Workshop Attendee Roster

2014 Student Research Workshop, Purdue University

Maurina Loren Aranda

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Graduate Student

Department of Biological Sciences, Purdue University

Major Advisor: Claudio Aguilar

Research Interests: Bladder cancer therapeutics

Frank DeVilbiss

fdevilbi@purdue.edu

Graduate Student

School of Chemical Engineering, Purdue University

Major Advisor: Doraiswami Ramkrishna

Research Interests: Metabolic Modeling, Model Selection, Systems Biology, Metabolic Control,

Cell Signalling, High Throughput Data

Felix Francisco-Sanchez

ffranci@purdue.edu

Undergraduate Student

Department of Mathematics, Purdue University

Major Advisor: Stacey Dunderman

Research Interests: I will begin doing statistical/data analysis in cell biology and I wish to learn

more before being in Fall.

Mohan Gopaladesikan

mgopalad@purdue.edu

Graduate Student

Department of Statistics, Purdue University

Major Advisor: Mark Daniel Ward

Research Interests: Analysis of algorithms and data structures, statistical modeling, data

analysis.

Wen-Chieh Hsieh

hsieh14@purdue.edu

Graduate Student

Department of Biological Sciences, Purdue University

Major Advisor: R. Claudio Aguilar

Research Interests: We are interested in how endocytic adaptors build up endocytic networks.

Minji Kim

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Graduate Student

Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign *Major Advisor:* Olgica Milenkovic

Research Interests: My research interest spans broad areas of Bioinformatics and Computational biology, with an emphasis on metagenomic read compression and gene prioritization.

Jingling Li

jli06@brynmawr.edu

Undergraduate Student

Departments of Computer Science and Biology, Bryn Mawr College

Major Advisors: Deepak Kumar and Jia Tao

Research Interests: As an undergraduate student who intends to major in Computer Science and Biology, I believe the two areas inspire each other. I am very interested in interdisciplinary areas between Computer Science and Biology. General interested areas would be utilizing machine learning to dig out hidden information among huge sets of biological data and improving artificial intelligence through learning human beings' thinking and communicating patterns. Recently, I am working on a summer research to implement a SNP (Single Nucleotide Polymorphisms) association detection tool and use this tool to find out possible drugs to treat Medulloblastoma based on corresponding SNPs.

Kayalvizhi Madhivanan

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Graduate Student

Department of Biological Sciences, Purdue University

Major Advisor: R. Claudio Aguilar

Research Interests: Lowe Syndrome (LS) is a lethal genetic disease characterized by cataracts at birth, mental retardation and renal dysfunction. Unfortunately, children affected with LS often die due to renal failure. Although the affected gene, OCRL1, was identified more than 17 years ago, the mechanism by which Ocrl1 defects lead to LS remained unknown. This has been an important obstacle for the development of efficient therapeutic approaches.

Using cells from LS patients we discovered the first cellular defects due to mutations in OCRL1, namely changes in cell area during cell spreading. We are currently doing a drug screen to rescue the cellular abnormalities we discovered in LS cells.

Aravinda Mandli

aravinda01@gmail.com

Postdoc

School of Chemical Engineering, Purdue University

Major Advisor: Doraiswami Ramkrishna

Research Interests: I have worked on using optimal control theory for understanding the growth of microorganisms during my PhD research. I am interested to learn how the methods of information theory can be used for understanding the behavior of biological systems.

Maryam Masnadi-Shirazi

mmasnadi@ucsd.edu

Graduate Student

Departments of Electrical and Computer Engineering, Bioengineering, University of California,

San Diego

Major Advisor: Shankar Subramaniam

Research Interests: My research interests include Time-varying causal inference of biological networks from high throughput data using statistical learning and information theory approaches.

McKeith Pearson

mnpearso@purdue.edu

Undergraduate Student

Department of Biological Sciences, Purdue University

Major Advisor: R. Claudio Aguilar

Research Interests: My research involves finding which regions of the yeast endocytic protein (Epsin) and the Huntingtin Interacting Protein-1 Homologue (Sla2) interact to mediate cytokinesis through methylene blue-stained microscopy.

Swetha Ramadesikan

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Graduate Student

Department of Biological Sciences, Purdue University

Major Advisor: R. Claudio Aguilar

Research Interests: My area of interest is primarily understanding the role of endocytosis and vesicle trafficking in cells and implications of its misregulation in disease.

Luke Redington

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Graduate Student

Department of English, Purdue University

Research Interests: I am a graduate student in English at Purdue University. I am a staff writer with CSoI, and I will be attending the event to write about the events and the other attendees.

Sherwin Jack

jack2@purdue.edu

Graduate Student

Department of Biology, Purdue University

Priyadharshini Sundararajan Venkatasubramani

priya26@neo.tamu.edu

Graduate Student

Electrical and Computer Engineering, Texas A&M University

Major Advisor: Aniruddha Datta

Research Interests: I am a PhD student in the Genomic Signal Processing group at Texas A&M University. I am currently working on metagenomic data analysis of rumen microbiome sequencing data, with a focus on the process of denoising pyrosequencing data. My research interests include statistical inference in biological models and developing validation schemes for cancer diagnosis and intervention.

Sundar Velkur

shansundar.velkur@gmail.com

Postdoc

Department of Civil Engineering, Johns Hopkins University

Research Interests: Estimation of rare event probabilities, updating prior models based on observable measurement data, system identification, MCMC simulations, filtering techniques.

Yucong Zhang

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Graduate Student

Department of Physics, Purdue University