

Agenda

6th Annual Louisiana Conference on Computational Biology and Bioinformatics

April 6-7, 2018

Louisiana State University Digital Media Center
Baton Rouge, LA

Friday, April 6, 2018
1:00 pm - 8:00 pm

Saturday, April 7, 2018
9:00 am - 5:00 pm



6TH ANNUAL LA CONFERENCE ON COMPUTATIONAL BIOLOGY & BIOINFORMATICS

April 6-7, 2018
LSU Digital Media Center
Baton Rouge, LA

- Cancer Informatics
- Microbiome and Metagenomics
- Health Informatics, Big Data, and Computing
 - Translational Bioinformatics and Data Visualization
- Evolutionary Genomics and Phylogenetics
- Virology and Infectious Diseases

Registration: <http://lbrn.lsu.edu/events/bioinformatics-conference/>

LSU | Office of
Research & Economic Development

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CENTER FOR EXPERIMENTAL INFECTIOUS DISEASE RESEARCH
DIVISION OF BIOTECHNOLOGY AND MOLECULAR MEDICINE • SCHOOL OF VETERINARY MEDICINE



Louisiana Biomedical Research Network



Friday April 6, 2018

1:00 – 1:10 pm Welcome and Opening Remarks

Session I: Evolutionary Genomics, Infectious Diseases and Cancer Informatics

1:10 – 2:10 pm  Jessica Kissinger - University of Georgia

Unleashing Your Inner Data Scientist: Challenges and Opportunities from the Field of Infectious Diseases

2:10 – 2:40 pm Chindo Hicks - Louisiana State University Health Sciences Center, New Orleans
Bioinformatics Approaches for Integrating Germline and Somatic Mutation Information in Cancer

2:40 – 3:10 pm Christian Clement - Southern University at New Orleans
Infection Characteristic of HSV-1 Neuronal Viral DNA and Analysis of ICP4, ICP0 In Silico

3:10 – 3:30 pm.....*Break*

Session II: The Human Microbiome and Metagenomics

3:30 – 4:30 pm  Morgan Langille - Dalhousie University
Disease Signatures of the Human Microbiome

4:30 – 5:00 pm Filipa Godoy-Vitorino - Inter American University of Puerto Rico
Characterization of the Cervicovaginal Bacterial and Fungal Profiles
Associated with HPV Infections in a Hispanic Population

5:00 – 5:30 pm Chris Taylor - Louisiana State University Health Sciences Center, New Orleans
Visualization of Daily Changes in the Vaginal Microbiome of Women Leading up to Bacterial Vaginosis

5:30 – 6:30 pm.....*Dinner*

6:30 – 8:00 pm.....*Poster Session*

Saturday, April 7, 2018

8:00 – 9:00 am.....Breakfast Available

9:00 – 9:10 am Welcome and Opening Remarks

Session III: Big Data, Bioinformatics Education, and Genomics Software

9:10 – 10:10 am  Ben Busby - National Center for Biotechnology Information/NIH
The Future is Now! Biomedical Data Science in the 21st Century

10:40 – 11:10 am Elia Brodsky - Pine Biotech
A Collaborative Model for Bioinformatics Education: Combining Biologically Inspired Bioinformatics with Project-Based Learning

11:10 – 12:10 pm Paul Fullerton - Partek
Partek Next Generation Sequencing Data Analysis Solution Overview

12:10 – 1:10 pm.....Lunch

Session IV: Translational Bioinformatics, Imaging and Data Visualization

1:10 – 2:10 pm  Jake Chen - University of Alabama Birmingham
Unravelling Complex Patterns in Omics Data with Integrative GNPA Tools

2:10 – 2:40 pm Phillip Kilgore - Louisiana State University, Shreveport
Computer-assisted Inference of Association and Causation in Time-Series Data

2:40 – 3:10 pm Fabrizio Donnarumma - Louisiana State University
Multi-modal Mass Spectrometry for Translational Proteomics

3:10 – 3:30 pm.....Break

Session V: Protein Structure and Machine Learning

3:30 – 4:00 pm
University

Yong-Hwan Lee - Louisiana State

MD Simulation of Protein Control by Covalent Modifications: A Preliminary Study with PFKFB3

4:00 – 4:30 pm
Prediction of Hierarchical Classification of Transposable Elements using Machine Learning Approach

Manisha Panta - University of New Orleans

4:30 – 5:00 pm
Prediction of RNA Binding Protein using Machine Learning Techniques

Reecha Khanal - University of New Orleans

5:00 pm..... Concluding Remarks