“Effects of subtoxic levels of triclosan on working memory and anxiety levels in Danio rerio”  
Hensley Barnes  
Faculty Advisor: Lori McGrew, Ph.D.

“Chemotaxis response in Caenorhabditis elegans to an olfactory repellent paired with nicotine”  
Amanda Bigness  
Faculty Advisor: Dr. Robert Grammer

“Analysis of Interferon-alpha Levels in Cervical Cancer Cell Lines Infected with Microbes”  
Sarah C. Bonaparte  
Faculty Advisor: Jennifer T. Thomas, Ph.D.

“Carbohydrate Effect Survivability to Staphylococcus aureus.”  
Christopher Bowen  
Faculty Advisor: Nick Ragsdale

“State dependent anti-predator behavior in Elimia snails.”  
Raina Burley  
Faculty Advisor: John Niedzwiecki, Ph.D.

“Role of HIF-1 in Caenorhabditis elegans Infected with Salmonella enterica.”  
Jacob Dahm  
Faculty Advisor: Nick Ragsdale

“Effect of previous experience and habituation on the anti-predator response in Elimia snails.”  
Brielle Davis  
Faculty Advisor: John Niedzwiecki, Ph.D.

“The Evaluation of Interferon-Beta Levels in HPV-Positive Cervical Cancer Cell Lines”  
Olivia M. Ford  
Faculty Advisor: Jennifer T. Thomas, Ph.D.

“Food quality of and preference for native and exotic plant leaves by the terrestrial isopod, Armadilidium vulgare”  
John Gossen  
Faculty Advisor: John Niedzwiecki, Ph.D. and Darlene Panvini, Ph.D.

“The Effect of SKN-1 on 6-OHDA Treated Caenorhabditis elegans”  
Rezzan Hekmat  
Faculty Advisor: Nick Ragsdale

“PVL as an Indicator of the Prevalence of USA300 CA-MRSA on Belmont University’s Campus.”  
Jordan D. Helms  
Faculty Advisor: Jennifer T. Thomas, Ph.D.

“Determining the Effect of Invasive Plant Species on Soil Environments with C. elegans Chemotaxis”  
John Anthony Holt, Jr.  
Faculty Advisor: Dr. Robert Grammer, Ph.D.

“The effects of different dosages of α-lipoic acid on the chemotaxis of Caenorhabditis elegans at various stages of adulthood”  
Alicia Hsu  
Faculty Advisor: Robert Grammer, Ph.D.

“The effect of FMRFamide on the contraction rates of the antennal accessory pulsatile organs and the dorsal vessel of Anopheles gambiae”  
Talitha H. Jones and Julian F. Hillyer, Ph.D., Vanderbilt University  
Faculty Advisor: C. Steven Murphree, Ph.D.
“Predator-induced behavior in snails by native and a novel crayfish.”
Sonia Kadakia
Faculty Advisor: John Niedzwiecki, Ph.D.

“Investigation of algae-inhabiting Invertebrates as indicators of water quality”
Katelyn B. Keast
Faculty Advisor: C. Steven Murphree, Ph.D.

“Investigating chemical detection of fish predators in heptagenid Mayflies”
Nicole Knowles
Faculty Advisor: John Niedzwiecki, Ph.D.

“Preferred microhabitat conditions of Vaejovis carolinianus in a middle Tennessee cedar glade”
Chelsea J. Lee and C. Dillon Oman
Faculty Advisor: C. Steven Murphree, Ph.D.

"Assessing the Effects of Nicotine with Caffeine on Cognitive Dysfunction in Zebrafish"
Karrah Parker
Faculty Advisor: Lori McGrew Ph.D.

“Adenosine Metabolite Production in Caenorhabditis elegans Infected with Staphylococcus aureus versus Pseudomonas aeruginosa”
Stephanie Ray
Faculty Advisor: Nick Ragsdale

“Prevalence of PBP2a in Community-Associated Methicillin-Resistant Staphylococcus aureus Isolates on Belmont University’s Campus”
Rebekah Shepherd
Faculty Advisor: Jennifer T. Thomas, Ph.D.

“Effects of Acetaminophen and Lexapro on the Memory of Zebra fish”
Lauren Sheppard
Faculty Advisor: Dr. Lori McGrew, Ph.D.

“Differences in DNA exchange upon mutation of the bacterium Acinetobacter baumannii”
Justin R. Smith
Faculty Advisor: Jennifer T. Thomas, Ph.D.; Eric P. Skaar (Vanderbilt University)

“The Effects of Nicotine on Caenorhabditis elegans Chemotaxis to e. coli”
Khang Tran
Faculty Advisor: Robert Grammer Ph.D.

“The Anxiogenic effects of 5-APB and Dark Rage™ (Pre-workout) on Danio rerio”
Jaime Wesley
Faculty Advisor: Lori McGrew, Ph.D

Biochemistry and Molecular Biology

“Antipredator Response of Elimia sp. snails to varying sizes of Orconectes crayfish”
Taylor Mills
Faculty Advisor: John Niedzwiecki, Ph.D.

“Bacterial Fight Club: Do QseBC-PmrAB-T6SS Cross-Interactions Benefit Bacterial Fitness?”
Himesh Zaver
Faculty Advisor: Jennifer T. Thomas Ph.D.; Maria Hadjifrangiskou Ph.D. (Vanderbilt University)
Environmental Science

“A comparison of two pitfall trap designs to determine arthropod abundance and diversity in a deciduous old-growth forest in Davidson County, Tennessee”
Jackson R. Smith
Faculty Advisor: C. Steven Murphree, Ph.D.

Neuroscience

“Blocking of thermotaxis and chemotaxis in Caenorhabditis elegans”
Lauryn Bouldin
Faculty advisor: Robert Grammer, Ph.D.

“Phenotypic variation, movement and abundance of Vaejoviscarolinianus in a middle Tennessee cedar glade”
C. Dillon Oman and Chelsea J. Lee
Faculty Advisor: C. Steven Murphree, Ph.D.

“The effects of anxiolytic medication on memory formation in stress induced Danio rerio specimens”
Iqra Wahid
Faculty Advisor: Dr. Lori McGrew, Ph.D.

“Effects of Win 55 212-2 Mesylate on Zebrafish Memory and Anxiety”
Cassie Michelle Wyatt
Faculty Advisor: Lori McGrew, Ph.D.

Botany

“Long term effect of Dalea purpurea on growth rate of Allium tuberosum on a green roof”
Jen Morelan, Chelsea Lee, Katlin Stodard, and Joanna Sorrell
Faculty Advisor: Darlene Panvini, Ph.D.

“The effect of plant spacing on height and canopy density of a green roof diculture”
Haley Stoever, Benjamin Jones, and John Holt
Faculty Advisor: Darlene Panvini, Ph.D.

“The effects of Sedum on the growth of sage on Wedgewood Academic Center green roof, Nashville, TN”
Lindsay Millward, Samara Solomon, Alex Jeffers, and Walter Burn
Faculty Advisor: Darlene Panvini, Ph.D.

“A comparison of succulent growth success in an extensive green roof”
Jack Smith, Lindsey Dennis, and Katie Keast
Faculty Advisor: Darlene Panvini, Ph.D.