

Department of Chemistry, Physics and Geology Student Research Accomplishments (2017-2018)

Peer-Reviewed Publications (*Undergraduate student co-author)

- St John, F.; Dietrich, D.; Crooks, C.; Bologun, P.; de Serrano, V.; Pozharski, E.; Smith, J.K.;* Bales, E.;* Hurlbert, J. C. A plasmid borne, functionally novel glycoside hydrolase family 30, subfamily 8 endoxylanase from solventogenic Clostridium.

 Biochemical Journal 2018 475(9), 1533-1551.
- Plasko, D. P.; Jordan, C. J.; Ciesa, B. E.; Merrill, M. A.; Hanna, J. M. Jr. Visible light-promoted alkylation of imines using potassium organotrifluoroborates. Photochem. Photobiol. Sci. 2018 17, 534-538.
- Amir, F. Z.; Pham, V.H.; Schultheis, E.M.; Dickerson, J.H. Flexible, all-solid-state, high-cell potential supercapacitors based on holey reduced graphene oxide/manganese dioxide nanosheets. Electrochemica Acta, 2018 260, 944–951.

Student Presentations at National Conferences (*Undergraduate student co-author)

- Hernandez, B. P.;* Murray, M. G.; Crenshaw, B. L.; Vinson, A. V.; Hurtt, M. J.; Lammi, R. K.; Hanna Jr., J. M. Synthesis and evaluation of heterocyclic biaryls as aggregation inhibitors for Alzheimer's amyloid-beta peptide. 255th National Meeting of the American Chemical Society, New Orleans, LA, 2018.
- Manore, S.;* Hurlbert, J. C.; Grattan, T. C. Design, synthesis and evaluation of novel sphingosine kinase 1 inhibitors with improved hydrophilic properties. 255th National Meeting of the American Chemical Society, New Orleans, LA, 2018.
- Nemeth, A. M.;* B. Melancon, B.; McDowell M.A. A Synthesis of novel oxazoline compounds for use as insecticides and the evaluation for mosquitocidal and larvalcidal activity. 255th National Meeting of the American Chemical Society, New Orleans, LA, 2018.

Student Presentations at Regional Conferences (*Undergraduate student co-author)

- Robbins, J T.;* Boyer, D.; Jackson, R. L.* Trace fossil assemblages of the lower Pilot Shale, Great Basin, USA. Geological Society of America Southeast Regional Meeting, Knoxville, TN, 2018.
- Ciesa, B. E.;* Plasko, D. P.;* Jordan, C. J.;* Hanna, J. M. Jr. Visible light-promoted additions of potassium organotrifluoroborates to imines. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Crenshaw, B. L.;* Vinson, A. V.;* Hanna, J. M. Jr.; Lammi, R. K. Evaluation of heterocyclic biaryls as aggregation inhibitors for Alzheimer's amyloid-beta peptide. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Grattan, T. C.; Manore, S;* Synthesis and analysis of potential sphingosine kinase 1 inhibitors. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Grattan, T. C.; McFadden, E.;* Synthesis of trifluoromethyl-1H pyrazole derivatives to optimize activity as antimicrobial agents. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Harris, C. T.; Gaster, C.* A simple, low-temperature method for the synthesis and electrophoretic deposition of size-controlled nanomaterials from reverse micelles. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Hernandez, B. P.;* Murray, M. G.;* Hanna, J. M. Jr.; Lammi, R. K. Synthesis of heterocyclic biaryls as aggregation inhibitors for Alzheimer's amyloid-beta peptide. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Lyons, C.;* Grossoehme, N. E. Progress towards identifying the phosphorylation site on RitR. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- McGlade, C. A.;* Hartel, A. M. The reaction of O-silylated cyanohydrin anions with epoxides as an alternative for the enantio- and diastereoselective preparation of aldols. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Sellers, H.;* Grossoehme, N. E. Exploring a possible moonlighting role for global phosphatase in S. pneumonia. 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.
- Stevens, J.;* Gelabert, M. C. Exploration of variables in aqueous synthesis of zinc oxide . 69th Southeast Regional Meeting of the American Chemical Society, Charlotte, NC, 2017.

External Summer 2018 Research Fellowships

Caylie McGlade University of Michigan

Darien Nguyen Brookhaven National Lab

Hunter Sellers Medical College of Georgia

Winthrop Summer 2018 Research Fellowships

Kiera Alexander Dr. Grossoehme Marlin McKnight Dr. Hurlbert Resa Allen Dr. Hanna Dr. Grattan Madison Merrill **Emily Mitchell** Dr. Werts Tamara Bright Dr. Gelabert Mouskudah Murray Drs. Hanna & Lammi Brittney Ciesa Dr. Hanna Drs. Hanna & Lammi Dr. Hurlbert **Brandy Crenshaw** John Pike Dr. Hurlbert Cale Gaster Dr. Harris Juliana Quay Dr. Grossoehme Madison Merrill Lucia Rodriguez Dr. Hanna Sara Dixson Dr. Boyer Dakota Shope Dr. Boyer Sigrid Dorman Dr. Grattan Evan Thibodeaux Dr. Hanna Tiffany Dwyer Dr. Hurlbert Dr. Grattan Augustine Vinson Kameron Johnson Dr. Gelabert Sean Wechsler Dr. Hartel

Students Matriculating into Graduate Programs

Medical University of South Carolina School of Medicine Jonathan Cutrone (2018) Department of Chemistry Dakota Hawkins (2018) University of North Carolina Benjamin Hernandez (2018) Presbyterian College School of Pharmacy Matthew Hurtt (2018) Clemson University Department of Chemistry Carra Lyons (2018) Department of Biochemistry University of South Carolina Ansley Nemeth (2018) University of Notre Dame Department of Chemistry Jesslyn Park (2018) University of California, San Francisco Department of Biochemistry Lauren Ramsey (2018) Winthrop University College of Business Jeremy Tuck (2017) University of California, Davis Medicinal Chemistry Justin Waller (2015) Temple University School of Medicine Sophia Warren (2018) New York University Department of Chemistry

Student Awards and Recognitions

ACS Analytical Division – Winthrop Undergraduate Award

Lennart H. Kullberg Research Award

Jesslyn Park