



2021 Hauber Fellows

Linkage of HELLS Gene Expression to Melanoma Cancer

Hauber Fellow: Kristen Battista
Faculty Mentor: Theresa Geiman, Biology

Modeling Winning Percentages in the Four Major American sports using R

Hauber Fellow: Jonathan Brooks
Faculty Mentor: Richard Auer, Statistics

Sustainable Methods for the Permanent Invasive Plant Removal

Hauber Fellow: Kyle Brown
Faculty Mentor: Maren Blohm, Biology

Sound Profiles of Historic Cast Bronzes

Hauber Fellow: Benjamin Doddy
Faculty Mentors: Robert Pond, Yanko Kranov, Suzanne Keilson; Additional mentorship from Chelsea Kaufman, Materials Engineering
Supported by Whiting Turner

Measuring and Modeling Temperature-Dependent Optical Absorption in Thulium-doped Crystals

Hauber Fellow: Ashley Dwyer
Faculty Mentor: Joseph Ganem, Physics

Developing a Quantum Computer Emulator: Writing the Computing Primitives

Hauber Fellow: Kyle Geary
Faculty Mentor: Dave Binkley, Mary Lowe, David Hoe, Computer Science
Supported by Whiting Turner



Atomic Force Microscopy Measurements of a Protein-DNA Complex

Hauber Fellow: Genjamin Glezer
Faculty Mentor: Mary Lowe, Biochemistry

The use of Deep Neural Networks to find security vulnerabilities in Source Code

Hauber Fellow: Erik Henson
Faculty Mentor: David Binkley, Sibren Isaacman, Computer Science

A Generalized Model of Temperature-Dependent Light Absorption for the Visible and Near-infrared in Thulium-doped YAG

Hauber Fellow: Skylar Higgs
Faculty Mentor: Joseph Ganem, Physics

Genetic alteration of yeast cells in stressed environments

Hauber Fellow: John Mirarchi
Faculty Mentor: Lisa Scheifele, Biochemistry

Quantum Brilliance and Innovation Technology

Hauber Fellow: Michael Murphy
Faculty Mentor: Mary Lowe, David Hoe, David Binkley, Physics

Applying Machine Learning to Predict Agent-based Modeling Results

Hauber Fellow: Naylah Perodin
Faculty Mentor: Megan Olsen, Computer Science

The Efficiency of Matcha to Strengthen the Body's Immune Response

Hauber Fellow: Paige Sim
Faculty Mentors: Christopher Thompson, Biochemistry
Supported by Grace



DNN Security

Hauber Fellow: Jack Still

Faculty Mentor: David Binkley, Sibren Isaacman, Statistics

Atomic Force Microscopy Measurements of a Protein-DNA Complex

Hauber Fellow: Brendan Toulan

Faculty Mentors: Mary Lowe, Biochemistry

Effects of Complementary and Alternative Medicine on Neutrophil Microbicidal Activity and NETosis

Hauber Fellow: Madeline Valentine

Faculty Mentors: Christopher Thompson, Biology-Psychology