## **Frontiers in Computational Medicine Seminar Series**

**Spring 2024, Thursdays at 9-10 AM, CHS 23-105** 



April 4, 2024

Beyond Cells: Tissue Context and Gene Programs

Dana Pe'er, Ph.D.

Chair, Computational & Systems Biology Program, Sloan Kettering Institute Director, Alan & Sandra Gerry Metastasis & Tumor Ecosystems Center Howard Hughes Medical Institute peerster@gmail.com https://www.mskcc.org/research/ski/labs/da

Host: Jason Ernst



May 9, 2024

Trait-based eco-evolutionary theory.

Christopher Klausmeier, PhD

Professor

MSU Research Foundation Professor, Kellogg Biological Station, Michigan State University https://www.kbs.msu.edu/kbs-people/faculty/c hristopher-klausmeier/

klausme1@msu.edu Host: Van Savage



April 18, 2024

Computationally scalable approaches for large-scale inference in genetics and genomics

Nick Mancuso, Ph.D.

Associate Professor of Population and Public Health Sciences, Keck School of Medicine, University of Southern California <a href="mailto:nmancuso@usc.edu">nmancuso@usc.edu</a>

https://www.mancusolab.com Host: Dr. Harold Pimentel



May 16, 2024

Leveraging large-scale epigenetic variation to identify novel context-specific disease mechanisms.

Sasha Gusev PhD

Associate Professor, Harvard Medical School & Dana-Farber Cancer Institute

Alexander\_Gusev@dfci.harvard.edu gusevlab.org

Host: Noah Zaitlen



April 25, 2024

Statistical machine learning for learning representations of embryonic development

Bianca Dumitrascu, Ph.D.

Herbert and Florence Irving Assistant Professor of Cancer Data Research and Assistant Professor of Statistics bmd2151@columbia.edu https://cancerdynamics.columbia.edu/bianc a-dumitrascu-phd

Host: Dr. Brunilda Balliu



May 23, 2024

The Human Pangenome Project: Creating a Reference that Better Represents Human Global Genetic Diversity

Karen Miga PhD

Assistant Professor, Biomolecular Engineering Department
Associate Director, UCSC Genomics Institute <a href="mailto:khmiga@ucsc.edu">khmiga@ucsc.edu</a>
<a href="https://migalab.com/">https://migalab.com/</a>

Host: Bogdan Pasaniuc



May 2, 2024

Mathematical modeling of the neurobiology of drug addiction

Maria D'Orsogna PhD

Professor of Mathematics, California State University at Northridge Adjunct Associate Professor of Computational Medicine, UCLA

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May 30, 2024

Simulation and control of high-dimensional dynamical systems

Lucas Böttcher PhD

Assistant Professor of Computational Science Frankfurt School and UFL

lbottcher@ufl.edu http://lucas-boettcher.info/

**Host: Tom Chou**