

Agenda

for the

8th Annual Louisiana Biomedical Research Network Conference on Computational Biology and Bioinformatics

April 15-17, 2021

Virtual Meeting via Zoom

Thursday, April 15
12:30 pm - 5:30 pm (CDT)

Friday, April 16
12:30 pm - 5:30 pm (CDT)

Saturday, April 17
9:00 am - 12:00 pm (CDT)

All Times given in Central Time Zone

Thursday April 15, 2021

12:30 – 12:40 pm.....Day 1 Opening Remarks
Louisiana Biomedical Research Network

Session I: NIH STRIDES Initiative

12:40 – 1:00 pm.....Dr. R. Todd Reilly
NIH STRIDES
The NIH STRIDES Initiative - Overview

1:00 – 1:30 pm.....Dr. Ankit Malhotra
Amazon Web Services
Transforming Biomedical Research with AWS

1:30 – 2:00 pm.....Dr. Erin Chu
Amazon Web Services
Powering the Open Science Flywheel

2:00 – 2:15 pm.....Amazon Web Services Q&A

2:15 – 2:30 pm.....Break

2:30 – 3:00 pm.....Dr. Alexander Titus
Google Cloud
Life Sciences with Google Cloud

3:00 – 3:30 pm.....Dr. Ross Thomson
Google Cloud
Multi-Cloud for Science Productivity

3:30 – 3:45 pm.....Google Cloud Q&A

3:45 – 4:00 pm.....Break

4:00 – 4:20 pm.....Mr. Matt Gieseke
NIH STRIDES
The NIH STRIDES Initiative - Training Spotlight

4:20 – 4:30 pm.....Day 1 Closing Remarks
Louisiana Biomedical Research Network

4:30 – 5:30 pm.....Poster Session #1

Friday April 16, 2021

12:30 – 12:50 pm.....Lakshmi Kumar Matukumalli
NIGMS/NIH
Introductory Remarks

Session II

12:50 – 1:50 pm.....Dr. Lauren Ancel Meyers
Director, UT COVID-19 Modeling Consortium, University of Texas at Austin
Modeling to Mitigate COVID-19 in a Large US City

1:50 – 2:25 pm.....Dr. Sara Suliman
Brigham and Women's Hospital, Harvard Medical School
Integration of Genetic and Transcriptional Profiles of Innate Cells to Decipher Mechanisms of TB Susceptibility

2:25 – 2:45 pm.....Dr. Matthew Hayes
Xavier University of Louisiana
Leveraging Hi-C and Whole Genome Shotgun Sequencing for Double Minute Chromosome Discovery

2:45 – 3:00 pm.....Break

3:00 – 3:20 pm.....Md Wasi Ul Kabir
University of New Orleans
A Sequence-based Machine Learning Method to Effectively Predict DNA and RNA Binding Residues

3:20 – 4:20 pm.....Dr. Catherine Lozupone
University of Colorado Anschutz Medical Campus
Systems Analysis of Gut Microbiome Influence on Metabolic Disease in HIV and High-risk Populations

4:20 – 4:30 pm.....Day 2 Closing Remarks
Louisiana Biomedical Research Network

4:30 – 5:30 pm.....Poster Session #2

Saturday April 17, 2021

9:00 – 9:10 am..... Opening Remarks
Louisiana Biomedical Research Network

Session III

9:10 – 10:10 am.....Dr. Moriah Szpara
The Pennsylvania State University
Herpes Simplex Viruses -- As Unique and Long-lived as their Human Hosts

10:10 – 10:30 am.....Dr. Claire Birkenheuer
Louisiana State University School of Veterinary Medicine
ICP22 Maintains Transcriptionally Active RNA Polymerase II on the HSV-1 Genome During Lytic Infection

10:30 – 10:45 am.....Break

10:45 – 11:45 am.....Dr. Michelle Lacey
Tulane University
Beyond p-Values: The Role of Statistics in Epigenetic Research

11:45 - 12:00 pm..... Meeting Wrap-Up and Awards Announcement
Louisiana Biomedical Research Network

Thursday April 15, 2021 Poster Session from 4:30pm - 5:30pm CDT

Session Day / Room #	Name	iPoster Title	Institution:
Thursday, Room #1	Jacob Elnaggar	Shotgun Metagenomic Sequencing of Vaginal Specimens Suggests Potential Involvement of Lactobacillus Phage Preceding Incident Bacterial Vaginosis	LSUHSC-NO
Thursday, Room #2	Claire Birkenheuer	ICP22 maintains transcriptionally active RNA Polymerase II on the HSV-1 genome during lytic infection	LSU-BR
Thursday, Room #3	Waneene Dorsey	Comparison of Differential Gene Expression in Cultured Human Tissue Exposed to the Human Rhinovirus 16 and Carbamate/Organophosphate Pesticides	GSU
Thursday, Room #4	Ugochi Emelogu	Target genes of Hoxa1 time series sequencing; a gene regulatory network approach.	SUBR
Thursday, Room #5	Seetharama Jois	EGFR in cancer: dimers, dynamics and more.	ULM
Thursday, Room #6	Derrick Mullins	Simulating Double Minute Evolution using Java	XULA
Thursday, Room #7	Urska Cvek	Substance Abuse Trends in North Louisiana Young Women of Child Birth Age and Children	LSU-S
Thursday, Room #8	Achyut Dahal	Design of Peptides as Protein-Protein Interaction Inhibitors for SARS-COV-2 and Angiotensin-Converting Enzyme2 Interaction.	ULM
Thursday, Room #9	Marjan Trutschl	Pharmacometabolomics and Pharmacoproteomics Analysis for Cardiovascular Disease	LSU-S
Thursday, Room #10	Jafrin Jobayer Sonju	pH-sensitive liposome formulation of peptidomimetic-doxorubicin conjugate for targeted delivery of anticancer conjugate on HER2 positive lung and breast cancer	ULM
Thursday, Room #11	April Wright	Discriminating among complex hierarchical models for phylogenetic inference	SELU
Thursday, Room #12	Md Wasi Ul Kabir	Machine Learning-based Effective Prediction of Protein Disordered Regions	UNO
Thursday, Room #13	Subhajit Chakrabarty	Seizures, Independent Components, Data-driven, Pattern	LSU-S

Friday, April 16, 2021 Poster Session from 4:30pm - 5:30pm CDT

Session Day / Room #	Name	iPoster Title	Institution:
Friday, Room #1	Matthew Hayes	Leveraging Hi-C and Whole Genome Shotgun Sequencing for Double Minute Chromosome Discovery	XULA
Friday, Room #2	Kyle Piller	Life in the fastlane: Testing for congruence among transcriptomic signatures in model organisms	SELU
Friday, Room #3	Basanta Khakurel	Species Delimitation in Eastern Pine Snakes (Pituophis melanoleucus)	SELU
Friday, Room #4	Angela Nguyen	Cancer Genomes with eccDNA Oncogene Amplification Show Evidence of Deletion-Episome Model of Double Minute Chromosome Formation	XULA
Friday, Room #5	Aasish Rijal	A Sequence-based Machine Learning Method to effectively predict DNA and RNA Binding Residues	UNO
Friday, Room #6	Duaa Alawad	Reconstructing gene regulatory network for the differentiation of hematopoietic stem cells	UNO
Friday, Room #7	Ishita Choudhary	Compartment-specific transcriptomics of ozone-exposed murine lungs reveal sex- and cell type-associated perturbations relevant to mucoinflammatory lung diseases	LSU-BR
Friday, Room #8	Thao Vo	Vesicular and extravesicular protein signatures from the airspaces of ozone-exposed mice reflect muco-inflammatory disturbances	LSU-BR
Friday, Room #9	Chukwumaobim Nwoku	Small RNA Sequencing and Computational Analysis Identifies Differentially Transcribed MicroRNAs that Regulate Nuclear Oxidative Damage in Human Astrocytes Exposed to Sodium Dichromate	LATECH
Friday, Room #10	Elia Brodsky	Effect of circulating PfAMA1 haplotype variants in Ghana on interaction with PfRON2 for merozoite invasion and vaccine development strategies	PineBio
Friday, Room #11	Phillip Kilgore	Augmenting Self-Organizing Maps to Depict Categorical Data	LSU-S
Friday, Room #12	Caryn Butler	HiC, Double-Minute, Chromosome, Statistical, Quantification	XULA