



INSTITUTE
FOR RESEARCH
IN BIOMEDICINE

Barcelona BioMed Conference Epithelial transitions and cell migration; Learning from development to tackle disease October 3-5, 2016

Monday, 3 October 2016

9.00 Registration

9.30 Welcome by Joan J. Guinovart

Session I

Chair: Guojun Sheng

9.45 Understanding gastrulation EMT during axis formation
Guojun Sheng, Kumamoto University (Kumamoto, Japan)

10.15 Guts and gastrulation: cell dynamics and the morphogenesis of the early mouse embryo
Anna-Katerina Hadjantonakis, Sloan Kettering Institute (New York, USA)

10.45 - 11.30 *Coffee break and poster session*

11.30 Cell shape and morphogenesis: sub cellular and supracellular mechanisms
Maria Leptin, EMBO (Heidelberg, Germany)

12.00 Tension-sensing at adherens junctions in epithelial homeostasis
Alpha S. Yap, University of Queensland (Brisbane, Australia)

12.30 Control of cells that move into and out of the ectoderm - wandering pigment cells
David R. McClay, Duke University (Durham, NC, USA)

13.00 - 15.00 *Lunch (FresCo, C/ Carme, 16)*

Session II

Chair: Roberto Mayor

- 15.00 Collective migration of neural crest cells during development**
Roberto Mayor, University College London (London, UK)
- 15.30 SHORT TALK 1 The Glide/Gcm fate determinant controls initiation of collective cell migration by regulating Frazzled**
Angela Giangrande, Institut de Génétique et de Biologie Moléculaire et Cellulaire (Alsace, France)
- 15.45 Molecular mechanisms of collective cell migration, from Drosophila border cells to human cancer**
Denise J. Montell, University of California (Los Angeles, CA, USA)
- 16.15 - 17.00 *Coffee break and poster session***
- 17.00 Architectural control of cell differentiation during organ morphogenesis**
Darren Gilmour, EMBL (Heidelberg, Germany)
- 17.30 Regulatory signals in cardiac EMT**
José Luis de la Pompa, CNIC (Madrid, Spain)
- 18.00 SHORT TALK 2 Acquisition of invasive features upon exposure of peritoneum mesothelial cells to linear stretch: role of a caveolin-1-TGF-beta1 interplay**
Raffaele Stripoli, Sapienza University of Rome (Rome, Italy)
- 18.15 SHORT TALK 3 Optogenetic control of cell forces and mechanotransduction**
Léo Valon, IBEC (Barcelona, Spain)
- 18.30 *End of session***

Tuesday, 4 October 2016

Session III

Chair: Xing Dai

- 9.00 EMT control in developing and regenerating epithelia - lessons from skin and mammary gland**
Xing Dai, University of California (Irvine, CA, USA)
- 9.30 Unravelling the cellular basis of limb regeneration by live imaging**
Michalis Averof, Institut de Génétique Fonctionnelle de Lyon (Lyon, France)
- 10.00 Role of niche migration in homeostasis of the drosophila larval intestine**
Benjamin Ohlstein, Columbia University Medical Center (New York, USA)
- 10.30 - 11.15 *Coffee break and poster session***
- 11.15 Progenitor cells and cell migration in Drosophila morphogenesis**
Jordi Casanova, IRB Barcelona/IBMB-CSIC (Barcelona, Spain)

- 11.45** SHORT TALK 4 **Integrin-regulated collective cell migration and epithelial plasticity is regulated by Rac1/RhoA antagonism and matrix stiffness**
Coert Margadant, Sanquin Research (Amsterdam, The Netherlands)
- 12.00** **Evolutionary pressure to attenuate the mesenchymal phenotype**
Angela Nieto, Universidad Miguel Hernández - CSIC (Alicante, Spain)
- 12.30** SHORT TALK 5 **GATA factor induced-EMT and identification of downstream targets**
Kyra Campbell, IRB Barcelona (Barcelona, Spain)
- 12.45 - 15.00** *Lunch (FrescCo, C/ Carme, 16)*

Session IV

Chair: Jean Paul Thiery

- 15.00** **Epithelial mesenchymal transition in carcinoma; Therapeutic implications**
Jean Paul Thiery, National University of Singapore (Singapore, Singapore)
- 15.30** **Lysyl oxidase-like 2 and 3 (LOXL2/LOXL3): new players in epithelial plasticity and tumor progression**
Amparo Cano, Instituto de Investigaciones Biomédicas "Alberto Sols" CSIC-UAM, (Madrid, Spain)
- 16.00** SHORT TALK 6 **Cancer stem-like cells act at via distinct signaling pathways in promoting late stages of malignant progression**
Purificación Muñoz, IDIBELL (Barcelona, Spain)
- 16.15 - 17.00** *Coffee break and poster session*
- 17.00** **The cancer cell of origin regulates EMT in epithelial tumors**
Cédric Blanpain, IRIBHM/ULB (Bruxelles, Belgium)
- 17.30** **Cancer cell invasion in complex environments/ stromal regulation of breast cancer invasion**
Erik Sahai, The Francis Crick Institute (London, UK)
- 18.00** *End of session*
- 20.30** *Speakers dinner "Restaurant Citrus" (Passeig de Gràcia, 44)*

Wednesday, 5 October 2016

Session V

Chair: Ginés Morata

- 9.00 Cell competition, JNK pathway and tumour growth**
Ginés Morata, CSIC-UAM (Madrid, Spain)
- 9.30 Neuroblastic Tumors: a paradigmatic example of developmental cancer**
Jaume Mora, Hospital Sant Joan de Déu (Barcelona, Spain)
- 10.00 SHORT TALK 7 Unraveling the role of Nxf1 in neuroblastoma cancer stem cells biology**
Lucía Fanlo, IBMB-CSIC (Barcelona, Spain)
- 10.15 - 11:00 *Coffee break and poster session***
- 11.00 Epigenetic regulation of epithelial and mesenchymal differentiation in pediatric cancer**
Miguel Rivera, Massachusetts General Hospital & Harvard Medical School (Boston, MA, USA)
- 11.30 A stromal gene program drives metastasis in colorectal cancer**
Eduard Batlle, IRB Barcelona (Barcelona, Spain)
- 12.00 Snail1-dependent activation of cancer-associated fibroblast controls collective tumor cell invasion and metastasis**
Antonio García de Herreros, IMIM (Barcelona, Spain)
- 12.30 *Closing remarks***