

PROFESSIONAL EXPERIENCE

- 2016 – present **Member, Executive Advisory Board, Comparative Medicine Institute (NC State)**
 2013 – present **Member, Comparative Medicine Institute (NC State)**
Leader, Novel Therapeutics Targeting Infectious Pathogens Working Group
 North Carolina State University, Comparative Medicine Institute
- 2012 – present **North Carolina State University, Raleigh, NC**
 Assistant Professor, Department of Chemistry
- 2009 – 2011 **The Scripps Research Institute, La Jolla, CA**
 NIH NRSA Postdoctoral Fellow
 Worked as part of a team that developed an amidine analog of vancomycin that overcomes bacterial resistance.
 Mentor: Professor Dale L. Boger

EDUCATION

- 2003 – 2008 **University of Pittsburgh, Pittsburgh, PA**
 Ph.D. in Organic Chemistry
 Developed several novel metal mediated reactions and applied them to the synthesis of biologically active molecules. Worked on the total synthesis of tuberostemonone.
 Advisor: Professor Peter Wipf
- 1999 – 2003 **University of Pittsburgh, Pittsburgh, PA**
 B.S. in Chemistry (Bioscience Option) with Honors
 Synthesized and demonstrated the efficacy of a chiral ligand for the addition of diethyl zinc to aldehydes.
 Advisor: Professor Peter Wipf

FELLOWSHIPS AND AWARDS

- 2017 – 2021 **University Faculty Scholar**
 2015 – 2020 **NSF CAREER Award**
 2015 **Sigma Xi Research Award**
 2009 – 2011 NIH NRSA Postdoctoral Award
 2008 Schering Plough Science and Innovation Award
 2008 Roche Excellence in Chemistry Award
 2007 – 2008 Mellon Pre-doctoral Fellowship
 2006 – 2007 ACS Organic Division Fellowship Sponsored by Wyeth Pharmaceuticals
 2002 Silverman Award, Department of Chemistry, University of Pittsburgh
 1999 – 2003 University Scholar, University of Pittsburgh

RESEARCH OVERVIEW

Research in the Pierce group is focused on harnessing the diverse architectures of marine natural products to inspire advances in chemical reaction development, chemical biology and therapeutic lead identification. One aspect of our program is developing natural product analogs with extremely potent antimicrobial and anti-biofilm properties and uncovering the mechanisms by which they function. Another project is focused on developing rapid approaches toward guanidinium alkaloids that have demonstrated potent and selective activities against aggressive cancers, again with the goal of developing small molecule probes to uncover the biological pathways involved, ultimately providing potential lead molecules. Finally, we are constantly engaged in the development of stereoselective methods for the construction of biologically relevant scaffolds with a particular focus on nitrogen containing heterocycles.

PUBLICATIONS

31. **Facile Stereoselective Synthesis of Pyrrolidine-2,3-Diones Containing All-Carbon Quaternary Stereocenter via Claisen Rearrangement of Pyrrol-2-ones.** Shymanska, N. V.; Pierce, J. G. **2016**, *In Prep.*

30. **Synthesis of Lipoxazolidinone A and Analogs Reveals Potent Antimicrobial Agents Against Methicillin-resistant *Staphylococcus aureus*.** Mills, J. J.; Pierce, J. G. **2016**, *Submitted.*

29. **Alkylamide 15 (dodeca-2E, 4E-dienoic acid isobutylamide) suppresses cytokine and chemokine production, mast cell degranulation, and Ca²⁺ responses.** Gulledge, T. V.; Collette, N. M.; Moazami, Y.; Juzumaite, M.; Tong, S.; Mackey, E.; Moeser, A. J.; Pierce, J. G.; Cech, N. B.; Laster, S. M. *J. Immun.* **2016**, *Submitted.*

28. **Total Synthesis of Plagiogyrin A.** Shi, Y.; Pierce, J. G. *Org. Lett.* **2016**, *18*, 5308.

27. **Examining Ubiquitinated Peptide Enrichment Efficiency through an Epitope Labeled Protein.** Parker, J. L.; Oh, Y. Y.; Moazami, Y.; Pierce, J. G.; Dean, R. A; Muddiman, D. C. *Anal. Biochem.* **2016**, *512*, 114.

26. **Synthesis of 1,2,4-Oxadiazoles via DDQ-Mediated Oxidative Cyclization of Amidoximes.** Parker, P. D.; Pierce, J. G. *Synthesis* **2016**, *In Press.* Invited Special Topics Article for "Cyclization Tactics and Strategies"

25. **Thiohydroxamic Acids: Versatile Reagents for Organic Synthesis.** Lemerrier, B. C.; Pierce, J. G. *Synlett* **2015**, *27*, 181. Invited SYNPACT perspective.

24. **Synthesis of 1,4,2-Oxathiazoles via Oxidative Cyclization of Thiohydroxamic Acids.** Lemerrier, B. C.; Pierce, J. G. *Org. Lett.* **2015**, *17*, 4542.

23. **Synthesis and Biological Evaluation of a Series of Fatty Acid Amides from Echinacea.** Moazami, Y.; Gulledge, T.; Laster, S. M.; Pierce, J. G. *Bioorg. Med. Chem. Lett.* **2015**, *25*, 3091.

22. **Synthesis of 2,3-Dihydro-1,3-oxazin-4-ones via a Mild Formal [4+2] Cycloaddition of Acylketenes with Aldimines.** Moazami, Y.; Pierce, J. G. *Synthesis* **2015** *47*, 3363.

21. **Rapid Synthesis and Antimicrobial Activity of Novel 4-Oxazolidinone Heterocycles.** Shymanska, N. V.; An, I. H.; Guevara-Zuluaga, S.; Pierce, J. G. *Bioorg. Med. Chem. Lett.* **2015**, *25*, 4887. Invited submission to 25th Anniversary Issue.
20. **Synthesis of the 5,6-Dihydroxymorpholin-3-one Fragment of Monanchocidin A.** Shi, Y.; Pierce, J. G. *Org. Lett.* **2015**, *17*, 968.
19. **A Rapid Synthesis of 4-Oxazolidinones: Total Synthesis of Synoxazolidinones A and B.** Shymanska, N. V.; An, I. H.; Pierce, J. G. *Angew. Chem. Int. Ed.* **2014**, *53*, 5401.
18. **Synthesis of Thiazolines by Copper Catalyzed Aminobromination of Thiohydroxamic Acids.** Lemerrier, B. C.; Pierce, J. G. *Org. Lett.* **2014**, *16*, 2074.
17. **Synthesis of Thiohydroxamic Acids and Thiohydroxamic Acid Derivatives.** Lemerrier, B. C.; Pierce, J. G. *J. Org. Chem.* **2014**, *79*, 2321.
16. **Synthesis of a Library of Tricyclic Azepinoisoindolinones.** Miller, B.; Mao, S.; Rosenker, K. M. G.; Pierce, J. G.; Wipf, P. *Beilstein J. Org. Chem.* **2012**, *8*, 1091.
15. **Silver(I)-Promoted Conversion of Thioamides to Amidines: Divergent Synthesis of a Key Series of Vancomycin Aglycon Residue 4 Amidines that Clarify Binding Behavior to Model Ligands.** Okano, A.; James, R. C.; Pierce, J. G.; Xie, J.; Boger, D. L. *J. Am. Chem. Soc.* **2012**, *134*, 8790.
14. **Redesign of Glycopeptide Antibiotics – Back to the Future.** James, R. C.; Pierce, J. G.; Okano, A.; Xie, J.; Boger, D. L. *ACS Chemical Biology*, **2012**, *7*, 000.
13. **Total Synthesis of $[\Psi[C(=S)NH]Tpg^4]$ Vancomycin Aglycon, $\Psi[C(=NH)NH]Tpg^4$ Vancomycin Aglycon, and Related Key Compounds: Reengineering Vancomycin for Dual D-Ala-D-Ala and D-Ala-D-Lac Binding.** Xie, J.; Okano, A.; Pierce, J. G.; James, R. C.; Stamm, S.; Crane, C.; Boger, D. L. *J. Am. Chem. Soc.* **2012**, *134*, 1284.
12. **A Redesigned Vancomycin Engineered for Dual D-Ala-D-Ala and D-Ala-D-Lac Binding Exhibits Potent Antimicrobial Activity Against Vancomycin-Resistant Bacteria.** Xie, J.; Pierce, J. G.; James, R. C.; Okano, A.; Boger, D. L. *J. Am. Chem. Soc.* **2011**, *133*, 13946.
11. **Large-scale asymmetric synthesis of the bioprotective agent JP4-039 and analogs.** Frantz, M-C.; Pierce, J. G.; Pierce, J. M.; Kangying, L.; Qingwei, W.; Johnson, M.; Wipf, P. *Org. Lett.* **2011**, *13*, 2318.
10. **Synthesis and Evaluation of Selected Key Methyl Ether Derivatives of Vancomycin Aglycon.** Crane, C. M.; Pierce, J. G.; Leung, S. S. F.; Tirado-Rives, J.; Jorgensen, W. L.; Boger, D. L. *J. Med. Chem.* **2010**, *53*, 7229.
9. **The Mitochondria-Targeted Nitroxide JP4-039 Augments Potentially Lethal Irradiation Damage Repair.** Rajagopalan, M. S.; Gupta, K.; Epperly, M. W.; Franicola, D.; Zhang, X.; Wang, H.; Zhao, H.; Tyurin, V. A.; Pierce, J. G.; Kagan, V. E.; Wipf, P.; Kanai, A.; Greenberger, J. S. *In Vivo* **2009**, *23*, 717.

8. **Synthesis of Hydroxylated L-Choi derivatives from L-Tyrosine: Octahydro-1H-indole Carboxylates.** Wipf, P.; Pierce, J. G.; Fushimi, M.; Kasi, D.; Cuzzupe, A. *J. Org. Chem.* **2008**, *73*, 7807.
7. **Synthesis of Functionalized Isoindolinones: Addition of *In Situ* Generated Organoalanes to Acyliminium Ions.** Pierce, J. G.; Waller, D. L.; Wipf, P. *J. Organometallic Chem.* **2007**, *692*, 4618.
6. **Expedient Synthesis of the α -C-Glycoside Analogue of the Immunostimulant Galactosylceramide (KRN7000).** Wipf, P.; Pierce, J. G. *Org. Lett.* **2006**, *8*, 3375.
5. **Synthesis of Homoallylic Amines by Hydrozirconation-Imine Addition of Allenes.** Wipf, P.; Pierce, J. G. *Org. Lett.* **2005**, *7*, 3537.
4. **Silver(I)-Catalyzed Addition of Zirconocenes to Glycol Epoxides. A New Synthesis of α -C-Glycosides.** Wipf, P.; Pierce, J. G.; Zhuang, N. *Org. Lett.* **2005**, *7*, 483.
3. **Lipase-Catalyzed Resolution of 4-Trimethylsilyl-3-Butyn-2-ol and Conversion of the (*R*)-Enantiomer to (*R*)-3-Butyn-2-yl-Mesulate and (*P*)-1-Tributylstannyl-1,2-Butadiene.** Marshall, J. A.; Chobanian, H. Checked by Wipf, P.; Pierce, J. G. *Org. Synth.* **2005**, *82*, 43.
2. **Catalytic Reduction of Amides to Amines with Hydrosilanes Using a Triruthenium Carbonyl Cluster as the Catalyst.** Motoyama, Y.; Itonaga, C.; Ishida, T.; Takasaki, M.; Nagashima, H. Checked by Wipf, P.; Pierce, J. G. *Org. Synth.* **2005**, *82*, 188.
1. **Investigation of Ligand Loading and Asymmetric Amplification in CHAOx-Catalyzed Diethylzinc Additions.** Wipf, P.; Pierce, J. G.; Wang, X. *Tetrahedron: Asymmetry* (Special Issue on Asymmetric Syntheses on a Process Scale) **2003**, *14*, 3605.

PATENTS

4. **4-Oxazolidinone Antimicrobial Agents.** Mills, J. J.; Pierce, J. G. (9/2016 - Provisional, NC State)
3. **5-Benzylidene-4-Oxazolidinones.** Edwards, G. E.; Pierce, J. G. (9/2016 - Provisional, NC State)
2. **Novel Th₂ Polarizing Compounds.** Groettrup, M.; Wipf, P.; Muller, M.; Pierce, J. G. *WO 2013/007792*
1. **Use of Targeted Nitroxide Agents in Preventing, Mitigating and Treating Radiation Injury.** Wipf, P.; Belikova, N. A.; Jiang, J.; Greenberger, J. S.; Pierce, J. G.; Epperly, M. W. *US-2011-0172214-A1*

INVITED LECTURES

56. Natural Products & Bioactive Compounds Gordon Research Conference (Andover, MA – July 2017)
55. Nankai University (Tianjin, China – May 2017)
54. Tianjin University (Tianjin, China – May 2017)
53. Tsinghua University (Beijing, China – May 2017)
52. Peking University (Beijing, China – May 2017)
51. University of Oregon (Eugene, OR – April 2017)
50. Oregon State University (Corvallis, OR – April 2017)
49. Emory University (Atlanta, GA – April 2017)
48. Duke University (Durham, NC – February 2017)

47. University of Notre Dame (South Bend, IL – March 2017)
46. University of Illinois at Chicago (Chicago, IL – March 2017)
45. Northwestern University (Evanston, IL – March 2017)
44. Temple University (Philadelphia, PA – March 2017)
43. University of Pennsylvania (Philadelphia, PA – March 2017)
42. Memorial Sloan Kettering Cancer Center (New York, NY – March 2017)
41. The Scripps Research Institute (La Jolla, CA – March 2017)
40. Janssen Pharmaceuticals (La Jolla, CA – March 2017)
39. Caltech (Pasadena, CA – March 2017)
38. Dart Neurosciences (San Diego, CA – March 2017)
37. University of Pittsburgh (Pittsburgh, PA – March 2017)
36. Princeton University (Princeton, NJ – February 2017)
35. Vanderbilt University (Nashville, TN – February 2017)
34. Purdue University (West Lafayette, IN – February 2017)
33. University of Indiana (Bloomington, IN – February 2017)
32. University of California, Riverside (Riverside, CA – February 2017)
31. University of California, Irvine (Irvine, CA – February 2017)
30. University of California, Los Angeles (Los Angeles, CA – February 2017)
29. University of California, Santa Barbara (Santa Barbara, CA – February 2017)
28. University of Colorado (Boulder, CO – January 2017)
27. University of Oklahoma (Norman, OK – January 2017)
26. Oklahoma State University (Stillwater, OK – January 2017)
25. University of California, Berkeley (Berkeley, CA – January 2017)
24. Baylor University (Waco, TX – January 2017)
23. University of Texas Southwestern Medical Center at Dallas (Dallas, TX – January 2017)
22. Boston University (Boston, MA – December 2016)
21. Georgia State University (Atlanta, GA – December 2016)
20. Wayne State University (Detroit, MI – October, 2016)
19. University of Michigan (Ann Arbor, MI – October, 2016)
18. University of Kentucky (Lexington, KY – October, 2016)
17. St Jude Children's Research Hospital (Memphis, TN – October 2016)
16. Georgia Tech University (Atlanta, GA – September, 2016)
15. University of North Carolina at Chapel Hill (Chapel Hill, NC – September, 2016)
14. University of North Carolina at Wilmington (Wilmington, NC – September, 2016)
13. University of Kansas (Lawrence, KS – September 2016)
12. Young Academic Investigators Symposium, ACS National Meeting (Philadelphia, PA – August 2016)
11. National Cancer Institute, Chemical Biology Laboratory (Fredrick, MD – May 2016)
10. BASF (RTP, NC – April 2016)
9. University of California, Davis (Davis, CA – April 2016)
8. FloHet – 2015 (Gainesville, FL – February, 2016)
7. SERMACS 2015, Tomorrow's Therapeutics: Natural Product Session (Memphis, TN – November, 2015)
6. IUPAC Congress, Young Chemists Lecture (Busan, South Korea – August 2015)
5. American Society of Pharmacognosy, 2015 Annual Meeting (Copper Mountain, CO – July, 2015)
4. Heterocyclic Compounds Gordon Research Conference (Salve Regina, RI – June, 2015)
3. University of Tulsa, Department of Chemistry and Biochemistry (Tulsa, OK – September, 2013)

2. Chemical Biology and High Throughput Chemistry Gordon Conference – Graduate Research Symposium (New London, NH – June, 2009)

1. Roche Excellence in Chemistry Symposium (Palo Alto, CA – May, 2008)

POSTER PRESENTATIONS

10. Natural Products Gordon Conference (Andover, NH – July, 2016)

9. Organic Reactions and Processes Gordon Conference (Eaton, MA – July, 2016)

8. BASF iTeam Event (RTP, NC – December, 2015)

7. Chemical Biology and High Throughput Chemistry Gordon Conference (New London, NH – June, 2015)

6. Natural Products Gordon Conference (Andover, NH – July, 2014)

5. Heterocycles Gordon Conference (Salve Regina, RI – June, 2014)

4. Natural Products Gordon Conference (Andover, NH – July, 2013)

3. National Organic Symposium Meeting (University of Washington, Seattle, WA – June, 2013)

2. Chemical Biology and High Throughput Chemistry Gordon Conference (New London, NH – June, 2013)

1. National Organic Symposium Meeting (Duke University, Durham, NC – 2007)

OTHER ORAL PRESENTATIONS

11. Coastal Carolina University (Conway, SC – October 2016)

10. ACS-National Meeting (Boston, MA – August 2015)

9. Salisbury State University, Department of Chemistry (Salisbury, MD – March 2015)

8. Appalachian State University, Department of Chemistry (Boone, NC – October, 2014)

7. Southeastern Regional Meeting of the ACS (Nashville, TN – October, 2014)

6. ACS-National Meeting (San Francisco, CA – August, 2014)

5. Natural Sciences Museum, Science Café (Raleigh, NC – August 2014)

4. Southeastern Regional Meeting of the ACS (Atlanta, GA – November, 2013)

3. ACS-National Meeting (Indianapolis, IN – August, 2013)

2. ACS-National Meeting (New Orleans, LA – March, 2013)

1. ACS-National Meeting (San Diego, CA – March, 2005)

CONFERENCE DISCUSSION LEADER / SESSION CHAIR

7. Natural Products Gordon Conference (Andover, NH – July, 2016)

6. ACS-National Meeting (Boston, MA – August 2015)

5. ACS-National Meeting (San Francisco, CA – August, 2014)

4. ACS-National Meeting (Indianapolis, IN – August, 2013)

3. Chemical Biology and High Throughput Chemistry Gordon Conference (New London, NH – June, 2013)

2. Southeastern Regional Meeting of the ACS (Atlanta, GA – November, 2013)

1. Southeastern Regional Meeting of the ACS (Raleigh, NC – October, 2012)

TEACHING AND RELATED ACTIVITIES

Courses Taught

CH221 (Organic Chemistry 1, Bruice textbook)

Spring 2014, 185 enrolled
CH225 (Organic Chemistry 1 for Majors, Loudon textbook)
Fall 2016, 49 enrolled
CH227 (Organic Chemistry 2 for Majors, Loudon textbook)
Spring 2015, 67 enrolled
Spring 2016, 76 enrolled
CH723 (Synthesis)
Spring 2012, 18 enrolled
Developed a graduate level synthesis course that combined named reactions with natural products total synthesis.
CH755 (Advanced Organic Chemistry)
Fall 2012, 20 enrolled
Fall 2013, 8 enrolled
Fall 2014, 25 enrolled
Fall 2015, 19 enrolled
A reaction and reaction mechanisms course for entry-level graduate students and undergraduates.
CH610 (Intro to Graduate Studies)
Fall 2012, 28 enrolled
Fall 2013, 29 enrolled
Fall 2014, 32 enrolled
Fall 2015, 24 enrolled
Introduction to Graduate Studies, co-taught with Prof. Walter Weare
CH601/801 (Chemistry Seminar Program)
Spring 2012, 125 enrolled
Fall 2012, 120 enrolled
Spring 2013, 122 enrolled
Fall 2013, 120 enrolled
Spring 2014, 119 enrolled
Fall 2014, 125 enrolled
Spring 2015, 90 enrolled
Fall 2015, 120 enrolled
Seminar Course for all enrolled graduate students.
CH499 (Undergraduate Research)
Summer 2014, 2 enrolled
Fall 2014, 7 enrolled
Spring 2015, 4 enrolled
Fall 2015, 6 enrolled

STUDENTS MENTORED

Postdoctoral Fellows

Il Hwan An, Ph.D. (January 2013 – December 2013)
PhD – Michigan State (Maleczka)

Graduate Students

Anna Cholowczyski (August 2016 -)
BS – University of San Diego
Grant Edwards (August 2014 -)

MS/BS – University of Tulsa (Chalker)
Bram Frohock (August 2016 -)
BS – University of Tulsa
Berenice Lemerrier (August 2011 – December 2015)
MS – University of Rouen, France
Current Position: Vertex Pharmaceuticals (Boston, MA)
You-Chen Lin (August 2016 -)
BS – Taiwan
Christina Martinez (August 2015 -)
BS – UNC Charlotte (Troutman)
Jonathan Mills (August 2012 -)
BS – University of North Carolina at Wilmington
Yasamin Moazami (August 2011 -)
MS – University of North Carolina at Charlotte (Ogle)
Jason Nguyen (August 2013 – May 2015)
BS – University of Puget Sound
Patrick Parker (August 2014 -)
BS – Lipscomb University
Nicholas Perry (August 2015 -)
BS – Salisbury State University
Kaylib Robinson (August 2015 -)
BS – UNC Asheville (Wolfe)
Yunlong Shi (August 2011 -)
BS – Zhejiang University, China
Nataliia Shymanska (August 2011 – March 2016)
BS – Taras Shevchenko National University of Kyiv
Current Position: Postdoctoral Fellow, EMBL (Heidelberg, Germany)
Alain Valery (August 2015 -)
BS – CPE Lyon, France

Undergraduate Students and Visiting Students

Matthew Boudreau (January 2013 – May 2016)
North Carolina State University (Chemistry)
Current Position: Graduate Student, Roger Adams Fellow, UIUC
Rachel Cancel (May 2015 - August 2015)
University of North Carolina at Wilmington
Alex Cusumano (August 2014 -)
North Carolina State University (Chemistry)
Naish Laloo (May 2015 -)
North Carolina State University (Chemistry)
Yonghe Ge (August 2016 -)
North Carolina State University (Chemistry)
Larissa Madden (May 2014 – May 2015)
North Carolina State University (Chemical Engineering)
Andrew McLean (January 2012 – January 2014)
North Carolina State University (Human Biology)

Current Position: Medical Student, Wake Forest University (Wake Forest, NC)
Jacob Nelson (September 2014 -)
North Carolina State University (Chemistry)
William Parks (May 2014 – June 2014)
North Carolina State University (Chemical Engineering)
Peyton Williams (August 2015 -)
North Carolina State University (Chemistry/Biology)
Bin Ye (Summer 2013)
Zhejiang University
Sebastian Guevara Zuluaga (Summer 2012)
University of Puerto Rico, Rio Piedras Campus
Yuyang Zhang (Summer 2012)
Zhejiang University
Troy Zehnder (September 2014 – August 2016)
North Carolina State University (Chemistry)
Current Position: Astra Zeneca Pharmaceuticals

High School Students

Jackie Omweno (Summer 2015, Project SEED)
Garner Magnet High School
Current Position: Undergraduate Student, NC State University (Raleigh, NC)
DaNaujah Venters (Summer 2014, Project SEED)
Knightdale High School
Current Position: Undergraduate Student, NC State University (Raleigh, NC)

DEPARTMENTAL AND UNIVERSITY SERVICE

Executive Advisory Committee, CMI (2016 – Present)
Working Group Leader (Infectious Disease Drug Discovery), CMI (2013 – Present)
Recruiting Committee – Chair (2013 – Present)
Director of Undergrad Research & Undergrad Research Committee Chair (2014 – Present)
Department of Chemistry Chair Selection Committee (2014)
College of Science Undergraduate Research Committee (2014 – Present)
Department of Chemistry Faculty Search Committee (2013 and 2015)

CURRENT RESEARCH SUPPORT

NIH RO1 (1R01GM117570) (March 2016 – February 2020)
“Synthesis and Chemical Biology of Pentacyclic Guanidinium Alkaloids”

NIH RO1 (1R01GM110154) (August 2015 – July 2020)
“Synthesis and Chemical Biology of Oxazolidinone and Pyrrolidinone Natural Products”

NSF CAREER Award (1454845) (July 2015 – June 2020)
“CAREER: Novel Methods for the Stereoselective Synthesis of Nitrogen Containing Heterocycles”

NCSU Research Innovation and Seed Funding Program (January 2016 – December 2016)

“Design of Novel Therapeutics for Modulating Bacterial Biofilms”

Co-investigators: Denis Fourches (Chemistry), Johanna Elfenbein (Veterinary Medicine)

PREVIOUS RESEARCH SUPPORT

American Chemical Society Petroleum Research Fund (August 2013 – August 2016)

“Thiohydroxamic Acids as Novel Reagents for the Construction of Heterocycles”

Faculty Research and Professional Development Fund (College of Sciences) (July 2014 –

June 2015) “Development of Novel Inhibitors of Deoxyhypusine Synthase: Synthesis and Chemical Biology”

Internal Chemistry Department Development Fund (August 2013 – July 2014)

“Development of Novel Antimicrobial Agents”

NCSU Research Innovation and Seed Funding Program (December 2013 – November 2014)

“Design of Novel Therapeutics for Irritable Bowel Syndrome”

Co-investigators: Scott Laster (Biological Sciences), Adam Moeser (Veterinary Medicine)