**Sixth Annual Central Arkansas**

**Undergraduate Summer Research Symposium**

**at the University of Arkansas for Medical Sciences**



1. **Dodd Wilson Education Building, Lecture Hall, Room 126**

**University of Arkansas for Medical Sciences**

**Little Rock, Arkansas**

**Wednesday, July 26th**

**8:30 AM – 4:00 PM**

***\*Pick up registration materials from 7:30 AM – 8:30 AM\****

*Co-organizers: Kevin D. Raney, PhD and Grover P. Miller, PhD*

*Organized and Sponsored by the Department of Biochemistry and Molecular Biology at the University of Arkansas for Medical Sciences along with the Graduate School and the Arkansas INBRE program, supported by grant funding from the National Institute of General Medical Sciences (NIGMS) (P20 GM103429) (formerly P20RR016460)*

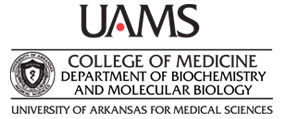
*Special thanks to Departmental staff, who have made this meeting possible:*

*Kahla Robinson, Sharon Sipe, Fred Goad, and Janeelle Whitfield*









**Sixth Annual Central Arkansas Undergraduate Summer Research Symposium**

**at the University of Arkansas for Medical Sciences**

**July 26, 2017**

**Symposium Program**

*\*All events will take place in the I. Dodd Wilson Education Building in Lecture Hall 126 and the atrium\**

|  |  |
| --- | --- |
| 7:30 – 8:30 am | Pick up registration materials at Registration desk  *(Kahla Robinson/Sharon Sipe/Janeelle Whitfield)*  and validate parking(*Fred Goad*)  Arrival and poster set-up |
| 8:30 am | Welcome and Opening remarks  *­­Grover P. Miller, Ph.D.* |
| 8:45 – 10:15 am | Oral Platform Session I (Talks T 1 – T 6)  *Session I Chair: Karen L. Abbott, PhD* |
| 10:15 – 10:30 am | Break |
| 10:30 – 11:30 pm | Poster Platform Session I – *ODD* number posters |
| 11:30 – 12:15 pm | Lunch |
| 12:15 – 1:15 pm | Poster Platform Session II – *EVEN* number posters |
| 1:15 – 2:45 pm | Oral Platform Session II (Talks T 7 – T 12)  *Session II Chair: Robert L. Eoff, PhD* |
| 2:45 – 3:00 pm | Break |
| 3:00 pm | Introduction of speaker  *Grover P. Miller, Ph.D.* |
| 3:05 – 3:30 pm | *"The life choices that led me to science… and herpes.”*  *James Craig Forrest, Ph.D.*  *Associate Professor of Microbiology and Immunology* |
| 3:30 pm | Student recognition and Closing remarks  *Mari Davidson, Ph.D. and Grover P. Miller, Ph.D.* |

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**Poster set-up:** Each poster has been assigned a number that corresponds to a specific poster board.

Participants should put up posters prior to 8:30 am if possible.

**Oral Platform Session I:** Each speaker will have 12 minutes followed by 3 minutes for questions.

**Poster Platform Session I:** Those students who have been assigned a poster board with an ***ODD number*** are requested to stand by their posters from **10:30 am to 11:30 am.**

**Lunch:** Lunch will be served in the atrium outside IDW Lecture Hall 126

**Poster Platform Session II:** Those students who have been assigned a poster board with an ***EVEN number*** are requested to stand by their posters from **12:15 pm to 1:15 pm.**

**Oral Platform Session II:** Each speaker will have 12 minutes followed by 3 minutes for questions.

*Co-organizers: Kevin D. Raney, PhD and Grover P. Miller, PhD*

*Organized and Sponsored by the Department of Biochemistry and Molecular Biology at the University of Arkansas for Medical Sciences along with the Graduate School and the Arkansas INBRE program, supported by grant funding from the National Institute of General Medical Sciences (NIGMS) (P20 GM103429) (formerly P20RR016460).*

*Special thanks to Departmental staff who have made this meeting possible; Kahla Robinson, Sharon Sipe, Fred Goad, and Janeelle Whitfield*

**Platform Session I / Talks T 1 – T 6**

**8:45 am – 10:15 am**

**Session Chair: Karen L. Abbott, PhD**

*\*The presenter’s name is underlined\**

**T1 8:45 – 9:00 am (Camila Cardenas)**

Camila Cardenas1,2 and Dhaval Shah2

*“Modeling Microsomes to Assess Relative Roles of Cytochromes P450 in Drug Metabolism”*

University of Arkansas for Medical Sciences (SURF, Biochemistry and Molecular Biology)1

University of Arkansas - Little Rock2

**T2 9:00 – 9:15 am (Nikita Das)**

Nikita Das1,2, James Raymick2, Elvis-Yane Cuevas-Martinez2, Syed Imam2, Merle G Paule, and Sumit Sarkar2

*“Evaluation of olfactory pathway neuropathology in a transgenic rat model of Alzheimer’s disease”*

Columbia University1

National Center for Toxicological Research, NCTR Summer Student Research Program2

**T3 9:15 – 9:30 am (Michelle Everett)**

Michelle Everett1,2, Amanda Stolarz2, Brittney Garner2, Terry Fletcher2, Nancy Rusch2

*“Evaluation of Ryanodine Receptors in Lymphatic Muscle Cells”*

Mississippi College1

University of Arkansas for Medical Sciences, SURP2

**T4 9:30 – 9:45 am (Daniel Games)**

Daniel N. Games

*“Visualizing Gammaherpesvirus Replication Using Viruses that Encode Fluorescently-Tagged Proteins”*

Ouachita Baptist University

University of Arkansas for Medical Sciences (INBRE)

**T5 9:45 – 10:00 am (Christa Huber)**

Christa C. Huber1, Galina V. Glazko2, Yasir Rahmatallah2, Stewart MacLeod2, Marjan Boerma2, Andrew M. Schurko1

*“Interpreting the Message of DNA Repair in Bdelloid Rotifers using Transcriptome Analysis”*

Hendrix College 1

University of Arkansas for Medical Sciences (UAMS)2

**T6 10:00 – 10:15 am (Christa Jackson)**

Christa Jackson1,3 and Douglas Rhoads2

*“Validation of a quantitative trait locus for ascites on chromosome 22 in broiler chickens“*

John Brown University1

University of Arkansas – Fayetteville2

University of Arkansas for Medical Sciences (INBRE)3

**Poster Session I / Odd number posters**

**10:30 am – 11:30 am**

**P1 Alex Abbott**

Alex Abbott1, Hannah Brandon1, Tim Hayes1, Joe Bradshaw1, Alexei Basnakian2, Alena Savenka2

*“Effectiveness and Mechanism of Action of Modified Porphyrins for Photodynamic Therapy of Triple Negative Breast Cancer Cells”*

Ouachita Baptist University, OBU Summer Research Program1

University of Arkansas for Medical Sciences2

**P3 Emily Allen**

Emily Allen1,2 and Si Chen2

*“Mechanistic study of the role of CYP3A5 in dronedarone-induced liver toxicity”*

University of Central Arkansas1

National Center for Toxicological Research/FDA, NCTR Summer Student Research Program2

**P5 Rachel Bacon**

Rachel Bacon1,2, Madison Crosby1, Casey Roark1, Raj Kore2, Rob Griffin2, and Nathan Reyna1  *“Neuron-Like Differentiation of PC12 Cells by Endogenous and Exogenous Exosomes”*

Ouachita Baptist University, OBU Summer Research Program1

University of Arkansas for Medical Sciences2

**P7 Kalissa Bittner**

Kalissa Bittner1,2

*“Spectral Analysis of Pre and Post-Ictal Periods using Intracranial EEG”*

Murray State University NeuroNEM REU No1

University of Arkansas for Medical Sciences2

**P9 Aimee Bowman**

Aimee Bowman1, Chloe Hughes1, Taylor Bishop1, Cody Chivers1, and Tsunemi Yamashita1

*“Relative Gene Expression Study on Centruroides vittatus Investigating Sodium Toxin Gene Activity”*

Arkansas Tech University1

University of Arkansas for Medical Sciences (INBRE)2

**P11 Kesley Brown**

Kesley Brown

*“Evaluation of the Role of MTF1 and the Glucocorticoid Receptor in Ewing's Sarcoma”*

Ouachita Baptist University, OBU Summer Research Program

**P13 Kori Bullard**

Kori Bullard

*“Use of Cannabinoids as Potential Cancer Treatment in Ewing’s Sarcoma: The Emerging Role of* Exosomes to Reduce Metastatic Potential”

Ouachita Baptist University, OBU Summer Research Program

**P15 Eric Bussey**

Eric Bussey1,2, Aaron Kemp1, and Linda Larson-Prior1

*“Effects of Sleep on Neurocognitive Variables”*

Hendrix College1

University of Arkansas for Medical Sciences (INBRE)2

**P17 Caitlin Caperton**

Caitlin Caperton1, Linda Larson-Prior1, Aaron K. Kemp1, and Diana Escalona-Vargas1

*“Identifying electrophysiological components of a visual recognition task: An event-related potentials* *study”*

University of Arkansas for Medical Sciences1

**P19 Logan Clay**

Logan Clay1,2 and Ruth Plymale1

*“Determining the Toxicity of Bacterially-Produced Antibiotics”*

Ouachita Baptist University, OBU Summer Research Program1

University of Arkansas for Medical Sciences (INBRE)2

**P21 Benjamin W. Curry**

Benjamin W. Curry1, Shimin Alice Fan1, Dylan Gilbreath1 and Richard C. Murray1

*“The role of the Neurogenin1 gene in the development of nociceptive neurons in the mouse dorsal root ganglion”*

Hendrix College, Hendrix Odyssey Program1

**P23 Tanner Duty**

Tanner Duty1,2 and John Sifford1

*“Utilizing a Mutated Taxus Benzoyltransferase (mTBT) as a Biocatalyst”*

Lyon College1

University of Arkansas for Medical Sciences (INBRE)2

**P25 Elizabeth Fast**

Elizabeth Fast1 and Sydney Van Scyoc1

*“Comparison of BMI, BMI-for-Age Percentile, Weight Status Category, and Z-Score between an Intervention Group and Control Group”*

Ouachita Baptist University, Patterson Summer Research Program1

**P27 Ray Fu**

Ray Fu1,2 and Ping-ching Hsu2

*“Metabolomics analysis on the impact of nicotine metabolism among male adolescent tobacco users”*

Pennsylvania State University1

University of Arkansas for Medical Sciences (UAMS)2

**P29 Laci Giambrone**

Laci Giambrone1,2, Jennifer Gess1, Jennifer Kleiner1, Aaron Kemp1, and Linda Larson-Prior1

*“A test of spatial memory predicts lateralization among patients with epilepsy"*

University of Arkansas for Medical Sciences1

EPSCOR 2

**P31 Sarah Glass**

Sarah Glass

*“Testing Tn and STn Tumor Antigens for Use as Biomarkers in Human Ovarian Carcinoma Sarah Glass”*

Hendrix College

University of Arkansas for Medical Sciences, SURF (Biochemistry and Molecular Biology)

**P33 Alicia Guy**

Alicia Guy1,2 and Vikrant Vijay1,2

*“Mechanims of organ toxicities caused by drug-induced mitochondrial dysfunction”*

University of Arkansas - Pine Bluff1

National Center for Toxicological Research, NCTR Summer Student Research Program2

**P35 Graham Harris**

Graham Harris1, Michaela Edwards1, and Andrea A. Duina1

*“Biochemical and genetic approaches for uncovering mechanisms that regulate the dissociation of the histone chaperone FACT from the 3’ ends of genes following transcription”*

Hendrix College, BCMB Research1

**P37 Savanna Harris**

Savanna Harris

*“Synthesis and characterization of a novel Zn(II) porphyrin incorporating TAMRA for use as a PDT agent”*

Ouachita Baptist University, OBU Summer Research Program

**P39 Cyntanna Hawkins**

Cyntanna Hawkins

*“Evaluation of the Role of MTH1 and USP-24 in Ewing's Sarcoma Cyntanna Hawkins”*

Ouachita Baptist University, OBU Summer Research Program

**P41 Lora Heath**

Lora Heath1,2

*“Increasing Relative Recovery of Imipramine with C18 beads”*

University of Arkansas - Little Rock1

University of Arkansas for Medical Sciences (INBRE)2

**P43 Jade Hess**

Jade Hess1,2 and John Bowyer2

*“Comparing activated microglial interactions with brain vasculature due to intraperitonealversus subcutaneous LPS initiated neuroinflammation”*

Coe College1

National Center for Toxicological Research/FDA, NCTR Summer Student Research Program2

**P45 Megan R. Hunter**

Megan R. Hunter1,2, Marjan Boerma2, Lisa M. Orr2, Stephanie D. Byrum2, Alan J. Tackett2 and Andrew M. Schurko1

*“Investigating the role of histones and post translations modifications in bdelloid rotifers”*

Hendrix College1

University of Arkansas for Medical Sciences (INBRE)2

**P47 Ian Jenkins**

Ian Jenkins1, Ben Zamzow1, and Laura J. MacDonald1

*“Evaluating the Role of Focal Adhesion Kinase in Papillary Thyroid Cancer”*

Hendrix College, Hendrix Odyssey Program1

**P49 Mary Beth Jones**

Mary Beth Jones1, Matt Savage1, and Jess Kelly1

*“Chemical and Biological Assessment of the Ouachita River and Associated Tributaries in Central* Arkansas Prior to the Construction of a $1.4B Paper Mill”

Ouachita Baptist University, OBU Summer Research Program1

**P51 Pranav Kolluru**

Pranav Kolluru1, Sangeeta Khare1, Carl E. Cegniglia1, and Kuppan Gokulan1

*“Does Aloin cause a cytotoxic effect to aerobic and anaerobic bacteria of the human gastrointestinal tract”*

National Center for Toxicological Research (NCTR), NCTR Summer Student Research Program1

**P53 Nicholas Kowalkowski**

Nicholas S. Kowalkowski1,2, Gunnar Boysen2 and Rosalind Penney2

*“The Effect of Glutamine and γ-Glutamylglutamine on NIH-3T3 Cell Metabolism”*

Ouachita Baptist University, OBU Summer Research Program1

University of Arkansas for Medical Sciences2

**P55 Alex Ladd**

Alex Ladd1,2, Alena Savenka2, Todd Fite2 and Alexei G. Basnakian2

*“Development of a new in situ TUNEL-based assay for DNase inhibitors”*

Jackson State University 1

University of Arkansas for Medical Sciences, SURP2

**P57 Timothy Lenox**

Timothy Lenox1,2, Sam Edogun2, Kwan Curry2 and Joseph Onyilagha2

*“Quantification of Salicylic Acid in Leaves of Wheat Strains”*

University of Arkansas - Little Rock1

University of Arkansas - Pine Bluff2

**P59 Kaersti McLellan**

Kaersti McLellan1 and Andrew M. Schurko1

*“Using Pulldown Assays to Characterize Meiotic Proteins in Bdelloid Rotifers”*

Hendrix College 1

University of Arkansas for Medical Sciences (INBRE)2

**P61 LaShawna Miller**

LaShawna Miller1 and Jordan Trant1

*“Development of rifamycin analogues to combat multi-drug resistant tuberculosis”*

Lyon College1

**P63 Shelby Morales**

Shelby Morales1 and Fusun Kilic2

*“At elevated levels serotonin mediates the leakage on brain endothelial cells”*

University of the Ozarks 1

University of Arkansas for Medical Sciences (SURP)2

**P65 Moira Murdoch**

Moira Murdoch1,2, Tyler C. Alexander2, Frederico Kiffer2, Thomas Groves2, Jing Wang2, Gwendolyn Carter2 and Antiño Allen2

*“qPCR Analysis of Hippocampal Oxidative Stress in Mice Treated with Cranial Radiation and Sulforaphane”*

Hendrix College 1

University of Arkansas for Medical Sciences (INBRE)2

**P67 ChrisTina Okolo**

ChriTina Okolo

*“Synthesis and cytotoxic studies of fused thiazoline-androstane derivatives as potential anticancer agents”*

Arkansas State University, Arkansas Biosciences Institute Research

**P69 Jessica Orton**

Jessica Orton1, Charis Eldred2, Sudip Banerjee2, Robin Raley1 and Snehalata Pawar2

*“Investigating the role of C/EBPδ in etoposide-mediated cytotoxicity”*

University of Arkansas – Fayetteville1

University of Arkansas for Medical Sciences (INBRE)2

**P71 Thomas Owens**

Thomas Owens

*“Quantitative Binding Analysis of Mn2+ to DNA Hairpin Loops”*

Hendrix College

**P73 Casey Roark**

Casey Roark1, Rachel Bacon1, Madison Crosby1, Nathan Reyna2, Raj Kore2 and Rob Griffin2,

*“Carbon Nano-Onions as an Extra-Cellular Matrix for Neurite Differentiation”*

Ouachita Baptist University, OBU Summer Research Program1

University of Arkansas for Medical Sciences2

**P75 Shruti Shah**

Shruti Shah1,2, Samir Jenkins2, Dmitry Nedosekin2, and Robert Griffin2

*“Carbon Nano-onions for Selective Imaging and Therapy of Tumors”*

Washington University in St. Louis1

University of Arkansas for Medical Sciences2

**P77 Danyal Smani**

Danyal Smani

*“Molecular Characterization of Cephalosporin Resistance in E. Coli”*

National Center for Toxicological Research (NCTR), NCTR Summer Student Research Program

**P79 Reed Spivey**

Reed Spivey

*“Construction of a Low-Cost Fluorescence Microscope”*

Hendrix College, Hendrix Odyssey Program

**P81 Brock Sullivan**

Brock Sullivan1,3 and Kidon Sung2

*“Investigation of in vitro antimicrobial activity and biofilm formation of antibiotic- and silver-coated catheters against multidrug-resistant bacteria”*

Hendrix College1

Arkansas State University2

National Center for Toxicological Research (NCTR), NCTR Summer Student Research Program3

**P83 Sylvia Szwedo**

Sylvia Szwedo

*“Isolating Exosomes Using Tumor-Specific Antibodies in the Serum and Ascites of Cancer Patients”*

University of Arkansas for Medical Sciences (SURF, Biochemistry and Molecular Biology)

**P85 Sydney Van Scyoc**

Sydney Van Scyoc1 and Elizabeth Fast1

“Ten Year Study Tracking Body Mass Index, Body Mass Index-for-Age Percentile and Weight Status Category of Children in a Southwest Arkansas Community”

Ouachita Baptist University, Patterson Summer Research Program1

**P87 Ryan Vreeland**

Ryan Vreeland1,2

*“Development and Parameterization of a Physiologically Based Pharmacokinetic (PBPK) Model in Humans to Study the Disposition Kinetics of Nitrate and its Effects on Serum Thyroid Hormone levels”*

St. Mary's College of Maryland1

National Center for Toxicological Research, NCTR Summer Student Research Program2

**P89 Tony Wang**

Tony Wang1, Sugunadevi Sakkiah1 and Huixiao Hong1

*“Development of Androgenic Activity Database”*

National Center for Toxicological Research (NCTR), NCTR Summer Student Research Program1

**P91 Allie Wynn**

Allie Wynn

*“Role of Infant Diet in Gastrointestinal Tract Development: Analysis of Duodenum Microbiome - Microbial Abundance and Colonization of the Specific Genera”*

University of Arkansas for Medical Sciences (INBRE)

**Poster Session II / Even number posters**

**12:15 pm – 1:15 pm**

**P2 Alex Adeoye**

Alex Adeoye

*“Identification of Proteins Involved in Fat Mobilization from Urine”*

Harding University

**P4 Micah Armstrong**

Michah Armstrong1, Beverly Word1, and Beverly Lyn-Cook2

*“Effect of Vorinostat and Indole-3-Carbinol (I3C) on WNT Signaling Pathway Genes in Triple Negative Breast Cancer Cells”*

Tuskegee University1

FDA/National Center for Toxicological Research, NCTR Summer Student Research Program2

**P6 Brittany Beaver**

Brittany Beaver1 and Nathan Terry1

*“Optimal Wavelength of Light for Arthrospira platensis Photosynthesis”*

Ouachita Baptist University, OBU Summer Research Program1

**P8 Daniel Blankson**

Daniel Blankson1,2 John Judkins2, Joseph Utecht2, and Jonathan Bona2

*“Web Tool Supporting The Development Of A Natural Product-Drug Interaction Terminology”*

Philander Smith College1

University of Arkansas for Medical Sciences (INBRE)2

**P10 Sean Brandon**

Sean Brandon1,2

*“Effects of Space Radiation on the Heart Sean Brandon”*

Philander Smith College1

University of Arkansas for Medical Sciences, SURP2

**12 Matthew Brownd**

Matthew Brownd1,3 Denise V. Greathouse2, and Roger E. Koeppe II,2

*“Structural Comparison of Membrane Crossing Gramicidin Subunits”*

John Brown University1

University of Arkansas - Fayetteville2

University of Arkansas for Medical Sciences (INBRE)3

**P14 Shelby Burchfield**

Shelby Burchfield1,2 and Ruth Plymale1

*“Extraction and Separation of Novel Antibiotics*

Ouachita Baptist University1

University of Arkansas for Medical Sciences (INBRE)2

**P16 Jessica Campbell**

Jessica Campbell1, Daniel Habenicht1, Heather Prowse1, Jennifer Harper1, Sydney Ozersky1,

Claire Turkal1 and Andrea A. Duina1

*“Evaluation of the contributions of DNA sequences and RNA polymerase II on the disassociation of the FACT complex from the 3' ends of genes following transcription”*

Hendrix College, BCMB Research1

**P18 Miguel Chuidian**

Migueel Chuidian1, Sangeeta Khare1, Banu Zolnik1, and Kuppan Gokulan1

*“Evaluation of toxicity of drug-nanocrystal formulation using intestinal epithelial permeability”*

National Center for Toxicological Research, NCTR Summer Student Research Program1

**P20 Callie Clement**

Callie Clement

*“Synthesis and Relaxivity of Target-Specific MRI Contrast Agents Callie Clement”*

Ouachita Baptist University, OBU Summer Research Program

**P22 Aditya Dendukuri**

Aditya Dendukuri1,2 and Tansel Halic1

*“Modeling Fluid Flow in Virtual Arthroscopic Tear Diagnosis and Evaluation Platform (VATDEP)”*

University of Central Arkansas1

University of Arkansas for Medical Sciences (INBRE)2

**P24 Shimin Alice Fan**

Shimin Alice Fan1,2, Benjamin W. Curry1, Dylan Gilbreath1 and Richard C. Murray1

*“Investigation into the effect of Dlk-1 on the development of the mouse Vomeronasal Organ”*

Hendrix College (BCMB Research)1

University of Arkansas for Medical Sciences (UAMS)2

**P26 S. Justin French**

S. Justin French1,2 and Joel Funk1

*“Investigation of Neuronal Ceroid Lipofuscinosis Protein CLN3 Expression in Coxiella burnetii Infections”*

John Brown University1

University of Arkansas for Medical Sciences (INBRE)2

**P28 Morgan Gathen**

Morgan Gathen1,2 and Elvin T. Price2

*“Translational Investigations into the Efficacy and Adverse Events Associated With Canagliflozin”*

University of Arkansas - Pine Bluff1

University of Arkansas for Medical Sciences (SURP)2

**P30 Sarah Gilmour**

Sarah E. Gilmour1 and Andrew M. Schurko1

*“Developing the Tools for CRISPR/Cas9 Genome Editing in Bdelloid Rotifers”*

Hendrix College1

**P32 Gracie Grant**

Gracie Grant1,2

*“Quantitation of Heterocyclic Aromatic Amines in Cooked Beef by Liquid Chromatography-Mass Spectrometry”*

Shorter University1

University of Arkansas for Medical Sciences (SURP)2

**P34 Annette Hall**

Annette Hall1, A-M Moorehead1, and J. Onyilagha1

*“The Genetic Code: Pathways of the 20 Standard Amino Acids”*

University of Arkansas - Pine Bluff1

**P36 Tashika Harris**

Tashika Harris1, Qiang Shi1, Jun Zhang1, and Lijun Ren1

*“Cytotoxicity of three newly approved tyrosine kinase inhibitors ribociclib, brigatinib and midostaurin in primary rat and human hepatocytes”*

University of Arkansas - Little Rock1

**P38 Anfernee Hawkins**

Anfernee Hawkins1,2, Fatemeh NouriEmamzadeh2 and Beverly Lyn-Cook2

*“Modulation of MicroRNAs 221 and 222 Expression in Basal-like 2 Triple Negative Breast Cancer Cells: Effects of Vorinostat and Indole-3-Carbinol (I3C) In Vitro.”*

University of Arkansas - Pine Bluff1

National Center for Toxicological Research/FDA, NCTR Summer Student Research Program2

**P40 William Hayes**

William Hayes1 and William Gunderson1

*“Open Source Design and Construction of a Stopped-Flow Absorption Spectrometer”*

Hendrix College, Hendrix Odyssey Program1

**P42 Jackson Hedrick**

Jackson Hedrick

*“Sarco/endoplasmic Reticulum Calcium ATPase in Neurodegenerative Disease: Implications from In Vitro Models”*

University of Arkansas for Medical Sciences (INBRE)

**P44 Sawyer Hickey**

Sawyer Hickey1,2 and Donghoon Yoon2

Donghoon Yoon

*“Effects of a RAS inhibitor and Its Combination with Proteasome Inhibitor on Multiple Myeloma”*

University of Central Arkansas1

University of Arkansas for Medical Sciences (INBRE)2

**P46 Nathan Jacobs**

Nathan Jacobs1,2

*“Investigation of Myristoylated Alanine-Rich C-Kinase Substrate-Like 1 (MARCKSL1) Expression During a Coxiella burnetii Infection”*

John Brown University1

University of Arkansas for Medical Sciences (INBRE)2

**P48 Khadijah Jones**

Khadijah Jones1,2, Eugene Nyumagenda2, Susan Russell2 and Giulia Baldini2

*“Detecting MC4R Neurons in Peripheral Tissues”*

University of Arkansas - Pine Bluff1

University of Arkansas for Medical Sciences (SURP)2

**P50 Candice Kaminski**

Candice Kaminski1,3, Tanmay Bera2, Hongjian Ding2, Howard Semey2, Leihong Wu3, Zhichao Liu3, Amy Barnes2, Darryl Langley2, Monica Pava-Ripoll4, Himansu Vyas2, Weida Tong3 and Joshua Xu4

*“ANN Method for Food Contaminating Beetle Species Identification: Effects of Random Rotation of Input Images”*

Georgia Institute of Technology1

**P52 Nicholas S. Kowalczyk**

Nicholas S. Kowalczyk1 Kimberly Cooney1 Brent Molden1 Susan Russell1 and Giulia Baldini1

*"Lipid Stress Inhibits Endocytosis of Melanocortin-4 Receptor from Modified Clathrin-Enriched Sites and Impairs Receptor Desensitization"*

University of Arkansas for Medical Sciences​1

**P54 Victoria Lackey**

Victoria Lackey

*“Treating Breast Cancer with Light: The Creation of a Photodynamic Therapy Agent”*

Ouachita Baptist University, OBU Summer Research Program

**P56 Eric Ledieu**

Eric Ledieu1,3, Foysal Khan1, and Ingrid Fritsch1

*“Magnetohydrodynamic horizontal and vertical flow according to current and chamber height”*

University of the Ozarks1

University of Arkansas – Fayetteville2

University of Arkansas for Medical Sciences (INBRE)3

**P58 Brigit McDannell**

Brigit McDannell1 and Volodymyr Tryndyak1

*“The miRNA expression profiles associated with sensitivity of hepatic tumor cells to chemotherapeutic drugs in vitro”*

National Center for Toxicological Research (NCTR), NCTR Summer Student Research Program1

**P60 Miranda McMickens**

Miranda McMickens1,2, Megan R. Reed2, and Robert L. Eoff2

*“Investigating the role of kynurenine pathway signaling in glioblastoma multiforme cancer stem cell maintenance”*

Louisiana Tech University1

University of Arkansas for Medical Sciences, SURF (Biochemistry and Molecular Biology)2

**P62 Christopher Mondragon**

Christopher Mondragon

*“Nonlinear Analysis of Pre and Postictal Brain States using Phase-Amplitude Coupling”*

Louisiana Tech University, NeuroNEM REU

**P64 Lauren Morehead**

Lauren Morehead1, Aaron Kemp1, Diana Escalona-Vargas1 and Linda Larson-Prior1

*“Using EEG power spectral densities to detect differences between Parkinson’s patients and healthy controls”*

University of Arkansas for Medical Sciences1

**P66 Josie Nieboer**

Josie Nieboer1, Clay Litteken1, Tyler Ratliff1, and Jon Blevins1

*“Optimizing expression and soluble production of recombinant BadR and BosR proteins in Escherichia coli”*

University of Arkansas for Medical Sciences (SURP)1

**P68 Angely Ortiz-Rosado**

Angely Ortiz-Rosado1,2 and Daniel Voth,PhD1

*“Identifying Keap1 interacting Coxiella burnetii effector proteins “*

University of Puerto Rico at Ponce1

University of Arkansas for Medical Sciences (SURP)2

**P70 Robert Osborne**

Robert Osborne1,2

*“Glutaminase and γ-Glutamyl-Transferase Activities are Essential for viability of head and neck tumor cells”*

Hendrix College (BCMB Research)1

University of Arkansas for Medical Sciences2

**P72 Anirudh Pidugu**

Anirudh Pidugu1,2 and Dusty Barnette1

*“Identifying the N-dealykation Pathway Mechanism and the Cytochrome P450 Enzyme that Metabolizes Terbinafine”*

Emory University1

**P74 Megan Rowe**

Megan Rowe1,3 and Kristin McEuen2

*“Mining Clinical Data for Drug-Host Interactions Influencing the Development of Drug-Induced Injury”*

University of Arkansas – Fayetteville1

University of Arkansas - Little Rock2

National Center for Toxicological Research (NCTR), NCTR Summer Student Research Program3

**P76 John Sifford**

John Sifford1,3 and Tanner Duty2

*“Utilizing a Mutated Taxus Benzoyltransferase (mTBT) as a Biocatalyst”*

Lyon College1

Arkansas State University2

University of Arkansas for Medical Sciences (INBRE)3

**P78 Chelsea Smith**

Chelsea Smith1,2 and Joel Funk1

*“Changes in ABCA1 “Expression in the Coxiella burnetii Infection of THP-1 Macrophage Cells”*

John Brown University1

University of Arkansas for Medical Sciences (INBRE)2

**P80 Emily Taylor Stone**

Emily Taylor Stone1,2, Jeffrey Lewis1, and Amanda Scholes1

*“Natural variation in acquired stress responses to oxidative stress in S. cerevisiae”*

University of Arkansas – Fayetteville1

University of Arkansas for Medical Sciences (INBRE)2

**P82 Andrew Sweatt**

Andrew Sweatt1,2

*“Characterizing the response of RKO to 5-FU using the CCK8 assay”*

University of Arkansas – Fayetteville1

University of Arkansas for Medical Sciences (INBRE)2

**P84 Nathan Terry**

Nathan Terry

*“Early development of Arabadopsis in possible space flight conditions of low pressure and altered oxygen and carbon dioxide”*

Ouachita Baptist University, OBU Summer Research Program

**P86 Andrea Vietti**

Andrea Vietti1,2 and Mark Hart2

*“Assessing the role of hyaluronic acid as a carbon and energy source for Staphylococcus aureus”*

University of Dayton1

National Center for Toxicological Research (NCTR), NCTR Summer Student Research Program2

**P88 Katherine Wang**

Katherine Wang1,2

*“Antibiotic treatment alters gut microbiome and restores mucus layer in inflammatory bowel disease”* Hendrix College1

University of Arkansas for Medical Sciences (SURP)2

**P90 Dillon Wester**

Dillon Wester1 and Keeley Johnson1

*“Passively Tracking A Solar Panel With Shape Memory Alloys”*

Ouachita Baptist University, OBU Summer Research Program1

**Oral Platform Session II / Talks T 7 – T 12**

**1:15 pm – 2:45 pm**

**Session Chair: Robert L. Eoff, PhD**

*\*The presenter’s name is underlined\**

**T 7 1:15 – 1:30 pm (Alison Luscomb)**

Alison Luscomb1,2, Jesse Roberts1, Jingyi Chen1, and Shannon Servoss1

*“Synthesis of Peptoid-Functionalized Gold Nanocages for Engineering of Nanoscale Stem Cell Scaffolds”*

University of Arkansas – Fayetteville1

University of Arkansas for Medical Sciences (INBRE)2

**T 8 1:30 – 1:45 pm (Sally Owens)**

Sally Owens

*“Development of a New Water-Soluble Photodynamic Therapy Agent for treatment of Breast Cancer”*

Ouachita Baptist University, OBU Summer Research Program

**T 9 1:45 – 2:00 pm (Connor Purvis)**

Connor Purvis1,2

*“Impact of respiratory syncytial virus and influenza virus infection on the diversity of gut microbiome in children”*

Harding University1

University of Arkansas for Medical Sciences2 (SURF, Biochemistry and Molecular Biology)2

**T 10 2:00 – 2:15 pm (Emily Seminara)**

Emily J. Seminara1,2, Lora J. Rogers2, Susan Kadlubar2, and Howard P. Hendrickson2

*“Extraction and Quantitation of Heterocyclic Aromatic Amines from Cooked Bacon using Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry”*

Hendrix College1

University of Arkansas for Medical Sciences (INBRE)2

**T 11 2:15 – 2:30 pm (Lane Smith)**

Lane Smith1,2, Amit Ketkar2 and Robert Eoff2

*“G-Quadruplex Mutagenesis in DNA Polymerase Rev1 & Knockout Cell Lines”*

Southern Arkansas University1

University of Arkansas for Medical Sciences (INBRE)2

**T 12 2:30 – 2:45 pm (Conrad Williams)**

Conrad Williams1,2

*“Synthesis and antimicrobial studies of difluorophenyl pyrazole derivatives”*

Arkansas State University1

University of Arkansas for Medical Sciences (INBRE)2

**2017 CAUSRS Participants List**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name**  **(First)** | **Name**  **(Last)** | **Undergraduate**  **Institution** | **Undergraduate**  **Research Program** | **Administrator/**  **Mentor/Oral/Poster** |
| 1. Alex | Abbott | Ouachita Baptist University | OBU Summer Research Program | P1, Poster |
| 1. Alex | Adeoye | Harding University | Harding University | P2, Poster |
| 1. Emily | Allen | University of Central Arkansas | NCTR Summer Student Research Program | P3, Poster |
| 1. Micah | Armstrong | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P4, Poster |
| 1. Rachel | Bacon | Ouachita Baptist University | OBU Summer Research Program | P5, Poster |
| 1. Brittany | Beaver | University of Arkansas for Medical Sciences (UAMS) | OBU Summer Research Program | P6, Poster |
| 1. Kalissa | Bittner | Murray State University | Other (Please list below) | P7, Poster |
| 1. DANIEL | BLANKSON | University of Arkansas for Medical Sciences (UAMS) | INBRE | P8, Poster |
| 1. Aimee | Bowman | Arkansas Tech University | INBRE | P9, Poster |
| 1. Sean | Brandon | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | P10, Poster |
| 1. Kesley | Brown | Ouachita Baptist University | OBU Summer Research Program | P11, Poster |
| 1. Matthew | Brownd | John Brown University | INBRE | P12, Poster |
| 1. Kori | Bullard | Ouachita Baptist University | OBU Summer Research Program | P13, Poster |
| 1. Shelby | Burchfield | University of Arkansas for Medical Sciences (UAMS) | INBRE | P14, Poster |
| 1. Eric | Bussey | University of Arkansas for Medical Sciences (UAMS) | INBRE | P15, Poster |
| 1. Jessica | Campbell | Hendrix College | BCMB Research (Hendrix College) | P16, Poster |
| 1. Caitlin | Caperton | University of Arkansas for Medical Sciences (UAMS) | None | P17, Poster |
| 1. Miguel | Chuidian | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P18, Poster |
| 1. Logan | Clay | Ouachita Baptist University | INBRE | P19, Poster |
| 1. Callie | Clement | Ouachita Baptist University | OBU Summer Research Program | P20, Poster |
| 1. Benjamin | Curry | Hendrix College | Hendrix Odyssey Program | P21, Poster |
| 1. Aditya | Dendukuri | University of Central Arkansas | INBRE | P22, Poster |
| 1. Tanner | Duty | Lyon College | INBRE | P23, Poster |
| 1. Shimin Alice | Fan | University of Arkansas for Medical Sciences (UAMS) | BCMB Research (Hendrix College) | P24, Poster |
| **Name**  **(First)** | **Name**  **(Last)** | **Undergraduate**  **Institution** | **Undergraduate**  **Research Program** | **Administrator/**  **Mentor/Oral/Poster** |
| 1. Elizabeth | Fast | Ouachita Baptist University | Patterson Summer Research Program | P25, Poster |
| 1. S. Justin | French | John Brown University | INBRE | P26, Poster |
| 1. Ray | Fu | University of Arkansas for Medical Sciences (UAMS) | None | P27, Poster |
| 1. Morgan | Gathen | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | P28, Poster |
| 1. Laci | Giambrone | University of Arkansas for Medical Sciences (UAMS) | EPSCOR | P29, Poster |
| 1. Sarah | Gilmour | Hendrix College | INBRE | P30, Poster |
| 1. Sarah | Glass | University of Arkansas for Medical Sciences (UAMS) | SURF (Biochemistry and Molecular Biology, UAMS) | P31, Poster |
| 1. Gracie | Grant | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | P32, Poster |
| 1. Alicia | Guy | University of Arkansas - Pine Bluff | NCTR Summer Student Research Program | P33, Poster |
| 1. Annette | Hall | University of Arkansas - Pine Bluff | None | P34, Poster |
| 1. Graham | Harris | Hendrix College | BCMB Research (Hendrix College) | P35, Poster |
| 1. Tashika | Harris | University of Arkansas - Little Rock | NCTR Summer Student Research Program | P36, Poster |
| 1. Savanna | Harris | Ouachita Baptist University | OBU Summer Research Program | P37, Poster |
| 1. Anfernee | Hawkins | University of Arkansas - Pine Bluff | NCTR Summer Student Research Program | P38, Poster |
| 1. Cyntanna | Hawkins | Ouachita Baptist University | OBU Summer Research Program | P39, Poster |
| 1. William | Hayes | Hendrix College | Hendrix Odyssey Program | P40, Poster |
| 1. Lora | Heath | University of Arkansas - Little Rock | INBRE | P41, Poster |
| 1. Jackson | Hedrick | University of Arkansas for Medical Sciences (UAMS) | INBRE | P42, Poster |
| 1. Jade | Hess | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P43, Poster |
| 1. Sawyer | Hickey | University of Central Arkansas | INBRE | P44, Poster |
| 1. Megan | Hunter | University of Arkansas for Medical Sciences (UAMS) | INBRE | P45, Poster |
| 1. Nathan | Jacobs | John Brown University | INBRE | P46, Poster |
| 1. Ian | Jenkins | Hendrix College | Hendrix Odyssey Program | P47, Poster |
| 1. Khadijah | Jones | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | P48, Poster |
| 1. Mary Beth | Jones | Ouachita Baptist University | OBU Summer Research Program | P49, Poster |
| 1. Candice | Kaminski | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P50, Poster |
| 1. Pranav | Kolluru | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P51, Poster |
| 1. Nicholas | Kowalczyk | University of Arkansas for Medical Sciences (UAMS) | SURF (Biochemistry and Molecular Biology, UAMS) | P52, Poster |
| 1. Nicholas | Kowalkowski | Ouachita Baptist University | None | P53, Poster |
| 1. Victoria | Lackey | Ouachita Baptist University | OBU Summer Research Program | P54, Poster |
| **Name**  **(First)** | **Name**  **(Last)** | **Undergraduate**  **Institution** | **Undergraduate**  **Research Program** | **Administrator/**  **Mentor/Oral/Poster** |
| 1. Alex | Ladd | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | P55, Poster |
| 1. Eric | Ledieu | University of the Ozarks | INBRE | P56, Poster |
| 1. Timothy | Lenox | University of Arkansas - Little Rock | Other | P57, Poster |
| 1. Brigit | McDannell | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P58, Poster |
| 1. Kaersti | McLellan | Hendrix College | INBRE | P59, Poster |
| 1. Miranda | McMickens | Louisiana Tech University | SURF (Biochemistry and Molecular Biology, UAMS) | P60, Poster |
| 1. LaShawna | Miller | Lyon College | Other (Please list below) | P61, Poster |
| 1. Christopher | Mondragon | Louisiana Tech University | Other (Please list below) | P62, Poster |
| 1. Shelby | Morales | University of the Ozarks | SURP (UAMS) | P63, Poster |
| 1. Lauren | Morehead | University of Arkansas for Medical Sciences (UAMS) | Other (Please list below) | P64, Poster |
| 1. Moira | Murdoch | Hendrix College | INBRE | P65, Poster |
| 1. Josie | Nieboer | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | P66, Poster |
| 1. ChrisTina | Okolo | Arkansas State University | Other (Please list below) | P67, Poster |
| 1. Angely | Ortiz-Rosado | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | P68, Poster |
| 1. Jessica | Orton | University of Arkansas for Medical Sciences (UAMS) | INBRE | P69, Poster |
| 1. Robert | Osborne | University of Arkansas for Medical Sciences (UAMS) | BCMB Research (Hendrix College) | P70, Poster |
| 1. Thomas | Owens | Hendrix College | None | P71, Poster |
| 1. Anirudh | Pidugu | Emory University | SURF (Biochemistry and Molecular Biology, UAMS) | P72, Poster |
| 1. Casey | Roark | Ouachita Baptist University | OBU Summer Research Program | P73, Poster |
| 1. Megan | Rowe | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P74, Poster |
| 1. Shruti | Shah | University of Arkansas for Medical Sciences |  | P75, Poster |
| 1. John | Sifford | Lyon College | INBRE | P76, Poster |
| 1. Danyal | Smani | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P77, Poster |
| 1. Chelsea | Smith | John Brown University | INBRE | P78, Poster |
| 1. Reed | Spivey | Hendrix College | Hendrix Odyssey Program | P79, Poster |
| 1. Emily Taylor | Stone | University of Arkansas - Fayetteville | INBRE | P80, Poster |
| 1. Brock | Sullivan | Hendrix College | NCTR Summer Student Research Program | P81, Poster |
| 1. Andrew | Sweatt | University of Arkansas - Fayetteville | INBRE | P82, Poster |
| 1. Sylvia | Szwedo | University of Arkansas for Medical Sciences (UAMS) | SURF (Biochemistry and Molecular Biology, UAMS) | P83, Poster |
| **Name**  **(First)** | **Name**  **(Last)** | **Undergraduate**  **Institution** | **Undergraduate**  **Research Program** | **Administrator/**  **Mentor/Oral/Poster** |
| 1. Nathan | Terry | Ouachita Baptist University | OBU Summer Research Program | P84, Poster |
| 1. Sydney | Van Scyoc | Ouachita Baptist University | Patterson Summer Research Program | P85, Poster |
| 1. Andrea | Vietti | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P86, Poster |
| 1. Ryan | Vreeland | St. Mary's College of Maryland | NCTR Summer Student Research Program | P87, Poster |
| 1. Katherine | Wang | Hendrix College | SURP (UAMS) | P88, Poster |
| 1. Tony | Wang | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | P89, Poster |
| 1. Dillon | Wester | Ouachita Baptist University | OBU Summer Research Program | P90, Poster |
| 1. Allie | Wynn | University of Arkansas for Medical Sciences (UAMS) | INBRE | P91, Poster |
| 1. Camila | Cardenas | University of Arkansas for Medical Sciences (UAMS) | SURF (Biochemistry and Molecular Biology, UAMS) | T1, Oral |
| 1. Nikita | Das | National Center for Toxicological Research (NCTR) | NCTR Summer Student Research Program | T2, Oral |
| 1. Michelle | Everett | University of Arkansas for Medical Sciences (UAMS) | SURP (UAMS) | T3, Oral |
| 1. Daniel | Games | Ouachita Baptist University | INBRE | T4, Oral |
| 1. Christa | Huber | Hendrix College | INBRE | T5, Oral |
| 1. Christa | Jackson | John Brown University | INBRE | T6, Oral |
| 1. Alison | Luscomb | University of Arkansas - Fayetteville | INBRE | T7, Oral |
| 1. Sally | Owens | Ouachita Baptist University | OBU Summer Research Program | T8, Oral |
| 1. Connor | Purvis | Harding University | SURF (Biochemistry and Molecular Biology, UAMS) | T9, Oral |
| 1. Emily | Seminara | Hendrix College | INBRE | T10, Oral |
| 1. Lane | Smith | Southern Arkansas University | INBRE | T11, Oral |
| 1. Conrad | Williams | Arkansas State University | INBRE | T12, Oral |
| 1. Hannah | Brandon | Ouachita Baptist University | OBU Summer Research Program | Non-Presenter |
| 1. Cameron | Duke | Arkansas State University | Other | Non-Presenter |
| 1. Sam | Edogun | University of Arkansas - Pine Bluff | Other | Non-Presenter |
| 1. Michaela | Edwards | Hendrix College | BCMB Research (Hendrix College) | Non-Presenter |
| 1. Daniel | Habenicht | Hendrix College | Hendrix Odyssey Program | Non-Presenter |
| 1. Chloe | Hughes | Arkansas Tech University | INBRE | Non-Presenter |
| 1. Keeley | Johnson | Ouachita Baptist University | OBU Summer Research Program | Non-Presenter |
| 1. Sabrina | Jones | University of Arkansas for Medical Sciences (UAMS) | Other | Non-Presenter |
| 1. Derek | Mullins | Lyon College | INBRE | Non-Presenter |
| **Name**  **(First)** | **Name**  **(Last)** | **Undergraduate**  **Institution** | **Undergraduate**  **Research Program** | **Administrator/Mentor**  **Judge/Oral/Poster** |
| 1. Bo-Chih | Pan | University of Illinois at Chicago | NCTR Summer Student Research Program | Non-Presenter |
| 1. Heather | Prowse | Hendrix College | BCMB Research (Hendrix College) | Non-Presenter |
| 1. Matt | Savage | Ouachita Baptist University | OBU Summer Research Program | Non-Presenter |
| 1. Jed | Whitt | Arkansas State University | Arkansas Biosciences Institute | Non-Presenter |
| 1. Mohammad | Abar | Arkansas State University |  | Judge |
| 1. Karen | Abbott | University of Arkansas for Medical Sciences (UAMS) |  | Administrator/Judge |
| 1. Mohammad | Alam | Arkansas State University |  | Faculty Mentor |
| 1. Giulia | Baldini | University of Arkansas for Medical Sciences (UAMS) |  | Faculty Mentor |
| 1. Dustyn | Barnette | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Helen | Benes | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Joe | Bradshaw | Ouachita Baptist University |  | Faculty Mentor |
| 1. Detri | Brech | Ouachita Baptist University |  | Faculty Mentor |
| 1. Larry | Cornett | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Mari | Davidson | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Elisabeth | Davis | University of Arkansas for Medical Sciences (UAMS) |  | Faculty Mentor |
| 1. Lauren | Davis | University of Arkansas for Medical Sciences |  | Judge |
| 1. Magdalena | Delgado | University of Arkansas for Medical Sciences (UAMS) |  | Administrator/Judge |
| 1. Alan | Diekman | University of Arkansas for Medical Sciences |  | Judge |
| 1. Angela | Douglass | Ouachita Baptist University |  | Faculty Mentor |
| 1. Andrea | Duina | Hendrix College |  | Faculty Mentor/Judge |
| 1. Robert | Eoff | University of Arkansas for Medical Sciences (UAMS) |  | Administrator/Judge |
| 1. Ingrid | Fritsch | University of Arkansas - Fayetteville |  | Faculty Mentor |
| 1. Joel | Funk | John Brown University |  | Faculty Mentor |
| 1. Fred | Goad | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Julie | Gunderson | Hendrix College |  | Faculty Mentor/Judge |
| 1. William | Gunderson | Hendrix College |  | Faculty Mentor/Judge |
| 1. Aru | Gupta | University of Arkansas for Medical Sciences |  | Judge |
| 1. Mark | Hart | National Center for Toxicological Research |  | Faculty Mentor |
| 1. Tim | Hayes | Ouachita Baptist University |  | Faculty Mentor/Judge |
| **Name**  **(First)** | **Name**  **(Last)** | **Undergraduate**  **Institution** | **Undergraduate**  **Research Program** | **Administrator/Mentor**  **Judge/Oral/Poster** |
| 1. Lori | Hensley | Ouachita Baptist University |  | Faculty Mentor |
| 1. Leah | Horn | University of Arkansas for Medical Sciences |  | Judge |
| 1. Joe | Jeffers | Ouachita Baptist University |  | Administrator |
| 1. Jess | Kelly | Ouachita Baptist University |  | Faculty Mentor |
| 1. Aaron | Kemp | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Amit | Ketkar | University of Arkansas for Medical Sciences |  | Judge |
| 1. Sangeeta | Khare | National Center for Toxicological Research (NCTR) |  | Faculty Mentor |
| 1. Lin-Xi | Li | University of Arkansas for Medical Sciences |  | Judge |
| 1. Lucie | Loukotkova | FDA National Center for Toxicological Research (NCTR) |  | Faculty Mentor |
| 1. William | MacCain | University of Arkansas for Medical Sciences |  | Judge |
| 1. John | Marecki | University of Arkansas for Medical Sciences (UAMS) |  | Administrator/Judge |
| 1. Diane | McKinstry | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Grover P | Miller | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Caroline | Miller Robinson | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Richard | Murray | Hendrix College |  | Faculty Mentor |
| 1. Irosha | Nawarathne | Lyon College |  | Faculty Mentor/Judge |
| 1. Sydney | Ozersky | Hendrix College |  | Administrator |
| 1. Henry | Palfrey | Southern University and A&M College |  | Administrator |
| 1. Amy | Patterson | Ouachita Baptist College |  | Donor |
| 1. Beth | Patterson | Ouachita Baptist College |  | Donor |
| 1. David | Paul | University of Arkansas - Fayetteville |  | Administrator |
| 1. Sarah | Phillips | University of Arkansas for Medical Sciences (UAMS) |  | Faculty Mentor |
| 1. Matthew | Phillips | University of Arkansas for Medical Sciences |  | Judge |
| 1. Ruth | Plymale | Ouachita Baptist University |  | Faculty Mentor |
| 1. Reine | Protacio | University of Arkansas for Medical Sciences |  | Judge |
| 1. Megan | Reed | University of Arkansas for Medical Sciences |  | Judge |
| 1. Kahla | Robinson | University of Arkansas for Medical Sciences |  | Administrator |
| 1. Sumit | Sarkar |  |  | Faculty Mentor/Judge |
| 1. Laura | Schnackenberg | National Center for Toxicological Research (NCTR) |  | Administrator |
| **Name**  **(First)** | **Name**  **(Last)** | **Undergraduate**  **Institution** | **Undergraduate**  **Research Program** | **Administrator/Mentor**  **Judge/Oral/Poster** |
| 1. Qiang | Shi | FDA National Center for Toxicological Research (NCTR) |  | Faculty Mentor/Judge |
| 1. Rajat | Singh | University of Arkansas - Little Rock |  | Administrator/Judge |
| 1. Sharon | Sipe | University of Arkansas for Medical Sciences |  | Administrator |
| 1. Kristen | Sterba | University of Arkansas for Medical Sciences (UAMS) |  | Administrator |
| 1. Amanda | Stolarz | University of Arkansas for Medical Sciences (UAMS) |  | Faculty Mentor |
| 1. Kidon | Sung | National Center for Toxicological Research (NCTR) |  | Faculty Mentor |
| 1. Jim | Taylor | Ouachita Baptist University |  | Faculty Mentor/Judge |
| 1. Vikrant | Vijay | National Center for Toxicological Research (NCTR) |  | Faculty Mentor |
| 1. Daniel | Voth | University of Arkansas for Medical Sciences (UAMS) |  | Faculty Mentor |
| 1. Wayne | Wahls | University of Arkansas for Medical Sciences (UAMS) |  | Judge |
| 1. Cindy | White | Harding University |  | Faculty Mentor |
| 1. Janeelle | Whitfield | University of Arkansas for Medical Sciences |  | Administrator |
| 1. Tsunemi | Yamashita | Arkansas Tech University |  | Faculty Mentor/Judge |
| 1. Maroof | Zafar | UAMS/BCMB |  | Judge |
| 1. Leena | Maddukuri | UAMS/BCMB |  | Judge |
| 1. Andrew | Schurko | Hendrix College |  | Faculty Mentor/Judge |
| 1. Taylor | McElroy | UAMS/BCMB |  | Judge |
| 1. Jim | Taylor | Ouachita Baptist University |  | Judge |
| 1. Oleg | Karaduta | UAMS/BCMB |  | Judge |
| 1. Brian | Koss | UAMS/BCMB |  | Judge |
| 1. Tiffany | Miles | UAMS/BCMB |  | Judge |
| 1. Giulia | Baldini | UAMS/BCMB |  | Judge |
| 1. Kimberly | Cooney | UAMS/BCMB |  | Judge |
| 1. Andrea | Edwards | UAMS/BCMB |  | Judge |
| 1. Tresor | Mukiza | UAMS/BCMB |  | Judge |
| 1. Eugene | Nyamugenda | UAMS/BCMB |  | Judge |

**INSTRUCTIONS FOR JUDGES:**

Packets with judging sheets are available at the registration table.  Each judging sheet indicates the student’s name, category (poster or platform talk) and session or poster number as well as the five criteria for scoring.  Please score each criteria using the full scoring range of 1 through 10, with 1.0 indicating very weak and 10 indicating outstanding.  There is also room to include comments on overall presentation of scientific data.

Please return your judging sheets as soon as possible in the breaks between the sessions.  Sheets can be either placed in the box at the registration table or given to Dr. Davidson.

Copies of the student’s judging sheets can be requested via e-mail to Dr. Davidson ([davidsonmarik@uams.edu)](mailto:davidsonmarik@uams.edu)).

|  |  |
| --- | --- |
| **Judges for Poster presentations** | |
| Name | Institution |
| 1. Dr. Mohammad Abar | ASU |
| 1. Dr. Dmitry Andreyev | UAMS/BCMB |
| 1. Dr. Giulia Baldini | UAMS/BCMB |
| 1. Dustyn Barnette | UAMS/BCMB |
| 1. Kimberly Cooney | UAMS/BCMB |
| 1. Lauren Davis | UAMS/BCMB |
| 1. Dr. Alan Diekman | UAMS/BCMB |
| 1. Magda Delgado | UAMS/BCMB |
| 1. Andrea Edwards | UAMS/BCMB |
| 1. Dr. Joel Funk | John Brown Univ |
| 1. Wezley Griffin | UAMS/BCMB |
| 1. Dr. Bill Gunderson | Hendrix |
| 1. Dr. Julie Gunderson | Hendrix |
| 1. Aru Gupta | UAMS/Micro |
| 1. Leah Horn | UAMS/Micro |
| 1. Dr. Oleg Karaduta | UAMS/BCMB |
| 1. Dr. Amit Ketkar | UAMS/BCMB |
| 1. Brian Koss | UAMS/BCMB |
| 1. Dr. Lin-Xi Li | UAMS/Micro |
| 1. Dr. Leena Maddukuri | UAMS/BCMB |
| 1. Dr. John Marecki | UAMS/BCMB |
| 1. William MacCain | UAMS/Micro |
| 1. Taylor McElroy | UAMS/BCMB |
| 1. Tiffany Miles | UAMS/BCMB |
| 1. Tresor Mukiza | UAMS/BCMB |
| 1. Dr. Irosha Nawarathne | Lyon College |
| 1. Eugene Nyamugenda | UAMS/BCMB |
| 1. Matthew Phillips | UAMS/Micro |
| 1. Dr. Reine Protacio | UAMS/BCMB |
| 1. Megan Reed | UAMS/BCMB |
| 1. Dr. Sumit Sarkar | NCTR |
| 1. Dr. Qiang Shi | NCTR |
| 1. Rajat Singh | UALR |
| 1. Dr. Andrew Schurko | Hendrix |
| 1. Dr. Jim Taylor | OBU |
| 1. Kirk West | UAMS/BCMB |
| **Judges for Oral presentations** | |
| 1. Dr. Karen Abbott | UAMS/BCMB |
| 1. Dr. Andrea Duina | Hendrix |
| 1. Dr. Robert Eoff | UAMS/BCMB |
| 1. Dr. Bill Gunderson | Hendrix |
| 1. Dr. Julie Gunderson | Hendrix |
| 1. Dr. Tim Hayes | OBU |
| 1. Dr. Irosha Nawarathne | Lyon College |
| 1. Dr. Sumit Sarkar | NCTR |
| 1. Dr. Qiang Shi | NCTR |
| 1. Dr. Jim Taylor | OBU |

Please help us keep Arkansas green! Your lunch box and many of its contents, are recyclable. Please put food waste in a trash can, and then collapse your cardboard lunch box and put it in the appropriate recycle bin. There are also labeled recycling bins for plastics and cans. All recycle bins are located in the lobby, near the restrooms.

Please help us make next year’s Symposium even better! To provide feedback, complete the appropriate evaluation found at the links listed below. The survey is designed to measure your satisfaction with this year’s Symposium and provide us with information for improvement.

Faculty/Administrators:        <https://www.surveymonkey.com/r/CAUSR-Faculty>

Student:              <https://www.surveymonkey.com/r/CAUSR-Student>

Being able to effectively share the results of one’s research is an important skill to learn. We thank the many scientists who gave of their time and skills to provide feedback to today’s undergraduate researchers. Students who would like copies of their written judging sheets may email Dr. Davidson at [davidsonmarik@uams.edu](mailto:davidsonmarik@uams.edu).