



ARKANSAS BIOINFORMATICS CONSORTIUM

5th Annual Meeting of the Arkansas Bioinformatics Consortium

AR-BIC 2019

Bioinformatics in Food and Agriculture

Monday, February 25 – Tuesday, February 26, 2019

University of Arkansas for Medical Sciences (UAMS)
Jackson T. Stephens Spine and Neurosciences Institute
Fred Smith Conference Center – 12th Floor Little Rock, Arkansas

Day 1: Monday, February 25, 2019 - Morning Session

Table with 2 columns: Time and Session Details. Rows include registration, Data Analytics Workshops, and three concurrent sessions (A, B, and C) with their respective chairs and locations.

NOTE: Lunch served to workshop participants only – served in workshop meeting rooms.

Updated 2/18/19

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Day 1: Monday, February 25, 2019 - Afternoon/Opening Session

LOCATION: Fred Smith Conference Center, 12TH Floor, Spine Institute

1:00 pm – 5:00 pm	Session 1: Microbiology in the Land of Data Session Co-Chairs – <u>Steven Foley, Ph.D.</u> , Deputy Director, Division of Microbiology, National Center for Toxicological Research (NCTR), U.S. FDA, Jefferson, AR; <u>Ohgew Kweon, Ph.D.</u> , Staff Fellow, Division of Microbiology, National Center for Toxicological Research (NCTR), U.S. FDA, Jefferson, AR
1:00 pm – 1:15 pm	Governor’s Welcome Video Jerry Adams, Arkansas Research Alliance Bill Slikker, National Center for Toxicological Research (NCTR)
1:15 pm – 2:15 pm	Keynote 1: GenomeTrakr and GalaxyTrakr – Distributed Sequencing and Bioinformatics for Food Safety <u>Errol Strain, Ph.D.</u> , Supervisory Mathematical Statistician, Division of Microbiology, Center for Food Safety and Applied Nutrition (CFSAN), U.S. FDA, White Oak, MD
2:15 pm – 2:45 pm	Antimicrobial Resistance Dissemination Among Enteric Bacteria <u>Steven Foley, Ph.D.</u> , Deputy Director, Division of Microbiology, National Center for Toxicological Research (NCTR), U.S. FDA, Jefferson, AR
2:45 pm – 3:15 pm	Food Production and Microbiome Applications <u>Steven C. Ricke, Ph.D.</u> , Professor, Donald "Buddy" Wray Chair in Food Safety, Department of Food Science, University of Arkansas, Fayetteville, AR
3:15 pm – 3:30 pm	Break
3:30 pm – 4:00 pm	How Bioinformatics Impact Plant Movement Across Border Lines <u>Ioannis Tzanetakis, Ph.D.</u> , Faculty Director, Department of Plant Pathology, University of Arkansas, Fayetteville, AR

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4:00 pm – 4:30 pm	Recent Data on the Impact of Veterinary Drug Residues in Food Animal Derived Products on the Human Intestinal Microbiome <u>Ahn Young-Beom, Ph.D.</u> , Staff Fellow, Division of Microbiology, National Center for Toxicological Research (NCTR), U.S. FDA, Jefferson, AR
4:30 pm – 5:00 pm	Keeping Track of It All: Making Microbiome Data Science Scalable, Extensible, and Reproducible <u>Michael S. Robeson II, Ph.D.</u> , Assistant Professor, Department of Biomedical Sciences, College of Medicine, University of Arkansas for Medical Sciences, Little Rock, AR
Day 1: Monday, February 25 – Evening Session – Reception and Poster Session <i>LOCATION: 12TH floor lobby, Spine Institute</i>	
5:00 pm - 7:00 pm	RECEPTION Poster session – Theme: Bioinformatics Activities in Arkansas

Day 2: Tuesday February 26th, 2019 – Morning Session <i>LOCATION: Fred Smith Conference Center, 12TH Floor, Spine Institute</i>	
8:00 am - 12:00 pm	Session 2: Data Analytics and Machine Learning Session Co-Chairs – <u>Shraddha Thakkar, Ph.D.</u> , Division of Bioinformatics and Biostatistics, National Center for Toxicological Research, U.S. FDA, Jefferson, AR; <u>Bryan Barnhouse</u> , Chief Operating Officer, Arkansas Research Alliance, Conway, AR
8:00 am – 9:00 am	Keynote 2: Big Data and Machine Learning to Predict Chemical Toxicity <u>Thomas Hartung, Ph.D.</u> , Professor, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

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9:00 am – 9:30 am	Text and Gene – Analysis of Big Genomics Data with Text Mining Methods <u>Weida Tong, Ph.D.</u> , Director, Division of Bioinformatics and Biostatistics, National Center for Toxicological Research (NCTR), U.S. FDA, Jefferson, AR
9:30 am – 10:00 am	Machine Learning Methods in PlantCV for Leaf Tracking and More <u>Noah Fahlgren, Ph.D.</u> , Director, Bioinformatics Core, Donald Danforth Plant Science Center, St. Louis, MO
10:00 am – 10:30 am	Break
10:30 am – 11:00 am	From Better Corn to New Plant Paradigms <u>Dan Berleant, Ph.D.</u> , Professor, University of Arkansas at Little Rock, Little Rock, AR
11:00 am – 11:30 am	Developing an Intelligent System for Species Identification of Food-Contaminating Beetles <u>Joshua Xu, Ph.D.</u> , Division of Bioinformatics and Biostatistics, National Center for Toxicological Research (NCTR), U.S. FDA, Jefferson, AR
11:30 am – 12:00 pm	For the Blockchain/Internet of Things <u>Chase Rainwater, Ph.D.</u> , College of Engineering, Department of Industrial Engineering, University of Arkansas, Fayetteville, AR
12:00 pm – 1:00 pm	LUNCH – 12 th Floor Lobby, Spine Institute
Day 2: Tuesday, February 26th, 2019 – Afternoon Session <i>LOCATION: Fred Smith Conference Center, 12TH Floor, Spine Institute</i>	
1:00 pm – 5:30 pm	Session 3: Bioinformatics Resources Session Co-Chairs – <u>Weida Tong, Ph.D.</u> , Director, Division of Bioinformatics, National Center for Toxicological Research (NCTR), U.S. FDA, Jefferson, AR; <u>Argelia Lorence, Ph.D.</u> , Professor of Metabolic Engineering, Arkansas State University (A-State), Jonesboro, AR

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1:00 pm – 2:00 pm	Keynote 3: Real World Evidence Drives Innovation in Health Care <u>Lawrence Lesko, Ph.D.</u> , University of Florida, Gainesville, FL
2:00 pm – 2:30 pm	Database to Store High-Throughput Phenotyping Data <u>Jack Cothren, Ph.D.</u> , Professor of Geography, Director of the Center for Advanced Spatial Technologies, University of Arkansas, Fayetteville, AR
2:30 pm – 3:00 pm	Agricultural Data – Supplying Information and Data Needs <u>Eugene Young</u> , Regional Director, National Agricultural Statistics Service, Delta Regional Office, USDA, Little Rock, AR
3:00 pm – 3:30 pm	Break
3:30 pm – 4:00 pm	Animal QTLdb and CorrDB: Helping to Close the Genotype to Phenotype Gap <u>James M. Reecy, Ph.D.</u> , Professor, Associate Vice President for Research, Iowa State University, Ames, IA
4:00 pm – 4:30 pm	Computer Cyber Security Training and Food Science <u>Dale R. Thompson, Ph. D.</u> , Associate Professor, Associate Department Head for Undergraduate Programs, University of Arkansas, Fayetteville, AR
4:30 pm – 5:00 pm	Plant Imaging Consortium in Arkansas <u>Fiona Goggin, Ph.D.</u> , Professor, Director Experiment Station, University of Arkansas, Fayetteville, AR
5:00 pm – 5:30 pm	Ricebase: A Web Resource for Rice Breeding and Genetic Discovery <u>Jeremy Edwards, Ph.D.</u> , ARS Dale Bumpers National Rice Research Center, USDA, Stuttgart, AR
5:30 pm	Closing Remarks – Weida Tong <i>Poster Awards Announcement and Presentation</i>