11th Annual Southern California Systems Biology Symposium

PROGRAM



9:45am	Welcoming remarks: Arthur Lander & Alexander Hoffmann
10:00am	Session I chaired by Matteo Pellegrini - Transcriptional & Epigenetic Control
	 Remo Rohs, USC: Deep learning Methods Reveal Mechanisms of Protein-DNA Binding Jin Yu, UC Irvine: Modeling Transcription Protein Machinery Christopher Benner, UC San Diego: Deciphering the cis-regulatory grammar of transcription initiation Sergio Branciamore, City of Hope: Evolution of heteromorphic sex chromosomes driven by stochastic epigenetic modification
11:00am	Coffee break
11:30am	Session II chaired by Aaron Meyer - Multiscale Dynamics
	 Roya Zandi, UC Riverside: Virus Assembly Pathways inside a Host Cell Max Wilson, UC Santa Barbara: Optogenetic control of cellular signaling through dynamic nucleation of liquid droplets Michael Elowitz, Cal Tech: Multicellular circuit design: natural and synthetic Venugopala (Reddy) Gonehal, UC Riverside: Multiscale analysis of mechanisms of the robustness of stem cell maintenance
12:30pm	Lightning Talks - Session I
	Supriyo Bhattacharya, City of Hope – Yuxuan Du, USC – Gaurav Mendiratta, Salk Institute for Biological Studies – Breanne Sparta, UCLA – Vincent Zaballa, UC Irvine
12:45pm	Lunch and Poster Session I (Posters 1-37)
2:00pm	Keynote Speaker: Uri Alon, Weizmann Institute of Science: Design principles of physiological circuits
2:30pm	Session III chaired by Jennifer Wilson - Heterogeneity
	 Helen Goodridge, Cedars-Sinai, Defining monocyte heterogeneity and origins by scRNAseq Zhaohui Gu, City of Hope: Dissecting the Heterogeneity of B-cell Acute lymphoblastic leukemia Stephanie Fraley, UC San Diego: Identifying regulators of breast cancer heterogeneity through phenotype guided single cell sequencing Suzanne Sindi, UC Merced: Using Slack Reactants to Calculate First-Arrival Times in Stochastic Protein Aggregation Blochemical Kinetics
3:30pm	Coffee break
4:00 pm	Session IV chaired by Eric Deeds - Dynamics and Al
	Aaron Meyer, UCLA: Mechanistic and Data-Driven Dissection of Cell Communication Through Tensor Methods Rose Yu, UC San Diego: Bridging data-driven and physics-based methods for learning dynamical systems Christopher Miles, UC Irvine: Learning the biophysical mechanisms of mitosis from spatiotemporal trajectories Nandita Garud, UCLA: Evolutionary dynamics in the human gut microbiome from infancy through adulthood
5:00pm	Lightning Talks - Session II
NIN.	Mohammadali Alidoost, UCLA – Sreejith Santhosh, UC San Diego – Hui (Karen) Xiao, UC Irvine – Alexander Xu, Cedars-Sinai – Lorenzo Scipioni, UC Irvine – Aqib Hasnain, UC Santa Barbara
5:15pm	Reception and Poster Session II (Posters 38-76)
6:15pm	Uri Alon Guitar Talk