A virtual conference on Quantitative Biology

hosted by the NCI/UMd Partnership in Integrative Cancer Biology

Wednesday July 29th 2020

Webcast: https://nci.rev.vbrick.com/#/webcasts/q-bio2020

8:30am – 8:45am (Time zone: UTC-05:00 Eastern Time – USA & Canada).
Introduction – Welcome

8:45am – 10:30am (Time zone: UTC-05:00 Eastern Time – USA & Canada)
Session I: Machine Learning and Quantitative Modeling in Biology

> **Chao Tang (Peking University – Beijing China)**
> *"Pancreatic α and β cells are globally phase-locked"*

> **Paul François (McGill University – Montréal QC – Canada)**
> *"Robotic mapping and generative modelling of cytokine response"*

> **Lucy Colwell (Google Research - Cambridge UK)**
> *"Deep learning for protein design"*

10:30am – 1:00pm (Time zone: UTC-05:00 Eastern Time – USA & Canada)
Session II: Systems Microbiology & Synthetic Ecology

> **Ophelia Venturelli (University of Wisconsin – Madison WI – USA)**
> *"Building microbial communities to understand and predict dynamics and functions"*

> **Claude Loverdo (Institut de Biologie Paris-Seine – Paris, France)**
> *"Interactions of antibodies and bacteria in the digestive tract"*

> **Ahmad (Mo) Khalil (Boston University – Boston MA – USA)**
> *"Cooperativity and the design of genetic regulatory circuits"*

> **Ido Golding (UIUC - Urbana-Champaign IL – USA)**
> *"Measuring transcription at a single gene copy reveals hidden drivers of bacterial individuality"*

> **Carolina Tropini (UBC – Vancouver BC – Canada)**
> *"Dynamics of microbiota communities during physical perturbation"*

1:00pm – 1:45pm (Time zone: UTC-05:00 Eastern Time – USA & Canada)
Keynote seminar

> **Jennifer Lippincott-Schwartz (HHMI Janelia Research Campus – Leesburg VA – USA)**
> *"Imaging Interacting Organelles to Understand Metabolic Homeostasis"*

1:45pm – 2:00pm (Time zone: UTC-05:00 Eastern Time – USA & Canada).
Closing remarks & tips for q-Bio'2021