## FUTURE TOOLS FOR BIOMEDICAL RESEARCH IN VITRO, IN SILICO AND IN VIVO DISEASE MODELING

## Thursday, October, $1^{\text {st }}, 2015$ <br> COSMOCAIXA BARCELONA. C/ISAAC NEWTON 26

PROGRAM
9:15 Welcome9:30 Animal Research and Possible Alternatives in Biomedicine: OverviewElisabet Berggren, JRC-Institute for Health and Consumer Protection, EURL ECVAM Unit, Italy
10:30 Coffee Break
11:00 SESSION 1: BEYOND CELL CULTURE SYSTEMSChair: Xavier Trepat. IBEC/ICREA/UB, Barcelona, Spain
11:05 Cellular Crosstalk in Vitro and its Use in Regenerative Medicine
James Kirkpatrick, Johannes Gutenberg University, Mainz, Germany
11:30 Engineering Microenvironments with Growth Factors - Looks MattersManuel Salmerón, University of Glasgow, UK
12:00 SESSION 2: iPS-BASED APPROACHESChair: Angel Raya, CMRB/ICREA/IBEC, Barcelona, Spain
12:05 Defining the Origins of Variation in Human Pluripotent Stem CellsRon Mckay, Lieber Institute, USA
12:30 Establishing Standardised Access to Human Induced Pluripotent Stem Cell Line Acquisitionvia the European Bank for Induced Stem Cells
Paul de Sousa, School of Clinical Sciences, University of Edinburgh, UK
12:55 Making Medicines more Precise: the role of iPSC and EBiSCTimothy Allsopp, Pfizer Ltd, Cambridge, UK
13:20 Open Debate13:45 Lunch
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14:45 SESSION 3: ORGAN-ON-A-CHIP
Chair: Josep Samitier, IBEC, Barcelona, Spain
14:50 Emergence of Organ-on-a-Chip Technologies: The Hype and the Reality Roger Kamm, MIT, USA

15:20 Use of iPSC Progeny to Model Disease and Drug Toxicity
Catherine Verfaillie, KU Leuven, Belgium
15:45 Coffee Break
16:15 SESSION 4: IN SILICO MODELS AND SYSTEMS BIOLOGY
Chair: Roger Guimerà, URV/ICREA, Spain
16:20 Systems Biology Approaches to Cell Biology
Pablo M. Garcia-Roves, University of Barcelona, Barcelona, Spain
16:45 The Virtual Physiological Human Initiative: Applications in Bone Regeneration Liesbet Geris, University of Liege, Belgium

17:15 Open Debate
"laCaixa" Foundation

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## Friday, October, $2^{\text {nd }}, 2015$

PRELIMINARY PROGRAM

10:00 SESSION 5: VALIDATING NEW ANIMAL MODELS
Chair: Fàtima Bosch, Universitat Autònoma de Barcelona, Spain
10:05 The International Mouse Phenotyping Consortium: New Insights into the Genetic and Molecular Bases of Disease
Steve Brown, MRC Harwell, Didcot, UK
10:30 Deciphering Genetic and Epigenetic Function in Diabetes
Martin M. Hrabe de Angelis, Helmholtz Zentrum München, Munich, Germany
11:00 Coffee Break
11:30 SESSION 6: PLAYING SAFE, PLAYING FAIR
Chair: Miquel Borràs, CERETOX, Universitat de Barcelona, Spain
12:00 Use of Alternative Methods in Drug Safety Assessment
Antonio Guzmán, Lab. Esteve, Barcelona, Spain
12:30 ECVAM and SEURAT-1 Experiences Looking Towards a More Efficient Safety Assessment Elisabet Berggren, JRC-Institute for Health and Consumer Protection, EURL ECVAM Unit, Italy

12:55 Open Debate
13:15 Closing Remarks
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