XIV Summer “Teófilo Hernando’s”
School of Pharmacology
of the
Menéndez Pelayo’s International University
(UIMP, Universidad Internacional Menéndez Pelayo)

NEW THERAPEUTIC TARGETS
IN BRAIN DISEASE
(July 20-24, 2015, Santander, Spain)

Directors:
Antonio G. García
Professor of Pharmacology
Teófilo Hernando’s Institute for Drug Discovery
Medical School, Autonomous University of Madrid, Spain

Michael Duchen
Professor of Physiology
Department of Cell and Developmental Biology
University College London, UK

Coordinator:
Luis Gandía
Professor of Pharmacology
Teófilo Hernando’s Institute for Drug Discovery
Medical School, Autonomous University of Madrid, Spain

You can find information regarding UIMP course in the following web pages
http://goo.gl/qEEfx6

Fellowships:
  a) Directly at UIMP: From April 18th
  b) At Fundación Teófilo Hernando (Arturo García de Diego; email
     arturo.garcia@uam.es): From June 15 to July 10 (after failure of UIMP application)

(22/06/2015)
PROGRAMME

Monday, July 20:

10:00  Inauguration by UIMP authorities and School directors

10:30-12:00  Inaugural Lecture: Discovery and impact of capacitative calcium entry in health and disease
James Putney
National Institute of Environmental Health Sciences-NIH, North Carolina, USA

12:30-13:30  A new fluorescent probe to monitor calcium signals in vitro and in vivo
Javier García Sancho
Medical School; University of Valladolid; Spain

15:00-17:00  Young Researcher Communications-I:
Aging, oxidative stress, neuroinflammation and Alzheimer’s disease
Coordinator: Dr. Rafael León,
Autonomous University of Madrid, Spain

Tuesday, July 21

10:00-12:00  Mitochondrial bioenergetics in health and disease
Michael Duchen
University College London, London, UK

12:30-13:30  Nicotinic receptors as targets for neuroprotection
Manuel Criado
Neuroscience Institute; Miguel Hernández University, Elche, Spain

15:00-17:00  Young Researcher Communications -II
Nicotinic receptors and calcium channels as therapeutic targets for brain disease
Coordinator: Luis Gandía
Autonomous University of Madrid, Spain
Wednesday, July 22

10:00-11:30  Pathways of differentiation for neurones from stem cells and their use for disease modelling
Tristan McKay
St. George University of London, London, UK

12:00-13:30  Kainate receptors in health and disease
Juan Lerma
Instituto de Neurociencias; CSIC-UMH, Alicante, Spain

15:00  17:00  Young Researcher Communications -III
Nerve injury and nerve repairing
Coordinator: Marija Sajic
University College London, UK

Thursday, July 23

10:00-10:00  ROS signalling
Paul Schumacker
Northwestern University, Chicago, USA

12:30-13:30  Amyotrophic lateral sclerosis: more than just a motoneuron disease
Antonio García García
Autonomous University of Madrid, Spain.

15:00  17:00  Young Researcher Communications-IV
Pain: new targets and drugs
Coordinator: Enrique Cobos
University of Granada, Spain

Friday, July 24

10:00-10:45  Open innovation in Pharma R&D: not sharing is not an option anymore
Javier Fernández Gadea
Janssen-Cilag, Toledo, Spain

10:45-11:15  Novel positive allosteric modulators of the metabotropic glutamate receptor 5 as potential antipsychotic agents
José Manuel Bartolomé
Janssen-Cilag, Toledo, Spain

11:30-13:00  Closing lecture: Perspectives in drug development for Alzheimer’s disease
John Kemp
Janssen-Cilag; Beerse, Belgium

13:00  Closing ceremony: UIMP authorities and School directors

Patrocinadores: Instituto y Fundación Teófilo Hernando de I+D del Medicamento (IFTH)
FORMAT OF YOUNG RESEARCHER COMMUNICATIONS

Young Researcher Communications (YRCs; every afternoon from Monday to Thursday) are coordinated by scientists with expertise in the subject, which are also responsible for recruiting the six young researchers of each session, either PhD students or postdocs.

The YRC session consists in a 30-min general introduction on the topic, done by the coordinator and six 10-min communications followed by 5-min discussion presented by postdocs and PhD students; thus, each session will be developed in 2 hours sharp.

The session themes must be related with the course subject namely neuroscience, physiology, neurology, psychiatry and pharmacology of the CNS with a broad scope. It is convenient to put some emphasis in potential drug targets for specific diseases (this is a School of Pharmacology) although this is not a restrictive condition at all.

Registration and participation in the entire course is mandatory for the coordinating scientists and the young scientists participating in these YRCs. The Teófilo Hernando’s Foundation and UIMP will help with expenses on an individual basis. It is, however, desirable that some funds from the working institution of the postdocs and PhD students may be provided to cover some of the travel and local expenses at Santander.

Information about the course can be found at:

ABOUT THE INTERNATIONAL UNIVERSITY “MENÉNDEZ PELAYO” (UIMP)

UIMP was created on August 23, 1932 as a result of the approval of a foundational decree proposed by the Minister for Public Education and Arts, Fernando de los Rios. Courses started in 1933 under the leadership of Ramón Menéndez Pidal and Blas Cabrera from 1934 to 1936 and the poet Pedro Salinas as Secretary General. This could explain the strong emphasis in humanities and Spanish language courses as well as in political, economical and social sciences of UIMP. However, the summer programme has also traditionally hosted advanced courses in physics, chemistry, mathematics, medical and other sciences.

In the 1940s the University adopted its current name after Marcelino Menéndez Pelayo, a Spanish historian born in Santander, where the most traditional and famous campus of this University is located. The “Universidad Internacional Menéndez Pelayo” (UIMP) was created to foster a better relationship between professors and doctoral and postdoctoral students, during summer courses that lasted several weeks and at its earlier time, during the whole summer. The idea was to create an informal atmosphere for discussion and analysis of different topics in the frontier of knowledge. This strongly contributed to the intellectual
maturation of young students as well as to the development of a critical and liberal attitude toward problems and people, in an atmosphere of open spirit and intellectual relevance.

During the last decades UIMP has diversified the type of courses and activities, of short (few days, one week) and longer duration (weeks to months) and has recently established PhD programmes in collaboration with the National Research Council (CSIC) and other private and public institutions. Eighty years after its foundation, the UIMP is still a benchmark in the Spanish educational arena.

UIMP has different campuses throughout Spain and courses are held along the year. UIMP directly depends on the Spanish Ministry of Education that elects its Rector among renowned University Professors (For more information visit UIMP site at http://www.uimp.es).

**SUMMER COURSES IN LA MAGDALENA PALACE**

The most famous campus of UIMP is La Magdalena Palace, located in Santander, North of Spain.

This palace was built at the beginning of the XX century and was gifted by the city of Santander to the Royal Family (Alfonso the XIIIth), for his summer vacations. This helped to develop Santander and its beaches and mountains surroundings, as one of the most beautiful tourist sites of Spain. In fact, Santander is actually considered as one of the most attractive cities of Spain due to the extraordinary combination of mountains, the Atlantic Ocean, the green and colourful gardens and the forests of Cantabria, the Autonomous Spanish Community having as capital Santander. Professors and students coming from abroad get unanimously astonished with the beauty of the Magdalena Palace, surrounded by forest, beaches (i.e. the famous “El Sardinero” beach) and beautiful and well kept colourful gardens where professors and students can gather together, in the lecture hall, at the restaurants or
walking in the surroundings of the palace and the Caballerizas, the place where the horses were kept at the time of the Royal family vacations, and now a residency and some lecture halls.

THE “TEÓFILO HERNANDO’S” SCHOOL OF PHARMACOLOGY: ORIGIN, DEVELOPMENT AND ACTIVITIES

The Teófilo Hernando’s School of Pharmacology (THSP) was initiated in 1996, in the frame of the summer courses of the UIMP. At that time, Rector José Luis García Delgado invited professor Antonio G. García (Autonomous University of Madrid) to organise this School. The courses are held at the magnificent Palace of la Magdalena, located on top of a hill at the Peninsula of La Magdalena.

The format of a UIMP’s School (“Escuela”) is based in the critical analysis in the frontier of knowledge of a given scientific topic, along a week (Monday to Friday) by scientists and students of all over the world. Emphasis is always made in drug discovery and development as well in basic research that illuminate on the identification of new biological drug targets for treating disease. The THSP was named after Teófilo Hernando, a Spanish MD/PhD pharmacologist who was trained under Oswald Schmiedeberg at Strasbourg, the first formal Pharmacology School where many pharmacologists were trained at the beginning of the XX century and then developed the subject of basic and clinical pharmacology all over the world. Teófilo Hernando introduced pharmacology as an independent teaching and science subject at the Central University of Madrid, along the first four decades of the XX century. He trained numerous other disciples that extended the subject to many other Spanish universities along the XX century.

Since 1996, 13 editions of the THSP have been held. Over 100 internationally recognised scientist professors and over 500 students have since then attended the THSP. The subjects of the subsequent schools were as follows:

1.-Drugs and their receptors (1996)  
2.-Drugs for the brain (1997)  
3.-Clinical trials in Spain (2000)  
4.-Biotechnological drugs (2001)  
5.-Alzheimer’s disease (2002)  
6.-Drugs and cardiovascular risk (2003)  
7.-Chronic inflammation and osteoarthritis (2008)  
8.-Neurodegenerative diseases (2009)  
9.-The language of neurons (2010)  
10.-Neuroprotection and neuroreparation of the injured brain (2011)  
11.-New concepts and strategies for neuroprotection (2012)  
12.-Brain damage and repair (2013)  
13.-Frontier drug discovery in brain disease (2014)