

Bioinformatics: Research & Applications Symposium

Friday, October 18th, 2019
Texas A&M University, Rudder 301



9:00 am **Welcome and Introduction: Valen Johnson (Dean, College of Science)**

SESSION 1 Bioinformatics: Human Health

9:10 am **Tanya Garcia (Texas A&M University):** *c2PLasso: the categorical-continuous pliable lasso to identify brain regions associated with motor impairment in Huntington disease*

9:40 am **Kunal Rai (MD Anderson Cancer Center):** *Computational analysis of epigenomic data from tumors*

10:10 am **Coffee Break**

10:35 am **Thomas Yankeelov (University of Texas at Austin):** *Predicting treatment response via quantitative imaging and computational modeling*

11:05 am **Leigh Greathouse (Baylor University):** *Using the microbiome to build predictors of cancer risk and treatment response*

11:45 am **Lunch (on your own)**

SESSION 2 Bioinformatics: Multifaceted Applications

1:15 pm **David Mittelman (Othram, Inc.):** *Computational challenges in reconstructing genomes from aged and damaged samples*

1:45 pm **Alan Pepper (Texas A&M University):** *Deep mining of diverse datasets to uncover evolutionary history*

2:15 pm **Marina Vannucci (Rice University):** *Edge-selection priors for multiple graphs estimation and applications to complex biological data*

2:45 pm **Coffee Break**

3:00 pm **Michael Thomson (Texas A&M University):** *Integrating bioinformatics and CRISPR-based gene editing to accelerate rice improvement*

PLENARY TALK

3:30 pm **Gaudenz Danuser (UT Southwestern Medical Center):** *Inference of causality in molecular pathways from live cell images*

4:45 - 5:45 **Poster session (students & postdocs)**

We thank our Texas A&M University sponsors:

College of Science
Department of Biology
Department of Statistics

Organizers:

Steve Lockless, Department of Biology
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