.10-16.50 **Juan Luis Ramos.**
Sensing small molecules: Antagonist and agonist of the TodS/TodT two component system.

16.50-17.10 **Marc Weber.**
Stochastic effects in the precision of the quorum sensing switch in *Vibrio fischeri*.

17.40-18.20 **Michael T. Laub.**
Specificity and evolution of two-component signaling pathways.

18.20-18.50 **Martin Weigt.**
Inference of bacterial protein-protein interactions from multi-species sequence data.

18.50 Poster viewing.

Friday, November 13

Session III: Computational analysis of transcriptional and post-transcriptional regulation

Chair: Igor Zwir

9.00-9.40 **Gary D. Stormo.**
Computational methods for identifying transcriptional and post transcriptional regulatory networks in bacteria.

9.40-10.20 **Julio Collado-Vides.**
RegulonDB: The bioinformatic platform to integrative studies of the *E. coli* K-12 gene regulation network.

10.20-11.00 **Igor Zwir.**
Mapping sequences to numbers: predicting the expression dynamics of PhoP co-regulated genes from *cis*-regulatory features.

11.00-11.30 **Coral del Val-Muñoz.**
Computational identification and characterization of small non-coding RNAs in the legume symbiont *Sinorhizobium meliloti*.

Session IV: RNA-mediated gene control in regulatory networks

Chair: Susan Gottesman

15.30-16.10 **Susan Gottesman.**
Small RNA Regulatory Networks: Multiple sRNA inputs to regulate RpoS.

16.10-16.50 **Jörg Vogel.**
Salmonella as a model organism for small RNA research.

16.50-17.10 **Meritxell García-Quintanilla.**
Regulation of the *cysDNC* operon by FinP RNA: a twist in plasmid-chromosome crosstalk.

17.40-18.20 **Pascale Cossart.**
The transcriptional landscape of *Listeria* genome: from saprophytic life to virulence.

18.20-19.00 **Luis Serrano.**
Transcriptome complexity in a minimum bacteria.

19.00 Poster viewing 2.

Saturday, November 14

Session VI: Evolution and pharmacological targeting of regulatory circuits
Chair: Sankar Adhya

9.00-9.40 **Sankar Adhya.**
Cellular stress created by intermediary metabolite imbalances.

10.50-11.20 **Kathleen Marchal.**
Reconstructing transcriptional networks in micro-organisms.

11.20-11.50 **Gloria Soberón-Chávez.**
The concentration of RhlR, the *Pseudomonas aeruginosa* quorum sensing transcriptional regulator, is modulated by growth temperature.

11.50-12.10 **Raúl Ruiz González.**
"In vivo" estimation of the gene regulatory function.

12.10 General discussion.

#2010

W25.
The Dynamics of Peptidoglycan Structure and Function: New Insights into the 'Great Wall'

4-6 October

Scope: Peptidoglycan makes up the cell wall of almost all bacterial species and serves to maintain the shape and structural integrity of the cell, but peptidoglycan is a much more dynamic molecule than is implied by the term cell wall. Strands of peptidoglycan must be degraded and replaced with more strands for the cell to grow, and peptidoglycan must be built into different shapes for formation of the side-wall, septum, and poles. Openings must be created in the peptidoglycan for insertion and attachment of secretion systems, flagella, or other molecular machines. The processes of synthesis and breakdown are not fully understood, and what the structure actually looks like is only now being glimpsed using new microscopic techniques. Understanding the mechanisms used by the enzymes for synthesis and breakdown of the cell wall

will both lead to a better understanding of bacterial metabolism and cell growth and will also reveal how new antibiotics can be developed to target these enzymes. Peptidoglycan that is released from bacteria is sensed by other bacteria and by host cells, and recent discoveries have shown that peptidoglycan recognition is necessary for normal development, symbiotic relationships, immune responses to infection, and also inflammatory diseases. This workshop will bring together scientists working in all areas of peptidoglycan research. Discussions will focus on structural biology characterizations of the whole cell wall, biochemical and genetic characterizations of enzymes involved in peptidoglycan assembly and breakdown, and recognition of peptidoglycan and responses by humans and other organisms.

Organizers: **Miguel A. de Pedro** (Centre for Molecular Biology "Severo Ochoa". Madrid, Spain).
Joseph P. Dillard (University of Wisconsin-Madison. Madison, USA).
Margaret J. McFall-Ngai (University of Wisconsin-Madison. Madison, USA).

Monday, October 4

8.45-9.00 **J. Dillard, M. McFall-Ngai, M. de Pedro.**
Opening of the workshop.

Session I: Peptidoglycan structure, enzymes, & enzyme complexes
Chair: J Dillard

9.00-9.30 **Morgan Beeby.**
Electron cryotomographic studies of the bacterial cell wall.

9.30-10.00 **Valério Matias.**
Cryo-electron microscopy reveals a lipoteichoic acid-surface layer in *Bacillus subtilis*.

10.00-10.30 **Waldemar Vollmer.**
Activities of PBPs in peptidoglycan synthesis complexes.

10.30-11.00 **Patricia Domínguez-Cuevas.**
A mechanism for the switch from rods to L-forms in *Bacillus subtilis*.

11.30-11.50 **Kevin Young**.
Bacterial morphology is determined by the interplay between peptidoglycan synthesis and cell division.

11.50-12.20 **Miguel de Pedro**.
Cell wall structure and biosynthesis in the á-proteobacteria *Asticcacaulis biprosthecium*.

12.20-12.40 **Kerwyn C. Huang** .
Physical mechanisms for bacterial cell shape maintenance.

12.40-13.10 **René van der Ploeg.**
Protein interaction, localization and function: unraveling the assembly of the divisome complex.

Session II: Antimicrobials-cell wall synthesis, cell wall synthesis inhibitors & phage lysins
Chair: M de Pedro

16.00-16.30 **Pedro García.**
Peptidoglycan hydrolases and pneumococcal disease.

16.30-17.00 **Dominique Mengin-Lecreulx**.
Undecaprenyl phosphate metabolism: the target of bacitracin and colicin M.

17.00-17.20 **David Roper.**
The mechanism of inhibition of the antibiotic D-cycloserine proceeds via a previously unidentified phosphoryl intermediate: prospects for novel antimicrobials without psychotic effects.

17.50-18.10 **Richard Daniel.**
A widespread family of proteins required for cell morphogenesis in bacteria and their control by the MreB cytoskeleton.

18.10-18.40 **Didier Blanot.**
Comparative biochemistry of paralogues and orthologues among the Mur ligase superfamily.

18.40 Poster viewing.

Tuesday, October 5

Session III: Generation, recycling, & release of peptidoglycan fragments
Chair: M McFall-Ngai

9.00-9.30 **Ivo Boneca**.
Role of lytic transglycosylases in the virulence of *Helicobacter pylori*.

9.30-9.50 **Juan A. Hermoso.**
Structural insights into cell wall recycling.

9.50-10.20 **Joseph Dillard**.
Peptidoglycan breakdown and release in *Neisseria gonorrhoeae*.

10.50-11.20 **Andy-Mark Thunnissen .**
Break it to make it: Structure and action of lytic transglycosylases explored by X-ray crystallography.

11.20-11.40 **Lien Callewaert.**
Bacterial lysozyme inhibitors in search of a function.

Session IV: Peptidoglycan recognition by the host
Chair: J Dillard

16.00-16.30 **Margaret McFall-Ngai**.
Peptidoglycan as a developmental signal in beneficial symbioses.

16.30-17.00 **Gérard Eberl**.
Symbiotic bacteria and the development of the immune system.

17.30-17.50 **Naohiro Inohara.**
Bacterial species–specific immunoactivation by peptidoglycan-related molecules through Nod1 and Nod2.

17.50-18.10 **Bruno Lemaitre .**
Multiple amidase PGRPs act in concert to regulate *Drosophila* immune responses.

18.10-18.40 **Gabriel Núñez**.
Nod1 and Nod2 receptors in innate immunity and disease

18.40 Poster viewing.

Wednesday, October 6

Session V: Signalling in and between bacteria
Chair: M McFall-Ngai

9.00-9.30 **Jonathan Dworkin.**
A novel signaling cascade mediates response to peptidoglycan in bacteria.

9.30-9.50 **Letal I. Salzberg.**
Peptidoglycan metabolism is controlled by the WalRK and PhoPR two-component systems in phosphate limited *Bacillus subtilis* cells.

10.10-11.00 Roundtable for general discussion, summing up and prospects.

Organizers / Margaret J. McFall-Ngai, Joseph P. Dillard, Miguel A. de Pedro.

Organizer / Miguel A. de Pedro.

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W26.
Cell Replacement for Regeneration in the Nervous System: Lessons from Adult Neurogenesis

13-15 October

Scope: Adult neurogenesis provides a unique model to study what a newly generated neuron needs to accomplish before taking over its function in an already pre-existing network. Failure to accomplish a sequence of distinct steps such as appropriate subtype specification, migration, dendritic and axonal outgrowth and arborization, synaptogenesis, and finally functional recruitment into behaviourally relevant circuits often dooms a new born neuron to death. There is growing evidence that the same requirements need to be fulfilled when attempting to repair damaged neuronal circuits by replacing dead with newly generated neurons, either derived from endogenously recruited stem cells or following transplantation. This poses currently an insurmountable barrier for the feasibility of cell-based therapies of neurodegenerative diseases.

In this workshop on "CELL REPLACEMENT FOR REGENERATION IN THE NERVOUS SYSTEM: LESSONS FROM ADULT NEUROGENESIS" world-wide leading scientists in the field will address and discuss the most updated knowledge of what are the key requirements for a newly generated neuron to integrate and thus survive and what can be learnt from this for eventually re-installing neurogenesis in regions where neurogenesis does not occur physiologically, such as the cerebral cortex or the retina.

Organizers: **Benedikt Berninger** (Ludwig-Maximilians University of Munich. Munich, Germany).
José Manuel García-Verdugo (Príncipe Felipe Research Center. Valencia, Spain).
Alejandro F. Schinder (Leloir Institute. Buenos Aires, Argentina).

Wednesday, October 13

Session I: The neurogenic niche
Chair: José López-Barneo

9.00-9.40 **Chichung Lie.**
Control of stem cell maintenance and differentiation in the adult hippocampal neurogenic niche.

9.40-10.20 **José-Manuel García-Verdugo.**
Comparative aspects of rodent, monkey and human SVZ organization.

Session II: Neuronal specification: learning a lesson from development
Chair: Magdalena Götz

11.30-12.10 **François Guillemot.**
Coordinated regulation of cell proliferation and differentiation during neurogenesis.

12.10-12.50 **Paola Arlotta.**
Fate specification and regeneration of cortical neuron subtypes.

12.50-13.30 **Pierre Vanderhaeghen.**
From stem cells to cortical networks.

16.00-17.30 Poster viewing.

Session III: Functional integration
Chair: François Guillemot

17.30-18.10 **Angélique Bordey.**
Controlling newly born neuron survival and integration.

18.10-18.50 **Alejandro Schinder.**
Activity-dependent integration of adult-born neurons in the hippocampal network.

18.50-19.10 **Marcos R. Costa.**
Continuous live imaging of adult neural stem cell division and lineage progression *in vitro*.

19.10-19.30 **Nicolas Toni.**
Astrocytic perisynaptic processes on neurons born in the adult hippocampus.

Thursday, October 14

Session IV: The role of adult neurogenesis in neuronal plasticity
Chair: Anders Björklund

9.00-9.40 **Marco Canossa.**
Neurotrophins/p75^{NTR} signaling specifies axons during adult neurogenesis and brain development.

9.40-10.20 **Arturo Álvarez-Buylla.**
Role of sonic hedgehog in the specification of adult neural stem cells.

10.20-11.00 **Guo-li Ming.**
Functions of schizophrenia susceptibility genes in adult neurogenesis.

11.00-11.20 **Matteo Bergami.**
Sequential expression of neurotrophin receptors p75^{NTR} and TrkB controls newborn neurons polarity and differentiation in the adult hippocampus.

15.00-16.30 Poster viewing 2.

Session V: Unconventional sources for cell replacement
Chair: Angélique Bordey

16.30-17.10 **José López-Barneo.**
The neurogenic niche in the carotid body and its potential applicability to antiparkinsonian cell therapy.

17.10-17.50 **Benedikt Berninger.**
Directing astroglia from the cerebral cortex into subtype specific functional neurons.

Session VI: Axon guidance

18.20-18.40 **Aida Platero-Luengo.**
Niche cells regulate the biology of adult carotid body stem cells.

18.40-19.20 **Guillermina López-Bendito.**
Wiring the thalamocortical system: from axon guidance to plasticity.

19.20-19.40 **Vanesa Nieto-Estévez.**
Specific transcription factors and extracellular signals regulate neural stem cell fate in neurogenic zones of the adult mouse brain.

Friday, October 15

Session VII: Repair strategies
Chair: Arturo Álvarez-Buyll

9.20-10.00 **Verónica Martínez Cerdeño.**
Embryonic MGE precursor cells grafted into adult rat striatum integrate and ameliorate motor symptoms in 6-OHDA-lesioned rats.

10.00-10.40 **Magdalena Götz.**
Neurogenesis from glial cells - novel sources for new neurons in the adult brain.

10.40-11.00 **Lázaro Centanin.**
Permanent pluripotent neural progenitors in the adult fish retina.

11.20-12.00 **Anders Björklund.**
Cell replacement strategies for Parkinson's disease.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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Speaker / José López-Barneo.

Organizers / Alejandro F. Schinder, Benedikt Berninger, José Manuel García-Verdugo.

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W27.
Ion Channels and Diseases of the Nervous System

2-4 November

Scope: Ion channels are intrinsic membrane proteins that regulate the flux of ions across cell membranes. Voltage- and ligand-gated varieties play a central role in the physiology of excitable cells; in the nervous system, they are key for spike firing, rapid information transfer, homeostatic control of excitability, and activate and modulate signaling pathways critical for learning and memory, neural circuit development, and basic cell survival. In addition to regulating ion flux, ion channels act as dynamic scaffolds for intracellular protein networks. These networks regulate the kinetic and signaling properties of the mature channel, but are also critical for intracellular trafficking through the secretory pathway during channel biogenesis and for controlling regulatory steps subsequent to insertion in the plasma membrane such as focal clustering at postsynaptic densities and other designated membrane sites, and local retrieval and recycling. Mutations

in ion channel subunits and throughout their associated protein complexes have been associated with a number of diseases of the nervous system (collectively known as "channelopathies"), including epilepsy, ataxias, migraine, autism spectrum disorders, Parkinson's and Alzheimer's disease.

This workshop will bring together internationally recognized researchers in the fields of ion channel function, trafficking, and regulation to discuss current and future trends in ion channel research. A major emphasis will be on recent advances in our knowledge of i) the molecular composition, structure, and regulation of ion channel scaffolding complexes, ii) the mechanisms regulating channel trafficking and membrane targeting, and iii) their involvement in the pathophysiology of human disease.

Organizers: **Ricardo Dolmetsch** (Stanford University School of Medicine. Stanford, USA).
Isabel Pérez-Otaño (University of Navarra. Pamplona, Spain).
Álvaro Villarroel (University of the Basque Country. Leioa (Biscay), Spain).

Tuesday, November 2

9.00-9.10 Álvaro Villarroel, Isabel Pérez-Otaño, Ricardo Dolmetsch. Welcome.

Session I: Ion channel interactions
Chair: Álvaro Villarroel

9.10-9.50 **Dan Minor, Jr.**
Structural insights into ion channel function and modulation.

9.50-10.30 **David Yue.**
Genetically encoded biosensors reveal enzyme-inhibitor-like tuning of calcium channels.

10.30-11.10 **Jakob von Engelhardt.**
CKAMP44, a new AMPA receptor auxiliary protein.

11.40-12.20 **Juan Lerma.**
Assessing roles for kainate receptor interactome in synaptic plasticity.

12.20-13.00 **Àlex Bayés.**
Synaptic Proteome Complexity and Evolution: The Case of the Human Postsynaptic Density and its Role in Disease.

Session II: Targeting and trafficking of potassium channels
Chair: Antonio Ferrer-Montiel

16.00-16.40 **Blanche Schwappach.**
Biogenesis and trafficking of ATP-sensitive potassium channels.

16.40-17.20 **Álvaro Villarroel.**
A pore residue of the KCNQ3 potassium M-channel subunit controls surface expression.

17.20-18.00 **Paul Slesinger.**
Moving GIRK Channels Around to Modulate Neuronal Activity.

18.00-18.20 **Araitz Alberdi.**
Calmodulin independent trafficking of KCNQ2 channels.

18.30 Poster viewing.

Wednesday, November 3

Session III: Glutamate receptor trafficking during synaptic transmission and plasticity
Chair: Juan Lerma

9.00-9.40 **Matthieu Sainlos.**
Biomimetic divalent ligands for the acute disruption of PDZ domain-mediated glutamate receptor stabilization at the synapse.

9.40-10.20 **Isabel Pérez-Otaño.**
Removal of non-conventional NMDA receptors gates synapse maturation.

10.20-11.00 **José Esteban.**
Manipulating the PIP_3 pathway for synaptic plasticity in health and disease.

11.00-11.15 **Teresa Iglesias.**
Kidins220/ARMS associates with NMDARs and is down-regulated in excitotoxicity and cerebral ischemia.

11.15-11.30 **Juan Carlos Arévalo.**
The ARMS/Kidins220 scaffold protein modulates synaptic transmission.

Session IV: Mechanisms of channelopathies

Chair: Isabel Pérez-Otaño

16.00-16.40 **Thomas J. Jentsch.**
The need for proton-driven vesicular Cl^- accumulation: insights from designer mice and biophysics.

16.40-17.20 **Kamran Khodakhah.**
Episodic Ataxia Type 2: A tail of paradoxes!

17.20-18.00 **Ricardo Dolmetsch.**
From calcium channels to autism.

18.00-18.20 **Sonia Marco.**
Impaired connectivity is driven by abnormal synaptic NMDA receptor composition in early stages of Huntington's disease.

18.30 Poster viewing 2.

Thursday, November 4

Session V: Ion channels as therapeutic targets

Chair: Ricardo Dolmetsch

9.10-9.50 **David Attwell.**
Control of myelination by neurotransmitter receptors.

9.50-10.30 **Antonio Ferrer-Montiel.**
Complex regulation of TRPV1: Implications for nociception and pain.

11.00-11.40 **Ricardo Dolmetsch.**
Closing remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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Organizers / Álvaro Villarroel, Isabel Pérez-Otaño, Ricardo Dolmetsch.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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W28. *Pseudomonas aeruginosa*: Opportunistic Pathogen and Human Infections

8-10 November

Scope: *Pseudomonas aeruginosa*, a Gram-negative environmental species and an opportunistic microorganism, establishes itself in compromised patients, such as those suffering from cystic fibrosis (CF), or hospitalized in intensive care units (ICU). It has become a major cause of nosocomial infections worldwide (about 10% of all such infections in most European Union hospitals) and a serious threat to public health. The overuse and misuse of antibiotics have also led to the selection of multi-resistant *P. aeruginosa* and the emergence of strains resistant to all known antibiotics causing infections that are very difficult to treat. How an environmental species can cause human infections remains a key question that still needs elucidation despite the incredibly high progress that has been made in the *P. aeruginosa* biology in the past decades. The workshop

is aimed to present the different recent advances in the environmental life of *P. aeruginosa*, the human *P. aeruginosa* infections, the new animal models to study *Pseudomonas* infections, the new molecular approaches of systems biology including metabolomics, genomics and bioinformatics, and the community lifestyle named biofilm that accounts for *P. aeruginosa* persistence in humans.

Organizers: **Sophie de Bentzmann** (Institute of Microbiology of the Mediterranean. Marseilles, France).
Søren Molin (Technical University of Denmark. Lyngby, Denmark).
Juan Luis Ramos (Zaidín Experimental Station. Granada, Spain).

Monday, November 8

9.00-9.10 **Sophie de Bentzmann.**
Welcome.

Session I: Animal and *in vitro* models for *P. aeruginosa* pathogenesis
Chair: Paul Williams

9.10-9.40 **David Stoltz.**
Lung disease in Cystic Fibrosis pigs.

9.40-10.10 **Joanna Goldberg.**
Role of phosphorylcholine modification in *Pseudomonas aeruginosa* pathogenesis.

10.10-10.25 **Sebastián Albertí.**
Alginate Production Confers Protection to *P. aeruginosa* from Permeabilization and Opsonisation by Surfactant Protein A.

10.25-10.40 **Thibault Sana.**
The second Type Six Secretion System of *Pseudomonas aeruginosa*, which is activated by Quorum-Sensing and upon iron limitation, triggers cytotoxicity towards macrophages and bacteria uptake by epithelial cells.

10.40-10:55 **Xiaoyun Lee.**
The *Pseudomonas aeruginosa* antimetabolite L-2-amino-4-methoxy-trans-3-butenoic acid (AMB) induces encystment in *Acanthamoeba castellanii*.

Session II: Resistance
Chair: Juan Luis Ramos

11.30-12.00 **Patrick Plésiat.**
Resistance of *Pseudomonas aeruginosa* to antibiotics: have we lost a battle or the war?

12.00-12.30 **Pradeep K. Singh.**
Active Starvation Responses Produce Antibiotic Tolerance in Nutrient-limited Bacteria.

12.30-12.45 **Cédric Muller.**
A Novel Two-Component Regulatory System, ParRS, Coordinates Multidrug Resistance in *Pseudomonas aeruginosa*.

12:45-13.00 **Sophie Guénard.**
Mutations associated with the overexpression of the MexXY/OprM efflux system in *Pseudomonas aeruginosa*.

Session III: The regulatory potency (I)
Chair: Dieter Haas
Small RNA

15.30-16.00 **Dieter Haas.**
Small RNAs regulating primary and secondary metabolism in *Pseudomonas aeruginosa*.

16.00-16.30 **Udo Bläsi.**
Small regulatory RNAs involved in pathogenicity of *Pseudomonas aeruginosa*.

16.30-16.45 **Karine Lapouge.**
How are *Pseudomonas aeruginosa* food choices regulated by small non-coding RNAs?

16.45-17.00 **Alessandra Romeo.**
Characterisation of the sRNAs PaeI and PaeII in *Pseudomonas aeruginosa*.

17.00-17.15 **Isabel Pérez-Martínez.**
Azithromycin inhibits the expression of small RNAs *rsmY* and *rsmZ* in *Pseudomonas aeruginosa* PAO1.

17.15-17.30 **Elisabeth Sonnleitner.**
The small RNA CrcZ is involved in catabolite repression and virulence of *Pseudomonas aeruginosa*.

Session IV: The regulatory potency (II)
Chair: Patrick Plésiat

TCS, CSS and regulators

18.00-18.30 **Juan Luis Ramos**.
Transcriptional control of multidrug efflux pumps in *Pseudomonas*: the role of TtgV.

18.30-18.45 **Sandy Fillet**.
Molecular study of TtgV, the regulator of a major multidrug efflux pump in *Pseudomonas*.

18.45-19.15 **Alain Filloux**.
Pseudomonas aeruginosa lifestyles: molecular switches drive the transition towards the biofilm growth mode.

19.15-20.30 Poster viewing.

Tuesday, November 9

Session V: From molecular mechanisms to new therapies
Chair: Joanna Goldberg

QS

9:00-9:30 **Paul Williams**.
Quinolones and Quorum Sensing in *Pseudomonas aeruginosa*.

Others

10:00-10-30 **Susanne Häussler.**
Towards individualized therapy and prevention of multi-drug resistant disease.

10:30-11:00 **Rob Lavigne**.
Bacteriophage-based strategies to combat *Pseudomonas aeruginosa*.

11.00-11.30 **Fernando Baquero.**
Pseudomonas aeruginosa as an opportunistic pathogen: from environmental biology to patient's local biology.

Session VI: The regulatory potency (III)
Chair: Alain Filloux

TCS, CSS and regulators

16:00-16:30 **Sophie de Bentzmann**.
The TCS PpprAB activates both biofilm formation and antimicrobial resistance in *Pseudomonas aeruginosa*.

16:30-16:45 **Caroline Giraud**.
The PprA-PprB two-component system activates CupE, the first non archetypal *Pseudomonas aeruginosa* chaperone-usher pathway system assembling fimbriae.

16:45-17:00 **Marian Llamas**.
Role of cell surface signaling in *Pseudomonas aeruginosa* virulence.

17:30-19:30 Poster viewing 2.

Wednesday, November 10

Session VII: Evolutionary dynamics in patients
Chair: Burkhard Tümmler

9.00-9.30 **Burkhard Tümmler.**
Pseudomonas aeruginosa: Update on population biology and clonal variation.

9.30-9.45 **Gloria Soberón-Chávez.**
Genomic islands and antibiotic resistance among a collection of 125 clinical and environmental *Pseudomonas aeruginosa* isolates in Mexico.

9.45-10.00 **Ana Fernández-Olmos**.
Feasibility identification of cystic fibrosis *Pseudomonas aeruginosa* strains with different morphotypes using MALDI-TOF MS.

10.00-10.15 **Xavier Daura**.
Comparative proteomic analysis of collection and clinical-isolate strains of *Pseudomonas aeruginosa*.

10.45-11.00 **María Gómez Lozano**.
Different evolutionary pathways during *Pseudomona aeruginosa* long-term infection.

11.00-11.30 **Søren Molin.**
Evolutionary dynamics of *Pseudomonas aeruginosa* during long-term infection in human airways.

11.30-12.00 **Søren Molin.**
Closing remarks.

Organizers / Juan Luis Ramos, Sophie de Bentzmann, Søren Molin.

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W29.
The Centrosome: Structure, Function and Dynamics

15-17 November

Scope: As we advance more and more in our detailed molecular understanding of biological function through atomic interactions, the more evident it is the need to contextualize this type of information in the complex environment of the cell. Indeed, among all the key cellular substructures performing a critical role, the centrosome stands not only as the organizer of the cellular microtubular network, but as a critical "molecular interaction hub" responsible for essential aspects of the cell cycle. Clearly, a multi facets approach is needed to unravel the functional details of the centrosome, first identified more than a century ago but still representing a formidable research challenge. The promiscuity of molecular interactions, exquisitely regulated along the cell cycle, poses exceptionally high demands on virtually all types of biophysical and biochemical approaches. Its role in coordinating a plethora of transient interactions opens a very

interesting window into our understanding of the control of essential aspects of cell biology. Not surprisingly, the centrosome is also key in understanding a number of pathologies, cancer among them, and the tangible possibility exists that a deeper understanding of this organelle could help substantially in the development of more efficient and targeted new anti cancer drugs. In recognition of the multidisciplinarity that is so much needed to advance in our studies on the centrosome, helped by a recent stress of focus of a number of Spanish research consortia on this topic, the present workshop aims to provide such a multi faceted environment, bringing together experts from distant biological disciplines to help advance our molecular understanding of the centrosome.

Organizers: **José María Carazo** (National Centre for Biotechnology. Madrid, Spain).
Rosa M. Ríos (Andalusian Molecular Biology and Regenerative Medicine Centre. Seville, Spain).
Luis Serrano (Centre for Genomic Regulation. Barcelona, Spain).

Monday, November 15

Session I: Structural and functional analysis of the centrosome
Chair: Luis Serrano

9.00-9.30 **Luis Serrano.**
Combining structural, information, mass spectroscopy, microscopy and bioinformatics to understand biological networks.

9.30-10.15 **Guillermo Montoya.**
Crystal structure of the mammalian cytosolic chaperonin CCT in complex with tubulin.

10.15-11.00 **José María Carazo.**
The role of soft X-ray Tomography and EM Tomography in the study of the centrosome.

11.35-12.20 **Wolfgang Baumeister.**
In situ Structural Biology by Electron Cryomicroscopy.

12.20-01.05 **Michel Bornens.**
Cep123, a distal appendage protein and Polo-like kinase 4 substrate, is required for primary cilium assembly.

15.30-16.15 **Cayetano González.**
A new centriole maturation marker in *Drosophila*.

16.15-17.00 **Helena Soares.**
Human TBCCD1 is a key protein in the centrosome-nucleus connection. Why do acentrosomal organisms have it?
Robert Janowski.
High-throughput strategy for centrosomal protein production and crystallisation Centrosome 3D Project.
Gonzalo S. Nido.
Protein disorder in the centrosome correlates with complexity in cell types number.

17.00-18.30 Poster viewing.

Session II: Centrosome Biochemistry
Chair: José María Carazo

18.30-19.15 **Bodo Lange.**
Functional characterisation of a centrosome protein interaction network relating to centrosome biogenesis and aberration in cancer cells.

19.15-20.00 **Robert Palazzo.**
Spisula Centrosome Assembly and Function.

Tuesday, November 16

Session III: Organization of the mitotic spindle
Chair: Rosa Ríos

9.00-9.45 **Isabelle Vernos.**
The role and regulation of the centrosomal kinase Aurora A during M-phase.

9.45-10.30 **Yixian Zheng.**
From Centrosome to Spindle Matrix, A Journey from Cell Division to Development.

10.30-11.15 **Karin Habermann.**
Integration of centrosomal phosphoproteins identified in *Drosophila* syncytial embryos in centrosome cycle, cell cycle and chromosome segregation pathways.
Fanni Gergely.
CEP63 is part of a centrosomal complex important for timely assembly of daughter centrioles and proper bipolar spindle formation.
Marcos Malumbres.
Cellular and physiological defects caused by Plk1 deficiency in mammals.

Session IV: Cell Cycle and Cell division, Cilia
Chair: Guillermo Montoya

15.30-16.15 **Nikola S. Dzhindzhev.**
Asterless is a scaffold for the onset of centriole assembly.

16.15-17.00 **Mónica Bettencourt-Dias.**
Centrosome Biogenesis and Evolution.

17.00-17.45 **Pierre Gönczy.**
PP2A phosphatase acts upon SAS-5 to ensure centriole formation in *C. elegans*.

17.45-19.00 Poster viewing.

19.00-19.45 **Bruce W. Stillman.**
The Origin Recognition Complex (ORC) is required for chromosome segregation during mitosis and centrosome copy number control in G1 phase.

19.45-20.30 **José Badano.**
The centrosome in human disease: characterization of the Bardet-Biedl syndrome protein 7 (BBS7) links centrosome/basal body function with gene regulation.

Wednesday, November 17

Session V: Centrosome and cellular architecture, morphogenesis
Chair: Isabelle Vernos

9.00-9.45 **Rosa Ríos.**
Addressing the functional significance of the pericentrosomal position of the Golgi apparatus.

09.45-10.30 **Wallace Marshall.**
Centriole orientation and cell polarity in *Chlamydomonas*.

11.00-11.45 **Alexey Khodjakov.**
Synchronization of nuclear and centriole cycles by Plk1.

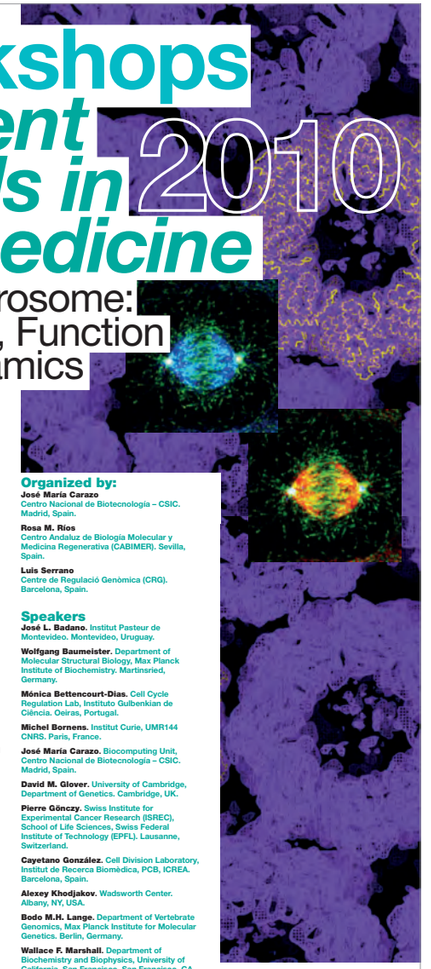
11.45-12.15 **Isabelle Vernos & Cayetano González.**
Closing remarks.

Organizers / José María Carazo, Rosa M. Ríos, Luis Serrano.

Workshops *Current trends in Biomedicine* 2010

The Centrosome: Structure, Function and Dynamics

un i A Universidad Internacional de Andalucía



Organized by:
José María Carazo
Centro Nacional de Biotecnología – CSIC. Madrid, Spain.

Rosa M. Ríos
Centro Andaluz de Biología Molecular y Medicina Regenerativa (CABIMER). Sevilla, Spain.

Luis Serrano
Centre de Regulació Genòmica (CRG). Barcelona, Spain.

Scope

As we advance more and more in our detailed molecular understanding of biological function through atomic interactions, the more evident it is the need to contextualize this type of information in the complex environment of the cell. Indeed, among all the key cellular substructures performing a critical role, the centrosome stands not only as the organizer of the cellular microtubular network, but as a critical "molecular interaction hub" responsible for essential aspects of the cell cycle. Clearly, a multi facets approach is needed to unravel the functional details of the centrosome, first identified more than a century ago but still representing a formidable research challenge. The promiscuity of molecular interactions, exquisitely regulated along the cell cycle, poses exceptionally high demands on virtually all types of biophysical and biochemical approaches. Its role in coordinating a plethora of transient interactions opens a very interesting window into our understanding of the control of essential aspects of cell biology. Not surprisingly, the centrosome is also key in understanding a number of pathologies, cancer among them, and the tangible possibility exists that a deeper understanding of this organelle could help substantially in the development of more efficient and targeted new anti cancer drugs. In recognition of the multidisciplinarity that is so much needed to advance in our studies on the centrosome, helped by a recent stress of focus of a number of Spanish research consortia on this topic, the present workshop aims to provide such a multi faceted environment, bringing together experts from distant biological disciplines to help advance our molecular understanding of the centrosome.

Format of the Workshop

The workshop will bring together 17 speakers and a maximum of 33-35 participants, to form a group of around 50 people. The scientific programme will start in the morning of Monday, November 15th, and will end around noon on Wednesday, November 17th. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

Venue of the Workshop

The workshop will be held in Baeza, at the "Sede Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a recently restored residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

Speakers

José L. Badano. Institut Pasteur de Montevideo. Montevideo, Uruguay.

Wolfgang Baumeister. Department of Molecular Structural Biology, Max Planck Institute of Biochemistry. Martinsried, Germany.

Mónica Bettencourt-Dias. Cell Cycle Regulation Lab, Instituto Gulbenkian de Ciência. Oeiras, Portugal.

Michel Bornens. Institut Curie, UMR144 CNRS. Paris, France.

José María Carazo. Biocomputing Unit, Centro Nacional de Biotecnología – CSIC. Madrid, Spain.

David M. Glover. University of Cambridge, Department of Genetics. Cambridge, UK.

Pierre Gönczy. Swiss Institute for Experimental Cancer Research (ISREC), School of Life Sciences, Swiss Federal Institute of Technology (EPFL). Lausanne, Switzerland.

Cayetano González. Cell Division Laboratory, Institut de Recerca Biomèdica, PCB, ICREA. Barcelona, Spain.

Alexey Khodjakov. Wadsworth Center. Albany, NY, USA.

Bodo M.H. Lange. Department of Vertebrate Genomics, Max Planck Institute for Molecular Genetics. Berlin, Germany.

Wallace F. Marshall. Department of Biochemistry and Biophysics, University of California, San Francisco. San Francisco, CA, USA.

Guillermo Montoya. Macromolecular Crystallography Group, Structural Biology and Biocomputing Programme, Spanish National Cancer Research Centre (CNIO). Madrid, Spain.

Robert E. Palazzo. Department of Biology and Center for Biotechnology and Interdisciplinary Studies, Rensselaer Polytechnic Institute. Troy, NY, USA.

Rosa M. Ríos. Departamento de Señalización Celular, Centro Andaluz de Biología Molecular y Medicina Regenerativa (CABIMER). Sevilla, Spain.

Bruce W. Stillman. Cold Spring Harbor Laboratory. Cold Spring Harbor, NY, USA.

Isabelle Vernos. Cell and Developmental Biology Program, Centre for Genomic Regulation (CRG), Universitat Pompeu Fabra, ICREA. Barcelona, Spain.

Yixian Zheng. Department of Embryology, Carnegie Institution of Washington and Howard Hughes Medical Institute. Baltimore, MD, USA.

Baeza, Spain
15th-17th November 2010

Deadline:
17th September 2010

Venue:
Sede Antonio Machado
Universidad Internacional de Andalucía
Palacio de Jabalquinto
Plaza de Santa Cruz, s/n
23440 Baeza (Jaén), Spain
Tel: +34 953 74 27 75
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Workshop coordinator:
Joaquín Torreblanca
Universidad Internacional de Andalucía
j.torreblanca@unia.es

More information and application:
http://www.unia.es/biomedicine

#2011

W30.
Frontiers in Epigenomics

17-19 October

Scope: The past few years have witnessed the birth of entirely new biomedical research fields, including epigenomics, human genome-wide association studies, and non-coding RNA biology. There has also been an unprecedented rate of progress in our understanding of genome regulatory mechanisms. At the same time, genetic and functional studies of common human diseases suggest that epigenetic regulation plays a key role in the underlying mechanisms. However, much remains to be accomplished to take full advantage of recent biological advances and link them to disease processes. The purpose of this workshop is to bring together leading investigators working in fields as diverse as human genetics, mechanisms of disease, epigenetics, genome biology, and regulatory mechanisms, and thus foster new ideas to progress in our understanding of genome regulation and disease.

Organizers: **Jorge Ferrer** (August Pi i Sunyer Biomedical Research Institute. Barcelona, Spain).
Klaus H. Kaestner (University of Pennsylvania School of Medicine. Philadelphia, USA).

Monday, October 17

9.00-9.10 **Klaus Kaestner and Jorge Ferrer.**
Welcome and opening remarks.

Session I: Charting the functional epigenome.
Chair: J. Lieb.

9.10-9.50 **Ewan Birney.**
Integrative Analysis of the ENCODE Project.

9.50-10.30 **José Luis Gómez-Skarmeta.**
Three dimensional genomic architecture, gene regulation and human diseases.

10.30-11.10 **Jorge Ferrer.**
Novel insights into the epigenome of pancreatic islet cells.

Session II: Epigenomics and Differentiation I.
Chair: J. Lieb.

11.40-12.00 **Miguel Vidal.**
RYBP selectively represses endogenous retroviruses and germline genes in mouse embryonic stem cells.

12.00-12.20 **Ozren Bogdanović.**
H3K4me1/H3K27ac deposition during early embryogenesis defines active enhancers associated with key developmental processes.

12.20-13.00 **Dirk Schübeler.**
Genetic determinants of epigenetic repression.

15.00 Poster viewing.

Session III: Epigenomics and Disease.
Chair: M. Snyder.

16.00-16.20 **Elena Campos-Sánchez.**
Differential analysis of DNA methylation during human leukemic progression allows the identification of new regulators of hematopoietic development.

16.20-17.00 **Manel Esteller.**
Human Cancer Epigenetics.

17.00-17.40 **Jason Lieb.**
Chromatin profiles reveal the regulatory mechanisms underlying breast cancer subtypes.

Session IV: Regulatory RNAs and disease
Chair: M Snyder

18.10-18.50 **Klaus Kaestner.**
Islet microRNAs in the pathogenesis of Type 2 Diabetes Mellitus.

18.50 - 19.30 **John Rinn.**
Long Intergenic ncRNAs (lincRNAs) in Cellular Differentiation and Disease.

19.30 - 19.50 **Oskar Marín-Béjar.**
Large non-coding RNAs in the p53 pathway.

Tuesday, October 18

Session V: Omics views of Disease
Chair: J Ferrer

9.00-9.40 **Mark I. McCarthy.**
Diamonds in the dirt: biological and translational inferences from genetic and genomic analysis of type 2 diabetes.

9.40-10.20 **Michael Snyder.**
Extensive Dynamic Changes in Omics Profiles During Normal and Disease States.

15.00 Poster viewing 2.

Session VI: Epigenetics and Splicing
Chair: K Kaestner

16.00-16.40 **Roderic Guigó.**
Chromatin mediated regulation of splicing.

16.40-17.00 **Sérgio Fernandes de Almeida.**
Co-transcriptional splicing enhances recruitment of HYPB/Setd2 and methylation of histone H3 lysine 36.

17.00-17.20 **Silvia Barabino.**
The chromatin-remodelling factor Brahma modulates the choice of alternative terminal exons.

17.20-18.00 **Alberto R. Kornblihtt.**
Chromatin, epigenetics and alternative splicing.

Session VII: Epigenomics and Differentiation II
Chair: K Kaestner

18.30 - 18.50 **Marcus Buschbeck.**
The histone variant macroH2A regulates the commitment of embryonic and adult stem cells.

18.50 - 19.10 **Montserrat Corominas.**
Chromatin regulation and transcriptional control in development.

Wednesday, October 19

Session VIII: Epigenomic Insights from evolutionary biology
Chair: J L Gómez-Skarmeta

9.00-9.20 **Chirag Nepal.**
Genome wide transcriptional evidence of conserved structured RNAs in teleost fish genomes.

9.20-9.40 **Petra C. Schwalie.**
Evolution of CTCF binding in vertebrates.

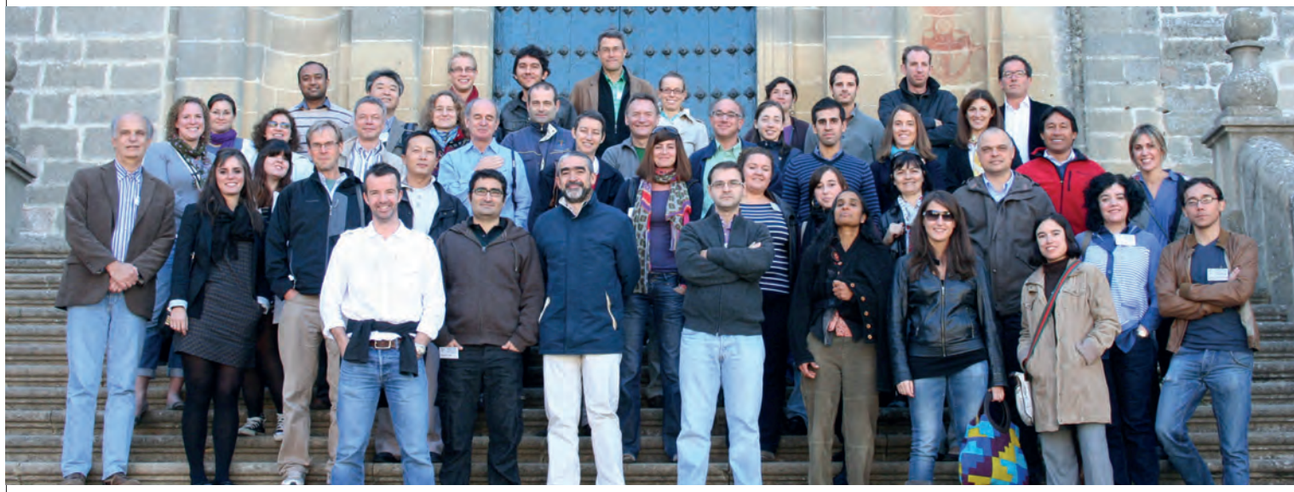
Session IX: Genetics and the Epigenome
Chair: J L Gómez-Skarmeta

10.00 -10.40 **Alan Attie.**
Genetics and Genomics of Type 2 Diabetes in Mice.

10.40-11.20 **Emmanouil T. Dermitzakis.**
Cellular genomics in human populations.

11.20-12.00 **Bing Ren.**
Base-resolution analyses of parent-of-origin and sequence dependent allele specific DNA methylation in the mouse genome.

12.00-12.15 Closing remarks.



W31.
The Biology of Intracellular Bacterial Pathogens

24-26 October

Scope: Many intracellular bacterial pathogens are important infectious agents inflicting serious diseases in humans and animals. Some of these bacteria cause serious diseases such as tuberculosis, tularemia, typhoid fever, brucellosis, the flu-like illness called Q-fever, Rocky-Mountain spotted fever, and pneumonia, among others. These bacterial pathogens exhibit distinct intracellular lifestyles depending on the eukaryotic cell that they encounter and have evolved multiple strategies for evading host immune defences. Despite the variation of intracellular bacterial pathogens and their diverse modes of interaction with the eukaryotic cell, discrete 'obligatory stages' have been repeatedly observed and constitute 'paradigms' that define the Biology of this selected group of successful pathogens. This workshop will essentially focus on the most recent advances on these 'paradigms', including: the pathogen-driven entry process into

phagocytic or non-phagocytic eukaryotic cells, the *intracellular survival* ensured by sophisticated mechanisms of evasion of host cell defences, and, the *replication or maintenance (persistence)* within vacuolar compartments or the cytosol of the infected cell. Other aspects that will be discussed are the impact of single-cell and 'real-time imaging' technologies, the metabolic readjustments contributing to the adaptation of these pathogens to live inside eukaryotic cells, and the mechanisms by which bacteria regulate gene expression during the transition from the extracellular environment to the intracellular niche.

Organizers: **Francisco García-del Portillo** (National Centre for Biotechnology. Madrid, Spain).

Monday, October 24

9.00-9.30 **Francisco García-del Portillo.**
Opening of the Workshop with Introductory Discussion on 'Topics'.

Session I: Cell biology of the host-bacteria interaction (I)
Chair: Lalita Ramakrishnan

9.30-10.00 **Guy Tran Van Nhieu.**
Filopodial capture of *Shigella* during epithelial cell invasion.

10.00-10.30 **Raphael H. Valdivia.**
On the importance of maintaining integrity: cytoskeletal remodeling promotes stability of the *Chlamydia* pathogenic vacuole.

10.30-10.45 **Jaione Valle.**
The *Staphylococcus aureus* surface protein Bap interacts with the host cell receptor Gp96 hindering bacterial invasion.

11.15-11.45 **Craig R. Roy.**
Modulation of Rab1-directed vesicular transport by the intracellular pathogen *Legionella pneumophila*.

11.45-12.15 **Thomas F. Meyer.**
Towards a global understanding of pathogen-host cell relationships.

12.15-12.30 **Anabel Alperi.**
Conjugative transfer of plasmid R388 derivatives by the *Legionella pneumophila* type IV secretion system.

12.30-12.45 **Hiroki Nagai.**
Type IVB secretion system TraM/DotI is structurally homologous to type IVA secretion system VirB8.

Session II: Cell biology of the host-bacteria interaction (II)
Chair: B Brett Finlay

16.30-17.00 **William Sullivan.**
Host factors required for *Wolbachia* replication and transmission.

17.00-17.15 **Junkal Garmendia.**
Subversion of the airway host cell machinery during non-typable *Haemophilus influenzae* infection: molecular mechanisms and clinical implications.

17.35-18.45 Poster viewing.

18.45-19.15 **Pascale Cossart.**
Listeria targeting to intracellular organelles.

19.15-19.30 **François Vromman.**
Chlamydia effectors target the host ESCRT system.

19.30-19.45 **Carmen Álvarez-Domínguez.**
Comparison of *Listeria monocytogenes* infection in macrophages and microglia: regulation by ActA virulence factor and TNF-á.

Tuesday, October 25

Session III: Regulation and stress in intracellular infections
Chair: Jean Pierre Gorvel

9.00-9.30 **John McKinney.**
Individuality of microbial responses to antibiotics.

9.30-10.00 **Eric J. Rubin.**
When good proteins go bad.

10.00-10.15 **Laurent Aussel.**
Adaptation to oxidative stress in *Salmonella* Typhimurium during infection.

10.45-11.15 **Francisco García-del Portillo.**
Salmonella restrains growth within the host cell based on concerted decisions taken at a precise time upon entry.

11.15-11.30 **Giulia Manina.**
Real-time single cell imagining to analyze the growth dynamics and heterogeneity of mycobacteria during infection.

Session IV: Intracellular infections and the host response
Chair: Pascale Cossart

16.00-16.30 **Jean Pierre Gorvel.**
Brucella β 1,2 cyclic glucans are novel dendritic cell activators.

16.30-17.00 **B. Brett Finlay.**
Salmonella: Cross-phylum virulence.

17.00-17.15 **Esteban Veiga.**
Bacterial subversion of the immunological synapse.

17.35-18.45 Poster viewing 2.

18.45-19.15 **Wolf-Dietrich Hardt.**
Salmonella diarrhea: fitness costs and benefits of triggering disease.

19.15-19.45 **Jonathan C. Howard.**
Virulence and tolerance of the intracellular protozoan parasite, *Toxoplasma Gondii*, in the house mouse, *Mus musculus*.

19.45-20.00 **José A. Bengoechea.**
Klebsiella pneumoniae: a new kid on the block?

Wednesday, October 26

Session V: Targeting intracellular infections and symbiotic relationships
Chair: John McKinney

9.00-9.30 **David J. Clarke.**
The complex life of *Photorhabdus*.

9.30-10.00 **David D. Russell.**
Exploitation of synthetic phenotypes and chemical genetics to probe the intracellular lifestyle of *Mycobacterium tuberculosis*.

10.30-11.00 **Lalita Ramakrishnan.**
A zebrafish's guide to TB pathogenesis and therapy.

11.00 General discussion and closing remarks.

Organizer / Francisco García-del Portillo.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W32. Molecular and Cellular Bases of Redox Signaling and Oxidative Stress: Implications in Biomedicine

2-4 November

Scope: The significance of reactive oxygen (ROS) and nitrogen species (RNS) (grouped here as RONS) has become increasingly recognized to the point that they are now considered to be a component of virtually every disease, but mainly including inflammation, cancer, neurodegeneration, cardiovascular disease, diabetes or gastrointestinal disorders. While it is clear that RONS are a central theme germane to many problems in biology, there has been little advance in reconciling the huge amount of chemical knowledge accumulated for about half a century with the relatively unknown biological function and biomedical relevance of these species. Thus, a fundamental aim of this workshop is to attempt to bridge this gap, so that some light may be shed on the yet challenging questions in the field. In addition a critical review of the

area is required regarding: a) detection and quantification of chemically-defined reactive species; b) development of novel methodologies with improved specificity and sensitivity; c) characterization of the molecular mechanisms by which oxidative modifications in biomolecules lead to intracellular signalling, dysfunction or death; d) definition of the participation of reactive species in pathology initiation and development; e) analysis of novel site-directed antioxidant strategies to cope with toxic effects of reactive species *in vitro* and *in vivo*. Hence the workshop will provide successful approaches and discussion on these items, which may serve to move the field forward in terms of finding novel and much-needed practical applications in a series of human disease conditions.

Organizers: **Santiago Lamas** (Centre for Molecular Biology "Severo Ochoa". Madrid, Spain).
Lawrence J. Marnett (Vanderbilt University School of Medicine. Nashville, USA).
Rafael Radi (University of the Republic. Montevideo, Uruguay).

Wednesday, November 2

9.00-9.10 **Santiago Lamas.**
Introductory remarks.

Session I: Cellular sources, detection and quantification of reactive species
Chair: Rafael Radi

9.10-9.45 **Enrique Cadenas.**
The mitochondrial energy-redox axis, post-translational modifications, and cell function.

9.45-10.20 **Balaraman Kalyanaraman.**
Global profiling of reactive oxygen and nitrogen species in biological systems: Real time monitoring using the fluorescence and HPLC techniques.

10.20-10.40 **Mariona Jové.**
QTOF-based lipidomic analysis reveals novel mechanisms in redox homeostasis induced by methionine restriction in central nervous system.

11.10-11.45 **Ronald P. Mason.**
The Significance of Protein Free Radical Formation in Autoimmune and Allergic Diseases.

11.45-12.20 **Dan Liebler.**
Analysis of protein damage by lipid electrophiles.

12.20-12.40 **Gonzalo Peluffo.**
Use of boron-based compounds for the detection of peroxynitrite in vascular endothelial cells.

15.30-17.00 Poster viewing.

Session II: Oxidative modifications in biomolecules
Chair: Thomas Michel

17.00-17.35 **Rafael Radi.**
Protein Tyrosine Nitration: Molecular Basis for Selectivity and for Modifying Protein Structure and Function.

17.35-18.10 **Christine Winterbourn.**
Superoxide addition to tyrosyl radicals: Products, mechanisms and biological relevance.

18.10-18.30 **Silvina Bartesaghi.**
Lipid peroxidation and protein tyrosine nitration are mechanistically connected: Model studies with tyrosine-containing transmembrane peptides.

19.00-19.35 **Richard Cohen.**
Redox cell signaling dependent upon oxidative modifications of the Ca^{2+} ATPase, SERCA.

19.35-20.10 **Ned A. Porter.**
Nature's most peroxidizable lipid, 7-dehydrocholesterol. Novel oxysterols in patients with cholesterol biosynthesis defects.

Thursday, November 3

Session III: Electrophilic signaling
Chair: Balaraman Kalyanaraman

9.00-9.35 **Bruce A. Freeman.**
Formation and signaling actions of electrophilic nitro- and keto-fatty acid derivatives.

9.35-10.10 **Lawrence J. Marnett.**
Cellular Responses to Lipid Electrophiles Generated by Oxidative Stress.

10.10-10.30 **Homero Rubbo.**
Mechanisms and therapeutic potential of nitro-fatty acids: footprints of nitrooxidative status in olive oils.

10.30-10.50 **Markus M. Bachschmid.**
Oxidation of H-ras by metabolic stress prevents palmitoylation and contributes to endothelial dysfunction.

15.30-17.00 Poster viewing 2.

Session IV: Mediators and targets of redox signalling
Chair: Lawrence J Marnett

17.00-17.35 **Santiago Lamas.**
Hydrogen peroxide as a signaling mediator in vascular endothelial cells.

17.35-18.10 **Thomas Michel.**
Hydrogen peroxide differentially modulates cardiac myocyte nitric oxide synthesis.

18.10-18.30 **Pablo Martínez-Acedo.**
GELSILOX: simultaneous high-throughput identification and quantification of thiol redox state and total proteomes.

19.00-19.35 **Philip Eaton.**
Oxidative post-translational modifications and the redox regulation of vasotone.

19.35-20.10 **Ana Denicola.**
Specificity and catalysis of peroxiredoxins. Implications in redox signaling.

Friday, November 4

Session V: Molecular, cellular and animal models of oxidative stress
Chair: Bruce A Freeman

9.00-9.35 **Jay Heinecke.**
Oxidative Pathways for the Generation of Dysfunctional HDL.

9.35-10.10 **Jean-Claude Drapier.**
Peroxiredoxins and sulfiredoxin at the crossroad between nitric oxide and peroxide signaling.

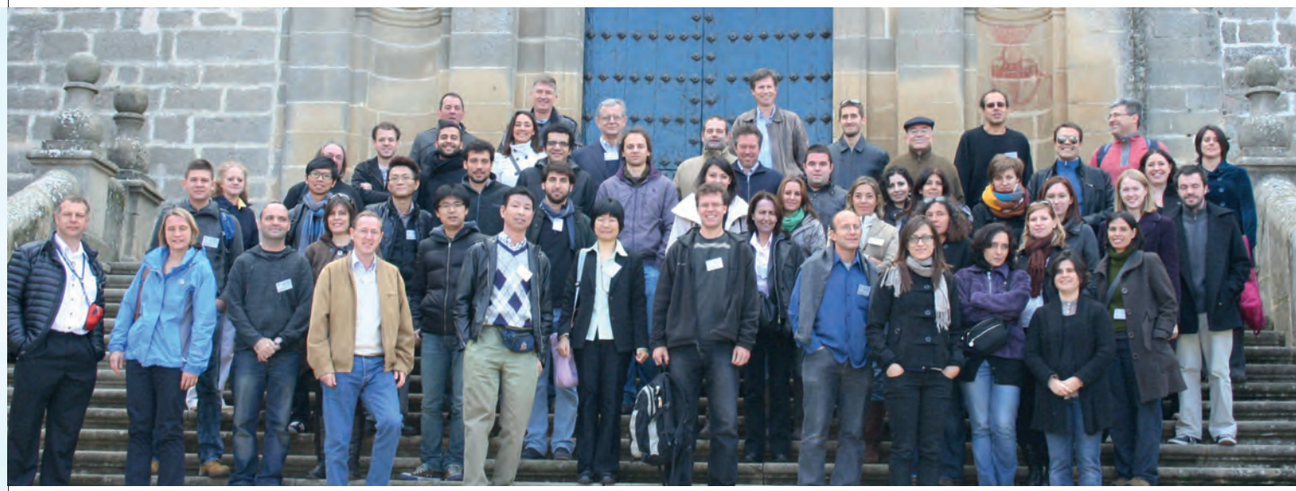
10.40-11.15 **Juan P. Bolaños.**
Can gamma-glutamylcysteine detoxify ROS?

11.15-11.35 **Antonio Miranda-Vizuete.**
The glutathione-glutaredoxin system of *Caenorhabditis elegans*.

11.35-12.00 Workshop organizers.
Closing remarks.

Guided tour / Baeza.

Guided tour / Cathedral tower.



W33.
Liver and Pancreas:
From Development to Disease

14-16 November

Scope: The liver and pancreas share a common embryological origin as they arise from the same endodermal progenitor cell population. Despite their close embryonic relationship, the mature organs consist of cell types that perform dramatically different though often complementary functions. Liver hepatocytes carry out essential metabolic functions, both with regard to fat and sugar metabolism, while the pancreas harbors enzyme producing acinar and hormone producing endocrine cells. Furthermore, recent data indicate that reprogramming of hepatocytes to pancreatic cells and vice-versa is possible and of potential therapeutic benefit. Understanding the processes by which these related and physiologically interconnected organs form during development and how cells regenerate upon injury is critical to further our understanding of how diseases affecting these organs, including diabetes and cancer, develop and how

they might be treated in a more efficient manner than currently possible. The proposed workshop will address these pertinent questions by bringing together a group of leading experts in both the liver and pancreas fields.

Organizers: **David A. Cano** (Institute of Biomedicine of Seville. Seville, Spain).
Matthias Hebrok (University of California San Francisco. San Francisco, USA).
Didier Y. R. Stainier (University of California San Francisco. San Francisco, USA).

Monday, November 14

Session I: Pancreas and liver embryonic development
Chair: David A Cano

9.00-9.10 Opening.

9.10-9.45 **Maike Sander.**
Niche dependency of pancreatic organ commitment.

9.45-10.05 **Cécile Haumaitre.**
The specific role of class IIa Histone Deacetylases HDAC4, 5 and 9 in the control of pancreatic endocrine beta and delta cell differentiation.

10.05-10.40 **David A. Cano.**
Colonization of embryonic pancreas by neural precursors: Role of Glial Cell Line-Derived Neurotrophic Factor.

11.10-11.30 **Luis Arnés.**
Defining the fate of ghrelin-expressing cells in pancreas.

11.30-12.05 **Frédéric Lemaigre.**
Mechanisms of hepatocyte maturation and bile duct development.

12.05-12.40 **Paul Gissen.**
Development of a mouse model of arthrogryposis, renal dysfunction and cholestasis syndrome.

15.30 Poster viewing.

Session II: Cellular plasticity in injury and cancer
Chair: Matthias Hebrok

16.30-17.05 **Jorge Ferrer.**
Plasticity of pancreatic duct cells in development, regeneration and neoplasia.

17.40-18.00 **Patricia Boley.**
Reversibility of Liver Disease and Hepatocellular Carcinoma.

18.30-19.05 **Matthias Hebrok.**
Regulation of adult pancreas plasticity and neoplasia.

19.05-19.25 **Patrick Jacquemin.**
Role of the ductal transcription factors HNF6 and Sox9 in pancreatic acinar-to-ductal metaplasia.

19.25-20.00 **George Michalopoulos.**
Liver regeneration.

Tuesday, November 15

Session III: Stem Cell Biology
Chair: Didier Y R Stainier

9.00-9.35 **Shoen Kume.**
Signals involved in guiding ES cells to differentiate into pancreatic beta cells.

9.35-10.10 **Stephen Duncan.**
Using Human iPS cells to Study Liver Disease and Development.

10.30-10.50 **Karim Si-Tayeb.**
Purification of human embryonic stem cell-derived hepatic progenitors.

10.50-11.25 **Markus Grompe.**
Clonogenic progenitors in the adult liver and gall bladder: basic biology and applications.

15.30 Poster viewing 2.

Session IV: Beta cell mass homeostasis
Chair: Maike Sander

16.30-17.05 **Benoit Gauthier.**
Liver Receptor Homolog 1 (LRH-1) as a Novel Anti-diabetic Drug Target.

17.05-17.25 **Dorota Pasko.**
Bioinformatic analysis of beta cell gene expression experiments in type 2 diabetes.

17.25-18.00 **Michael S. German.**
Physiologic signals regulating beta-cell mass.

18.30-19.05 **Didier Y.R. Stainier.**
Chemical screens in zebrafish to identify promoters of pancreatic β-cell regeneration and proliferation.

19.05-19.25 **Michael J. Parsons.**
Chemical screen identifies FDA approved drugs and target pathways that induce precocious pancreatic endocrine differentiation.

19.25-20.00 **Yuval Dor.**
Mechanisms of pancreatic beta cell regeneration.

Wednesday, November 16

Session V: Cellular transdifferentiation
Chair: Shoen Kume

9.00-9.35 **Pedro Herrera.**
Alpha to Beta Cell Transdifferentiation: Beta Cell Regeneration by Lineage Reprogramming.

9.35-9.55 **Pierre-Paul Prévot.**
A microRNA-transcription factor network regulates terminal differentiation of pancreatic acinar cells.

9.55-10.30 **Harry Heimberg.**
Neurogenin 3 progenitor cells endogenous to the pancreas contribute to increased beta cell mass.

10.30-10.50 Closing remarks.

W34.
The Enemy Within: Endogenous DNA Damage as a Source of Cancer and Ageing

17-19 November

Scope: DNA damage is a common initiator of cancer and ageing. To date, most of the studies investigating how cells respond to DNA damage rely on the use of external sources of genotoxic agents such as ionizing radiation or chemical carcinogens. However, the actual nature of the damage that arises endogenously in living cells remains poorly understood. Telomere erosion, oxidative stress, by-products of metabolism, replicative stress... All these are endogenous insults that have been postulated as key drivers of ageing and cancer. Nevertheless, and despite the intensive research already done in these areas, their actual contribution to human disease remains to be formally demonstrated. This meeting will bring together a group of scientists with a common interest in understanding how endogenous DNA damage is generated, dealt with, and on the consequences of accumulating such lesions for human health.

Organizers: **Óscar Fernández-Capetillo** (Spanish National Cancer Research Centre. Madrid, Spain).
Jiri Lukas (Danish Cancer Society. Copenhagen, Denmark).
André Nussenzweig (National Cancer Institute. Bethesda, USA).

Thursday, November 17

Session I: Responses to endogenous DNA damage
Chair: André Nussenzweig

9.30-10.00 **Philippe Pasero.**
Spontaneous replication stress regulates replication timing in budding yeast.

10.00-10.30 **Anja Groth.**
Chromatin Replication, Histone Dynamics and Epigenetic Stability.

10.30-10.45 **Pedro San Segundo.**
Functional analysis of chromatin modifications during meiosis.

11.15-11.45 **Óscar Fernández-Capetillo.**
Exploiting oncogene-induced replicative stress for cancer therapy.

11.45-12.00 **Daniël O. Warmerdam.**
A novel protein complex involved in the maintenance of genome stability.

12.00-12.15 **Jiri Bartek.**
Replication stress and DNA damage response in tumorigenesis and cancer stem cells.

15.00 Poster viewing.

Session II: Generation of endogenous DNA damage
Chair: Jiri Lukas

16.30-17.00 **Andrés Aguilera.**
Role of R-loops and histone modifications as sources of genome instability.

17.00-17.30 **John Rouse.**
Forks and knives in DNA repair and disease.

17.30-17.45 **Raimundo Freire.**
Wee1 controls Genomic Instability during replication by regulating the Mus81-Eme1 endonuclease.

18.15-18.45 **Joe Jiricny.**
Mismatch repair and somatic hypermutation.

18.45-19.15 **Marco Foiani.**
Mechanisms coordinating collision between replication and transcription.

19.15-19.30 **Juan Méndez.**
Visualization of the MCM helicase at DNA replication factories before the onset of DNA synthesis.

Friday, November 18

Session III: Replication and disease
Chair: John Rouse

9.30-10.00 **Jiri Lukas.**
Spatial and temporal dynamics of chromosomal lesions derived from replication stress.

10.00-10.30 **Ian Hickson.**
Genomic instability and cancer: lessons from analysis of Bloom's syndrome.

11.00-11.30 **Steve Jackson.**
Cellular responses to DNA damage generated by exogenous and endogenous agents.

11.30-11.45 **Arne Nedergaard Kousholt.**
DNA end resection is dispensable for checkpoint initiation but required for checkpoint maintenance.

15.00 Poster viewing.

Session IV: Physiological impact of endogenous DNA damage
Chair: Óscar Fernández-Capetillo

16.30-17.00 **Paula Martínez.**
53BP1 deficiency leads to aggravation of pathologies in mice with uncapped telomeres through hyper-activation of the ATR-dependent DDR.

17.00-17.30 **Barry Sleckman.**
DNA Damage Responses to Physiologic DNA Breaks Generated in Developing Lymphocytes.

17.30-17.45 **Iván Rosado.**
An essential requirement for formaldehyde detoxification in the absence of the Fanconi anaemia pathway.

18.15-18.45 **Manuel Serrano.**
Tumor suppressors beyond cancer.

18.45-19.15 **André Nussenzweig.**
Linking nuclear DNA damage and epigenetic changes to stem-cell and mitochondrial decline during aging.

19.15-19.30 **Andrés J. López-Contreras.**
An extra allele of Chk1 provides a supra-physiological protection against replicative stress.

Saturday, November 19

Session V: Molecular mechanisms of DNA damage generation and repair
Chair: Andrés Aguilera

9.00-9.30 **William G. Dunphy.**
Control of Genomic Integrity in *Xenopus* Egg Extracts and Human Cells.

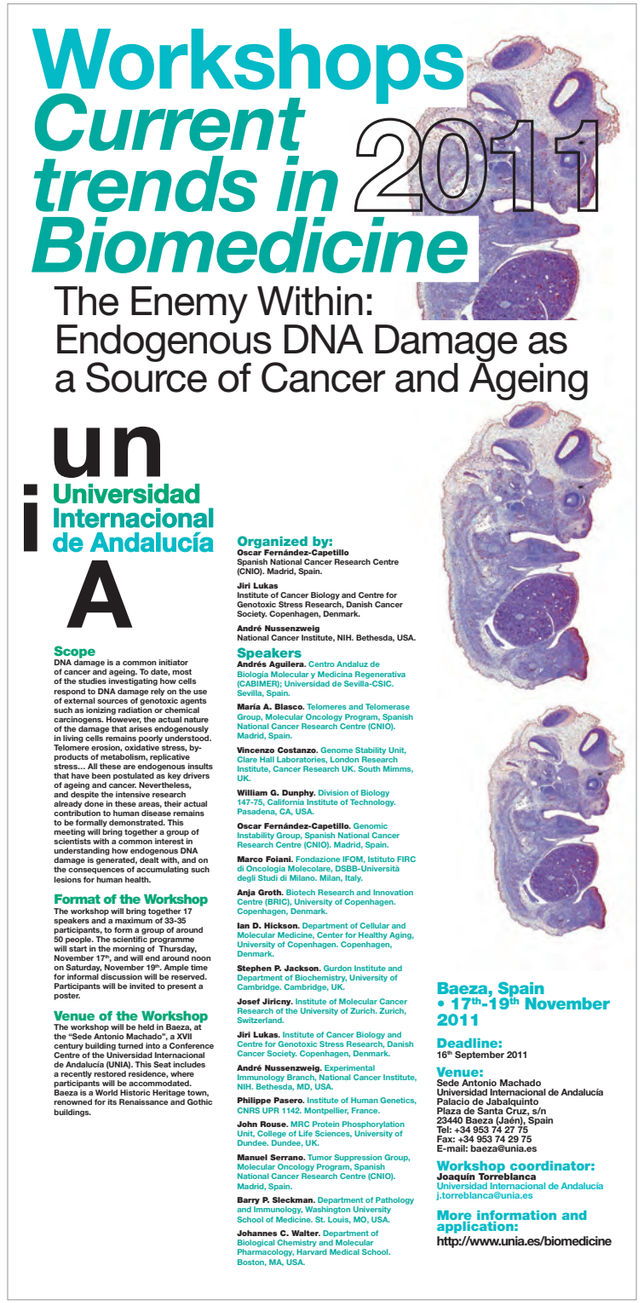
9.30-10.00 **Vincenzo Costanzo.**
Understanding the role of DNA repair factors in vertebrate DNA replication.

10.00-10.30 **Johannes Walter.**
Mechanism of replication-coupled DNA interstrand cross-link repair.

10.30-10.45 **Massimo Lopes.**
Structural Insights into Oncogene-induced DNA Replication Stress.

10.45 Concluding remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"



#2012

W35.
The Microbiome:
Role in Health and Disease

8-10 October

Scope: Vertebrates become colonized with complex microbial communities in the intestine and many other body surfaces soon after birth. Millions of years of co-evolution have led this host-microbe interaction into a symbiotic relationship in which the microbiota contributes to many host physiological processes including building the intestinal epithelial barrier, development of the immune system, protection against pathogen colonization, cell renewal, and nutrient acquisition. Notably, several disorders have been linked to the composition of the gut microbiota including inflammatory bowel disease, obesity and diabetes. Although little is known about how the microbial communities are formed and regulated in different individuals, it is likely that strategies to alter their composition and plasticity will be part of clinical medicine in the near future. The workshop will bring the world's

leading scientists working in different aspects of the microbiome to discuss recent advances in the field.

Organizers: **Francisco Guarner** (University Hospital "Vall d'Hebron". Barcelona, Spain).
Lora V. Hooper (University of Texas Southwestern Medical Center. Dallas, USA).
Gabriel Núñez (University of Michigan Medical School. Ann Arbor, USA).

Monday, October 8

9.00-9.15 **F. Guarner, L. Hooper, G. Núñez.**
Opening of the Workshop.

Session I: The human microbiome: regulation in health and disease
Chair: F Guarner

9.15-9.45 **Dusko Ehrlich.**
Association of intestinal bacterial to chronic disease revealed by the Metahit Consortium.

9.45-10.15 **George Weinstock.**
Variation in Microbial Genomes, Communities, and Populations.

10.15-10.35 **Mattias Bergentall.**
The gut microbiota regulates steady state small intestinal permeability.

11.05-11.35 **Fredrik Bäckhed.**
The gut microbiota as a novel modulator of host metabolism and obesity.

11.35-12.05 **Francisco Guarner.**
Microbiota and inflammatory bowel diseases.

Session II: Factors controlling microbiota populations in the intestine
Chair: G Núñez

16.30-17.00 **Eric Martens.**
Bacteroides thetaiotaomicron: Dr. Jekyll and Mr. Hyde of the human colon.

17.00-17.30 **Justin Sonnenburg.**
Mechanistic Insight into Intestinal Microbiota Function and Disruption.

18.00-18.30 **Lora Hooper.**
Sensing of microbial and nutritional signals by the intestinal lepithelium.

18: 30-18.50 **Alfonso Clemente.**
Resistance to gut digestion and bifidogenic effect of galacto-oligosaccharides in rats is dependent of linkage type and monomer composition.

18.50 Poster viewing.

Tuesday, October 9

Session III: Microbiota-pathogen interactions at mucosal surfaces
Chair: L Hooper

9.00-9.30 **Wolf-Dietrich Hardt.**
Enteric disease, a driver of pathogen evolution?

9.30-10.00 **Gabriel Núñez.**
Role of Nod-like Receptors and the Microbiota in Eradication of Enteric Pathogens.

10.00-10.20 **Carles Úbeda.**
Commensal anaerobic bacteria mediate Vancomycin-resistant *Enterococcus* clearance from the intestine.

10.50-11.20 **Naohiro Inohara.**
Role of Commensals, Pathobionts and Host Immunity in the Development of Periodontitis.

11.20-11.50 **Margaret McFall-Ngai.**
First contact: The initial molecular exchange between host and symbiont.

Session IV: Microbiota-immune system interactions in the gut
Chair: W. Garrett

16.00-16.30 **Nadine Cerf-Bensussan.**
How the microbiota shapes homeostatic intestinal immune responses.

16.30-17.00 **Andrew Macpherson.**
The immune geography of host-microbial mutualism.

17.00-17.20 **Tim Mak.**
Ubiquity of *Propionibacterium acnes* in humans: bacterial diversity meets host cell tropism.

17.50-18.20 **Dan Littman.**
Regulation of intestinal and systemic immune responses by the commensal microbiota.

18.20-18.40 **Aoife Thompson.**
Activation of the inflammasome by Crohn's disease (CD) associated Adherent Invasive *Escherichia coli* (AIEC).

18.40 Poster viewing 2.

Wednesday, October 10

Session V: Microbiota-driven mechanisms of disease

9.00-9.30 **Gunnar Hansson.**
The Intestinal Microbiota and the Mucus Systems of the small and Large Intestine in Relation to Cystic Fibrosis and Ulcerative Colitis.

9.30-10.00 **Wendy Garrett.**
Identifying a colorectal cancer associated microbiome.

10.00-10.20 **Robert Jenq.**
Effects of nutrition and graft-versus-host disease on the intestinal microbiota following allogeneic bone marrow transplantation.

10.20-11.00 Roundtable for general discussion, summing up and prospects.

11.00 Concluding remarks.

W36.
Systems Biology of T Cells: Clinical, Experimental and Theoretical Approaches

22-24 October

Scope: The immune system can be viewed as a coordinated set of cells and molecules that preserve the integrity of vertebrates' tissues and physiology. Thus, it defends against health-threatening microorganisms (such as viruses, bacteria, fungi and parasites) and tumours. In doing so, the immune system must be able to distinguish between harmful antigens and non-harmful self-antigens, which should be tolerated and/or not damaged. It must also distinguish different pathogens from each other, and sufficiently rapidly to mount an efficient response. These requirements have resulted in a system with many hundreds of different signalling molecules impacting and/or mediating the function of, at least, twenty different immune cell types.
Immunological processes span temporal and spatial scales from handfuls of interacting molecules within a cell to huge

populations of proliferating lymphocytes. Thus, a profound physical and mathematical understanding and a range of deterministic and stochastic modelling approaches are required to describe them. Moreover, technical advances are providing ever-more-refined tools with which to probe immune responses and constrain the models. For example, recent advances in two-photon microscopy and cell labelling have made it possible to directly observe cells interacting *in vivo*, and are opening new perspectives in Immunology by generating a wealth of quantitative data. Theoretical understanding of these interactions and other processes is very much lacking, in some cases, apparently, for deep mathematical reasons. The integration of mathematical and computational models with immunological data poses a challenge that cannot be successfully managed by immunologists, biologists, clinicians, physicists or applied mathematicians on their own. An inter-disciplinary approach is required to provide answers to the current challenges of basic and clinical Immunology.

The workshop is intended to cover cutting edge topics of T lymphocyte physiology, from thymic development and differentiation and T cell repertoire generation to peripheral homeostasis, activation and regulation, both in health and disease. The major focus of the workshop is to promote and stimulate the combination of theoretical approaches, whether mathematical or computational, with clinical and experimental ones. This inter-disciplinary approach has the advantage of providing a novel and quantitative insight to both basic and clinical immunology. The dual aspect of T cell physiology, health and disease, will then be covered from theoretical, clinical and experimental perspectives.

Organizers: **Balbino Alarcón** (Centre for Molecular Biology "Severo Ochoa". Madrid, Spain).
José Faro (University of Vigo. Vigo, Spain).
Carmen Molina-París (University of Leeds. Leeds, UK).

Monday, October 22

9.10-9.25 **Carmen Molina-París.**
Welcome - Opening.

Session I: Thymocyte development
Chair: António Freitas

9.25-10.00 **Ellen Robey.**
Visualising thymic selection *in situ*.

10.00-10.35 **Bruno Kyewski.**
Generating intrathymic self-antigen diversity for tolerance induction.

10.35-11.10 **Marisa Toribio.**
Notch and IL-7R interplay in T cell development and leukemia.

Session II: T cell tolerance and regulation
Chair: José Faro

11.45-12.20 **Michael Bevan.**
Regulating the response of naïve and memory T cells to different forms of antigen presentation.

12.20-12.55 **Luis Graça.**
Quantitative aspects of immune regulation.

12.55-13.15 **Pamela Fink.**
Post-thymic T cell maturation.

Session III: TCR and coreceptor determination of thymic selection
Chair: Michael Bevan

15.30-16.05 **Al Singer.**
CD4/CD8 coreceptors determine the specificity and consequences of thymic selection.

16.05-16.40 **Ed Palmer.**
Affinity threshold, a play in three acts: clocks, collisions and kinases.

Session IV: T cell homeostasis and differentiation
Chair: Balbino Alarcón

17.10-17.45 **António Freitas.**
Quorum sensing in $CD4^+$ T cell homeostasis.

17.45-18.20 **Zvi Grossman.**
Dynamic tuning of lymphocytes: physiological basis, mechanisms and function.

18.55-19.30 **Rob de Boer.**
Quantifying T lymphocyte turnover.

19.30 Poster viewing.

Tuesday, October 23

Session V: Mechanisms of TCR-pMHC binding and signalling (a)
Chair: Ed Palmer

9.00-9.35 **Veronika Zarnitsyna.**
Reading antigen recognition codes during TCR triggering.

9.35-10.10 **Wolfgang Schamel.**
Sensing the affinity of ligands by multivalent ligand-binding to the T cell receptor (TCR).

10.10-10.30 **Hisse M. van Santen.**
Cognate MHCp clusters for oligomeric TCRs.

Session V: Mechanisms of TCR-pMHC binding and signalling (b)
Chair: Ed Palmer

15.15-15.50 **Carmen Molina-París.**
TCR-CD3 complex: oligomers, allostery, ligand binding and T cell responses.

15.50-16.25 **Balbino Alarcón.**
Cooperativity in the TCR deduced from pMHC tetramer binding data.

16.25-16.45 **Dinah Singer.**
Systems biology program in the National Cancer Institute (NCI).

16.45-17.05 **Michal Polonsky.**
Dynamic single cell measurements on primary T cells during activation and differentiation using long term live cell imaging in microwell arrays.

17.35-18.10 **Andrew Sewell.**
A systems view of recognition by the T cell receptor provides multiple opportunities for rational therapeutic interventions.

18.10-18.30 **Derek Macallan.**
Predictors of *in vivo* human T cell turnover in HIV infection.

18.30-18.50 **Dipankar Nandi.**
Infection-induced thymic atrophy: studies on the death of $CD4^+CD8^+$ thymocytes during *Salmonella enterica* serovar Typhimurium Infection.

18.50-19.10 **Philippe Robert.**
The fate of adoptively-transferred T cells is modulated by the conditioning protocol and nutrient availability.

19.10 Poster viewing 2.

Wednesday, October 24

9.00-9.35 **José Faro.**
Measuring and estimating the TCR diversity.

9.35-9.55 **Leïla Perié.**
Beyond TCR-affinity: dominance of T cell responses by individual naïve T cell progeny.

9.55-10.15 **Isabel Mérida.**
PKCα transient shuttling to the immunological synapse is governed by DGKζ and regulates Ras/ERK signals.

10.15 Roundtable for general discussion:
Ed Palmer.
Closing remarks:
Carmen Molina-París.

Guided tour / Baeza.

Rector Juan Manuel Suárez Japón (left center) and Director José Domingo Sánchez (right center).

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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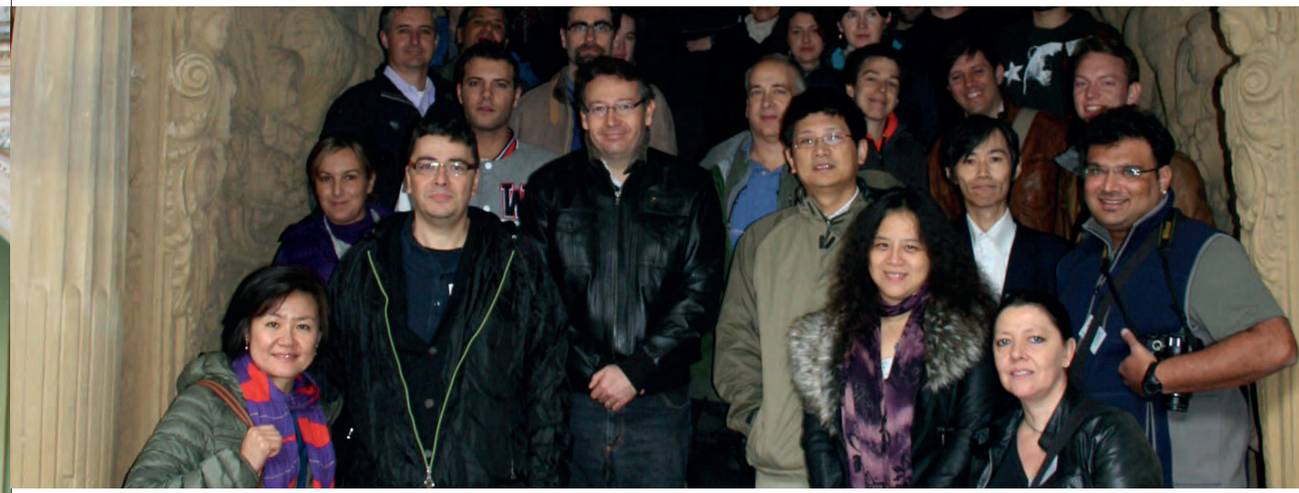

W37.
Neuroepigenetics: A New Perspective on Memory Mechanisms and Brain Disorders

29-31 October

Scope: The epigenetic modification of the chromatin, such as DNA methylation and the posttranslational modifications of histones, provides mechanisms for the stable propagation of gene activity states from one generation of cells to the next. In the brain, the same epigenetic mechanisms can underlie the long-term maintenance, maybe for the whole life of the individual, of new gene activity states in the nucleus of the neurons, providing a plausible link between experience and long-lasting alterations in neuronal gene expression. The discovery of the relevance of epigenetic mechanisms in adult brain function is relatively recent, and many questions remain unanswered. This workshop will discuss the contribution of epigenetic mechanisms to different forms of neuroadaptation, including learning and memory and addictive

behavior, as well as the role of these processes in neurological and psychiatric disorders. The meeting will be highly interdisciplinary and will cover complementary areas of research, from electrophysiology and behavior to different "omics" approaches.

Organizers: **Ángel Barco** (Miguel Hernández University. Sant Joan d'Alacant (Alicante), Spain).
Richard G. M. Morris (The University of Edinburgh. Edinburgh, UK).
Li-Huei Tsai (Massachusetts Institute of Technology. Cambridge, USA).

Monday, October 29

9.05-9.20 **L.H. Tsai, R.G.M. Morris and A. Barco.**
Opening of the workshop.

Session I: Memory encoding and maintenance: A dialogue between genes and synapses
Chair: A Barco

9.20-10.00 **Richard M. G. Morris.**
Memory types, processes and the concept of synaptic tagging and capture.

10.00-10.40 **Bruno Bontempi.**
Early tagging of cortical networks as a crucial mechanism for the formation of enduring memories: contribution of epigenetic modulations.

10.40-11.20 **Todd Sacktor.**
Enhancing, erasing, and tracing long-term memories by targeting PKMæ.

11.50-12.30 **Bruno Frenguelli.**
Regulation of synaptic and experience-dependent plasticity by the CREB and histone H3 kinase, MSK1.

12.30-13.10 **Ángel Carrión.**
Epigenetic modifications regulate cognitive processes.

13.10-13.25 **Vassilios Beglopoulos.**
Inactivation of the Transcriptional Repressor REST/NRSF in the Adult Brain leads to Sex-Specific Impairments of Memory and Gene Expression.

Session II: Transcriptional and epigenetic control of neuronal plasticity
Chair: L H Tsai

16.00-16.40 **Isabelle Mansuy.**
Epigenetic regulation by protein phosphatases for memory formation.

16.40-17.20 **J. David Sweatt.**
DNA methylation in memory formation.

17.20-17.35 **Pablo Muñoz Carvajal.**
Transcriptional regulation of ryanodine receptors on recognition memory and aging.

18.00-18.40 **Marcelo Wood.**
The Molecular Brake Pad Hypothesis: A New Perspective to Understand the Role of Histone Modification in Long-Term Memory and Drug-Seeking Behavior.

18.40 - 18.55 **Rohan H. Kamat.**
Epigenetic regulation of the Brain Derived Neurotrophic Factor (BDNF) in repetitive stress.

18.55 Poster viewing.

Tuesday, October 30

Session III: Epigenetic mechanisms in neurological disorders
Chair: J D Sweatt

9.00-9.40 **Ángel Barco.**
Histone acetylation in the adult brain: Role in neuronal plasticity and intellectual disability disorders.

9.40-10.20 **Li-Huei Tsai.**
Chromatin remodeling enhances memory performance in mouse models of cognitive dysfunction.

10.20-10.35 **Grzegorz M. Wilczyński.**
Novel higher-order epigenetic regulation of the Bdnf gene upon seizures.

11.40-11.55 **Mar Cuadrado-Tejedor.**
Phenylbutyrate as a multifaceted molecule effective in reversing Alzheimer´s disease phenotype.

Session IV: Epigenetic mechanisms in psychiatric disorders
Chair: I Mansuy

16.00-16.40 **Tadafumi Kato.**
DNA methylation analysis in bipolar disorder.

16.40-17.20 **Schahram Akbarian.**
Neuronal Epigenome Mapping in Autism and Schizophrenia.

17.20-17.35 **Luis M. Valor.**
Genomic landscape of transcriptional and epigenetic dysregulation in a mouse model of early onset Huntington's disease.

18.00-18.40 **Hongjun Song.**
Neuronal Activity-Induced Changes of DNA Methylation Landscape in the Adult Brain.

18.40-18.55 **José V. Sánchez-Mut.**
Epigenetic repression of *Dusp22* in Alzheimer's disease alters cell survival and CREB signaling through PKA inhibition.

18.55 Poster viewing 2.

Wednesday, October 31

Session V: Developmental neuroepigenetics
Chair: R.G.M. Morris

9.00-9.40 **Yi E. Sun.**
Epigenetic regulation of neural stem cell differentiation.

9.40-10.20 **Anne L. Boutillier.**
Activation of p300/CBP-mediated Acetylation in the Hippocampus induces Adult Neurogenesis: Implications in Memory Formation.

10.20-10.35 **Jacob Anderson.**
Identification and characterisation of novel nuclear targets of neurotrophin-dependent S-nitrosylation in neurons.

11.00-11.40 **Laurence Wilkinson.**
Imprinted Snord115 and control of post-transcriptional modifications to 5HT2C-receptor pre-RNA: effects on brain and behaviour.

11.40 Roundtable for general discussion, summing up and prospects.

W38.
Molecular Mechanisms of Inner Ear Development

5-7 November

Scope: The vertebrate inner ear is a small but structurally complex organ that mediates several different sensory inputs including perception of head position, acceleration, and sound. The intricate structure and exquisite cellular patterning of this sensory organ has much to offer as a model system to study important developmental processes such as morphogenesis, planar cell polarity and cell fate determination. The goal of this workshop is to provide a forum for scientists studying inner ear development, as well as developmental biologists who have done pioneering work using other model systems, to identify and discuss important existing questions and challenges. Exchange of ideas and data will generate new insights and collaborations that will raise awareness of the inner ear as a model system for the study of precise developmental patterning and facilitate the deciphering of the molecular mechanisms underlying the formation of this

complex organ. Specific areas to be covered by this workshop include: 1) Signals regulating patterning and morphogenesis of the inner ear, 2) Mechanisms regulating cell fate specification, and 3) Roles of planar cell polarity and spindle orientation in patterning and cell fate specification.

Organizers: **Fernando Giráldez** (Pompeu Fabra University. Barcelona, Spain).
Matthew W. Kelley (National Institute on Deafness and Other Communication Disorders. Bethesda, USA).
Doris K. Wu (National Institute on Deafness and Other Communication Disorders. Rockville, USA).

Monday, November 5

9.00-9.15 Opening of the workshop.

Session I: Morphogenesis and Patterning
Chair: Doris Wu

9.15-9.45 **Doris Wu.**
Morphogenesis of the vertebrate inner ear.

9.45-10.15 **Douglas Epstein.**
Dichotomous roles of Wnt/βcatenin signaling in epithelial maintenance and fusion-plate breakdown during vestibular morphogenesis.

10.15-10.45 **Lisa Goodrich.**
Sculpting a Sense of Balance.

10.45-11.00 **Esther Maier.**
Regulation of ventral patterning and neurogenesis in the otic vesicle of zebrafish.

11.30-12.00 **Thomas Schimmang.**
Inner ear induction, morphogenesis and patterning is controlled by different members of the Fgf, Wnt and myc gene families.

12.00-12.30 **Donna Fekete.**
Wnt signaling regulates proliferation, cell fate, patterning and axon outgrowth in the vertebrate cochlea.

12.30-12.45 **Mai H. Sham.**
Sox10 is Essential for Neural Crest Invasion in Cochlea-Vestibular Ganglion.

12.45-13.00 **Laurence Delacroix.**
Role of soxE genes in the development of the auditory portion of the inner ear.

Session II: Cell fate specification
Chair: Matthew Kelley

16.00-16.30 **Fernando Giráldez.**
Different modes of Notch operation arise from levels of Notch activity: from lateral induction to lateral inhibition in the developing inner ear.

16.30-17.15 **François Schweisguth.**
Live imaging analysis of Notch regulation by Numb in *Drosophila*.

17.45-18.15 **Berta Alsina.**
Signaling pathway cross-talk during neurosensory specification of zebrafish inner ear.

18.15-18.30 **Sarah M. Lorenzen.**
The zinc-finger protein Insm1 promotes terminal neurogenesis in spiral and vestibular ganglia.

18.30-18.45 **Brigitte Malgrange.**
Differential expressions of ephrin and Eph genes are required for specific afferent targeting to hair cells in the cochlea.

18.45 Poster viewing.

Tuesday, November 6

Session III: Planar Cell Polarity I
Chair: Lisa Goodrich

9.00-9.30 **Matthew Kelley.**
Cellular patterning in the cochlear duct; regulation by myosin II and PCP.

9.30-10.15 **Cecilia B. Moens.**
Planar Cell Polarity-Directed Neuronal Migration.

10.45-11.30 **Marek Mlodzik.**
Intercellular regulation of Wnt/Frizzled Planar Cell Polarity Signaling.

Session IV: Planar Cell Polarity II
Chair: Domingos Henrique

15.15-15.45 **Mireille Montcouquiol.**
The cochlear epithelium: a mammalian model for translational and tissue polarity.

15.45-16.00 **Ursula Weber.**
A genetic screen identifies novel planar cell polarity factors in *Drosophila*.

16.00-16.30 **Hernán López-Schier.**
Development and homeostasis of epithelial planar polarity in a mechanosensory organ.

19.30 Poster viewing 2.

Wednesday, November 7

Session V: Stem cells and repair
Chair: Fernando Giráldez

9.00-9.45 **Sally Temple.**
Environmental factors that control the activation and migration of Neural Stem Cells in the mouse adult forebrain niche.

9.45-10.15 **Ulla Pirvola.**
The Rho GTPase Cdc42 is critical for the development of the apical actin cytoskeleton in auditory supporting cells.

10.45-11.15 **Domingos Henrique.**
Sensory Hair Cells: a Reprogramming Approach.

11.15-11:45 Roundtable for general discussion, summing up and prospects.

#2013

W39.
Membrane Traffic at the Synapse. The Cell Biology of Synaptic Plasticity

7-9 October

Scope: It is now evident that synaptic function relies on core components of the intracellular membrane trafficking machinery to support key aspects of neurotransmitter vesicle cycling and postsynaptic receptor translocation. On the other hand, synaptic membranes are endowed with specific molecular tools tailored to fulfill the unique demands of synaptic transmission, such as the tight temporal and spatial regulation of membrane fusion, or its coupling to synaptic activity. This workshop will bring together these concepts, in an effort to integrate synaptic and neuronal physiology within the realm of cell biology. Throughout the sessions, we will emphasize the multidisciplinary aspect of modern neuroscience research and the development of new experimental techniques, including cutting-edge imaging and electrophysiological approaches, together with powerful genetic manipulations to assess the role of individual molecules in complex behaviors and their implication in cognitive disease.

Organizers: **José A. Esteban** (Centre for Molecular Biology "Severo Ochoa". Madrid, Spain).
Juan Lerma (Miguel Hernández University. Sant Joan d'Alacant (Alicante), Spain).
Thomas L. Schwarz (Harvard Medical School. Boston, USA).

Monday, October 7

Session I: Pools and Triggers at the Presynapse
Chair: Thomas Schwarz

9.00-9.30 **Matthijs Verhage.**
Docking, priming and fusion of dense core vesicles in mammalian CNS neurons.

9.30-10.00 **Nils Brose.**
Molecular and morphological correlates of synaptic vesicle priming.

10.00-10.25 **Mª Ángeles Montes and Elisa Durán.**
Control of synaptic vesicle pools by synaptotagmins.

10.25-10.55 **Timothy Ryan.**
Control of action potential-driven calcium influx at nerve terminals.

Session II: Kainate Receptors; Phosphorylation at the Postsynapse
Chair: José Esteban

11.40-12.10 **Juan Lerma.**
Modulation of trafficking and gating of kainate receptors by identified interacting proteins.

12.10-12.40 **Jeremy Henley.**
Kainate receptor regulation of endosomal recycling at synapses mediates a novel form of synaptic plasticity.

13.10-13.30 **Xavier Altafaj.**
Dual specificity tyrosine-phosphorylation-regulated kinase 1A (Dyrk1A) phosphorylates and regulates GluN1/GluN2A receptor surface expression and channel activity.

Session III: Regulating Release at the Presynapse
Chair: Rafael Fernández-Chacón

16.00-16.30 **Thomas Südhof.**
Molecular mechanisms of neurotransmitter release.

16.30-16.50 **Jeremy Dittman.**
Synaptic vesicles position Complexin to block spontaneous fusion.

16.50-17.10 **Debarati Mukherjee.**
Presynaptic mechanisms of mGluR-dependent synaptic plasticity: Implications for the state of synapses in Fragile X Syndrome.

Session IV: Ral and Neuronal Membrane Traffic
Chair: Rafael Fernández-Chacón

17.40-18.10 **Thomas Schwarz.**
Ral mediates activity-dependent growth of postsynaptic membranes via recruitment of the exocyst.

18.10-18.30 **Giovanna Lalli.**
The role of Ral GTPase in neurogenesis.

18.30-20.30 Poster viewing.

Tuesday, October 8

Session V: Priming, the Active Zone, and Recycling
Chair: Timothy Ryan

9.00-9.30 **Stephan Sigrist.**
Shedding light on the functional anatomy of presynaptic active zones.

9.30-10.00 **Pascal Kaeser.**
Gas and brake of synaptic vesicle exocytosis at the presynaptic active zone.

10.00-10.30 **Rafael Fernández-Chacón.**
Presynaptic dysfunction and neurodegeneration in the absence of a synaptic vesicle co-chaperone: what happens beyond the nerve terminals?

10.30-10.50 **Raquel Cano.**
Structural and functional maturation of active zones in the neuromuscular junction.

10.50-11.10 **Artur Llobet.**
Quantitative analysis of clathrin function at a presynaptic terminal.

Session VI: Adrenergic Receptors; Disorders

16.00-16.30 **Mark von Zastrow.**
Retromer mediates a discrete route of local membrane delivery to dendrites.

16.30-16.50 **M. Dolores Ledesma.**
Role of sphingomyelin in dendritic spine actin cytoskeleton. Implications for Niemann Pick disease type A.

16.50-17.10 **Francisco G. Scholl.**
The inactivation of Presenilin activity affects vesicle release at neurexin-neuroligin synapsis by abnormal processing of neurexins.

Session VII: Glutamate Receptor Trafficking

17.40-18.10 **Andrés Barría.**
Trafficking, function and regulation of NMDA-type glutamate receptors.

18.10-18.30 **Mauricio Martín.**
Constitutive hippocampal cholesterol loss underlies poor cognition in old rodents.

18.30-20.30 Poster viewing 2.

Wednesday, October 9

Session VIII: Receptor Trafficking: Role of Associated Proteins
Chair: Juan Lerma

9.00-9.30 **Roger Nicoll.**
Cornichons much more than a relish.

9.30-10.00 **Maria Passafaro.**
The X-LID protein SHROOM4 regulates $GABA_B$ receptor trafficking through its association with the microtubule-dependent molecular motor dynein.

10.00-10.30 **José A. Esteban.**
Molecular machinery controlling the exocytosis and endocytosis of AMPA receptors at the postsynaptic membrane during synaptic plasticity.

Session IX: AMPA Receptor Trafficking
Chair: Juan Lerma

11.00-11.20 **Maura Francolini.**
Analysis of neuronal alterations associated to TM4SF2 deletion in knockout mouse.

11.20-11.50 **Robert Malenka.**
Molecular mechanism of AMPAR exocytosis and synaptic stabilization during LTP.

11.50-12.00 Concluding remarks.

Guided tour / Baeza.

Nobel Prize Thomas C. Südhof with the staff of Sede Antonio Machado.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Organizer José A. Esteban, Nobel Prize Thomas C. Südhof, organizer Juan Lerma, speaker Rafael Fernández-Chacón.

Talk / Nobel Prize Thomas C. Südhof.

W40.
The Hemato-Vascular System: Development and Disease

21-23 October

Scope: The hematopoietic and vascular systems are intimately linked from development to their diverse functions in adult life but have rarely been tackled together in scientific meetings. At least a subset of hematopoietic stem cells arise from specific embryonic endothelial cells. Other adult endothelial and sub-endothelial mesenchymal progenitor cells also contribute to maintain and regulate adult hematopoietic stem cells. On the other hand, pro-angiogenic hematopoietic cells can influence the growth and remodeling of blood vessels and critically contribute to pathological processes. In this workshop we will bring together world-leading experts in the intertwined hemato-vascular systems. Specific areas to be covered include the development of the hematopoietic and vascular systems, interactions of hematopoietic stem cells with their niche and signaling and regulatory pathways that critically control hemato-vascular interactions. This workshop will stimulate novel ways to approach old questions and uncover many more critical aspects

that can only arise when addressed using a different perspective. Exchange of ideas and results from cutting edge researchers in the hematopoietic and vascular fields will generate new instrumental insights with combined therapeutic value.

Organizers: **Simón Méndez-Ferrer** (Spanish National Center for Cardiovascular Research. Madrid, Spain).
María-José Sánchez (Andalusian Centre for Developmental Biology. Seville, Spain).
Elaine Dzierzak (Erasmus MC. Rotterdam, The Netherlands).

Monday, October 21

9.00-9.15 **E. Dzierzak, M.J. Sánchez and S. Méndez-Ferrer.**
Opening of the workshop.

Session I: The emergence of hematopoietic progenitors
Chair: E Dzierzak

9.15-9.45 **Elaine Dzierzak.**
Regulation of the endothelial-to-hematopoietic stem cell transition.

9.45-10.15 **Alexander Medvinsky.**
Runx1 dependency defines the boundary between transitory and adult haematopoietic hierarchies during early embryonic development.

10.45-11.15 **Sten Eirik W. Jacobsen.**
Emergence of immune-restricted lympho-myeloid progenitors prior to definitive hematopoietic stem cells.

11.45-12.05 **Michèle Souyri.**
Phenotypical and molecular identity card of hematopoietic stem cells during their journey in the mouse embryo.

12.05-12.25 **Mihaela Crişan.**
BMP and Hedgehog signaling pathways discriminate two hematopoietic stem cell subsets in the mouse embryo.

12.25-12.45 **Rui Monteiro.**
TGFβ signalling is required for the emergence of haematopoietic stem cells in zebrafish.

12.45-13.05 **Yosuke Tanaka.**
Circulation-independent differentiation pathway from extraembryonic mesoderm toward HSCs via hemogenic angioblasts.

Session II: Endothelial progenitor cells
Chair: M J Sánchez

16.00-16.30 **Miguel Torres.**
Clonal analysis of the early endothelial and hematopoietic lineages in the mouse.

16.30-17.00 **Juan M. Melero-Martín.**
Bioengineering vascular networks to facilitate stem cells engraftment.

17.30-18.00 **María José Sánchez.**
Characterization of long term repopulating endothelial progenitor cells in the mouse embryo.

18.00-18.20 **María Luisa Gaspar.**
Megakaryocytes in the mouse embryo developing liver.

18.20-18.40 **Rui Benedito.**
Molecular regulation of vascular development by Notch.

18.40 Poster viewing.

Tuesday, October 22

Session III: Evo-Devo analyses and regulatory network of hemato-vascular system
Chairs: E Dzierzak & M J Sánchez

9.00-9.30 **Ramón Muñoz-Chápuli.**
The cardiovascular system. From development to evolution and back again.

9.30-10.00 **Berthold Göttgens.**
Combinatorial control of blood stem and progenitor cells.

10.00-10.30 **Anna Bigas.**
Upstream and downstream of Notch signaling in hematopoietic stem cell development.

10.30-10.50 **María Luisa Toribio.**
Spatio-temporal regulation of Notch ligand expression defines specific functional microenvironments in the human thymus.

10.50-11.10 **Pablo Menéndez.**
The Notch ligand DLL4 segregates hematopoietic- versus endothelium-biased human embryonic hemogenic endothelium and promotes its hematopoietic differentiation.

Session IV: Metabolic control of hematopoietic stem cells
Chair: S Méndez-Ferrer

16.00-16.30 **Toshio Suda.**
Hematopoietic stem cells in the hypoxic niche.

16.30-17.00 **Trista E. North.**
Metabolic regulation of hematopoietic stem cell formation and function.

17.00-17.30 **Kenichi Miharada.**
Dppa5 improves haematopoietic stem cell activity by reducing endoplasmic reticulum stress.

18.00-18.20 **Virginie Esain.**
CNR2 signaling modulates HSC development via PGE2 dependent and independent mechanisms.

18.20-18.40 **Matthias Kieslinger.**
Expression of *Ebf2* in Osterix-positive Immature Osteoblastic Cells Defines a Niche for Hematopoietic Stem Cells.

18.40-19.00 **Raúl V. Durán.**
Glutaminolysis activates mTORC1 signaling.

19.00 Poster viewing 2.

Wednesday, October 23

Session V: The hematopoietic microenvironment
Chair: S Méndez-Ferrer

9.00-9.30 **Simón Méndez-Ferrer.**
The multiple contributions of the neural crest to the bone marrow stem-cell niche.

9.30-10.00 **Tsvee Lapidot.**
Regulation of normal and leukemic stem cell adhesion and migration: dynamic stem cell interactions with the bone marrow endothelium and microenvironment.

10.00-10.30 **Taina Pihlajaniemi.**
Collagen XVIII supports stem cell maintenance and differentiation in cellular compartments.

11.00-11.20 **Charles Durand.**
A developmental systems biology approach to define the molecular framework of the hematopoietic stem cell niche.

11.20-11.40 **Joan Isern.**
Developmental segregation of hematopoietic stem cell niche-forming mesenchymal stem cells from osteo-chondro precursors in the fetal bone marrow.

11.40-12.00 **Sílvia Arroz-Madeira.**
The neurotrophic factor receptor RET drives haematopoietic stem cell survival and function.

12.00-12.30 Roundtable for general discussion, summing up and prospects.
E. Dzierzak, M.J. Sánchez and S. Méndez-Ferrer.

Guided tour / Baeza.

Organizers / María José Sánchez, Simón Méndez-Ferrer, Elaine Dzierzak.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W41.
Gene Expression as a Circular Process: Cross-Talk between Transcription and mRNA Degradation in Eukaryotes

4-6 November

Scope: Transcription in eukaryotes has been traditionally considered as a linear process that involves several consecutive steps, starting with mRNA synthesis, processing and export. The fate of the mRNA in the cytoplasm was regarded, according to this view, as an independent part of its life. During the last two decades it has been demonstrated that most steps are interconnected. Thus, transcription initiation machinery does not function only at initiation but has roles also during elongation, splicing and export as well. Likewise, transcription elongation regulates capping, splicing, polyadenylation and export; and *vice versa*, RNA processing modulates the transcription process. It has similarly been discovered that in the cytoplasm mRNA translation, degradation or storage in P-bodies are also interdependent processes.

Communication between nuclear and cytoplasmic mRNA events is, however, a more recent topic. The idea was raised by the finding that transcription in the nucleus and mRNA decay in the cytoplasm are coupled processes. Two subunits of RNA pol II, Rpb4 and Rpb7 shuttle between nucleus and cytoplasm and mediate transcription and the two major cytoplasmic mRNA decay pathways. These factors also regulate the shuttling of the mRNA between the translation apparatus and P-bodies. Other transcription-related proteins, such as the Exon Junction Complex (EJC) and the Ccr4-Not complex could be additional factors that affect mRNA fate in the cytoplasm. These initial observations rely mainly on the analysis of several specific genes and, thus, may be related with specific mechanisms. However, more recent works have extended those observations to the global level.

Taken together, all these results show that transcription may imprint mRNA in a manner that predetermines its fate in the cytoplasm. Thus, it seems that eukaryotic gene expression can be viewed as a circular process, whereby the hitherto "first" (transcription) and the "last" (mRNA decay) are interconnected. The picture that emerges from all recent publications is that the synthetic and decay processes function as one multi-factorial machinery, which has two arms. This is a new concept of a very young field that will be discussed in this workshop.

Organizers: **Sebastián Chávez** (Institute of Biomedicine of Seville. Seville, Spain).
Mordechai Choder (Technion – Israel Institute of Technology. Haifa, Israel).

Monday, November 4

9.00-9.15 **M. Choder, S. Chávez.**
Opening of the workshop.

Session I: From transcription to mRNA decay and back
Chair: J Reese

09.15-09.55 **Jack Keene.**
Global Coordination of RNA Regulons.

9.55-10.35 **Sebastián Chávez.**
RNA polymerase II backtracking is important for the cross-talk between transcription and mRNA decay.

10.35-11.15 **Sergi Puig.**
Post-transcriptional regulation of iron homeostasis in *Saccharomyces cerevisiae*.

11.45-12.25 **Itay Tirosh.**
Identifying regulatory cross-talks through comparison of closely-related yeast species.

12.25-13.05 **Carol J. Wilusz.**
Effects of mRNA decay on transcription in normal and virus-infected mammalian cells.

13.05-13.20 **Francisco Navarro.**
Incorrect assembly of the RNA pol II affects transcriptional activity and mRNA stability.

15.30 Poster viewing.

Session II: From transcription to translation and back
Chair: E Izaurralde

16.45-17.25 **Martine A. Collart.**
The Not5 subunit of the Ccr4-Not complex connects transcription with translation.

17.25-18.05 **Raúl Méndez.**
A new function for CPEB1 coordinates alternative 3' UTR processing with translational regulation in cell cycle and cancer.

18.30-19.10 **María Vera.**
eEF1A couples transcription to translation during heat shock response.

19.10-19.25 **Michael Kracht.**
Signal-dependent assembly of decapping proteins in cytokine responses.

19.25-19.40 **Lorea Blázquez.**
Inhibition of gene expression by combining RNA interference and U1 inhibition.

Tuesday, November 5

Session III: Ccr4-Not: at cross-road of mRNA synthesis and degradation

Chair: J Keene

9.00-9.40 **Elisa Izaurralde.**
Assembly and function of the CCR4-NOT complex.

09.40-10.20 **Joseph C. Reese.**
The Rpb4/7 module connects the Ccr4-Not complex to elongating RNA Polymerase II: implications for the coordination of synthesis and decay.

10.50-11.30 **John C. Panepinto.**
Breaking the circle of mRNA synthesis and decay impairs stress adaptation in the pathogenic fungus *Cryptococcus neoformans*.

15.30 Poster viewing 2.

Session IV: Soft-coupling: miRNAs roles in the crosstalk between transcription and mRNA degradation

Chair: C Wilusz

17.25-18.05 **Francis C. Luca.**
Regulation of the yeast mRNA binding protein Ssd1.

Session V: Hard-coupling: Synthegradases and synthegradosome

Chair: M Collart

18.30-19.10 **Patrick Cramer.**
Global analysis of eukaryotic mRNA degradation reveals Xrn1-dependent buffering of transcript levels.

19.10-19.50 **Mordechai Choder.**
Gene expression is a circular system.

Wednesday, November 6

Session VI: New perspectives

Chair: P Cramer

9.00-9.40 **Robert Schneider.**
The RNA binding protein AUF1 links control of inflammation to aging, cellular senescence and myogenesis.

9.40-9.55 **Cornelia H. de Moor.**
The role of poly(A) tail metabolism in rapid transcriptional regulation.

9.55-10.10 **Susana Rodríguez-Navarro.**
mRNA transport controls gene expression programs.

10.10-10.25 **M. Lienhard Schmitz.**
Interplay between HIPK2 and the Ccr4-Not complex in the regulation of mRNA abundance.

10.25-10.40 **Anna Mattout.**
The role of Lsm proteins in heterochromatic gene silencing.

10.40-11.00 **Mordechai Choder.**
What is next?

11.00 Open discussion.

Guided tour / Baeza.

Organizer Mordechai Choder, Director José Domingo Sánchez Martínez, organizer Sebastián Chávez.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W42.
The Regulatory Roles of ncRNA

18-20 November

Scope: Recent insights into genome biology have induced a paradigm shift towards the recognition of RNAs as functional molecules with roles beyond mere messengers for protein-coding genes. Genomes produce thousands of highly diverse transcripts with no protein-coding capacity that however play active roles in gene regulation. From small RNAs such as small interfering RNAs, Piwi-associated or microRNAs, to long non-coding RNAs; noncoding RNAs are involved in virtually every level of cellular biology, and are altered in many diseases. This workshop will cover studies across diverse organisms, where common RNA based principles are at once similar and yet very diverse, and where the application of the latest genomic technologies has allowed surveying transcriptomes to an unprecedented degree, triggering the rapid emergence of this field. We will bring together leader world experts that will discuss the latest

progress towards the understanding of the functions and mechanisms of non-coding RNAs in gene regulation, including epigenetic and transcriptional regulation, genome stability and posttranscriptional regulation, as well as the alterations and roles of non-coding RNAs in cancer.

Organizers: **Maite Huarte** (University of Navarra. Pamplona, Spain).
John L. Rinn (Broad Institute of MIT and Harvard. Cambridge, USA).

Monday, November 18

9.15-9.30 **John Rinn and Maite Huarte.**
Welcome.

Session I: Emerging themes of noncoding genomes (I)
Chair: John Rinn

9.30-10.00 **Leonard Lipovich.**
Estrogen-responsive long non-coding RNA genes regulate cell growth and cell death in human breast cancer.

10.00-10.30 **Ling-Ling Chen.**
New formats of long noncoding RNAs from excised introns: mechanisms and functional implications.

10.30-11.00 **Ingrid Grummt.**
Non-coding RNA controls epigenetic processes.

11.00-11.30 Lightning Rounds (1-4).
1. Ascensión Ariza-Mateos.
miR-122 binds efficiently at both flanks of hepatitis C virus internal ribosome entry site.
2. Luis Arnés.
Examining the role of novel long noncoding RNAs in beta cell biology.
3. Stefanie Böhm.
Transcription in the intergenic region of the rDNA loci.
4. Raquel Boqué-Sastre.
Divergent antisense transcription and R loop formation promotes transcriptional activation at the Vimentin locus.

12.00-12.30 **Andreas Werner.**
The sense of antisense.

12.30-13.00 **Arjun Raj.**
Visualizing and counting individual lncRNA molecules *in situ*.

13.00-13.30 Lightning Rounds (5-8).
5. David Cano.
Characterization of antisense derived transcripts from LINE-1 retrotransposons during early embryonic development.
6. Elena Carnero.
Long non-coding RNAs and its role in Hepatitis C virus replication.
7. Francisco J. Enguita.
Integrative analysis and functional implications of the aging-related changes in the human non-coding transcriptome.
8. Sophia Häfner.
Toward the functional characterization of Ftx*, a conserved non-coding RNA.*

15.30-17.30 Poster viewing.

Session II: Emerging themes of noncoding genomes (II)
Chair: Andreas Werner

18.30-19.00 **Alexei Aravin.**
Small RNA: from bacteria to metazoan germline.

19.00-19.30 **John Rinn.**
RNA trans-genomic regulation and localization.

19.30-20.00 Lightning Rounds (9-12).
9. Francisco Hernández-Torres.
miR-23a/27a/24-2 transcriptional regulation is differently modulated in cardiac and skeletal muscle cells.
10. Rory Johnson.
Functional analysis of cis-regulatory noncoding RNA by inducible reporter assay.
11. M. Carmen Limón.
Identification and expression of two putative miRNA genes in Fusarium oxysporum.
12. Gloria Lozano.
Impact of divalent cations and RNA binding proteins on the RNA structure of an IRES element.

Tuesday, November 19

Session III: Noncoding RNA lessons from lower organisms
Chair: Ingrid Grummt

9.30-10.00 **Marc Bühler.**
Noncoding RNA activity in fission yeast nucleus.

10.00-10.30 **Sandra Duharcourt.**
RNA-mediated epigenetic organization of the genome in the model organism *Paramecium*.

10.30-11.00 **Jörg Vogel.**
Expanding the operon: Small regulatory RNAs from 3' UTRs of bacterial messengers.

11.00-11.30 Lightning Rounds (13-16).
13. Marta Melé.
Human long non-coding RNAs recent evolutionary history.
14. Marta Montes.
Identification of lncRNAs with a role in oncogene-induced senescence.
15. Juan Pablo Muñoz-Cobo Belart.
Gene knockdown analysis of the transcription/splicing factor TCERG1 by exon array reveals a role in microRNA biogenesis and cytoskeleton dynamics.
16. Babita Singh.
Elucidating the network of miRNAs and alternative splicing in breast cancer.

15.30-16.00 Poster viewing.

Session IV: ncRNAs and epigenetic regulation
Chair: Irene Bozzoni

16.00-16.30 **Maite Huarte.**
LncRNAs and epigenetic regulation in the p53 pathway.

16.30-17.00 **Claire Rougeulle.**
Long non-coding RNAs controlling X chromosome activity in mammals.

17.00-17.30 **Manel Esteller.**
Epigenetic and Genetic disruption of ncRNAs in Cancer

18.00-20.00 Poster viewing 2.

Wednesday, November 20

Session V: Noncoding RNAs in disease and development
Chair: Maite Huarte

9.00-9.30 **Anders Lund.**
Identification of microRNA functions in cancer.

9.30-10.00 **Irene Bozzoni.**
Role of long noncoding RNAs in muscle differentiation.

10.00-10.30 Round table discussion (anonymous questions from students).

10.30-11.00 Closing remarks:
John Rinn and Maite Huarte.

Organizer Maite Huarte, Director José Domingo Sánchez Martínez, organizer John L. Rinn.

Guided tour / Aula Antonio Machado.

Workshops *Current trends in Biomedicine* 2013

THE REGULATORY ROLES OF ncRNA

unia
Universidad Internacional de Andalucía

Scope

Recent insights into genome biology have induced a paradigm shift towards the recognition of RNAs as functional molecules with roles beyond mere messengers for protein-coding genes. Genomes produce thousands of highly diverse transcripts with no protein-coding capacity that however play active roles in gene regulation. From small RNAs such as small interfering RNAs, Piwi-associated or microRNAs, to long non-coding RNAs; noncoding RNAs are involved in virtually every level of cellular biology, and are altered in many diseases. This workshop will cover studies across diverse organisms, where common RNA based principles are at once similar and yet very diverse, and where the application of the latest genomic technologies has allowed surveying transcriptomes to an unprecedented degree, triggering the rapid emergence of this field. We will bring together leader world experts that will discuss the latest progress towards the understanding of the functions and mechanisms of non-coding RNAs in gene regulation, including epigenetic and transcriptional regulation, genome stability and posttranscriptional regulation, as well as the alterations and roles of non-coding RNAs in cancer.

Format of the Workshop

The workshop will bring together 17 speakers and a maximum of 33-35 participants, to form a group of around 50 people. The scientific programme will start in the morning of Monday, November 18th, and will end around noon on Wednesday, November 20th. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

Venue of the Workshop

The workshop will be held in Baeza, at the "Sede Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a recently restored residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

Organized by:

Maite Huarte
Center for Applied Medical Research (CIMA), University of Navarra. Pamplona, Spain.

John L. Rinn
Harvard University / The Broad Institute of Massachusetts Institute of Technology and Harvard. Cambridge, USA.

Speakers

Alexei A. Aravin. California Institute of Technology, Division of Biology. Pasadena, CA, USA.

Marc Bühler. Friedrich Miescher Institute for Biomedical Research. Basel, Switzerland.

Sandra Duharcourt. Institut Jacques Monod, CNRS, UMR 7592, Université Paris Diderot. Paris, France.

Manel Esteller. Cancer Epigenetics and Biology Program (PEBC), Bellvitge Biomedical Research Institute (IDIBELL); Department of Physiological Sciences II, School of Medicine, University of Barcelona; ICREA. Barcelona, Spain.

Ingrid Grummt. Division of Molecular Biology of the Cell II, German Cancer Research Center, DKFZ-ZMBH Alliance. Heidelberg, Germany.

Gregory J. Hannon. Watson School of Biological Sciences, Howard Hughes Medical Institute, Cold Spring Harbor Laboratory. Cold Spring Harbor, NY, USA.

Maite Huarte. Regulation of Gene Expression Laboratory, Division of Oncology, Center for Applied Medical Research (CIMA), University of Navarra. Pamplona, Spain.

Alberto R. Kornblihtt. Departamento de Fisiologia, Biologia Molecular y Celular, LFBM and IFIBYNE-CONICET, Facultad de Ciencias Exactas Naturales, Universidad de Buenos Aires. Buenos Aires, Argentina.

Anders H. Lund. Biotech Research and Innovation Centre, University of Copenhagen. Copenhagen, Denmark.

John S. Mattick. Institute for Molecular Bioscience, The University of Queensland / Garvan Institute of Medical Research. Brisbane / Darlinghurst, Australia.

Arjun Raj. Department of Bioengineering, University of Pennsylvania. Philadelphia, PA, USA.

Nikolaus Rajewsky. Laboratory of Systems Biology of Gene Regulatory Elements, Max-Delbrück-Center for Molecular Medicine. Berlin, Germany.

John L. Rinn. Department of Stem Cell and Regenerative Biology, Harvard University / The Broad Institute of Massachusetts Institute of Technology and Harvard. Cambridge, MA, USA.

Claire Rougeulle. UMR 7216 Epigénétique et Destin Cellulaire, CNRS/Université Paris-Diderot Paris 7. Paris, France.

Alexander Stark. Research Institute of Molecular Pathology (IMP). Vienna, Austria.

John van der Oost. Laboratory of Microbiology, Wageningen University. Wageningen, The Netherlands.

Jörg Vogel. RNA Biology Group, Institute for Molecular Infection Biology, University of Würzburg. Würzburg, Germany.

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DIGNA BIOTECH

Baeza, Spain • 18th-20th November 2013

Deadline:

20th September 2013

Venue:

Sede Antonio Machado
Universidad Internacional de Andalucía
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Workshop coordinator:

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More information and application:

http://www.unia.es/biomedicine

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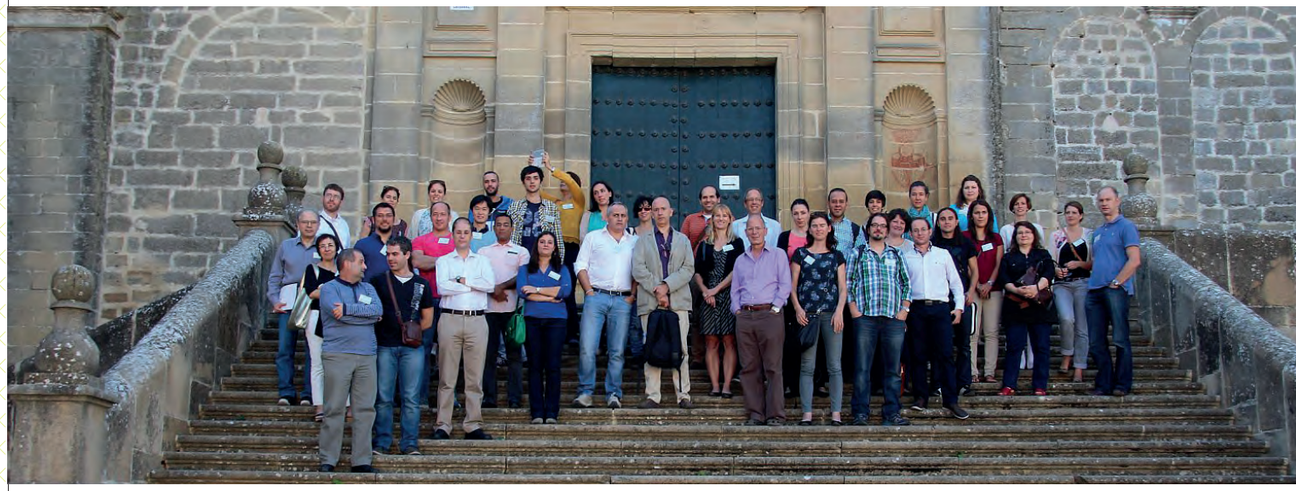


W43.
Cardiovascular Extracellular Matrix in Health and Disease

6-8 October

Scope: Far from being a rigid and static material, cardiovascular extracellular matrix (ECM) is a highly dynamic structure that responds to injury and disease through specific molecular mechanisms. This response can activate beneficial repair mechanisms but can also lead to myocardial and vascular malfunction. This workshop will provide insight into the mechanisms integral to ECM homeostasis—synthesis, deposition and remodeling—that are fundamental to understanding the pathological basis of several cardiovascular diseases. The workshop will also present state-of the art knowledge on the mechanisms of fibrosis initiation, propagation and regression that will form the basis for the future development of new therapeutic strategies, including new anti-fibrotic drugs, the ECM-based biomaterials, and gene therapy interventions to revert fibrosis.

Organizers: **Harry C. Dietz** (Johns Hopkins University School of Medicine. Baltimore, USA).
Nadia Mercader (Spanish National Center for Cardiovascular Research. Madrid, Spain).
Paul R. Riley (University of Oxford. Oxford, UK).

Monday, October 6

9.00-9.10 **Hal Dietz, Paul Riley and Nadia Mercader.**
Welcome.

Session I: Origin of myofibroblasts and their role during cardiac remodeling
Chair: N. Mercader

9.10-9.40 **Raghu Kalluri.**
Cellular plasticity in the pathogenesis of fibrosis.

9.40-10.10 **Nikolaos Frangogiannis.**
Cell-specific Smad3 signaling in the remodeling heart.

10.10-10.30 **Onur Kanisicak.**
In vivo characterization of murine cardiac fibroblasts within normal and pathological heart.

11.00-11.30 **Thomas Braun.**
Molecular control of cardiovascular remodeling processes.

11.30-12.00 **Esther Creemers.**
The role of microRNAs in cardiac fibrosis.

12.00-12.20 **Silvia Martín-Puig.**
Von Hippel-Lindau deletion in Wt1+ epicardial progenitors causes cardiac hypertrophy, fibrosis and abnormal coronary vessel development.

12.20-12.40 **Nathalie Pizzinat.**
Deletion of tenascin C attenuates pressure overload induced cardiac dilation and contractile dysfunction.

12.40-13.00 **Marta C. Guadamillas.**
Caveolin1 drives stromal biomechanics for cardiac ECM remodeling after myocardial infarction.

Session II: Signaling pathways in fibrogenesis
Chair: E Lara-Pezzi

15.30-16.00 **Jelena Mann.**
Epigenetic reprogramming of wound healing.

16.00-16.20 **Pura Muñoz-Cánoves.**
Understanding fibrosis development in Duchenne Muscular Dystrophy.

16.50-17.10 **Marta Fierro.**
miR-9 prevents fibrogenic transformation of pulmonary fibroblasts and lung fibrosis.

17.10-17.40 **Jeff Molkentin.**
A novel TRPC6-dependent pathway for myofibroblast transdifferentiation and wound healing *in vivo*.

17.40 Moderated poster session (I). 5 minutes presentation at the poster.
Verónica Miguel H: *A novel microRNA mediates fibrogenic transformation of dermal fibroblasts.*
Sergio de Frutos: *A new mediator for insulin resistance: integrin linked kinase (ILK) modify blood glucose homeostasis by regulating cardiac GLUT4 expression.*
Adrián Ruiz-Villalba: *Epicardial-derived interstitial fibroblasts and bone marrow-derived interaction determines post-infarction ventricular remodeling.*
José González-Santamaría: *Contribution of extracellular matrix lysyl oxidases in myocardial infarction.*
Bárbara Rotstein: *Cardiac matrix formation.*

18.15-20.15 Poster viewing.

Tuesday, October 7

Session III: Fibrosis in the heart: cardiac injury and regeneration
Chair: F Rodríguez-Pascual

9.00-9.30 **José María Pérez-Pomares.**
Time and disease dependent contribution of epicardial- and bone marrow-derived cells in post infarction ventricular remodeling.

9.30-9.50 **Jesús Sánchez-Más.**
Metformin prevents adverse cardiac remodeling by modulation of IL-33/ST2 signaling.

9.50-10.20 **Nadia Mercader.**
Shifting the balance from cardiac fibrosis to heart regeneration upon cryoinjury in the zebrafish.

10.50-11.20 **Rebecca Richardson.**
The role of inflammatory cell signalling, the fibroblast response and osteopontin expression during tissue repair in zebrafish.

11.20-11.40 **Elke Dworatzek.**
17β-Oestradiol activates oestrogen receptors in a sex-specific manner in rat cardiac fibroblasts leading to sex dimorphic collagen I and III expression.

Session IV: Matrix remodeling in vascular disease
Chair: H Dietz

15.30-16.00 **Harry Dietz.**
Found in translation: new insights into the pathogenesis and treatment of Marfan syndrome and related disorders.

16.00-16.30 **Fernando Rodríguez-Pascual.**
Lysyl oxidases in the cardiovascular system: a role in aneurysmal disease and myocardial infarction.

16.30-17.00 **Jason Cook.**
Dimorphic effects of TGFβ signaling during aortic aneurysm progression in mice with Marfan syndrome.

17.30-18.00 **Jessica E. Wagenseil.**
Extracellular matrix and the mechanics of disease in developing aorta.

18.00-18.30 **Richard K. Assoian.**
MMP12 is a common and essential mediator of arterial stiffening in cardiovascular disease and aging.

18.30-18.50 **Gustavo Egea.**
TGF-β -dependent NOX4 overexpression in Marfan syndrome aggravates the formation of aortic aneurysm.

18.50-19.10 **Raúl Rodrigues-Díez.**
The C-terminal module of connective tissue growth factor, through EGFR/Nox1 signaling, activates the NF-κB pathway and proinflammatory factors in vascular smooth muscle cells.

19.10 Moderated poster session (II). 5 minutes presentation at the poster.
Inês Marques: *Heart regeneration in the zebrafish cryoinjury model: a role for LOX.*

Héctor Sánchez: *New lineage tracing tools to study zebrafish heart regeneration.*
Gustavo Egea: *Chronic activation of the TGF-β signaling is responsible for vascular smooth muscle phenotypic alteration in patients with Marfan syndrome.*
Fernando Rodríguez-Pascual: *Lysyl oxidases protect against aortic aneurysm progression in Marfan syndrome mice.*
Miguel Campanero: *Regulator of calcineurin 1 mediates atherosclerosis progression.*

Wednesday, October 8

Session V: Novel therapeutics in cardiovascular disease and tissue remodeling
Chair: P Riley

9.15-9.45 **Enrique Lara-Pezzi.**
The calcineurin splicing variant CnAbeta1 reduces fibrosis and improves cardiac function in ischemic and non-ischemic heart disease.

9.45-10.15 **Juan Miguel Redondo.**
ADAMTS-1 in vascular wall remodeling.

10.45-11.15 **Paul Riley.**
A chemical screen to modulate epicardial-derived fibrosis.

11.15-11.45 **Masaki Ieda.**
Reprogramming fibroblasts into cardiomyocytes for heart repair.

11.45 Closing remarks.

Guided tour / Baeza.

W44.
Proteases at Work: Cues for Understanding Neural Development and Neurodegeneration

20-22 October

Scope: Proteolytical processing of membrane bound molecules is emerging as a fundamental mechanism for controlling the strength and timing of cell-to-cell communication, which is at the basis of tissue development and homeostasis. This process acquires particular importance in the context of the brain because its function strongly depends on well-orchestrated interactions among many different cell types. Members of families of metalloproteinases are major effectors of these events. Understanding how proteinases, particularly metalloproteinases, coordinate brain development or how they contribute to brain pathologies when disregulated, requires multi-disciplinary approaches tackling the problem from different perspectives. This workshop will summarize the most recent biochemical and genetic evidence

demonstrating that proteases are required for development, function and homeostasis of the CNS, underscoring their relevance in neurodegeneration and discussing whether endogenous or pharmacological modulation of their activity represents a therapeutic tool to prevent synaptic loss, neural defects or brain diseases.

Organizers: **Paola Bovolenta** (Centre for Molecular Biology "Severo Ochoa". Madrid, Spain).
Paul Saftig (Christian-Albrechts University of Kiel. Kiel, Germany).

Monday, October 20

9.00-9.10 **Paola Bovolenta, Paul Saftig.**
Welcome.

Session I: Proteases in focus
Chair: Elena Cattaneo

9.10-9.40 **Carl Blobel.**
iRhoms1 and 2 are essential upstream regulators of ADAM17-dependent EGFR signaling.

9.40-10.00 **Paul Saftig.**
Regulation and in vivo function of ADAM10-mediated shedding processes.

10.00-10.15 **Lisa Seipold.**
TSPANs are regulators for ADAM10-mediated shedding processes.

10.15-10.30 **Silvia Pelucchi.**
CAP2, a regulator of actin filament dynamic, is a novel ADAM10 interactor.

11.15-11.45 **Leszek Kaczmarek.**
MMP-9 in Mind.

11.45-12.00 **Magdalena Jasińska.**
Regulation of MMP-9 mRNA by miR-132 in neurons.

12.00-12.30 **Bart De Strooper.**
Gamma-secretases: fascinating proteases in the membrane.

12.30-12.45 **Claus Pietrzik.**
The potential role of meprin β in Alzheimer's Disease.

Session II: Ectodomain shedding and development
Chair: Isabel Fariñas

16.00-16.30 **Paola Bovolenta.**
Modulation of metalloprotease activity by Secreted Frizzled Related proteins contributes to pathfinding and fasciculation of mouse retina ganglion cell axons.

16.30-17.00 **Avraham Yaron.**
ADAM metalloproteases promote a developmental switch in responsiveness to the axonal repellant Sem3A.

17.30-18.00 **Shanthini Sockanathan.**
GDE2 downregulates Notch signalling to promote neurogenesis through GPI-anchor cleavage.

18.00-18.15 **Yosuke Nao.**
Proteolytic cleavage of inhibitory synapse specific adhesion molecule neuroligin-2.

18.15-18.45 **Patricia F. Maness.**
Regulation of Interneuron Connectivity through NCAM, ADAM10, and EphrinA/EphA3 in Developing Prefrontal Cortex.

Tuesday, October 21

Session III: Proteases in CNS homeostasis
Chair: Carl Blobel

9.00-9.30 **Elena Marcello.**
ADAM10 trafficking in physiology and pathology.

9.30-10.00 **Taisuke Tomita.**
Activity-dependent proteolytic processing of synaptic adhesion molecules.

10.00-10.15 **Michael Willem.**
η-secretase generates APP fragments that modulate LTP and accumulate upon BACE-1 inhibition.

10.15-10.30 **Stephanie Hartmann.**
β-secretase BACE1 regulates hippocampal M-current and expressed KCNQ2/3 channels in a β-subunit-like fashion.

10.30-11.00 **Isabel Fariñas.**
The role of metalloproteases in the activation of adult neural stem cells.

15.30-17.00 Poster viewing.

Session IV: Proteases and Neurodegeneration
Chair: Patricia F Maness

17.30-18.00 **Lieve Moons.**
Matrix metalloproteinases as promising benefactors in development and repair of the CNS.

18.00-18.15 **Lucía Chávez-Gutiérrez.**
Reduced efficiency of Aβ production in the brains of Familial Alzheimer's Disease patients.

18.15-18.30 **Amantha Thathiah.**
β-arrestin 2 regulation of Aβ generation and the γ-secretase complex in Alzheimer's Disease.

18.30-18.45 **Teresa Iglesias.**
Kidins220/ARMS accumulation in Alzheimer's Disease: Role of phosphorylation on its proteolysis by Calpain.

18.45-19.15 **Pilar Esteve.**
Sfrp1 contributes to Alzheimer Disease progression regulating ADAM10 proteinase activity.

19.15-19.45 **Elena Cattaneo.**
Huntingtin and proteases: a story that began many years ago.

Wednesday, October 22

Session V: Alzheimer Disease: Proteases as new therapeutic targets
Chair: Bart De Strooper

9.30-10.00 **Nigel M. Hooper.**
Activation of ADAM10 as a therapeutic strategy for Alzheimer's Disease: shedding of prion protein reduces Aβ oligomer binding and toxicity.

10.00-10.20 **Hermann Altmeppen.**
The sheddase ADAM10 is a potent modulator of prion disease.

10.20-10.40 **Peer-Hendrik Kuhn.**
Neuronal substrates of ADAM10 point towards a modulatory role in synapse function, axon guidance and adherence.

11.10-11.40 **Kristina Endres.**
Targeting ADAM10 for Alzheimer's Disease therapy.

11.40-12.00 **Paul Saftig.**
General discussion and closing remarks.

W45.
RNA Meets DNA: On the Road to Genome Instability

3-5 November

Scope: Genome instability is a hallmark of cancer cells. Understanding the physiological mechanisms preventing genome rearrangements and the pathological pathways causing genome aberrations is therefore of pivotal relevance for cancer research and cancer therapy. Cells adopt a wide range of strategies to maintain the integrity of their genomes by coordinating cell cycle progression with DNA repair, recombination and replication. In the last 25 years tremendous progress has been made in elucidating those cellular mechanisms that prevent genome rearrangements in response to exogenous genotoxic events. However, it is becoming obvious that cells must also deal with endogenous molecular processes that undermine genome integrity. In particular, the chromosomal transitions occurring during the life of the cells have a tremendous impact on genome instability, and how cells deal with chromatin dynamics to

prevent genome alterations is becoming the new frontier in the genome instability field. Recent advances strongly suggest that RNA metabolism is one of the most relevant of all the endogenous cellular processes that impact on genome integrity. The main goal of the Workshop is to have scientists working in the RNA metabolism and genome instability fields discussing together their recent progresses. These two research fields have developed separately and the need now is to create synergies between them and stimulate the interest for common scientific views. In particular, the Workshop will cover fundamental aspects of RNA processing mechanisms and their impact on chromatin dynamics and architecture as well as the pathological mechanisms leading to genome instability when key factors involved in certain RNA metabolic pathways are dysfunctional.

Organizers: **Andrés Aguilera** (Andalusian Molecular Biology and Regenerative Medicine Centre. Seville, Spain).
Karlene A. Cimprich (Stanford University School of Medicine. Stanford, USA).
Marco Foiani (University of Milan. Milan, Italy).

Monday, November 3

Session I
Chair: Robert J Crouch

9.00 Presentation.

9.10-9.45 **Michelle Debatisse.**
Respective roles of replication and transcription in common fragile site instability.

9.45-10.20 **Marco Foiani.**
Mechanisms controlling replication termination.

10.20-10.40 **André Maicher.**
TERRA-DNA hybrids affect telomere-length dynamics and senescence.

11.10-11.45 **Andrés Aguilera.**
Role of chromatin and DSB repair factors on transcription and R loop-mediated genome instability.

11.45-12.20 **Philippe Pasero.**
Mec1 detects conflicts between DNA replication and transcription and delays late origins firing during a normal S phase.

12.20-12.40 **Ralf E. Wellinger.**
Transcription-induced Replication in Yeast rDNA.

12.40-13.00 **Gonzalo Fernández-Miranda.**
CPEB RNA-binding protein is required to maintain genome integrity.

15.30-17.00 Poster viewing.

Session II
Chair: Frédéric Chédin

17.00-17.35 **Robert J. Crouch.**
Two enzymes, four activities of Ribonucleases H.

17.35-18.10 **Andrew Jackson.**
Ribonucleotides in genomic DNA: the good, the bad and the ugly.

18.40-19.15 **Thomas A. Kunkel.**
Positional analysis of genome instability resulting from ribonucleotides incorporated during DNA replication in yeast.

19.15-19.50 **Hannah L. Klein.**
Preventing mutagenesis from misincorporated ribonucleotides into DNA: DNA helicases and nucleases provide a backup pathway to RNaseH2.

19.50-20.10 **Melanie Blasius.**
The nuclear-exosome targeting complex is controlled by the MAP kinase pathway in response to cellular stress.

Tuesday, November 4

Session III
Chair: Philippe Pasero

9.00-9.35 **Karlene A. Cimprich.**
Mechanisms for RNA-Induced Genome Instability.

9.35-10.10 **Douglas Koshland.**
RNA-DNA hybrids: Where do they form and what do they do?

10.10-10.35 **Houra Merrikh.**
A replication-transcription conflict-coupled repair mechanism increases mutagenesis of lagging strand genes.

11.05-11.40 **Camilla Sjögren [EMBO Lecture].**
Connecting replication and transcription with chromosome segregation, DNA topology and SMC complexes.

15.30-17.00 Poster viewing.

Session IV
Chair: Virginia A Zakian

17.00-17.35 **Nick Proudfoot.**
R-loop dependent transcriptional termination: Mechanism and DNA damage protection.

17.35-18.10 **Jesper Q. Svejstrup.**
The transcription-related DNA damage response.

18.40-19.15 **Jurgen Marteijn.**
DNA damage induced remodeling of the core spliceosome.

19.15-19.50 **Frédéric Chédin.**
Prevalent R-loop formation in the human genome.

19.50-20.15 **Peter C. Stirling.**
Functional genomics to identify genetic determinants of R-loop formation.

Wednesday, November 5

Session V
Chair: Hannah Klein

9.00-9.35 **Virginia A. Zakian.**
Role of Pif1 family helicases in replication fork progression.

9.35-10.05 **Rodrigo Bermejo.**
Mechanisms of fork monitoring and protection.

10.05-10.25 **Natalia Gromak.**
R-loop dysregulation in pathology of nucleotide expansion diseases.

10.50-11.10 **Alexander J. R. Bishop.**
Chemosensitivity, RNA metabolism and homologous recombination in Ewing's sarcoma.

11.10-11.40 **Óscar Fernández-Capetillo.**
Targeting oncogene-induced replication stress for cancer therapy.

W46.
Comparative and Functional Genomics of Fungal Pathogens

17-19 November

Scope: Fungal pathogens are a growing threat to human health and pose a serious economic burden to modern societies. Control and treatment of invasive mycoses is limited by our incomplete knowledge of the molecular bases of fungal infection, pathogen-host interactions, emergence of drug resistance, or the process of appearance and spread of new pathogenic species. The advent of next-generation sequencing has impacted the field, enabling revolutionary new strategies to unravel the regulatory and evolutionary processes that act on fungal genomes. However, these technologies also pose unprecedented challenges for the analysis and interpretation of the new types of data, to avoid the risk of disconnecting these new strategies from traditional experimental and clinical approaches. The workshop aims to bridge the scientific disciplines by bringing together researchers that drive the field of computational biology with leading experts in

fungal genetics and cell biology. This interdisciplinary approach will promote and stimulate discussion on new ideas and concepts related to plasticity and evolution of fungal genomes and their impact on pathogenicity.

Organizers: **Antonio Di Pietro** (University of Córdoba. Córdoba, Spain).
Toni Gabaldón (Centre for Genomic Regulation. Barcelona, Spain).
Neil A. R. Gow (University of Aberdeen. Aberdeen, UK).

Monday, November 17

9.00-9.10 Welcome from the organizers.

Session I

Chair: Toni Gabaldón

9.10-9.35 **Neil Gow.**
Genomics, the cell wall and the pathogenicity phenotype of *Candida* species.

9.35-10.00 **Bernhard Hube.**
Evolutionary adaptation of *Candida* species to phagocytes.

10.00-10.25 **Patrick Wincker.**
Challenges in Next-Generation Sequencing of fungal and other eukaryotic microbial genomes.

10.25-10.40 **Jane Usher.**
Engineering a complete sexual cycle in *Candida glabrata*.

Session II

Chair: Leah Cowen

11.15-11.40 **Toni Gabaldón.**
An evolutionary genomics perspective on the evolutionary emergence of virulence.

11.40-12.05 **Tom Richards.**
Has horizontal gene transfer played a role in how fungi interact with their host, environment and competitors?

12.05-12.30 **Dawn Thompson.**
Tracing the evolutionary trajectory of drug resistance and virulence in clinical isolates of *Candida albicans*.

12.30-12.45 **Shay Covo.**
Genome instability in fungal plant pathogens from a comparative genomic perspective.

12.45-13.00 **Carlos Vázquez de Aldana.**
Alternative translation initiation of *ACE2* regulates septin ring dynamics during hyphal development in *Candida albicans*.

15.30-17.30 Poster viewing.

Session III

Chair: Dawn Thompson

18.00-18.25 **Leah Cowen.**
Functional Genomic Analysis of Fungal Morphogenesis.

18.25-18.50 **Michael Lorenz.**
Comparative transcriptomic analysis of eight CUG-clade species in co-culture with macrophages identifies host-specific adaptations.

18.50-19.15 **Mark Farman.**
High throughput effector localization assays identify a novel mechanism for pathogenic adaptation in the rice blast pathogen *Magnaporthe oryzae*.

19.15-19.30 **Francisco E. Nicolás.**
Identifying potential endogenous RNAi targets in the basal fungus *Mucor circinelloides*.

19.30-19.45 **Jaime Correa-Bordes.**
Phosphoregulation of Nrg1 in *Candida albicans*.

19.45-20.00 **Alessandro Fiori.**
Mitochondrial control of susceptibility to fluconazole by way of the nucleotide exchange factor Mge1 in *Saccharomyces cerevisiae* and *Candida albicans*.

Tuesday, November 18

Session IV

Chair: Neil Gow

9.00-9.25 **Judith Berman.**
Rapid ploidy shifts for genome plasticity, chromosome dynamics and stress survival in *Candida albicans*.

9.25-9.50 **Dominique Sanglard.**
Genome-wide comparison of sequential *Candida glabrata* isolates developing azole resistance.

9.50-10.15 **Li-Jun Ma.**
Fusarium Pathogenomics: Genome Dynamics and Fungal Pathogenicity.

10.15-10.40 **Antonio Di Pietro**.
Genetic dissection of infectious growth the trans-kingdom pathogen *Fusarium oxysporum*.

10.40-11.05 **Eva Stukenbrock.**
Recombination rate variation and adaptive evolution in fungal plant pathogens: Insight from comparative population genomic studies.

15.30-17.30 Poster viewing.

Session V
Chair: Judith Berman

18.00-18.25 **Antonis Rokas.**
The Evolution of Fungal Chemodiversity.

18.25-18.50 **Malcolm Whiteway**.
Transcriptional rewiring of ascomycete metabolism.

18.50-19.15 **Gustavo Goldman.**
Systematic global analysis of genes encoding phosphatases in *Aspergillus fumigatus* reveals novel virulence determinants.

19.15-19.25 **Elena Pérez-Nadales.**
Use of NGS to study genome plasticity in *Fusarium oxysporum*.

19.25-19.35 **Jane L. Faull.**
Airborne yeasts sp. in London air.

19.35-19.45 **Javier Capilla.**
Identification of virulence factors in *Mucor circinelloides* by genome comparison.

19.45-19.55 **Sascha Brunke.**
Laboratory evolution of *Candida albicans* to elucidate pathogenicity mechanisms.

Wednesday, November 19

Session VI
Chair: Antonio Di Pietro

9.00-9.25 **Paul Dyer.**
Exploitation of the sexual cycle of *Aspergillus fumigatus*: gene flow and the genetic basis of resistance to antifungal drugs.

9.25-09.50 **Cécile Fairhead**.
Comparative and functional genomics of sexual reproduction in the *Nakaseomyces*.

10.20-10.45 **Mélanie Legrand.**
A population genomics study highlights the importance of loss-of-heterozygosity events in generating genetic diversity in *Candida albicans*.

10.45-11.00 Closing remarks.

Rector Eugenio Domínguez Vilches, surrounded by other authorities and members of the Advisory Board.

#2015

W47.
Development and Adult Neurogenesis in the Central Nervous System

5-7 October

Scope: Vertebrate central nervous system (CNS) is achieved through multiple orders of developmental processes including neural induction, regionalization of the neural tube, proliferation of neural stem cells, cell type determination, and neurogenesis. Our understanding of vertebrate brain development has been deepened recently. The differentiation of the brain regions is initiated by organizing signals that regulate the expression of transcription factors, which in turn determine the regionalities. The differences in the signal strength and the competence of the recipient cells cause the differential outputs, thus regulating the differentiation of the neighboring regions. Specific type of neurons and glial cells differentiates depending on their birth place and time.

Neurogenesis in the adult brain of vertebrates was discovered half a century ago. This phenomenon has attracted much attention recently, as the newly generated neurons

are integrated in already established architecture of the adult brain. This gives a hope of repairing damaged brain by explanting neural stem cells or modulating remaining adult neurogenesis.

In parallel, researchers have succeeded in making pluripotent stem cells from embryos and even from adult tissue, and are trying to reconstruct functional organ system from stem cells.

On this particular occasion, we will discuss brain development and adult neurogenesis in vertebrates. The goal is to focus in the molecular and cellular processes underlying the origin of adult progenitors and revealing conserved mechanisms that regulate neural proliferation and differentiation in embryonic and adult brain.

Organizers: **Salvador Martínez** (Miguel Hernández University. Sant Joan d'Alacant (Alicante), Spain).
Harukazu Nakamura (Tohoku University. Sendai, Japan).

Monday, October 5

9.00-9.10 **Harukazu Nakamura.**
Welcome.

Session I: Early Development and Patterning
Chair: Harukazu Nakamura

9.10-9.40 **Hisato Kondoh.**
Modeling the regionality of embryonic neural development in epiblast stem cells.

9.40-10.10 **Harukazu Nakamura.**
Fate determination of mesencephalon and metencephalon.

Session II: Cortical Development
Chair: John L R Rubenstein

11.00-11.30 **John L.R. Rubenstein.**
Transcriptional control of telencephalon patterning and differentiation.

11.30-12.00 **Orly Reiner.**
Unexpected Activities of the Complement Pathway in Migrating Neurons.

12.00-12.15 **Alice Karam.**
The ciliary protein Rpgrip1l is required for normal cortical neurogenesis.

15.30-17.30 Poster viewing.

Session III: Neuronal development
Chair: Ryoichiro Kageyama

18.00-18.30 **Siew-Lan Ang .**
Molecular Heterogeneity of Midbrain dopamine neurons.

19.00-19.15 **Lia Panman.**
Transcriptional control of dopamine neuron subtype diversification.

19.15-19.45 **Ryoichiro Kageyama.**
Dynamic control of neural determination factors in multipotency and fate choice.

19.45-20.00 **Andrea Yung.**
Rhombic lip-derived neurons migrate into the inner ear upon loss of *Netrin-1*.

Tuesday, October 6

Session IV: Postnatal and Adult Neurogenesis (I)
Chair: Silvia K Nicolis

9.00-9.30 **Silvia K. Nicolis.**
Sox2 is required for a genome-wide network of RNApolII-mediated long-range chromatin interactions connecting genes to distal enhancers active in the brain.

9.30-10.00 **Pierre-Marie Lledo.**
When cortical afferents need adult-born neurons to influence olfaction.

10.30-11.00 **José López-Barneo.**
Effect of hypoxia on central and peripheral neurogenesis

15.30-17.30 Poster viewing 2.

Session IV: Postnatal and Adult Neurogenesis (II)
Chair: Alain Chédotal

18.00-18.30 **Arturo Álvarez-Buylla.**
Allocation of Adult Neural Stem Cells.

18.30-19.00 **Alain Chédotal.**
Slits and Robos: from axon guidance to neurogenesis.

19.00-19.15 **Stefan Zweifel.**
Transcriptional profiling provides insights into the regional heterogeneity of postnatal neural stem cell niches.

19.15-19.30 **Quentin Marlier.**
A crucial role for Cdk1 in postnatal hippocampal neurogenesis.

19.30-1945 **José L. Nieto-González.**
CSP-α maintains the quiescence of radial-glia like stem cells in postnatal neurogenesis.

19.45-20.00 **Akio Tsuboi.**
A specific subtype of adult-born interneurons in the olfactory bulb is required for behaviors on odor detection and discrimination.

Wednesday, October 7

Session V: Reconstruction of nervous system by stem cells
Chair: Salvador Martínez

9.00-9.30 **Kunimasa Ohta .**
Making multipotent cells with natural materials derived from lactic acid bacteria.

9.30-10.00 **Salvador Martínez.**
Restoring functional neural cells in the postnatal brain.

10.00-10.15 **Diego Echevarría.**
Intercellular communication during FGF8 planar morphogenetic activity in mouse neural tube.

10.15-10.30 **Carmen Castro.**
ADAM-17 inhibition in injured adult brain cortex promotes neurogenesis from endogenous neural precursor cells.

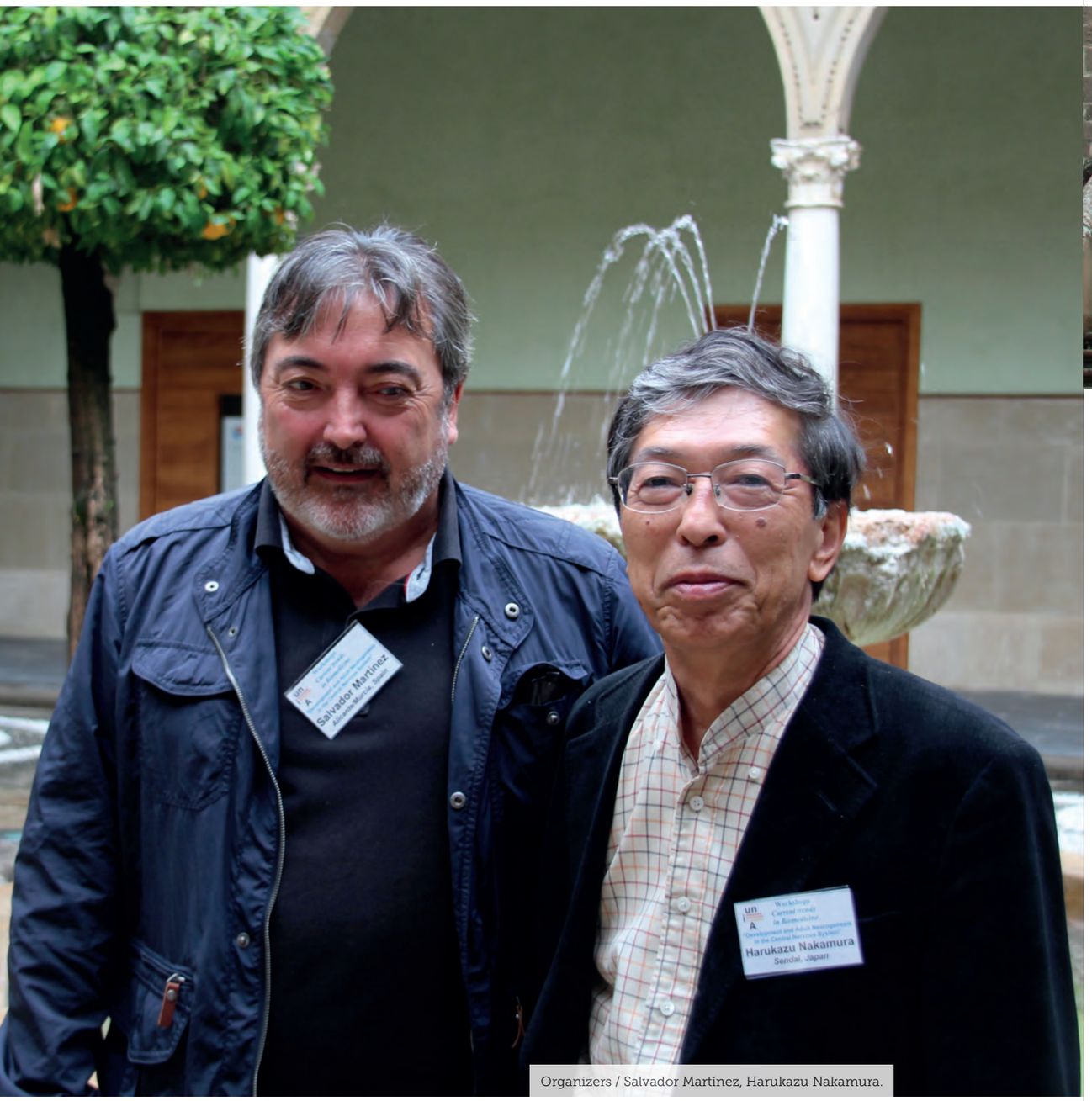
10.55-11.10 **Maribel Murillo-Carretero.**
Pharmacological activation of protein kinase C using plant-derived natural products promote adult neurogenesis.

11.10-11.25 **María Victoria Gómez-Gaviro.**
Betacellulin remodels the neural stem cell niche after stroke.

11.25-11.45 **Salvador Martínez.**
Closing remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Vice-chancellor Yolanda de la Fuente Robles, speaker José López-Barneo.



Organizers / Salvador Martínez, Harukazu Nakamura.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W48.
Cell Division: Molecular Machineries and Cancer Targeted Therapies EMBO Workshop with co-sponsorship from UNIA

19-21 October

Scope: Targeting the cell division cycle is thought to be a promising therapeutic strategy in cancer. However, the mechanisms that govern cell cycle progression or mitotic maintenance or exit in mammalian cells are still poorly understood. This workshop aims to obtain a better insight into the machineries and circuits that regulate cell cycle control and to advance in the validation and/or identification of new potential targets for cancer treatment. This will be analyzed from different perspectives including basic cell biology, animal models, structural studies and clinical evaluation, thus making this workshop an attractive forum for researchers, pharma developers and clinicians.

Organizers: **Amancio Carnero** (Institute of Biomedicine of Seville. Seville, Spain).
Marcos Malumbres (Spanish National Cancer Research Centre. Madrid, Spain).
Guillermo Montoya (University of Copenhagen. Copenhagen, Denmark).

Monday, October 19

9.00-9.10 **Marcos Malumbres.**
Welcome.

Session I: Oncogenic Pathways and the Cell Division Cycle
Chair: Marcos Malumbres

9.15-9.45 **Daniel Peeper.**
Systematic genetic perturbations to reveal cancer vulnerabilities.

9.45-10.15 **Amancio Carnero.**
Oncogenic functions of MAP17 (PDZK1IP1).

10.15-10.35 **Begoña Cánovas.**
A pro-tumorigenic role of p38α during cell cycle in breast cancer cells.

10.35-10.55 **Josep Clotet.**
Human new cyclins: expression in tumors and novel interactors.

11.30-12.00 **Peter Sicinski.**
Identification of cell cycle-regulating microRNAs.

12.00-12.20 **Eloi Garí.**
Cytoplasmic cyclin D1 regulates cell spreading, invasion and metastasis through the phosphorylation of paxillin.

12.20-12.40 **Alexis Gautreau.**
Loss of a branched actin checkpoint in cancer cells.

12.40-13.00 **Juan A. Marchal.**
MCPH1 is required for timed chromosome alignment during metaphase.

13.00-13.20 **Francisco J. Tejedor.**
MNB/DYRK1A regulates the proliferation/differentiation balance during brain development linking mechanisms that regulate neurogenesis, cell cycle and terminal differentiation.

15.30-17.30 Poster viewing.

Session II: G1 & DNA Replication
Chair: Mónica Bettencourt

18.00-18.30 **Jackie Lees.**
Distinct mitochondrial roles for retinoblastoma protein.

18.30-19.00 **Karim Labib.**
The end of chromosome replication.

19.00-19.20 **Diana Urrego.**
Expression of Kv10.1 potassium channels is coupled to cell cycle progression and facilitates G2/M progression.

19.20-19.40 **Guillermo de Cárcer.**
Polo-like kinase 1: oncogene or tumor suppressor?

19.40-20.00 **Ana R. R. Maia.**
Inhibition of the spindle assembly checkpoint kinase TTK enhances the efficacy of docetaxel in a triple negative breast cancer model.

20.00-20.20 **Katrin Kestav.**
Bisubstrate inhibitor approach for targeting mitotic kinase Haspin.

Tuesday, October 20

Session III: Preventing and Generating Instability
Chair: Karim Labib

9.00-9.30 **Jiri Lukas.**
Spatial and temporal limits of genome surveillance: Implications for cancer origin and treatment.

9.30-10.00 **René Medema.**
Exploiting chromosome instability.

10.00-10.30 **Tom Blundell.**
Targeting the complex multiprotein assemblies of cell regulation: gaining selectivity in drug discovery for cancer.

10.30-10.50 **Tanmay Gupta.**
Structural basis for the centromeric localisation of the Chromosomal Passenger Complex.

15.30-17.30 Poster viewing 2.

Session IV: The Centrosome Cycle and Chromosome Segregation

Chair: Amancio Carnero

18.00-18.30 **Mónica Bettencourt-Dias.**
Spatial and temporal regulation of centrosome biogenesis.

18.30-19.00 **Guillermo Montoya.**
The XTACC3-XMAP215 assembly in microtubule elongation during mitosis.

19.00-19.30 **Andrea Musacchio.**
In vitro reconstitution of spindle assembly checkpoint signaling.

19.30-19.50 **Damian Dudka.**
How do cells put the metaphase plate in the middle of the mitotic spindle?

19.50-20.10 **Gang Zhang.**
Distinct domains in Bub1 localize RZZ and BubR1 to kinetochores to regulate the checkpoint.

20.10-20.30 **Florian Prinz.**
Tight, long lasting Bub3-BubR1 interactions are required for spindle assembly checkpoint signaling in human cells.

Wednesday, October 21

Session V: Cell Cycle Machineries and Cancer Therapy

Chair: Guillermo Montoya

9.00-9.30 **Mariano Barbacid.**
Targeting KRAS-driven cancers.

9.30-10.00 **Stephen S. Taylor.**
Cell fate in response to anti-mitotic chemotherapeutics.

10.00-10.30 **Marcos Malumbres.**
Killing cells during cell division: new targets and therapies.

10.30-10.50 **Andreas Villunger.**
The NOXA-MCL1-BIM axis defines lifespan on extended mitotic arrest.

11.15-11.45 **David Barford.**
Implications for mechanisms of protein ubiquitination from a high resolution structure of the APC/C.

11.45-12.00 **Guillermo Montoya.**
Closing remarks.

Vice-chancellor Yolanda de la Fuente Robles, speaker Mariano Barbacid.

W49.
Adaptation and Communication of Bacterial Pathogens

26-28 October

Scope: Adaptation of pathogens to their environment, considering the environment in its broader sense as every niche in which bacteria have to survive, is a complex issue of undisputed relevance for fields such as ecology, biotechnology, crop protection or biomedicine. This relevance is evidenced by the growing number of reports dealing with bacterial adaptation to different niches. This springs from two fundamental aspects, communication and competition between bacteria sharing the same environment, and how the outcome of these behaviours shapes bacterial communities. This workshop aims at bringing together the complementary aspects of the molecular mechanisms leading to bacterial adaptation and communication in various hosts, among which plants and humans. It will also represent a unique chance to gather different scientific communities which hardly ever meet.

Organizers: **Laurent Aussel** (University of Aix-Marseilles. Marseilles, France).
Carmen R. Beuzón (University of Málaga. Málaga, Spain).
Eric Cascales (University of Aix-Marseilles. Marseilles, France).

Monday, October 26

9.30-9.45 **Carmen Beuzón, Eric Cascales, Laurent Aussel.**
Opening of the workshop.

Session I: Bacterium-bacterium interactions
Chair: Søren Molin

9.45-10.15 **Søren Molin.**
Adaptation and dead-end evolution of *Pseudomonas aeruginosa* in airways of cystic fibrosis patients.

10.15-10.30 **Maite Echeverz.**
Analyses of the properties conferred by the exopolysaccharide PNAG through its heterologous expression in *Salmonella*.

10.30-10.45 **Carolina Palencia-Gándara.**
Unsaturated fatty acids as conjugation inhibitors.

11.15-11.45 **David Low.**
Molecular mechanisms that regulate cell-cell interactions in contact-dependent growth inhibition.

11.45-12.15 **Eric Cascales.**
Assembly of the Type VI secretion system.

12.15-12.30 **Laura Nolan.**
Uncovering the mechanism of membrane puncture and the full toxin repertoire of the Type VI secretion system of *Pseudomonas aeruginosa*.

12.30-12.45 **Brook Peterson.**
Unraveling the danger response of *Pseudomonas aeruginosa*.

Session II: Regulatory mechanisms of adaptation of intracellular bacteria
Chair: David Holden

16.00-16.30 **David Holden.**
Hostile takeover: manipulation of mammalian cells by *Salmonella*.

16.30-16.45 **Renée Tsolis.**
Adaptation of *Brucella abortus* to persistence in alternatively activated macrophages.

16.45-17.15 **Josep Casadesús.**
Non-mutational preadaptation to lethal selection.

17.15-17.30 **Olivier Espéli.**
Cell cycle regulations during macrophage infection by *E. coli* AIEC LF82.

17.30-18.00 **Francisco García-del Portillo.**
A suicide strategy involving aggregation of host endomembranes controls *Salmonella* proliferation in host cells.

18.30 Poster viewing.

Tuesday, October 27

Session III: Metabolism of intracellular bacteria
Chair: David Russell

9.00-9.30 **David Russell.**
How the host environment shapes the physiology of *Mycobacterium tuberculosis*.

9.30-10.00 **Laurent Aussel.**
The Fe-S cluster machinery Isc is essential for the regulation of the SPI-1 Type III secretion system and for *Salmonella* virulence.

10.00-10.15 **María Antonia Sánchez-Romero.**
Biological significance of *Salmonella enterica* SPI-1 bistability: the active role of the SPI-1 OFF subpopulation.

10.45-11.15 **Andreas Bäumler.**
The Pyromaniac inside you: *Salmonella* metabolism in the host gut.

11.15-11.30 **Julie Viala.**
Posttranslational modification of the type 3 secretion system translocon using a dedicated acyl carrier protein in *Salmonella*.

Session IV: Adaptation to the plant environment of phytopathogenic bacteria and animal pathogens

Chair: Adam Schikora

16.00-16.30 **Adam Schikora.**
Can *Salmonella* adapt to a plant host?

16.30-17.00 **Stéphane Genin.**
An experimental evolution approach with the pathogen *Ralstonia solanacearum* to identify genes controlling adaptation to multiple hosts.

17.30-18.00 **Carmen Beuzón.**
Dodging the bullet: effector-mediated mechanisms of plant defence evasion in *Pseudomonas syringae*.

18.00-18.15 **Eloy Caballo-Ponce.**
Virulence and adaptation of *Pseudomonas savastanoi* to woody hosts.

18.15-20.15 Poster viewing 2.

Wednesday, October 28

Session V: Adaptation to the plant environment of plant-associated bacteria

Chairwoman: Marta Martín

9.00-9.30 **Marta Martín.**
Bacteria adaptions to the rhizosphere environment.

9.30-10.00 **Robert Jackson.**
Moving microbes - Insights to gene regulation and evolutionary rewiring of regulatory networks.

10.30-10.45 **Mateo San José.**
Characterisation of a novel *Pseudomonas viridiflava* virulence gene cluster.

10.45-11.00 **Tanya Arseneault.**
Characterizing the mechanism of biocontrol of *Streptomyces scabies*, the causal agent of potato common scab.

11.00-11.45 Concluding remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Organizers / Laurent Aussel, Carmen R. Beuzón, Eric Cascales.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W50.
The Nuclear Lamina in Health and Disease

16-18 November

Scope: The human cell nucleus is a highly organized and compartmentalized structure. The nuclear lamina is one of the major structural elements and organizers of the cell nucleus. Besides its well established architectural role, groundbreaking work over the last few years has demonstrated that the lamina and the associated nuclear envelope proteins regulate multiple cellular functions, including higher-order chromatin organization, DNA replication and repair, gene transcription, and signal transduction. Interest in the nuclear lamina has taken on added relevance in recent years with the discovery that mutations in the lamin proteins which make up the lamina, or genetic defects leading to changes in lamin abundance or post-translational processing, cause a variety of rare genetic disorders termed laminopathies. This workshop will bring together leaders in nuclear lamina research with the aim of discussing cutting-edge research in

the field which is providing a fertile ground for discoveries that are impacting the basic understanding of cellular functions, aging and disease.

Organizers: **Vicente Andrés** (Spanish National Center for Cardiovascular Research. Madrid, Spain).
Peter Askjaer (Andalusian Centre for Developmental Biology. Seville, Spain).
Tom Misteli (National Cancer Institute. Bethesda, USA).

Monday, November 16

9.00-9.15 **T. Misteli, P. Askjaer and V. Andrés.**
Welcome.

Session I: Role of the nuclear lamina in signaling and transcription
Chair: Roland Foisner

9.15-9.55 **Dennis Discher.**
Mechanosensing by Lamin-A and protecting chromatin in motility.

9.55-10.35 **Jan Lammerding.**
Nuclear envelope rupture and repair during migration through confining 3-D environments.

10.35-11.15 **Eric C. Schirmer.**
Tissue-specific nuclear envelope proteins in genome regulation and disease.

12.00-12.40 **Roland Foisner.**
Nucleoplasmic lamins regulate euchromatin in health and disease.

12.40-13.00 **Yasuhiro Hirano.**
Genome-wide analysis of the gene regulation mechanism by lamin B receptor.

13.00-13.20 **Chiara Lanzuolo.**
Lamin A/C sustains PcG proteins architecture maintaining transcriptional repression at target genes.

Session II: Regulation of nuclear architecture by lamins
Chair: Kathy L Wilson

15.30-16.10 **Bas van Steensel.**
Genome-nuclear lamina interactions in single cells.

16.10-16.50 **Peter Askjaer.**
A novel function of emerin in neuromuscular junction activity.

16.50-17.30 **Marina Lušic.**
The role of nuclear periphery in HIV-1 integration and transcription.

18.00-18.20 **Ana C. Carrera.**
Phosphoinositide 3-Kinase beta protects nuclear envelope integrity.

18.20-18.40 **Isabella Saggio.**
AKTIP (Ft1), a telomeric protein that interacts with lamin, is required for mouse survival and development.

18.40-19.00 **Abigail Buchwalter.**
Protein turnover at the nuclear periphery.

19.00 Poster viewing.

Tuesday, November 17

Session III: The nuclear lamina, aging and disease (I)
Chair: Colin L Stewart

9.00-9.40 **Gisèle Bonne.**
Gene therapy via trans-splicing for *LMNA*-related congenital muscular dystrophy.

9.40-10.20 **Susana Gonzalo.**
Beneficial effects of Vitamin D in Hutchinson-Gilford Progeria Syndrome.

10.20-10.40 **Giovanna Lattanzi.**
All-Trans retinoic acid and rapamycin rescue cell cycle dynamics in Hutchinson-Gilford progeria syndrome fibroblasts.

10.40-11.00 **Katarina Wolf.**
Control of cancer cell invasion by A- and B-type lamin-regulated nuclear deformability.

Session IV: The nuclear lamina, aging and disease (II)
Chair: Gisèle Bonne

15.30-16.10 **Vicente Andrés.**
A-type lamins and cardiovascular disease.

16.10-16.50 **Catherine Shanahan.**
Prelamin A - A novel mediator of cardiovascular ageing and dysfunction.

16.50-17.10 **Matthew J. Stroud.**
The nuclear envelope protein Luma is dispensable for normal cardiac function.

17.40-18.20 **Kathy L. Wilson.**
Lamin A hyper-*O*-GlcNAcylation as a potential laminopathy mechanism.

18.20-18.40 **Clara I. Rodríguez.**
Consequences of prelamin A accumulation in human mesenchymal stem cells: Experimental models for human lipodystrophy and aging.

18.40-19.00 **Delphine Larrieu.**
Chemical reversion of nuclear shape and other defects in laminopathic cells and HGPS mouse model.

19.00 Poster viewing 2.

Wednesday, November 18

Session V: Control of stem cell function by the nuclear lamina
Chair: Catherine Shanahan

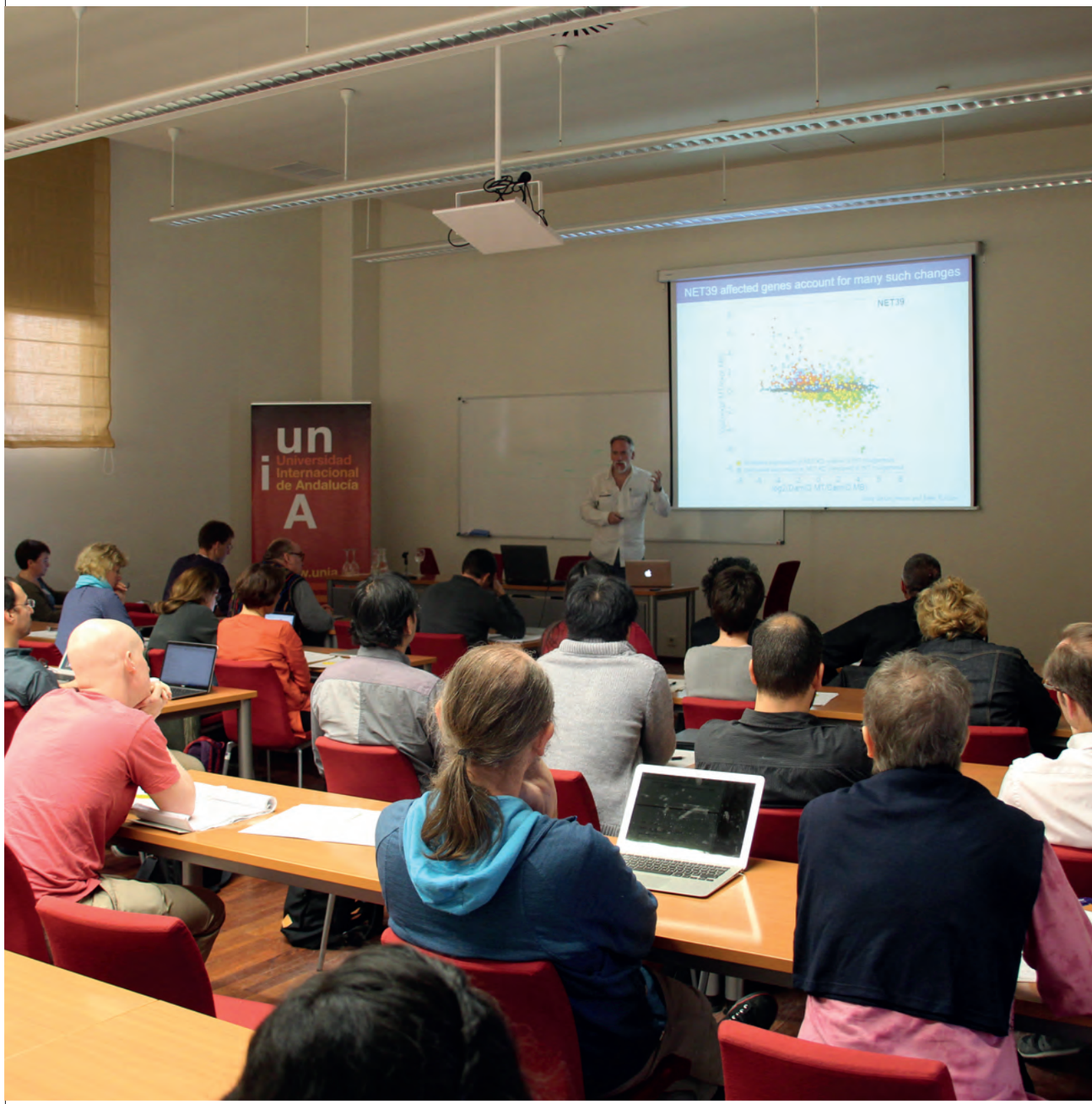
9.00-9.40 **Tom Misteli.**
Disease mechanisms in Hutchinson-Gilford Progeria Syndrome.

9.40-10.20 **Colin L. Stewart.**
Progeric mutations at the nuclear periphery.

10.50-11.30 **Juan C. Izpisúa-Belmonte.**
A Werner syndrome stem cell model unveils heterochromatin alterations as a driver of human aging.

11.30-11.45 Workshop closure.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"



Organizers / Vicente Andrés, Tom Misteli, Peter Askjaer.

Workshops *Current trends in Biomedicine* 2015

THE NUCLEAR LAMINA IN HEALTH AND DISEASE

Universidad Internacional de Andalucía

Scope

The human cell nucleus is a highly organized and compartmentalized structure. The nuclear lamina is one of the major structural elements and organizers of the cell nucleus. Besides its well established architectural role, groundbreaking work over the last few years has demonstrated that the lamina and the associated nuclear envelope proteins regulate multiple cellular functions, including higher-order chromatin organization, DNA replication and repair, gene transcription, and signal transduction. Interest in the nuclear lamina has taken on added relevance in recent years with the discovery that mutations in the lamin proteins which make up the lamina, or genetic defects leading to changes in lamin abundance or post-translational processing, cause a variety of rare genetic disorders termed laminopathies. This workshop will bring together leaders in nuclear lamina research with the aim of discussing cutting-edge research in the field which is providing a fertile ground for discoveries that are impacting the basic understanding of cellular functions, aging and disease.

Format of the Workshop

The workshop will bring together 17 speakers and a maximum of 33-35 participants, to form a group of around 50 people. The scientific programme will start in the morning of Monday, November 16th, and will end around noon on Wednesday, November 18th. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

Venue of the Workshop

The workshop will be held in Baeza, at the "Campus Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a recently restored residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

Speakers

Vicente Andrés Laboratory of Molecular and Genetic Cardiovascular Pathophysiology, Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC). Madrid, Spain.

Peter Askjaer Andalusian Center for Developmental Biology (CABD), CSIC/Junta de Andalucía/Universidad Pablo de Olavide. Sevilla, Spain.

Wendy A. Bickmore MRC Human Genetics Unit, Institute of Genetics and Molecular Medicine, University of Edinburgh. Edinburgh, UK.

Gisèle Bonne Center of Research in Myology, Sorbonne Universités, UPMC Université Paris 06, INSERM U974, CNRS FRE3617, Institut de Myologie. Paris, France.

Dennis E. Discher Molecular and Cell Biophysics Laboratory, Department of Chemical and Biomolecular Engineering / Graduate Groups in Physics and Cell & Molecular Biology; University of Pennsylvania. Philadelphia, PA, USA.

Roland Foisner Max F. Perutz Laboratories, Department of Medical Biochemistry, Medical University Vienna. Vienna, Austria.

Susana Gonzalo Department of Biochemistry and Molecular Biology, St. Louis University School of Medicine. St. Louis, MO, USA.

Martin W. Hetzer Molecular and Cell Biology Laboratory, Salk Institute for Biological Studies. La Jolla, CA, USA.

Juan Carlos Izpisúa Belmonte Gene Expression Laboratory, Salk Institute for Biological Studies. La Jolla, CA, USA.

Jan Lammerding Department of Biomedical Engineering, Weill Institute for Cell and Molecular Biology, Cornell University. Ithaca, NY, USA.

Carlos López-Otín Departamento de Bioquímica y Biología Molecular, Instituto Universitario de Oncología del Principado de Asturias, IUOPA, Universidad de Oviedo. Oviedo, Spain.

Tom Misteli National Cancer Institute, National Institutes of Health (NIH). Bethesda, MD. USA.

Eric C. Schirmer The Wellcome Trust Centre for Cell Biology and Institute of Cell Biology, University of Edinburgh. Edinburgh, UK.

Catherine M. Shanahan BHF Centre, Cardiovascular Division, King's College London. London, UK.

Colin L. Stewart Developmental and Regenerative Biology, Institute of Medical Biology / Department of Biological Sciences, NUS. Singapore.

Bas van Steensel Division of Gene Regulation, Netherlands Cancer Institute. Amsterdam, The Netherlands.

Katherine L. Wilson Department of Cell Biology, Johns Hopkins University School of Medicine. Baltimore, MD, USA.

Organized by:

Vicente Andrés
Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC). Madrid, Spain.

Peter Askjaer
Andalusian Center for Developmental Biology (CABD), CSIC/Junta de Andalucía/ Universidad Pablo de Olavide. Sevilla, Spain.

Tom Misteli
National Cancer Institute, National Institutes of Health (NIH). Bethesda, USA.

Sponsors:

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PLOS BIOLOGY

Baeza, Spain • 16th-18th November 2015

Deadline:

18th September 2015

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W51.
Chaperones in the Maintenance of Cellular Proteostasis

17-19 October

Scope: Molecular chaperones comprise a large group of proteins originally characterized as involved in assisting the folding of many proteins. However, it has become clear that their roles are much more complex and diverse, including disaggregation of aggregated species and targeting for protein degradation, among other activities. Molecular chaperones have been extensively studied at the structural and biochemical levels and their cellular role as main proteostasis regulators is well supported. Growing evidence revealing that alterations in cellular quality control underlie the pathogenic basis for severe common human neurodegenerative disorders such as Alzheimer's or Parkinson's diseases, has brought molecular chaperones back to stardom in recent years. In fact, the tight functional interactions between molecular chaperones and the cellular systems involved in protein clearance, such as the ubiquitin-proteasome system and autophagy, have

unveiled chaperones as essential components of the cellular and organismal proteostasis networks. These recent links with human diseases have propelled the vertiginous expansion that the field of molecular chaperones has undergone in recent years (> 8000 papers in the last five years). The goal of this meeting is to facilitate the communication among the different fields of research currently interested in the roles of molecular chaperones in cellular proteostasis, as well as to foment an integrated approach to defining the contribution of alterations in this process to pathological conditions and to exploring their value as potential therapeutic targets.

Organizers: **Ana María Cuervo** (Albert Einstein College of Medicine. New York, USA).
Cintia Roodveldt (Andalusian Molecular Biology and Regenerative Medicine Centre. Seville, Spain).
José María Valpuesta (National Centre for Biotechnology. Madrid, Spain).

Monday, October 17

Session I: Molecular chaperones in protein quality control
Chair: José María Valpuesta

9.00-9.40 **Ulrich Hartl.**
Molecular Chaperones in Protein Folding and Proteostasis Maintenance.

9.40 –10.20 **Douglas Cyr.**
Membrane Protein Quality Control: Roles for Hsp70 In Partitioning Nascent Membrane Proteins Between Pathways for Folding, ERAD and ERQC-Autophagy.

10.20-10.35 **Francisco Navarro.**
Bud27 influences RNA pol II, RSC remodeler complex and histone H3 recruitment to the chromatin.

10.35-10.50 **Xavier Salvatella.**
Structural basis for the assembly and disassembly of the complex formed by the androgen receptor and the molecular chaperone Hsp72.

Chair: Lila Gierasch

11.20-12.00 **Judith Frydman.**
Dissecting the aging-associated decline in cellular proteostasis.

12.00-12.40 **Harm Kampinga.**
Regulation and dysregulation of the HSP70 machine: implications for protein aggregation diseases.

12.40-12.55 **Sara Martín-Villanueva.**
The eukaryote-specific N-terminal extension of ribosomal protein S31 contributes to the assembly and function of 40S ribosomal subunits.

12: 55-13.10 **Olga Rodríguez-Galán.**
A functional interface between translation elongation and protein folding at the exit tunnel in *Saccharomyces cerevisiae*.

15.00-16.30 Poster viewing.

Session II: Molecular chaperones in protein folding
Chair: Bernd Bukau

16.30-17.10 **Johannes Buchner.**
The plasticity of the Hsp90 chaperone machinery

17.10-17.50 **José María Valpuesta.**
Structural characterisation of the chaperone Hsp70 network

17.50-18.05 **Daniel Rutz.**
Modulation of the Hsp90 chaperone cycle by a stringent client protein.

18.35-19.15 **Guillermo Montoya.**
Structure and functional analysis of human CCT.

19.15-19.55 **Lila Gierasch.**
The allosteric landscape of Hsp70 molecular chaperones.

19.55-20.10 **Irene Díaz-Moreno.**
Structural Basis for Inhibition of the Histone Chaperone Activity of SET/TAF-1β by Cytochrome *c*.

Tuesday, October 18

Session III: Molecular chaperones in protein disaggregation and degradation (I)

Chair: Ulrich Hartl

9.00-9.40 **Ana María Cuervo.**
Chaperone-mediated autophagy in the maintenance of proteostasis.

9.40-10.20 **Laura Santambrogio.**
Role of the Hsc-70 Chaperone in Endosomal Microautophagy.

10.20-10.35 **Noa Martín.**
Chaperone gathering in lymphocytes.

10.35-10.50 **María Teresa Bueno.**
Structural studies of the CCT-gelsolin complex.

Session IV: Molecular chaperones in protein disaggregation and degradation (II)

Chair: Cintia Roodveldt

15.00-15.40 **Bernd Bukau.**
Mechanism of the Hsp70 chaperone network in protein disaggregation.

15.40-16.20 **Juan Carlos Zabala.**
Tubulin folding cofactors and their role in tubulin proteostasis.

16.20-16.35 **Fernando Moro.**
Remodeling of RepE conformation by DnaK and DnaJ.

16.35-16.50 **Laura Payán-Bravo.**
Exploring the contribution of the human cochaperone prefoldin to gene expression.

17.20-18.00 **Arturo Muga.**
ClpB dynamics and activation by DnaK-substrate complexes.

18.00-18.15 **María M. Leal.**
Exogenous TDP-43 species elicit different microglial immune profiles dependent on co-stimulating chaperones.

18.15-18.30 **Xenia Peñate.**
Nuclear prefoldin interacts with the INO80 chromatin-remodelling complex.

18.30-18.45 **Sébastien Z. Causse.**
HSP110 protection of the genome against genotoxic chemotherapy.

18.45-19.00 **Begoña Sot.**
The chaperonin CCT inhibits assembly of α-synuclein amyloid fibrils by a specific and conformation-dependent interaction.

19.00-20.00 Round table.

Wednesday, October 19

Session V: Molecular chaperones, human diseases and therapeutics

Chair: Ana María Cuervo

9.00-9.40 **Cintia Roodveldt.**
Molecular chaperones and immunity in neurodegenerative proteinopathies.

9.40-10.20 **Jason Gestwicki.**
Chemical Approaches to Studying Small Heat Shock Proteins.

10.50- 11.30 **Carmen Garrido.**
HSP70-exosomes: Biomarkers for cancer patients' follow-up and Therapeutic targets.

11.30-11.45 Closing remarks.

Guided tour / Baeza.

W52.
Steps towards Personalized Therapy: Functional Genomics, Genetic Screenings and Animal Models

6-9 November

Scope: The scientific knowledge accumulated in the past ten years, together with novel resources and technology are reshaping the world of diagnosis and treatment: they bring genomics to the bedside and use the individual genomes as an important source of information to design more efficient therapies. Personalized therapy is at the crossroad of numerous disciplines. First, it requires a full understanding of our genome as for gene function, activity and regulation. Second, genes need to be linked to phenotypes and their interrelationships established. Animal models are mandatory as a way towards a deep understanding of the disease's biology, to evaluate diseases progression, test hypothesis and evaluate drugs. Finally, we need to expand our drug repertoire to be in a position to easily target any gene and pathway associated with

diseases' development. Successful and widespread personalized therapy will require the dialogue among investigators, physicians and health professionals involved in these different steps.

The main purpose of this workshop is to discuss the steps towards personalized therapy, its scientific challenges, and the avenues to pursue to transform knowledge into applications that will reformulate our health care systems. The workshop is articulated around four major topics: 1) **functional genomics** to understand diseases mechanisms, 2) **animal models** to study diseases and test response to therapies, 3) systematic analyses to identify genes associated with complex **diseases** and, 4) successful examples of **personalized therapy**.

Organizers: **Fernando Casares** (Andalusian Centre for Developmental Biology. Seville, Spain).
Marcelo A. Nóbrega (University of Chicago. Chicago, USA).
Luiz O. F. Penalva (University of Texas Health Science Center at San Antonio. San Antonio, USA).

Monday, November 7

Session I: Computational biology, bioinformatics and Genomics (I)
Chair: B Deplancke

9.30-10.10 **Stein Aerts.**
Decoding regulatory landscapes in cancer.

10.10-10.50 **Pedro A. F. Galante.**
Genomic variations in personalized medicine.

11.30-12.10 **Rainer Spang.**
Molecular Profiles, Reference Points, Zero-Sum Regression and Personalized Medicine.

12.10-12.25 **Marcia Santos.**
miRNA-X expression is altered in CSF of early stage Parkinson's disease patients and has a potential applicability as a diagnostic biomarker.

12.25-12.40 **Raquel Rouco.**
Functional genomics of Atrial Fibrillation.

Session I: Computational biology, bioinformatics and Genomics (II)
Chair: F Casares

14.30-15.10 **Vishy Iyer.**
Non-coding somatic mutations and epigenetic regulatory variation in the glioblastoma genome.

15.10-15.50 **Luiz O. Penalva.**
Post-transcriptional mechanisms in glioblastoma development.

Session II: Genetics and biomarker discovery
Chair: S Aerts

16.30-17.10 **Michael A. Hauser.**
Pathogenesis of exfoliation glaucoma: dysregulation of LOXL1 and a long noncoding RNA in the same locus.

17.10-17.50 **Marcelo A. Nóbrega.**
An integrative platform to uncover the mechanisms of the association of TCF7L2 and type-2 diabetes.

17.50-18.30 **Bart Deplancke.**
Understanding and predicting complex phenotypes using genetic and molecular data.

Tuesday, November 8

Session III: Therapy and diagnosis
Chair: L. O. Penalva

9.30-10.10 **Elizabeth R. Hauser.**
Functional follow-up and interpretation of gene-by-environment (GXE) interactions in the genetic analysis of cardiovascular disease.

10.10-10.50 **Maurizio Ceppi.**
NGS as part of an integrated approach for drug development.

10.50-11.30 **Raquel Seruca.**
E-cadherin, much more than an adhesion molecule. Cancer-causing CDH1 missense mutations as a model system.

15.00-15.15 **Martin Kerick.**
Copy Number Variation in Systemic Sclerosis.

15.15-15.30 **José M. Santos-Pereira.**
Uncovering novel therapeutic targets for p63-related hereditary malformations.

15.30-15.45 **Christine B. Beuschel.**
Memory in aging flies.

15.45-16.45 Open discussion.
Partnership academia and pharma towards personalized therapy.

16.45-18.45 Poster viewing.

Wednesday, November 9

Session IV: Diseases model
Chair: M Nóbrega

9.00-9.40 **Alysson Renato Muotri.**
Modeling the human social brain with stem cells. Epigenomic analyses.

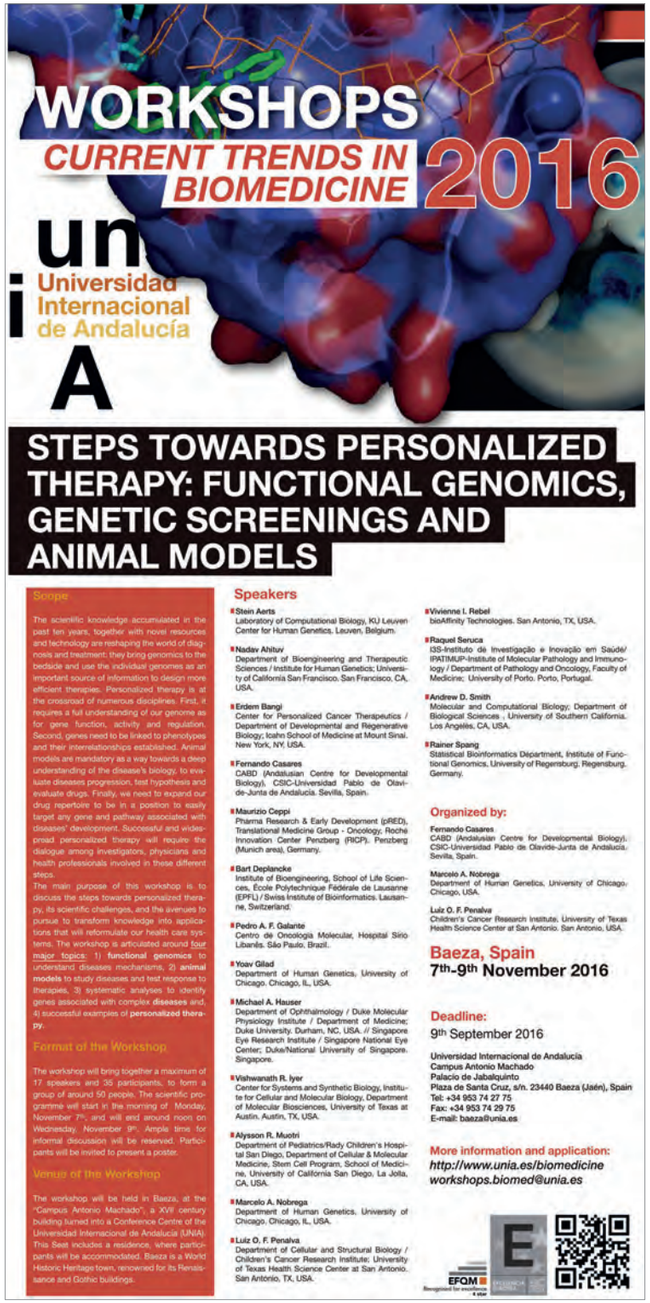
9.40 -10.20 **Nadav Ahituv.**
Functional Characterization of Gene Regulatory Elements.

10.20-11.00 **Fernando Casares.**
Dysregulation of progenitor proliferation induced by hth/Meis1 and tsh/Tshz.

11.00-11.40 **Erdem Bangi.**
Personalized cancer therapeutics using *Drosophila*.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Guide tour / Palacio de Jabalquinto.



WORKSHOPS
CURRENT TRENDS IN BIOMEDICINE 2016

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STEPS TOWARDS PERSONALIZED THERAPY: FUNCTIONAL GENOMICS, GENETIC SCREENINGS AND ANIMAL MODELS

Scope

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Format of the Workshop

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Venue of the Workshop

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Speakers

- **Stein Aerts**
  Laboratory of Computational Biology, KU Leuven Center for Human Genetics. Leuven, Belgium.
- **Nadav Ahituv**
  Department of Bioengineering and Therapeutic Sciences / Institute for Human Genetics; University of California San Francisco. San Francisco, CA, USA.
- **Erdem Bangi**
  Center for Personalized Cancer Therapeutics / Department of Developmental and Regenerative Biology; Icahn School of Medicine at Mount Sinai. New York, NY, USA.
- **Fernando Casares**
  CABD (Andalusian Centre for Developmental Biology), CSIC-Universidad Pablo de Olavide-Junta de Andalucía. Sevilla, Spain.
- **Maurizio Ceppi**
  Pharma Research & Early Development (pRED), Translational Medicine Group - Oncology, Roche Innovation Center Penzberg (RICP), Penzberg (Munich area), Germany.
- **Bart Deplancke**
  Institute of Bioengineering, School of Life Sciences, École Polytechnique Fédérale de Lausanne (EPFL) / Swiss Institute of Bioinformatics. Lausanne, Switzerland.
- **Pedro A. F. Galante**
  Centro de Oncologia Molecular, Hospital Sirio Libanês. São Paulo. Brazil..
- **Yoav Gilad**
  Department of Human Genetics, University of Chicago. Chicago, IL, USA.
- **Michael A. Hauser**
  Department of Ophthalmology / Duke Molecular Physiology Institute / Department of Medicine; Duke University. Durham, NC, USA. // Singapore Eye Research Institute / Singapore National Eye Center; Duke/National University of Singapore. Singapore.
- **Vishwanath R. Iyer**
  Center for Systems and Synthetic Biology, Institute for Cellular and Molecular Biology, Department of Molecular Biosciences, University of Texas at Austin. Austin, TX, USA.
- **Alysson R. Muotri**
  Department of Pediatrics/Rady Children's Hospital San Diego; Department of Cellular & Molecular Medicine, Stem Cell Program, School of Medicine, University of California San Diego. La Jolla, CA, USA.
- **Marcelo A. Nobrega**
  Department of Human Genetics, University of Chicago. Chicago, IL, USA.
- **Luiz O. F. Penalva**
  Department of Cellular and Structural Biology / Children's Cancer Research Institute; University of Texas Health Science Center at San Antonio. San Antonio, TX, USA.
- **Vivienne I. Rebel**
  bioAffinity Technologies. San Antonio, TX, USA.
- **Raquel Seruca**
  I3S-Instituto de Investigação e Inovação em Saúde/ IPATIMUP-Institute of Molecular Pathology and Immunology / Department of Pathology and Oncology, Faculty of Medicine; University of Porto. Porto, Portugal.
- **Andrew D. Smith**
  Molecular and Computational Biology; Department of Biological Sciences , University of Southern California. Los Angeles, CA, USA.
- **Rainer Spang**
  Statistical Bioinformatics Department, Institute of Functional Genomics, University of Regensburg. Regensburg, Germany.

Organized by:

Fernando Casares
CABD (Andalusian Centre for Developmental Biology), CSIC-Universidad Pablo de Olavide-Junta de Andalucía. Sevilla, Spain.

Marcelo A. Nobrega
Department of Human Genetics, University of Chicago. Chicago, USA.

Luiz O. F. Penalva
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Baeza, Spain
7th-9th November 2016

Deadline:
9th September 2016

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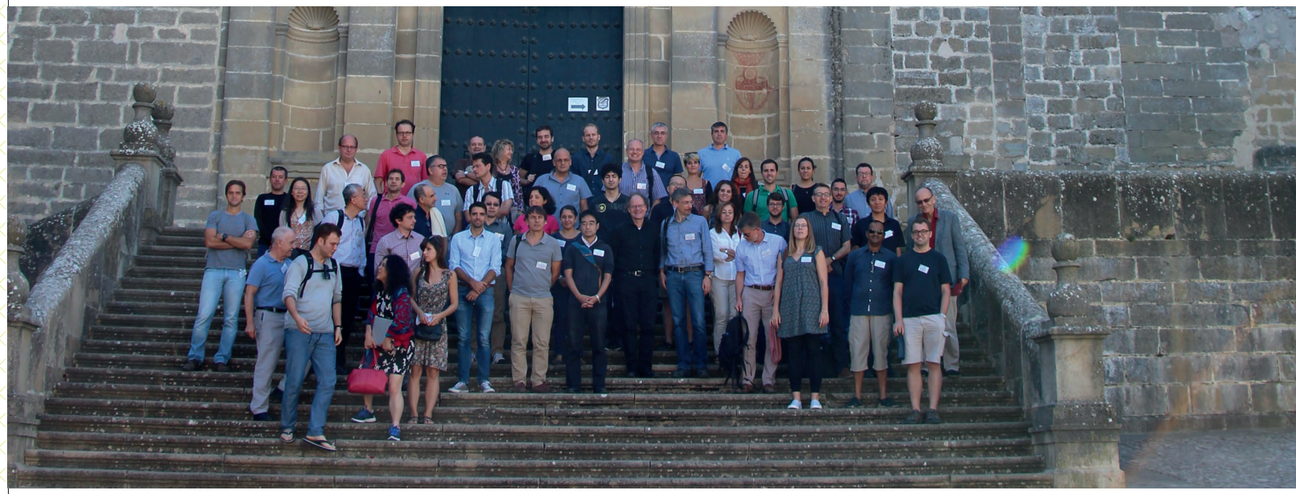


W53.
Synapse Formation, Specification and Elimination: From Molecules to Circuits

25-27 September

Scope: Precise patterns of synaptic connections between neurons characterize the nervous system organization. Nevertheless, the molecular mechanisms mediating synapse formation and elimination, the specification of synapse diversity and the processes underlying the assembly of synapses to sculpt neural circuits are not well understood yet. The direct implication of those processes in major psychiatric disorders such as autism or schizophrenia demand a deeper understanding of neural circuit assembly mechanisms to be able to design therapeutic tools. Almost twenty-five years ago, the molecular diversity of cell surface molecules was postulated to impart the specific neuronal surface properties required for differential cell-cell recognition. Currently, a major scientific challenge is to answer key questions on the role of those

molecules in synaptic formation and specification of synaptic diversity: How synaptic cell surface proteins mediate specific connections of presynaptic and postsynaptic neurons at synapses? How those proteins mediate trans-synaptic signaling across the synapse? How do specific synaptic functions shape the properties of neural circuits? On the other hand, the proper final assembly of functional neural circuits requires axon and dendrite pruning, which in most of the cases involves synapse elimination by molecular mechanisms not well understood yet. Synapse elimination is somehow linked to synapse loss that correlates with cognitive decline and it is a hallmark for neurodegenerative diseases such as Alzheimer's disease. This workshop will tackle those questions by bringing together internationally recognized investigators with different and multidisciplinary expertise in the study of multiple aspects of the molecular mechanisms of synaptic assembly and remodeling of circuits.

Organizers: **Rafael Fernández-Chacón** (Institute of Biomedicine of Seville. Seville, Spain).
Thomas C. Südhof (Stanford University School of Medicine. Stanford, USA).

Sunday, September 24

21.30-23.00 **Thomas C. Südhof and Rafael Fernández-Chacón.**
Round Table on Synapse Formation, Specification and Elimination: Key Questions.

Monday, September 25

Session I: Dynamics of synaptic structure and circuits
Chair: Thomas C Südhof

9.00-9.35 **Thomas Biederer.**
Topography and dynamics of the synaptic cleft.

9.35-10.10 **Scott Soderling.**
Molecular Analysis of Postsynaptic Inhibition.

10.10-10.45 **Nils Brose.**
Formation and Maintenance of Functional Spines in the Absence of Presynaptic Glutamate Release.

11.15-11.50 **Rafael Fernández-Chacón.**
Maintenance of inhibitory presynaptic terminals: mechanisms and consequences upon its failure.

11.50-12.10 **Yi E. Sun.**
Using single cell transcriptome analyses to study neural development.

12.10-12.30 **Özgün Gökçe.**
Beyond the D1/D2 receptor dichotomy in basal ganglia circuits.

12.30-12.45 **Pablo García-Junco-Clemente.**
Functional connectivity in frontal cortex revealed by *in vivo* large-scale network imaging.

13.00-13.30 Official Inauguration of the 2017 Workshop Series.

Session II: Circuit assembly and remodeling
Chair: Lawrence Zipursky

16.00-16.35 **Oliver Hobert.**
Shaping the sexually dimorphic connectome of the nematode *C. elegans*.

16.35-17.10 **Yishi Jin.**
Neuronal circuit remodeling in *C. elegans*.

17.10-17.25 **Ben Mulcahy.**
The ultrastructural sequence of events during developmental remodelling of the *C. elegans* motor circuit.

17.55-18.30 **Liqun Luo.**
Genetic Dissection of Neural Circuit Assembly.

18.30-18.50 **Artur Llobet.**
Tight temporal coupling between synaptic rewiring of olfactory glomeruli and the emergence of odour-guided behaviour in *Xenopus* tadpoles.

18.50-19.10 **Frank Schmitz.**
A CASPR1/contactin1-containing cellular adhesion complex at retinal ribbon synapses is an early target in experimental autoimmune encephalitis (EAE), a mouse model of multiple sclerosis.

19.10-19.25 **Elizabeth Zúñiga-Sánchez.**
Dissecting Mouse Retina Development with RNA-seq and CRISPR.

19.25-19.40 **M. Neşet Özel.**
Synaptic Capture: Synapse formation stabilizes filopodial dynamics in *Drosophila* brain development.

19.40-19.55 **Julio Franco.**
Role of SMN in Synapse Maturation.

Tuesday, September 26

Session III: Trans-synaptic signaling in circuit sculpting (I)
Chair: Nils Brose

9.00-9.35 **Thomas C. Südhof.**
The Molecular Logic of Neural Circuits: Role of Cell-Adhesion Molecules Such as Neurexins and Latrophilins.

9.35-10.10 **Eunjoon Kim.**
Netrin-G ligands (NGLs) in the regulation of synapse function and specific behaviors.

10.10-10.45 **Jean-Louis Bessereau.**
Bridging extra- and intracellular synaptic scaffolds.

10.45-11.05 **Markus Missler.**
Calcium channel auxiliary subunits team up with α-neurexins to regulate Ca^{2+} influx and release.

11.05-11.20 **Elizabeth C. Davenport.**
An essential role for the tetraspanin LHFPL4 in the cell type-specific targeting and clustering of synaptic $GABA_A$ receptors.

15.00-16.00 Poster viewing 2.

Session IV: Trans-synaptic signaling in circuit sculpting (II)
Chair: Yishi Jin

16.00-16.35 **Lawrence Zipursky.**
Dpr and DIP Ligand/Receptor Pairs Regulate Circuit Development in the *Drosophila* Visual System.

16.35-17.10 **P. Robin Hiesinger.**
Simple Rules in Neural Circuit Assembly.

17.10-17.45 **Chen Zhang.**
The identification of Protein tyrosine phosphatase receptor type O (PTPRO) as a synaptic adhesion molecule that promotes synapse formation.

18.15-18.50 **Alex Kolodkin.**
Neuropilin-2/PlexinA3 Receptors Associate with GluA1 and Mediate Sema3F-dependent Homeostatic Scaling in Cortical Neurons.

19.00-19.15 **Sergio Gascón.**
Neuronal LRP4 Regulates Synapse Formation in the Developing CNS.

19.15-19.30 **Richard Sando.**
Signaling via the adhesion GPCR Latrophilins regulates excitatory synapse formation and specificity in the hippocampus.

19.30-19.45 **Fredrik H. Sterky.**
Post-translational Regulation of Neurexins by Carbonic Anhydrase Related Protein CA10.

19.45-20.00 **Àlex Bayés.**
Postsynaptic proteome of the hippocampal trisynaptic circuit.

20.00-20.15 **Daniel Enterría-Morales.**
Insights into the striatal parvalbumin neurons: towards a specific stimulation of GDNF to protect the nigrostriatal dopaminergic neurons.

Wednesday, September 27

Session V: Molecular diversity, synapse specification and mental disorders
Chair: Rafael Fernández-Chacón

9.00-9.35 **Peter Scheiffele.**
Alternative splicing programs for synapse specification and neuronal plasticity.

9.35-10.10 **Davide Comoletti.**
Structural and functional insights into neuronal connectivity.

10.10-10.30 **Francisco G. Scholl.**
Second genetic hits in synaptic adhesion proteins in autism.

10.30-10.50 **Takuma Mori.**
Down-regulation of Calcium/calmodulin-dependent serine protein kinase (CASK) disrupts excitatory-inhibitory balance of synapses by down-regulation of GluN2B.

11.20-11.35 **Mathieu Letellier.**
A unique tyrosine residue in the intracellular domain of neuroligin-1 regulates excitatory versus inhibitory synapse differentiation.

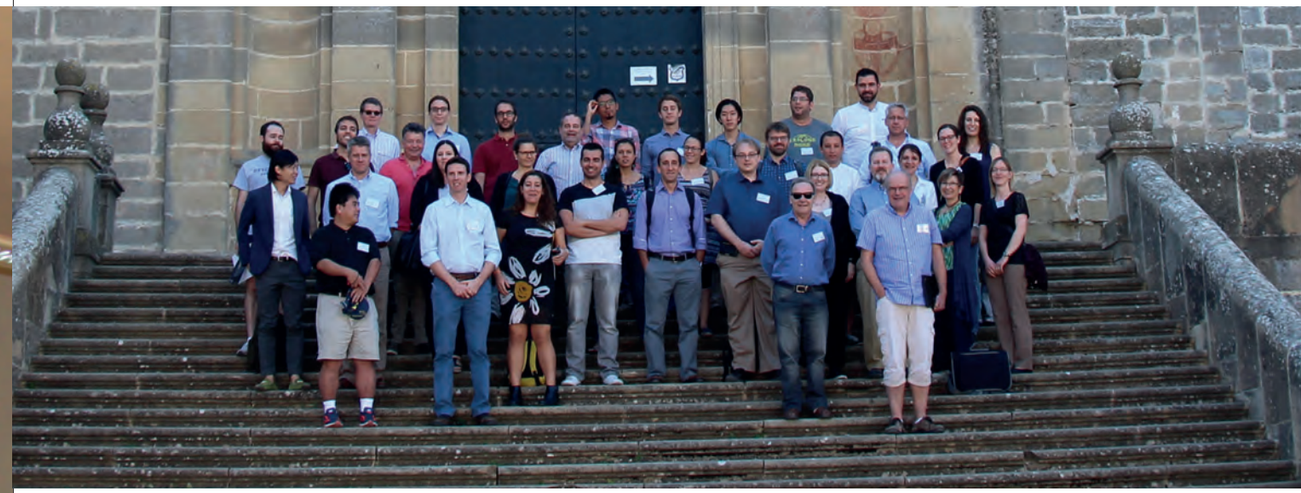
11.35-11.50 **Raquel Sánchez-Varo.**
Abeta from APP/PS1 Alzheimer mice hippocampus induced synaptic damage *in vivo* and *in vitro*.

11.50-12.00 Concluding remarks.

Inauguration / Organizer Rafael Fernández-Chacón, Vice-chancellor M. Ángeles Peinado Herreros, organizer Thomas C. Südhof, Major of Baeza Lola Marín.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Tribute to Nobel Prize Thomas C. Südhof at City Hall of Baeza.



W54.
Understanding the Beneficial Role of the Microbiota in Animals and Plants

9-11 October

Scope: Plant roots and mucosal surfaces of animals are colonized by complex and diverse microbial communities that include bacteria, archaea, fungi, viruses and protozooa (microbiota). In both animal and plants, the microbiota contribute to many beneficial processes in the host including nutrition acquisition, optimal cellular development and defense against pathogenic microbes. Thus, the microbiota living in association or within animal and plants play an important role in several physiological activities required for host survival and prevention of disease. The goal of this workshop is to bring together the world's leading scientists working on the microbiome in animal and plants to present and discuss cutting edge research in their fields. In addition, an important goal of the meeting will be to compare and discuss

mechanistic aspects of the microbiota in animal and plants to foster cross-fertilization and collaborations across both fields.

Organizers: **Gabriel Núñez** (University of Michigan Medical School. Ann Arbor, USA).
Paul Schulze-Lefert (Max Planck Institute for Plant Breeding Research. Cologne, Germany).

Monday, October 9

09.00-09.15 **María Ángeles Peinado Herreros, Vice-Chancellor of the Campus Antonio Machado, UNIA.**
Welcome address.
Opening of the Workshop by the organizers.

Session I: Genetic and environmental factors controlling host-microbiota interactions
Chair: Gabriel Núñez

9.15-9.45 **Paul Schulze-Lefert.**
Plant microbiota assembly and functions in plant health.

10.15-10.45 **Simona Radutoiu.**
Nod factor recognition at root epidermis and its impact on microbiota assembly in *Lotus japonicus*.

11.15-11.45 **Eran Elinav.**
Host microbiome interactions in health and disease.

11.45-12.00 **Paloma Durán.**
Dissecting the multispecies interaction network at the *Arabidopsis* root-soil interface.

12.00-12.15 **Lisa Pöltl.**
Effects of the human microbiota resident *K. oxytoca* and its metabolites on colorectal cancer.

Session II: Metabolic functions of the microbiota

16.00-16.30 **Michael Fischbach.**
Small molecules from the human microbiota.

16.30-17.00 **Jos M. Raaijmakers.**
Mining the endophytic microbiome for beneficial consortia, novel biosynthetic genes and secondary metabolites.

17.00-17.15 **Rachael Chanin.**
Oxygen utilization during intestinal inflammation provides an advantage for *E. coli*.

17.45-18.15 **Christine Vogel.**
The leaf microbiota: disassembling and rebuilding to explore plant microbe interactions.

18.15-18.30 **Mohamed Hassani.**
Competitive interbacterial interactions within the *Arabidopsis* root microbiota.

18.45 Poster viewing.

Tuesday, October 10

Session III: Microbiota-pathogen interactions at mucosal surfaces
Chair: Renée Tsolis

9.00-9.30 **Eric Pamer.**
Microbiota-mediated defense against intestinal infection.

9.30-10.00 **Gabriel Núñez.**
Control of Pathogen Colonization by Host Immunity and the Microbiota in the Gut.

10.00-10.15 **Michael C. Abt.**
Host immune response supports fecal microbiota trans-plant-mediated clearance of *Clostridium* difficile infection.

10.45-11.15 **Paola Bonfante.**
Looking at the plant side: plant crop responses to symbiotic fungi and native microbial communities.

11.15-11.45 **Andreas Bäumler.**
Microbiota-activated PPAR-gamma-signaling maintains gut homeostasis by thwarting dysbiotic *Enterobacteriaceae* expansion.

Session IV: Microbiota-immune system interactions
Chair: Paul Schulze-Lefert

16.00-16.30 **Renée Tsolis.**
Effects of malaria on gut microbiota-mediated protection against infection with enteric pathogens.

16.30-17.00 **Naohiro Inohara.**
Role of bacteria/protozoa interactions in intestinal disease.

17.00-17.15 **Tatsuya Nobori.**
In host bacterial transcriptome reveals pathogen genes under the control of plant immunity.

17.45-18.15 **Eric Martens.**
The diet-microbiota-mucus layer axis as a mediator of intestinal health and disease.

18.15-18.45 **Sebastian Winter.**
Precision editing of the gut microbiota ameliorates colitis.

18.50 Poster viewing 2.

Wednesday, October 11

Session V: Additional animal models of microbiota-host interactions

Chair: Eric Pamer

9.00-9.30 **Sebastian Fraune.**
Cnidarian holobionts: a deep crosstalk between host and bacteria.

9.30-10.00 **Luis Teixeira.**
Natural host-microbiome interactions in *Drosophila*: from defensive endosymbionts to gut microbiota.

10.00-10.15 **Ana Rodiles.**
The impact of sea lice *(Caligus rogercresseyi)* parasitism on the mucosal microbiota of Atlantic salmon *(Salmo salar)* in Chile.

10.15 Roundtable for general discussion, summing up and prospects.

11.00 Concluding remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

Inauguration / Organizer Paul Schulze-Lefert, Vice-chancellor M. Ángeles Peinado Herreros, organizer Gabriel Núñez.

Dr. José López-Barneo and Rector Eugenio Domínguez (2017).

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W55.
Noncoding RNA-Mediated Metabolic Regulation in Health and Disease

6-8 November

Scope: Work over the last decade has identified the important role of non-coding RNAs in regulating metabolism. Alterations in non-coding RNA expression have been associated to metabolic diseases including dyslipidemia, cardiovascular disease, organ fibrosis, diabetes and obesity. The current reductionist notion distinguishes between long non-coding RNA molecules (lncRNAs, composed by > 200 nucleotides, ribosomal RNAs and others) and small non-coding RNAs, which include transfer, nucleolar and microRNAs (miRNAs). By far, miRNAs are the most well-known and best studied in diverse biomedical contexts even though the availability of next-generation sequencing techniques is allowing to progressively identify and functionally decipher a growing number of lncRNAs. MiRNAs are small non-coding RNA molecules (22 nt) that control gene expression at the post-transcriptional level by affecting mRNA stability and/or

translation. LncRNAs regulate gene expression by sequestering endogenous miRNAs (miRNA sponges), activating or inhibiting gene transcription (scaffold of transcription factors) and scaffold linking proteins. Interestingly, recent reports have shown that lncRNAs can encode coding sequences that are translated into small peptides (micro-peptides) with significant biological functions. MiRNAs are also highly abundant in exosomes, regulating paracrine signaling via transfer of miRNAs between neighboring cells and serving as biomarkers for cardiovascular and metabolic diseases. This workshop provides a unique forum for the exchange of critical new and unpublished developments in the field among participants at all levels of experience including word-leaders in the field. We are covering different topics from basic aspects of RNA biology to novel RNA-based therapeutic approaches for metabolic disturbances including dyslipidemia, cardiovascular disease, organ fibrosis, diabetes and obesity.

Organizers: **Carlos Fernández-Hernando** (Yale University School of Medicine. New Haven, USA).
Santiago Lamas (Centre for Molecular Biology "Severo Ochoa". Madrid, Spain).

Monday, November 6

9.20-9.30 **María Ángeles Peinado Herreros, Vice-Chancellor of the Campus Antonio Machado, UNIA.**
Welcome address.
Opening of the Workshop by the organizers.

Session I: Non-coding-RNA in cancer and aging
Chair: Markus Stoffel

9.30-10.10 **Frank J. Slack.**
miRNAs as biomarkers of aging.

10.10-10.50 **Myriam Gorospe.**
Control of cell senescence by noncoding RNPs.

10.50-11.05 **Julia Ramírez-Moya.**
DICER1 and miRNA downregulation induce an aggressive behaviour in thyroid cancer cells.

11.30-12.10 **Andrea Ventura.**
From miRNAs to crRNAs: exploiting small non-coding RNAs to understand cancer and development.

12.10-12.50 **Manel Esteller.**
Epigenetics and Epitranscriptomics of Non-Coding RNAs in Human Cancer.

12.50-13.05 **Christian Bär.**
A large shRNA library approach identifies lncRNA *Ntep* as an essential regulator of cell proliferation.

15.30-17.30 Poster viewing.

Session II: Non-coding RNAs in cardiovascular disease
Chair: Carlos Fernández-Hernando

19.20-20.00 **Eva van Rooij.**
Enhancing cardiac delivery of RNA therapeutics.

20.00-20.15 **Magda R. Hamczyk.**
The role of microRNAs in heart disease in Hutchinson-Gilford progeria syndrome.

Tuesday, November 7

Session III: Non-coding RNAs in inflammation and vascular biology

9.00-9.40 **Almudena Ramiro.**
microRNAs and B cell Lymphomagenesis.

9.40-10.20 **Manuel Mayr.**
VLDL associated apolipoproteins predict cardiovascular events and are associated with liver-specific miR-122.

10.20-10.35 **Xurde M. Caravia.**
The microRNA-29/PGC1α regulatory axis is critical for metabolic control of cardiac function.

10.35-10.50 **Alejandro Fulgencio-Covián.**
Potential role of miRNAs in the development of cardiomyopathies in propionic acidemia.

10.50-11.05 **Ileana Badi.**
MicroRNA-34a modulates vascular calcification.

11.05-11.20 **Virginia G. de Yébenes.**
The age-associated microRNA miR-217 impairs endothelial function *in vivo*.

15.30-17.30 Poster viewing 2.

Session IV: Non-coding RNA in organ fibrosis
Chair: Myriam Gorospe

18.00-18.40 **Jeremy Duffield.**
MicroRNAs as attractive therapeutic targets in disease.

18.40-19.20 **Santiago Lamas.**
The role of microRNAs in metabolic dysregulation related to renal fibrosis.

19.20-19.35 **Elena Garreta.**
Enhancer-associated noncoding RNAs in human pluripotent stem cells differentiation towards the renal fate.

19.35-19.50 **Temo Barwari.**
MicroRNA-21 Regulates Transforming Growth Factor Beta-1 Release from Platelets.

19.50-20.05 **Rafael Blanco-Domínguez.**
Extracellular hsa-miRNA-Chr8:96 as a unique biomarker for diagnosis of acute myocarditis patients.

Wednesday, November 8

Session V: Non-coding RNAs in obesity, insulin resistance and lipid metabolism
Chair: Manuel Mayr

9.00-9.40 **Markus Stoffel.**
miRNA function in pancreatic b-cell.

9.40-10.20 **Jan-Wilhelm Kornfeld.**
De.Coding obesity - Control of liver metabolism by the long noncoding RNome.

10.20-10.35 **Matilde Bustos.**
Role of Cardiotrophin-1 (CT-1) on macrophage polarization: Molecular mechanism for CT-1-dependent M2 macrophage polarization.

11.00-11.40 **Carlos Fernández-Hernando.**
miRNA regulation of lipid metabolism, obesity and atherosclerosis.

11.40-11.55 **Yuan Guo.**
The Chromatin remodelling complex B-WICH is required for DNA Pol I transcriptional activation by glucose stimulation.

11.55-12.05 **Santiago Lamas and Carlos Fernández-Hernando.**
Closing remarks.

Rector José Sánchez Maldonado.

Organizers / Santiago Lamas, Carlos Fernández-Hernando.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W56.
Chromosomal Instability: From Molecular Mechanisms to Disease

13-15 November

Scope: The fidelity in chromosome maintenance and segregation are indispensable to maintain genomic stability and the perpetuation of life as we know it. A cell that fails in such processes will end up with an aberrant set of chromosomes, and this may lead to different types of diseases. *Chromosomal Instability (CIN)* is the gain and/or loss of whole chromosomes or chromosomal segments. There are a variety of human diseases directly related to *Chromosomal Instability*. Most diseases related to *CIN* share a high susceptibility to develop cancer, and in certain cases, premature ageing. Thus, the study of the causes and consequences of *CIN* has become one of the leading fields in biomedical research in the last years. *Chromosomal Instability* accounts for different types of chromosomal alterations: **Aneuploidy**, which stands for numerical alterations of chromosomes in a given cell; **Chromosomal Rearrangements**, where chromosomes become broken, and the resultant chromosomal

fragments are either fused to other chromosomes, rearranged, or simply gained or lost into a cell; and **Chromothripsis**, the generation of highly rearranged chromosomes from a single catastrophic event. The goal of this Workshop is to bring together experts in **DNA repair** and **chromosome segregation** in order to address the phenomenon of *CIN* as a whole and facilitate the communication between scientists from different fields to foster cross disciplinary approaches.

Organizers: **Guillermo de Cárcer** (Spanish National Cancer Research Centre. Madrid, Spain).
Pablo Huertas (Andalusian Molecular Biology and Regenerative Medicine Centre. Seville, Spain).
Andrés J. López-Contreras (University of Copenhagen. Copenhagen, Denmark).

Monday, November 13

9.00-9.15 **María Ángeles Peinado Herreros, Director of the "Sede Antonio Machado", UNIA.**
Welcome address.

9.15-9.30 **Guillermo de Cárcer.**
Welcome.

Session I: DNA Replication and Replicative Stress
Chair: Andrés J López-Contreras

9.30-10.00 **Ian Hickson.**
Defining how problematic DNA replication impacts on chromosome segregation.

10.00-10.30 **Belén Gómez-González.**
Understanding R loop-mediated genome instability: a new role for histones and chromatin modifications.

10.30-11.00 **Ralf Wellinger.**
Cell Cycle Progression and Nucleolar Organization is Perturbed in Cells Lacking RNase H Activities.

11.30-12.00 **André Nussenzweig.**
Genome Organization Drives Chromosome Fragility.

12.00-12.30 **Óscar Fernández-Capetillo.**
Coordinating DNA Replication Termination with Mitotic Entry.

12.30-13.00 **Ying Liu.**
Folic Acid Deficiency Induces Anaphase DNA Bridges at the Fragile X Locus.

15.30-17.00 Poster viewing.

Session II: DNA Damage and DNA Repair
Chair: Óscar Fernández-Capetillo

17.30-18.00 **Pablo Huertas.**
The regulation of the repair of DNA breaks in a global cellular context.

18.00-18.30 **Evi Soutoglou.**
Fundamental differences in spatial regulation of Double Strand break Repair in mouse and human pericentric heterochromatin.

18.30-19.00 **Travis Stracker.**
The role of the Tousled like kinases in genome and epigenome stability.

19.00-19.20 **Stephanie Munk.**
The Kinase Landscape of the DNA damage response.

19.20-19.40 **Teresa Anglada.**
Delayed DNA-DSBs repair in aged women

Tuesday, November 14

Session III: Mitotic Alterations and Aneuploidy
Chair: Guillermo de Cárcer

9.00-9.30 **Helder Maiato.**
Chromosome (mis)segregation is biased by kinetochore size.

9.30-10.00 **Robert Benezra.**
TRIP13 is a Critical Regulator of Mitotic Duration and Proliferation in Mad2 Overexpressing Cells.

10.00-10.30 **Grzegorz Nalepa.**
FANCA fine-tunes chromosome segregation by controlling $BUBR1^{K250}$ acetylation at the kinetochores.

10.30-11.00 **Zuzana Storchová.**
Genome instability in response to the presence of extra chromosomes.

15.30-17.00 Poster viewing 2.

Session IV: Chromosome Cohesion and Segregation
Chair: Robert Benezra

17.30-18.00 **Guillermo de Cárcer**
Plk1 Overexpression Suppresses Tumor Development by Inducing Chromosomal Instability.

18.00-18.30 **Rocío Sotillo**
Overexpression of either Mad2 or Plk1 induces chromosome instability and suppresses mammary tumor development although through different mechanisms.

18.30-18.50 **Mónica Álvarez-Fernández**
Functions of Greatwall-PP2A/B55 pathway in mammals: a new role in chromosome clustering during mitosis.

18.50-19.10 **Abderrahmane Kaidi**
Imaging chromatin dynamics reveals nuclear F-actin regulation of genome organisation and stability after mitosis.

19.10-19.40 **Andrés J. López-Contreras**
PICH is essential for early embryonic development

19.40-20.00 **Manuel Eguren**
Chromosome segregation in preimplantation mouse embryos.

Wednesday, November 15

Session V: Chromosomal Instability in Disease & Ageing
Chair: Pablo Huertas

9.00-9.30 **Floris Foijer**
Aneuploidy and copy number heterogeneity in cancer and other ageing-associated disease.

9.30-10.00 **María Nieto-Soler**
Exploring mechanisms for chromatin shattering in mitosis.

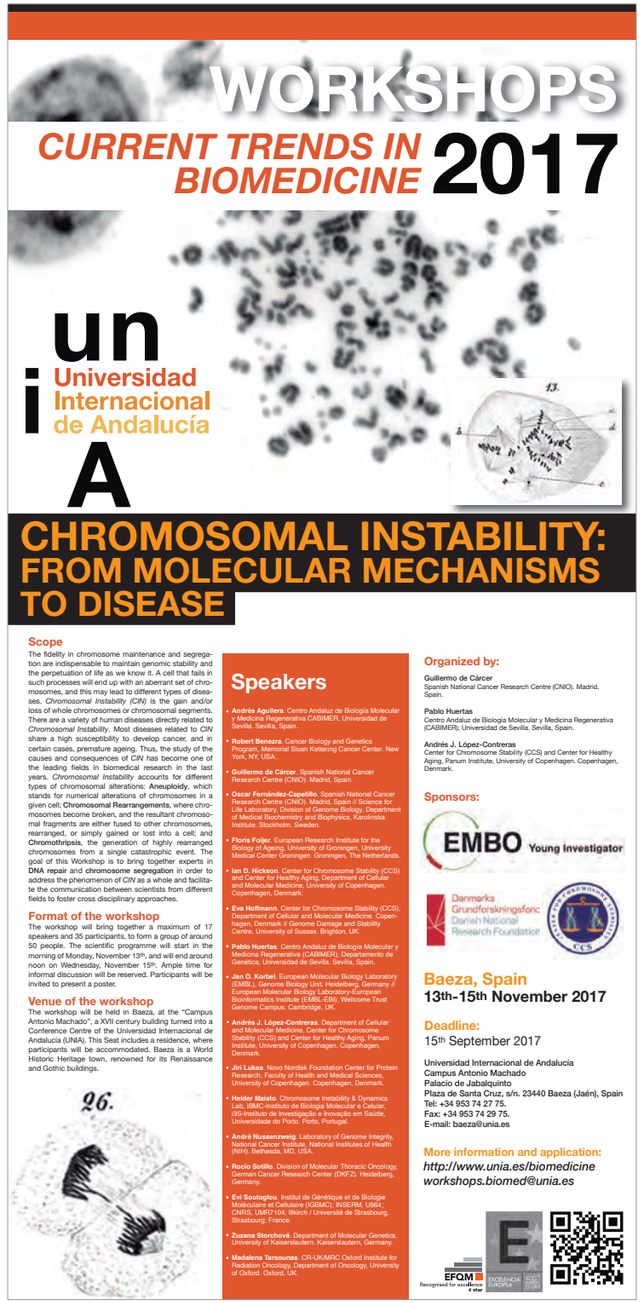
10.00-10.20 **Cristina Mayor-Ruiz**
Trap^{Seq}: An RNA Sequencing-Based Pipeline for the Identification of Gene-Trap Insertions in Mammalian Cells.

10.20-10.40 **Fernando Gómez-Herreros.**
Oncogenic Chromosomal Translocations Induced by DNA topoisomerase II During Gene Transcription.

10.40-11.10 **Fernando Monje-Casas**
Reversal of the predetermined pattern of MTOC distribution during the asymmetric cell division of budding yeast accelerates cellular aging

11.10-11.30 **Guillermo de Cárcer, Pablo Huertas and Andrés J. López-Contreras**
Closing Remarks.

Organizers / Pablo Huertas, Guillermo de Cárcer, Andrés J. López-Contreras.



WORKSHOPS

CURRENT TRENDS IN BIOMEDICINE 2017

Universidad Internacional de Andalucía

CHROMOSOMAL INSTABILITY: FROM MOLECULAR MECHANISMS TO DISEASE

Scope

The fidelity in chromosome maintenance and segregation are indispensable to maintain genomic stability and the perpetuation of life as we know it. A cell that fails in such processes will end up with an aberrant set of chromosomes, and this may lead to different types of diseases. *Chromosomal Instability (CIN)* is the gain and/or loss of whole chromosomes or *chromosomal* segments. There are a variety of human diseases directly related to *Chromosomal Instability*. Most diseases related to *CIN* share a high susceptibility to develop cancer, and in certain cases, premature ageing. Thus, the study of the causes and consequences of *CIN* has become one of the leading fields in biomedical research in the last years. *Chromosomal Instability* accounts for different types of chromosomal alterations: **Aneuploidy**, which stands for numerical alterations of chromosomes in a given cell; **Chromosomal Rearrangements**, where chromosomes become broken, and the resultant chromosomal fragments are either fused to other chromosomes, rearranged, or simply gained or lost into a cell; and **Chromothripsis**, the generation of highly rearranged chromosomes from a single catastrophic event. The goal of this Workshop is to bring together experts in **DNA repair** and **chromosome segregation** in order to address the phenomenon of *CIN* as a whole and facilitate the communication between scientists from different fields to foster cross disciplinary approaches.

Format of the workshop

The workshop will bring together a maximum of 17 speakers and 35 participants, to form a group of around 50 people. The scientific programme will start in the morning of Monday, November 13th, and will end around noon on Wednesday, November 15th. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

Venue of the workshop

The workshop will be held in Baeza, at the "Campus Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

Speakers

- **Andrés Aguilera**. Centro Andaluz de Biología Molecular y Medicina Regenerativa CABIMER, Universidad de Sevilla. Sevilla, Spain.
- **Robert Benezra**. Cancer Biology and Genetics Program, Memorial Sloan Kettering Cancer Center. New York, NY, USA.
- **Guillermo de Cárcer**. Spanish National Cancer Research Centre (CNIO). Madrid, Spain.
- **Oscar Fernández-Capetillo**. Spanish National Cancer Research Centre (CNIO). Madrid, Spain // Science for Life Laboratory, Division of Genome Biology, Department of Medical Biochemistry and Biophysics, Karolinska Institute. Stockholm, Sweden.
- **Floris Foijer**. European Research Institute for the Biology of Ageing, University of Groningen, University Medical Center Groningen. Groningen, The Netherlands.
- **Ian D. Hickson**. Center for Chromosome Stability (CCS) and Center for Healthy Aging, Department of Cellular and Molecular Medicine, University of Copenhagen. Copenhagen, Denmark.
- **Eva Hoffmann**. Center for Chromosome Stability (CCS), Department of Cellular and Molecular Medicine. Copenhagen, Denmark // Genome Damage and Stability Centre, University of Sussex. Brighton, UK.
- **Pablo Huertas**. Centro Andaluz de Biología Molecular y Medicina Regenerativa (CABIMER); Departamento de Genética, Universidad de Sevilla. Sevilla, Spain.
- **Jan O. Korbel**. European Molecular Biology Laboratory (EMBL). Genome Biology Unit. Heidelberg, Germany // European Molecular Biology Laboratory-European Bioinformatics Institute (EMBL-EBI). Wellcome Trust Genome Campus. Cambridge, UK.
- **Andrés J. López-Contreras**. Department of Cellular and Molecular Medicine, Center for Chromosome Stability (CCS) and Center for Healthy Aging, Panum Institute, University of Copenhagen. Copenhagen, Denmark.
- **Jiri Lukas**. Novo Nordisk Foundation Center for Protein Research, Faculty of Health and Medical Sciences, University of Copenhagen. Copenhagen, Denmark.
- **Helder Maiato**. Chromosome Instability & Dynamics Lab, IBMC-Instituto de Biologia Molecular e Celular, i3S-Instituto de Investigação e Inovação em Saúde, Universidade do Porto. Porto, Portugal.
- **André Nussenzweig**. Laboratory of Genome Integrity, National Cancer Institute, National Institutes of Health (NIH). Bethesda, MD, USA.
- **Rocío Sotillo**. Division of Molecular Thoracic Oncology, German Cancer Research Center (DKFZ). Heidelberg, Germany.
- **Evi Soutoglou**. Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC); INSERM, U964; CNRS, UMR7104; Illkirch / Université de Strasbourg. Strasbourg, France.
- **Zuzana Storchová**. Department of Molecular Genetics, University of Kaiserslautern. Kaiserslautern, Germany.
- **Madalena Tarsounas**. CR-UK/MRC Oxford Institute for Radiation Oncology, Department of Oncology, University of Oxford. Oxford, UK.

Organized by:

Guillermo de Cárcer
Spanish National Cancer Research Centre (CNIO). Madrid, Spain.

Pablo Huertas
Centro Andaluz de Biología Molecular y Medicina Regenerativa (CABIMER); Universidad de Sevilla. Sevilla, Spain.

Andrés J. López-Contreras
Center for Chromosome Stability (CCS) and Center for Healthy Aging, Panum Institute, University of Copenhagen. Copenhagen, Denmark.

Sponsors:

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Danmarks Grundforskningsfond
Danish National Research Foundation

Baeza, Spain
13th-15th November 2017

Deadline:
15th September 2017

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#2018

W57.
Chromosome Architecture and Topological Stress

8-10 October

Scope: The mechanisms by which chromosomes fold into the nucleus constitutes a major question in biology. Our 3.3 billion base-pair genome stretched from one end to the other would cover a length of a few meters. Yet DNA must be structured in such a way that it fits into the confines of the nucleus of only a few microns. This compaction becomes even more extreme when nascent DNA strands move to daughter cells during mitosis. How does the cell accomplish this packaging of DNA while avoiding the formation of knots, entanglements and breakage? How can basic processes such as transcription and replication, which require readily accessible and unknotted DNA, occur within the confined space of the nucleus? How do topoisomerases, which remove knots from crowded DNA molecules, distinguish knotted DNA from unknotted ones?

The purpose of this workshop is to improve our understanding of how the genetic material is folded up without entanglements in such a way that it can manage to be properly decoded inside the nucleus.

Organizers: **Felipe Cortés-Ledesma** (Andalusian Molecular Biology and Regenerative Medicine Centre. Seville, Spain).
Erez Lieberman Aiden (Baylor College of Medicine. Houston, USA).
André Nussenzweig (National Cancer Institute. Bethesda, USA).

Monday, October 8

9.00-9.15 **María Ángeles Peinado Herreros, Director of the "Sede Antonio Machado", UNIA.**
Welcome address.

9.15-9.30 **A. Nussenzweig, E. Lieberman-Aiden and Felipe Cortés.**
Opening of the Workshop.

Session I: Genome Architecture
Chair: Rafael Casellas

9.30-10.00 **Erez Lieberman-Aiden.**
A 3D Code in the Human Genome.

10.00-10.30 **Darío Lupiáñez.**
Structural variation in the 3D genomic era.

10.30-11.00 **José Luis Gómez-Skarmeta.**
Evolution of regulatory landscapes.

11.30-11.50 **Michele Di Pierro.**
The three-dimensional architecture of the human genome: it's nuclear physics!

11.50-12.10 **Rafael D. Acemel.**
Exploring changes in the 3D genome involved in the invertebrate to vertebrate transition using HiChIP.

12.10-12.30 **Martin Franke.**
Fine-scale analysis of chromatin interactions identifies tissue-specific compartmentalization at the *SOX9* locus.

12.30-12.50 **Olivier Hyrien.**
Topological organisation and plasticity of human genome replication.

Session II: DNA topology and genome architecture
Chair: Camilla Björkegren

16.00-16.30 **Andrzej Stasiak.**
Transcription-induced supercoiling as the driving force of chromatin loop extrusion during formation of TADs in interphase chromosomes.

16.30-17.00 **Michael Wilson.**
Global protein-protein and protein-DNA interactions of DNA topoisomerases.

17.00-17.30 **Felipe Cortés-Ledesma.**
Roles of DNA topoisomerase II in genome organization, expression and stability.

18.00-18.20 **Michail Amoiridis.**
Heterochromatin DNA repair under endogenous stress (Replication stress).

18.20-18.40 **William Gittens.**
Comparative analysis of topoisomerase activity in the yeast and human genome revealed by CCseq.

18.40-19.00 **Pedro M. Martínez-García.**
TOP2 and YY1-associated DNA loops predict promoter proximal pausing genome wide.

19.00 Poster viewing.

Tuesday, October 9

Session III: SMC complexes and topological stress
Chair: Andrzej Stasiak

9.00-9.30 **Camilla Björkegren.**
The Smc5/6 complex, entangled chromatids and DNA supercoiling.

9.30-10.00 **Luis Aragón.**
SMC-dependent loops on chromosome require chromatin remodeling.

10.00-10.30 **Óskar Fernández-Capetillo.**
A role for topological stress in kidney disease?

11.00-11.20 **Jonathan Baxter.**
Topoisomerase II acts on SMC complex dependent DNA topological stress during both S phase and M phase.

11.20-11.40 **Félix Machín.**
Depletion of yeast Topoisomerase II leads to the formation of recombination-independent branched DNA structures at the ribosomal DNA.

Session IV: SMC complexes and genome architecture
Chair: José Luis Gómez-Skarmeta

16.00-16.30 **Gordana Wutz.**
Differential roles of STAG1, STAG2 and ESCO1 proteins in chromatin organization.

16.30-17.00 **Benjamin Rowland.**
Chromosome organization by condensin through the cell cycle.

17.00-17.30 **Rafael Casellas.**
The energetics and physiological impact of cohesin extrusion.

18.00-18.20 **Suhas S. P. Rao.**
Cohesin loss eliminates all loop domains.

18.20-18.40 **Pedro Ortega.**
A new role for histone deacetylases in the maintenance of genome integrity.

18.40-19.00 **Christina Paliou.**
A CTCF-dependent chromatin interaction ensures robust enhancer-promoter communication at the *Shh* locus.

19.00 Poster viewing 2.

Wednesday, October 10

Session V: Topological stress and disease
Chair: Óskar Fernández-Capetillo

9.00-9.30 **Keith Caldecott.**
A novel role for poly(ADP-ribose) polymerase activity during normal S phase.

9.30-10.00 **Peter McKinnon.**
Prevention of chromosomal damage from aberrant Topoisomerase-1 activity is critical for protecting replicating neural progenitors.

10.00-10.30 **André Nussenzweig.**
How genome organization influences processing of the TOP2 protein-DNA adduct.

10.50-11 **Juan J. Tena.**
Uncovering novel targets for p63-related hereditary malformations.

11.10-11.30 **Yaakov Maman.**
From topological stress to genome instability. A multi-factorial process.

11.30-11.50 **Fernando Gómez-Herreros.**
Transcription as a source of abortive TOP2 activity.

Inauguration / Organizers Erez Lieberman Aiden, André Nussenzweig, Director M. Ángeles Peinado Herreros, organizer Felipe Cortés-Ledesma.

Organizers / Felipe Cortés-Ledesma, Erez Lieberman Aiden, André Nussenzweig.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

W58.
The Cell Biology behind the Oncogenic PIP3 Lipids

15-17 October

Scope: The high incidence of mutations in the Phosphoinositide 3-kinase pathway in cancer (in 50% of the human tumors) has posed hope on the use of pharmacological inhibitors to PI3K as a treatment for cancer. Clinical testing of **Phosphoinositide 3-kinase**-directed compounds has proven that simple blockade of the **Phosphoinositide 3-kinase** family members by the use of pan-inhibitors is not an optimal therapeutic approach. We have learned that total inhibition of this route promotes undesired secondary effects. Second, in many tumour types, cells develop alternative strategies. Finally, in many cases, the cells develop rapidly resistance. In some tumour types, however, the use of compounds for this pathway has extended life expectation. These facts show the urgent need of a deeper knowledge on the *cell biology behind the oncogenic PIP3 lipids* (the products of PI3K). This is the topic of our conference, a good starting point for the

discussion between experts of a more subtle and rational design of novel therapeutic strategies to interfere with the high PIP3 levels of cancer cells.

Organizers: **Richard A. Anderson** (University of Wisconsin-Madison. Madison, USA)
Ana C. Carrera (National Centre for Biotechnology. Madrid, Spain).
Bart Vanhaesebroeck (University College London. London, UK).

Monday, October 15

9.00-9.15 **María Ángeles Peinado Herreros, Director of the "Sede Antonio Machado", UNIA.**
Welcome address.

9.15-9.30 **Bart Vanhaesebroeck, Ana Carrera, Richard Anderson.**
Welcome.

Session I: PI3K Structural Requirements
Chair: Grace Gong

9.30-10.15 Keynote lecture
Roger Williams
Regulation of the PI3K related enzymes on lipid membranes

10.15-11.00 **Jon Backer**
PIK3CB Signaling in Breast Cancer

Session II: PI3K Function *in vivo*
Chair: Pascale Zimmermann

11.30-12.15 **Ana Carrera**
Therapy for lung cancer: principles of novel molecular approaches.

12.15-12.30 **Ralitsa R. Madsen**
PIK3CA-H1047R in human iPSCs: revisiting the "butterfly" effect in a developmental context.

12.30-12.45 **Priyanka Tibarewal**
Investigation of PTEN genotype-phenotype correlations in the PTEN Hamartoma Tumour Syndrome (PHTS) using *in vitro* and *in vivo* approaches.

12.45-13.00 **Irene Matucci**
PTEN regulated changes in RTK physiology

15.30-16.15 **Emilio Hirsch.**
Class II PI3K alpha scaffold and kinase activity in cancer.

16.15-17.00 **Bart Vanhaesebroeck.**
Class I PI3K isoforms as drug targets in cancer.

17.30-18.15 **María Blasco.**
Regulation of telomere protection by the Pi3K/ATR axis.

18.15-19.30 Poster viewing.

Tuesday, October 16

Session III: Phosphoinositides and Membrane Dynamics
Chair: María Blasco

9.00-9.45 **Pascale Zimmermann.**
Scaffolding, phospholipids and oncogenic signaling in the making of exosomes.

9.45-10.30 **Volker Haucke.**
PI 3-phosphates in endocytosis and nutrient signaling within the endolysosomal system.

Session IV: Counteracting Phosphoinositide Levels by the Tumor Suppressor PTEN & Receptor Internalization
Chair: Mariona Graupera

10.45-11.30 **Lloyd C. Trotman.**
The PHLPP2 phosphatase is a druggable driver of prostate cancer metastasis.

15.30-16.15 **Richard Anderson.**
A Nuclear Phosphoinositide Kinase Complex That Regulates P53.

16.15-16.30 **Athanasios Karapetsas.**
Identification of novel selective substrates of the hVps34-SGK3 pathway.

16.30-16.45 **Leonardo Salmena.**
INPP4B-associated leukemic stem cell self-renewal as a new target in AML therapy.

Session V: PI3K Function in Endothelia and Immune Response against Cancer
Chair: Mari Ángeles Gómez

17.15-18.00 **Len Stephens.**
Signalling via Phosphoinositides.

18.00-18.45 **Klaus Okkenhaug.**
PI3Kδ is a driver of B cell cancer and is also a target for cancer immunotherapy.

18.45-19.30 **Mariona Graupera.**
PI3King of blood vessels.

19.30-20.30 Poster viewing 2.

Wednesday, October 17

Session VI: PI3K in the Clinics
Chair: Ana González García

9.00-9.45 **Rafael Pulido.**
PTEN-L goes salvaging.

9.45-10.30 **Arkaitz Carracedo.**
Regulation of cancer metabolism by PTEN.

10.45-11.00 **Wolfgang Link.**
TRIB2-mediated activation of AKT confers resistance to anti-cancer therapy.

11.00-11.15 **Rocío Seoane .**
The role of Trim28 in the PI3K pathway: Implications for the cell and the virus.

11.15-11.30 **Hannah Tovell.**
PROTAC compounds inducing degradation of SGK3, a kinase implicated in PI3K inhibitor resistance in breast cancer.

11.30 Acknowledgements.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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Organizers / Richard A. Anderson, Ana C. Carrera, Bart Vanhaesebroeck.

Inauguration / Organizer Ana C. Carrera, Director M. Ángeles Peinado Herreros, organizers Bart Vanhaesebroeck, Richard A. Anderson.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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W59.
Genomic Parasites and Noncoding RNA in Evolution and Disease

29-31 October

Scope: Friend or foe in nature is often one and the same and the classification depends on the perspective of the observer. This concept is key to the proposed workshop which will discuss the beneficial and detrimental impact of genomic parasites to the human genome. On the one hand, viruses and transposable elements provide novel genetic material and challenge established gene expression patterns. Hence, transposition of DNA enables quick adaptation and is widely accepted to be a major driver of evolution, in fact essential for the development of complex organisms. On the other hand, mobile genetic elements are highly mutagenic and may interfere with essential developmental programmes and physiological processes. As a consequence, transposition is linked to cancer and other diseases. Importantly, in all the processes, beneficial or detrimental, a complex web of non-coding RNA constitutes the interface between the genomic parasites and the host. Tasks as diverse

as transcriptional regulation, self/nonself-discrimination or genome defence and quality control are crucially depending on non-coding RNAs. Accordingly, they control development and homeostasis in the host and abnormalities of non-coding RNAs are associated with various diseases and premature ageing. The speakers, opinion makers in the field, will broadly cover different aspects of the 'love-hate' relationship between transposable genetic elements and the human genome. The line-up of inspirational speakers and their presentations will be highly educational and stipulate engaged discussions.

Organizers: **Jordi Gómez** (Institute of Parasitology and Biomedicine "López-Neyra". Granada, Spain).
Andreas Werner (Newcastle University. Newcastle upon Tyne, UK).

Monday, October 29

9.10-9.15 **María Ángeles Peinado Herreros, Director of the "Sede Antonio Machado", UNIA.**
Welcome address.
Opening of the Workshop by the organizers.

Session I: Viruses-genome interactions
Chair: Andreas Werner

9.15-9.50 **Eugene V. Koonin.**
Guns for hire: intertwined evolution of parasitic genetic elements and host defense systems.

9.50-10.25 **Jordi Gómez.**
mRNA archaeology.

10.25-10.45 **Ascensión Ariza-Mateos.**
Structural context and miR-122 modulate the binding of ribosomal subunit 40S to the hepatitis C virus IRES.

11.15-11.50 **Anders H. Lund.**
New roles for old ncRNAs - tuning the ribosome.

11.50-12.25 **Sara Macías Ribela.**
Intrinsic antiviral immunity of embryonic stem cells.

12.25-12.45 **Dušan Kordiš.**
The origin and early evolution of eukaryotic retroelements in the light of phylogenomics.

Session II: Evolution of complex genomes
Chair: Claudia Kutter

16.05-16.40 **Mar Albà.**
Functionalization of recently evolved transcripts.

16.40-17.05 **José M. Almendral.**
Endogenous Parvovirus sequences in animal genomes: a critical assessment.

17.35-18.00 **Marcos de la Peña.**
Genomic colonization by small ribozymes and circular RNAs.

18.00-18.25 **Sara R. Heras.**
The tumor suppressor microRNA let-7 represses human LINE-1 retrotransposition.

18.25-19.00 **Günther Witzany.**
That's Life.

19.00-20.00 Discussion and poster viewing.

Tuesday, October 30

Session III: Transposon control
Chair: Puri Fortes

9.15-9.50 **Claudia Kutter.**
Transcriptional architecture and regulation of mammalian noncoding RNAs.

9.50-10.25 **Frank Jiggins.**
Pan-arthropod analysis reveals somatic piRNAs as an ancestral defence against transposable elements.

10.25-10.50 **Tanya Vavouri.**
Naturally occurring transposable element insertions linked to emergence of novel piRNA producing loci from introns of genes.

15.30 Poster viewing.

Session IV: Transposon control (II)

16.30-17.05 **Judith Korb.**
Longevity and transposon defense, the case of termite reproductives.

17.05-17.40 **Andreas Werner.**
The regulatory roles of natural antisense transcripts.

18.10-18.45 **Rita Rebollo.**
Epigenetic interplay between mammalian transposable elements and host genes - and other preliminary stories.

18.45-19.10 **Francisco J. Sánchez-Luque.**
Slightly 5' truncated L1s avoid DNA methylation to achieve retrotransposition in humans.

19.10-19.45 General discussion.

Wednesday, October 31

Session V: Viruses, ncRNAs and human disease
Chair: Jordi Gómez

9.00-9.35 **Geoffrey Faulkner.**
L1 retrotransposon locus- and element-specific regulation in the brain.

9.35-10.10 **Helen Rowe.**
KAP1 regulates endogenous retroviruses in adult human cells and contributes to innate immune control.

10.40-11.15 **Puri Fortes.**
Dual roles of long non-coding RNAs in infection and cancer.

11.15-11.35 **Juan Pablo Unfried.**
LncRNAs with oncogenic potential in hepatocellular carcinoma identified by big data analysis.

11.35-11.50 Closing remarks.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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Organizers Jordi Gómez, Andreas Werner.

Inauguration / Organizer Jordi Gómez,
Director of secretary's office Juan Martínez Moreno, organizer Andreas Werner.

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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W60.
Contribution of Bacterial Injection Systems to Human Disease

5-7 November

Scope: Bacterial secretion systems are trans-envelope multiprotein assemblies devoted to the transport of specific macromolecules. In particular, the Type III, Type IV and Type VI secretion systems share the ability to inject their substrates into human cells, playing an important role in virulence. The transported substrates, so-called effectors, modulate cellular processes for the benefit of the bacterial pathogens. Their role in pathogenesis has been well established in an increasing number of human pathogens causing diseases such as salmonellosis, legionellosis, brucellosis, lung pneumonia, gastric ulcer, or gastric carcinomas. In spite of the differences among these secretion systems, they all converge into a number of common strategies of human cell subversion. This workshop aims to gather experts in each secretion system in order to compare them and to highlight common targets in the human cell. The workshop will address our

knowledge of the architecture of the secretion machineries, the secretion mechanism, and the role of effectors in the target cell. The scientific outcome will provide us with a holistic comprehension of the mechanisms of bacterial pathogenicity, and will open the way to the design of possible common strategies for anti-pathogen therapies by targeting the secretion machine, the effectors, or their targets.

Organizers: **Sophie Bleves** (University of Aix-Marseilles. Marseilles, France).
Jorge E. Galán (Yale University School of Medicine. New Haven, USA).
Matxalen Llosa (University of Cantabria. Santander, Spain).

Monday, November 5

9.00-9.30 **María Ángeles Peinado Herreros, Director of the "Sede Antonio Machado", UNIA.**
Welcome address.
Opening of the Workshop by the organizers.

Session I: Structure/function of secretion machines
Chair: Amy E Palmer

9.30-10.05 **Craig R. Roy.**
The Dot/Icm Secretion System.

10.05-10.40 **Peter J. Christie.**
Structural Definition of an IncF-encoded Type IV Secretion System.

10.40-11.00 **Tiago R.D. Costa.**
Cryo-EM structure of the core complex of a bacterial killing T4SS.

11.00-11.20 **Joseph P. Vogel.**
Polar targeting, assembly and molecular organization of the *Legionella* Dot/Icm T4SS.

11.50-12.10 **David O'Callaghan.**
An 'open channel conformation' VirB10 deregulates intracellular trafficking and virulence of *Brucella suis*.

12.10-12.30 **Jean Celli.**
Conditional expression of the VirB11 ATPase reveals post-replication roles of the *Brucella* VirB T4SS.

12.30-13.05 **Samuel Wagner.**
Assembly, structure and function of the export apparatus of bacterial T3SS.

13.05-13.25 **María Lara-Tejero.**
In Situ Molecular Architecture of the *Salmonella* T3SS.

13.25-14.00 **Eric Cascales.**
Assembly and function of an antibacterial speargun: the Type VI secretion system.

16.00-16.20 **Luke P. Allsopp.**
The *Pseudomonas aeruginosa* T6SS-VgrG1b spike is topped by a PAAR protein eliciting DNA damage to bacterial competitors.

16.20-16.40 **Lin Lin.**
Analysis of bacterial T6SS Stoichiometry Reveals New Insights into its Regulation.

16.40-17.00 **Mario F. Feldman.**
Multi-drug resistant plasmids repress chromosomally encoded T6SS to enable their dissemination.

Session II: Nature and recruitment of substrates (I)
Chair: Eric Cascales

17.30-18.05 **Amy E. Palmer.**
Visualizing secreted effector proteins in infected mammalian cells.

18.05-18.25 **Eric Faudry.**
Interaction of *Pseudomonas aeruginosa* T3SS ATPase with secreted proteins and chaperons.

18.25-18.45 **Luis A. Fernández.**
Engineering *E. coli* bacteria for the injection of proteins into tumor cells.

18.45-19.05 **Francisco Ramos-Morales.**
A *Salmonella* T3SS effector as carrier in a live vaccine against *Pseudomonas aeruginosa*.

19.05 Poster viewing.

Tuesday, November 6

Session II: Nature and recruitment of substrates (II)
Chair: Eric Cascales

9.00-9.35 **Christoph Dehio.**
Evolutionary and structure-function analysis of T4SS effectors of *Bartonella*.

9.35-9.55 **María Lucas.**
The *Legionella pneumophila* effector RavN is an E3 ligase that hijacks host-cell ubiquitination.

9.55-10.30 **Matxalen Llosa.**
Nucleoprotein recruitment and transfer through T4SS involved in bacterial conjugation and virulence.

10.30-10.50 **David Albesa-Jové.**
Deciphering the mechanism of action of toxins delivered by the T6SS in *Pseudomonas aeruginosa*.

Session III: Host cell subversion (I)
Chair: Craig R Roy

11.20-12.00 **Ulla Bonas.**
How plant pathogenic bacteria manipulate the plant.

16.00-16.35 **Jorge Galán.**
Salmonella-induced intestinal inflammation: a pathogen-centric view.

16.35-17.10 **Steffen Backert.**
A novel basolateral type IV secretion model for the CagA oncoprotein of *Helicobacter* pylori.

17.10-17.45 **Sophie Bleves.**
The T6SS of *Pseudomonas aeruginosa*, an anti-eukaryotic and antibacterial weapon.

18.15-18.50 **Feng Shao.**
Ubiquitination and degradation of GBPs by a *Shigella* effector to suppress host defense.

18.50-19.25 **Miguel A. Valvano.**
Role of specialized secretion systems in macrophage intracellular survival of the opportunistic pathogen *Burkholderia cenocepacia*.

19.25 Poster viewing 2.

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Wednesday, November 7

Session III: Host cell subversion (II)
Chair: Craig R Roy

9.00-9.35 **Elisabeth L. Hartland.**
Cysteine proteases effectors targeting innate immune signalling.

10.45-11.15 **Jorge Galán.**
Roundtable for general discussion, summing up and prospects.

Organizers / Sophie Bleves, Matxalen Llosa, Jorge E. Galán.

WORKSHOPS

CURRENT TRENDS IN BIOMEDICINE 2018

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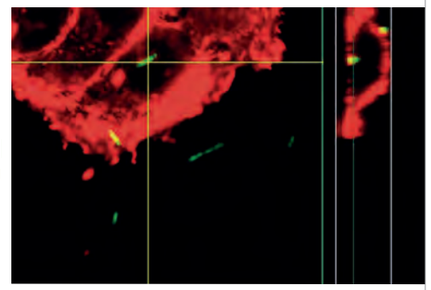


CONTRIBUTION OF BACTERIAL INJECTION SYSTEMS TO HUMAN DISEASE

Scope

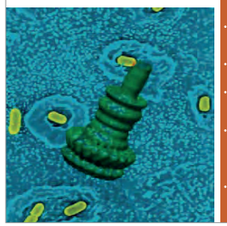
Bacterial secretion systems are trans-envelope multi-protein assemblies devoted to the transport of specific macromolecules. In particular, the Type III, Type IV and Type VI secretion systems share the ability to inject their substrates into human cells, playing an important role in virulence. The transported substrates, so-called effectors, modulate cellular processes for the benefit of the bacterial pathogens. Their role in pathogenesis has been well established in an increasing number of human pathogens causing diseases such as salmonellosis, legionellosis, brucellosis, lung pneumonia, gastric ulcer, or gastric carcinomas. In spite of the differences among these secretion systems, they all converge into a number of common strategies of human cell subversion. This workshop aims to gather experts in each secretion system in order to compare them and to highlight common targets in the human cell. The workshop will address our knowledge of the architecture of the secretion machineries, the secretion mechanism, and the role of effectors in the target cell. The scientific outcome will provide us with a holistic comprehension of the mechanisms of bacterial pathogenicity, and will open the way to the design of possible common strategies for anti-pathogen therapies by targeting the secretion machine, the effectors, or their targets.

Format of the workshop

The workshop will bring together a maximum of 15 speakers and 35 participants, to form a group of around 50 people. The scientific programme will start in the morning of Monday, November 5th, and will end around noon on Wednesday, November 7th. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

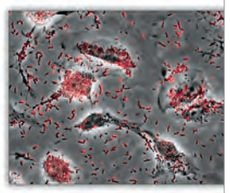
Venue of the workshop

The workshop will be held in Baeza, at the "Sede Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.



Speakers

- **Steffen Backert,** Department of Biology, Division of Microbiology, Friedrich Alexander University Erlangen/ Nuremberg, Erlangen, Germany.
- **Sophie Bleves,** Laboratoire d'Ingénierie des Systèmes Macromoléculaires (UMR7255), Institut de Microbiologie de la Méditerranée, CNRS, Aix-Marseille University, Marseille, France.
- **Ulla Bonas,** Department of Genetics, Institute for Biology, Martin Luther University Halle-Wittenberg, Halle, Germany.
- **Eric Cascales,** Laboratoire d'Ingénierie des Systèmes Macromoléculaires (LISM), Institut de Microbiologie de la Méditerranée (IMM), Aix-Marseille Université, CNRS, UMR 7255, Marseille, France.
- **Peter J. Christie,** Department of Microbiology and Molecular Genetics, McGovern Medical School, Houston, TX, USA.
- **Christoph Dehio,** Biozentrum, University of Basel, Basel, Switzerland.
- **Jorge E. Galán,** Department of Microbial Pathogenesis, Yale University School of Medicine, New Haven, CT, USA.
- **Elisabeth L. Hartland,** Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research / Department of Molecular and Translational Science, Monash University, Clayton, Australia.
- **Matxalen Llosa,** Departamento de Biología Molecular, Universidad de Cantabria (UC), Instituto de Biomedicina y Biotecnología de Cantabria (IBBTEC, UC-CSIC-SODERCAN), Santander, Spain.
- **Amy E. Palmer,** Department of Chemistry and Biochemistry, BioFrontiers Institute, University of Colorado Boulder, Boulder, CO, USA.
- **Craig R. Roy,** Boyer Center for Molecular Medicine, Department of Microbial Pathogenesis, Yale University, New Haven, CT, USA.
- **Feng Shao,** National Institute of Biological Sciences (NIBS), Beijing, China.
- **Miguel A. Valvano,** Wellcome-Wolfson Institute for Experimental Medicine, Queen's University Belfast, Belfast, UK.
- **Samuel Wagner,** Interfaculty Institute of Microbiology and Infection Medicine (IMIT), Section of Cellular and Molecular Microbiology, University of Tübingen / German Center for Infection Research (DZIF), Partner-site Tübingen, Tübingen, Germany.
- **Gabriel Waksman,** Institute of Structural and Molecular Biology, University College London and Birkbeck, London, UK.



Organized by:

Sophie Bleves
Marseille, France.

Jorge E. Galán
New Haven, CT, USA.

Matxalen Llosa
Santander, Spain.

Baeza, Spain
5th-7th November 2018

Deadline:
7th September 2018

Universidad Internacional de Andalucía
Sede Antonio Machado
Palacio de Jabalquinto
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FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

ANNEXES

LIST OF PARTICIPANTS

SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
A. Figueiredo	Teresa		W25	New University of Lisbon	Oeiras	Portugal
Abad	Xavier		W7	University of Navarra	Pamplona	Spain
Abecia	Leticia		W35	Zaidín Experimental Station	Granada	Spain
Abt	Michael C.		W54	Memorial Sloan Kettering Cancer Center	New York	USA
AbuQattam	Ali		W42	Príncipe Felipe Research Center	Valencia	Spain
Acanda de la Rocha	Arlet María		W42	University of Navarra	Pamplona	Spain
Acedo	Alberto		W19	University of Valladolid	Valladolid	Spain
Achar	Yathish J.		W45	FIRC Institute of Molecular Oncology	Milan	Italy
Acín-Pérez	Rebeca		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Acosta-Herrera	Marialbert		W52	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Acun	Tolga		W7	Bilkent University	Ankara	Turkey
Adhya	Sankar	Invited speaker	W24	National Cancer Institute	Bethesda	USA
Aerts	Stein	Invited speaker	W52	Catholic University of Louvain	Louvain	Belgium
Agriesti	Francesca		W24	University of Bologna	Bologna	Italy
Aguado	Begoña		W7	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Aguilar	Juan		W1	University of Barcelona	Barcelona	Spain
Aguilera	Andrés	Organizer and speaker	W2, W9, W34, W45	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Aguilera Herce	Julia		W49	University of Seville	Seville	Spain
Ahituv	Nadav	Invited speaker	W52	University of California San Francisco	San Francisco	USA

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Ahmad	Mohiuddin		W3	Georg-August University of Göttingen	Göttingen	Germany
Akay	Alper		W19	University of Dundee	Dundee	UK
Akbarian	Schahram	Invited speaker	W37	Mount Sinai School of Medicine	New York	USA
Akerman	Ildem		W30	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Akhtar	Wasseem		W30	Netherlands Cancer Institute	Amsterdam	The Netherlands
Al-Fawares	O'la		W51	University Toulouse III Paul Sabatier	Toulouse	France
Alabert	Constance		W9	Institute of Human Genetics	Montpellier	France
Alarcón	Balbino	Organizer and speaker	W36	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Albà	M. Mar	Invited speaker	W59	Pompeu Fabra University	Barcelona	Spain
Albar	Juan Pablo		W29	National Centre for Biotechnology	Madrid	Spain
Alberdi	Araitz		W27	University of the Basque Country	Leioa	Spain
Albers	Eliene		W56	University of Copenhagen	Copenhagen	Denmark
Albertí	Sebastián		W28	University of the Balearic Islands	Palma de Mallorca	Spain
Albesa-Jové	David		W60	Center for Cooperative Research in Biosciences bioGUNE	Derio	Spain
Alcaraz-Iborra	Manuel		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Aldea	Martí	Invited speaker	W8	University of Lleida	Lleida	Spain
Alés	Eva		W6, W21	University of Seville	Seville	Spain
Allende	Miguel L.	Invited speaker	W20	University of Chile	Santiago	Chile
Aller	M. Isabel		W27	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Allsopp	Luke P.		W60	Imperial College London	London	UK
Almena	María		W36	National Centre for Biotechnology	Madrid	Spain
Almendral	José M.		W59	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Almers	Wolfhard	Invited speaker	W3	Oregon Health and Science University	Portland	USA
Almuedo	María		W20	University of Barcelona	Barcelona	Spain
Alonso	Claudio R.		W2	University of Cambridge	Cambridge	UK
Alonso	Eva		W12	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Alonso	Juan C.		W9	National Centre for Biotechnology	Madrid	Spain
Alonso	Sonia		W51	Spanish National Center for Cardiovascular Research	Madrid	Spain
Alperi	Anabel		W31	University of Cantabria	Santander	Spain
Alpern	Daniel		W33, W52	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Alsina	Berta	Invited speaker	W38	Pompeu Fabra University	Barcelona	Spain
Altafaj	Xavier		W39	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Altmeppen	Hermann		W44	University Medical Center Hamburg-Eppendorf	Hamburg	Germany
Álvarez	Ángeles		W10	University of Valencia	Valencia	Spain
Álvarez de Toledo	Guillermo	Organizer and speaker	W3, W6, W21	University of Seville	Seville	Spain
Álvarez-Barón	Elena		W21	University Hospital Bonn	Bonn	Germany
Álvarez-Buylla	Arturo	Invited speaker	W26, W47	University of California San Francisco	San Francisco	USA

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SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
Álvarez-Cabrera	Ana Lucía		W29	National Centre for Biotechnology	Madrid	Spain
Álvarez-Domínguez	Carmen		W31	Hospital "Santa Cruz de Liencres"	Liencres	Spain
Álvarez-Fernández	Mónica		W56	Spanish National Cancer Research Centre	Madrid	Spain
Álvarez-Medina	Roberto		W12	Molecular Biology Institute of Barcelona	Barcelona	Spain
Álvarez-Tabarés	Isabel		W8	National Centre for Biotechnology	Madrid	Spain
Alves-Sampaio	Alexandra		W13	University of Seville	Seville	Spain
Amoiridis	Michail		W57	Institute of Genetics and Molecular and Cellular Biology	Illkirch-Graffenstaden	France
Anderson	Jacob		W37	University College London	London	UK
Anderson	Richard A.	Organizer and speaker	W58	University of Wisconsin-Madison	Madison	USA
Andersson	Dan I.	Invited speaker	W1	Uppsala University	Uppsala	Sweden
Andre	Guillaume		W25	Catholic University of Louvain	Louvain-la-Neuve	Belgium
Andrés	Vicente	Organizer and speaker	W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Andrés-Delgado	Laura		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Andreu	Abraham		W47	Pierre and Marie Curie University	Paris	France
Andreu	Antonio L.	Invited speaker	W10	University Hospital "Vall d'Hebron"	Barcelona	Spain
Ang	Siew-Lan	Invited speaker	W47	National Institute for Medical Research	London	UK
Anglada	Teresa		W56	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain
Angonin	Diane		W47	Stem cell and Brain Research Institute	Bron	France
Anguita-Maeso	Manuel		W54	University of Granada	Granada	Spain
Aparicio	Óscar		W7	University of Navarra	Pamplona	Spain
Apostolova	Nadezda		W32	University of Valencia	Valencia	Spain
Aquizu	Naiara		W5	University of Barcelona	Barcelona	Spain
Aragón	Luis	Invited speaker	W57	Imperial College London	London	UK
Aranda	Miguel A.		W18	Center for Edaphology and Applied Biology of the River Segura	Murcia	Spain
Aránega	Amelia		W4	University of Jaén	Jaén	Spain
Araujo Garrido	Juan Luis		W60	University of Seville	Seville	Spain
Aravin	Alexei A.	Invited speaker	W42	California Institute of Technology	Pasadena	USA
Arce-Rodríguez	Alejandro		W31	National Centre for Biotechnology	Madrid	Spain
Arechaga	Ignacio		W16, W60	University of Cantabria	Santander	Spain
Aréchaga	Juan	Invited speaker	W17	University of the Basque Country	Leioa	Spain
Ares Jr.	Manuel	Invited speaker	W2	University of California Santa Cruz	Santa Cruz	USA
Arévalo	Juan Carlos		W27	University of Salamanca	Salamanca	Spain
Argüello	Héctor		W54	University of Córdoba	Córdoba	Spain
Arias-González	J. Ricardo		W29	National Centre for Biotechnology	Madrid	Spain
Ariza	Laura		W40, W47	University of Málaga	Málaga	Spain

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Ariza-Mateos	Ascensión		W42, W59	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Arlotta	Paola	Invited speaker	W26	Harvard Medical School	Boston	USA
Arnés	Luis		W33, W42	Columbia University	New York	USA
Arroyo	María		W57	University of Jaén	Jaén	Spain
Arroz-Madeira	Sílvia		W40	University of Lisbon	Lisbon	Portugal
Arseneault	Tanya		W49	University of Reading	Reading	UK
Artola Recolons	Cecilia		W25	Rocasolano Institute of Physical Chemistry	Madrid	Spain
Artuch	Rafael	Invited speaker	W10	Hospital "Sant Joan de Déu"	Barcelona	Spain
Aschtgen	Marie-Stéphanie		W31	Institute of Microbiology of the Mediterranean	Marseilles	France
Asensio	Alejandro		W60	National Centre for Biotechnology	Madrid	Spain
Ashworth	Alan	Invited speaker	W9	Institute of Cancer Research	London	UK
Askjaer	Peter	Organizer and speaker	W50	Andalusian Centre for Developmental Biology	Seville	Spain
Assoian	Richard K.	Invited speaker	W43	University of Pennsylvania	Philadelphia	USA
Athie	Alejandro		W42	University of Navarra	Pamplona	Spain
Attie	Alan D.	Invited speaker	W30	University of Wisconsin-Madison	Madison	USA
Attrée	Ina		W28	Interdisciplinary Research Institute of Grenoble	Grenoble	France
Attwell	David	Invited speaker	W27	University College London	London	UK
Ausoni	Simonetta	Invited speaker	W4	University of Padua	Padua	Italy
Aussel	Laurent	Organizer and speaker	W31, W49	University of Aix-Marseilles	Marseilles	France
Ávalos	Javier		W42	University of Seville	Seville	Spain
Avrahami	Dana		W30	University of Pennsylvania School of Medicine	Philadelphia	USA
Ayala	Sara		W51	University Toulouse III Paul Sabatier	Toulouse	France
Ayora	Silvia		W9	National Centre for Biotechnology	Madrid	Spain
Babes	Alexandru		W15	University of Bucharest	Bucharest	Romania
Babes	Ramona Madalina		W15	University of Bucharest	Bucharest	Romania
Babic	Ana		W1	University Hospital "Necker Enfatnts Malades"	Paris	France
Bachiller	Sara		W39	Pablo de Olavide University	Seville	Spain
Bachschmid	Markus M.		W32	Boston University School of Medicine	Boston	USA
Backer	Jonathan M.	Invited speaker	W58	Albert Einstein College of Medicine	Bronx	USA
Backert	Steffen	Invited speaker	W16, W60	Friedrich-Alexander University of Erlangen-Nuremberg	Erlangen	Germany
Bäckhed	Fredrik	Invited speaker	W35	University of Gothenburg	Gothenburg	Sweden
Bączyńska	Ewa		W53	Nencki Institute of Experimental Biology	Warsaw	Poland
Badano	José L.	Invited speaker	W29	Pasteur Institute	Montevideo	Uruguay
Badi	Ileana		W55	Monzino Cardiology Centre	Milan	Italy
Badía	Josefa		W1	University of Barcelona	Barcelona	Spain
Bailey	Travis J.		W20	University of Notre Dame	Notre Dame	USA
Balakrishnan	Kamakshi		W9	Tata Institute of Fundamental Research	Mumbai	India
Balderas-Martínez	Yalbi I.		W24	National Autonomous University of México	Cuernavaca	México
Baldomà	Laura		W1	University of Barcelona	Barcelona	Spain

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Ballarino	Monica		W42	University of Rome "La Sapienza"	Rome	Italy
Ballesteros	Manuel		W10, W14	Andalusian Centre for Developmental Biology	Seville	Spain
Balomenou	Stavroula		W25	University of Crete	Heraklion	Greece
Bangi	Erdem	Invited speaker	W52	Icahn School of Medicine at Mount Sinai	New York	USA
Banta	Lois		W16	Williams College	Williamstown	USA
Banushi	Blerida		W33	University College London	London	UK
Bañó Polo	Manuel		W51	University of Valencia	Burjassot	Spain
Baquero	Fernando	Invited speaker	W28	University Hospital "Ramón y Cajal"	Madrid	Spain
Bär	Christian		W55	Hannover Medical School	Hannover	Germany
Barabino	Silvia		W30	University of Milan-Bicocca	Milan	Italy
Baralle	Francisco E.	Invited speaker	W2, W7	International Centre for Genetic Engineering and Biotechnology	Trieste	Italy
Barbacid	Mariano	Invited speaker	W48	Spanish National Cancer Research Centre	Madrid	Spain
Barbagallo	Federica		W19	University "Tor Vergata"	Rome	Italy
Barbier	Mariette		W28	University of the Balearic Islands	Palma de Mallorca	Spain
Barbosa	Carla		W15	Neuroscience Technologies	Barcelona	Spain
Barco	Ángel	Organizer and speaker	W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Barcos	Montserrat		W13	University Hospital "Reina Sofía"	Córdoba	Spain
Barford	David	Invited speaker	W48	MRC Laboratory of Molecular Biology	Cambridge	UK
Bargiela	Rafael		W35	Institute of Catalysis and Petrochemistry	Madrid	Spain
Baron	Christian	Invited speaker	W16	University of Montreal	Montreal	Canada
Barras	Frédéric		W31	Institute of Microbiology of the Mediterranean	Marseilles	France
Barría	Andrés	Invited speaker	W39	University of Washington School of Medicine	Seattle	USA
Barrientos-Moreno	Marta		W56, W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Barriocanal	Marina		W57	University of Navarra	Pamplona	Spain
Barroso	Sonia		W34	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Barroso-delJesus	Alicia		W7	Stem Cell Bank of Andalusia	Granada	Spain
Bartek	Jiri		W34	Danish Cancer Society	Copenhagen	Denmark
Bartesaghi	Silvina		W32	University of the Republic	Montevideo	Uruguay
Barwari	Temo		W55	King's College London	London	UK
Basbaum	Allan I.	Invited speaker	W15	University of California San Francisco	San Francisco	USA
Bassler	Bonnie L.	Organizer and speaker	W24	Princeton University	Princeton	USA
Batalha Martins	Ana		W48	Spanish National Cancer Research Centre	Madrid	Spain
Baù	Davide		W23	Príncipe Felipe Research Center	Valencia	Spain
Bauer	Bianca		W16	Max Planck Institute for Infection Biology	Berlin	Germany
Baumeister	Wolfgang	Invited speaker	W29	Max Planck Institute of Biochemistry	Martinsried	Germany
Bäumler	Andreas J.	Invited speaker	W49, W54	University of California Davis	Davis	USA

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Baxter	Jonathan		W57	University of Sussex	Brighton	UK
Bayés	Àlex	Invited speaker	W27, W39, W53	Sant Pau Biomedical Research Institute	Barcelona	Spain
Beane	Wendy S.		W20	Tufts University	Medford	USA
Beato	Miguel	Organizer and speaker	W2, W11	Centre for Genomic Regulation	Barcelona	Spain
Beccari	Leonardo		W12, W23	Cajal Institute	Madrid	Spain
Becerra	Soraya		W41	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Bechara	Elias	Invited speaker	W13	University of Nice Sophia Antipolis	Nice	France
Becker	Jordan R.		W56	University of Oxford	Oxford	UK
Becker	Thomas S.	Organizer and speaker	W12	University of Bergen	Bergen	Norway
Beeby	Morgan	Invited speaker	W25	California Institute of Technology	Pasadena	USA
Beglopoulos	Vassilios		W37	The University of Edinburgh	Edinburgh	UK
Behra	Martine		W20	National Human Genome Research Institute	Bethesda	USA
Belmonte	Carlos	Invited speaker	W15	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Belmonte	Rodrigo		W46	University of Aberdeen	Aberdeen	UK
Belsham	Graham J.	Organizer and speaker	W18	Technical University of Denmark	Lindholm	Denmark
Ben Abdallah	Nada M.B.		W37	University Hospital Erlangen	Erlangen	Germany
Bender	Balázs		W23	Agricultural Biotechnology Center	Gödöllő	Hungary
Benedito	Rui		W40	Spanish National Center for Cardiovascular Research	Madrid	Spain
Benezra	Robert	Invited speaker	W56	Memorial Sloan Kettering Cancer Center	New York	USA
Bengoechea	José A.		W31	Balearic Islands Health Research Institute	Bunyola	Spain
Benito-Garagorri	Eva		W37	European Neuroscience Institute Göttingen	Götingen	Germany
Bennett	Claire		W13	University of Exeter	Exeter	UK
Bentley	David	Invited speaker	W11	University of Colorado	Aurora	USA
Bergami	Matteo		W26	Italian Institute of Technology	Genoa	Italy
Bergentall	Mattias		W35	University of Gothenburg	Gothenburg	Sweden
Berger	Jennifer	Invited speaker	W5	The University of Edinburgh	Edinburgh	UK
Berman	Judith	Invited speaker	W8, W46	Tel Aviv University	Ramat Aviv	Israel
Bermejo	Rodrigo	Invited speaker	W45	University of Salamanca	Salamanca	Spain
Bernard	Elvis		W25	Catholic University of Louvain	Louvain-la-Neuve	Belgium
Bernardo García	Noelia		W25	Rocasolano Institute of Physical Chemistry	Madrid	Spain
Berninger	Benedikt	Organizer and speaker	W6, W26	Ludwig-Maximilians University of Munich	Munich	Germany
Bertolini	Jessica A.		W47	University of Milan-Bicocca	Milan	Italy
Berzal-Herranz	Alfredo	Organizer and speaker	W7	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Bessa	José		W23	Andalusian Centre for Developmental Biology	Seville	Spain
Bessereau	Jean-Louis	Invited speaker	W53	University of Lyon	Lyon	France
Bethani	Ioanna		W21	European Neuroscience Institute Götingen	Götingen	Germany
Bettencourt-Dias	Mónica	Invited speaker	W29, W48	Gulbenkian Science Institute	Oeiras	Portugal
Betz	William J.	Organizer and speaker	W3, W21	University of Colorado Medical School	Aurora	USA

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Beucher	Anthony		W30	Institute of Genetics and Molecular and Cellular Biology	Illkirch	France
Beuschel	Christine B.		W52	Free University of Berlin	Berlin	Germany
Beuzón	Carmen R.	Organizer and speaker	W49	University of Málaga	Málaga	Spain
Bevan	Michael J.	Invited speaker	W36	University of Washington	Seattle	USA
Bhatia	Vaibhav		W30, W45	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Bhonker	Yoni		W38	Tel Aviv University	Tel Aviv	Israel
Biederer	Thomas	Invited speaker	W53	Tufts University School of Medicine	Boston	USA
Bigas	Anna	Invited speaker	W40	Hospital del Mar Medical Research Institute	Barcelona	Spain
Birney	Ewan	Invited speaker	W30	European Bioinformatics Institute	Hinxton	UK
Bishop	Alexander J. R.		W45	University of Texas Health Science Center at San Antonio	San Antonio	USA
Bit-Avragim	Nana		W4	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Björkegren (former Sjögren)	Camilla	Invited speaker	W9, W45, W57	Karolinska Institute	Stockholm	Sweden
Björklund	Anders	Invited speaker	W26	Lund University	Lund	Sweden
Black	Douglas L.	Invited speaker	W19	University of California Los Angeles	Los Angeles	USA
Blanco	Enrique		W12, W30	University of Barcelona	Barcelona	Spain
Blanco	Raquel		W36	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Blanco-Domínguez	Rafael		W55	Spanish National Center for Cardiovascular Research	Madrid	Spain
Blanot	Didier	Invited speaker	W25	Paris-Sud University	Orsay	France
Blasco	María A.	Invited speaker	W5, W9, W58	Spanish National Cancer Research Centre	Madrid	Spain
Bläsi	Udo	Invited speaker	W28	University of Vienna	Vienna	Austria
Blasius	Melanie		W45	Danish Cancer Society	Copenhagen	Denmark
Blázquez	Jesús	Organizer and speaker	W14	National Centre for Biotechnology	Madrid	Spain
Blázquez	Lorea		W41	University of Navarra	Pamplona	Spain
Bleves	Sophie	Organizer and speaker	W60	University of Aix-Marseilles	Marseilles	France
Blobel	Carl P.	Invited speaker	W44	Weill Medical College of Cornell University	New York	USA
Blundell	Tom L.	Invited speaker	W48	University of Cambridge	Cambridge	UK
Bocancea	Diana		W47	University Carlos III	Madrid	Spain
Boerkoel	Cornelius F.	Invited speaker	W5	Baylor College of Medicine	Houston	USA
Bogdanović	Ozren		W30	Andalusian Centre for Developmental Biology	Seville	Spain
Böhm	Stefanie		W42	Stockholm University	Stockholm	Sweden
Boireau	Stéphanie		W11	Montpellier Institute of Molecular Genetics	Montpellier	France
Boix-Chornet	Manuel		W2	Spanish National Cancer Research Centre	Madrid	Spain
Boizet-Bonhoure	Brigitte		W17	Institute of Human Genetics	Montpellier	France
Bolaños	Juan P.	Invited speaker	W32	University of Salamanca	Salamanca	Spain
Boley	Patricia A.		W33	University of Pittsburgh	Pittsburgh	USA
Bonaldi	Tiziana		W5	Ludwig-Maximilians University of Munich	Munich	Germany
Bonas	Ulla	Invited speaker	W60	Martin-Luther University Halle-Wittenberg	Halle	Germany

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Bonet	Fernando		W42	University of Jaén	Jaén	Spain
Bonfante	Paola	Invited speaker	W54	University of Turin	Turin	Italy
Bonne	Gisèle	Invited speaker	W50	Pierre and Marie Curie University	Paris	France
Bonnet	Amandine		W45	Paris Diderot University	Paris	France
Bontempi	Bruno	Invited speaker	W37	University of Bordeaux I	Talence	France
Boqué-Sastre	Raquel		W42	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Bordey	Angélique	Invited speaker	W26	Yale University School of Medicine	New Haven	USA
Borges	Ricardo		W21	University of La Laguna	La Laguna	Spain
Bormann	Joachim		W6	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Bornens	Michel	Invited speaker	W29	Curie Institute	Paris	France
Bornstein	Belén		W10	Autonomous University of Madrid	Madrid	Spain
Borst	Gerard	Invited speaker	W6	Erasmus MC University Medical Center	Rotterdam	The Netherlands
Bosone	Camilla		W47	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Bossi	Lionello	Invited speaker	W1	Centre for Molecular Genetics	Gif-sur-Yvette	France
Bősze	Zsuzsanna		W23	Agricultural Biotechnology Center	Gödöllő	Hungary
Botet	Javier		W9	University of Salamanca	Salamanca	Spain
Bourgeron	Thomas	Invited speaker	W6	Pasteur Institute	Paris	France
Bourne	James A.		W26	Monash University	Clayton	Australia
Boutillier	Anne-Laurence	Invited speaker	W37	University of Strasbourg	Strasbourg	France
Bovolenta	Paola	Organizer and speaker	W22, W44	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Bowles	Josephine		W17	The University of Queensland	Brisbane	Australia
Bozzoni	Irene	Invited speaker	W42	University of Rome "La Sapienza"	Rome	Italy
Bragado-Nilsson	Elisabeth		W51	University of Copenhagen	Copenhagen	Denmark
Brand	Michael	Invited speaker	W20	Technical University Dresden	Dresden	Germany
Braun	Thomas	Invited speaker	W43	Max Planck Institute for Heart and Lung Research	Bad Nauheim	Germany
Brea-Calvo	Gloria		W10	Andalusian Centre for Developmental Biology	Seville	Spain
Bremer	Anna		W19	Leibniz Institute on Aging – Fritz Lipmann Institute	Jena	Germany
Brennan	Sarah E.		W19	University of Maryland	Baltimore	USA
Bretón-Romero	Rosa		W32	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Brierley	Ian	Invited speaker	W18	University of Cambridge	Cambridge	UK
Briones	Paz		W10	Institute of Clinic Biochemistry	Barcelona	Spain
Briscoe	James	Invited speaker	W22	National Institute for Medical Research	London	UK
Brons	Janynke		W4	University of Amsterdam	Amsterdam	The Netherlands
Brose	Nils	Invited speaker	W6, W39, W53	Max Planck Institute for Experimental Medicine	Götingen	Germany
Brown	Nigel	Invited speaker	W4	St. George's Hospital Medical School	London	UK
Brown	Wendy C.		W16	Washington State University	Pullman	USA
Brunke	Sascha		W46	Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute	Jena	Germany

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Brzóska	Kamil		W32	Institute of Nuclear Chemistry and Technology	Warsaw	Poland
Buchner	Johannes	Invited speaker	W51	Technical University of Munich	Garching	Germany
Buchwalter	Abigail		W50	Salk Institute for Biological Studies	La Jolla	USA
Buckingham	Margaret	Invited speaker	W4	Pasteur Institute	Paris	France
Bueno	María Teresa		W51	National Centre for Biotechnology	Madrid	Spain
Bühler	Marc	Invited speaker	W42	Friedrich Miescher Institute for Biomedical Research	Basel	Switzerland
Bukau	Bernd	Invited speaker	W51	German Cancer Research Center	Heidelberg	Germany
Bullejos	Mónica	Organizer and speaker	W17	University of Jaén	Jaén	Spain
Buratowski	Stephen	Invited speaker	W2	Harvard Medical School	Boston	USA
Buresova	Monika		W2	University of Vienna	Vienna	Austria
Burgess	Shawn M.	Organizer and speaker	W12, W20	National Human Genome Research Institute	Bethesda	USA
Busby	Stephen J.W.	Invited speaker	W24	University of Birmingham	Birmingham	UK
Buschbeck	Marcus		W30	Institute for Predictive and Personalized Medicine of Cancer	Badalona	Spain
Bushell	Martin		W18, W19	University of Nottingham	Nottingham	UK
Bushey	Ashley M.		W23	Emory University	Atlanta	USA
Bushnell	M. Catherine	Invited speaker	W15	McGill University	Montreal	Canada
Busselez	Johan		W29	National Centre for Biotechnology	Madrid	Spain
Bustos	Matilde		W33, W55	Institute of Biomedicine of Seville	Seville	Spain
Buxboim	Amnon		W50	The Hebrew University of Jerusalem	Jerusalem	Israel
Caballero	Erica		W27	University of Valladolid	Valladolid	Spain
Caballero	Javier		W10	Agency of Evaluation of Health Technologies	Seville	Spain
Caballero Flores	Gustavo G.		W54	University of Michigan Medical School	Ann Arbor	USA
Caballero-Lima	David		W8	University of Extremadura	Badajoz	Spain
Caballo-Ponce	Eloy		W49	University of Málaga	Málaga	Spain
Cabeza	José María		W21	University of Seville	Seville	Spain
Cabrera Maqueda	José María		W47	University Hospital "Virgen de la Arrixaca"	Murcia	Spain
Cáceres	Javier F.	Invited speaker	W19	Western General Hospital	Edinburgh	UK
Cáceres	Mario		W12	Centre for Genomic Regulation	Barcelona	Spain
Cadenas	Enrique	Invited speaker	W32	University of Southern California	Los Angeles	USA
Cairrão	Fátima		W19	New University of Lisbon	Oeiras	Portugal
Caja	Sergio		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Calabia-Linares	Carmen		W31	Research Institute at Hospital de La Princesa	Madrid	Spain
Caldecott	Keith W.	Invited speaker	W57	University of Sussex	Brighton	UK
Calleja Sierra	Enrique		W36	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Callen	Elsa		W56	National Cancer Institute	Bethesda	USA
Callewaert	Lien		W25	Catholic University of Louvain	Louvain	Belgium
Calvanese	Vicenzo		W7	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Calvo	Beatriz		W20	University of Barcelona	Barcelona	Spain

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Calvo	María		W27	University of Valladolid	Valladolid	Spain
Calvo	Olga		W41	University of Salamanca	Salamanca	Spain
Camerini-Otero	Daniel		W9	National Institute of Diabetes and Digestive and Kidney Diseases	Bethesda	USA
Campanero	Miguel R.		W43	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Campbell	Kenneth	Invited speaker	W22	University of Cincinnati	Cincinnati	USA
Campione	Marina	Organizer and speaker	W4	University of Padua	Padua	Italy
Campos-Sánchez	Elena		W30	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Cano	David		W42	University of Granada	Granada	Spain
Cano	David A.	Organizer and speaker	W20, W33	Institute of Biomedicine of Seville	Seville	Spain
Cano	Elena		W40	University of Málaga	Málaga	Spain
Cano	Raquel		W21, W39	University of Seville	Seville	Spain
Canossa	Marco	Invited speaker	W26	Italian Institute of Technology	Genoa	Italy
Cánovas	Begoña		W48	Institute for Research in Biomedicine	Barcelona	Spain
Cantero-Nieto	Gloria		W21	University of Seville	Seville	Spain
Cañete	Ana		W40, W43	University of Málaga	Málaga	Spain
Capel	Blanche	Invited speaker	W17	Duke University Medical Center	Durham	USA
Capilla	Javier		W46	Rovira i Virgili University	Reus	Spain
Caporale	Lynn Helena	Invited speaker	W14	Columbia University	New York	USA
Caraffi	Stefano		W2	University of Bologna	Bologna	Italy
Carazo	José María	Organizer and speaker	W29	National Centre for Biotechnology	Madrid	Spain
Carbó	Natalia		W8	National Centre for Biotechnology	Madrid	Spain
Carbonell	Albert		W30	University of Barcelona	Barcelona	Spain
Cardenal-Muñoz	Elena		W31	University of Seville	Seville	Spain
Cardozo	Marcos		W22	Cajal Institute	Madrid	Spain
Carmona	Rita		W4, W40, W43	University of Málaga	Málaga	Spain
Carnero	Amancio	Organizer and speaker	W48	Institute of Biomedicine of Seville	Seville	Spain
Carnero	Elena		W42	University of Navarra	Pamplona	Spain
Caroni	Pico	Invited speaker	W3	Friedrich Miescher Institute for Biomedical Research	Basel	Switzerland
Carracedo	Arkaitz		W58	Center for Cooperative Research in Biosciences bioGUNE	Derio	Spain
Carrasco	Manuel		W33	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Carrera	Ana C.	Organizer and speaker	W50, W58	National Centre for Biotechnology	Madrid	Spain
Carreté	Laia		W46	Centre for Genomic Regulation	Barcelona	Spain
Carretero	Luis		W27	University of Oviedo	Oviedo	Spain
Carril	Iñaki		W26	University of Navarra	Pamplona	Spain
Carrión	Ángel Manuel	Invited speaker	W37	Pablo de Olavide University	Seville	Spain
Cartagena	Julio		W18	University of Santiago de Chile	Santiago	Chile
Carvalho	Ana		W60	Gulbenkian Science Institute	Oeiras	Portugal
Carvalho-Santos	Zita		W29	Gulbenkian Science Institute	Oeiras	Portugal
Casadesús	Josep	Organizer and speaker	W1, W14, W24, W49	University of Seville	Seville	Spain

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Casañas	Juan José		W21	University of Seville	Seville	Spain
Casares	Fernando	Organizer and speaker	W12, W52	Andalusian Centre for Developmental Biology	Seville	Spain
Cascajo-Almenara	Marivi		W10, W19	Andalusian Centre for Developmental Biology	Seville	Spain
Cascales	Eric	Organizer and speaker	W49, W60	University of Aix-Marseilles	Marseilles	France
Casellas	Rafael	Invited speaker	W57	National Cancer Institute	Bethesda	USA
Cassell	Raphaëlle		W37	University of Strasbourg	Strasbourg	France
Castaño	David		W33	University of Navarra	Pamplona	Spain
Castejón-Griñán	María		W56	University of Murcia	El Palmar	Spain
Castelló	Alfredo		W18	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Castillo	Sandra		W58	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Castillo-Lizardo	Melissa		W14	University of Málaga	Málaga	Spain
Castrén	Maija	Invited speaker	W13	University of Helsinki	Helsinki	Finland
Castro	Carmen		W26, W47	University of Cádiz	Cádiz	Spain
Castro	Mario		W36	Comillas Pontifical University	Madrid	Spain
Cattaneo	Elena	Invited speaker	W44	University of Milan	Milan	Italy
Causse	Sébastien Z.		W51	University of Burgundy	Dijon	France
Cavalli	Giacomo	Invited speaker	W23	Institute of Human Genetics	Montpellier	France
Cebola	Inês		W30	Institute for Predictive and Personalized Medicine of Cancer	Badalona	Spain
Cebrià	Francesc		W20	University of Barcelona	Barcelona	Spain
Çelik	Arzu		W52	Bosphorus University	Istanbul	Turkey
Çelik	Ertuğrul-Kaan		W16	University of Graz	Graz	Austria
Celli	Jean		W60	Washington State University	Pullman	USA
Centanin	Lázaro		W26	Heidelberg University	Heidelberg	Germany
Ceppi	Maurizio	Invited speaker	W52	Roche Innovation Center Penzberg	Penzberg	Germany
Cereghini	Silvia		W30	Pierre and Marie Curie University	Paris	France
Cerf-Bensussan	Nadine	Invited speaker	W35	University René Descartes-Paris 5	Paris	France
Cerritelli	Susana M.		W45	Eunice Kennedy Shriver National Institute of Child Health and Human Development	Bethesda	USA
Cervantes	Sara		W33	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Ceyssens	Pieter-Jan		W28	Catholic University of Louvain	Louvain	Belgium
Cha	Rita		W9	National Institute for Medical Research	London	UK
Chan	Chung Man		W20	City University of Hong Kong	Hong Kong	China
Chanin	Rachael		W54	University of Texas Southwestern Medical Center	Dallas	USA
Charnay	Patrick	Invited speaker	W12	Normal Superior School	Paris	France
Chávez	Sebastián	Organizer and speaker	W11, W41	Institute of Biomedicine of Seville	Seville	Spain
Chávez-Gutiérrez	Lucía		W44	Catholic University of Louvain	Louvain	Belgium
Chechik	Lyuba		W56	Institute of Genetics and Molecular and Cellular Biology	Illkirch	France
Chédin	Frédéric	Invited speaker	W45	University of California Davis	Davis	USA
Chédotal	Alain	Invited speaker	W47	Vision Institute	Paris	France

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Chemes	Héctor E.	Invited speaker	W17	Center of Endocrinological Investigations	Buenos Aires	Argentina
Chen	Ling-Ling	Invited speaker	W42	Shanghai Institutes for Biological Sciences	Shanghai	China
Chico	Lidia		W9	University of Extremadura	Badajoz	Spain
Chinchilla	Ana		W4, W11, W12	University of Jaén	Jaén	Spain
Chiurazzi	Pietro	Invited speaker	W13	Catholic University	Rome	Italy
Choder	Mordechai	Organizer and speaker	W41	Technion – Israel Institute of Technology	Haifa	Israel
Chowdhury	Dhrubajyoti		W27	University of Navarra	Pamplona	Spain
Christie	Peter J.	Invited speaker	W16, W60	McGovern Medical School	Houston	USA
Christoffels	Vincent	Invited speaker	W4	University of Amsterdam	Amsterdam	The Netherlands
Chuma	Shinichiro	Invited speaker	W17	Kyoto University	Kyoto	Japan
Cimprich	Karlene A.	Organizer and speaker	W45	Stanford University School of Medicine	Stanford	USA
Cirz	Ryan		W14	Achaogen	South San Francisco	USA
Ciudad	Antonia		W9	University of Extremadura	Badajoz	Spain
Clarke	Anthony J.		W25	University of Guelph	Guelph	Canada
Clarke	David J.	Invited speaker	W31	University College Cork	Cork	Ireland
Clemente	Alfonso		W35	Zaidín Experimental Station	Granada	Spain
Clerc	Isabelle		W36	Montpellier Institute of Molecular Genetics	Montpellier	France
Clotet	Josep		W48	International University of Catalonia	Barcelona	Spain
Cobos	Enrique José		W15	University of Granada	Granada	Spain
Cohen	Richard A.	Invited speaker	W32	Boston University	Boston	USA
Cole	David K.		W36	Cardiff University School of Medicine	Cardiff	UK
Collado-Vides	Julio	Invited speaker	W24	National Autonomous University of México	Cuernavaca	México
Collart	Martine A.	Invited speaker	W41	University of Geneva	Geneva	Switzerland
Comoletti	Davide	Invited speaker	W53	Rutgers University	New Brunswick	USA
Conduit	Paul T.		W29	University of Oxford	Oxford	UK
Constantinou	Georgia		W58	University College London	London	UK
Cook	Jason R.	Invited speaker	W43	Icahn School of Medicine at Mount Sinai	New York	USA
Cooper	Thomas A.	Invited speaker	W7	Baylor College of Medicine	Houston	USA
Corces	Víctor G.	Organizer and speaker	W23	Emory University	Atlanta	USA
Cordero-Alba	María del Mar		W31	University of Seville	Seville	Spain
Corominas	Montserrat		W30	University of Barcelona	Barcelona	Spain
Correa-Bordes	Jaime	Organizer and speaker	W8, W46	University of Extremadura	Badajoz	Spain
Correia	Inês		W46	Complutense University of Madrid	Madrid	Spain
Corrionero	Anna		W7	Centre for Genomic Regulation	Barcelona	Spain
Cortés-Ledesma	Felipe	Organizer and speaker	W9, W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Cossart	Pascale	Invited speaker	W24, W31	Pasteur Institute	Paris	France
Costa	Aida		W38	University of Lisbon	Lisbon	Portugal
Costa	Marcos R.		W26	Federal University of Rio Grande do Norte	Natal	Brazil
Costa	Ricardo		W20	University of Manchester	Manchester	UK
Costa	Tiago R. D.		W60	University College London	London	UK
Costa Simões	Filipa		W20	University of Oxford	Oxford	UK

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Costanzo	Vincenzo	Invited speaker	W34	London Research Institute	South Mimms	UK
Cota	Ignacio		W14, W49	University of Seville	Seville	Spain
Couce	Alejandro		W14	National Centre for Biotechnology	Madrid	Spain
Coutinho	Pedro		W12	Western General Hospital	Edinburgh	UK
Covo	Shay		W46	The Hebrew University of Jerusalem	Rehovot	Israel
Cowen	Leah E.	Invited speaker	W46	University of Toronto	Toronto	Canada
Craig	Tim J.		W39	University of Bristol	Bristol	UK
Cramer	Patrick	Invited speaker	W41	Ludwig-Maximilians University of Munich	Munich	Germany
Creemers	Esther E.	Invited speaker	W43	Heart Failure Research Center	Amsterdam	The Netherlands
Crespo	Inmaculada		W22, W26	Cajal Institute	Madrid	Spain
Crişan	Mihaela		W40	Erasmus MC	Rotterdam	The Netherlands
Croda-García	Gerardo		W24	National Autonomous University of México	México D.F.	México
Crouch	Robert J.	Invited speaker	W45	Eunice Kennedy Shriver National Institute of Child Health and Human Development	Bethesda	USA
Cruz-Adalia	Aránzazu		W31	Research Institute at Hospital de La Princesa	Madrid	Spain
Cuadrado-Tejedor	Mar		W37	University of Navarra	Pamplona	Spain
Cuervo	Ana María	Organizer and speaker	W51	Albert Einstein College of Medicine	New York	USA
Cuesta	Isabel		W2, W5	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Cuesta-Garrote	Natalia		W15	Miguel Hernández University of Elche	Elche	Spain
Cullen	Bryan R.	Organizer and speaker	W7	Duke University Medical Center	Durham	USA
Cuypers	Eva		W15	Catholic University of Louvain	Louvain	Belgium
Cyr	Douglas M.	Invited speaker	W51	University of North Carolina School of Medicine	Chapel Hill	USA
Czarnecka	Joanna		W48	Nencki Institute of Experimental Biology	Warsaw	Poland
D. Acemel	Rafael		W52, W57	Andalusian Centre for Developmental Biology	Seville	Spain
D'Alessandro	Giuseppina		W45	FIRC Institute of Molecular Oncology	Milan	Italy
D'Aniello	Salvatore		W23	University of Barcelona	Barcelona	Spain
Daddaoua	Abdelali		W28	Zaidín Experimental Station	Granada	Spain
Dadon	Daniela		W33	The Hebrew University-Hadassah Medical School	Jerusalem	Israel
Dain	Liliana		W13	University of Buenos Aires	Buenos Aires	Argentina
Dallner	Gustav	Invited speaker	W10	Stockholm University	Stockholm	Sweden
Daniel	Richard A.		W25	Newcastle University	Newcastle upon Tyne	UK
Danielli	Alberto		W24	University of Bologna	Bologna	Italy
Dantas	Tiago J.		W29	National University of Ireland Galway	Galway	Ireland
Darnell	Robert B.	Invited speaker	W19	The Rockefeller University	New York	USA
Daura	Xavier		W28	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain
Davenport	Elizabeth C.		W53	The University of Edinburgh	Edinburgh	UK
David	Blandine		W25	Catholic University of Louvain	Louvain-la-Neuve	Belgium

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Davidson	Beverly L.	Invited speaker	W7	University of Iowa	Iowa City	USA
Davidson	Eric H.	Invited speaker	W12	California Institute of Technology	Pasadena	USA
Davidson	Irwin		W11	Institute of Genetics and Molecular and Cellular Biology	Illkirch	France
de Bentzmann	Sophie	Organizer and speaker	W28	Institute of Microbiology of the Mediterranean	Marseilles	France
de Boer	Rob J.	Invited speaker	W36	Utrecht University	Utrecht	The Netherlands
de Cárcer	Guillermo	Organizer and speaker	W48, W56	Spanish National Cancer Research Centre	Madrid	Spain
de Castro	Fernando		W26	National Hospital for Paraplegics	Toledo	Spain
de Castro	María Pilar		W4	University of Jaén	Jaén	Spain
De Castro Arce	Johanna		W5	German Cancer Research Center	Heidelberg	Germany
de Cires	César		W6	University of Seville	Seville	Spain
de Diego	Yolanda	Invited speaker	W13	University Hospital "Carlos Haya"	Málaga	Spain
de Fátima Costa	Alzenira		W13	University of Seville	Seville	Spain
De Felici	Massimo	Invited speaker	W17	University "Tor Vergata"	Rome	Italy
De Franco	Elisa		W33	University of Exeter	Exeter	UK
de Frutos	Sergio		W43	University of Alcalá	Alcalá de Henares	Spain
De Koninck	Magali		W56	Spanish National Cancer Research Centre	Madrid	Spain
de la Cruz	Fernando	Invited speaker	W16	University of Cantabria	Santander	Spain
de la Cruz	Jesús		W2, W7	University of Seville	Seville	Spain
de la Peña	Marcos		W59	Polytechnic University of Valencia	Valencia	Spain
de la Pompa	José Luis		W4	National Centre for Biotechnology	Madrid	Spain
de la Rosa	Ángel		W4	University of Jaén	Jaén	Spain
de Lorenzo	Víctor	Invited speaker	W24	National Centre for Biotechnology	Madrid	Spain
de Lucas	Susana		W7	National Centre for Biotechnology	Madrid	Spain
de Miguel-Jiménez	Lola		W41	Institute of Biomedicine of Seville	Seville	Spain
de Moor	Cornelia H.		W19, W41	University of Nottingham	Nottingham	UK
de Paz	Héctor		W16	University of Cantabria	Santander	Spain
de Pedro	Miguel A.	Organizer and speaker	W25	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
De Rubeis	Silvia		W13	University "Tor Vergata"	Rome	Italy
de Sena-Tomás	Carmen		W34	National Centre for Biotechnology	Madrid	Spain
de Souza	Sandro J.	Invited speaker	W19	Ludwig Institute for Cancer Research	Sao Paulo	Brazil
De Strooper	Bart	Invited speaker	W44	Catholic University of Louvain	Louvain	Belgium
De Vas	Matías		W33	Pierre and Marie Curie University	Paris	France
Dean	Ann	Invited speaker	W23	National Institute of Diabetes and Digestive and Kidney Diseases	Bethesda	USA
Debatisse	Michelle	Invited speaker	W45	Curie Institute	Paris	France
Decara del Olmo	Juan		W13	University Hospital "Carlos Haya"	Málaga	Spain
Dehio	Christoph	Organizer and speaker	W16, W60	University of Basel	Basel	Switzerland

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del Blanco	Beatriz		W9, W23	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
del Mazo	Jesús	Invited speaker	W17	Biological Research Center	Madrid	Spain
del Monte	Alberto		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Del Pozo	Miguel A.		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
del Puerto	Ana		W47	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
del Val Muñoz	Coral		W24	University of Granada	Granada	Spain
Delacroix	Laurence		W38	University of Liège	Liège	Belgium
Delaney	Kerry R.	Invited speaker	W21	University of Victoria	Victoria	Canada
Delgado	Ignacio		W6	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Delgado	Irene		W33	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Delgado	Luisa		W35	University of Los Andes	Bogotá	Colombia
Delgado García	Mercedes		W13	no scientific affiliation during the workshop	Seville	Spain
Delgado-Ramos	Lidia		W41	Institute of Biomedicine of Seville	Seville	Spain
Dellago	Hanna		W34	University of Natural Resources and Life Sciences	Vienna	Austria
Delprato	Anna		W16	Laboratory of Enzymology and Structural Biochemistry	Gif-sur-Yvette	France
Denicola	Ana	Invited speaker	W32	University of the Republic	Montevideo	Uruguay
Denk	Winfried	Invited speaker	W3	Max Planck Institute for Medical Research	Heidelberg	Germany
Deogracias	Rubén		W2	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Deplancke	Bart	Invited speaker	W52	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Dermitzakis	Emmanouil T.	Invited speaker	W30	University of Geneva	Geneva	Switzerland
Deshpande	Aditi		W26	Ludwig-Maximilians University of Munich	Munich	Germany
Devesa	Isabel		W27	Miguel Hernández University of Elche	Elche	Spain
Di Caudo	Carla Gisela		W26	University of Navarra	Pamplona	Spain
Di Croce	Luciano		W5	Centre for Genomic Regulation	Barcelona	Spain
Di Marco	Fabiana		W44	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Di Pasquale	Elisa		W50	Institute of Genetic and Biomedical Research - UOS of Milan	Milan	Italy
Di Pierro	Michele		W57	Rice University	Houston	USA
Di Pietro	Antonio	Organizer and speaker	W46	University of Córdoba	Córdoba	Spain
Di Venanzio	Gisela		W60	Washington University School of Medicine	St. Louis	USA
Díaz	Rosa		W18	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Díaz de la Guardia	Rafael		W17	University of Jaén	Jaén	Spain
Díaz-Castro	Blanca		W22	Institute of Biomedicine of Seville	Seville	Spain
Díaz-Guerra	Margarita		W27	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Díaz-Moreno	Irene		W51	University of Seville	Seville	Spain

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Díaz-Romero	Alberto		W49	National Centre for Biotechnology	Madrid	Spain
Díaz-Ruiz	José Alberto		W21	University of Córdoba	Córdoba	Spain
Dietz	Harry C.	Organizer and speaker	W43	Johns Hopkins University School of Medicine	Baltimore	USA
Díez	Juana		W18	Pompeu Fabra University	Barcelona	Spain
Dillard	Joseph P.	Organizer and speaker	W16, W25	University of Wisconsin-Madison	Madison	USA
DiMauro	Salvatore	Organizer and speaker	W10	Columbia University	New York	USA
Dimitrov	Alexander G.		W15	Centre for Biomedical Engineering	Sofia	Bulgaria
Discher	Dennis E.	Invited speaker	W50	University of Pennsylvania	Philadelphia	USA
Dittman	Jeremy		W39	Weill Cornell Medical College	New York	USA
Dixon	Don B.		W3	National Institute for Medical Research	London	UK
Djabali	Karima		W50	Technical University of Munich	Garching	Germany
Djodji Damas	Nkerorema		W42	University of Copenhagen	Copenhagen	Denmark
Dobrzyńska	Agnieszka		W50	Andalusian Centre for Developmental Biology	Seville	Spain
Dolci	Susanna		W17	University "Tor Vergata"	Rome	Italy
Dolmetsch	Ricardo	Organizer and speaker	W27	Stanford University School of Medicine	Stanford	USA
Domingo-Prim	Judit		W45	Stockholm University	Stockholm	Sweden
Domínguez	Jorge N.		W4	University of Jaén	Jaén	Spain
Domínguez-Cuevas	Patricia	Invited speaker	W25	Newcastle University	Newcastle upon Tyne	UK
Domínguez-Sala	Eduardo		W47	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Domínguez-Sánchez	María S.		W11, W19	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Dondzillo	Anna		W6	Max Planck Institute for Medical Research	Heidelberg	Germany
Dong	Xianjun		W23	University of Bergen	Bergen	Norway
Dor	Yuval	Invited speaker	W33	The Hebrew University-Hadassah Medical School	Jerusalem	Israel
Dorado	Beatriz		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Dorman	Charles J.	Invited speaker	W24	Trinity College	Dublin	Ireland
Draffin	Jonny		W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Drake	John W.	Invited speaker	W14	National Institute of Environmental Health Sciences	Research Triangle Park	USA
Drakulic	Srdja		W29	National Centre for Biotechnology	Madrid	Spain
Drapier	Jean-Claude	Invited speaker	W32	Institute of Chemistry of Natural Substances	Gif-sur-Yvette	France
Druckenbrod	Noah		W38	Harvard Medical School	Boston	USA
Duboule	Denis	Invited speaker	W12	University of Geneva	Geneva	Switzerland
Ducasse	Miryam		W2	Institute for Biomedical Research Georg-Speyer-Haus	Frankfurt	Germany
Dudka	Damian		W48	University of Geneva	Geneva	Switzerland
Duffield	Jeremy S.	Invited speaker	W55	Vertex Pharmaceuticals	Boston	USA
Duharcourt	Sandra	Invited speaker	W42	Paris Diderot University	Paris	France
Duncan	Stephen A.	Invited speaker	W33	Medical College of Wisconsin	Milwaukee	USA
Dunphy	William G.	Invited speaker	W34	California Institute of Technology	Pasadena	USA

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Durán	Paloma		W54	Max Planck Institute for Plant Breeding Research	Cologne	Germany
Durán	Raúl V.	Invited speaker	W40	European Institute of Cemistry and Biology	Pessac	France
Durán Zurita	Elisa		W39	University of Seville	Seville	Spain
Durand	Charles		W40	Pierre and Marie Curie University	Paris	France
Durussel	Jean-David		W17	University of Bologna	Bologna	Italy
Duvezin-Caubet	Stéphane		W10	Ludwig-Maximilians University of Munich	Munich	Germany
Dworatzek	Elke		W43	Charité University Hospital	Berlin	Germany
Dworkin	Jonathan	Invited speaker	W25	Columbia University	New York	USA
Dyer	Paul S.	Invited speaker	W46	University of Nottingham	Nottingham	UK
Dymecki	Susan M.	Invited speaker	W22	Harvard Medical School	Boston	USA
Dziembowska	Magdalena		W19	Nencki Institute of Experimental Biology	Warsaw	Poland
Dzierzak	Elaine	Organizer and speaker	W40	Erasmus MC	Rotterdam	The Netherlands
Easton	Laura E.		W18	MRC Laboratory of Molecular Biology	Cambridge	UK
Eaton	Philip	Invited speaker	W32	King's College London	London	UK
Eberl	Gérard	Invited speaker	W25	Pasteur Institute	Paris	France
Echevarría	Diego		W47	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Echeverri	Karen		W20	Center for Regenerative Therapies TU Dresden	Dresden	Germany
Echeverz	Maite		W49	Institute of Agrobiotechnology	Mutilva	Spain
Eckert-Boulet	Nadine		W9	University of Copenhagen	Copenhagen	Denmark
Egan	Martin		W8	University of Exeter	Exeter	UK
Egea	Gustavo		W43	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Egea	Laia		W1	University of Barcelona	Barcelona	Spain
Eguether	Thibaut		W29	Curie Institute	Orsay	France
Eguren	Manuel		W56	European Molecular Biology Laboratory	Heidelberg	Germany
Ehrlich	Dusko S.	Invited speaker	W35	INRA Research Center at Jouy-en-Josas	Jouy-en-Josas	France
Ejarque	Miriam		W33	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
El Ghachi	Meriem		W25	Pasteur Institute	Paris	France
El Hage	Aziz		W45	The University of Edinburgh	Edinburgh	UK
Elgar	Greg	Invited speaker	W12	University of London	London	UK
Elías	Alberto		W8	Andalusian Centre for Developmental Biology	Seville	Spain
Elías-Arnanz	Montserrat		W24	University of Murcia	Murcia	Spain
Elinav	Eran	Invited speaker	W54	Weizmann institute of Science	Rehovot	Israel
Elliott	David		W19	Newcastle University	Newcastle upon Tyne	UK
Elsen	Sylvie		W28	Interdisciplinary Research Institute of Grenoble	Grenoble	France
Emery	David W.	Invited speaker	W23	University of Washington	Seattle	USA
Endres	Kristina	Invited speaker	W44	Johannes Gutenberg University Mainz	Mainz	Germany
Enguita	Francisco J.		W42, W55	University of Lisbon	Lisbon	Portugal
Enterría-Morales	Daniel		W53	Institute of Biomedicine of Seville	Seville	Spain
Ephrussi	Anne	Invited speaker	W19	European Molecular Biology Laboratory	Heidelberg	Germany
Epstein	Douglas J.	Organizer and speaker	W12, W22, W38	University of Pennsylvania School of Medicine	Philadelphia	USA

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Erck	Christian		W6	Synaptic Systems GmbH	Göttingen	Germany
Erkman	Linda		W6	Faust Pharmaceuticals S.A.	Strasbourg	France
Esain	Virginie		W40	Harvard Medical School	Boston	USA
Escarmís	Cristina	Invited speaker	W1	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Espéli	Olivier		W49	College of France	Paris	France
Espinás	M. Lluisa		W23	Molecular Biology Institute of Barcelona	Barcelona	Spain
Espinosa	Cristina		W32	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Espinosa	Elena		W24	University of Seville	Seville	Spain
Esteban	José A.	Organizer and speaker	W27, W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Esteller	Manel	Invited speaker	W5, W30, W42, W55	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Esteve	Pilar	Invited speaker	W26, W44	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Estrada-Rivadeneyra	Diego		W59	University of Manchester	Manchester	UK
Estruch	Francisco		W2	University of Valencia	Burjassot	Spain
Ettwiller	Laurence		W12	European Molecular Biology Laboratory	Heidelberg	Germany
Eykelenboom	John K.		W34	National University of Ireland Galway	Galway	Ireland
F. de Almeida	Sérgio		W30, W45	University of Lisbon	Lisbon	Portugal
F. Fraga	Mario		W2	Spanish National Cancer Research Centre	Madrid	Spain
Faas	Laura		W19	University of York	York	UK
Fairhead	Cécile	Invited speaker	W46	Paris-Sud University	Orsay	France
Fajardo	Otto		W15	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Fajardo Jr.	Teodoro M.		W18	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Fanjul	Víctor		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Fargas	Laura		W38	Pompeu Fabra University	Barcelona	Spain
Fariñas	Isabel	Invited speaker	W44	University of Valencia	Burjassot	Spain
Farman	Mark L.	Invited speaker	W46	University of Kentucky	Lexington	USA
Faro	José	Organizer and speaker	W36	University of Vigo	Vigo	Spain
Faudry	Eric		W60	Biosciences and Biotechnology Institute of Grenoble	Grenoble	France
Faulkner	Geoffrey J.	Invited speaker	W59	The University of Queensland	Brisbane	Australia
Faull	Jane L.		W46	University of London	London	UK
Faustmann	Marco		W16	University of Basel	Basel	Switzerland
Fazzari	Pietro		W22, W53	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Fdez	Elena		W6	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Feeney	Ann J.	Invited speaker	W23	Scripps Research	La Jolla	USA
Feijóo	Carmen G.		W12	University of Chile	Santiago	Chile
Feijoo-Redondo	Ana		W38	University of Valladolid	Valladolid	Spain
Fejtova	Anna		W21	Leibniz Institute for Neurobiology	Magdeburg	Germany
Fekete	Donna M.	Invited speaker	W38	Purdue University	West Lafayette	USA
Feldman	Mario F.		W60	Washington University School of Medicine	St. Louis	USA

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Felipe-Abrio	Irene		W11	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Felmy	Felix		W3	Oregon Health and Science University	Portland	USA
Felsenfeld	Gary	Invited speaker	W23	National Institute of Diabetes and Digestive and Kidney Diseases	Bethesda	USA
Ferenci	Thomas	Invited speaker	W14	The University of Sydney	Sydney	Australia
Fernández	Luis Ángel		W60	National Centre for Biotechnology	Madrid	Spain
Fernández	Matilde		W28	Bio-Iliberis R&D	Granada	Spain
Fernández Sánchez	Noemí		W18	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Fernández-Álvarez	Alfonso		W8	Andalusian Centre for Developmental Biology	Seville	Spain
Fernández-Álvarez	Ana		W23	Biomedicine Institute of Valencia	Valencia	Spain
Fernández-Capetillo	Óscar	Organizer and speaker	W9, W34, W45, W56, W57	Spanish National Cancer Research Centre	Madrid	Spain
Fernández-Carvajal	Isabel		W13	University of Valladolid	Valladolid	Spain
Fernández-Chacón	Rafael	Organizer and speaker	W3, W6, W21, W37, W39, W47, W53	Institute of Biomedicine of Seville	Seville	Spain
Fernández-Escamilla	Ana María		W24	Zaidín Experimental Station	Granada	Spain
Fernández-García	Elisabet		W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Fernández-González	Esther		W16, W31	University of Cantabria	Santander	Spain
Fernández-Hernando	Carlos	Organizer and speaker	W55	Yale University School of Medicine	New Haven	USA
Fernández-Miñán	Ana		W23	Andalusian Centre for Developmental Biology	Seville	Spain
Fernández-Miranda	Gonzalo		W45	Institute for Research in Biomedicine	Barcelona	Spain
Fernández-Moreno	Miguel Ángel		W10	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Fernández-Olmos	Ana		W28	University Hospital "Ramón y Cajal"	Madrid	Spain
Fernández-Orth	Juncal		W27	University of the Basque Country	Leioa	Spain
Fernández-Peruchena	Carlos		W6	University of Seville	Seville	Spain
Fernández-Pevida	Antonio		W18	University of Seville	Seville	Spain
Fernández-Salguero	Pedro M.		W23	University of Extremadura	Badajoz	Spain
Fernández-Tornero	Carlos		W41	Biological Research Center	Madrid	Spain
Ferrán	José Luis		W12	University of Murcia	Murcia	Spain
Ferrando Lucas	María Teresa		W13	Hospital "Quirón"	Madrid	Spain
Ferrer	Jorge	Organizer and speaker	W30, W33	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Ferrer González	Lara Natalia		W1	no scientific affiliation during the workshop	Barcelona	Spain
Ferrer-Montiel	Antonio	Invited speaker	W27	Miguel Hernández University of Elche	Elche	Spain
Ferrero	José J.		W39	Complutense University of Madrid	Madrid	Spain

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Ferrero Gómez	Lara		W10	no scientific affiliation during the workshop	Seville	Spain
Fetter-Pruneda	Ingrid		W12	National Autonomous University of México	México D.F.	México
Fibriansah	Guntur		W25	University of Groningen	Groningen	The Netherlands
Fierro-Fernández	Marta		W43	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Filipowicz	Witold	Invited speaker	W7	Friedrich Miescher Institute for Biomedical Research	Basel	Switzerland
Fillet	Sandy		W28	Zaidín Experimental Station	Granada	Spain
Filloux	Alain	Invited speaker	W28	Imperial College London	London	UK
Fink	Pamela J.		W36	University of Washington	Seattle	USA
Finlay	B. Brett	Invited speaker	W31	University of British Columbia	Vancouver	Canada
Fiorenza	Anna		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Fiori	Alessandro		W46	Catholic University of Louvain	Louvain	Belgium
Fischbach	Michael A.	Invited speaker	W54	University of California San Francisco	San Francisco	USA
Fischer	Gilles		W9	Pasteur Institute	Paris	France
Fisher-Lavie	Arava		W21	Technion – Israel Institute of Technology	Haifa	Israel
Flanagan	Sarah E.		W33	University of Exeter	Exeter	UK
Flández	Marta		W51	Spanish National Center for Cardiovascular Research	Madrid	Spain
Flaugnatti	Nicolas		W49	University of Aix-Marseilles	Marseilles	France
Flor-Parra	Ignacio		W8	National Centre for Biotechnology	Madrid	Spain
Florentz	Catherine	Invited speaker	W18	Louis Pasteur University	Strasbourg	France
Floriano	Belén		W24	Andalusian Centre for Developmental Biology	Seville	Spain
Foiani	Marco	Organizer and speaker	W9, W34, W45	University of Milan	Milan	Italy
Foijer	Floris	Invited speaker	W56	University of Groningen	Groningen	The Netherlands
Foisner	Roland	Invited speaker	W50	Medical University of Vienna	Vienna	Austria
Forment	Josep V.		W34	University of Cambridge	Cambridge	UK
Fortes	Puri	Invited speaker	W7, W59	University of Navarra	Pamplona	Spain
Foster	Simon J.		W25	University of Sheffield	Sheffield	UK
Fraguas	Susanna		W20	University of Barcelona	Barcelona	Spain
Franchini	Daniela		W53	University of Bristol	Bristol	UK
Franco	Diego	Organizer and speaker	W4	University of Jaén	Jaén	Spain
Franco	Julio		W53	University of Seville	Seville	Spain
Francolini	Maura		W39	University of Milan	Milan	Italy
Frande-Cabanes	Elisabet		W31	Hospital "Santa Cruz de Liencres"	Liencres	Spain
Frangogiannis	Nikolaos G.	Invited speaker	W43	Albert Einstein College of Medicine	Bronx	USA
Franke	Martin		W57	Andalusian Centre for Developmental Biology	Seville	Spain
Fraune	Sebastian	Invited speaker	W54	Christian-Albrechts University of Kiel	Kiel	Germany
Freeman	Bruce A.	Invited speaker	W32	University of Pittsburgh School of Medicine	Pittsburgh	USA
Freire	Raimundo		W34	University of La Laguna	La Laguna	Spain
Freitas	António A.	Invited speaker	W36	Pasteur Institute	Paris	France
Frenguelli	Bruno G.	Invited speaker	W37	University of Warwick	Coventry	UK
Frigolé Vivas	Marta		W51	Institute for Research in Biomedicine	Barcelona	Spain

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

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Fronzes	Rémi		W16	Birkbeck College	London	UK
Frydman	Judith	Invited speaker	W51	Stanford University	Stanford	USA
Fulgencio-Covián	Alejandro		W55	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Furchtgott	Leon		W25	Harvard University	Cambridge	USA
G. Bartual	Sergio		W25	Rocasolano Institute of Physical Chemistry	Madrid	Spain
G. Boneca	Ivo	Invited speaker	W25	Pasteur Institute	Paris	France
G. de Yébenes	Virginia		W55	Spanish National Center for Cardiovascular Research	Madrid	Spain
G. Míguez	David		W22	Molecular Biology Institute of Barcelona	Barcelona	Spain
G. Sainz de Aja	Julio		W40	Spanish National Center for Cardiovascular Research	Madrid	Spain
G. Santamaría	Patricia		W56	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
G. Scholl	Francisco		W3, W6, W21, W39, W53	Institute of Biomedicine of Seville	Seville	Spain
Gabaldón	Toni	Organizer and speaker	W46	Centre for Genomic Regulation	Barcelona	Spain
Gaboriau-Routhiau	Valérie		W35	University René Descartes-Paris 5	Paris	France
Gaete	Marcia		W20	Pontifical Catholic University of Chile	Santiago	Chile
Gago	Andrea		W50	Biocruces Bizkaia Health Research Institute	Barakaldo	Spain
Gago-Rodrigues	Inês		W30	Andalusian Centre for Developmental Biology	Seville	Spain
Galán	Amparo		W41	Príncipe Felipe Research Center	Valencia	Spain
Galán	Beatriz		W6	University of Seville	Seville	Spain
Galán	Jorge E.	Organizer and speaker	W60	Yale University School of Medicine	New Haven	USA
Galante	Pedro A. F.	Invited speaker	W52	Hospital "Sírio Libanês"	Sao Paulo	Brazil
Galão	Rui Pedro		W18	Pompeu Fabra University	Barcelona	Spain
Galarreta	Antonio		W56	Spanish National Cancer Research Centre	Madrid	Spain
Galceran	Juan		W23	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Galhardo	Rodrigo		W14	Baylor College of Medicine	Houston	USA
Gallarda	Benjamin W.		W22	Salk Institute for Biological Studies	La Jolla	USA
Gallardo	M. Esther		W10	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Gallego	Cristina		W25	Rocasolano Institute of Physical Chemistry	Madrid	Spain
Galli	Daniela		W4	Pasteur Institute	Paris	France
Galliot	Brigitte	Invited speaker	W20	University of Geneva	Geneva	Switzerland
Gálvez Rojas	Robert L.		W35	University of Gothenburg	Gothenburg	Sweden
Gama-Carvalho	Margarida		W19	University of Lisbon	Lisbon	Portugal
Gámez	Gustavo A.		W25	University of Greifswald	Greifswald	Germany
Gamir-Morralla	Andrea		W27, W44	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Gáñez Zapater	Antoni		W41	Stockholm University	Stockholm	Sweden
García	Luis	Invited speaker	W7	Généthon	Evry	France
García	Miquel		W55	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain
García	Pedro	Invited speaker	W25	Biological Research Center	Madrid	Spain

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García Benítez	Francisco		W41	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
García Souto	Daniel		W56	University of Vigo	Vigo	Spain
García-Blanco	Mariano A.	Organizer and speaker	W7	Duke University Medical Center	Durham	USA
García-Calderón	Clara B.		W1	University of Seville	Seville	Spain
García-Cazorla	Àngels		W10	Hospital "Sant Joan de Déu"	Barcelona	Spain
García-del Portillo	Francisco	Organizer and speaker	W31, W49	National Centre for Biotechnology	Madrid	Spain
García-Díaz	Ángel		W5	National Centre for Biotechnology	Madrid	Spain
García-García	Andrés		W40	Spanish National Center for Cardiovascular Research	Madrid	Spain
García-Gómez	Juan José		W7, W18	University of Seville	Seville	Spain
García-Gómez	Sara		W14	University of Málaga	Málaga	Spain
García-González	Diego		W26	National Hospital for Paraplegics	Toledo	Spain
García-Guerra	Lucía		W47	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
García-Junco Clemente	Pablo		W3, W6, W21, W53	Institute of Biomedicine of Seville	Seville	Spain
García-Marqués	Jorge		W26	Cajal Institute	Madrid	Spain
García-Molinero	Varinia		W41	Príncipe Felipe Research Center	Valencia	Spain
García-Núñez	Alejandro		W33	Institute of Biomedicine of Seville	Seville	Spain
García-Osta	Ana		W37	University of Navarra	Pamplona	Spain
García-Pastor	Lucía		W49	University of Seville	Seville	Spain
García-Pichardo	Desiré		W42, W45	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
García-Quintanilla	Meritxell		W1, W24	University of Seville	Seville	Spain
García-Rabaneda	Luis		W39	Institute of Biomedicine of Seville	Seville	Spain
García-Rubio	María		W11	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
García-Sacristán	Ana		W2, W18	Centre of Astrobiology	Madrid	Spain
García-Sanz	José A.	Invited speaker	W19	Biological Research Center	Madrid	Spain
García-Verdugo	José Manuel	Organizer and speaker	W26	Príncipe Felipe Research Center	Valencia	Spain
Garcillán-Barcia	María del Pilar		W1	University of Cantabria	Santander	Spain
Garda	Ana Lila		W13	Valencian Institute of Infertility	Murcia	Spain
Gardeux	Vincent		W52	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Garesse	Rafael	Invited speaker	W10	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Garí	Eloi		W48	University of Lleida	Lleida	Spain
Garitano	Andoni		W42	University of Navarra	Pamplona	Spain
Garmendia	Junkal		W31	Institute of Agrobiotechnology	Mutilva	Spain
Garreta	Elena		W55	Institute for Bioengineering of Catalonia	Barcelona	Spain
Garrett	Wendy S.	Invited speaker	W35	Harvard Medical School	Cambridge	USA

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Garrido	Carmen	Invited speaker	W51	University of Burgundy	Dijon	France
Gasa	Rosa		W33	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Gascón	Sergio		W53	Ludwig-Maximilians University of Munich	Planegg-Martinsried	Germany
Gaspar	María Luisa		W40	National Microbiology Centre	Majadahonda	Spain
Gaudet	Rachelle	Invited speaker	W15	Harvard University	Cambridge	USA
Gauthier	Benoit R.	Invited speaker	W33	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Gautreau	Alexis		W48	Polytechnic School-France-Palaiseau	Palaiseau	France
Gavaldá	Sandra		W11, W19	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Gaztambide	Joaquín		W4	Regional University Hospital "Materno Infantil Carlos Haya"	Málaga	Spain
Gebauer	Fátima	Organizer and speaker	W18, W19	Centre for Genomic Regulation	Barcelona	Spain
Gebhart	G.F.	Invited speaker	W15	University of Pittsburg	Pittsburg	USA
Genin	Stéphane	Invited speaker	W49	Laboratory of Plant-Microbe Interactions	Castanet-Tolosan	France
Georgiev	Pavel	Invited speaker	W23	Institute of Gene Biology	Moscow	Russia
Gergely	Fanni		W29	Cancer Research UK Cambridge Institute	Cambridge	UK
German	Michael S.	Invited speaker	W33	University of California San Francisco	San Francisco	USA
Gestwicki	Jason E.	Invited speaker	W51	University of California San Francisco	San Francisco	USA
Gibson	Janet		W14	Baylor College of Medicine	Houston	USA
Gierasch	Lila M.	Invited speaker	W51	University of Massachusetts	Amherst	USA
Gil-Gálvez	Alejandro		W57	Andalusian Centre for Developmental Biology	Seville	Spain
Girach	Fatima		W39	University of Bristol	Bristol	UK
Giráldez	Fernando	Organizer and speaker	W38	Pompeu Fabra University	Barcelona	Spain
Giraud	Caroline		W28	University of Aix-Marseilles	Marseilles	France
Girón	Jorge A.		W31	University of Florida	Gainesville	USA
Gissen	Paul	Invited speaker	W33	University College London	London	UK
Gittenberger-de Groot	Adriana	Invited speaker	W4	Leiden University Medical Center	Leiden	The Netherlands
Gittens	William		W57	University of Sussex	Brighton	UK
Gladfelter	Amy S.	Invited speaker	W8	Dartmouth College	Hanover	USA
Gleeson	Joseph G.	Invited speaker	W22	University of California San Diego	La Jolla	USA
Goda	Yukiko	Invited speaker	W6	University College London	London	UK
Gökçe	Özgün		W53	Ludwig-Maximilians University of Munich	Munich	Germany
Goldberg	Joanna B.	Invited speaker	W28	University of Virginia	Charlottesville	USA
Goldman	Gustavo H.	Invited speaker	W46	University of Sao Paulo	Sao Paulo	Brazil
Gómez	Jordi	Organizer and speaker	W18, W42, W59	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Gómez de Agüero	Mercedes		W35	University of Bern	Bern	Switzerland
Gómez Lozano	María		W28	Technical University of Denmark	Lyngby	Denmark
Gómez Marín	Carlos		W30	Andalusian Centre for Developmental Biology	Seville	Spain
Gómez-Garre	Pilar		W13	University Hospital "Virgen del Rocío"	Seville	Spain

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Gómez-Gaviro	María Victoria		W47	University Carlos III	Madrid	Spain
Gómez-Gómez	José María		W14	National Centre for Biotechnology	Madrid	Spain
Gómez-González	Belén		W9, W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Gómez-Herreros	Fernando		W2, W5, W11, W56, W57	Institute of Biomedicine of Seville	Seville	Spain
Gómez-Muñoz	María Ángeles		W58	Institute of Biomedicine of Seville	Seville	Spain
Gómez-Raja	Jonathan		W9	University of Extremadura	Badajoz	Spain
Gómez-Saldivar	Georgina		W50	Andalusian Centre for Developmental Biology	Seville	Spain
Gómez-Sánchez	Leonardo		W21, W37, W39	Institute of Biomedicine of Seville	Seville	Spain
Gómez-Skarmeta	José Luis	Organizer and speaker	W12, W23, W30, W57	Andalusian Centre for Developmental Biology	Seville	Spain
Gomis	Ana		W15	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Gonçalves	João		W29	University of Lisbon	Lisbon	Portugal
Gonçalvez	José Tiago		W3	Max Planck Institute for Experimental Medicine	Göttingen	Germany
Gönczy	Pierre	Invited speaker	W29	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Göndör	Anita		W23	Karolinska Institute	Stockholm	Sweden
Gong	Grace		W58	University College London	London	UK
González	Antonio		W27, W32	University of Extremadura	Cáceres	Spain
González	Caleb		W14	Baylor College of Medicine	Houston	USA
González	Cayetano	Invited speaker	W29	Institute for Research in Biomedicine	Barcelona	Spain
González Ortiz	Daniel		W8	University of Extremadura	Badajoz	Spain
González-Aguilera	Cristina		W11	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
González-Barrios	María		W32	Andalusian Centre for Developmental Biology	Seville	Spain
González-Buendía	Edgar F.		W23	National Autonomous University of México	México D.F.	México
González-Estévez	Cristina		W20	University of Nottingham	Nottingham	UK
González-García	Ana		W58	National Centre for Biotechnology	Madrid	Spain
González-González	M. Inmaculada		W39	University of Navarra	Pamplona	Spain
González-Granado	José María		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
González-Prieto	Coral		W49	University of Cantabria	Santander	Spain
González-Rajal	Álvaro		W20	National Centre for Biotechnology	Madrid	Spain
González-Reyes	Acaimo	Invited speaker	W20	Andalusian Centre for Developmental Biology	Seville	Spain
González-Rosa	Juan Manuel		W20	Spanish National Center for Cardiovascular Research	Madrid	Spain
González-Santamaría	José		W43	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
González-Soltero	Rocío		W9	University of Extremadura	Badajoz	Spain
Gonzalo	Susana	Invited speaker	W34, W50	St. Louis University School of Medicine	St. Louis	USA

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Goode	Debbie		W12	University of London	London	UK
Goodrich	James	Invited speaker	W11	University of Colorado	Boulder	USA
Goodrich	Lisa V.	Invited speaker	W38	Harvard Medical School	Boston	USA
Gophna	Uri		W1	Dalhousie University	Halifax	Canada
Görnemann	Janina		W2	Max Planck Institute of Molecular Cell Biology and Genetics	Dresden	Germany
Gorospe	Myriam	Invited speaker	W19, W55	National Institute on Aging	Baltimore	USA
Gorvel	Jean-Pierre	Invited speaker	W31	University of the Mediterranean Aix-Marseilles II	Marseilles	France
Gottesman	Susan	Invited speaker	W24	National Cancer Institute	Bethesda	USA
Göttgens	Berthold	Invited speaker	W40	University of Cambridge	Cambridge	UK
Götz	Magdalena	Invited speaker	W26	Ludwig-Maximilians University of Munich	Munich	Germany
Gould	Joanna M.		W47	University of Southampton	Southampton	UK
Gow	Neil A. R.	Organizer and speaker	W46	University of Aberdeen	Aberdeen	UK
Graber	Tyson E.		W19	Children's Hospital of Eastern Ontario	Ottawa	Canada
Graça	Luis	Invited speaker	W36	University of Lisbon	Lisbon	Portugal
Gragera	Marcos		W51	National Centre for Biotechnology	Madrid	Spain
Graindorge	Antoine		W19	Centre for Genomic Regulation	Barcelona	Spain
Grainge	Robert		W12	University of Virginia	Charlottesville	USA
Grande-Pérez	Ana		W14	University of Málaga	Málaga	Spain
Grandl	Jörg		W15	Scripps Research	La Jolla	USA
Granset	Björn		W3	MRC Laboratory of Molecular Biology	Cambridge	UK
Graupera	Mariona	Invited speaker	W58	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Gregorio-Teruel	Lucía		W27	Miguel Hernández University of Elche	Elche	Spain
Grewal	Shiv I. S.	Invited speaker	W5	National Cancer Institute	Bethesda	USA
Griffiths	Heledd H.		W44	University of Manchester	Manchester	UK
Griveau	Amélie		W22	Paris Diderot University	Paris	France
Groffen	Sander		W6	Free University of Amsterdam	Amsterdam	The Netherlands
Groh	Alexander		W3	Max Planck Institute for Medical Research	Heidelberg	Germany
Grohmann	Elisabeth		W16	Technical University of Berlin	Berlin	Germany
Groisman	Eduardo A.	Organizer and speaker	W1, W24	Washington University School of Medicine	St. Louis	USA
Gromak	Natalia		W45	University of Oxford	Oxford	UK
Grompe	Markus	Invited speaker	W33	Oregon Health & Science University	Portland	USA
Gross	Lital		W41	Technion – Israel Institute of Technology	Haifa	Israel
Gross	Stefan A.		W15	Saarland University Medical Center	Homburg	Germany
Grossman	Zvi	Invited speaker	W36	National Institute of Allergy and Infectious Diseases	Bethesda	USA
Groth	Anja	Invited speaker	W34	University of Copenhagen	Copenhagen	Denmark
Grummt	Ingrid	Invited speaker	W42	German Cancer Research Center	Heidelberg	Germany
Grynberg	Marcin		W16	Institute of Biochemistry and Biophysics	Warsaw	Poland
Guadamillas	Marta C.		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Guadix	Juan Antonio		W4	University of Málaga	Málaga	Spain

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Guarner	Francisco	Organizer and speaker	W35	University Hospital "Vall d'Hebron"	Barcelona	Spain
Gueimonde	Miguel		W35	Dairy Research Institute of Asturias	Villaviciosa	Spain
Guénard	Sophie		W28	University of Franche-Comté	Besançon	France
Guerrero	Lucía		W12	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Guialis	Apostolia		W2	Institute of Biological Research and Biotechnology	Athens	Greece
Guichard	Paul		W29	Curie Institute	Orsay	France
Guigó	Roderic	Invited speaker	W12, W23, W30	Centre for Genomic Regulation	Barcelona	Spain
Guil	Sònia		W42	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Guillemot	François	Invited speaker	W26	National Institute for Medical Research	London	UK
Guiretti	Deisy M.		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Gundelfinger	Eckart D.	Invited speaker	W21	Leibniz Institute for Neurobiology	Magdeburg	Germany
Guo	Yuan		W55	Stockholm University	Stockholm	Sweden
Gupta	Ishaan		W41	European Molecular Biology Laboratory	Heidelberg	Germany
Gupta	Tanmay		W48	The University of Edinburgh	Edinburgh	UK
Gutiérrez Escribano	Pilar		W8	University of Extremadura	Badajoz	Spain
Gutiérrez Guisado	Marta		W7	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Gutiérrez-Martín	Yolanda		W15	Complutense University of Madrid	Madrid	Spain
Guyet	Aurelie		W25	Newcastle University	Newcastle upon Tyne	UK
Guzmán	Elena C.		W34	University of Extremadura	Badajoz	Spain
Guzmán-Herrador	Dolores L.		W60	University of Cantabria	Santander	Spain
H. Sterky	Fredrik		W53	University of Gothenburg	Gothenburg	Sweden
Haas	Dieter	Invited speaker	W28	University of Lausanne	Lausanne	Switzerland
Haas	Rainer	Invited speaker	W16	Ludwig-Maximilians University of Munich	Munich	Germany
Haber	James E.	Invited speaker	W9	Brandeis University	Waltham	USA
Habermann	Karin		W29	Max Planck Institute for Molecular Genetics	Berlin	Germany
Haenni	Anne-Lise		W18	Jacques Monod Institute	Paris	France
Häfner	Sophia		W42	Paris Diderot University	Paris	France
Hagerman	Paul J.	Invited speaker	W13	University of California Davis	Davis	USA
Hagerman	Randi J.	Organizer and speaker	W13	University of California Davis	Sacramento	USA
Hahn	Steven	Invited speaker	W11	Fred Hutchinson Cancer Research Center	Seattle	USA
Hamczyk	Magda R.		W55	Spanish National Center for Cardiovascular Research	Madrid	Spain
Hammond	Scott M.	Invited speaker	W7	University of North Carolina	Chapel Hill	USA
Hamperl	Stephan		W45	Stanford University School of Medicine	Stanford	USA
Hampsey	Michael	Invited speaker	W11	University of Medicine and Dentistry of New Jersey	Piscataway	USA
Handwerker	Hermann O.	Invited speaker	W15	Friedrich-Alexander University of Erlangen-Nuremberg	Erlangen	Germany
Hannon	Gregory J.	Invited speaker	W7	Cold Spring Harbor Laboratory	Cold Spring Harbor	USA

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Hansikova	Hana		W10	Charles University	Prague	Czech Republic
Hansson	Gunnar C.	Invited speaker	W35	University of Gothenburg	Gothenburg	Sweden
Harari	Oscar		W24	University of Granada	Granada	Spain
Hardt	Wolf-Dietrich	Invited speaker	W31, W35	Swiss Federal Institute of Technology Zurich	Zurich	Switzerland
Harris	Steven D.	Invited speaker	W8	University of Nebraska	Lincoln	USA
Hartl	F. Ulrich	Invited speaker	W51	Max Planck Institute of Biochemistry	Martinsried	Germany
Hartland	Elisabeth L.	Invited speaker	W60	Monash University	Clayton	Australia
Hartmann	Stephanie		W44	Friedrich-Alexander University of Erlangen-Nuremberg	Erlangen	Germany
Hassani	Mohamed Amine		W54	Max Planck Institute for Plant Breeding Research	Cologne	Germany
Hastings	Philip J.	Invited speaker	W14	Baylor College of Medicine	Houston	USA
Haucke	Volker	Invited speaker	W58	Free University of Berlin	Berlin	Germany
Haumaitre	Cécile		W33	Pierre and Marie Curie University	Paris	France
Hauser	Elizabeth R.		W52	Duke University	Durham	USA
Hauser	Michael A.	Invited speaker	W52	Duke University	Durham	USA
Häussler	Susanne	Invited speaker	W28	Helmholtz Centre for Infection Research	Braunschweig	Germany
Havis	Emmanuelle		W12	Pierre and Marie Curie University	Paris	France
Heard	Edith	Invited speaker	W5	Curie Institute	Paris	France
Hebrok	Matthias	Organizer and speaker	W20, W33	University of California San Francisco	San Francisco	USA
Heidenreich	Erich	Invited speaker	W14	Medical University of Vienna	Vienna	Austria
Heimberg	Harry	Invited speaker	W33	Free University of Brussels	Brussels	Belgium
Hein	Jamin B.		W48	University of Copenhagen	Copenhagen	Denmark
Heinecke	Jay W.	Invited speaker	W32	University of Washington	Seattle	USA
Heinzen	Robert A.	Invited speaker	W16	National Institute of Allergy and Infectious Diseases	Hamilton	USA
Heliot	Claire		W30	Pierre and Marie Curie University	Paris	France
Henley	Jeremy M.	Invited speaker	W39	University of Bristol	Bristol	UK
Henrique	Domingos	Invited speaker	W38	University of Lisbon	Lisbon	Portugal
Hentze	Matthias W.	Invited speaker	W18	European Molecular Biology Laboratory	Heidelberg	Germany
Herman	Christophe	Invited speaker	W14	Baylor College of Medicine	Houston	USA
Hermida	Darío		W48	University of Copenhagen	Copenhagen	Denmark
Hermoso	Juan A.		W25	Rocasolano Institute of Physical Chemistry	Madrid	Spain
Hernández	Sara B.		W24	University of Seville	Seville	Spain
Hernández-Munain	Cristina		W5, W9	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Hernández-Torres	Francisco		W4, W42	University of Jaén	Jaén	Spain
Hernansanz Agustín	Pablo		W32	Research Institute at Hospital de La Princesa	Madrid	Spain
Herr	Winship	Invited speaker	W11	University of Lausanne	Lausanne	Switzerland
Herrera	M. Carmen		W24	Zaidín Experimental Station	Granada	Spain
Herrera	Pedro L.	Invited speaker	W33	University of Geneva	Geneva	Switzerland
Herrera-Moyano	Emilia		W34	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Herrero	María Dolores		W10	University of Zaragoza	Zaragoza	Spain
Herrero-Ruiz	Andrés		W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain

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Heulens	Inge		W13	University of Antwerp	Antwerp	Belgium
Hickson	Ian D.	Invited speaker	W34, W56	University of Copenhagen	Copenhagen	Denmark
Hidalgo-Figueroa	María		W22	Institute of Biomedicine of Seville	Seville	Spain
Hidalgo-Sánchez	Matías		W38	University of Extremadura	Badajoz	Spain
Hiesinger	P. Robin	Invited speaker	W53	Free University of Berlin	Berlin	Germany
Hija	Ayat		W33	The Hebrew University-Hadassah Medical School	Jerusalem	Israel
Hilbi	Hubert		W16	Swiss Federal Institute of Technology Zurich	Zurich	Switzerland
Hime	Gary R.	Invited speaker	W17	The University of Melbourne	Melbourne	Australia
Hirano	Michio	Invited speaker	W10	Columbia University	New York	USA
Hirano	Yasuhiro		W50	Osaka University	Suita	Japan
Hirsch	Emilio	Invited speaker	W58	University of Turin	Turin	Italy
Ho	Chin Yee		W50	King's College London	London	UK
Hobert	Oliver	Invited speaker	W53	Columbia University	New York	USA
Hodel	Alois		W8	Syngenta Bioscience	Bracknell	UK
Hoeijmakers	Jan H. J.	Invited speaker	W9	Erasmus MC	Rotterdam	The Netherlands
Holcik	Martin	Invited speaker	W18	Children's Hospital of Eastern Ontario Research Institute	Ottawa	Canada
Holden	David W.	Invited speaker	W49	Imperial College London	London	UK
Holderith	Noemi		W6	Institute of Experimental Medicine	Budapest	Hungary
Holstege	Frank		W11	University Medical Center Utrecht	Utrecht	The Netherlands
Holubcová	Zuzana		W29	Masaryk University	Brno	Czech Republic
Honoré	Eric	Invited speaker	W15	University of Nice Sophia Antipolis	Valbonne	France
Hooper	Lora V.	Organizer and speaker	W35	University of Texas Southwestern Medical Center	Dallas	USA
Hooper	Nigel M.	Invited speaker	W44	University of Manchester	Manchester	UK
Horvilleur	Emilie		W19	University of Nottingham	Nottingham	UK
Houlard	Martin	Invited speaker	W5	Curie Institute	Paris	France
Howard	Jonathan C.	Invited speaker	W31	University of Cologne	Cologne	Germany
Hruskova	Bohdana		W6	Institute of Experimental Medicine	Prague	Czech Republic
Hu	Bo		W60	The University of Texas Health Science Center at Houston	Houston	USA
Hu	Jing		W15	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Huang	Kerwyn C.		W25	Stanford University	Stanford	USA
Huarte	Maite	Organizer and speaker	W30, W42, W56	University of Navarra	Pamplona	Spain
Hube	Bernhard	Invited speaker	W46	Friedrich Schiller University Jena	Jena	Germany
Huertas	Blanca		W46	Complutense University of Madrid	Madrid	Spain
Huertas	Pablo	Organizer and speaker	W9, W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Hunn	Julia P.		W31	University of Cologne	Cologne	Germany
Hurd	Alexander		W25	University of Sheffield	Sheffield	UK
Hurtado del Pozo	Carmen		W55	Institute for Bioengineering of Catalonia	Barcelona	Spain
Hussein	Bahira		W8	Concordia University	Montreal	Canada
Hyrien	Olivier		W57	Institute of Biology of the Normal Superior School	Paris	France

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
Ieda	Masaki	Invited speaker	W43	Keio University School of Medicine	Tokyo	Japan
Igea	Ana		W48	Institute for Research in Biomedicine	Barcelona	Spain
Iglesias	Marta		W20	University of Barcelona	Barcelona	Spain
Iglesias	Teresa		W27, W44, W47	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Ill-Raga	Gerard		W44	San Raffaele Scientific Institute	Milan	Italy
Infante	Arantza		W50	Biocruces Bizkaia Health Research Institute	Barakaldo	Spain
Inohara	Naohiro	Invited speaker	W25, W35, W54	University of Michigan Medical School	Ann Arbor	USA
Iparraguirre	Leire		W55	Biodonostia Health Research Institute	San Sebastián	Spain
Isern	Joan		W40	Spanish National Center for Cardiovascular Research	Madrid	Spain
Ito	Satomi		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Iyer	Vishwanath R.	Invited speaker	W52	University of Texas at Austin	Austin	USA
Izaurralde	Elisa	Invited speaker	W41	Max Planck Institute for Developmental Biology	Tübingen	Germany
Izpisúa Belmonte	Juan Carlos	Invited speaker	W50	Salk Institute for Biological Studies	La Jolla	USA
Izquierdo	Mercè		W21	Institute for Bioengineering of Catalonia	Barcelona	Spain
Izquierdo-Álvarez	Alicia		W32	Research Institute at Hospital de La Princesa	Madrid	Spain
Jaalouk	Diana E.		W50	American University of Beirut	Beirut	Lebanon
Jackson	Andrew P.	Invited speaker	W45	The University of Edinburgh	Edinburgh	UK
Jackson	Robert W.	Invited speaker	W49	University of Reading	Reading	UK
Jackson	Stephen P.	Invited speaker	W9, W34	University of Cambridge	Cambridge	UK
Jacobsen	Sten Eirik W.	Invited speaker	W40	University of Oxford	Oxford	UK
Jácome	Ariana		W34	Spanish National Cancer Research Centre	Madrid	Spain
Jacquemin	Patrick		W33	Catholic University of Louvain	Brussels	Belgium
Jagla	Krzysztof	Invited speaker	W4	French National Institute of Health and Medical Research	Clermont-Ferrand	France
Jahn	Reinhard	Organizer and speaker	W6	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Janky	Rekin's		W24	MRC Laboratory of Molecular Biology	Cambridge	UK
Janowski	Robert		W29	Institute for Research in Biomedicine	Barcelona	Spain
Jasińska	Magdalena		W44	Nencki Institute of Experimental Biology	Warsaw	Poland
Jedynak	Paulina		W26	Nencki Institute of Experimental Biology	Warsaw	Poland
Jeggo	Penny	Invited speaker	W9	University of Sussex	Brighton	UK
Jemal	Imane		W21	University of Seville	Seville	Spain
Jenq	Robert		W35	Memorial Sloan Kettering Cancer Center	New York	USA
Jensen	Torben Heick	Invited speaker	W2	Aarhus University	Aarhus	Denmark
Jentsch	Thomas J.	Invited speaker	W27	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Jiggins	Francis M.	Invited speaker	W59	University of Cambridge	Cambridge	UK
Jiménez	Antonio J.		W26	University of Málaga	Málaga	Spain
Jiménez Tortosa	Víctor		W47	University of Murcia	Murcia	Spain
Jiménez-Gancedo	Sandra		W52, W57	Andalusian Centre for Developmental Biology	Seville	Spain

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Jiménez-Palomares	Margarita		W33	University Hospital "Puerta del Mar"	Cádiz	Spain
Jiménez-Soto	Luisa		W16	Ludwig-Maximilians University of Munich	Munich	Germany
Jiménez-Zurdo	José I.		W24	Zaidín Experimental Station	Granada	Spain
Jimeno	Sonia	Invited speaker	W2, W11	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Jimeno-González	Silvia		W5	University of Seville	Seville	Spain
Jin	Yishi	Invited speaker	W53	University of California San Diego	La Jolla	USA
Jiricny	Josef	Invited speaker	W34	University of Zurich	Zurich	Switzerland
Jishage	Miki		W11	The Rockefeller University	New York	USA
Jobling	Matthew S.		W17	The University of Edinburgh	Edinburgh	UK
Johansen	Helle Krogh		W49	Copenhagen University Hospital	Copenhagen	Denmark
Johnson	Alexander D.	Invited speaker	W8	University of California San Francisco	San Francisco	USA
Johnson	Rory		W42	Centre for Genomic Regulation	Barcelona	Spain
Jolivet	Geneviève		W23	INRA Research Center at Jouy-en-Josas	Jouy-en-Josas	France
Jones	Peter	Invited speaker	W5	University of Southern California	Los Angeles	USA
Jordan	Albert		W11	Centre for Genomic Regulation	Barcelona	Spain
Jordán	Antonio		W41	University of Valencia	Burjassot	Spain
Jørgensen	Karin Meinike		W28	University of Copenhagen	Copenhagen	Denmark
Jové	Mariona		W32	University of Lleida	Lleida	Spain
Juárez	Antonio		W1	University of Barcelona	Barcelona	Spain
Juhas	Mario		W16	University of Oxford	Oxford	UK
Jukić	Marin M.		W47	Karolinska Institute	Stockholm	Sweden
Julius	David	Organizer and speaker	W15	University of California San Francisco	San Francisco	USA
Juniat	Stéphanie		W38	University College London	London	UK
Jurado-Arjona	Jerónimo		W47	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Kaan	Timothy K.Y.		W15	King's College London	London	UK
Kaczmarek	Leszek	Invited speaker	W44	Nencki Institute of Experimental Biology	Warsaw	Poland
Kadonaga	James T.	Invited speaker	W11	University of California San Diego	La Jolla	USA
Kaeser	Pascal S.	Invited speaker	W21, W39	Harvard Medical School	Boston	USA
Kaeser-Woo	Yea Jin		W39	Massachusetts Institute of Technology	Cambridge	USA
Kaestner	Klaus H.	Organizer and speaker	W20, W30	University of Pennsylvania School of Medicine	Philadelphia	USA
Kageyama	Ryoichiro	Invited speaker	W47	Kyoto University	Kyoto	Japan
Kaidi	Abderrahmane		W56	University of Bristol	Bristol	UK
Kalluri	Raghu	Invited speaker	W43	University of Texas MD Anderson Cancer Center	Houston	USA
Kalyanaraman	Balaraman	Invited speaker	W32	Medical College of Wisconsin	Milwaukee	USA
Kamada	Nobuhiko		W35	University of Michigan Medical School	Ann Arbor	USA
Kamakaka	Rohinton T.	Invited speaker	W23	University of California Santa Cruz	Santa Cruz	USA
Kamalyukova	Ilnaz		W34	University of Copenhagen	Copenhagen	Denmark
Kamat	Rohan H.		W37	Tata Institute of Fundamental Research	Bangalore	India

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Kämmer	Philipp		W46	Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute	Jena	Germany
Kampinga	Harm H.	Invited speaker	W51	University of Groningen	Groningen	The Netherlands
Kanaar	Roland	Organizer and speaker	W9	Erasmus MC	Rotterdam	The Netherlands
Kanisicak	Onur		W43	Cincinnati Children's Hospital Medical Center	Cincinnati	USA
Karam	Alice		W47	Pierre and Marie Curie University	Paris	France
Karapetsas	Athanasios		W58	University of Dundee	Dundee	UK
Kato	Shigeaki	Invited speaker	W5	The University of Tokyo	Tokyo	Japan
Kato	Tadafumi	Invited speaker	W37	RIKEN Brain Science Institute	Saitama	Japan
Keegan	Liam P.		W2	Western General Hospital	Edinburgh	UK
Keene	Jack D.	Invited speaker	W41	Duke University Medical Center	Durham	USA
Kehoe	Laura A.		W27	University of Navarra	Pamplona	Spain
Kelbert-Avraham	Moran		W41	Technion – Israel Institute of Technology	Haifa	Israel
Kelley	Matthew W.	Organizer and speaker	W38	National Institute on Deafness and Other Communication Disorders	Bethesda	USA
Kelly	Robert	Organizer and speaker	W4	University of Aix-Marseilles	Marseilles	France
Kerick	Martin		W52	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Kestav	Katrin		W48	University of Tartu	Tartu	Estonia
Khan	Muhammad Amir		W26	Helmholtz Center Munich	Munich-Neuherberg	Germany
Khan	Zafar U.		W37	University of Málaga	Málaga	Spain
Khodakhah	Kamran	Invited speaker	W27	Albert Einstein College of Medicine	Bronx	USA
Khodjakov	Alexey	Invited speaker	W29	Wadsworth Center	Albany	USA
Kienesberger	Sabine		W16	University of Graz	Graz	Austria
Kieslinger	Matthias		W40	Helmholtz Center Munich	Munich	Germany
Kim	Eunjoon	Invited speaker	W53	Korea Advanced Institute of Science and Technology	Daejeon	Korea
Kim	Juhyun		W24	National Centre for Biotechnology	Madrid	Spain
Kim	Yun-Gi		W54	Keio University	Tokyo	Japan
Kimmel	Robin A.		W20	University of Innsbruck	Innsbruck	Austria
Kimmins	Sarah		W17	McGill University	Montreal	Canada
King	Helen		W18	University of Nottingham	Nottingham	UK
Kirjavainen	Anna		W38	University of Helsinki	Helsinki	Finland
Kitagawa	Daiju		W29	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Klein	Hannah L.	Invited speaker	W45	New York University School of Medicine	New York	USA
Kleinjan	Dirk-Jan		W12	Western General Hospital	Edinburgh	UK
Klenova	Elena	Invited speaker	W23	University of Essex	Essex	UK
Klochendler	Agnes		W33	The Hebrew University-Hadassah Medical School	Jerusalem	Israel
Kolodkin	Alex L.	Invited speaker	W22, W53	Johns Hopkins University School of Medicine	Baltimore	USA
Kolter	Roberto	Invited speaker	W1	Harvard Medical School	Boston	USA
Kolthur	Ullas S.	Invited speaker	W2	Institute of Genetics and Molecular and Cellular Biology	Illkirch	France
Kondoh	Hisato	Invited speaker	W47	Kyoto Sangyo University	Kyoto	Japan

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Konnerth	Arthur	Organizer and speaker	W3	Technical University of Munich	Munich	Germany
Kontoyiannis	Dimitris L.		W19	Biomedical Sciences Research Centre "Alexander Fleming"	Vari	Greece
Koonin	Eugene V.	Invited speaker	W59	National Center for Biotechnology Information	Bethesda	USA
Koopman	Peter	Organizer and speaker	W17	The University of Queensland	Brisbane	Australia
Korb	Judith	Invited speaker	W59	University of Freiburg	Freiburg	Germany
Kordiš	Dušan		W59	Jožef Stefan Institute	Ljubljana	Slovenia
Kornblihtt	Alberto R.	Invited speaker	W2, W30	University of Buenos Aires	Buenos Aires	Argentina
Kornfeld	Jan-Wilhelm	Invited speaker	W55	Max Planck Institute for Metabolism Research	Cologne	Germany
Koshland	Douglas	Invited speaker	W45	University of California Berkeley	Berkeley	USA
Kotsantis	Panagiotis		W45	University of Birmingham	Birmingham	UK
Kousholt	Arne Nedergaard		W34	University of Copenhagen	Copenhagen	Denmark
Kowalczykowski	Stephen C.	Invited speaker	W9	University of California Davis	Davis	USA
Kracht	Michael		W41	Justus-Liebig University Giessen	Giessen	Germany
Krainer	Adrian R.	Invited speaker	W7	Cold Spring Harbor Laboratory	Cold Spring Harbor	USA
Kramer	María Gabriela		W5	University of Navarra	Pamplona	Spain
Kreienkamp	Ray		W50	St. Louis University School of Medicine	St. Louis	USA
Krishnan	Neeraja		W10	Tata Institute of Fundamental Research	Mumbai	India
Kristensen	David M.		W17	Copenhagen University Hospital	Copenhagen	Denmark
Kristensen	Hans-Henrik		W35	Novozymes A/S	Bagsvaerd	Denmark
Krzystyniak	Adam		W53	Nencki Institute of Experimental Biology	Warsaw	Poland
Kubori	Tomoko		W16	Osaka University	Osaka	Japan
Kuhn	Peer-Hendrik		W44	Technical University of Munich	Munich	Germany
Kumar	Anil		W48	Paul Scherrer Institute	Villingen	Switzerland
Kume	Shoen	Invited speaker	W33	Kumamoto University	Kumamoto	Japan
Kuner	Thomas	Invited speaker	W6	Max Planck Institute for Medical Research	Heidelberg	Germany
Kunkel	Thomas A.	Invited speaker	W45	National Institute of Environmental Health Sciences	Research Triangle Park	USA
Kurukuti	Sreenivasulu		W23	University of Glasgow	Glasgow	UK
Kutter	Claudia	Invited speaker	W59	Karolinska Institute	Stockholm	Sweden
Kyewski	Bruno	Invited speaker	W36	German Cancer Research Center	Heidelberg	Germany
L. Fanarraga	Mónica		W29	University of Cantabria	Santander	Spain
La Sala	Gina		W17	University "Tor Vergata"	Rome	Italy
Labib	Karim	Invited speaker	W48	University of Dundee	Dundee	UK
LaCava	John		W11	Centre for Genomic Regulation	Barcelona	Spain
Lage	José Manuel		W5	no scientific affiliation during the workshop	Málaga	Spain
Lagnado	Leon	Invited speaker	W3	MRC Laboratory of Molecular Biology	Cambridge	UK
Lalli	Giovanna		W39	King's College London	London	UK
Lamas	Santiago	Organizer and speaker	W32, W55	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Lammerding	Jan	Invited speaker	W50	Cornell University	Ithaca	USA

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Lampert	Angelika		W15	Friedrich-Alexander University of Erlangen-Nuremberg	Erlangen	Germany
Lancho Medina	Olga		W36	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Lange	Bodo M.H.	Invited speaker	W29	Max Planck Institute for Molecular Genetics	Berlin	Germany
Lango Allen	Hana		W33	University of Exeter	Exeter	UK
Lanzuolo	Chiara		W50	National Institute of Molecular Genetics	Milan	Italy
Lapidot	Tsvee	Invited speaker	W40	Weizmann institute of Science	Rehovot	Israel
Lapouge	Karine		W28	University of Lausanne	Lausanne	Switzerland
Lara-Pezzi	Enrique	Invited speaker	W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Lara-Tejero	María		W60	Yale University School of Medicine	New Haven	USA
Lario	Argentina		W27, W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Larriba	Germán		W9	University of Extremadura	Badajoz	Spain
Larrieu	Delphine		W50	University of Cambridge	Cambridge	UK
Larsen	Jesper		W1	Royal Veterinary and Agricultural University	Frederiksberg	Denmark
Lattanzi	Giovanna		W50	CNR Institute of Molecular Genetics Unit of Bologna	Bologna	Italy
Laub	Michael T.	Invited speaker	W24	Massachusetts Institute of Technology	Cambridge	USA
Laugwitz	Karl	Invited speaker	W4	University of California San Diego	La Jolla	USA
Lavado-Roldán	Ángela		W37	Institute of Biomedicine of Seville	Seville	Spain
Lavigne	Rob	Invited speaker	W28	Catholic University of Louvain	Louvain	Belgium
Leal	María M.		W51	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Ledesma	María Dolores		W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Ledesma-García	Laura		W24	Andalusian Centre for Developmental Biology	Seville	Spain
Lee	Xiaoyun		W28	University of Lausanne	Lausanne	Switzerland
Lees	Jacqueline A.	Invited speaker	W48	Massachusetts Institute of Technology	Cambridge	USA
Legrand	Mélanie		W46	Pasteur Institute	Paris	France
Lehmann	Alan R.	Invited speaker	W9	University of Sussex	Brighton	UK
Leichter	Michael		W7	Institute of Biological Research and Biotechnology	Athens	Greece
Lemaigre	Frédéric P.	Invited speaker	W33	Catholic University of Louvain	Brussels	Belgium
Lemaire	Patrick	Invited speaker	W12	University of the Mediterranean Aix-Marseilles II	Marseilles	France
Lemaitre	Bruno	Invited speaker	W25	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Lenaz	Giorgio	Invited speaker	W10	University of Bologna	Bologna	Italy
Lenhard	Boris	Invited speaker	W12	University of Bergen	Bergen	Norway
Lenzken	Silvia C.		W34, W45	University of Milan-Bicocca	Milan	Italy
Lerma	Juan	Organizer and speaker	W27, W39	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Letellier	Mathieu		W53	University of Bordeaux I	Bordeaux	France
Levens	David	Invited speaker	W11	National Cancer Institute	Bethesda	USA
Levin	Michael	Invited speaker	W20	Tufts University	Boston	USA
Levine	Michael	Invited speaker	W12	University of California Berkeley	Berkeley	USA
Lew	Daniel J.	Invited speaker	W8	Duke University Medical Center	Durham	USA

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Lewin	Gary R.	Invited speaker	W15	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Lewis	Kim	Invited speaker	W14	Northeastern University	Boston	USA
Li	Lingling		W47	Cajal Institute	Madrid	Spain
Liakath-Ali	Kif		W53	King's College London	London	UK
Lichten	Michael	Invited speaker	W9	National Cancer Institute	Bethesda	USA
Lichtman	Jeff	Invited speaker	W3	Harvard University	Cambridge	USA
Lie	D. Chichung	Invited speaker	W26	Helmholtz Center Munich	Munich-Neuherberg	Germany
Lieb	Jason D.	Invited speaker	W30	University of North Carolina	Chapel Hill	USA
Lieberman Aiden	Erez	Organizer and speaker	W57	Baylor College of Medicine	Houston	USA
Liebler	Daniel C.	Invited speaker	W32	Vanderbilt University School of Medicine	Nashville	USA
Limón	M. Carmen		W8, W42	University of Seville	Seville	Spain
Limousin	Taran		W18	Normal Superior School of Lyon	Lyon	France
Lin	Lin		W60	University of Basel	Basel	Switzerland
Lin	Yea-Lih		W34, W45	Institute of Human Genetics	Montpellier	France
Linares-Clemente	Pedro		W3, W6, W21	University of Seville	Seville	Spain
Link	Wolfgang		W58	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Linke	Dirk		W1	Max Planck Institute for Developmental Biology	Tübingen	Germany
Lipiński	Michał		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Lipovich	Leonard	Invited speaker	W42	Wayne State University School of Medicine	Detroit	USA
Lis	John T.	Invited speaker	W2	Cornell University	Ithaca	USA
Lisby	Michael		W9	University of Copenhagen	Copenhagen	Denmark
Littman	Dan R.	Invited speaker	W35	New York University School of Medicine	New York	USA
Liu	Ying		W56	University of Copenhagen	Copenhagen	Denmark
Livingston	David	Invited speaker	W5	Dana-Farber Cancer Institute	Boston	USA
Llamas	Marian		W28	Zaidín Experimental Station	Granada	Spain
Llamusí	Mª Beatriz		W12	University of Valencia	Burjassot	Spain
Llano	Isabel	Invited speaker	W3	University René Descartes-Paris 5	Paris	France
Lleches	Adela		W47	University of Valencia	Burjassot	Spain
Lledo	Pierre-Marie	Invited speaker	W47	Pasteur Institute	Paris	France
Llobet	Artur		W39, W53	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Llosa	Matxalen	Organizer and speaker	W16, W60	University of Cantabria	Santander	Spain
Lobato	Damián		W31	Biological Research Center	Madrid	Spain
Loeb	Lawrence A.	Invited speaker	W14	University of Washington	Seattle	USA
Lombo	Tania		W7	University of Vienna	Vienna	Austria
Londoño-Vallejo	Arturo		W45	Curie Institute	Paris	France
Long	Katherine S.		W28	Technical University of Denmark	Lyngby	Denmark
Looijenga	Leendert H.J.	Invited speaker	W17	Erasmus MC	Rotterdam	The Netherlands
Lopes	Massimo		W34	University of Zurich	Zurich	Switzerland
López Córdoba	Ainara		W27	Miguel Hernández University of Elche	Elche	Spain
López de Silanes	Isabel		W7	Spanish National Cancer Research Centre	Madrid	Spain

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López Mejía	Isabel Cristina		W19	Montpellier Institute of Molecular Genetics	Montpellier	France
López-Acosta	José Francisco		W33	University Hospital "Puerta del Mar"	Cádiz	Spain
López-Atalaya	José P.		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
López-Barneo	José	Invited speaker	W26, W47	Institute of Biomedicine of Seville	Seville	Spain
López-Bendito	Guillermina	Invited speaker	W26	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
López-Contreras	Andrés J.	Organizer and speaker	W34, W56	University of Copenhagen	Copenhagen	Denmark
López-Farfán	Diana		W41	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
López-Fernández	Loida		W46	Rovira i Virgili University	Reus	Spain
López-Garrido	Javier		W31	University of Seville	Seville	Spain
López-Márquez	Diego		W49	University of Málaga	Málaga	Spain
López-Martín	José M.		W10	Andalusian Centre for Developmental Biology	Seville	Spain
López-Mascaraque	Laura		W26	Cajal Institute	Madrid	Spain
López-Maury	Luis		W5, W8	Wellcome Sanger Institute	Hinxton	UK
López-Menéndez	Celia		W27	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
López-Murcia	Francisco José		W39	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
López-Schier	Hernán	Organizer and speaker	W20, W38	Helmholtz Center Munich	Neuherberg	Germany
Lorenz	Michael C.		W46	University of Texas Health Science Center	Houston	USA
Lorenzen	Sarah M.		W38	Northwestern University	Chicago	USA
Lorenzo	Petra I.		W30	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Lőrinczi	Éva		W27	Max Planck Institute for Experimental Medicine	Götingen	Germany
Lorite	Mª José		W27	Lilly R&D	Alcobendas	Spain
Lou	Xuelin		W3	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Louhivuori	Verna		W13	University of Helsinki	Helsinki	Finland
Loveland	Kate L.	Invited speaker	W17	Monash University	Clayton	Australia
Lovett	Michael	Invited speaker	W20	Washington University School of Medicine	St. Louis	USA
Low	David A.	Invited speaker	W49	University of California Santa Barbara	Santa Barbara	USA
Lowndes	Noel F.		W34	National University of Ireland Galway	Galway	Ireland
Lozano	Estefanía		W4	University of Jaén	Jaén	Spain
Lozano	Gloria		W42	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Luca	Francis C.	Invited speaker	W41	University of Pennsylvania	Philadelphia	USA
Lucas	María		W60	University of Cantabria	Santander	Spain
Lujambio	Amaia		W7	Spanish National Cancer Research Centre	Madrid	Spain
Lukas	Jiri	Organizer and speaker	W34, W48	University of Copenhagen	Copenhagen	Denmark
Lukavsky	Peter J.	Invited speaker	W18	MRC Laboratory of Molecular Biology	Cambridge	UK

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Luna	Rosa		W7	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Lund	Anders H.	Invited speaker	W42, W59	University of Copenhagen	Copenhagen	Denmark
Lunyak	Victoria V.	Invited speaker	W23	Buck Institute for Age Research	Novato	USA
Luo	Liqun	Invited speaker	W53	Stanford University	Stanford	USA
Lupiáñez	Darío G.	Invited speaker	W57	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Lušic	Marina	Invited speaker	W50	German Center for Infection Research	Heidelberg	Germany
M. Caravia	Xurde		W55	University of Oviedo	Oviedo	Spain
M. Tormos	Ana		W32	University of Valencia	Burjassot	Spain
M. Valverde	Ángela		W33	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Ma	Li-Jun	Invited speaker	W46	University of Massachusetts	Amherst	USA
Macallan	Derek		W36	University of London	London	UK
Macfarlan	Todd	Invited speaker	W22	Salk Institute for Biological Studies	La Jolla	USA
Machín	Félix		W57	University Hospital "Ntra. Señora de Candelaria"	Santa Cruz de Tenerife	Spain
Macías	Álvaro		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Macías	Sara		W59	The University of Edinburgh	Edinburgh	UK
Macpherson	Andrew J.	Invited speaker	W35	University of Bern	Bern	Switzerland
Madrid	Cristina		W1	University of Barcelona	Barcelona	Spain
Madsen	Ralitsa R.		W58	University of Cambridge	Cambridge	UK
Magri	Marta S.		W52, W57	Andalusian Centre for Developmental Biology	Seville	Spain
Maiato	Helder	Invited speaker	W56	University of Porto	Porto	Portugal
Maicher	André		W45	German Cancer Research Center	Heidelberg	Germany
Maier	Esther		W38	University of Sheffield	Sheffield	UK
Maier	Lisa		W35	Swiss Federal Institute of Technology Zurich	Zurich	Switzerland
Majuelos-Melguizo	Jara		W48, W56	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Mak	Tim N.		W35	Aarhus University	Aarhus	Denmark
Makarov	Alexandr A.		W50	The University of Edinburgh	Edinburgh	UK
Malas	Stavros		W22	The Cyprus Institute of Neurology & Genetics	Nicosia	Cyprus
Malenka	Robert C.	Invited speaker	W39	Stanford University School of Medicine	Stanford	USA
Malgrange	Brigitte		W38	University of Liège	Liège	Belgium
Maliandi	María Victoria		W23	Centre for Genomic Regulation	Barcelona	Spain
Malik	Sohail		W11	The Rockefeller University	New York	USA
Malinow	Roberto	Invited speaker	W3	Cold Spring Harbor Laboratory	Cold Spring Harbor	USA
Mälkiä	Annika		W15	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Malumbres	Marcos	Organizer and speaker	W29, W48	Spanish National Cancer Research Centre	Madrid	Spain
Maman	Yaakov		W57	National Cancer Institute	Bethesda	USA
Maness	Patricia F.	Invited speaker	W44	University of North Carolina School of Medicine	Chapel Hill	USA
Manetsberger	Julia		W34	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Manfredi	Candela		W9	National Centre for Biotechnology	Madrid	Spain

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Manfredi	Giovanni	Invited speaker	W10	Cornell University	New York	USA
Manfroid	Isabelle		W20	University of Liège	Liège	Belgium
Manina	Giulia		W31	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Manley	James L.	Invited speaker	W2	Columbia University	New York	USA
Mann	Jelena	Invited speaker	W43	Newcastle University	Newcastle upon Tyne	UK
Mansén	Anethe		W11	Stockholm University	Stockholm	Sweden
Mansuy	Isabelle M.	Invited speaker	W37	Swiss Federal Institute of Technology Zurich	Zurich	Switzerland
Mantyh	Patrick W.	Invited speaker	W15	University of Arizona	Tucson	USA
Manzanares	Miguel		W12	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Maquat	Lynne E.	Invited speaker	W7	University of Rochester	Rochester	USA
Marcello	Elena		W44	University of Milan	Milan	Italy
Marchal	Juan A.		W17, W48	University of Jaén	Jaén	Spain
Marchal	Kathleen		W24	Catholic University of Louvain	Louvain	Belgium
Marchese	Francesco P.		W42, W56	University of Navarra	Pamplona	Spain
Marco	Sonia		W27	University of Navarra	Pamplona	Spain
Marcos	Séverine		W22	Cajal Institute	Madrid	Spain
Marcotti	Aída		W51	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Marians	Kenneth J.	Invited speaker	W9	Memorial Sloan Kettering Cancer Center	New York	USA
Marín	Óscar	Invited speaker	W22	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Marín Vinader	Laura		W2	Radboud University	Nijmegen	The Netherlands
Marín-Béjar	Oskar		W30, W42	University of Navarra	Pamplona	Spain
Markwald	Roger	Invited speaker	W4	Medical University of South Carolina	Charleston	USA
Marlier	Quentin		W47	University of Liège	Liège	Belgium
Marnett	Lawrence J.	Organizer and speaker	W32	Vanderbilt University School of Medicine	Nashville	USA
Maroto	María		W56	Spanish National Cancer Research Centre	Madrid	Spain
Marques	Inês João		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Márquez-Expósito	Laura		W55	University Hospital "Fundación Jiménez Díaz"	Madrid	Spain
Marrugal	Ángela		W51	Spanish National Cancer Research Centre	Madrid	Spain
Marshall	Wallace F.	Invited speaker	W29	University of California San Francisco	San Francisco	USA
Marteijn	Jurgen A.	Invited speaker	W45	Erasmus MC	Rotterdam	The Netherlands
Martens	Eric C.	Invited speaker	W35, W54	University of Michigan Medical School	Ann Arbor	USA
Martens	Henrik		W6	Synaptic Systems GmbH	Götingen	Germany
Martí	Elisa	Invited speaker	W22	Molecular Biology Institute of Barcelona	Barcelona	Spain
Martí	Ramon	Invited speaker	W10	University Hospital "Vall d'Hebron"	Barcelona	Spain
Martí-Prado	Beatriz		W44	University of Valencia	Burjassot	Spain
Martí-Renom	Marc A.	Invited speaker	W23	Príncipe Felipe Research Center	Valencia	Spain
Martín	Marta	Invited speaker	W49	Autonomous University of Madrid	Madrid	Spain
Martín	Marta		W56	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain

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Martín	Mauricio G.		W37, W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Martín	Miguel Ángel		W10	University Hospital "12 de Octubre"	Madrid	Spain
Martín	Rebeca		W10	University Hospital "12 de Octubre"	Madrid	Spain
Martín	Ricardo		W21	Complutense University of Madrid	Madrid	Spain
Martin	Sophie		W19	Montpellier Institute of Molecular Genetics	Montpellier	France
Martín	Verónica		W14	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Martín-Cófreces	Noa B.		W51	Spanish National Center for Cardiovascular Research	Madrid	Spain
Martín-Puig	Silvia		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Martín-Villanueva	Sara		W51	Institute of Biomedicine of Seville	Seville	Spain
Martínez	Belén		W18	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Martínez	Paula	Invited speaker	W34	Spanish National Cancer Research Centre	Madrid	Spain
Martínez	Raquel		W13	University of Seville	Seville	Spain
Martínez	Salvador	Organizer and speaker	W47	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Martínez Moreno	José Luis		W10	Spanish National Foundation for Muscular Disabled Persons	Madrid	Spain
Martínez Riaño	Ana		W36	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Martínez-Acedo	Pablo		W32	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Martínez-Balbás	Marian		W5	Molecular Biology Institute of Barcelona	Barcelona	Spain
Martínez-Cerdeño	Verónica	Invited speaker	W26	University of California Davis	Sacramento	USA
Martínez-Chantar	María L.		W19	Center for Cooperative Research in Biosciences bioGUNE	Derio	Spain
Martínez-Esparza	María		W14	University of Murcia	Murcia	Spain
Martínez-Fernández	Verónica		W41	University of Jaén	Jaén	Spain
Martínez-García	Pedro Manuel		W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Martínez-Gil	Marta		W28	Zaidín Experimental Station	Granada	Spain
Martínez-López	José A.		W21, W27, W39	Institute of Biomedicine of Seville	Seville	Spain
Martínez-Pastor	María Teresa		W41	University of Valencia	Burjassot	Spain
Martínez-Peinado	Antonio		W13	University Hospital "Reina Sofía"	Córdoba	Spain
Martínez-Ruiz	Antonio		W32	Research Institute at Hospital de La Princesa	Madrid	Spain
Martínez-Salas	Encarna	Organizer and speaker	W7, W18	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Martínez-Serra	Pedro		W12	University of Barcelona	Barcelona	Spain
Martins de Araújo	Mafalda		W7	Centre for Genomic Regulation	Barcelona	Spain
Mas	Glòria		W2	Pompeu Fabra University	Barcelona	Spain
Masek	Tomas		W19	Charles University	Prague	Czech Republic

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Mason	Ronald P.	Invited speaker	W32	National Institute of Environmental Health Sciences	Research Triangle Park	USA
Mateescu	Bogdan		W5	Pasteur Institute	Paris	France
Mateo	Inés		W44	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Mateus	Rita		W20	Institute of Molecular Medicine	Lisbon	Portugal
Mathivanan	Sakthikumar		W27	Miguel Hernández University of Elche	Elche	Spain
Matias	Valério R. F.	Invited speaker	W25	Max Planck Institute of Biochemistry	Martinsried	Germany
Matic	Ivan	Organizer and speaker	W14	University René Descartes-Paris 5	Paris	France
Matilla	Inmaculada		W16	University of Cantabria	Santander	Spain
Matise	Michael P.	Organizer and speaker	W22	University of Medicine and Dentistry of New Jersey	Piscataway	USA
Matsui	Reiko		W32	Boston University Medical School	Boston	USA
Matteoli	Michela	Invited speaker	W6	University of Milan	Milan	Italy
Mattout	Anna		W41	Friedrich Miescher Institute for Biomedical Research	Basel	Switzerland
Matucci	Irene		W58	The Institute of Cancer Research	London	UK
Mavillard	Fabiola		W37	Institute of Biomedicine of Seville	Seville	Spain
Mayer	Christoph		W25	University of Konstanz	Konstanz	Germany
Mayor-Ruiz	Cristina		W56	Spanish National Cancer Research Centre	Madrid	Spain
Mayr	Manuel	Invited speaker	W55	King's College London	London	UK
Mazier	Wilfrid		W27	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
McCarthy	Mark I.	Invited speaker	W30	University of Oxford	Oxford	UK
McFall-Ngai	Margaret J.	Organizer and speaker	W25, W35	University of Wisconsin-Madison	Madison	USA
McKinney	John D.	Invited speaker	W31	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
McKinnon	Peter J.	Invited speaker	W57	St. Jude Children's Research Hospital	Memphis	USA
McLaughlin	Eileen A.		W17	The University of Newcastle	Callaghan	Australia
McMahan	Uel J.	Invited speaker	W21	Texas A&M University	College Station	USA
McReynolds	Larry		W19	New England Biolabs	Ipswich	USA
Medema	René H.	Invited speaker	W48	Netherlands Cancer Institute	Amsterdam	The Netherlands
Medina	Daniel A.		W41	University of Valencia	Burjassot	Spain
Medina	Pedro P.		W55	University of Granada	Granada	Spain
Medvinsky	Alexander	Invited speaker	W40	The University of Edinburgh	Edinburgh	UK
Meisterernst	Michael	Invited speaker	W11	National Research Center for Environment and Health	Munich	Germany
Mejías-Navarro	Fernando		W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Melé	Marta		W42	Centre for Genomic Regulation	Barcelona	Spain
Melero-Martín	Juan M.	Invited speaker	W40	Harvard Medical School	Boston	USA
Méndez	Juan		W34	Spanish National Cancer Research Centre	Madrid	Spain
Méndez	Raúl	Invited speaker	W19, W41	Institute for Research in Biomedicine	Barcelona	Spain
Méndez-Álvarez	Sebastián		W1	University Hospital "Ntra. Señora de Candelaria"	Santa Cruz de Tenerife	Spain

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Méndez-Ferrer	Simón	Organizer and speaker	W40	Spanish National Center for Cardiovascular Research	Madrid	Spain
Menéndez	Margarita		W25	Rocasolano Institute of Physical Chemistry	Madrid	Spain
Menéndez	Pablo		W40	University of Barcelona	Barcelona	Spain
Menéndez-Montes	Iván		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Mengin-Lecreulx	Dominique	Invited speaker	W25	Paris-Sud University	Orsay	France
Mercader	Nadia	Organizer and speaker	W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Mercaldo	Valentina		W13	University "Tor Vergata"	Rome	Italy
Merchant-Larios	Horacio	Invited speaker	W17	National Autonomous University of México	México D.F.	México
Mercola	Mark	Invited speaker	W4	Burnham Institute	La Jolla	USA
Mercurio	Sara		W47	University of Milan-Bicocca	Milan	Italy
Mérida	Isabel		W36	National Centre for Biotechnology	Madrid	Spain
Merino	Ramón		W54	University of Cantabria	Santander	Spain
Merrikh	Houra		W45	University of Washington	Seattle	USA
Merson	Tobias D.		W26	The University of Melbourne	Melbourne	Australia
Mesa	Beatriz		W24	Andalusian Centre for Developmental Biology	Seville	Spain
Mesbah	Karim		W4	Pasteur Institute	Paris	France
Messina	Valeria		W19	University "Tor Vergata"	Rome	Italy
Meyer	Thomas F.	Invited speaker	W31	Max Planck Institute for Infection Biology	Berlin	Germany
Michalopoulos	George K.	Invited speaker	W33	University of Pittsburgh School of Medicine	Pittsburgh	USA
Michel	Bénédicte	Invited speaker	W9	Centre for Molecular Genetics	Gif-sur-Yvette	France
Michel	Thomas	Invited speaker	W32	Harvard Medical School	Boston	USA
Mielnichuk	Natalia		W8	National Centre for Biotechnology	Madrid	Spain
Miguel	Ana		W41	University of Valencia	Burjassot	Spain
Miguel Herranz	Verónica		W43, W55	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Miharada	Kenichi	Invited speaker	W40	Lund University	Lund	Sweden
Mikkelsen	Helga		W28	Imperial College London	London	UK
Miłek	Jacek		W44	Nencki Institute of Experimental Biology	Warsaw	Poland
Milenkovic	Nevena		W15	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Ming	Guo-li	Invited speaker	W26	Johns Hopkins University School of Medicine	Baltimore	USA
Minor Jr.	Daniel L.	Invited speaker	W27	University of California San Francisco	San Francisco	USA
Mir	Pablo	Invited speaker	W13	University Hospital "Virgen del Rocío"	Seville	Spain
Miranda	Alberto		W8	Complutense University of Madrid	Madrid	Spain
Miranda-Vizuete	Antonio		W32	Andalusian Centre for Developmental Biology	Seville	Spain
Mischerikow	Nikolai		W11	Utrecht University	Utrecht	The Netherlands
Misic	Ana M.		W28	University of Wisconsin-Madison	Madison	USA
Missler	Markus		W53	University of Münster	Münster	Germany
Misteli	Tom	Organizer and speaker	W50	National Cancer Institute	Bethesda	USA
Mitchell	Rod T.		W17	The University of Edinburgh	Edinburgh	UK

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Miyawaki	Atsushi	Invited speaker	W3	RIKEN Brain Science Institute	Saitama	Japan
Mlodzik	Marek	Invited speaker	W38	Mount Sinai School of Medicine	New York	USA
Mochizuki	Atsushi		W12	National Institute for Basic Biology	Aichi	Japan
Moens	Cecilia B.	Invited speaker	W38	Fred Hutchinson Cancer Research Center	Seattle	USA
Moghadamrad	Sheida		W35	University of Bern	Bern	Switzerland
Mokrejš	Martin		W18	Charles University	Prague	Czech Republic
Moldón	Alberto		W2	Pompeu Fabra University	Barcelona	Spain
Moleres	Javier		W49	Institute of Agrobiotechnology	Mutilva	Spain
Molin	Søren	Organizer and speaker	W28, W49	Technical University of Denmark	Lyngby	Denmark
Molina	Águeda		W24	Zaidín Experimental Station	Granada	Spain
Molina	Mª Dolores		W20	University of Barcelona	Barcelona	Spain
Molina-Alvarado	Andrea		W31	Free University of Berlin	Berlin	Germany
Molina-París	Carmen	Organizer and speaker	W36	University of Leeds	Leeds	UK
Molkentin	Jeffery D.	Invited speaker	W43	Cincinnati Children's Hospital Medical Center	Cincinnati	USA
Moll	Isabella		W28	University of Vienna	Vienna	Austria
Möller	Mareike		W46	Christian-Albrechts University of Kiel	Kiel	Germany
Moltó	Eduardo		W12, W23	National Centre for Biotechnology	Madrid	Spain
Molyneaux	Kathleen	Invited speaker	W17	Case Western Reserve University	Cleveland	USA
Mommersteeg	Tilly		W4	University of Amsterdam	Amsterdam	The Netherlands
Monasor-Pascual	Ángela		W34	Spanish National Cancer Research Centre	Madrid	Spain
Monini	Paolo	Invited speaker	W1	National AIDS Center	Rome	Italy
Monje-Casas	Fernando	Invited speaker	W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Montalbán-Loro	Raquel		W47	University of Valencia	Burjassot	Spain
Montanuy	Inmaculada		W11	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Montcouquiol	Mireille	Invited speaker	W38	University of Bordeaux I	Bordeaux	France
Monteiro	Joana F.		W20	Gulbenkian Science Institute	Oeiras	Portugal
Monteiro	Rui		W40	University of Oxford	Oxford	UK
Montero	Raquel		W10	Hospital "Sant Joan de Déu"	Barcelona	Spain
Montes	Marta		W19, W42	University of Copenhagen	Copenhagen	Denmark
Montes Fernández	Mª Ángeles		W6, W21, W39	University of Seville	Seville	Spain
Montesinos	María Luz		W6	University of Seville	Seville	Spain
Montoliu	Lluís	Organizer and speaker	W12, W23	National Centre for Biotechnology	Madrid	Spain
Montoya	Guillermo	Organizer and speaker	W29, W48, W51	University of Copenhagen	Copenhagen	Denmark
Montoya	Julio	Invited speaker	W10	University of Zaragoza	Zaragoza	Spain
Monyer	Hannah	Invited speaker	W6	Heidelberg University	Heidelberg	Germany
Moon	Randall T.	Invited speaker	W20	University of Washington School of Medicine	Seattle	USA
Moons	Lieve	Invited speaker	W44	Catholic University of Louvain	Louvain	Belgium
Morado-Díaz	Camilo J.		W22, W26	University of Seville	Seville	Spain

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Morales	Aixa V.		W22, W26, W47	Cajal Institute	Madrid	Spain
Morán	Ignasi		W30	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Moreno	Natividad		W4	University of Jaén	Jaén	Spain
Moreno Fernández-Ayala	Daniel J.		W10	Andalusian Centre for Developmental Biology	Seville	Spain
Moreno Martín-Bejarano	Roberto Carlos		W22, W26	University of Seville	Seville	Spain
Moreno Sancho	Mª Luz		W32	University of Valencia	Burjassot	Spain
Moreno-Manzano	Victoria		W22, W26	Príncipe Felipe Research Center	Valencia	Spain
Moreno-Oñate	Marta		W57	Andalusian Centre for Developmental Biology	Seville	Spain
Morey	Céline		W42	Pasteur Institute	Paris	France
Mori	Takuma		W53	Shinshu University	Nagano	Japan
Morillo-Huesca	Macarena		W8, W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Moritz	Sören		W20	Max Planck Institute for Molecular Biomedicine	Münster	Germany
Morlando	Mariangela		W2	University of Rome "La Sapienza"	Rome	Italy
Moro	Fernando		W51	University of the Basque Country	Leioa	Spain
Morris	Richard G. M.	Organizer and speaker	W37	The University of Edinburgh	Edinburgh	UK
Morrison	Ciaran G.		W29	National University of Ireland Galway	Galway	Ireland
Mortuza	Gulnahar B.		W29, W48	University of Copenhagen	Copenhagen	Denmark
Moshourab	Rabih		W15	Charité University Hospital	Berlin	Germany
Mothersill	Carmel	Invited speaker	W14	McMaster University	Hamilton	Canada
Moxon	E. Richard	Invited speaker	W1	University of Oxford	Oxford	UK
Moya	Andrés	Invited speaker	W1	University of Valencia	Paterna	Spain
Muga	Arturo	Invited speaker	W51	University of the Basque Country	Leioa	Spain
Mukherjee	Debarati		W39	Tata Institute of Fundamental Research	Bangalore	India
Mularoni	Loris		W30	Johns Hopkins University School of Medicine	Baltimore	USA
Mulcahy	Ben		W53	Lunenfeld-Tanenbaum Research Institute	Toronto	Canada
Mulle	Christophe	Invited speaker	W6	University of Bordeaux II	Bordeaux	France
Muller	Cédric		W28	University of Franche-Comté	Besançon	France
Müller	Martin		W3	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Mumm	Jeff S.		W20	Medical College of Georgia	Augusta	USA
Munk	Stephanie		W56	University of Copenhagen	Copenhagen	Denmark
Muntané	Jordi		W10	University Hospital "Reina Sofía"	Córdoba	Spain
Muñiz	M. Mar		W47	Cajal Institute	Madrid	Spain
Muñoz Carvajal	Pablo		W37	University of Valparaíso	Valparaíso	Chile
Muñoz-Barrera	Marta		W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Muñoz-Berbel	Xavier		W21	University of Seville	Seville	Spain

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Muñoz-Bravo	José L.		W33, W51	Institute of Biomedicine of Seville	Seville	Spain
Muñoz-Cabello	Ana M.		W34	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Muñoz-Cánoves	Pura		W43	Pompeu Fabra University	Barcelona	Spain
Muñoz-Chápuli	Ramón	Invited speaker	W4, W40	University of Málaga	Málaga	Spain
Muñoz-Cobo Belart	Juan Pablo		W42	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Muñoz-Hernández	Rocío		W40	Institute of Biomedicine of Seville	Seville	Spain
Muotri	Alysson R.	Invited speaker	W52	University of California San Diego	La Jolla	USA
Murillo-Carretero	Maribel		W26, W47	University of Cádiz	Cádiz	Spain
Murina	Olga		W45	The University of Edinburgh	Edinburgh	UK
Murray	Anna	Invited speaker	W13	University of Exeter	Exeter	UK
Musacchio	Andrea	Invited speaker	W48	Max Planck Institute of Molecular Physiology	Dortmund	Germany
Musci	Thomas J.	Invited speaker	W13	University of California San Francisco	San Francisco	USA
Nadal-Ginard	Bernardo	Invited speaker	W4	Mount Sinai Medical School	New York	USA
Nagai	Hiroki		W16, W31	Osaka University	Osaka	Japan
Nagy	Zita		W14	Institute of Genetics and Molecular and Cellular Biology	Illkirch	France
Nakamura	Harukazu	Organizer and speaker	W47	Tohoku University	Sendai	Japan
Nakić	Nikolina		W30	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Nalepa	Grzegorz		W56	Indiana University School of Medicine	Indianapolis	USA
Nandi	Dipankar		W36	Indian Institute of Science	Bangalore	India
Nao	Yosuke		W44	The University of Tokyo	Tokyo	Japan
Natalizio	Barbara	Invited speaker	W2	Duke University Medical Center	Durham	USA
Naudí	Alba		W32	University of Lleida	Lleida	Spain
Navarro	Francisco		W2, W41, W51	University of Jaén	Jaén	Spain
Navarro	Miguel		W23, W41	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Navarro-Sastre	Aleix		W10	Institute of Clinic Biochemistry	Barcelona	Spain
Navas	Plácido	Organizer and speaker	W10	Andalusian Centre for Developmental Biology	Seville	Spain
Navas	Sergio		W6	University of Seville	Seville	Spain
Neher	Erwin	Invited speaker	W6, W21	Max Planck Institute for Biophysical Chemistry	Götingen	Germany
Nepal	Chirag		W30	University of Bergen	Bergen	Norway
Neto	Ana		W12	Andalusian Centre for Developmental Biology	Seville	Spain
Neto	Marta		W52	Andalusian Centre for Developmental Biology	Seville	Spain
Nevado	Rosa M.		W55	Spanish National Center for Cardiovascular Research	Madrid	Spain
Newmark	Phillip A.	Invited speaker	W20	University of Illinois at Urbana-Champaign	Urbana	USA
Newton	Hayley J.		W31	Yale University School of Medicine	New Haven	USA
Nicolas	Alain	Invited speaker	W9	Curie Institute	Paris	France
Nicolás	Francisco E.		W46	University of Murcia	Murcia	Spain

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Nicolás	Silvia		W23	University of León	León	Spain
Nicolis	Silvia K.	Invited speaker	W22, W47	University of Milan-Bicocca	Milan	Italy
Nicoll	Roger A.	Invited speaker	W39	University of California San Francisco	San Francisco	USA
Niculescu	Ioana		W36	Utrecht University	Utrecht	The Netherlands
Niedzwiedz	Wojciech		W9	MRC Laboratory of Molecular Biology	Cambridge	UK
Nielsen	Olaf	Invited speaker	W8	University of Copenhagen	Copenhagen	Denmark
Nieto	Amelia		W2	National Centre for Biotechnology	Madrid	Spain
Nieto	Marta		W22	National Centre for Biotechnology	Madrid	Spain
Nieto-Estévez	Vanesa		W26	Cajal Institute	Madrid	Spain
Nieto-González	José L.		W37, W39, W47	Institute of Biomedicine of Seville	Seville	Spain
Nieto-Soler	María		W56	The Francis Crick Institute	London	UK
Nishitani	Allison		W38	Harvard Medical School	Boston	USA
Nobori	Tatsuya		W54	Max Planck Institute for Plant Breeding Research	Cologne	Germany
Nóbrega	Marcelo A.	Organizer and speaker	W12, W52	University of Chicago	Chicago	USA
Nogueira da Costa	André		W52	UCB Biopharma SPRL	Braine L'Alleud	Belgium
Nolan	Laura		W49	Imperial College London	London	UK
Nolasco	Sofia		W29	Technical University of Lisbon	Lisbon	Portugal
Noon	Luke A.		W33	Príncipe Felipe Research Center	Valencia	Spain
North	Trista E.	Invited speaker	W40	Harvard Medical School	Boston	USA
Núñez	Estefanía		W32	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Núñez	Gabriel	Organizer and speaker	W25, W35, W54	University of Michigan Medical School	Ann Arbor	USA
Nurse	Paul	Organizer and speaker	W8	The Rockefeller University	New York	USA
Nussenzweig	André	Organizer and speaker	W34, W56, W57	National Cancer Institute	Bethesda	USA
Nusser	Zoltan	Invited speaker	W6	Institute of Experimental Medicine	Budapest	Hungary
Nyström	Thomas	Invited speaker	W14	University of Gothenburg	Gothenburg	Sweden
O'Callaghan	David		W16, W60	University of Montpellier	Nimes	France
Ochman	Howard	Invited speaker	W1	University of Arizona	Tucson	USA
Ochoa-Ibarrola	Lissette		W51	National Centre for Biotechnology	Madrid	Spain
Odermatt	Benjamin		W3	MRC Laboratory of Molecular Biology	Cambridge	UK
Ofir	Ayala		W8	Technion – Israel Institute of Technology	Haifa	Israel
Ohle	Corina		W45	Heidelberg University	Heidelberg	Germany
Ohlsson	Rolf	Invited speaker	W23	Karolinska Institute	Stockholm	Sweden
Öhman	Marie		W2	Stockholm University	Stockholm	Sweden
Ohta	Kunimasa	Invited speaker	W47	Kumamoto University	Kumamoto	Japan
Okamoto	Ikuhiro		W5	Curie Institute	Paris	France
Oki	Masaya		W23	University of Fukui	Fukui	Japan
Okkenhaug	Klaus	Invited speaker	W58	University of Cambridge	Cambridge	UK
Olazábal-Morán	Manuel		W58	National Centre for Biotechnology	Madrid	Spain
Oliete-Calvo	Paula		W41	Príncipe Felipe Research Center	Valencia	Spain

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
Olivares-Chauvet	Pedro		W23	University of Manchester	Manchester	UK
Olmedo-Pelayo	Joaquín		W57	Institute of Biomedicine of Seville	Seville	Spain
Ong	Chin-Tong		W23	Emory University	Atlanta	USA
Ong	Chong Yi		W9	MRC Laboratory of Molecular Biology	Cambridge	UK
Ontoria-Oviedo	Imelda		W27	Príncipe Felipe Research Center	Valencia	Spain
Oostra	Ben A.	Organizer and speaker	W13	Erasmus MC	Rotterdam	The Netherlands
Ordóñez	Cristina		W26	University of Navarra	Pamplona	Spain
Orlando	Valerio	Invited speaker	W5	Dulbecco Telethon Institute	Naples	Italy
Orlovski	Igor		W2, W19	Engelhardt Institute of Molecular Biology	Moscow	Russia
Orozco	Gisela		W5, W12	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Ortega	Álvaro D.		W19, W31	National Centre for Biotechnology	Madrid	Spain
Ortega	Pedro		W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Ortega de la O	Felipe		W15	Complutense University of Madrid	Madrid	Spain
Osmani	Stephen A.	Invited speaker	W8	The Ohio State University	Columbus	USA
Ostareck	Dirk H.		W18	Martin-Luther University Halle-Wittenberg	Halle (Saale)	Germany
Ostareck-Lederer	Antje		W18	Martin-Luther University Halle-Wittenberg	Halle (Saale)	Germany
Osterweil	Emily	Invited speaker	W13	Massachusetts Institute of Technology	Cambridge	USA
Östlund Farrants	Ann-Kristin		W2	Stockholm University	Stockholm	Sweden
Otaegui	David		W55	Biodonostia Health Research Institute	San Sebastián	Spain
Ovcharenko	Ivan	Invited speaker	W12	National Center for Biotechnology Information	Bethesda	USA
Özel	M. Neşet		W53	Free University of Berlin	Berlin	Germany
P. Camino	Lola		W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Pablo	M. Evangelina		W8	University of Salamanca	Salamanca	Spain
Pachulec	Emilia		W16	University of Groningen	Groningen	The Netherlands
Padmanabhan	Subramanian		W24	Rocasolano Institute of Physical Chemistry	Madrid	Spain
Padrón-Barthe	Laura		W43	Health Research Institute Puerta de Hierro	Majadahonda	Spain
Páez-Gómez	Juan Antonio		W21	University of Seville	Seville	Spain
Palacios-Filardo	Jon		W27, W39	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Palancade	Benoit		W45	Paris Diderot University	Paris	France
Palau	Francesc	Invited speaker	W10	Biomedicine Institute of Valencia	Valencia	Spain
Palazzo	Robert E.	Invited speaker	W29	Rensselaer Polytechnic Institute	Troy	USA
Palencia-Gándara	Carolina		W49, W60	University of Cantabria	Santander	Spain
Palenzuela	Rocío		W27, W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Paliou	Christina		W57	Max Planck Institute for Molecular Genetics	Berlin	Germany

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Palmer	Amy E.	Invited speaker	W60	University of Colorado Boulder	Boulder	USA
Palmer	Ed	Invited speaker	W36	University of Basel	Basel	Switzerland
Palomer	Ernest		W37	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Palomino-Morales	Rogelio		W12	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Pamer	Eric G.	Invited speaker	W54	Memorial Sloan Kettering Cancer Center	New York	USA
Pamplona	Reinald		W32	University of Lleida	Lleida	Spain
Pandit	Aridaman		W36	Utrecht University	Utrecht	The Netherlands
Panepinto	John C.	Invited speaker	W41	The State University of New York	Buffalo	USA
Panman	Lia		W47	University of Cambridge	Leicester	UK
Panosa	Anaïs		W1	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain
Papadopoulou	Nikoletta		W31	University of Cologne	Cologne	Germany
Papenfort	Kai		W24	Max Planck Institute for Infection Biology	Berlin	Germany
Pardal	Ricardo	Organizer and speaker	W22	Institute of Biomedicine of Seville	Seville	Spain
Pardo	Benjamin		W9, W34, W45	Institute of Human Genetics	Montpellier	France
Paredes	Juan		W25	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Pareja	Eduardo		W35	Era7 Bioinformatics	Madrid	Spain
Parkel	Sven		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Parker	Hugo		W12	University of London	London	UK
Parra-Rivero	Obdulia		W46	University of Seville	Seville	Spain
Parsons	Michael J.		W33	Johns Hopkins University School of Medicine	Baltimore	USA
Pascual	Rosa		W48	Institute for Research in Biomedicine	Barcelona	Spain
Pascual-Anaya	Juan		W12	University of Barcelona	Barcelona	Spain
Pasero	Philippe	Invited speaker	W34, W45	Institute of Human Genetics	Montpellier	France
Pasko	Dorota		W33	University of Exeter	Exeter	UK
Pasqua	Martina		W49	University of Rome "La Sapienza"	Rome	Italy
Pasquali	Lorenzo		W30	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Passafaro	Maria	Invited speaker	W39	University of Milan	Milan	Italy
Paternain	Ana V.		W27	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Pauls	Stefan		W12	University of London	London	UK
Pawellek	Andrea		W7	University od Dundee	Dundee	UK
Payán-Bravo	Laura		W51	Institute of Biomedicine of Seville	Seville	Spain
Pecci	Adalí		W2	University of Buenos Aires	Buenos Aires	Argentina
Pedroso	Enrique		W7, W13	University of Barcelona	Barcelona	Spain
Peeper	Daniel S.	Invited speaker	W48	Netherlands Cancer Institute	Amsterdam	The Netherlands
Peers	Bernard		W33	University of Liège	Liège	Belgium
Peinado	Paola		W55	University of Granada	Granada	Spain
Pelechano	Vicent		W11	University of Valencia	Burjassot	Spain
Pelletier	Jerry	Invited speaker	W18	McGill University	Montreal	Canada
Pelucchi	Silvia		W44	University of Milan	Milan	Italy
Peluffo	Gonzalo		W32	University of the Republic	Montevideo	Uruguay
Penalva	Luiz O. F.	Organizer and speaker	W12, W19, W52	University of Texas Health Science Center at San Antonio	San Antonio	USA

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Pennell	Simon		W18	National Institute for Medical Research	London	UK
Peña	Alejandro		W16	University of Cantabria	Santander	Spain
Peñate	Xenia		W11, W41, W51	Institute of Biomedicine of Seville	Seville	Spain
Pérez	Pilar		W8	University of Salamanca	Salamanca	Spain
Pérez-Cabornero	Lucía		W7	University of Valladolid	Valladolid	Spain
Pérez-Cañamás	Azucena		W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Pérez-Lluch	Sílvia		W23	University of Barcelona	Barcelona	Spain
Pérez-Martín	José	Organizer and speaker	W8, W34	National Centre for Biotechnology	Madrid	Spain
Pérez-Martínez	Isabel		W28	University of Lausanne	Lausanne	Switzerland
Pérez-Nadales	Elena		W46	University of Córdoba	Córdoba	Spain
Pérez-Otaño	Isabel	Organizer and speaker	W27	University of Navarra	Pamplona	Spain
Pérez-Pomares	José M.	Invited speaker	W4, W43	University of Málaga	Málaga	Spain
Pérez-Roth	Eduardo		W1	University Hospital "Ntra. Señora de Candelaria"	Santa Cruz de Tenerife	Spain
Perié	Leïla		W36	Netherlands Cancer Institute	Amsterdam	The Netherlands
Pertusa	María		W15	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Pesole	Graziano	Invited speaker	W19	University of Bari	Bari	Italy
Peter	Matthias	Invited speaker	W8	Swiss Federal Institute of Technology Zurich	Zurich	Switzerland
Peterson	S. Brook		W49	University of Washington	Seattle	USA
Petrovic	Jelena		W38	Pompeu Fabra University	Barcelona	Spain
Petrovic	Milos		W39	University of Navarra	Pamplona	Spain
Phillips	Jennifer E.		W23	Emory University	Atlanta	USA
Piccini	Alexandre		W52	Andalusian Centre for Developmental Biology	Seville	Spain
Picher	Maria Magdalena		W38	University Medical Center Göttingen	Götingen	Germany
Pickard	Joseph		W54	University of Michigan Medical School	Ann Arbor	USA
Pierce	Marquicia R.		W32	Vanderbilt University Medical Center	Nashville	USA
Pietrzik	Claus U.		W44	Johannes Gutenberg University Mainz	Mainz	Germany
Pihlajaniemi	Taina	Invited speaker	W40	University of Oulu	Oulu	Finland
Pinheiro	Paulo		W6	Neurocentre Magendie	Bordeaux	France
Pintado	Elizabeth	Organizer and speaker	W13	University of Seville	Seville	Spain
Piñeiro	David		W19	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Pirvola	Ulla	Invited speaker	W38	University of Helsinki	Helsinki	Finland
Pizzinat	Nathalie		W43	Institute of Cardiovascular and Metabolic Diseases	Toulouse	France
Pla	Jesús		W8, W35	Complutense University of Madrid	Madrid	Spain
Pladevall-Morera	David		W56	University of Copenhagen	Copenhagen	Denmark
Platero	Ana Isabel		W24	Andalusian Centre for Developmental Biology	Seville	Spain
Platero-Luengo	Aida		W22, W26	Institute of Biomedicine of Seville	Seville	Spain

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Plésiat	Patrick	Invited speaker	W28	Hospital "Jean Minjoz"	Besançon	France
Polo	Salvador		W55	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Polonsky	Michal		W36	Weizmann institute of Science	Rehovot	Israel
Pöltl	Lisa		W54	University of Graz	Graz	Austria
Pongrac	Igor		W33	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Port	J. David		W19	University of Colorado	Aurora	USA
Porter	Ned A.	Invited speaker	W32	Vanderbilt University	Nashville	USA
Portero-Otín	Manuel		W32	University of Lleida	Lleida	Spain
Portillo-Salido	Enrique		W15	Esteve	Barcelona	Spain
Posadas	Sinforiano		W37	University of Málaga	Málaga	Spain
Posas	Francesc		W2	Pompeu Fabra University	Barcelona	Spain
Poss	Kenneth D.	Organizer and speaker	W20	Duke University Medical Center	Durham	USA
Prado	Félix		W9, W34	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Převorovský	Martin		W19	University College London	London	UK
Prévot	Pierre-Paul		W33	Catholic University of Louvain	Brussels	Belgium
Prieto	A. Daniel		W35	Complutense University of Madrid	Madrid	Spain
Prieto	Ana I.		W1	University of Seville	Seville	Spain
Prinz	Florian		W48	Bayer Pharma AG	Berlin	Germany
Promonet	Alexy		W45	Institute of Human Genetics	Montpellier	France
Proudfoot	Nicholas J.	Invited speaker	W2, W45	University of Oxford	Oxford	UK
Pucciarelli	M. Graciela		W31, W49	National Centre for Biotechnology	Madrid	Spain
Puig	Sergi	Invited speaker	W41	Institute of Agrochemistry and Food Technology	Paterna	Spain
Pulido	Rafael	Invited speaker	W58	Biocruces Bizkaia Health Research Institute	Barakaldo	Spain
Pun	San		W3	Novartis Pharma AG	Basel	Switzerland
Quách Thị Thu	Huöng		W48	National University of Ireland Galway	Galway	Ireland
Quiroga	Alejandra C.		W26	Cajal Institute	Madrid	Spain
R. Balestra	Fernando		W29	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
R. Barbancho	Juan L.		W34	Spanish National Cancer Research Centre	Madrid	Spain
R. Ferrón	Sacri		W47	University of Valencia	Burjassot	Spain
R. Guelfo	Javier		W14	National Centre for Biotechnology	Madrid	Spain
R. Heras	Sara		W11, W59	University of Granada	Granada	Spain
R. Maia	Ana R.		W48	Netherlands Cancer Institute	Amsterdam	The Netherlands
R. Matarredona	Esperanza		W26	University of Seville	Seville	Spain
R. Ramiro	Almudena	Invited speaker	W55	Spanish National Center for Cardiovascular Research	Madrid	Spain
R. Vázquez de Aldana	Carlos		W8, W46	University of Salamanca	Salamanca	Spain
Raaijmakers	Jos M.	Invited speaker	W54	Netherlands Institute of Ecology	Wageningen	The Netherlands
Radi	Orietta		W17	University of Pavia	Pavia	Italy
Radi	Rafael	Organizer and speaker	W32	University of the Republic	Montevideo	Uruguay

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Radman	Miroslav	Invited speaker	W14	University René Descartes-Paris 5	Paris	France
Radutoiu	Simona	Invited speaker	W54	Aarhus University	Aarhus	Denmark
Raible	Florian		W12	European Molecular Biology Laboratory	Heidelberg	Germany
Raj	Arjun	Invited speaker	W42	University of Pennsylvania	Philadelphia	USA
Rajpert-De Meyts	Ewa	Invited speaker	W17	Copenhagen University Hospital	Copenhagen	Denmark
Ramakrishnan	Lalita	Invited speaker	W31	University of Washington	Seattle	USA
Ramdohr	Pablo		W18	Pontifical Catholic University of Chile	Santiago	Chile
Ramírez	Bertha Cecilia		W18	University René Descartes-Paris 5	Paris	France
Ramírez-Franco	Jorge		W21, W39	Complutense University of Madrid	Madrid	Spain
Ramírez-Moya	Julia		W55	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Ramos	Feliciano J.	Invited speaker	W13	University of Zaragoza	Zaragoza	Spain
Ramos	Juan Luis	Organizer and speaker	W24, W28	Zaidín Experimental Station	Granada	Spain
Ramos-Marquès	Estel		W49, W55	University of Zaragoza	Zaragoza	Spain
Ramos-Mejía	Verónica		W40	University of Granada	Granada	Spain
Ramos-Morales	Francisco		W60	University of Seville	Seville	Spain
Ramos-Trujillo	Elena		W7	University Hospital "Ntra. Señora de Candelaria"	Santa Cruz de Tenerife	Spain
Ramos-Vivas	José		W31	University Hospital "Marqués de Valdecilla"	Santander	Spain
Ranum	Laura P.W.	Invited speaker	W13	University of Minnesota	Minneapolis	USA
Rao	Suhas S. P.		W57	Stanford University School of Medicine	Stanford	USA
Rattenbacher	Bernd		W19	University of Minnesota	Minneapolis	USA
Rebollo	Rita	Invited speaker	W59	University of Lyon	Villeurbanne	France
Reboreda	Antonio		W27	University of Vigo	Vigo	Spain
Recillas-Targa	Félix	Organizer and speaker	W5, W23	National Autonomous University of México	México D.F.	México
Redondo	Juan Miguel		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Redondo	Pilar		W29	Spanish National Cancer Research Centre	Madrid	Spain
Reese	Joseph C.	Invited speaker	W41	Penn State University	University Park	USA
Regehr	Wade	Invited speaker	W3	Harvard Medical School	Boston	USA
Reigadas	Sandrine		W18	University of Bordeaux II	Bordeaux	France
Reik	Wolf	Invited speaker	W5	Babraham Institute	Cambridge	UK
Reina	José		W29	Institute for Research in Biomedicine	Barcelona	Spain
Reinberg	Danny	Invited speaker	W2	University of Medicine and Dentistry of New Jersey	Piscataway	USA
Reiner	Orly	Invited speaker	W47	Weizmann institute of Science	Rehovot	Israel
Ren	Bing	Invited speaker	W11, W23, W30	University of California San Diego	La Jolla	USA
Rendall	Alan		W36	Max Planck Institute for Gravitational Physics	Potsdam	Germany
Revilla	Eva		W38	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Rey-Serra	Carlos		W55	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain

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Reyes	José C.	Organizer and speaker	W2, W5, W11, W12	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Reynolds	Joseph		W36	University of Leeds	Leeds	UK
Rhee	Jeong-Seop	Invited speaker	W21	Max Planck Institute for Experimental Medicine	Götingen	Germany
Rhouda	Taha		W10	University of Zaragoza	Zaragoza	Spain
Ribate	Mª Pilar		W13	University of Zaragoza	Zaragoza	Spain
Ribaud	Virginie		W41	University of Geneva	Geneva	Switzerland
Ribeiro Xavier	Anna Lenice		W26	Federal University of Rio de Janeiro	Rio de Janeiro	Brazil
Ribeyre	Cyril		W45	Institute of Human Genetics	Montpellier	France
Ricchetti	Miria		W10	Pasteur Institute	Paris	France
Ricci	Emiliano		W18	Normal Superior School of Lyon	Lyon	France
Riccio	Andrea	Invited speaker	W5	Second University of Naples	Caserta	Italy
Richards	Thomas A.	Invited speaker	W46	University of Exeter	Exeter	UK
Richardson	Rebecca J.	Invited speaker	W43	University of Bristol	Bristol	UK
Richly	Holger		W5	Centre for Genomic Regulation	Barcelona	Spain
Richter	Joel D.	Invited speaker	W19	University of Massachusetts Medical School	Worcester	USA
Rico	Gadea		W31	National Centre for Biotechnology	Madrid	Spain
Riel	Constanze		W6	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Rikihisa	Yasuko	Invited speaker	W16	The Ohio State University	Columbus	USA
Riley	Paul R.	Organizer and speaker	W43	University of Oxford	Oxford	UK
Rimbaud	Pierre		W35	Enterome	Paris	France
Rinaldi	Tania		W6	Swiss Federal Institute of Technology Lausanne	Lausanne	Switzerland
Rinkwitz	Silke		W12	University of Bergen	Bergen	Norway
Rinn	John L.	Organizer and speaker	W30, W42	Broad Institute of MIT and Harvard	Cambridge	USA
Ríos	Rosa M.	Organizer and speaker	W29	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Ríos-Covián	David		W54	Dairy Research Institute of Asturias	Villaviciosa	Spain
Ripoll	Jorge		W16	University of Cantabria	Santander	Spain
Riquelme	Elia		W60	University of Montpellier	Nimes	France
Ritz	Katja		W37	Academic Medical Centre	Amsterdam	The Netherlands
Rius	Cristina		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Rivas-Marín	Elena		W24	Andalusian Centre for Developmental Biology	Seville	Spain
Rivera	Henry		W10	University Hospital "12 de Octubre"	Madrid	Spain
Rizzoli	Silvio O.	Invited speaker	W21	European Neuroscience Institute Götingen	Götingen	Germany
Roach	Jack A.		W54	Max Planck Institute for Plant Breeding Research	Cologne	Germany
Robert	Philippe		W36	Montpellier Institute of Molecular Genetics	Montpellier	France
Robert-Moreno	Àlex		W23	Pompeu Fabra University	Barcelona	Spain
Roberts	Lisa O.	Invited speaker	W18	University of Surrey	Guilford	UK
Robey	Ellen A.	Invited speaker	W36	University of California Berkeley	Berkeley	USA

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Robledo	Claudia Lizeth		W6	University of Seville	Seville	Spain
Robles-Lanuza	Estefanía		W39, W53	Institute of Biomedicine of Seville	Seville	Spain
Robson	Michael I.		W50	The University of Edinburgh	Edinburgh	UK
Rocha Viegas	Luciana		W2	University of Buenos Aires	Buenos Aires	Argentina
Roco	Álvaro		W17	University of Jaén	Jaén	Spain
Rodiles	Ana		W54	University of Plymouth	Plymouth	UK
Rodó	Jordi		W55	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain
Rodrigues-Díez	Raúl		W43, W55	University Hospital "Fundación Jiménez Díaz"	Madrid	Spain
Rodríguez	Clara I.		W50, W52	Biocruces Bizkaia Health Research Institute	Barakaldo	Spain
Rodríguez	María Josefa		W29	National Centre for Biotechnology	Madrid	Spain
Rodríguez Pulido	Miguel		W18	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Rodríguez-Cerrato	Violeta		W25	Biological Research Center	Madrid	Spain
Rodríguez-Contreras	Adrián		W6	Erasmus MC	Rotterdam	The Netherlands
Rodríguez-Esteban	Gustavo		W20	University of Barcelona	Barcelona	Spain
Rodríguez-Galán	Olga		W51	Institute of Biomedicine of Seville	Seville	Spain
Rodríguez-Gil	Alfonso		W41	Justus-Liebig University Giessen	Giessen	Germany
Rodríguez-Hernández	Ángeles		W10	Andalusian Centre for Developmental Biology	Seville	Spain
Rodríguez-López	Raquel		W13	Hospital "Infanta Cristina"	Badajoz	Spain
Rodríguez-Mateo	Cristina		W42	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Rodríguez-Navarro	Susana		W2, W41	Príncipe Felipe Research Center	Valencia	Spain
Rodríguez-Paredes	Manuel		W5	University of Seville	Seville	Spain
Rodríguez-Pascual	Fernando	Invited speaker	W43	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Rodríguez-Puyol	Diego		W55	University Hospital "Príncipe de Asturias"	Alcalá de Henares	Spain
Rodríguez-Rojas	Alexandro		W14	National Centre for Biotechnology	Madrid	Spain
Rodríguez-Seguel	Elisa		W20	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Rodríguez-Seguí	Santiago A.		W30	August Pi i Sunyer Biomedical Research Institute	Barcelona	Spain
Roeder	Robert G.	Invited speaker	W11	The Rockefeller University	New York	USA
Roiz-Valle	David		W55	University of Oviedo	Oviedo	Spain
Rojas	Anabel		W33	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Rokas	Antonis	Invited speaker	W46	Vanderbilt University	Nashville	USA
Rolain	Thomas		W25	Catholic University of Louvain	Louvain-la-Neuve	Belgium
Román	Ángel Carlos		W23	University of Extremadura	Badajoz	Spain
Román	Elvira		W8	Complutense University of Madrid	Madrid	Spain
Romeo	Alessandra		W28	University of Lausanne	Vienna	Austria

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Romero	Antonia M.		W41	Institute of Agrochemistry and Food Technology	Paterna	Spain
Romero-López	Cristina		W7, W18	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Romero-Zaliz	Rocío		W24	University of Granada	Granada	Spain
Romero-Zerbo	Yanina		W13	University Hospital "Carlos Haya"	Málaga	Spain
Romesberg	Floyd E.	Invited speaker	W14	Scripps Research	La Jolla	USA
Rong	Yikang		W9	National Cancer Institute	Bethesda	USA
Roodveldt	Cintia	Organizer and speaker	W51	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Roper	David I.		W25	University of Warwick	Coventry	UK
Roque	Hélio		W29	University of Oxford	Oxford	UK
Rosenberg	Susan M.	Organizer and speaker	W14	Baylor College of Medicine	Houston	USA
Roth	John R.	Invited speaker	W1	University of California Davis	Davis	USA
Rothman	Jason		W6	University College London	London	UK
Rothstein	Rodney	Invited speaker	W9	Columbia University	New York	USA
Rotstein	Bárbara		W43	Osnabrück University	Osnabrück	Germany
Rouco	Raquel		W52	Spanish National Center for Cardiovascular Research	Madrid	Spain
Rougeulle	Claire	Invited speaker	W42	Paris Diderot University	Paris	France
Rouse	John	Invited speaker	W34	University of Dundee	Dundee	UK
Rovira	Meritxell		W33	Johns Hopkins University School of Medicine	Baltimore	USA
Rowe	Helen M.	Invited speaker	W59	University College London	London	UK
Rowitch	David H.	Invited speaker	W22	University of California San Francisco	San Francisco	USA
Rowland	Benjamin D.	Invited speaker	W57	Netherlands Cancer Institute	Amsterdam	The Netherlands
Roy	Craig R.	Organizer and speaker	W16, W31, W60	Yale University School of Medicine	New Haven	USA
Royo	José Luis		W23, W30	Andalusian Centre for Developmental Biology	Seville	Spain
Royo	María		W27, W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Roza	Carolina		W3	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Rozas	José Luis		W3	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Rubbo	Homero		W32	University of the Republic	Montevideo	Uruguay
Rubenstein	John L.	Invited speaker	W47	University of California San Francisco	San Francisco	USA
Rubin	Eric J.	Invited speaker	W31	Harvard School of Public Health	Boston	USA
Rubio-Contreras	Diana		W56, W57	Institute of Biomedicine of Seville	Seville	Spain
Rubio-Escudero	Cristina		W24	University of Seville	Seville	Spain
Rueda	Blanca		W5	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Rufián	José S.		W49	University of Málaga	Málaga	Spain
Ruiz	Alicia		W35	University of Granada	Granada	Spain
Ruiz	José F.		W34	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Ruiz	Rocío		W3, W6, W13, W21, W37, W39, W53	University of Seville	Seville	Spain

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Ruiz González	Raúl		W24	University of Cantabria	Santander	Spain
Ruiz-Pesini	Eduardo		W10	University of Zaragoza	Zaragoza	Spain
Ruiz-Villalba	Adrián		W43	Academic Medical Centre	Amsterdam	The Netherlands
Russell	David G.	Invited speaker	W31, W49	Cornell University	Ithaca	USA
Rustin	Pierre	Invited speaker	W10	Hospital "Robert Debré"	Paris	France
Rutherford	Suzannah	Invited speaker	W14	Fred Hutchinson Cancer Research Center	Seattle	USA
Rutz	Daniel		W51	Technical University of Munich	Garching	Germany
Ruz-Maldonado	Inmaculada		W26	University of Málaga	Málaga	Spain
Ryan	Timothy A.	Invited speaker	W6, W39	Weill Cornell Medical College	New York	USA
Ryme	Jessica		W11	Stockholm University	Stockholm	Sweden
S. Dzhindzhev	Nikola		W29	University of Cambridge	Cambridge	UK
S. Nido	Gonzalo		W29	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
S. Pais	Inês		W54	Gulbenkian Science Institute	Oeiras	Portugal
Sacktor	Todd C.	Invited speaker	W37	State University of New York Downstate Medical Center	Brooklyn	USA
Sacristán	Víctor		W55	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain
Saftig	Paul	Organizer and speaker	W44	Christian-Albrechts University of Kiel	Kiel	Germany
Saggio	Isabella		W50	University of Rome "La Sapienza"	Rome	Italy
Sainlos	Matthieu	Invited speaker	W27	Neurocentre Magendie	Bordeaux	France
Saint-Ruf	Claude		W14	University René Descartes-Paris 5	Paris	France
Sakano	Daisuke		W33	Kumamoto University	Kumamoto	Japan
Sakmann	Bert	Invited speaker	W3	Max Planck Institute for Medical Research	Heidelberg	Germany
Salas Hernández	Isabel		W39	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Salas-Armenteros	Irene		W41, W45	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Salcedo	Suzana P.		W16	Center of Immunology of Marseille-Luminy	Marseilles	France
Saleh	Malek		W25	University of Greifswald	Greifswald	Germany
Salido	Ginés M.		W27	University of Extremadura	Cáceres	Spain
Salierno	Marcelo J.		W57	King's College London	London	UK
Salinas	Patricia C.	Invited speaker	W22	University College London	London	UK
Salmena	Leonardo		W58	University of Toronto	Toronto	Canada
Saló	Emili	Invited speaker	W20	University of Barcelona	Barcelona	Spain
Salvatella	Xavier		W51	Institute for Research in Biomedicine	Barcelona	Spain
Salviati	Leonardo	Invited speaker	W10	University of Padua	Padua	Italy
Salzberg	Letal I.		W25	Trinity College	Dublin	Ireland
Samaranayake	Calum		W59	Newcastle University	Newcastle upon Tyne	UK
San José	Mateo		W49	University of Reading	Reading	UK
San-Segundo	Pedro A.		W9, W34	University of Salamanca	Salamanca	Spain
Sana	Thibault		W28	University of Aix-Marseilles	Marseilles	France
Sánchez	Elena		W12	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Sánchez	Humberto		W9	National Centre for Biotechnology	Madrid	Spain

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Sánchez	María-José	Organizer and speaker	W40	Andalusian Centre for Developmental Biology	Seville	Spain
Sánchez	Yolanda		W42	University of Navarra	Pamplona	Spain
Sánchez Ortega	Miriam		W58	National Centre for Biotechnology	Madrid	Spain
Sánchez-Alcázar	José A.		W10	Andalusian Centre for Developmental Biology	Seville	Spain
Sánchez-Álvarez	Miguel		W7, W11, W19	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Sánchez-Arroyos	Ricardo		W15	Esteve	Barcelona	Spain
Sánchez-Fresneda	Ruth		W14	University of Murcia	Murcia	Spain
Sánchez-García	Manuel A.		W53	Institute of Biomedicine of Seville	Seville	Spain
Sánchez-Gómez	Francisco J.		W32	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Sánchez-Guardado	Luis Óscar		W38	University of Extremadura	Badajoz	Spain
Sánchez-Hernández	Noemí		W11, W19, W45	Stockholm University	Stockholm	Sweden
Sánchez-Hidalgo	Ana		W53	Institute of Biomedicine of Seville	Seville	Spain
Sánchez-Iranzo	Héctor		W43	Spanish National Center for Cardiovascular Research	Madrid	Spain
Sánchez-López	Amanda		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Sánchez-Luque	Francisco J.		W59	University of Granada	Granada	Spain
Sánchez-Más	Jesús		W43	University Hospital "Virgen de la Arrixaca"	El Palmar	Spain
Sánchez-Mut	José V.		W37	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Sánchez-Pacheco	Aurora		W5	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Sánchez-Romero	María Antonia		W49	University of Seville	Seville	Spain
Sánchez-Varo	Raquel		W53	University of Málaga	Málaga	Spain
Sancho	Jaime		W55, W58	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Sander	Maike	Invited speaker	W33	University of California San Diego	La Jolla	USA
Sando	Richard		W53	Stanford University	Stanford	USA
Sandoval	Pilar		W43	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Sanglard	Dominique		W46	University of Lausanne	Lausanne	Switzerland
Sanjuán-Pla	Alejandra		W10, W40	University of Barcelona	Barcelona	Spain
Sans	Nathalie		W38	University of Bordeaux I	Bordeaux	France
Santambrogio	Laura	Invited speaker	W51	Albert Einstein College of Medicine	New York	USA
Santini	Maria Paola	Invited speaker	W4	European Molecular Biology Laboratory	Monterotondo	Italy
Santisteban	Pilar		W2	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Santofimia-Castaño	Patricia		W32	University of Extremadura	Cáceres	Spain
Santos	Joana		W12	Andalusian Centre for Developmental Biology	Seville	Spain
Santos-Pereira	José M.		W42, W45, W52	Andalusian Centre for Developmental Biology	Seville	Spain

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Sanz	David J.		W7, W19	University of Valladolid	Valladolid	Spain
Sanz-Clemente	Antonio		W39	National Institute of Neurological Disorders and Stroke	Bethesda	USA
Sanz-Flores	María		W48	Spanish National Cancer Research Centre	Madrid	Spain
Sanz-Gómez	Natalia		W56	Marqués de Valdecilla Health Research Institute	Santander	Spain
Saravia	Flavia		W26	University of Buenos Aires	Buenos Aires	Argentina
Sartorel	Elodie		W8	National Centre for Biotechnology	Madrid	Spain
Sastre	Juan		W32	University of Valencia	Burjassot	Spain
Saunders	Diane		W8	University of Exeter	Exeter	UK
Saura	Carlos A.		W3	Autonomous University of Barcelona	Cerdanyola del Vallès	Barcelona
Savage	Kienan I.		W9, W34	Queen's University Belfast	Belfast	UK
Savolainen	Linda		W9	Stockholm University	Stockholm	Sweden
Scandaglia	Marilyn		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Schäfer	Katja		W46	University of Aberdeen	Aberdeen	UK
Schamel	Wolfgang W.A.	Invited speaker	W36	Max Planck Institute of Immunobiology and Epigenetics	Freiburg	Germany
Scheiffele	Peter	Invited speaker	W53	University of Basel	Basel	Switzerland
Schikora	Adam	Invited speaker	W49	Julius Kühn Institute	Braunschweig	Germany
Schiller	Rachel		W37	University of Oxford	Oxford	UK
Schimmang	Thomas	Invited speaker	W38	University of Valladolid	Valladolid	Spain
Schinder	Alejandro F.	Organizer and speaker	W26	Leloir Institute	Buenos Aires	Argentina
Schirmer	Eric C.	Invited speaker	W50	The University of Edinburgh	Edinburgh	UK
Schmitt	Bianca		W30	Cancer Research UK Cambridge Institute	Cambridge	UK
Schmitz	Frank		W53	Saarland University	Homburg/ Saar	Germany
Schmitz	M. Lienhard		W41	Justus-Liebig University Giessen	Giessen	Germany
Schneider	Robert J.	Invited speaker	W41	New York University School of Medicine	New York	USA
Schneider	Romy		W27	Leibniz Institute for Neurobiology	Magdeburg	Germany
Schneider-Maunoury	Sylvie		W12	Pierre and Marie Curie University	Paris	France
Schoenwolf	Gary		W47	University of Utah School of Medicine	Salt Lake City	USA
Schübeler	Dirk	Invited speaker	W30	Friedrich Miescher Institute for Biomedical Research	Basel	Switzerland
Schulte	Christian		W55	King's College London	London	UK
Schulze-Lefert	Paul	Organizer and speaker	W54	Max Planck Institute for Plant Breeding Research	Cologne	Germany
Schwalie	Petra C.		W30	European Bioinformatics Institute	Hinxton	UK
Schwappach	Blanche	Invited speaker	W27	University of Manchester	Manchester	UK
Schwarz	Thomas L.	Organizer and speaker	W21, W39	Harvard Medical School	Boston	USA
Schwarz	Tobias J.		W26	Helmholtz Center Munich	Munich-Neuherberg	Germany
Schweisguth	François	Invited speaker	W38	Pasteur Institute	Paris	France
Sebastià	Pau		W60	Centre for Research in Agricultural Genomics	Cerdanyola del Vallès	Spain

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Seeburg	Peter	Invited speaker	W6	Max Planck Institute for Medical Research	Heidelberg	Germany
Segovia	Margarita		W21	University of Seville	Seville	Spain
Segura-Bayona	Sandra		W56	Institute for Research in Biomedicine	Barcelona	Spain
Seida	Ahmed Adel		W36	University of Würzburg	Würzburg	Germany
Seipold	Lisa		W44	Christian-Albrechts University of Kiel	Kiel	Germany
Selfa Aspiroz	Lucía		W55	Institute for Bioengineering of Catalonia	Barcelona	Spain
Seligmann	Hervé		W10	The Hebrew University of Jerusalem	Jerusalem	Israel
Sémériva	Michel		W4	University of Aix-Marseilles	Marseilles	France
Senserrich	Jordi		W40	The University of Edinburgh	Edinburgh	UK
Seoane	Rocío		W58	University of Santiago de Compostela	Santiago de Compostela	Spain
Serna	Marina		W29	National Centre for Biotechnology	Madrid	Spain
Serrano	Luis	Organizer and speaker	W24, W29	Centre for Genomic Regulation	Barcelona	Spain
Serrano	Manuel	Invited speaker	W34	Spanish National Cancer Research Centre	Madrid	Spain
Serrano-Benítez	Almudena		W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Seruca	Raquel	Invited speaker	W52	University of Porto	Porto	Portugal
Servián-Morilla	Emilia		W21, W39	Institute of Biomedicine of Seville	Seville	Spain
Sevilla	Ana		W4	University of Salamanca	Salamanca	Spain
Sewell	Andrew K.	Invited speaker	W36	Cardiff University School of Medicine	Cardiff	UK
Sgarbi	Gianluca		W10	University of Bologna	Bologna	Italy
Sham	Mai H.		W38	The University of Hong Kong	Hong Kong	China
Shamoo	Yousif	Invited speaker	W14	Rice University	Houston	USA
Shanahan	Catherine M.	Invited speaker	W50	King's College London	London	UK
Shao	Feng	Invited speaker	W60	National Institute of Biological Sciences	Beijing	China
Sharpe	James	Invited speaker	W20	Centre for Genomic Regulation	Barcelona	Spain
Sharpe	Richard M.	Invited speaker	W17	The University of Edinburgh	Edinburgh	UK
Shatsky	Ivan N.	Invited speaker	W18	Moscow State University	Moscow	Russia
Shatz	Maria		W7	Weizmann Institute of Science	Rehovot	Israel
Shemer	Ruth		W33	The Hebrew University-Hadassah Medical School	Jerusalem	Israel
Shen	Jie	Invited speaker	W3	Harvard Medical School	Boston	USA
Shiekhattar	Ramin	Organizer and speaker	W11	Centre for Genomic Regulation	Barcelona	Spain
Shields	Shannon D.		W15	National Hospital for Paraplegics	Toledo	Spain
Shiraki	Nobuaki		W33	Kumamoto University	Kumamoto	Japan
Si-Tayeb	Karim		W33	Hospital Bicêtre	Le Kremlin-Bicêtre	France
Sicinski	Piotr	Invited speaker	W48	Harvard Medical School	Boston	USA
Sieira	Rodrigo		W16, W24	National University of General San Martín	Buenos Aires	Argentina
Siendones	Emilio		W19	Andalusian Centre for Developmental Biology	Seville	Spain
Sienknecht	Ulrike J.		W38	Carl von Ossietzky University of Oldenburg	Oldenburg	Germany
Sierra	Javier		W38	Francisco de Vitoria University	Pozuelo de Alarcón	Spain

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Sigler	Albrecht		W3, W53	Max Planck Institute for Experimental Medicine	Götingen	Germany
Sigrist	Stephan J.	Invited speaker	W21, W39	Free University of Berlin	Berlin	Germany
Silva	Sónia		W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Silva-Martín	Noella		W25	Rocasolano Institute of Physical Chemistry	Madrid	Spain
Silva-Rocha	Rafael		W24	National Centre for Biotechnology	Madrid	Spain
Silver	Angus	Invited speaker	W6	University College London	London	UK
Simões	Mariana		W20	Institute of Molecular Medicine	Lisbon	Portugal
Simonelig	Martine	Invited speaker	W19	Institute of Human Genetics	Montpellier	France
Sims	Robert J.	Invited speaker	W11	New York University School of Medicine	New York	USA
Singer	Alfred	Invited speaker	W36	National Cancer Institute	Bethesda	USA
Singer	Dinah S.		W36	National Cancer Institute	Rockville	USA
Singh	Babita		W42	Pompeu Fabra University	Barcelona	Spain
Singh	Pradeep K.	Invited speaker	W28	University of Washington	Seattle	USA
Skakkebæk	Niels E.	Organizer and speaker	W17	Copenhagen University Hospital	Copenhagen	Denmark
Skinner	Michael K.	Invited speaker	W17	Washington State University	Pullman	USA
Skourti-Stathaki	Konstantina		W45	University of Oxford	Oxford	UK
Slack	Frank J.	Invited speaker	W55	Harvard Medical School	Boston	USA
Sleckman	Barry P.	Invited speaker	W34	Washington University School of Medicine	St. Louis	USA
Slesinger	Paul A.	Invited speaker	W27	Salk Institute for Biological Studies	La Jolla	USA
Smith	Andrew J.		W27	University of Manchester	Manchester	UK
Smith	Ewan St. J.		W15	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Smith	Holly		W33	University College London	London	UK
Smith	Stephen	Invited speaker	W3	Stanford University School of Medicine	Stanford	USA
Snyder	Michael	Invited speaker	W30	Stanford University School of Medicine	Stanford	USA
Soares	Helena		W29	University of Lisbon	Lisbon	Portugal
Soberón-Chávez	Gloria		W24, W28	National Autonomous University of México	México D.F.	México
Sobrino	Verónica		W26, W47	Institute of Biomedicine of Seville	Seville	Spain
Sockanathan	Shanthini	Invited speaker	W44	Johns Hopkins University School of Medicine	Baltimore	USA
Soderling	Scott H.	Invited speaker	W53	Duke University School of Medicine	Durham	USA
Solaimani Kartalaei	Parham		W40	Erasmus MC	Rotterdam	The Netherlands
Sollier	Julie		W45	Stanford University School of Medicine	Stanford	USA
Sommer	Felix		W35	University of Gothenburg	Gothenburg	Sweden
Sommer	Lukas	Invited speaker	W22	University of Zurich	Zurich	Switzerland
Somorjai	Ildikó M. L.		W20	University of Barcelona	Barcelona	Spain
Sonenberg	Nahum	Invited speaker	W18	McGill University	Montreal	Canada
Song	Hongjun	Invited speaker	W37	Johns Hopkins University School of Medicine	Baltimore	USA
Sonnenburg	Justin L.	Invited speaker	W35	Stanford University School of Medicine	Stanford	USA
Sonnleitner	Elisabeth		W28	University of Vienna	Vienna	Austria
Sorgenfrei	Oliver		W6	Axaron Bioscience AG	Heidelberg	Germany

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Sot	Begoña		W51	National Centre for Biotechnology	Madrid	Spain
Sotillo	Rocío	Invited speaker	W56	German Cancer Research Center	Heidelberg	Germany
Soto Rifo	Ricardo		W18	Normal Superior School of Lyon	Lyon	France
Soutoglou	Evi	Invited speaker	W56	Institute of Genetics and Molecular and Cellular Biology	Illkirch	France
Souyri	Michèle		W40	Pierre and Marie Curie University	Paris	France
Spagnoli	Francesca M.		W20	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Spang	Rainer	Invited speaker	W52	University of Regensburg	Regensburg	Germany
Spedale	Gianpiero		W11	University Medical Center Utrecht	Utrecht	The Netherlands
Spratt	Brian G.	Invited speaker	W1	Imperial College London	London	UK
Springer	Helen M.		W31	University of Cologne	Cologne	Germany
Srikumar	Shabarinath		W31	Trinity College	Dublin	Ireland
Stainier	Didier Y. R.	Organizer and speaker	W4, W20, W33	University of California San Francisco	San Francisco	USA
Stasiak	Andrzej	Invited speaker	W57	University of Lausanne	Lausanne	Switzerland
Steger	Martin		W34	University of Zurich	Zurich	Switzerland
Steinberg	Gero	Invited speaker	W8	Max Planck Institute for Terrestrial Microbiology	Marburg	Germany
Steitz	Joan A.	Invited speaker	W19	Yale University	New Haven	USA
Stephens	Len R.	Invited speaker	W58	Babraham Institute	Cambridge	UK
Stępkowski	Tomasz		W32	Institute of Nuclear Chemistry and Technology	Warsaw	Poland
Stern-Bach	Yael	Invited speaker	W6	The Hebrew University-Hadassah Dental School	Jerusalem	Israel
Stewart	Colin L.	Invited speaker	W50	National University of Singapore	Singapore	Singapore
Stillman	Bruce W.	Invited speaker	W29	Cold Spring Harbor Laboratory	Cold Spring Harbor	USA
Stirling	Peter C.		W45	University of British Columbia	Vancouver	Canada
Stoffel	Markus	Invited speaker	W55	Swiss Federal Institute of Technology Zurich	Zurich	Switzerland
Stoltz	David A.	Invited speaker	W28	University of Iowa	Iowa City	USA
Storchová	Zuzana	Invited speaker	W56	Technical University of Kaiserslautern	Kaiserslautern	Germany
Stormo	Gary D.	Invited speaker	W24	Washington University School of Medicine	St. Louis	USA
Stracker	Travis H.	Invited speaker	W56	Institute for Research in Biomedicine	Barcelona	Spain
Strähle	Uwe	Invited speaker	W12	Institute of Toxicology and Genetics	Karlsruhe	Germany
Stroud	Matthew J.		W50	University of California San Diego	San Diego	USA
Studer	Lorenz	Invited speaker	W22	Memorial Sloan Kettering Cancer Center	New York	USA
Stukenbrock	Eva H.	Invited speaker	W46	Max Planck Institute for Terrestrial Microbiology	Marburg	Germany
Stürzebecher	Annika		W15	Max Delbrück Center for Molecular Medicine	Berlin	Germany
Suárez	Antonio		W35	University of Granada	Granada	Spain
Subtil	Agathe		W31	Pasteur Institute	Paris	France
Sucularli	Ceren		W7	Bilkent University	Ankara	Turkey
Suda	Toshio	Invited speaker	W40	Keio University	Tokyo	Japan
Sudbery	Peter	Invited speaker	W8	University of Sheffield	Sheffield	UK
Südhof	Thomas C.	Organizer and speaker	W3, W39, W53	Stanford University School of Medicine	Stanford	USA

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Sullivan	William	Invited speaker	W31	University of California Santa Cruz	Santa Cruz	USA
Sun	Yi E.	Invited speaker	W37, W53	University of California Los Angeles	Los Angeles	USA
Suñé	Carlos		W2, W7, W11	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Sutormin	Dmitry		W57	Skolkovo Institute of Science and Technology	Moscow	Russia
Svejstrup	Jesper Q.	Invited speaker	W45	London Research Institute	South Mimms	UK
Sweatt	J. David	Invited speaker	W37	University of Alabama at Birmingham	Birmingham	USA
Sweeney	Blake A.		W59	European Bioinformatics Institute	Hinxton	UK
Székvölgyi	Lóránt		W45	University of Debrecen	Debrecen	Hungary
Szmaragd	Camille		W1	University of Cambridge	Cambridge	UK
T. Santos	Marcia Cristina		W52	UCB Biopharma SPRL	Braine L'Alleud	Belgium
Tabares	Lucía	Organizer and speaker	W3, W6, W21, W39, W53	University of Seville	Seville	Spain
Taberner	Francisco J.		W27	Miguel Hernández University of Elche	Elche	Spain
Tachibana	Masao	Invited speaker	W21	The University of Tokyo	Tokyo	Japan
Tainer	John A.		W9	Scripps Research	La Jolla	USA
Tajbakhsh	Shahragim	Invited speaker	W20	Pasteur Institute	Paris	France
Takai	Yoshimi	Invited speaker	W21	Kobe University Graduate School of Medicine	Kobe	Japan
Talbot	Nicholas J.	Invited speaker	W8	University of Exeter	Exeter	UK
Tamayo Martínez	Elisabeth		W14	University of Málaga	Málaga	Spain
Tambe	Mahesh		W48	University of Turku	Turku	Finland
Tanaka	Elly M.	Invited speaker	W20	Max Planck Institute of Molecular Cell Biology and Genetics	Dresden	Germany
Tanaka	Yosuke		W40	University of Cambridge	Cambridge	UK
Tang	Jiong		W53	Agency for Science, Technology and Research	Singapore	Singapore
Tarantino	Carolina		W55	Institute for Bioengineering of Catalonia	Barcelona	Spain
Tassin	Anne-Marie		W29	Curie Institute	Orsay	France
Tassone	Flora	Invited speaker	W13	University of California Davis	Davis	USA
Tavares	Ana Teresa		W40	University of Lisbon	Lisbon	Portugal
Taylor	Stephen S.	Invited speaker	W48	University of Manchester	Manchester	UK
Teixeira	Luis	Invited speaker	W54	Gulbenkian Science Institute	Oeiras	Portugal
Tejedor	Francisco J.		W48	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Tejero	Rocío		W39, W53	University of Seville	Seville	Spain
Temple	Sally	Invited speaker	W38	Neural Stem Cell Institute	Rensselaer	USA
Tena	Juan J.		W12, W23, W52, W57	Andalusian Centre for Developmental Biology	Seville	Spain
Terán Pérez	Wilson		W1	Zaidín Experimental Station	Granada	Spain
Terni	Beatrice		W53	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Terradas	Mariona		W42	Autonomous University of Barcelona	Cerdanyola del Vallès	Spain
Terrak	Mohammed		W25	University of Liège	Liège	Belgium
Terribas	Ernest		W48	Institute for Predictive and Personalized Medicine of Cancer	Badalona	Spain

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Terrón-Bautista	José		W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Tessari	Alessandra		W4	University of Padua	Padua	Italy
Tevy	María Florencia		W4	Dulbecco Telethon Institute	Bologna	Italy
Thangavelu	Pulari		W48	The University of Queensland	Brisbane	Australia
Thathiah	Amantha		W44	Catholic University of Louvain	Louvain	Belgium
Théveniau-Ruissy	Magali		W4	University of Aix-Marseilles	Marseilles	France
Thomas	Graham		W46	University of Exeter	Exeter	UK
Thompson	Aoife		W35	University College Cork	Cork	Ireland
Thompson	Dawn Anne	Invited speaker	W46	Broad Institute of MIT and Harvard	Cambridge	USA
Thunnissen	Andy-Mark W. H.	Invited speaker	W25	University of Groningen	Groningen	The Netherlands
Tibarewal	Priyanka		W58	University College London	London	UK
Timmers	Marc	Organizer and speaker	W2, W11	University Medical Center Utrecht	Utrecht	The Netherlands
Tippmann	Sylvia C.		W30	Friedrich Miescher Institute for Biomedical Research	Basel	Switzerland
Tirosh	Itay	Invited speaker	W41	Broad Institute of MIT and Harvard	Cambridge	USA
Tobes	Raquel		W35	Era7 Bioinformatics	Madrid	Spain
Togashi	Hideru		W21	Kobe University Graduate School of Medicine	Kobe	Japan
Tokuoka	Hirofumi		W6	University College London	London	UK
Tomita	Taisuke	Invited speaker	W44	The University of Tokyo	Tokyo	Japan
Toni	Nicolas		W26	University of Lausanne	Lausanne	Switzerland
Toonen	Ruud		W3	Free University of Amsterdam	Amsterdam	The Netherlands
Tora	Làszlò	Invited speaker	W11	Institute of Genetics and Molecular and Cellular Biology	Illkirch	France
Toribio	María L.	Invited speaker	W36, W40	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Toribio-Fernández	Raquel		W50	Spanish National Center for Cardiovascular Research	Madrid	Spain
Torrents	Eduard		W1	Stockholm University	Stockholm	Sweden
Torres	Miguel	Invited speaker	W40	Spanish National Center for Cardiovascular Research	Madrid	Spain
Torres-Benito	Laura		W21	University of Seville	Seville	Spain
Torres-Vargas	Claudia E.		W60	University of Tübingen	Tübingen	Germany
Tosi	Tommaso		W16	European Synchrotron Radiation Facility	Grenoble	France
Toulmé	Jean-Jacques	Invited speaker	W18	University of Bordeaux I	Bordeaux	France
Tovell	Hannah		W58	University of Dundee	Dundee	UK
Tran Van Nhieu	Guy	Invited speaker	W31	College of France	Paris	France
Traxler	Beth		W16	University of Washington	Seattle	USA
Trojanova	Johana		W6	Institute of Experimental Medicine	Prague	Czech Republic
Trotman	Lloyd C.	Invited speaker	W58	Cold Spring Harbor Laboratory	Cold Spring Harbor	USA
Trullàs	Ramon		W53	Biomedical Research Institute of Barcelona	Barcelona	Spain
Truniger	Verónica		W18	Center for Edaphology and Applied Biology of the River Segura	Murcia	Spain

SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
Tsai	Li-Huei	Organizer and speaker	W37	Massachusetts Institute of Technology	Cambridge	USA
Tseng	Ai-Sun Kelly		W20	Tufts University	Medford	USA
Tsien	Richard W.	Invited speaker	W3	Stanford University School of Medicine	Stanford	USA
Tsolis	Renée M.	Invited speaker	W16, W49, W54	University of California Davis	Davis	USA
Tsuboi	Akio		W47	Nara Medical University	Nara	Japan
Tumini	Emanuela		W34, W48, W57	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Tümmler	Burkhard	Invited speaker	W28	Hannover Medical School	Hannover	Germany
Turecek	Rostislav	Invited speaker	W6	Institute of Experimental Medicine	Prague	Czech Republic
Turner	Robert D.		W25	University of Sheffield	Sheffield	UK
Úbeda	Carles		W35	Center for Advanced Research in Public Health	Valencia	Spain
Uchitel	Osvaldo	Invited speaker	W3, W6	University of Buenos Aires	Buenos Aires	Argentina
Ueno	Naoto		W12	National Institute for Basic Biology	Aichi	Japan
Ugalde	Rodolfo A.	Invited speaker	W16	National University of General San Martín	Buenos Aires	Argentina
Ule	Jernej	Organizer and speaker	W19	MRC Laboratory of Molecular Biology	Cambridge	UK
Unanua	Edurne		W3	University of Navarra	Pamplona	Spain
Unfried	Juan P.		W59	University of Navarra	Pamplona	Spain
Unterhauser	Katrin		W54	University of Graz	Graz	Austria
Urdaneta	Verónica		W49	University of Seville	Seville	Spain
Urrego	Diana		W48	Max Planck Institute for Experimental Medicine	Götingen	Germany
Usher	Jane		W46	University of Exeter	Exeter	UK
V. Rosado	Iván		W7, W34	MRC Laboratory of Molecular Biology	Cambridge	UK
Vagner	Stéphan	Invited speaker	W18	University Toulouse III Paul Sabatier	Toulouse	France
Valcárcel	Juan	Organizer and speaker	W2, W7	Centre for Genomic Regulation	Barcelona	Spain
Valdivia	Raphael H.	Invited speaker	W31	Duke University Medical Center	Durham	USA
Valente	Pierluigi		W15	Miguel Hernández University of Elche	Elche	Spain
Valentini	Martina		W28	University of Lausanne	Lausanne	Switzerland
Valentini	Stella		W17	University of Pavia	Pavia	Italy
Valenzuela-Gómez	Fernando		W60	University of Cantabria	Santander	Spain
Valenzuela-Villatoro	Marina		W53	Institute of Biomedicine of Seville	Seville	Spain
Valle	Jaione		W31	Institute of Agrobiotechnology	Mutilva	Spain
Vallejo	Mario		W33	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Vallejo-Díaz	Jesús		W50, W58	National Centre for Biotechnology	Madrid	Spain
Vallejos	Maricarmen		W18	Pontifical Catholic University of Chile	Santiago	Chile
Valor	Luis M.		W37	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Valpuesta	José María	Organizer and speaker	W29, W51	National Centre for Biotechnology	Madrid	Spain
Valvano	Miguel A.	Invited speaker	W60	Queen's University Belfast	Belfast	UK

SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
van den Bergen	Jocelyn		W17	Murdoch Children's Research Institute	Parkville	Australia
van der Does	Chris		W16	Max Planck Institute for Terrestrial Microbiology	Marburg	Germany
van der Ploeg	René		W25	University of Amsterdam	Amsterdam	The Netherlands
van Harten	Anne M.		W48	Free University Medical Center	Amsterdam	The Netherlands
van Heyningen	Veronica	Invited speaker	W12	Western General Hospital	Edinburgh	UK
van Kregten	Maartje		W16	Leiden University	Leiden	The Netherlands
van Lohuizen	Maarten	Invited speaker	W5	Netherlands Cancer Institute	Amsterdam	The Netherlands
van Rooij	Eva	Invited speaker	W55	University Medical Center Utrecht	Utrecht	The Netherlands
van Santen	Hisse M.		W36	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
van Steensel	Bas	Invited speaker	W50	Netherlands Cancer Institute	Amsterdam	The Netherlands
Vanderhaeghen	Pierre	Invited speaker	W26	Free University of Brussels	Brussels	Belgium
Vanderleyden	Jos		W24	Catholic University of Louvain	Louvain	Belgium
Vanhaesebroeck	Bart	Organizer and speaker	W58	University College London	London	UK
Vanoli	Fabio		W9	University of Milan	Milan	Italy
Vara	Hugo		W27	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain
Varela-Rey	Marta		W19	Center for Cooperative Research in Biosciences bioGUNE	Derio	Spain
Varoqueaux	Frédérique		W6	Max Planck Institute for Experimental Medicine	Göttingen	Germany
Vavouri	Tanya		W12, W59	Josep Carreras Leukaemia Research Institute	Barcelona	Spain
Vayssier-Taussat	Muriel		W16	National Veterinary School of Alfort	Maisons-Alfort	France
Vázquez-Naharro	Alberto		W56	"Alberto Sols" Biomedical Research Institute	Madrid	Spain
Vega	Beatriz		W7	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Vega	Francisco M.		W58	University of Seville	Seville	Spain
Vega	Lorena		W7	University of Salamanca	Salamanca	Spain
Veiga	Esteban		W31	Research Institute at Hospital de La Princesa	Madrid	Spain
Velasco	Eladio A.		W7, W19	University of Valladolid	Valladolid	Spain
Ventura	Andrea	Invited speaker	W55	Memorial Sloan Kettering Cancer Center	New York	USA
Ventura Sávio	André Luiz		W52	University of Texas Health Science Center at San Antonio	San Antonio	USA
Vera	María	Invited speaker	W41	Albert Einstein College of Medicine	Bronx	USA
Verderio	Claudia		W6	University of Milan	Milan	Italy
Vergunst	Annette C.	Invited speaker	W16	University of Montpellier	Nimes	France
Verhage	Matthijs	Invited speaker	W6, W39	Free University of Amsterdam	Amsterdam	The Netherlands
Vernos	Isabelle	Invited speaker	W29	Centre for Genomic Regulation	Barcelona	Spain
Veses	Verónica		W8	University of Aberdeen	Aberdeen	UK
Viala	Julie		W49	University of Aix-Marseilles	Marseilles	France
Viana	Félix	Organizer and speaker	W3, W15	Miguel Hernández University of Elche	Sant Joan d'Alacant	Spain

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
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SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
Vicario-Abejón	Carlos		W26	Cajal Institute	Madrid	Spain
Vicente García	Cristina		W23	National Centre for Biotechnology	Madrid	Spain
Víctor	Víctor M.		W32	University Hospital Dr. Peset Research Foundation	Valencia	Spain
Vidak	Sandra		W50	Medical University of Vienna	Vienna	Austria
Vidal	Miguel		W5, W30	Biological Research Center	Madrid	Spain
Vidal	Silvia		W35	Research Institute of the Hospital de la Santa Creu i Sant Pau	Barcelona	Spain
Viguera	Enrique		W9, W14, W34	University of Málaga	Málaga	Spain
Villa	Raffaella		W2, W5	Centre for Genomic Regulation	Barcelona	Spain
Villalba	José M.		W10	University of Córdoba	Córdoba	Spain
Villányi	Zoltán		W41	University of Geneva	Geneva	Switzerland
Villarroel	Álvaro	Organizer and speaker	W27	University of the Basque Country	Leioa	Spain
Villarroya	Joan		W10	University Hospital "Vall d'Hebron"	Barcelona	Spain
Villate	Olatz		W7	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Villegas	Rosario		W20	University of Chile	Santiago	Chile
Villeneuve	Anne M.	Invited speaker	W9	Stanford University School of Medicine	Stanford	USA
Villunger	Andreas		W48	Medical University of Innsbruck	Innsbruck	Austria
Visa	Neus		W2	Stockholm University	Stockholm	Sweden
Vogel	Christine		W54	Swiss Federal Institute of Technology Zurich	Zurich	Switzerland
Vogel	Jörg	Invited speaker	W24, W42	University of Würzburg	Würzburg	Germany
Vogel	Joseph P.	Invited speaker	W16, W60	Washington University School of Medicine	St. Louis	USA
Vollmer	Waldemar	Invited speaker	W25	Newcastle University	Newcastle upon Tyne	UK
von Engelhardt	Jakob	Invited speaker	W27	Heidelberg University	Heidelberg	Germany
von Zastrow	Mark	Invited speaker	W39	University of California San Francisco	San Francisco	USA
Voth	Daniel E.		W16	National Institute of Allergy and Infectious Diseases	Hamilton	USA
Vromman	François		W31	Pasteur Institute	Paris	France
Wagenseil	Jessica E.	Invited speaker	W43	Washington University	St. Louis	USA
Wagers	Amy J.	Invited speaker	W20	Harvard University	Boston	USA
Wagner	Samuel	Invited speaker	W60	University of Tübingen	Tübingen	Germany
Waksman	Gabriel	Invited speaker	W16	University College London	London	UK
Wallace	Douglas	Invited speaker	W10	University of California Irvine	Irvine	USA
Walter	Johannes C.	Invited speaker	W34	Harvard Medical School	Boston	USA
Warmerdam	Daniël O.		W34	University Medical Centre Utrecht	Utrecht	The Netherlands
Warrander	Fiona		W19	University of York	York	UK
Warren	Derek T.		W50	King's College London	London	UK
Watanabe	Yusuke		W4	Pasteur Institute	Paris	France
Waxman	Stephen	Invited speaker	W15	Yale University School of Medicine	New Haven	USA
Weber	Marc		W24	University of Barcelona	Barcelona	Spain
Weber	Ursula		W38	Mount Sinai School of Medicine	New York	USA
Wegner	Michael	Invited speaker	W22	Friedrich-Alexander University of Erlangen-Nuremberg	Erlangen	Germany

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Weigt	Martin		W24	Institute for Scientific Interchange	Turin	Italy
Weinstock	George M.	Invited speaker	W35	Washington University School of Medicine	St. Louis	USA
Wellinger	Ralf E.		W34, W45, W56	Andalusian Molecular Biology and Regenerative Medicine Centre	Seville	Spain
Welnowska	Ewelina		W18	Centre for Molecular Biology "Severo Ochoa"	Madrid	Spain
Wendland	Jürgen	Invited speaker	W8	Friedrich Schiller University Jena	Jena	Germany
Werner	Andreas	Organizer and speaker	W42, W59	Newcastle University	Newcastle upon Tyne	UK
Wesseling	John F.		W3, W6, W21	University of Navarra	Pamplona	Spain
West	Ryan J.H.		W39	University of York	York	UK
West	Stephen C.	Invited speaker	W9	London Research Institute	South Mimms	UK
Westhof	Eric	Invited speaker	W18	Louis Pasteur University	Strasbourg	France
Whiteway	Malcolm	Invited speaker	W8, W46	Concordia University	Montreal	Canada
Wickens	Marvin	Invited speaker	W19	University of Wisconsin-Madison	Madison	USA
Wilczyński	Grzegorz M.		W37	Nencki Institute of Experimental Biology	Warsaw	Poland
Wilkinson	Adam C.		W40	University of Cambridge	Cambridge	UK
Wilkinson	Lawrence S.	Invited speaker	W37	Cardiff University School of Medicine	Cardiff	UK
Wilkinson	Robert S.	Invited speaker	W21	Washington University School of Medicine	St. Louis	USA
Willaime-Morawek	Sandrine		W47	University of Southampton	Southampton	UK
Willem	Michael		W44	Ludwig-Maximilians University of Munich	Munich	Germany
Willemsen	Rob	Invited speaker	W13	Erasmus MC	Rotterdam	The Netherlands
Williams	Paul	Invited speaker	W28	University of Nottingham	Nottingham	UK
Williams	Robert		W16	Birkbeck College	London	UK
Williams	Roger L.	Invited speaker	W58	MRC Laboratory of Molecular Biology	Cambridge	UK
Willis	Anne E.	Invited speaker	W18, W19	University of Nottingham	Nottingham	UK
Wilson	Katherine L.	Invited speaker	W50	Johns Hopkins University School of Medicine	Baltimore	USA
Wilson	Michael D.	Invited speaker	W57	University of Toronto	Toronto	Canada
Wilusz	Carol J.	Invited speaker	W41	Colorado State University	Fort Collins	USA
Wincker	Patrick	Invited speaker	W46	University of Evry	Evry	France
Winter	Maria G.		W54	University of Texas Southwestern Medical Center	Dallas	USA
Winter	Sebastian E.		W54	University of Texas Southwestern Medical Center	Dallas	USA
Winterbourn	Christine C.	Invited speaker	W32	University of Otago Christchurch	Christchurch	New Zealand
Wittich	Rolf-Michael		W24	Zaidín Experimental Station	Granada	Spain
Witzany	Guenther	Invited speaker	W59	Telos - Philosophical Practice	Buermoos	Austria
Wolf	Katarina		W50	Radboud University Medical Center	Nijmegen	The Netherlands
Wolter	Mathis		W54	Luxembourg Institute of Health	Esch-sur-Alzette	Luxembourg
Wood	Marcelo A.	Invited speaker	W37	University of California Irvine	Irvine	USA
Woolf	Clifford J.	Invited speaker	W15	Massachusetts General Hospital and Harvard Medical School	Charlestown	USA

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SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
Wu	Doris K.	Organizer and speaker	W38	National Institute on Deafness and Other Communication Disorders	Rockville	USA
Wu	Leonard		W9	University of Oxford	Oxford	UK
Wutz	Gordana	Invited speaker	W57	Research Institute of Molecular Pathology	Vienna	Austria
Xavier-Neto	José	Invited speaker	W4	University of Sao Paulo	Sao Paulo	Brazil
Yadav	Sudhanshu		W58	National Centre for Biotechnology	Madrid	Spain
Yamazoe	Taiji		W33	Kumamoto University	Kumamoto	Japan
Yaniv	Moshe	Organizer and speaker	W5	Pasteur Institute	Paris	France
Yáñez-Cuna	J. Omar		W50	Netherlands Cancer Institute	Amsterdam	The Netherlands
Yaron	Avraham	Invited speaker	W44	Weizmann institute of Science	Rehovot	Israel
Yin	Viravuth P.		W20	Duke University Medical Center	Durham	USA
Yoshimura	Megumu	Invited speaker	W15	Kyushu University	Fukuoka	Japan
Young	Julia C.		W17	Monash University	Clayton	Australia
Young	Kevin D.		W25	University of Arkansas for Medical Sciences	Little Rock	USA
Young	Samuel		W6	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Yousef-Coronado	Fátima		W28	Zaidín Experimental Station	Granada	Spain
Yue	David T.	Invited speaker	W27	Johns Hopkins University School of Medicine	Baltimore	USA
Yung	Andrea		W47	Harvard Medical School	Boston	USA
Yus	Eva		W24	Centre for Genomic Regulation	Barcelona	Spain
Zabala	Juan Carlos	Invited speaker	W29, W51	University of Cantabria	Santander	Spain
Zaglia	Tania		W4	University of Padua	Padua	Italy
Zahradka	Ksenija		W9	Ruder Boskovic Institute	Zagreb	Croatia
Zakian	Virginia A.	Invited speaker	W45	Princeton University	Princeton	USA
Zambrano	María Mercedes	Invited speaker	W1	Corpogen Research Institute	Bogotá	Colombia
Zambryski	Patricia	Invited speaker	W16	University of California Berkeley	Berkeley	USA
Zamparo	Ilaria		W3	Venetian Institute of Molecular Medicine	Padua	Italy
Zampighi	Guido A.	Invited speaker	W21	University of California Los Angeles	Los Angeles	USA
Zamponi	Gerald W.	Invited speaker	W21	University of Calgary	Calgary	Canada
Zanoncello	Jasmina		W58	Bellvitge Biomedical Research Institute	L'Hospitalet de Llobregat	Spain
Zarnack	Kathi		W8	Max Planck Institute for Terrestrial Microbiology	Marburg	Germany
Zarnitsyna	Veronika I.	Invited speaker	W36	Georgia Institute of Technology	Atlanta	USA
Zechner	Ellen L.		W16, W49	University of Graz	Graz	Austria
Zeilhofer	Hanns Ulrich	Invited speaker	W15	University of Zurich	Zurich	Switzerland
Zeviani	Massimo	Invited speaker	W10	National Neurological Institute "C. Besta"	Milan	Italy
Zhang	Chen		W53	Peking University	Beijing	China
Zhang	Gang		W48	University of Copenhagen	Copenhagen	Denmark
Zheng	Yixian	Invited speaker	W29	Carnegie Institution for Science	Baltimore	USA
Zhou	Aihua		W6	Max Planck Institute for Medical Research	Heidelberg	Germany
Zick	Michael		W10	Ludwig-Maximilians University of Munich	Munich	Germany

SURNAME	NAME	MAIN ROLE	WORKSHOP CODE	AFFILIATION (last one in case of several)	CITY	COUNTRY
Zielonka	Elisabeth M.		W45	European Molecular Biology Laboratory	Heidelberg	Germany
Žigman	Mihaela		W38	Heidelberg University	Heidelberg	Germany
Zimek	Alexander		W6	Max Planck Institute for Biophysical Chemistry	Göttingen	Germany
Zimmermann	Pascale	Invited speaker	W58	Catholic University of Louvain	Louvain	Belgium
Zinad	Hany		W59	Newcastle University	Newcastle upon Tyne	UK
Zipursky	S. Lawrence	Invited speaker	W53	University of California Los Angeles	Los Angeles	USA
Ziv	Noam E.	Invited speaker	W21	Technion – Israel Institute of Technology	Haifa	Israel
Ziv	Yael		W45	Tel Aviv University	Tel Aviv	Israel
Zubiaur	Mercedes		W55, W58	Institute of Parasitology and Biomedicine "López-Neyra"	Granada	Spain
Zúñiga-Sánchez	Elizabeth		W53	University of California Los Angeles	Los Angeles	USA
Zweifel	Stefan		W47	Stem cell and Brain Research Institute	Bron	France
Zwicky	Katharina		W45	University of Zurich	Zurich	Switzerland
Zwir	Igor	Organizer and speaker	W24	University of Granada	Granada	Spain
Zylka	Mark J.	Invited speaker	W15	University of North Carolina School of Medicine	Chapel Hill	USA
Zwicky	Katharina		W45	University of Zurich	Zurich	Switzerland
Zwir	Igor	Organizer and speaker	W24	University of Granada	Granada	Spain
Zylka	Mark J.	Invited speaker	W15	University of North Carolina School of Medicine	Chapel Hill	USA

FIFTEEN YEARS OF BAEZA'S WORKSHOPS
"CURRENT TRENDS IN BIOMEDICINE"

STATISTICS OF THE WORKSHOPS "CURRENT TRENDS IN BIOMEDICINE"

Baeza, Spain / 2004-2018 / Editions: 15 /Workshops: 60

Attendees distribution

Invited speakers: 948 (organizers included. 1022 in principle; 146 withdrawals, 7 organizers among them; 76 speakers not invited initially were substitutes, and in turn 4 of them were withdrawals).

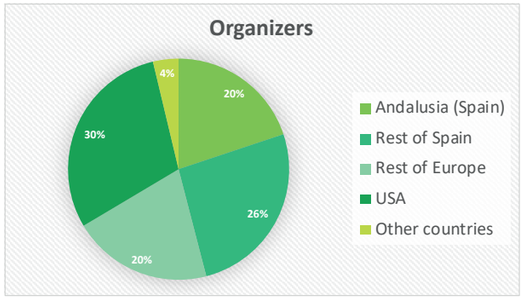
Rest of Participants: 1777 (approx, 87.10% of the maximum allowed number).

Presented posters: 1420.

Short talks: 547 (545 selected among posters; excepctionally in the second workshop of 2012 there were 2 short talks whose authors did not present a poster): 38.38% of the total number of posters.

Origin countries (research centre)

Organizers: 161



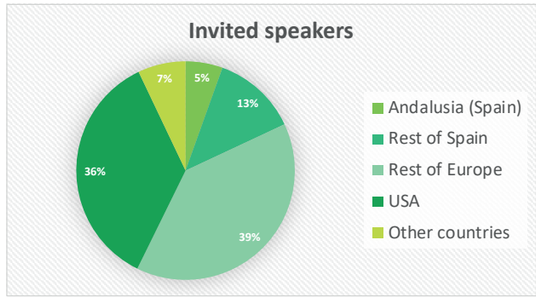
Spain: 74 **45.96%**
(Andalusia, 32) **(19.88%)**
USA: 48 **29.81%**

Rest of Europe: 33 **20.50%**
France: 7
UK: 7
Denmark: 6
Germany: 5
The Netherlands: 4
Italy: 2
Norway: 1
Switzerland: 1

Other countries: 6 **3.73%**
Argentina: 1
Australia: 1
Israel: 1
Japan: 1
Mexico: 1
Uruguay: 1
Withdrawals: 6 **(3.59% of a total of 167)**

* One organizer coming from USA cancelled his participation as speaker, but kept his place as organizer.

Invited speakers: 948
(organizers included)



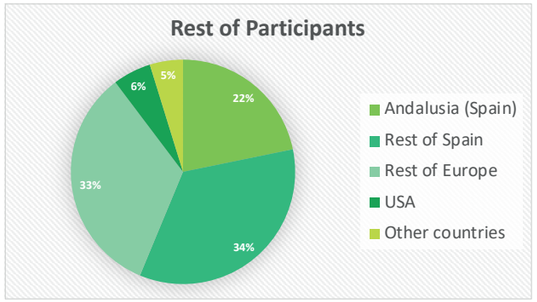
Spain: 171 **18.04%**
(Andalusia, 52) **(5.49%)**
USA: 338 **35.65%**

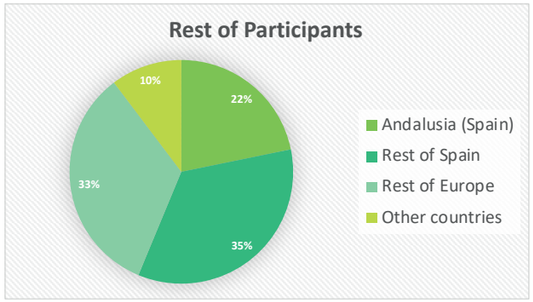
Rest of Europe: 372 **39.24%**
UK: 87
Germany: 74
France: 70
Switzerland: 29
Italy: 25
The Netherlands: 25
Denmark: 19
Sweden: 11
Belgium: 8
Portugal: 7
Austria: 5
Finland: 3
Ireland: 2
Norway: 2
Russia: 2
Czech Republic: 1
Hungary: 1
Poland: 1

Other countries: 67 **7.07%**
Japan: 15
Canada: 13
Israel: 9
Argentina: 6
Australia: 6
Brazil: 4
Mexico: 4
Uruguay: 3
China: 2
Chile: 1
Colombia: 1
Korea: 1
New Zealand: 1
Singapore: 1

* There were totally 65 latin-american invited speakers, or with latin-american origin (and also 8 of the withdrawals). In addition to the 19 already indicated, 46 speakers whose origin was Argentina (18), Brazil (10), Chile (8), Uruguay (3), Colombia (2), Mexico (2), Guatemala, Peru and Puerto Rico (one in each case) are settled in countries which are not their originary ones

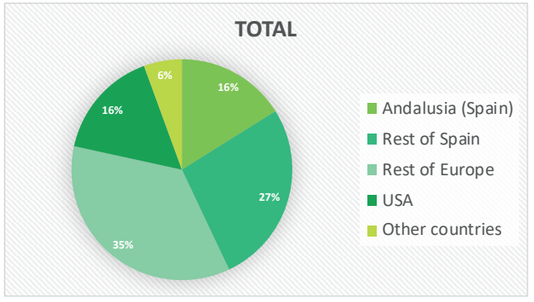
Rest of Participants: 1777





Spain: 1000	**56.27%**	**Rest of Europe: 594**	**33.43%**	**Other countries: 183**	**10.30%**
(Andalusia, 387)	**(21.78%)**	UK: 138		USA: 98	
Seville: 256	**(14.41%)**	Germany: 111		Israel: 15	
Granada: 69	**(3.88%)**	France: 96		Japan: 15	
Málaga: 28	**(1.58%)**	Italy: 41		Australia: 8	
Jaén: 21	**(1.18%)**	Switzerland: 30		Canada: 8	
Córdoba: 7	**(0.39%)**	The Netherlands: 27		Argentina: 7	
Cádiz: 6	**(0.34%)**	Denmark: 25		Chile: 7	
Rest of Spain: 613	**(34.49%)**	Belgium: 23		Mexico: 6	
		Portugal: 19		India: 5	
		Sweden: 19		China: 3	
		Austria: 15		Turkey: 3	
		Poland: 11		Uruguay: 3	
		Irleland: 8		Brazil: 2	
		Czech Republic: 6		Colombia: 1	
		Greece: 4		Lebanon: 1	
		Hungary: 4		Singapore: 1	
		Finland: 3			
		Norway: 3			
		Russia: 3			
		Romania: 2			
		Bulgaria: 1			
		Croatia: 1			
		Cyprus: 1			
		Estonia: 1			
		Luxembourg: 1			
		Slovenia: 1			

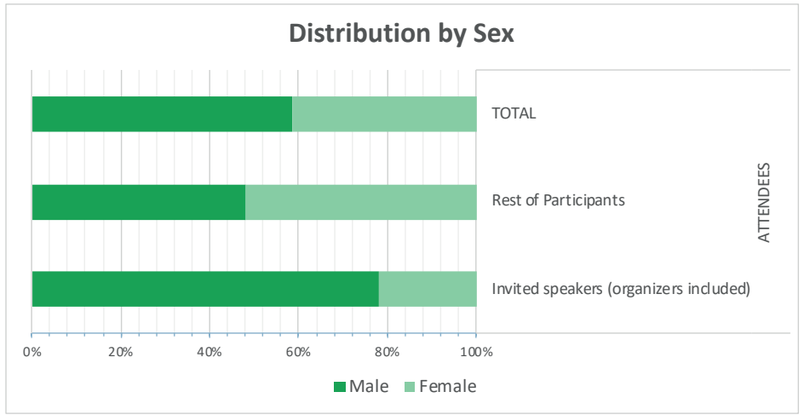
Total: 2725



Spain: 1171	**56.27%**
(Andalusia, 439)	**(21.78%)**
Rest of Europe: 966	**35.45%**
USA: 436	**16%**
Other countries: 152	**5.58%**

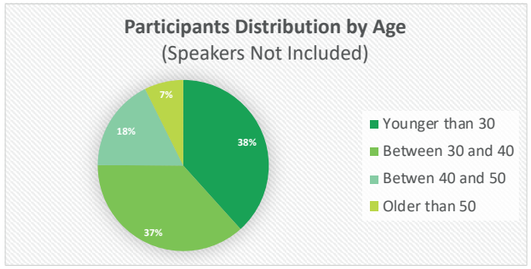
* There were totally 119 latin-american participants (or with latin-american origin); only 26 were working in their country: Argentina (7), Chile (7), Mexico (6), Uruguay (3), Brazil (2) and Colombia (1). The other ones came from Argentina (32), Mexico (16), Colombia (13), Brazil (7), Cuba (7), Chile (4), Venezuela (4), Costa Rica (3), Uruguay (3), Honduras (1), Panama (1), Peru (1) and Puerto Rico (1).

Attendees distribution by sex



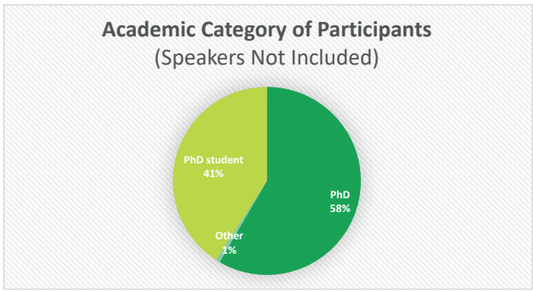
Invited speakers: 948
(organizers included)
Male: 741 78.16%
Female: 207 21.84%
Rest of Participants: 1777
Male: 853 48%
Female: 924 52%
TOTAL: 2725
Male: 1594 58.50%
Female: 1131 41.50%

Participants distribution by age
(speakers not included)



Younger than 30: 681 38.32%
Between 30 and 40: 653 36.75%
Between 40 and 50: 312 17.56%
Older than 50: 131 7.37%

Academic category of participants
(speakers not included)



PhD: 1038 58.41%
PhD student: 726 40.86%
Other: 13 0.73%

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