Schedule: Oral Sessions

ORAL SESSION I: 8:30 – 9:30 AM

Biotechnology & Molecular Biology: Room 212

8:30 – 8:45  Justin Ashby; *Lenoir Rhyne University*
Type 2 cGMP-dependent protein kinase suppresses tumorigenesis in the mouse colon

8:45 – 9:00  Ereny Gerges; *University of North Carolina at Pembroke*
Studying the interplay between RNA Polymerase II and nucleosome dynamics

9:00 – 9:15  Victoria Hudson; *East Carolina University*
Expressing Scorpion Antarease in E. coli

Environmental Sciences: Room 214

8:30 – 8:45  Charles Bookheimer*, Benjamin Levin, Dave Millican, John Bang; *Guilford College*
Persistent Organic Pollutants in Soil and Water Samples

8:45 – 9:00  Cerita Mattison; *Nash Community College*
The Future of Conservation: Tough questions from a population assessment of the Bali Starling on Nusa Penida

9:00 – 9:15  Briana Wilson; *Shaw University*
Shell Selection in Hermit Crabs Based on Color and Condition

9:15 – 9:30  Trina Phan, David Beamer; *Nash Community College*
Using Maximum Likelihood Networks to Infer Reticulation Events Between Lineages in the Northern Dusky Salamander Species Complex

Microbiology: Room 215

8:30 – 8:45  Sinclair Do; *Lenoir Rhyne University*
Influence of capsaicin on the growth of pathogenic microorganisms

8:45 – 9:00  Laura Dytrt; *Lenoir Rhyne University*
The influence of ginger (*Zingiber officinale*) on the growth of gut bacteria, in vitro.

9:00 – 9:15  Aubrey Hite; *Lenoir Rhyne University*
The effects of clove oil (*Eugenia carophyllata*) on the growth of antibiotic-resistant Gram-negative bacteria.
ORAL SESSION II: 9:45 – 10:30 AM

Microbiology: Room 212

9:45 – 10:00  Micaela Robson1*, Stephanie Matthews1, Anne Madden2, Amy Grunden2, Rob Dunn2; 
1Campbell University, 2North Carolina State University
Isolation and characterization of Bacillus species from polyester clothing

10:00 – 10:15  Dana Waskiewicz; Guilford College
The effects of green tea on staphylococcal, lactose fermenting, bacteria of the buccal flora

10:15 – 10:30  Sean Bryant; LenoirRhyne University
Identification of Bacteria Through Fourier-Transform Infrared Spectroscopy

Chemistry & Physiology: Room 214

9:45 – 10:00  Hannah Aaron; Lenoir Rhyne University
Confirming Monofloral Honey Composition through the Comparison of PCR, Pollen Counting, and Basic Color Identification Methods

10:00 – 10:15  Joshua Cade*, Devang Upadhyay, Sivanadane Mandjiny, Jeff Frederick, Leonard Holmes; 
University of North Carolina at Pembroke
The Effect of Carbohydrates on the Growth and Bioluminescence of Photorhabdus luminescens

10:15 – 10:30  Jeison Valencia*, Devang Upadhyay, Sivanadane Mandjiny, Jeff Frederick and Leonard Holmes; 
University of North Carolina at Pembroke
The Effects of Alternative Growth Media Composition on Beneficial Entomopathaogenic Nematode Mass Production

Genomics & Physiology: Room 215

9:45 – 10:00  Osvaldo Rodriguez*, Daisy Fry*; Wake Tech Community College
Measuring Alcohol Tolerance in Drosophila melanogaster with Genetic Variations

10:00 – 10:15  Renelsa Blackman; Lenoir Rhyne University
The Effects of Exogenous Juvenile Hormone III on 5th Instar Tobacco Hornworms (Manduca sexta)

10:15 – 10:30  Kaitlin Smith; University of North Carolina at Pembroke
Reducing Alzheimer-type protein accumulation pathology and associated synaptopathogenesis to treat early dementia in a mouse model
Oral Session III: 11:00AM – 12:00PM

Faculty & Graduate Student Presentations: Room 215

11:00 – 11:15  Dennis Edgell; University of North Carolina at Pembroke
Analysis of heating and cooling degree-days in North Carolina’s Southeastern Coastal Plain climate division, 1895-2016.

11:15 – 11:30  Lisa Kelly; University of North Carolina at Pembroke
Colony social forms of invasive ants (Solenopsis invicta) in a cypress savanna

11:30 – 11:45  Emily Woolard¹*; Gleta K. Carswell ², Steve O. Simmons², Brian N. Chorley²; ¹Oak Ridge Institute for Science and Education, ²U.S. Environmental Protection Agency
Optimization of DNA Barcode Method to Assess Altered Chemical Toxicity Due to CYP-Mediated Metabolism