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

Tapasree Roy Sarkar, Department of Biology & Department of Statistics

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