# Agenda

*for the*

# 9th Annual LA Conference on Computational Biology and Bioinformatics

April 21-23, 2022

Virtual Meeting via Zoom

Thursday, April 21
12:30 pm - 5:50 pm (CDT)

Friday, April 22
12:45 pm - 4:50 pm (CDT)

Saturday, April 23
9:00 am - 12:00 pm (CDT)

All Times given in Central Time Zone

# Thursday April 21, 2022 (Day 1)

12:30 – 12:38 pm ................................................................................Day 1 Opening Remarks

12:40 - 12:58 pm .......................................................................................Lakshmi Matukumalli
NIH/NIGMS
*NIGMS Update on Data Sciences and Cloud computing training*

## Session I

1:00 – 1:58 pm ............................................................................................. Sara Sawyer
University of Colorado Boulder
*Viruses at the Human-Animal Interface*

2:00 – 2:18 pm ......................................................................................Christopher Taylor
Louisiana State University Health Sciences - New Orleans
*Louisiana Biomedical Research Network Bioinformatics, Biostatistics, & Computational Biology Core*

2:20 – 2:38 pm ..............................................................................................Elia Brodsky
Pine Biotech
*Analysis of Omics Data: BioMMED Bioinformatics Support Services*

2:40 – 2:58 pm .....................................................................................................Break

3:00 – 3:15 pm ............................................................................................ Mark Bieger
Louisiana State University
*The Scholarship First Agenda for Louisiana*

3:17 – 3:35 pm ...........................................................................................Basel Abuaita
Louisiana State University
*Human neutrophils augment intestinal inflammatory responses and host defense via directing epithelial cell extrusion during Salmonella infection*

3:37 – 3:55 pm ........................................................................................... Michael Foster
Louisiana Tech University
*Genomic Surveillance of SARS-CoV-2 in North Louisiana*

3:57 – 4:15 pm ........................................................................................... Lauren Cramer
University of Louisiana at Monroe
*An Across Species Approach to Pharmaceutical Prioritization Using Fish Reproduction Data*

4:17 – 4:27 pm ....................................................................................... Day 1 Closing Remarks

4:30 – 5:50 pm .............................................................................................. Poster Session

# Friday April 22, 2022 (Day 2)

12:45 – 12:58 pm ........................................................................................Day 2 Opening Remarks

## Session II

1:00 – 1:58 pm ............................................................................................Melissa Wilson
Arizona State University
*Sex-biased Genome Evolution*

2:00 – 2:18 pm ......................................................................................... Richa Lamichhane
Louisiana State University
*Sex-Specific Susceptibility of Mice to Bleomycin-Induced Pulmonary inflammation and fibrosis is Contributed by Differential
Sex-Specific Transcriptomic Repertoire of Airway/Alveolar-Space Myeloid-Cells*

2:20 – 2:38 pm ..................................................................................................Urska Cvek
Louisiana State University Shreveport
*Exploring Disparities in Breast Cancer Treatment Outcomes within the State of Louisiana*

2:40 – 2:58 pm ...................................................................................................................Break

3:00 – 3:18 pm ......................................................................................... Matthew Hayes
Xavier University of Louisiana
*Complex Germline Structural Variant Discovery via Cluster Normalization*

3:20 – 3:38 pm ...........................................................................................Md Wasi Ul Kabir
University of New Orleans
*A Machine Learning Approach for Oyster Disease Prediction*

3:40 – 4:38 pm .................................................................................................April Wright
Southeastern Louisiana University
*Navigating the Early Career Funding Landscape*

4:40 – 4:50 pm ......................................................................................... Day 2 Closing Remarks

# Saturday April 23, 2022 (Day 3)

9:00 – 9:08 am ........................................................................................Day 3 Opening Remarks

## Session III
9:10 – 10:08 am ............................................................................Christopher Mason

Weill Cornell Medicine

*Clonal Hematopoiesis Dynamics during Cancer Therapy and Spaceflight*

10:10 – 10:28 am ........................................................................Ioannis Karakasiliotis

Democritus University of Thrace

*Viral genome assembly and characterization hindrances from virus-host chimeric reads*

10:30 – 10:43 am ................................................................................................Break

10:45 – 11:43 am ........................................................................ Michael Snyder

Stanford Medicine

*Big Data, Health and COVID-19*

11:45 - 12:00 pm.................................................... Meeting Wrap-Up and Awards Announcement

# Poster Session List

## Thursday 4:30 – 5:50pm

| Room | Name | iPoster Title | Institution |
|------|------|---------------|-------------|
| 1 | Dr. Basel Abuaita | Human neutrophils augment intestinal inflammatory responses and host defense via directing epithelial cell extrusion during Salmonella infection | LSUBR |
| 2 | Mrs. Duaa Alawad | Inferring Gene Regulatory Network using Graph Transformer Self-Attention Network | UNO |
| 3 | Mr. Eric Clifford | Drug Screen Trends in Emergency Rooms Among Childbearing-Aged Females | LSUS |
| 4 | Dr. Urska Cvek | Exploring Disparities in Breast Cancer Treatment Outcomes within the State of Louisiana | LSUS |
| 5 | Mr. Michael Foster | Genomic Surveillance of SARS-CoV-2 in North Louisiana | LATECH |
| 6 | Ms. Deriesha Gaines | RNA capture pin technology: assessment of mRNA enrichment via high throughput RNA seq | LATECH |
| 7 | Mr. Nayan Howladar | PPILC: Protein-Protein Interaction Prediction from Language of Biological Coding | UNO |
| 8 | Mr. Md Wasi Ul Kabir | Dispredict3.0: Intrinsically Disordered Protein prediction enhanced with Protein Language Model | UNO |
| 9 | Mr. Phillip Kilgore | STABILITY (Symptomatic Review during Biologic Therapy) during Inflammatory Bowel Disease Patient Infusion Therapy Visits: A Retrospective Review - 2019-22. | LSUS |
| 10 | Dr. Rahul Kumar | Generation of inducible whole-body Knockout mice using Rosa-Cre-inducible promoter | LSUBR |
| 11 | Dr. Richa Lamichhane | Sex-Specific Susceptibility of Mice to Bleomycin-Induced Pulmonary inflammation and fibrosis is Contributed by Differential Sex-Specific Transcriptomic Repertoire of Airway/Alveolar-Space Myeloid-Cells | LSUBR |
| 12 | Dr. Elahe Mahdavian | An interdisciplinary course on computer-aided drug discovery to broaden student participation in scientific research | LSUS |
| 13 | Ms. Savannah Montgomery | Inferring the Deletion-Episome Model of Double Minute Chromosome Formation Using Hi-C Sequencing Data | XULA |
| 14 | Mr. Derrick Mullins | Simulating Double Minute Chromosome and Phylogenetic Tree Evolution using Java | XULA |
| 15 | Mr. Chandra Mohan Reddy Muthumula | Identification of Constituents of Hydroethanolic Echinacea Extracts Active in Free Radical Quenching by n-Hexane and Ethyl Acetate Partitioning Aided by Chemometric Analysis | ULM |
| 16 | Mr. Luis Pena Marquez | Automatic segmentation and calculation of the Monocyte Monolayer Assay Index using deep learning | LSUS |
| 17 | Ms. Stephanie Provenzano | Bioinformatic Approaches in Elucidation of the Evolution and Functional Characterization of Natural Product Methyltransferases | LSUS |
| 18 | Mr. Aasish Rijal | A Machine Learning Approach for Oyster Disease Prediction | UNO |
| 19 | Mr. Krishna Shah | Using Language-based Features for ncRNA-protein Interaction Prediction | UNO |
| 20 | Mr. Ran Sun | Nucleosome-Receptor Structure Studies Based on Bioinformatics and Molecular Modeling | LATECH |
| 21 | Dr. Marjan Trutschl | Utilizing Self-Organizing Maps to Improve Information Delivery of Venn Diagrams | LSUS |
| 22 | Mrs. Anna Wilson | Time-Series Transcriptome Analysis of Encapsulated vs Embryo Body Mouse ES Cell Cultures Treated with Retinoic Acid | SUBR |