Modeling Cell Heterogeneity: From Single-Cell Variations to Mixed Cells Populations

PSB 2013 Workshop

Thursday, January 3, 2013
Salon 2&3

- 1:00 – 1:05 Introduction

- 1:05 – 1:40 *Invited speaker*
  <u>Sylvia Plevritis</u>, Stanford School of Medicine
  "Dissecting the Phenotypic Heterogeneity of Cancer"

- 1:40 – 2:35 Contributed talks (15 minutes each)

  - "From molecules to cells to organisms: understanding health and disease with multidimensional single-cell methods." <u>Julian Candia</u>, Jayanth Banavar and Wolfgang Losert

  - "Automated Functional Profiling of Progenitor Cell Populations using High-Resolution Single Cell Gene Expression Data." <u>Michael Januszyk</u>, Jason P. Glotzbach, Michael Sorkin, Atul J. Butte and Geoffrey C. Gurtner

  - "Estimating Tumor Clonal Populations from Copy Number Data." <u>Layla Oesper</u>, Ahmad Mahmoody and Ben Raphael

- 2:35 – 3:10 *Invited speaker*
  <u>Dana Pe'er</u>, Columbia University
  "Mapping tumor heterogeneity using forty markers at single cell resolution"

- 3:10 – 3:45 Contributed talks (15 minutes each)

  - "The role of positive and negative feedback loops of p53 pathway." <u>Kyoungmin Roh</u> and Stephen Proulx

  - "Teasing apart sources of stochastic variations in eukaryotic gene expression." Damian Wojtowicz, Daniela Ganelin, Raheleh Salari, Jie Zheng, David Levens, Yitzhak Pilpel and <u>Teresa Przytycka</u>

- 3:45 – 4:00 Discussion