

INSTITUTE FOR RESEARCH IN BIOMEDICINE

Barcelona BioMed Conference Centrosomes, cilia and cell cycle in development and disease" (11-13 June, 2018)

Monday, June 11, 2018

- 8.30 Registration
- 9.00 Welcome by the organizers

Session I Chair: Travis Stracker

- 9.15 The multitasking nature of Drosophila Centrobin Cayetano Gonzalez, IRB Barcelona/ICREA (Barcelona, Spain)
- 9.40 <u>Short talk 1</u> The ciliopathy gene Ftm/Rpgrip1l controls patterning and cell fate in the mouse forebrain via region-specific modulation of Hedgehog/Gli signaling Abraham Andreu, Sorbonne Université - Instut de Biologie Paris-Seine - CNRS (Paris, France)
- 9.55 Blood, brain and size: can the centrosome do it all? Fanni Gergely, University of Cambridge (Cambridge, UK)
- 10.20 11.50 Coffee break and poster session
- 11.50 Intraflagellar transport is deeply integrated in hedgehog signaling Gregory J. Pazour, University of Massachusetts Medical School (Worcester, MA, USA)
- 12.15 <u>Short talk 2</u> Functional Analysis of Rbm26 Ana Curinha, Sektion for Molecular Pathophysiology, CCB, Biocenter (Innsbruck, Austria)
- 12.30 Cell cycle asynchrony and DNA damage at mitotic entry contribute to the evolution of polyploid karyotypes Renata Basto, Institut Curie (Paris, France)
- 13.00 15.00 Lunch (IEC courtyard)

Session II

Chair: to be determined

- 15.00 Phosphoproteomic screening identifies centrosome and cytoskeleton regulators as novel targets of the CDKL5 kinase John Rouse, School of Life Sciences- University of Dundee (Dundee, Scotland, UK)
- 15.25 <u>Short talk 3</u> Regulating the centrosome cycle through phosphorylation. Roles of the NIMA-family protein kinases Joan Roig, IBMB-CSIC (Barcelona, Spain)
- 15.40 **GEMC1** and Multicilin: identical twins or distinct individuals in the Geminin family? Travis Stracker, IRB Barcelona (Barcelona, Spain)
- 16.05 17.50 Coffee break and poster session
- 17.50 Adult neural stem cells and ependymal cells share a common lineage Nathalie Spassky, Institut de Biologie de l'École Normale Supérieure (Paris, France)
- 18.15 <u>Short talk 4</u> CDC20B is required for deuterosome-mediated centriole production in multiciliated cells Camille Boutin, IBDM CNRS UMR (Marseille, France)
- 18.30 Centrosome homeostasis and its dysregulation in disease Andrew Holland, Johns Hopkins University School of Medicine (Baltimore, MD, USA)
- 18.55 End of session remarks

Tuesday, June 12, 2018

Session III Chair: Renata Basto

- 9.15 Tau tubulin kinase 2 (TTBK2) and the links between primary cilia and neural degeneration Sarah Goetz, Duke University (Durham, USA)
- 9.40 <u>Short talk 5</u> Therapeutic targeting of the γ-tubulin meshwork in RB1-negative tumors
 Maria Alvarado-Kristensson, Lund University (Malmö, Sweden)
- 9.55 Coordinating microtubule cytoskeleton organization with the transition from proliferation to differentiation Jens Lüders, IRB Barcelona (Barcelona, Spain)
- 10.20 11.50 Coffee break and poster session

- 11.50 **Progenitor abnormalities during brain development leading to heterotopia** Fiona Francis, École des Neurosciences de Paris Île-de-France (Paris, France)
- 12.15 <u>Short talk 6</u> SDCCAG8 is a schizophrenia risk gene that is required for efficient primary ciliogenesis Ciaran G. Morrison, National University of Ireland Galway (Galway, Ireland)
- 12.30 Microcephalic primordial dwarfism: a cell cycle disorder? Andrew Jackson, University of Edinburgh (Edinburgh, UK)
- 13.00 15.00 Lunch (IEC courtyard)

Session IV

Chair: Fanni Gergely

- 15.00 **Targeting cilia checkpoint in patient-derived glioma stem cells** Jay Gopalakrishnan, University of Cologne (Cologne, Germany)
- 15.25 <u>Short talk 7</u> Resting cells rely on the DNA helicase component MCM2 to build cilia Melanie Philipp, Ulm University- Institute for Biochemistry and Molecular Biology (Ulm, Germany)
- 15.40 16.45 Coffee break and poster session
- 16.45 Genome Maintenance and Nervous System Development Peter McKinnon, St. Jude Children's Research Hospital (Memphis, TN, USA)
- 17.10 <u>Short talk 8</u> Chromosomal instability induces cellular invasion in epithelial tissues Marco Milán, IRB Barcelona/ ICREA (Barcelona, Spain)
- 17.25 Functional dissection of the centrosome-cilium proximity interaction landscape
 Laurence Pelletier, Lunenfeld-Tanenbaum Research Institute (Toronto, Ontario, Canada)
- 17.50 End of session remarks
- 20.30 **Speakers dinner** Restaurant els 4 Gats (Montsió, 3)

Wednesday, June 13, 2018

Session V

Chair: Jens Lüders

- 9.15 **The Love-Hate Relationship between the Centrosome and Cilia** Bryan Tsou, Memorial Sloan Kettering Cancer Center (NY, USA)
- 9.40 <u>Short talk 9</u> Cholesterol is indispensable for proper cilium formation and function Lars D. Maerz, Ulm University- Institute for Biochemistry and Molecular Biology (Ulm, Germany)
- 9.55 <u>Short talk 10</u> Primary cilia mediate diverse kinase inhibitor resistance mechanisms in cancer Barbara E. Tanos, Institute of Cancer Research (London, UK)
- 10.10 10.45 Coffee break and poster session
- 10.45 **Congenital heart disease: is it a ciliopathy?** Cecilia W. Lo, University of Pittsburgh (Pittsburgh, PA, USA)
- 11.10 <u>Short talk 11</u> A tight control of mitochondrial function prevents heart defects through faithful ciliogenesis Martin D. Burkhalter, Ulm University- Institute for Biochemistry and Molecular Biology (Ulm, Germany)
- 11.25 **Breaking the rules: centriole amplification and loss in differentiated cells** Tim Stearns, Stanford University (Stanford, California, USA)
- 11.45 Closing remarks and departure