AWARD WINNERS FROM THE 102ND ARKANSAS ACADEMY OF SCIENCE (awardees are underlined)

UNDERGRADUATE ORAL PRESENTATION AWARDS: Biology

1st Place (Tie)

Culture-independent analysis of Hot Springs National Park thermophiles by <u>Taylor Stone</u>; Richard C. Murray; Matthew D. Moran. Hendrix College

Effects of recreational boat noise on avoidance and feeding behaviors in an important freshwater stream fish by <u>Claire Turkal</u>; Trystin F. Anderson; Maureen R. McClung. Hendrix College

UNDERGRADUATE POSTER PRESENTATION AWARDS: Biology

1st Place

Genetic engineering of the Mad locus using CRISPR/Cas-9 and Phi-C31 recombination by <u>Jeremy Brown.</u> Southern Arkansas University

GRADUATE ORAL PRESENTATION AWARDS: Biology

1st Place

Distribution Records of the Chestnut Lamprey in Arkansas by <u>Jeremiah Salinger</u>; Ron Johnson. University of Arkansas at Pine Bluff

GRADUATE POSTER PRESENTATION AWARDS: Biology

1st Place

Molecular Mechanisms Underlying the Higher Biomass and Abiotic Stress Tolerance Phenotype of Arabidopsis MIOX Overexpressers by Nirman Nepal; Jessica P. Yactayo Chang; Lucia M. Acosta-Gamboa; Karina Medina-Jimenez; Mario A. Arteaga-Vasquez; Argelia Lorence. Arkansas State University

2nd Place

Investigation of the function of a putative cysteine synthase homolog in Mycobacterium smegmatis using unmarked gene deletion mutation by Saroj Mahato; Ravi D. Barabote. University of Arkansas

<u>UNDERGRADUATE ORAL PRESENTATION</u> <u>AWARDS: Ecology</u>

1st Place

Valuation of ecosystem services of the Arctic National Wildlife Refuge by Margaret Young; Adam C. Turner; Matthew D. Moran; Maureen R. McClung. Hendrix College

2nd Place

Aerobic Pushups: Cutaneous Ventilation in Overwintering Smooth Softshell Turtles, Apalone mutica by Caleb O'Neal; Michael V. Plummer. Harding University

<u>UNDERGRADUATE ORAL PRESENTATION</u> AWARDS: Chemistry & Geosciences

1st Place (Tie)

Development of a Novel Method for Purification of Recombinant Proteins by <u>Amberly Vaughan;</u> Musaab Al-Ameer; T.K.S. Kumar. University of Arkansas

Quantification of Brominated Vegetable Oil in Beverages by LC-MS by <u>Katie Farmer</u>. Harding University

<u>UNDERGRADUATE POSTER PRESENTATION</u> <u>AWARDS: Chemistry & Geosciences</u>

1st Place

Novel Peptoids as Antimicrobial Agents by <u>Eliza Hanson;</u> Francis Umesiri. John Brown University

2nd Place

Extraction and Quantitation of Heterocyclic Aromatic Amines from Cooked Bacon using Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry by Emily Joy Seminara; Lora J. Rogers; Susan Kadlubar; Howard Hendrickson. Hendrix College

GRADUATE ORAL PRESENTATION AWARDS: Chemistry, Geosciences & Engineering

1st Place (Tie)

Phenomics Approaches to Elucidate the Contribution of the Four Ascorbate Pathways to Abiotic Stress Tolerance in Arabidopsis by <u>Lucia Acosta-Gamboa</u>; Nirman Nepal; Zachary C. Campbell; Shannon Cunningham; Karina Medina-Jimenez; Argelia Lorence. Arkansas State University Variable Frequency Drives, Providing Energy Efficiency and Enhanced Crop Production in Agriculture While Improving Water Management Processes by Robert Straitt; Rajesh Sharma; Paul Mixon; Steve Green; Andrzej Rucinski; Nadya Reingand; Christophe Paoli; Dwight Ellis. Arkansas State University

GRADUATE POSTER PRESENTATION AWARDS: Chemistry

1st Place

Identification of a novel glucan crosslink to feruloylated arabinoxylan in rice bran fiber by <u>Kan Takahashi</u>; Brett Savary. Arkansas State University

<u>AWARDS:</u> Engineering, Math, Physics & Computer Science

1st Place

An Interacting Model between Dark Energy and Dark Matter by Yosuke Kitakaze; Jesse Griffiths. Arkansas Tech University

<u>UNDERGRADUATE POSTER PRESENTATION</u> AWARDS: Engineering & Physics

1st Place

Stratospheric Ballooning RGB System for LiDAR Measurements by <u>Patrick Tribbett</u>; Ross Carroll. Arkansas State University

2nd Place

Rutherford Backscattering Spectromety by <u>Paul Niyonkuru</u>. University of Central Arkansas

GRADUATE POSTER PRESENTATION AWARDS: Engineering

1st Place

Anomalous electrostatic nature of charged particles: An approach towards stable equilibrium in inverted systems by Tamal Sarkar. Arkansas State University