

Saturday, October 22nd

9:30-11:30      **Session IV. Ion Channel drug discovery**  
Chairman: Angel Messeguer (IQAC- Barcelona)

Speakers:

- **M<sup>a</sup> Jesús Pérez de Vega** (IQM- Madrid) "Chalcones and Chalconoids: New Allosteric Modulators of the  $\alpha 7$  Nicotinic Acetylcholine Receptor ( $\alpha 7$  nAChR)"
- **Ricardo Borges** (Univ. La Laguna-Tenerife) "The vesicular transporter of nucleotides its role in the accumulation of neurotransmitters."
- **Antonio Rodríguez Artalejo** (Univ. Complutense Madrid) "Alpha 2 adrenergic and P2X3 receptors from adrenomedullary chromaffin cells as novel targets for the treatment of neuropathic pain"
- **Andrés Morales** (Univ. Alicante) "Deciphering the complex modulation of nAChRs by local anesthetics: looking for modulating binding sites"

11:30-12:00      **Poster session and coffee break**

12:00-13:00      **Keynote Lecture:**  
**Juan Tamargo** (Univ. Complutense Madrid)

"Translational Research on Cardiac arrhythmias secondary to Channelopathies  
(The ITACA Consortium)"

13:00-13:30      **Concluding remarks and farewell**

13:30-14:00      **SICI Network meeting**

14:00-15:00      **Lunch**

Organized by:



Organizing contact: Ms . Raquel Jorquera (rjorquera@umh.es)

# RED DE EXCELENCIA SICI CONSOLIDER

## International Workshop



**El Rancho de la Aldegüela  
(Torrecaballeros, Segovia)  
October, 20<sup>th</sup>-22<sup>nd</sup>, 2016**

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# PROGRAMME

## Thursday, October 20th

18:00-18:15 Welcome by the Organizing Committee

18:15-19:15 Keynote Lecture:  
**Pierre Paoletti** (Institut de Biologie de l'Ens- IBENS-Paris)  
"NMDA receptors: from molecular engineering to synaptic regulation"

20:30 Welcome dinner

## Friday, October 21<sup>st</sup>

9:30-11:30 Session I. Ion Channels in Physiology

Chairman: Antonio Ferrer Montiel (UMH- Elche)

Speakers:

- **John Wesseling** (CIMA-Pamplona) "NMDARs in electrogenesis: A new hypothesis for the special role of NMDARs in neurodegeneration."
- **Rafael Luján** (Univ. Castilla La Mancha) "Subcellular localization of ion channels and associated proteins along the neuronal surface"
- **Antonio Felipe** (Univ. de Barcelona) "Molecular interactions shaping the functional Kv1.3 channelosome"
- **José A. Lamas** (Univ. de Vigo) "Modulation of potassium TREK-channels by bradykinin".

11:30-12:00 Poster session and coffee break

12:00-14:00 Session II. Ion channels in disease

Chairman: Rosario González Muñiz (IQM- Madrid)

Speakers:

- **Xavier Altafaj** (Idibell- Barcelona) "Rett-like severe encephalopathy caused by a de novo GRIN2B mutation is attenuated by D-serine dietary supplement"
- **Alvaro Villarreal** (Instituto Biofisika CSIC-Bilbao) "The assembly domain couples calmodulin binding and PIP2 regulation of Kv7.2 channels"
- **Diego Alvarez de la Rosa** (Univ. La Laguna- Tenerife) "Ion channels and vascular dysfunction in chronic kidney disease"
- **Luis Carlos Barrio** (Hosp. Ramón y Cajal-Madrid) "Neuronal connexin-36 protects against sudden infant death syndrome"

14:00-15:30 Lunch

15:30-17:30 Session III. Structure-function Ion channels

Chairman: Pilar de la Peña (Univ. Oviedo)

Speakers:

- **Antonio Alcaraz** (Univ. Jaume I-Castellón) "Fluctuation-driven transport in bacterial channels under acidic stress"
- **Oscar Millet** (CIC Biogune-Bilbao) "Structural basis for the calmodulin mediated Ca2+ inhibition of the Kv7.2 channel"
- **Teresa Giráldez** (Universidad La Laguna-Tenerife) "Using unnatural aminoacids to probe the molecular basis of BK channel modulation by Ca2+"
- **Alfonso Martínez de la Cruz** (CIC Biogune-Bilbao) "Structural basis of the oncogenic interaction of PRL-1 with the Magnesium transporter CNNM2"

17:30-18:00 Poster session and coffee break

18:00-19:30 Oral communications (15 min.each)

Chairman: Asia Fernández Carvajal (UMH-Elche)

- **Alex Perálvarez** (Univ. Autónoma Barcelona) "Interatomic profiles reveal neuropathological implications for TRPV2 channel."
- **Mar Orzaez** (CIPF-Valencia) "The Bax transmembrane domain interacts with pro-survival Bcl-2 proteins in biological membranes"
- **Felipe Ortega** (Univ. Complutense de Madrid) "Unravelling the mechanisms controlling neurogenic and oligodendroglionic lineages in the adult subependymal zone."
- **Sonia Marco** (CIMA-Pamplona) "Silencing GluN3A-containing NMDA receptors to treat Huntington's disease"
- **Katarzyna Styrcewska** (Univ. Barcelona) "Poliubiquitination mediates the voltage-gated potassium channel Kv1.3 endocytosis"
- **Rosa Gómez-Villafuertes** (Univ. Complutense Madrid) "Upregulation of ionotropic P2X7 receptor facilitates the survival of neuroblastoma cells under limiting growth conditions: implication of PI3K/Akt signaling pathway."

21:00 Dinner at Rancho de la Aldegüela