

93rd Annual Meeting Best Paper Awards

AGRICULTURE, FORESTRY, and AQUACULTURE

Best Student Oral Presentation:

Arrieyana Cartier, Agriculture Research Station, Dept. of Biology and Dept. of Family & Consumer Sciences, Virginia State University. Changes in physicochemical, nutritional, anti-nutritional and antioxidant properties during vegetable soybean development stages.

Honorable Mention – Student Oral Presentations:

Betty R. McConn, Neuroendocrinology Laboratory, Virginia Tech. Elucidating the hunger-inhibiting mechanism of oxytocin.

Zachary Gish, Dept. of Biology, Eastern Mennonite University. Blueberry extracts protect against alcohol-induced body defects in fetal mice.

ASTRONOMY, MATH and PHYSICS with MATERIAL SCIENCE

Best Student Poster Presentation:

Matthew A. Tate, Dept. of Physics & Astronomy, Virginia Military Institute. Polarization measurements of NGC 7380 in both broad and narrow bands.

BIOLOGY with MICROBIOLOGY and MOLECULAR BIOLOGY

Best Graduate Student Oral Presentation and REMSBURG AWARD:

Abigail Lenz, Dept. of Biology & Chemistry, Liberty University. Shigatoxin pathogenesis in the gastrointestinal tract.

Best Undergraduate Student Oral Presentation:

Amanda Hazy, Dept. of Biology & Chemistry, Liberty University. Genome-wide RNA-Seq analysis of changing gene expression in brain and blood in an Alzheimer's disease mouse model.

Best Student Poster Presentation:

Virginia L. King, Dept. of Biological Sciences, University of Mary Washington. Cell phone induced gene expression in glioblastoma cells.

BIOMEDICAL and GENERAL ENGINEERING

Best Student Oral Presentation:

Dong S. Lee, Dept. of Chemical & Life Science Engineering, Virginia Commonwealth University. Soft electrode systems capable of integration on the auricle as brain-computer interface

Honorable Mention – Student Oral Presentations:

Trisha J. Massenzo, Dept. of Biomedical Engineering, Virginia Commonwealth University. Effect of visual biofeedback on gait balance symmetry during elliptical trainer exercise.

Lauren A. Griggs, Dept. of Biomedical Engineering, Virginia Commonwealth University. Fibronectin assembly drives TGF- β 1-induced epithelial-mesenchymal transition in mammary epithelial cells.

BOTANY

Best Student Oral Presentation and BAKER AWARD:

Wesley J. Geyer and W. H. Deaver, Dept. of Biology, James Madison University. Effect of leaf age on antioxidant content in *Salvia officinalis* and *Lavendula angustifoli*.

Best Student Oral Presentation and HARVILL AWARD:

Daniel Wright, Dept. of Organismal & Environmental Biology, Christopher Newport University. Tree growth in created Piedmont wetlands in relation to vertical vegetation structure.

Honorable Mention – Student Oral Presentation:

Lane D. Gibbons, Dept. of Biology, James Madison University. An analysis of infraspecific variation within *Eleocharis tenuis* (Cyperaceae).

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CHEMISTRY

Best Student Oral Presentation and BRUNER AWARD:

James M. Mattila, Dept. of Chemistry & Biochemistry, James Madison University. Comparison of negative ion ESI ionization efficiencies for a diversity of small acidic molecules with widely varying pKa's.

EDUCATION

Best Student Oral Presentation:

Julia Boles, College of Agriculture & Life Science, University of Wisconsin - Madison. Science on a Sphere®: An ethics learning tool.

ENVIRONMENTAL SCIENCE

Best Student Oral Presentation:

John T. Fox, Dept. of Fish & Wildlife Conservation, Virginia Tech. Spatiotemporal variation and the role of wildlife in seasonal water quality declines in the Chobe River, Botswana.

Honorable Mention – Student Oral Presentation:

Alaina C. Esposito, Dept. of Biology, James Madison University. Using state-of-the-art mark-recapture techniques to create a conservation action plan for endangered freshwater mussels.

Best Student Poster Presentation:

Dorottya Boisen, Katie Sipes and Dakota M. Kobler, Dept. of Biology, James Madison University. Modeling habitat use for the endangered James Spineymussel (*Pleurobema collina*): An approach for detecting rare cryptic organisms.

MEDICAL SCIENCES

Best Student Oral Presentation:

Sudha Korwar, Dept. of Medicinal Chemistry, Virginia Commonwealth University. Design and SAR study of small molecule CtBP inhibitors.

Honorable Mention – Student Oral Presentation:

Sukhada M. Bhawe, Dept. of Pharmacology & Toxicology, Virginia Commonwealth University. Role of Toll-like receptor 4 in enteric glia.

Best Student Poster Presentation:

Sri L. Chalasani, Dept. of Pharmacology and Toxicology, Virginia Commonwealth University. Tolerance of proximal thymine glycol in non homologous end joining.

NATURAL HISTORY and BIODIVERSITY

Best Student Oral Presentations and WOOLCOTT AWARD:

Jessica L. Bray, Dept. of Biology, Virginia Commonwealth University. Responses of the catalpa sphinx moth and its primary parasitoid to high and low levels of iridoid glycosides.

Megan E. Ayers, Dept. of Biology, Virginia Commonwealth University. Behavioral responses of male parasitic wasps to plant cues with respect to host-plant complex origin.

STATISTICS

Best Student Oral Presentation:

Aobo Wang, Dept. of Biostatistics, Virginia Commonwealth University. Simulating dependent binary data with random effects.

Honorable Mention – Student Oral Presentation:

Hossein M. Rekabdarkolae, Dept. of Statistical Sciences & Operations Research, Virginia Commonwealth University. Bayesian Inference of multilevel model with spatially varying coefficients.

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STRUCTURAL BIOLOGY, BIOCHEMISTRY and BIOPHYSICS

Best Student Oral Presentation:

Thushani D. Nilaweera, Dept. of Chemistry, University of Virginia. Identification and characterization of *Thermotoga maritima* Hfq protein binding partners.

Best Student Poster Presentation:

Lucas T. Kane, Edward Via College of Osteopathic Medicine. Identification of allosteric modulator binding sites in NMDA receptors: A molecular modeling study.
