



**POSTER SESSION THREE**  
**Henry Hood Center for Health Research || Ground Floor**  
**1:15-2:30 p.m.**

#1 **Amanda Pennett**, Bucknell University

*Union County Solar Energy Awareness*

Categories: Arts, Humanities and Social Sciences / Life Sciences

Mentor: Shaunna Barnhart

#2 **Nicholas Sorkine**, Bloomsburg University

*Opposite Effects of Chronic Stress on Context-Induced Relapse to Palatable Food Seeking after Punishment-Induced Abstinence in Male versus Female Rats*

Categories: Arts, Humanities and Social Sciences / Studies of Health and Wellness across disciplines

Mentor: Kevin Ball

#3 **Gwen Conley & Hannah Needham**, Susquehanna University

*Developing an Aversive Stimulus Device using an Arduino*

Categories: Engineering, Computer Science and Natural Sciences / Arts, Humanities and Social Sciences

Mentor: Carl Faust

#4 **Amanda McLaughlin**, Susquehanna University

*Precision 3D Modeling*

Categories: Engineering, Computer Science and Natural Sciences / Arts, Humanities and Social Sciences

Mentor: Adam Hansell

#5 **Benjamin Shimer**, Bucknell University

*Visualizing Acid Mine Drainage in the Shamokin Creek Watershed: Environmental Injustices and Consequences from Coal Mining*

Categories: Arts, Humanities and Social Sciences / Engineering, Computer Science and Natural Sciences

Mentor: Shaunna Barnhart

#6 **Brandon Burkett**, Bucknell University

*Using Smartphone GPS Data to Analyze Athlete Performance*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Stu Thompson

#7 **Jake Schaefer**, Bucknell University

*Leveraging Ovis Canadensis Horn Shapes for Impact Mitigation*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Benjamin Wheatley

#8 **Mary Kuziak & Savannah Barton**, Susquehanna University

*The Role of Dm Ime4 in Drosophila melanogaster Spermatogenesis*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Antonio Rockwell

#9 **Elena Marchetti**, Bucknell University

*Understanding the nucleation of 3D covalent frameworks using small molecule analogs*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Brian Smith

#10 **Hannah Kim**, Bucknell University

*Building a Digital Twin: A Virtual Model of an Electric Vehicle*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Craig Beal

#11 **Eleanor Lowe**, Bucknell University

*Melt Crystallization of the Elusive Form III Polymorph of Acetaminophen*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Brian Smith

#12 **Cory Mabry**, Susquehanna University

*Assembly of Muon-Specific Particle Detectors*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Adam Hansell

#13 **Dmitri Yarczower**, Geisinger

*Medical Presentations of GRIN2B-Related Disorders*

Categories: Life Sciences / Studies of Health and Wellness across disciplines

Mentor: Cora Taylor

#14 **Ryan Walker, Aidan Sullivan & Sarah Townsend**, Bucknell University

*The Impact of Host Condition and Life-stage on Immune System Investment in *Photinus pyralis**

Categories: Life Sciences / Engineering, Computer Science and Natural Sciences

Mentor: Moria Chambers & Sarah Lower

#15 **Ding Zhang**, Bucknell University

*Turbidity Estimation Based on Sampled Images of Reference and Test Water Samples*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Alan Marchiori

#16 **Abby Gearhart**, Bucknell University

*Using temperature as a tracer to assess groundwater-surface water exchange in a forested headwater stream in Pennsylvania*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Ben Hayes

#17 **Nuha Mohammed**, Geisinger

*Characterizing Familial Hypercholesterolemia in the NIH ALoofUS Cohort*

Categories: Engineering, Computer Science and Natural Sciences / Life Sciences

Mentor: Matthew Oetjens

#18 **Abigail Wagner**, Susquehanna University

*The Effect of Acute Stress on Context-Dependent Memory in Rats*

Categories: Life Sciences / Studies of Health and Wellness across disciplines

Mentor: James Briggs

#19 **Kate Strong**, Bucknell University

*Get-2-Goal Diabetes App: Estimating Risk and Remission*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Lea Wittie

#20 **Julia Calderone**, Bucknell University

*Usability of the Get-2-Goal App*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Lea Wittie

#21 **Matthew Kroen**, Bucknell University

*Comparison of Orientation-Specific and Traditional Measures of Subthalamic Nucleus Activation*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Karlo Malaga

#22 **Keeler Thomas**, Bucknell University

*Optimal Tissue Activation During Thalamic Deep Brain Stimulation for Essential Tremor*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Karlo Malaga

#23 **Mary Robinson**, Bucknell University

*Deep Brain Stimulation of the Subthalamic Nucleus and its Effect on Verbal Fluency in Parkinson's Disease Patients*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Karlo Malaga

#24 **Rebecca Stinson**, Bucknell University

*Assessing Stability of Thalamic Segmentation using Diffusion Tensor MRI*

Categories: Engineering, Computer Science and Natural Sciences / Studies of Health and Wellness across disciplines

Mentor: Karlo Malaga

#25 **Jimmy Pronchick**, Bucknell University

*Collecting Language Production Data Online*

Categories: Arts, Humanities and Social Sciences / Engineering, Computer Science and Natural Sciences

Mentor: Heidi Lorimor