



19
DECEMBER
2019

**CENTRO NACIONAL
DE BIOTECNOLOGÍA**
9:15 LECTURE HALL
& ROOM B6

915 854 500
www.cnb.csic.es

ORGANIZERS

Mar Valés-Gómez
Inés M. Antón
Susana de Lucas

COLLABORATORS

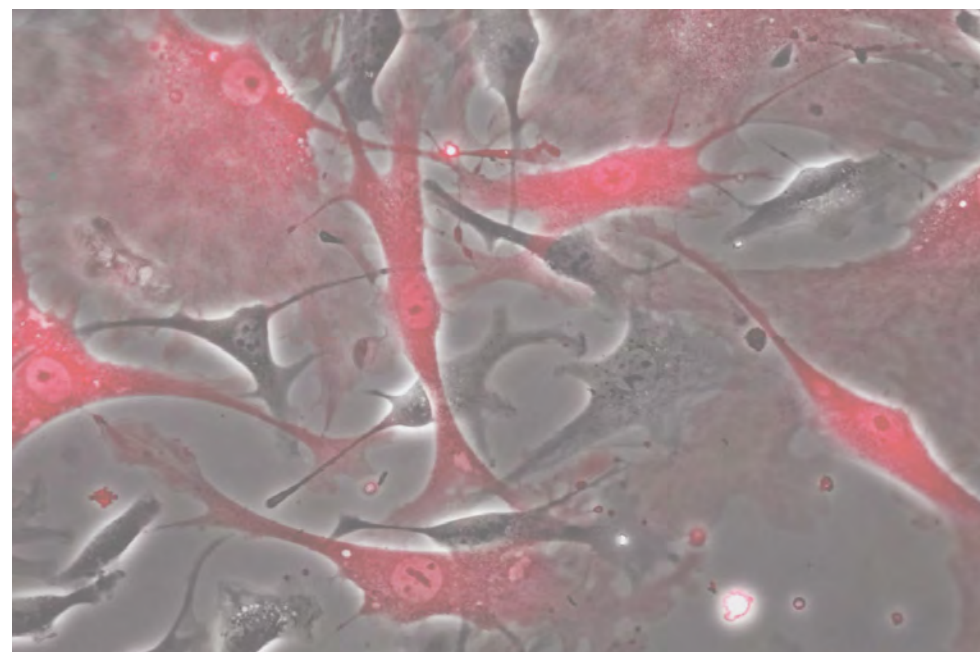
Silvia Ayora
Domingo F. Barber
Sandra Fonseca
Urtzi Garaigorta
Juan Poyatos
Carmen San Martín



XXVII WORKSHOP

ADVANCES IN MOLECULAR BIOLOGY BY YOUNG RESEARCHERS ABROAD

Centro Nacional de Biotecnología
19th December 2019



Session 1: Molecular & Cell Biology, Microbiology and Virology. Chairs: Urtzi Garaigorta, Silvia Ayora, Carmen San Martín, Lecture hall.

- 09:30:** The dark and bright side of epigenetics: interrogating chromatin modifiers and non-coding elements
Davide Seruggia, Boston Children's Hospital, Dana-Farber Cancer Institute, Harvard Medical School USA. (PI: Stuart H. Orkin)
- 09:50:** Non human primate iPSC for testing regenerative therapies and human cardiovascular disease modeling
Ignacio Rodríguez Polo, German Primate Center, Germany. (PI: Rüdiger Behr)
- 10:10:** Deciphering the molecular mechanism of p300 activation
Esther Ortega, EMBL, France (PI: Daniel Panne)
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- 10:40:** Plant Cysteine Oxidases enable the Cys N-Degron Pathway in yeast
Mikel Lavilla, Plantlab, Scuola Superiore Sant'Anna, Italy (PI: Francesco Licausi)
- 11:00:** Psoriatic Arthritis and gut microbiome: a new therapeutic approach
Jesus Miguens, Imperial College London, UK (PI: Prof Julian Marchesi)
- 11:20:** Multi-parameter Single Molecule Spectroscopy Imaging Reveals Intra and Inter Molecular Conformations of HIV-1 Envelope on Native Viruses
Irene Carlón, Wellcome Centre for Human Genetics, University of Oxford, UK (PI: Sergi Padilla Parra)

11:40- 12:30 Coffee Break and networking session
Session 2: Molecular Biology of Plants I. Chair: Sandra Fonseca, Lecture hall

- 12:30:** Differential Fluorescent Markers to map Synthetic Communities on plant roots
Beatriz Jorrín, University of Oxford (PI: Philip Poole)
- 12:50:** Metacaspases: plant proteases as switches to wound response
Alvaro Daniel Fernández-Fernández, Plant Biotechnology and Bioinformatics, Ghent University, Belgium (PI: Frank Van Breusegem)
- 13:10:** PEATmoss (Physcomitrella Expression Atlas Tool): a gene expression atlas and bioinformatics tools for Physcomitrella patens adaptable and customizable for any species and expression data
Noé Fernández-Pozo, Plant Cell Biology, University of Marburg, Germany (PI: Stefan Rensing)

Session 3: Neurobiology. Chair: Marta Nieto, Room B6

- 12:30:** Molecular signatures in Parkinson's disease brain: the overlooked effect of cellular composition
Gonzalo S. Nido, University of Bergen, Norway (PI: Charalampos Tzoulis)
- 12:50:** A novel function of TSC1/hamartin protein regulating tau acetylation and clearance: implications in age-related neurodegeneration and tauopathies
Carolina Alquezar, University of California San Francisco, USA. (PI: Aimee Kao)
- 13:10:** Complexin enables synaptic strength and prevents mature SV fusion after activity independently on the secondary Ca²⁺ sensor Synaptotagmin 7
Francisco J. López-Murcia, Max-Planck Institute of Exp. Medicine, Germany (PI, Nils Brose)
- 13:30:** XXXXXXXX
Javier Calvo Garrido, Karolinska Institutet, Stockholm, Sweden (PI: XXX)

13:50- 15:00 Lunch and networking session
Session 5: Immunology and Oncology. Chairs: Mar Valés, Domingo Barber Lecture hall

- 15:00:** Cytotoxic lymphocytes exploit biophysical vulnerabilities in metastatic cancer cells
Maria Tello-Lafoz, Memorial Sloan-Kettering Cancer Center NY, USA. (PI: Morgan Huse)
- 15:20:** Behavioral signatures that enable engineered T cells to target breast cancer organoids revealed by multivariate dynamic analysis of 3D live imaging data
Maria Alieva, Prinses Maxima Centrum, Netherlands (PI: Anne Rios)
- 15:40:** ZZW-115: a NUPR1 inhibitor for cancer treatment
Patricia Santofimia, Centre de Recherche en Cancérologie de Marseille, France (PI: Juan Iovanna)
- 16:00:** Mechanisms of intravascular immune surveillance by antigen-experienced T cells subsets during the response to acute viral infections in the skin
Olga Barreiro, Harvard Medical School, (PI: Ulrich von Andrian)

Session 4: Molecular Biology of Plants II. Chair: Andrea Chini Room B6

- 15:00:** To the exodermis and beyond: what secrets does it hide?
Concepción Manzano, University of California at Davis, USA (PI: Siobhan Brady)
- 15:20:** Is not easy being green: plastid retrograde signals during chloroplast biogenesis
Tamara Hernández-Verdeja, Umeå Plant Science Centre, Umeå University, Sweden (PI: Åsa Strand)
- 15:40:** Molecular function of BRUTUS-LIKE hemerythrin E3 ligases in iron uptake
Jorge Rodríguez-Celma, John Innes Centre, UK (PI: Janneke Balk)
- 16:00:** Nanoparticle mediated delivery of gene-editing tools (CRISPR/Cas9) to plants
Eduardo González-Grandío, UC Berkeley, USA (PI: Markita Landry)

16:30 Round Table: Funding opportunities for young researchers in Spain. Chair: Inés Antón, Lecture hall

Enrique Playan, Agencia Estatal de Investigación **Jesús Rojo, Marie Skłodowska-Curie Actions Spain, Fundación Conocimiento Madrid+d** **Julio Merino, Dirección General I+D, Comunidad de Madrid**
Sonia Vidal, Fundación La Caixa **Alicia González, Instituto Investigaciones Biomédicas (IIB-CSIC-UAM)**

17:45- 18:30 Cava and Christmas sweets