

**Tennessee Academy of Sciences
November 19, 2016**

Here is a listing of the Belmont University research projects that were presented at the conference:

“Decomposition Rates of *Acer Saccharum* and *Lonicera Macckii* in Mixed Litter Bags”

Anna Anderson Faculty Advisor: Darlene Panvini, Ph.D.

“Convallatoxin induces apoptosis in HCT116 colorectal cancer cells”

Sarah Anderson Faculty Advisor: Chris Barton, Ph.D.

“Seeking Behaviors of Nicotine”

AJ Arnold Faculty Advisor: Robert Grammer, Ph.D.

“Disinhibition by Ethanol on *C. elegans* Towards *Bacillus thuringiensis*”

Samantha Bush Faculty Advisor: Dr. Robert Grammer, Ph.D.

“Insight Into the Chemotaxis of *Caenorhabditis Elegans* Toward Pathogenic *Bacillus Thuringiensis* Strain 4A4 Using Chemosensory Deficient Nematodes”

Stacey Crockett Faculty Advisor: Robert Grammer, Ph.D

“The effect of caffeine on motor movement of *Caenorhabditis elegans*”

Madeline Johnson Faculty Advisor: Robert Grammer, Ph.D.

“Investigating the effect of super oxide dismutase, 6-hydroxydopamine and exogenous dopamine on the mobility of *Caenorhabditis elegans*”

Arielle Manabat and Abby Rife Faculty Advisor: Nick Ragsdale, Ph.D.

“Effects of Epigallocatechin-gallate and Enoxacin on HeLa cells”

Anna Margaret McDonnell Faculty Advisor: Chris Barton, Ph.D.

“Chemotaxis of *Caenorhabditis elegans* with *Bacillus thuringiensis* 4A4 in vegetative and sporulated growth stages”

Meghan McGath Faculty Advisor: Robert Grammer, Ph.D.

“Investigation of p53 activation in HCT116 with the sesquiterpene Beta-Caryophyllene”

Diana Neculcea Faculty Advisor: Chris Barton, Ph.D.

“The Effects of Fertilizer on Decomposition of Native and Invasive Exotic Plant Species”

Gary W. Noel Faculty Advisor: Darlene Panvini, Ph.D.

“Detection of Respiration in *C. elegans* and the Effects of Different Sugars and *E. coli*”

Prisha Patel Faculty Advisor: Robert Grammer, Ph.D.

“Differences in Plant, Macroinvertebrate, and Microbiota Diversity on a Well-Established Green Roof and a New Green Roof”

Sargoel Rezanejad Faculty Advisors: Chris Barton, Ph.D., and Darlene Panvini, Ph.D.

“Comparison Between Established Versus Newly Created Green Roofs Focusing on Microbiology, Macroinvertebrates and Green Roof Flora”

Kelsey Saint Clair

Faculty Advisors: Chris Barton, Ph.D., and Darlene Panvini, Ph.D.

“Caffeine’s Effect on Chemotaxis of *C. elegans* at Various Stages of Life”

Emily Shearon

Faculty Advisor: Robert Grammer, Ph.D.

“Treatment effects of emetine on HCT-116 cells”

Kerry Sommers

Faculty Advisor: Chris Barton, Ph.D.

“Expansion on the Nematode Scent Detection Test: Evaluating *C. elegans* Attraction to Non-Small Cell Lung Cancer”

Brian Song

Faculty Advisor: Robert Grammer, Ph.D.

“Linearization and solution approximations for nonlinear differential equations”

Allison B. Hardee

Faculty Advisor: Daniel Biles, Ph.D.

“Mapping the unmapped of Nigeria”

Oluwatito P. Ebiwonjumi

Faculty Advisor: William Hooper, Ph.D.

“Problems in algebraic combinatorics”

Tucker L. Dowell

Faculty Advisor: Brad Schleben, Ph.D.

“Vector representations of musical harmonic structures”

Brandon Stephens and Peter Eigel

Faculty Advisor: *Brad Schleben, Ph.D.*