

2018 Graduating Seniors Awarded Departmental High or Highest Honors

Student	Research Mentor	Honors	Senior Thesis
Noreen Brar	Annaliese Franz	Highest	Exploring Anionic-Binding and Hydrogen-Bonding Catalysts Amide for the Selective Synthesis of Chiral Silanols
Maria Wong Chang	Jesús Velázquez	Highest	Facile and Scalable Green Synthesis of Copper Nanoparticles for the Integration of Carbide Based Electrocatalysts
Catherine Chen	Julie Bossuyt	Highest	Development of CaMKII Activation Assays
Natalie DeForest	Xi Chen	Highest	Chemoenzymatic Synthesis of Sialyl Lewis X, A Biologically Important Tetrasaccharide, and the Cloning and Characterization of Enzymes for Carbohydrate Synthesis
David Dominguez-Aguilar	Kristie Koski	High	Building an Ultra Low Frequency Raman Spectroscopy System
Alexandra Greb	David Olson	Highest	Transient Treatment with Psychoplastogens is Sufficient to Cause Long-Lasting Changes in Neuronal Structure
Kelly Gullet	Philip Power	High	Synthesis, Characterization and Small Molecule Activation Studies of Monomeric Heavier Group 14 Element Diaryls
Matti Jirjees	Justin Siegel	High	Designing Novel Mutation In β -glucosidases B, BglB, Enzyme And Run Them Through Multiple Experiments To Assay for Kinetic Parameters and Thermal Stability.
Sheila Kulkarni	Louise Berben	High	Proton-Transfer Reactivity of a Redox-Active Al(III) Complex with Anilines
Chiaohwei Lee	Selina Wang	Highest	Near Infrared (NIR) Spectrometry as a Fast Reliable Tool for Fat and Moisture Analysis in Olives
Svetlana Miakicheva	Jamal Lewis	Highest	The Extraction and Purification of Polysaccharide A and the Analysis of Its Immunosuppressive Effects
Alma Perez	Annaliese Franz	High	Boronic Acids as Hydrogen-Bonding Catalysts and Binding Studies on Hydrogen-Bonding and Halogen-Bonding Molecules
Russell Perry	Kristie Koski	High	The Elastic Stiffness Constants of 2D Bismuth Selenide, Measured by Brillouin Light Spectroscopy
Marina Shatskikh	Mark Kurth	Highest	Synthesis of Heterocyclic Pendrin Inhibitors In Translational Research

Jeanelle Smoot

Annaliese Franz

Highest

Production of Biofuel Precursors and Oxylipins from Microalgae

- I. Improving *Chlorella sorokiniana* growth on wastewater with glycerol supplementation
- II. Maximizing production of oxylipins in *Phaeodactylum tricornutum* with fatty acid supplementation, temperature regulation, and hydrogen peroxide treatment