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**

LSU | Center for **Computation & Technology**

iSCB
INTERNATIONAL SOCIETY FOR COMPUTATIONAL BIOLOGY
AFFILIATED CONFERENCE

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

LBRN 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
Chair:

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

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3:10 – 3:30 pm..Break

Session II: The Human Microbiome and Metagenomics
Chair:

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

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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
Chair:

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

10:10 – 10:40 am   Rebecca Christofferson - Louisiana State University
Elucidating the Effect of Time When Investigating Within-Mosquito Zika Kinetics Altered by the Integration of Rearing and Extrinsic Incubation Temperature

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

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12:10 – 1:10 pm...*Lunch*

Session IV: Translational Bioinformatics, Imaging and Data Visualization
Chair:

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   Yong-Hwan Lee - Louisiana State University
    MD Simulation of Protein Control by Covalent Modifications: A Preliminary Study with PFKFB3

4:00 – 4:30 pm   Manisha Panta - University of New Orleans
    Prediction of Hierarchical Classification of Transposable Elements using Machine Learning Approach

4:30 – 5:00 pm   Reecha Khanal - University of New Orleans
    Prediction of RNA Binding Protein using Machine Learning Techniques

5:00 pm…….. *Concluding Remarks*