GRADUATE STUDENT POSTERS

College of Humanities and Social Sciences

Derek Corder presents *Collaboration and Resistance in Marginalized Community Archives*. Mentored by Randall Jimerson, History, Archives and Records Management. **Location: Grad 37**

College of Science and Engineering

Janie Aguilera presents *"Effects of ER stress on the glutamate receptor GLR-1 and ER-associated degradation using Caenorhabditis elegans"*. Mentored by Lina Dahlberg, Biology. **Location: Grad 30**

Taylor Cofer presents *Effects of TPS plasticizers and PBAT monomers on A. flavus germination, growth, and aflatoxin production*. Mentored by Marion Brodhagen, Biology. **Location: Grad 28**

Nathan Guilford presents *Non-Invasive Harbor Seal Tracking: Marker Identification and Individual Genotyping from Scat*. Mentored by Alejandro Acevedo-Gutierrez, Biology. **Location: Grad 36**

Anastacia Wiencke presents *Exploring gene-level controls of protein expression dynamics*. Mentored by Dan Pollard, Biology. **Location: Grad 16**

Jonathan Blubaugh presents *Impacts of Mixed Trophic Interactions in the Strait of Georgia: Are Seals Saving the Salmon?*. Mentored by Jonathan Blubaugh, Biology, Marine and Estuarine Science (MESP). **Location: Grad 24**

Douglas Baumgardner presents *Cobalt mediated reduction of nitrogen pollutants*. Mentored by John Gilbertson, Chemistry. **Location: Grad 15**

Sarah Bowersox, Izzi Piper present *Isopeptide Ligations Catalyzed by Streptococcus Suis Sortase A*. Mentored by Antos John, Chemistry. **Location: Grad 8**

Gunnar Carlson presents *CDFTBCI Implementation into DFTB*. Mentored by Tim Kowalczyk, Chemistry. **Location: Grad 33**

Cassidy Crickmore presents *High temperature polybenzoxazine resins for aerospace applications*. Mentored by Cassidy Crickmore, Chemistry. **Location: Grad 27**

Megan Deshaye presents *Calculation of excited state characteristics and electronic transition dipole moments in time-independent DFTB*. Mentored by Tim Kowalczyk, Chemistry. **Location: Grad 2**

Haley Doran presents *Direct Visualization of Monomer Concentration Fields During Thin Film Nucleation and Growth*. Mentored by David Patrick, Chemistry. **Location: Grad 2**
Justin Doyle presents *Improved Dispersion of CuInS2/ZnS Quantum Dots in Poly(methylmethacrylate) for High Performance Luminescent Solar Concentrators*. Mentored by David Patrick, Chemistry. **Location: Grad 19**

Alberto Melchor presents *Polycarbodiimides and Polyguanidines: Their reactivity and applications in covalent adaptable networks*. Mentored by Michael Larsen, Chemistry. **Location: Grad 7**

Griffin Reed presents *Bottom-Up Shape Engineering of Organic Molecular Single-Crystals*. Mentored by David Patrick, Chemistry. **Location: Grad 3**

Alyson Silva presents *Microgel nanostructures for surface-enhanced Raman spectroscopy*. Mentored by Steven Emory, Chemistry. **Location: Grad 34**

Evangeline Starchman presents *Rupestines: A family of Guaipyridine Alkaloids*. Mentored by James Vyvyan, Chemistry. **Location: Grad 32**

Sarah Struyvenberg presents *Engineering Sortase; Activity and Selectivity of New Hybrid and Ancestral Variants of Sortase A*. Mentored by Jeanine Amacher, Chemistry. **Location: Grad 23**

Chris Swanson presents *Determining the Mechanism of Action of the Antibiotic Argyrin B*. Mentored by Clint Spiegel, Chemistry. **Location: Grad 11**

Brian Barragan-Cruz, Chris Daw present *Approximation of exhaustive pairwise protein mutation stability using sparse plus low rank matrix decomposition and biologically-inspired sampling strategies*. Mentored by Brian Hutchinson, Computer Science. **Location: Grad 11**


Simon Haile presents *Towards high throughput quantification of extended irradiation defects via advanced-STEM-based machine learning*. Mentored by Brian Hutchinson, Computer Science. **Location: Grad 18**

Chace Jones presents *Using Deep Learning to Understand Ancient Sumerian*. Mentored by Brian Hutchinson, Computer Science. **Location: Grad 13**

Jonny Mooneyham, Ryan Lingg present *Improving Forecasts of Wave Height and Direction using Deep Learning Methods*. Mentored by Brian Hutchinson, Computer Science. **Location: Grad 12**

Richard Olney presents *Applying Machine Learning to Generate Stellar Properties from Spectra*. Mentored by Brian Hutchinson, Computer Science. **Location: Grad 5**

Gary Plunkett presents *A Simulation Platform for Generation of Synthetic Videos for Human Activity Recognition*. Mentored by Wesley Deneke, Computer Science. **Location: Grad 4**

Alexandra Puchko, Piper Wolters present *Earth System Model Simulation with Recurrent and Convolutional Neural Networks*. Mentored by Brian Hutchinson, Computer Science. **Location: Grad 26**
Elliott Skomski presents Deep Learning for Transactive Control and Coordination of Large Building HVAC Systems. Mentored by Elliott Skomski, Computer Science. Location: Grad 6

Noah Strong, Ryan Haight present A Hybrid Convolutional Neural Network Graph Cut Approach to Video Looping. Mentored by Brian Hutchinson, Computer Science. Location: Grad 17

Katherine Clarke presents Modeling the effects of climate change on streamflow and stream temperature in the South Fork of the Stillaguamish River. Mentored by Bob Mitchell, Geology. Location: Grad 20

Kathleen Hoza presents An automated spectrogoniometer system with planetary science applications. Mentored by Melissa Rice, Geology. Location: Grad 9

Fairhaven

Travis Kurtz presents The effects of timber harvest and culverts on the distribution of the Olympic Torrent Salamander (Rhyacotriton olympicus) in Olympic National Park and National Forest. Mentored by John Bower, Student/Faculty Designed. Location: Grad 25

Huxley College of the Environment

Hannah Drummond presents Automated beach delineation using least cost path analysis along Whidbey Island, WA. Mentored by Andy Bach, Environmental Studies. Location: Grad 1

Britta Fast presents Habitat delineation and volumetric analysis methods for high-resolution 3D mapping of subalpine ecotones in the North Cascades. Mentored by Aquila Flower, Environmental Studies. Location: Grad 14

Hannah LaGassey presents Finding climatologically teleconnected sites with a network of tree ring chronologies. Mentored by Aquila Flower, Environmental Studies. Location: Grad 10

Nathan Roueche presents Two decades of Western spruce budworm outbreaks in the Pacific Northwest. Mentored by Aquila Flower, Environmental Studies. Location: Grad 21

Kate Welch presents Creating a Canadian-American Wildfire Atlas for Late 19th-21st Centuries. Mentored by Michael Medler, Environmental Studies. Location: Grad 31