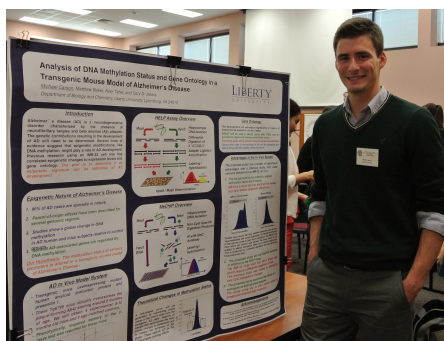


VAS - Winners - Fall 2013 Undergraduate Research Awards



Michael Carson, Department of Biology and Chemistry, Liberty University
Faculty Advisor: Gary D. Issacs

Project title: **Analysis of DNA Methylation Status and Subsequent Gene Ontology of a Transgenic Mouse Model of Alzheimer's Disease.** Research suggests that changes in DNA methylation status contribute to the development and pathology of Alzheimer's Disease (AD). This study will use HELP assay and microarray hybridization data from a transgenic mouse model of AD to identify regions of interest for gene ontology analysis using online genomics tools (GREAT and GeneCodis).



Randl Dent, Eliza Parrot, and Kingsley Schroeder (not pictured), Department of Psychology, Washington & Lee University
Faculty Advisor: Meghan Fulcher

Project title: **Fighting and Makeup: What Children Learn from Playing with Gender-amplified Dolls.** Children use dolls as models to construct their perceptions of themselves and their world. The current study investigates how playing with dolls that have an amplified focus on gendered body will affect gender typicality of play and influence a child's feelings of efficacy for future gendered skills and tasks.



Betty R. McConn, Dept. of Animal & Poultry Science, Virginia Tech

Faculty Advisor: Mark R. Cline

Project Title: **Elucidating the Mechanism of Gonadotropin-inhibitory Hormone Stimulation of Hunger**. The purpose of the proposed research is to elucidate the brain mechanisms where gonadotropin-inhibitory hormone (GnIH) mediates the perception of hunger. Study in this area is highly warranted because only a few neurotransmitters stimulate hunger. With this knowledge we can devise a model of the molecular mechanism of GnIH.



Keaira Thornton (on right), Department. of Biology, Norfolk State University

Faculty Advisor: Ashley Haines

Project title: **Phylogenetic Analyses of *Streptococcus parauberis* form Fish and Cattle**. This project will analyze the phylogeny of *Streptococcus parauberis* from fish and cattle using nucleic and amino acid sequences of multiple housekeeping genes. This analysis will clarify whether *S. parauberis* is more closely related to *S. iniae* (a fish pathogen) than to *Streptococcus uberis* (a cattle pathogen).



Alison M. Washington, Department of Chemistry, Virginia Wesleyan College
Faculty Advisor: Kevin Kittredge

Project title: **Kinetics of Release of Dyes and Pigments in Thermally Cured Poly(allylamine)/Poly(acrylic acid hydrochloride) Thin Films.** Hyperbranched poly(acrylic acid hydrochloride) (PAA/PAH) films have been synthesized in a layer-by-layer fashion. The films may be intercalated with a dye molecule and the rates of release can be measured by UV-Visible spectroscopy. We plan to examine the kinetics for releasing this dye from the films under physiological conditions.