94th Annual Meeting Best Student Presentation Awards

ASTRONOMY, MATH and PHYSICS with MATERIAL SCIENCE

Best Student Oral Presentation and CARPENTER AWARD:

Steven H. Lohrey, Dept. of Physics, Randolph-Macon College Development and verification of a new post roll-up model for characterization of aircraft lift generated wake vortices

BIOLOGY with MICROBIOLOGY and MOLECULAR BIOLOGY

Best Graduate Student Oral Presentation and REMSBURG AWARD:

Kelly Barford, Dept. of Neuroscience, University of Virginia Molecular regulation of TrkA trafficking in space and time

Best Undergraduate Student Oral Presentation and REMSBURG AWARD:

Hannah Belski, Dept. of Biology, University of Mary Washington

Dominance behavior in the tube test, and its relationship to home cage behavior in mice

Best Graduate Student Poster Presentation:

Allison L. Teunis, Center for Applied Proteomics and National Center for Biodefense & Infectious Diseases, Dept. of Molecular Microbiology, School of Systems Biology, George Mason University

Early neutrophil recruitment by chemokine-releasing nanoparticles improves bacterial clearance and survival of anthrax spore-challenged mice Best Undergraduate Student Poster Presentation:

Kelsey Deal and **Geoffrey Parriott**, Dept. of Biological & Environmental Sciences, Longwood University Chimeric PD1-expressing T cells as a potential treatment for multiple types of cancer

Honorable Mention – Student Poster Presentation:

Kristina Krumpos, Dept. of Biological Sciences, University of Mary Washington

Genetically engineering a plasmid expression vector for nuclear localization studies, Part 1: Engineering a 3GFP-3NLS plasmid

BIOMEDICAL and GENERAL ENGINEERING

Best Student Oral Presentation:

Ruche Chande, Dept. of Biomedical Engineering and Dept. of Orthopaedic Surgery, Virginia Commonwealth University Improved predictive capability of a computational foot/ankle model using artificial neural networks

Honorable Mention – Student Oral Presentations:

Patrick A. Link, Dept. of Biomedical Engineering, Virginia Commonwealth University Development and characterization of protein nanoparticles derived from lung extracellular matrix

Mark Ostyn, Dept. of Mechanical & Nuclear Engineering and Dept. of Radiation Oncology, Virginia Commonwealth University An active immobilization system for head and neck external beam radiotherapy using a 6D table and radiofrequency localization

BOTANY

Best Student Oral Presentation and BAKER AWARD:

Sarah Kwon, Dept. of Biology, University of Richmond Anatomy and morphology of the allomorphic flowers of *Acalypha setosa* (Euphorbiaceae)

Best Student Oral Presentation and HARVILL AWARD:

Sydney J. Vonada, Environmental Studies Program, Shenandoah University
An ecological characterization of terrestrial communities at Shenandoah University's River Campus at Cool Spring Battlefield, Clarke County Virginia

ENTOMOLOGY

Best Student Oral Presentation:

James M. Wilson, Dept. of Entomology, Virginia Tech Friends with benefits: Natural enemies and pollinators in Virginia cucurbit production

ENVIRONMENTAL SCIENCE

Best Student Oral Presentation:

James Haluska, Dept. of Ocean, Earth & Atmospheric Sciences, Old Dominion University
Shore and location changes to Wreck Island, Virginia since 1999

MEDICAL SCIENCES

Best Student Oral Presentation:

Braden Herman, Dept. of Biology, Eastern Mennonite University
Design and SAR study of small molecule CtBP inhibitors

Best Student Poster Presentation:

Sarah L. Kyte, Dept. of Pharmacology and Toxicology, Virginia Commonwealth University
Nicotine prevents chemotherapy-induced peripheral neuropathy in vivo and fails to stimulate the growth of lung cancer cells or interfere with the effectiveness of chemotherapy *in vitro*

NATURAL HISTORY and BIODIVERSITY

Best Student Oral Presentation and WOOLCOTT AWARD:

Justin Bredlau, Integrative Life Sciences and Dept. of Biology, Virginia Commonwealth University Evolving isolation mechanisms among host-foodplant sources of a parasitic wasp species

PSYCHOLOGY

Best Student Poster Presentation and RAY KIRBY AWARD:

Rachel I. MacIntyre, VA Consortium Program in Clinical Psychology, Old Dominion University
Association between traumatic life events and social and psychological functioning in college students

STATISTICS

Best Student Oral Presentation:

Hossein M. Rekabdarkolaee, Dept. of Statistical Sciences & Operations Research, Virginia Commonwealth University Analyzing Hong Kong air pollution using dimension reduction

Honorable Mention – Student Oral Presentation:

Victoria C. Garcia, Dept of Biostatistics, Virginia Commonwealth University, and United Network for Organ Sharing Explaining the ten-year increasing trend in kidneys recovered for transplantation but discarded

STRUCTURAL BIOLOGY, BIOCHEMISTRY and BIOPHYSICS

Best Student Oral Presentation:

Wen Xiong, Protein Signaling Domains Laboratory, Dept. of Biological Sciences, Biocomplexity Institute, Virginia Tech Structural basis of ligand recognition by the endosomal adaptor protein Tom1

Best Student Poster Presentation:

Kimberly Kerns, Dept. of Chemistry, University of Mary Washington
Optimization of SELEX parameters for RNA aptamer selection