

# **KYX**



# **XXV CNB Scientific Workshop**

# MONDAY, 18 December 2017

Session I, Chair: Fernando Rojo

**10:00 Santos Mañes:** Molecular and cellular networks in inflammation: Relevance in cancer and beyond

**10:20 Carlos Oscar S. Sorzano:** Image processing for Electron Microscopy: Advances and challenges ahead

**10:40 Carlos Alonso:** Addressing the demographical and adaptive history of *Arabidopsis thaliana* from genome sequences

**11:00 Javier Tamames:** A novel progressive clustering approach for discovering ecological networks

# 11.20h Break

# Session II, Chair: Antonio Leyva

11:40 Mariano Esteban: Vaccine development for emerging human diseases

**12:00 Daniel López:** Bacterial lipids rafts; from the bench to the development of marketable applications

12:20 Yolanda Carrasco: New insights on B cell dynamics: implications in pathology

12:40 Luis Alberto Campos: Tuning energy barriers in protein folding

# 13:00h Lunch break

# Session III, Chair: Hugh Reyburn

**15:00 Carmen Castresana:** Oxylipins: new players in old processes

**15:20** Inés Antón: WIP, mutated p53 and YAP/TAZ co-ordinately control the oncogenic cascade that regulates proliferation and invasiveness of glioblastoma stem cells

15:40 José Luis Martínez: Determinism and stochasticity in the evolution of antibiotic resistance

# Predoctoral Session I, Chair: Alejandro Asensio

**16:00 Noelia Sofía de León** (*PI Marta Nieto*): Talking to the other side: making brain conversations happen

**16:15** Julene Madariaga Marcos (*PI Fernando Moreno*): Magnetic Tweezers and TIRF microscopy to study DNA:protein interactions

**16:30** Andrés Ortigosa (*PI Roberto Solano*): Generation of pathogen resistant tomato plants by JAZ2 gene editing



# **NAME OF THE OF**

# **XXV CNB Scientific Workshop**

# TUESDAY, 19 December 2017

Session IV, Chair: Jose María Valpuesta

10:20 Juan José Sanz: Signalling pathways in development and regeneration

10:40 Juan Carlos Alonso: Barriers to horizontal gene transfer between bacterial species

**11:00 Dimitri Balomenos:** A novel role for p21 (WAF1) in protecting from excessive inflammatory responses by controlling mitochondrial activation and production of IFNs

# 11.20h Break

# Session V, Chair: Juan José Sanz

11:40 Fernando Corrales: Translating genes into cellular functions by mass spectrometry

**12:00 Carmen Simón:** Antiviral resistance caused by artificial miRNAs and its effect on viral population

**12:20 Juan Nogales:** Systems Biotechnology group, updating microbial biotechnological approaches

**12:40 Isabel Sola:** Emerging human coronaviruses: contribution of small non-coding RNAs to pathogenesis and protection

# 13:00h Lunch break

# Session VI, Chair: Florencio Pazos

**15:00** Ana Cuenda: Novel signalling pathways in inflammation and infection

15:20 Jose Jesús Fernández: Visualization of subcellular architecture with 3D electron microscopy

15:40 Maite Sanmartín: Plants shed light on stem cell differentiation

# **Predoctoral Session II, Chair: Marcos Gragera**

16:00 Alfonso Blázquez (PI Hugh Reyburn): Transmembranes: Where sensing and signals collide

16:15 Adriana Lucia-Sanz (PI Susanna Manrubia): Basics of multipartite genomes

**16:30 Paula Blanco Torres** (*PI Jose Luis Martínez*): Use of phenotype microarrays (BIOLOG) for the comprehensive analysis of multidrug resistance efflux pumps effectors

