

Department of Chemistry, Physics and Geology Student Research Accomplishments (2014-2015)

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

- St. John, F. J.; Dietrich, D.; Crooks, C.; Pozharski, E.; Gonzlez, J. M.; Bales, E.*; Smith, K.*; Hurlbert, J. C. A novel member of glycoside hydrolase family 30 subfamily 8 with altered substrate specificity. Acta Cryst. D. 2014, 70, 2950-2958.
- Hartel, A. M.; Moore, A.C. * Extraction and ¹H-NMR Analysis of Fats from Convenience Foods: A Laboratory Experiment for Organic Chemistry. J. Chem. Educ. **2014,** 91, 1702-1705.

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

- Douglas, T.*; Harris, C. Sustained photocurrent in CdS/α-Fe₂O₃ stacked thin films on titania-coated transparent conductive substrates, 249th National Meeting of the American Chemical Society, Denver, CO, 2015.
- Melendez, D. R.*; Hartel, A. M. The Reaction of O-Silylated Cyanohydrin Anions with Epoxides as an Alternative for the Enantio- and Diastereoselective Preparation of Aldols, 249th National Meeting of the American Chemical Society, Denver, CO, 2015.
- Peppers, D.*; Grossoehme, N. Purification and characterization of wild type nickel uptake regulator (NUR) from Streptomyces coelicolor, 249th National Meeting of the American Chemical Society, Denver, CO, 2015.
- Wicks, S.*; Logan, J.*; Hanna, J.; Lammi, R. Synthesis and evaluation of symmetrical biphenyltetrols as aggregation inhibitors for Alzheimer's amyloid-β peptide, 249th National Meeting of the American Chemical Society, Denver, CO, 2015.
- Bufkin, K.*; Nelson, R.*; Deng, J.*; Sumter, T. Molecular Evaluation of Transformation Binding Proteins, Annual Meeting of the American Society for Biochemistry and Molecular Biology, Boston, MA, 2015.
- Jones, G.*; Hurlbert, J. The X-Ray Crystal Structure of a Mutant Glycerol Dehydrogenase from Bacillus coagulans with Acquired Lactate Dehydrogenase from Bacillus coagulas with Acquired Lactate Dehydrogenase from Bacillus coagulas with Acquired Lactate Dehydrogenase from Bacillus coagulas with Acquired L Biology, Boston, MA, 2015.
- Murakami, J.*; Harvey, C.*; Huang, A.*; Bufkin, K.*; Hanna, J.; Sumter, T. Synthesis and Anti-Cancer Activity of Benzisoxazolo[2,3-α]azinium Tetrafluoroborates, Annual Meeting of the American Society for Biochemistry and Molecular Biology, Boston, MA, 2015.
- Murray, A.B.*; Hurlbert, J. The X-Ray Crystallographic Structure of Endoxylanase Xyn10C from Xanthomonas axonopodis at 1.6 Angstrom Resolution, Annual Meeting of the American Society for Biochemistry and Molecular Biology, Boston, MA, 2015.
- Tesney, J.*; Hurlbert, J. Expression, Purification and Crystallization of the Xanthmonal Avirulence Protein, AvrBs1.1, and its Target in Capsicum annuum, the Transcription Factor WRKY-1, Annual Meeting of the American Society for Biochemistry and Molecular Biology, Boston, MA, 2015.
- Wynes, A.*; Werts, S. The Effects of Simulated Wildfire on Particle Size and Carbon Content in Piedmont Soils, American Geophysical Union Fall Meeting, San Francisco, CA, 2014.
- Lintz, L.*; Werts, S. Clay Chemistry's Influence on the Average Carbon Content and Particle Size at the Ninety-Six Historical Site, South Carolina, American Geophysical Union Fall Meeting, San Francisco, CA, 2014.
- Davis, T.*; Werts, S. Comparison of Piedmont Clay Complexity and Carbon and Nitrogen Release at Various Temperature Intensities through Simulated Wildfires, American Geophysical Union Fall Meeting, San Francisco, CA, 2014.

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

- Wicks, S. L.*; Lammi, R. K.; Hanna, J. M., Jr. Synthesis and Evaluation of Symmetrical Biphenyltetrols as Aggregation Inhibitors for Alzheimer's Amyloid-β Peptide, 66th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, 2014.
- Douglas, T. C.*; Harris, C. CdS/α-Fe₂O₃ Multi-junction Thin Films, 66th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, 2014.
- Manley, O. M.*; Grossoehme, N. E. Cloning and Characterization of Nickel Uptake Regional Meeting of the American Chemical Society, Nashville, TN, 2014.
- Bufkin, K.*; Leevy, M. Multimodal Imaging Trials with Zebrafish Specimens, 66th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, 2014.

External Summer 2015 Research Fellowships

Adaeze Aninweze	University of Cincinnati	Alex Pinnix	University of North Carolina	
Macey Bosley	Clemson University	Symone Smalls	Medical University of South Carolina	
Michelle Corley	Virginia Tech	Michala Tesney	St. Jude Children's Research Hospital	
James Dean	University of Pittsburgh	Emily Watson	Wake Forest University	
Esse Etim	Clemson University	Ashley Williams	St. Jude Children's Research Hospital	
Katja Hall	Wake Forest University	Deanna Worley	Clemson University	
Jessica Logan	Northeastern University	Jessica Zinna	ca Zinna Vanderbilt University	
Dakoda Mullinax	Brookhaven National Lab			

Jake Roberts

Students Matriculating into Graduate Programs

Kenisha Barber (2015)	University of Notre Dame	Department of Chemistry
Kendra Bufkin (2015)	Virginia Technical Institute	Department of Biochemistr
Tyler Couch (2013)	University of Rochester	Department of Biochemistr
Tyra Douglas (2015)	University of Alabama	Department of Chemistry
Kourtland Haile (2014)	Medical University of South Carolina	School of Dentistry
Jamie Murakami (2015)	Johns Hopkins University	Chemistry-Biology Interface
Briana Murray (2015)	University of Florida	Department of Biochemistr
Iris Strzyzewski (2013)	University of Florida	Plant Medicine Program
Sarah Wicks (2015)	Duke University	Department of Chemistry

Biochemistry Biochemistry Chemistry gy Interface Program Biochemistry Program Chemistry

Winthrop Summer 2015 Research Fellowships

Dr. Hurlbert

Justin Hutchinson

Sommer Barber	Dr. Sumter	Christopher Jordan	Dr. Harris	Mikala Smith	Dr. Grossoehme
Rayshon Ellis	Dr. Hartel	Lauren Lintz	Dr. Werts	Andrea Taylor	Drs. Lammi & Hanna
Danielle Gasparik	Dr. Gelabert	Autumn Leggins	Dr. Grossoehme	Danielle Thibault	Dr. Gelabert
Benjamin Hernandez	Drs. Hanna & Lammi	Olivia Manley	Dr. Grossoehme	Morgan Turnow	Dr. Grattan
Brandon Hicks	Dr. Hanna	Teresa Melendez	Drs. Sumter & Hanna	Margaret Whitley	Drs. Grossoehme & Hanna
Matthew Hurtt	Drs. Lammi & Hanna	Davis Plasko	Dr. Hanna		

Drs. Hanna & Lammi