

Monday, June 4

08:00	Registration & Breakfast	
09:00	A. Hoffmann /R. Eils	Opening and welcome remarks
	Session 1 Chair: Matteo Pellegrini	
09:10	Thomas Höfer <i>BioQuant, Heidelberg</i>	Long-Range Memories of Cell-Cycle Progression, and Growth Shape Statistics of Lineage Trees
09:50	Vanessa Jonsson <i>City of Hope, Duarte, USA</i>	In Silico Adaptive Trial Design: CART Combination Dosing for Solid Tumors
10:10	Stacey Finley <i>USC, Los Angeles, USA</i>	Kinetic modeling of CD28 co-stimulation in CAR-engineered T cells
10:30	Break	
	Session 2 Chair: Tom Chou	
10:50	Jason E. Shoemaker <i>U Pittsburgh, USA</i>	Immunodynamics During Deadly Influenza Virus Infection
11:10	Carolyn Zitzmann <i>DKFZ, Heidelberg, Germany</i>	Modeling of Dengue Virus Replication and the Innate Immune Response
11:30	Anna Kicheva <i>IST, Vienna, Austria</i>	Progenitor Specification and Growth in the Developing Spinal Cord
12:10	Lunch CNSI, Rooftop (5 th floor)	
	Session 3: QCB @ UCLA Chair: Alexander Hoffmann	
13:30	Eleazar Eskin	<i>TBA</i>
13:50	Leonid Kruglyak	New CRISPR/Cas9 Technologies For Studies Of Genetic Variation
14:10	Sri Kosuri	The Impact of Rare Genetic Variation on Pre-mRNA Splicing
14:30	Grace Xiao	Global Studies of RNA Editing in Health and Disease
14:50	Roy Wollman	Cell State Variability in Calcium Signaling
15:10	Xia Yang	Multi-tissue, Multi-omics Modeling of Complex Human Diseases
15:30	Break	
	Session 4 Chair: Tom Graeber	
16:00	Roland Eils <i>BIH Berlin, Germany</i>	Pheno-Seq – Placing Single Cell Sequencing Into A Spatial Context
16:40	Ariel Bensimon <i>ETH Zürich, Switzerland</i>	Exploring Cellular Phosphorylation Network Responses to DNA Damage
17:00	George T. Chen <i>UC Irvine, USA</i>	Linking Wnt to Patterns of Metabolism in Colon Cancer
17:20	Nikolas Balanis <i>UC Los Angeles, USA</i>	Convergent Pan-Cancer De-differentiation to Small Cell Phenotype
	Shyr-Shea Chang <i>UC Los Angeles, USA</i>	Physical Principles for Capillary Network Formation
	Mohit K. Jolly <i>Rice U, Houston, USA</i>	Quantifying Epithelial-Mesenchymal Plasticity during Cancer metastasis
	Linda Krause <i>Munich, Germany</i>	Predicting Disease Courses in Children with Atopic Eczema
	Takamasa Kudo <i>Stanford, USA</i>	Epitope barcoding for high-throughput image-based genetic screening
	James Lu <i>Genentech, USA</i>	Modeling Synergy between Idasanutlin and Venetoclax in an AML Cell Line
17:30	Reception	Poster Session 1

QCB @ UCLA Session

Lightning Talks

Tuesday, June 5

Session 5			Chair: Hilary Collier		
09:00	Michael Elowitz <i>Caltech, Pasadena, USA</i>	Communication and Computation in Mammalian Cells			
09:40	Hui Xiao Chao <i>UNC, Chapel Hill, USA</i>	Human Cell Cycle is a Series of Uncoupled, Memoryless Phases			
10:00	Silvia Santos <i>Crick, London, England</i>	Decoding Cellular Signals: Commitment During hES Cells Differentiation			
10:40	Break				
Session 6			Chair: Aaron Meyer		
11:00	Ursula Klingmuller <i>Heidelberg, Germany</i>	Multilevel Regulation of TGF β Signal Transduction			
11:40	Carlos Lopez <i>Nashville, USA</i>	Calibration of Mechanistic Apoptosis Models to Single Cell Data Using PySB			
12:00	Aaron S Meyer <i>UC Los Angeles, USA</i>	Dissecting Fc γ R Regulation Through a Multivalent Binding Model	Lightning Talks		
	Darius Schweinoch <i>Heidelberg, Germany</i>	Temporal Control of the RIG-I-Dependent Antiviral Innate Immune Response			
	Kartik Subramanian <i>Harvard Medical School, USA</i>	Predicting Drivers of Drug Response from Omics Data Across Breast Cancers			
	Gajendra Suryawanshi <i>UC Los Angeles, USA</i>	QVISA: Quantitative Vector Integration Site Analysis for In Vitro Clonal Tracking			
	Criseida Zamora <i>Okinawa Institute</i>	A model of Long-Term Depression molecular network sensitivity			
	Mattia Zampieri <i>ETH, Zurich, Switzerland</i>	Mapping Transcription Factor- Metabolite Associations in Cancer Cells			
12:30	Lunch (Extended)	Poster Session 2			
Session 7			Chair: Peipei Ping		
14:45	Andreas Raue <i>Merrimack, Boston, USA</i>	Predicting Ligand-dependent Tumors from Signaling and Gene Expression			
15:25	Karine Le Roch <i>UC Riverside, USA</i>	Changes in Genome Organization of Parasite			
15:45	Bernhard Palsson <i>UC San Diego, USA</i>	Pasteur21: A Global System Biology Platform			
16:30	Carpool to Annenberg Community Beach House				
17:30	Activities/Cocktails				
19:45	Conference Dinner				

Wednesday June 6

Session 8		Chair: Van Savage
09:00	Arthur Lander <i>UC Irvine, USA</i>	Feedback control of proliferation: implications for cancer biology
09:40	Kakajan Komurov <i>Cincinnati, USA</i>	Integrated Modeling and Targeting of Oncogenic Liabilities in Cancers
10:00	Vito Quaranta <i>Vanderbilt, Nashville, USA</i>	Systems Biology of Small Cell Lung Cancer: Treatment Evasion by Phenotypic Transitions
10:40	Coffee break	
Session 9: Award Lectures		Chairs: Roland Eils & Alexander Hoffmann
11:00	Pavak Shah <i>MSKCC, New York, USA</i>	Anne Heidenthal Prize for Fluorescence Research, 2018 <i>sponsored by Chroma Technology Corp.</i> <i>ShootingStar: Imaging Technologies for Single Cell Analysis in vivo</i>
11:45	Frank Alber <i>USC, Los Angeles, USA</i>	CSB Prize in Computational Systems Biology, 2018 <i>sponsored by Merrimack Pharmaceuticals</i> <i>Mapping the Spatial Organization of Genomes and Cells through Data Integration</i>
12:30	Lunch	
Session 10		Chair: Jasmine Zhou
13:45	Irina Lehmann <i>BIH Berlin, Germany</i>	Epigenetic modification in early childhood asthma
14:25	David Van Valen <i>Caltech Pasadena, USA</i>	Deep Learning for Single-Cell Biology
14:45	Avi Ma'ayan <i>Mt Sinai, New York, USA</i>	The Art of Connectivity Mapping
15:25	Closing Remarks: A. Hoffmann and R. Eils	