

The Dean of the College of Applied Sciences and Engineering Fotis Sotiropoulos, the Dean of the Renaissance School of Medicine Kenneth Kaushansky, and the Institute of Engineering-Driven Medicine (IEDM) Directors Joel Saltz and Yuefan Deng invite you to attend

# The IEDM Kickoff Workshop and Reception

May 21, 2019 Tuesday 1-5pm Simons Center for Geometry and Physics, Stony Brook University

**1:00pm-4:00pm, the Simons Center's Main Auditorium**

Dean Kenneth Kaushansky and Dean Fotis Sotiropoulos: Welcome		
Director Joel Saltz: Introduction of the IEDM, the Workshop, Seed Grants		
1	Patricia Thompson	Looking for the Big MAC
2	Alfredo Fontanini	NeuroEngineering and IEDM: what and why
3	Eugene Feinberg	Comparison of neoadjuvant and adjuvant therapy for resettable pancreatic cancer using Markov decision modeling
4	Andy Schwartz	Our digital language as a window into our ecological health
5	Arianna Maffei	Investigating connectivity in brain circuits
6	Memming Park	Real-time machine-learning tools for neuroengineering systems
7	Braden Brinkman	Modeling how to modify neural interactions
8	Giancarlo La Camera	Temporal stimulus segmentation via reinforcement learning in populations of spiking neurons
9	Joshua Plotkin	Prediction and manipulation of action selection in mice
10	Maya Shelly	Harnessing material engineering to manipulate rodent embryonic brain development
11	Milutin Stanacevic	Real-time machine-learning tools for neuroengineering systems
12	Qiaojie Xiong	Auditory decision in striatum
13*	Sima Mofakham Marcia Simon	Sima: Who wakes up after severe TBI? A new approach Marcia: Printing Skin: Considerations
14	Flaminia Talos	A computational systems approach identifies synergistic specification genes that facilitate lineage conversion to prostate and bladder tissue
15	Eric Brouzes	Microfluidics to re-create tissue environment on a chip
16	David Rubenstein	Engineering a liver: templates, inflammation and vascular diseases
17	Sandeep Mallipattu	Multidisciplinary approach to building a kidney
18	Chao Chen	Topological Analysis of Biomedical Images
19	Romeli Sandhu	Geometry and control towards systems biology
20	Fusheng Wang	Computational pathology software for integrative cancer research with three-dimensional digital slides
21	Janos Hajagos	Building scalable and reproducible data pipelines for machine learning in health care
22	Craig Evinger	Using deep brain stimulation to reshape the behavior of normal animals
23	David Matus	Cell cycle regulation of morphogenesis and differentiation
24	Petar Djuric & Guanchao Feng	Fetal heart rate monitoring with machine learning methods
25	Saikat Chowdhury	Visualizing invisible cellular nanoscale architectures
26	Richard Moffitt	Multi-omic imaging and informatics for heterogeneous cancer tissues

**4:00pm-5:00pm, Reception and Brainstorming, the Simons Café**

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