

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO  
DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY  
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# MITCHELL PETER CROATT

## POSITIONS HELD

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January 2026 – Present University of North Carolina at Greensboro  
*Director of the Undergraduate Research, Scholarship, and Creativity Office*

August 2025 – January 2026 University of North Carolina at Greensboro  
*Interim Director of the Undergraduate Research, Scholarship, and Creativity Office*

May 2024 – August 2025 University of North Carolina at Greensboro  
*Interim Dean of the Joint School of Nanoscience and Nanoengineering* and North Carolina A&T State University

August 2017 – May 2024 University of North Carolina at Greensboro  
*Department Head of Chemistry and Biochemistry in the College of Arts and Sciences*

January 2022 – Present University of North Carolina at Greensboro  
*Marie Foscue Rourk Distinguished Professor of Chemistry and Biochemistry*

August 2021 – December 2021 University of North Carolina at Greensboro  
*Professor of Chemistry and Biochemistry*

August 2015 – July 2021 University of North Carolina at Greensboro  
*Associate Professor of Chemistry and Biochemistry*

August 2010 – July 2015 University of North Carolina at Greensboro  
*Assistant Professor of Chemistry and Biochemistry*

February 2008 – June 2010 Eidgenössische Technische Hochschule Zürich (ETH-Zurich)  
*Postdoctoral Fellow (Carreira Group)*

## FORMAL EDUCATION

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July 2002 - October 2007 Stanford University  
*Ph.D. in Chemistry (Wender Group; Degree conferred on Jan. 10, 2008)* GPA: 3.6/4.0  
*“Design, Discovery, and Development of Novel Metal-Catalyzed Reactions and Their Use in Synthesis”*

September 1998 - May 2002 University of Minnesota, Twin Cities  
*B.S. in Chemistry (O’Doherty Group; Graduated with honors)* GPA: 3.5/4.0

## AWARDS AND FELLOWSHIPS

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[Dean’s Award for the Promotion of Diversity and Inclusiveness](#): Awarded to the Department of Chemistry and Biochemistry in 2024.

[Seven Seals Award](#): Awarded to the Department of Chemistry and Biochemistry in 2023.

[Stanley C. Israel Award for Advancing Diversity in the Chemical Sciences](#): Awarded to the Department of Chemistry and Biochemistry in 2023.

[UNCG Research Award](#): Awarded by the University of North Carolina at Greensboro in 2018.

[Keynote Speaker](#): Chancellor's New Student Convocation at University of North Carolina at Greensboro in 2015.

[James Y. Joyner Alumni Teaching Excellence Award](#): Awarded by the University of North Carolina at Greensboro in 2015.

[Young Academic Investigator Award](#): Awarded by the American Chemical Society's Division of Organic Chemistry.

[Candace Bernard and Robert Glickman Dean's Professorship](#): Merit-based honor for outstanding junior faculty awarded in 2014.

[Teaching Excellence Award](#): Awarded by the College of Arts & Sciences in 2014.

[ETH Fellow](#): Proposal-based fellowship for postdoctoral research at ETH-Zurich from July 2008 to June 2010.

[Linus Pauling Teaching Award](#): Award for excellence in student teaching for the 2006-2007 academic year.

[Nichols Award](#): Merit-based fellowship for the 2006-2007 academic year.

[Eli Lilly Graduate Fellowship](#): Merit-based fellowship for the 2005-2006 academic year.

[Undergraduate Research Opportunity Program](#): Research funding for the 2000-2001 and 2001-2002 academic years.

[Heissig Research Grant](#): Research funding for the summer of 2001.

## **LEADERSHIP ACCOMPLISHMENTS AS (INTERIM) DIRECTOR OF URSCO (AUG 2025 – )**

### ***-Contributions as Interim Director of the Undergraduate Research, Scholarship, and Creativity Office (URSCO)***

Held [event](#) to celebrate students and faculty participating in summer research

Assisted with [Research Fellows Program](#) (high academic 1<sup>st</sup> year undergraduates interested in research)

- Held event to welcome them to the program and introduce them to faculty involved in research
- Organized tours of Art, Biology, and Chemistry research spaces
- Organized [faculty discussion panels](#)
- Organized [graduate student discussion panels](#)

Led or hosted 11 different workshops in the Fall Semester (two sessions for each workshop to capture more students)

- Two focused on scholarship opportunities (i.e., Goldwater and NSF GRFP)
- Three focused on applying to graduate or professional schools
- Four focused on being a successful researcher
- Two focused on presenting research

Led a Mock Review Panel for NSF GRFP applicants to help them improve their application

Campus representative for the Goldwater Scholarship

- Selected four students to move forward with a full application
- Meeting with students to help refine their documents
- Held mock review panel to help students improve their applications

Hosted events to recruit and [connect student veterans with undergraduate research programs](#)

Supervised one full time staff member and two part time students

Reviewed and assigned travel grants for undergraduate researchers

Reviewed and assigned Undergraduate Research and Creative Inquiry Awards

## **LEADERSHIP ACCOMPLISHMENTS AS INTERIM DEAN OF JSNN (MAY 2024 – AUG. 2025)**

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### ***-Administrative Contributions as Interim Dean of the Joint School of Nanoscience and Nanoengineering (JSNN)***

Reported directly to two Provosts (NCA&T and UNCG) since [JSNN](#) is a joint program between both universities

Periodically met with the Provosts together and individually

Represented JSNN at events and meetings with both universities (~200 events per year)

- Four commencements in December 2024 and eight commencements in May 2025
- Homecoming and convocation events
- Professional development activities
- Search committees with administrative candidates

Led and hosted JSNN events (~200 events per year)

- Meetings with Dean's Office staff and Associate Dean every week
- Meetings with other key staff members every other week
- Meetings with Chairs and all staff members monthly and as needed
- Meetings with all faculty every other month
- Hosted and gave tours to visiting groups (e.g., Sandia National Labs, NCInnovation, NSF, NNCO)

Learned about role of the Dean and administrative leadership with two universities

Used position to share ideas, when relevant and appropriate, between universities

Served on Task Force to update UNCG's Post-Tenure Review Policy

Worked with UNCG Deans with Graduate Program Reinvestment Process

Host for multiple external groups for visits to JSNN (e.g., [NIST](#), [NNCO](#), [NCInnovation](#), companies)

Represented JSNN at various events hosted at JSNN (e.g., [Draelos Scholars](#) event, [NanoImpacts](#), etc.)

Assisted with the hiring of four faculty and four staff members with additional faculty and staff searches ongoing

### ***-Identified and Addressed Unit-Level Issues at JSNN***

Need for departmental authority

- Empowered Department Chairs to be more independent
- Clarified roles and responsibilities within departments and in the Dean's Office

Updated policies to be compliant with the respective parent universities

- Developed workload guidelines for Nanoscience and Nanoengineering
- Developed practices to ensure compliance with Teaching Effectiveness Policy changes
- Worked with both departments to update departmental policies

Developed a Space and Equipment Committee to advise on key issues

Worked with UNCG and NCA&T to update the [JSNN website](#)

## **LEADERSHIP ACCOMPLISHMENTS AS DEPARTMENT HEAD (AUGUST 2017 - MAY 2024)**

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### ***-Support and Recruitment of Faculty and Staff of the Department of Chemistry and Biochemistry***

Hired three Assistant Professors who have each been highly successful

- Each has two or more major external grants with the NSF and/or NIH

- All three successfully went up early for promotion and tenure

Hired four Professional Track Faculty members (Lecturers)

Hired five staff members, including two PhD-level instrumentation managers

Negotiated with faculty and administration on conditions for phased retirements of two faculty members

Supported the successful promotion of seven Tenured/Tenure-Track Faculty, three Professional Track Faculty, and a Department Head in a different department

Wrote several nomination or supporting letters for awards for departmental faculty, staff, and students

- Teaching and research excellence for faculty (College, University, and UNC System awards)
- Staff excellence (College, University, and UNC System awards)
- Student excellence awards for students (Honors College, Graduate School)
- External awards for faculty (Camille Dreyfus, Sloan, Cottrell, ACS, Midland, MMMA, etc.)
- External awards for students (Goldwater)

Advocated for and received three junior research leaves and five senior research leaves

Managed the successful retention of a faculty member being recruited away

Communicated with NSF and NIH program officers to get multiple junior faculty on review panels

Developed clearer structure for peer evaluations and annual reviews of faculty

Incorporated the assessment of active learning techniques on the peer evaluation rubric and in annual reviews

Supported research activity that resulted in a 50% increase in awarded external grants, increasing from \$2.2M to \$3.3M for 3-year average compared to prior to being Dept Head

Managed several years of budget cuts while maintaining morale and productivity of the department

#### ***-Management of Logistics in the Department of Chemistry and Biochemistry***

Developed a Departmental Instrument of Governance

Managed two major modifications to the Departmental Workload guidelines

Assembled a Program Review document (available upon request) and managed the external review process

Updated the Departmental Promotion and Tenure procedures, which added inclusive excellence efforts

Added students to safety committee and initiated Safety Awards

Established, reviewed, and revised policies and procedures to manage teaching and research spaces during COVID-19

Raised the visibility of departmental accomplishments through a [LinkedIn](#) page and [Twitter](#) (now X) profile

#### ***-Creation of a Departmental Culture of Intentional Inclusion in the Department of Chemistry and Biochemistry***

Established a departmental Diversity Statement and DEI committee ([awarded DEI award from the American Chemical Society](#) and [College of Arts and Sciences](#))

Moderated multiple virtual Town Halls in 2020 to address issues related to COVID-19 and racial injustice

Incorporated additional important areas into the annual safety talks that are related to health and safety, including:

- LGBTQ+ respect and awareness
- UNCG Police Department guidance on active shooters and campus safety
- Mental Health Awareness
- UNCG Recreation and Wellness opportunities
- UNCG Athletics options

Included Professional Track Faculty in faculty meetings and on relevant Departmental committees

### ***-Collaboration with Units and Groups Outside of the Department of Chemistry and Biochemistry***

Supported events that connected people across the College of Arts and Sciences and the Greater Greensboro Community

- “[The Underground Railroad Tree](#)” Project, which was a cross-disciplinary collaboration and multimedia exhibit in downtown Greensboro that explored a single tulip poplar tree from historical, scientific, and artistic perspectives
- “[Dialogue Across Disciplines: Bridging Humanities, Arts & Sciences](#)” with actor, science advocate, and author Alan Alda
- Financial and logistical assistance for the [Medicinal Chemistry Collaborative](#), [RISE Network](#), [Science Olympiad](#), and [Science Everywhere](#). These groups and events connect scientists with outside members of the community and encourage future scientists.
- Participated in a tree-planting ceremony outside of the Nursing and Instructional Building with the family of Dr. Steven Nils Ulosevich and kept in touch with family by sending pictures of the tree.
- Taught a First Year Experience course, in collaboration with the Division of Student Success, that focused on Chemistry and Biochemistry majors.

Worked with School of Nursing and other various departments with the design and outfitting of a [new Nursing and Instructional Building](#)

- Oversaw the development of designs and blueprints for General Chemistry labs
- Worked with Development for potential naming of spaces
- Led discussions with Dean and Provost to acquire funds to outfit the new labs

Cooperated with Facilities Operations on renovations and several repairs

- Converted a lecture space into research space with fume hoods, gasses, and sinks
- Advocated to have the floor of a penthouse sealed to prevent future leaks into research spaces
- Communicated the consequences of frequent flooding issues which led to the installation of an additional drain and clearing out of local drains, in addition to the installation of “water bugs” in high-risk locations to get alerts for water issues

Collaborated with the Joint School of Nanoscience and Nanoengineering

- Assisted in the interviews and recruitment of their Dean and Nanoscience Department Head
- Cooperated with their instrument manager to repair equipment (700 MHz NMR)
- Transferred underutilized equipment to UNCG (XRD)
- Collaborated with faculty at JSNN with recruitment of graduate students

Assisted the Dean of Students Office and Office of Student Rights and Responsibilities

- Participated on several search committees for Assistant Deans
- Served on a Task Force to update the hearing process and procedures for violations of Student Code of Conduct or Academic Integrity Policy
- Collaborated with Dean of Students with various student issues that have occurred in the Department

Worked with Advancement to connect with donors and alumni

- Connected with a donor to secure a \$50K gift to help with a renovation
- Maintained positive relationships with a prior faculty member that led to a \$1.3M gift in her will

### **GRANTS FUNDED (PI UNLESS NOTED)**

#### **External:**

“Collaborative Research: Broadening Instructional Innovation in the Chemistry Laboratory through Excellence in Curriculum Development” *IUSE (DUE-2337028)*, **February 2024 - January 2029**, NSF, \$1,984,640 total (\$967,316 total to UNCG) for research expenses. PI = Popova (UNCG) and Neiles (SMCM).

“TAK1 Inhibition by (5Z)-7-Oxozeaenol Analogues for Anticancer Leads” *R15 (CA246491)*, **December 2019 -**

**November 2023**, NIH, \$404,939 total (\$286,908 direct costs) for research expenses.

“CAREER: Generation of Cyanocarbenes from Alkynes and Azides” CAREER Program (1351883), **August 2014 – July 2019**, NSF Chemical Structure, Dynamics & Mechanism B, \$450,000 total (\$313,591 direct costs) for research expenses.

“Synthesis and Biological Evaluation of Potent Neuroprotective Agents” North Carolina Biotechnology Center (2014-BRG-1205), **July 2014 – December 2015**, Biotechnology Research Grant Program, \$100,000 + \$10,000 matching funds from UNCG (no indirect costs) for research expenses.

“Formation of Cyano-Carbenes from Alkynes and Azides Using Hypervalent Iodine” ACS PRF (52488-DNII), **September 2012 - August 2014**, DNI, \$100,000 (no indirect costs) for research expenses.

“Optimization of High Selectivity Antagonist Hits for the GPR55 Receptor” R21 (NS077347), **July 2012 - June 2014**, NIH, \$418,563 total (\$86,000 direct costs for Croatt Group’s contribution).

-This is a multi-PI grant with Mary Abood and Patricia Reggio.

“Molecular Characterization of GPR35 and GPR55, Putative Cannabinoid Receptors” R01 (DA023204), **June 2012 - May 2017**, NIH, \$1,502,600 total (\$209,201 direct costs for Croatt Group’s contribution).

-PI = Mary Abood; Co-PI = Mitchell Croatt, Patricia Reggio.

### **Internal:**

“Towards the Synthesis of Jesterone Dimer” Undergraduate Research and Creativity Award, **Fall 2024 – Spring 2025**, UNCG, \$3,000 for Ms. Sydney Jones.

“Use of a Regioselective Claisen Rearrangement: Total Synthesis of Cycloepoxydon Dimer” Undergraduate Research and Creativity Award, **Summer 2024**, UNCG, \$3,000 for Ms. Emily Guin.

“Regioselectivity of the Claisen Rearrangement Reaction: Research on Tethered Amines” Undergraduate Research and Creativity Award, **Summer 2023**, UNCG, \$1,500 for Mr. Nolan Garci.

Dorothy Munroe Student Research Grant, **Fall 2023**, UNCG, \$993 for Ms. Christina Wiswell.

Dorothy Munroe Student Research Grant, **Fall 2023**, UNCG, \$971 for Mr. David Tanas.

“Regioselectivity Study of meta-Substituted Allyloxybenzenes” Undergraduate Research and Creativity Award, **Summer 2023**, UNCG, \$3,000 for Ms. Emily Guin.

“Substrate Study for Mechanistic Analysis: Role of Allylic Groups in the Claisen Rearrangement” Undergraduate Research and Creativity Award, **Summer 2022**, UNCG, \$3,000 for Mr. Logan Brown.

“New Reaction Discovery: Reactivity of Cyanocarbenes with Electron-Rich Systems” Undergraduate Research and Creativity Award, **Fall 2021**, UNCG, \$2,500 for Ms. Ashley Brown.

“Development of New Reactions: Synthesis of 1-Indanone and Derivatives” Undergraduate Research and Creativity Award, **Summer 2020**, UNCG, \$2,000 for Mr. Charles Crawford.

“Design and Development of New Reactions: Utilization of Strained Rings and Reactive Intermediates” Undergraduate Research and Creativity Award, **Summer 2018**, UNCG, \$3,000 for Mr. Saad Sohail.

“Large Scale Synthesis of Mevalocidin, a Potential Organic Herbicide” Undergraduate Research and Creativity Award, **Summer 2018**, UNCG, \$3,000 for Mr. Jamison Breeding.

“Molecular Engineered Chemistry for Health and Wellness, and Vibrant Communities” Giant Steps Research Development Grant **Spring 2018**, UNCG, \$25,000 total direct to team.

-PI = Hemali Rathnayake; Co-PI = Mitchell Croatt, Kimberly Petersen, Dennis LaJeunesse

“GPR55 Antagonist” Undergraduate Research and Creativity Award, **Summer 2016**, UNCG, \$2,500 for Mr. Mark Zachary Adkins.

“Synthesis of Novel Compounds from Renewable Sources” *Undergraduate Research and Creativity Award*, **Summer 2016**, UNCG, \$2,500 for Mr. Peter Matusik.

“Reactions of hypervalent iodonium alkynyl triflates with azides: Cyclopropanation cyanocarbene reactions” *Undergraduate Research and Creativity Award*, **Summer 2015, Fall 2015**, UNCG, \$3,000 for Ms. A. Christina F. Hairston.

“Exploration and Optimization of a Novel Decarboxylative Coupling Reaction” *Undergraduate Research and Creativity Award*, **Summer 2014**, UNCG, \$2,500 for Ms. Rupa Vummalaneni.

“Exploration and Optimization of a Novel Decarboxylative Coupling Reaction” *Undergraduate Research and Creativity Award*, **Summer 2013**, UNCG, \$2,000 for Ms. Sommayah Sayed.

“Exploration of New Reagents to Access Novel Reactivity” *Undergraduate Research and Creativity Award*, **2013-2014 Academic Year**, UNCG, \$3,000 for Mr. Daniel Nasrallah.

“Use of Nitroso Compounds in Organometallic Cycloaddition Reactions” *New Faculty Research Grant*, **2011-2012 Academic Year**, UNCG, \$5,000 for research expenses.

“Use of Nitroso Compounds in Organometallic Cycloaddition Reactions” *Summer Excellence Research Grant*, **2011**, UNCG, \$5,000 for summer salary of Dr. Croatt.

“New Reaction Design: Alkynes and Electrophilic Azides” *Undergraduate Research Assistantship Proposal*, **2011-2012 Academic Year**, UNCG, \$3,000 for Ms. Mudita Patel.

## PUBLICATIONS

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44) Wiswell, C. N.; Croatt, M. P. “Alkynes and Azides: Beyond Click Chemistry” *Chemical Communications*, **2026**, 62, 3178-3193.

43) Wiswell, C. N.; Tanas, D. K.; Croatt, M. P. “Practical Conversion of Carboxylic Acids to Nitriles” *Nature Catalysis* **2025**, 8, 1262-1263.

42) Tanas, D. K.; Li, R.; Khan, H. H.; Johnson, T. C.; Brown, L. E.; West, P. M.; Guin, E. J.; Jones, S. E.; Garci, N. K.; Canning, D. M.; Ramirez, E. J.; Sekhon, G. S.; Pierce, T. H.; Ustoyev, A.; Croatt, M. P. “Regioselectivity Study of Contrasteric Aromatic Claisen Rearrangements and Their Utilization in the Total Syntheses of 5-Hydroxymellein and Botyrosicoumarin A” *The Journal of Organic Chemistry* **2025**, 90, 12956-12963.

41) Ward, L. W.; Hoang, J.; Croatt, M. P.; Walsh, J.; Popova, M. “Remote teaching as the catalyst for change in teaching values and practices: experiences of instructors within one chemistry department during the COVID-19 pandemic” *Frontiers in Education* **2024**, 9, 1371132.

40) Ustoyev, A.; Croatt, M. P. “Arene Additions” *Nature Chemistry* **2023**, 15, 745-746.

39) Figuerola-Asencio, L; Morales, P.; Zhao, P.; Hurst, D. P.; Sayed, S. S.; Colón, K. L.; Gómez-Cañas, M.; Fernández-Ruiz, J.; Croatt, M. P.; Reggio, P. H.; Abood, M. E.; Jagerovic, N. “Thienopyrimidine Derivatives as GPR55 Receptor Antagonists: Insight into Structure–Activity Relationship” *ACS Medicinal Chemistry Letters* **2023**, 14, 18-25.

38) Al Subeh, Z. Y.; Ustoyev, A.; Obike, J. C.; West, P. M.; Khin, M.; Burdette, J. E.; Pearce, C. J.; Oberlies, N. H.; Croatt, M. P. “Semisynthesis of Hypothemycin Analogues Targeting the C8-C9 Diol” *Journal of Natural Products* **2022**, 85, 2018-2025.

37) Abu Deiab, G. I.; Croatt, M. P. “Prostacyclin (PGI<sub>2</sub>) scaffolds in medicinal chemistry: current and emerging drugs” *Medicinal Chemistry Research* **2022**, 31, 1241-1251.

36) Alam, K.; Li, T.; Hyatt, I. F. D.; Croatt, M. P. “AlCl<sub>3</sub>-catalyzed regioselective intermolecular  $\alpha$  or  $\gamma$  mono- or  $\alpha,\gamma$  bis-hydroalkoxylation of allenamides with alcohols” *Organic & Biomolecular Chemistry* **2022**, 20, 4719-4723.

- 35) Alam, K.; McFee, E. C.; Croatt, M. P. "Rapid and Facile Synthesis of Isomaleimides: Dehydration of Maleamic Acids using Methanesulfonyl Chloride" *Synthesis* **2022**, *54*, 3085-3092.
- 34) Al Subeh, Z. Y.; Raja, H. A.; Obike, J. C.; Pearce, C. J.; Croatt, M. P.; Oberlies, N. H. "Media and strain studies for the scaled production of cis-enone resorcylic acid lactones as feedstocks for semisynthesis" *The Journal of Antibiotics* **2021**, *74*, 496-507.
- 33) Al-Huniti, M. H.; Croatt, M. P. "Metal-Catalyzed Dehydration of Primary Amides to Nitriles" *Asian Journal of Organic Chemistry* **2019**, *8*, 1791-1799. (invited mini-review)
- 32) Abu Deiab, G. I.; Croatt, M. P. "Synthetic Approaches to Isocarbacyclin and Analogues as Potential Neuroprotective Agents Against Ischemic Stroke" *Bioorganic & Medicinal Chemistry* **2019**, *27*, 338-342.
- 31) Al-Huniti, M. H.; Perez, M. A.; Garr, M. K.; Croatt, M. P. "Palladium-Catalyzed Chemoselective Protodecarboxylation of Polyenoic Acids" *Organic Letters* **2018**, *23*, 7375-7379.
- 30) McPherson, K. E.; Croatt, M. P.; Morehead, Jr. A. T.; Sargent, A. L. "DFT Mechanistic Investigation of an Enantioselective Tsuji-Trost Allylation Reaction" *Organometallics* **2018**, *37*, 3791-3802.
- 29) Al-Huniti, M. H.; Rivera-Chávez, J.; Colón, K. L.; Stanley, J. L.; Burdette, J. E.; Pearce, C. J.; Oberlies, N. H.; Croatt, M. P. "Development and Utilization of a Palladium-Catalyzed Dehydration of Primary Amides To Form Nitriles" *Organic Letters* **2018**, *20*, 6046-6050. (reached the 6<sup>th</sup> most downloaded article from journal over 12 months)
- 28) Al-Huniti, M. H.; Sullivan, Z. B.; Stanley, J. L.; Carson, J. A.; Hyatt, I. F. D.; Hairston, A. C.; Croatt, M. P. "Hypervalent Iodonium Alkynyl Triflate Generated Phenylcyanocarbene and Its Reactivity with Aromatic Systems" *The Journal of Organic Chemistry* **2017**, *82*, 11772-11780. (Special Issue on Hypervalent Iodine)
- 27) Paguigan, N. D.; Al-Huniti, M. H.; Raja, H. A.; Czarnecki, A.; Burdette, J. E.; González-Medina, M.; Medina-Franco, J. L.; Polyak, S. J.; Pearce, C. J.; Croatt, M. P.; Oberlies, N. H. "Chemoselective fluorination and chemoinformatic analysis of griseofulvin: natural vs fluorinated fungal metabolites" *Bioorganic & Medicinal Chemistry* **2017**, *25*, 5238-5246.
- 26) Fakhouri, L.; Cook, C. D.; Al-Huniti, M. H.; Console-Bram, L. M.; Hurst, D. P.; Spano, M. B. S.; Nasrallah, D. J.; Caron, M. G.; Barak, L. S.; Reggio, P. H.; Abood, M. E.; Croatt, M. P. "Design, Synthesis, and Biological Evaluation of GPR55 Agonists" *Bioorganic & Medicinal Chemistry* **2017**, *25*, 4355-4367.
- 25) Abu-Deiab, G. I.; Al-Huniti, M. H.; Hyatt, I. F. D.; Nagy, E. E.; Gettys, K. E.; Sayed, S. S.; Joliat, C. M.; Daniel, P. E.; Vummalaneni, R. M.; Morehead, A. T.; Sargent, A. L.; Croatt, M. P. "Decarboxylative and Dehydrative Coupling of Dienoic Acids and Pentadienyl Alcohols to Form 1,3,6,8-Tetraenes" *Beilstein Journal of Organic Chemistry* **2017**, *13*, 384-392.
- 24) Abdalhameed, M. M.; Zhao, P.; Hurst, D. P.; Reggio, P. H.; Abood, M. E.; Croatt, M. P. "Structure-Activity Relationships of Benzothiazole GPR35 Antagonists" *Bioorganic & Medicinal Chemistry Letters* **2017**, *27*, 612-615.
- 23) Abu-Deiab, G. I.; Croatt, M. P. "Step-Economical Synthesis of Clinprost and Analogues Utilizing a Novel Decarboxylation Reaction" In *Strategies and Tactics in Organic Synthesis* Harmata, M. Ed.; Academic Press, **2017**, Vol. 12, pp 95-117. (invited book chapter)
- 22) Meza-Aviña, M. E.; Lingerfelt, M. A.; Console-Bram, L. M.; Gamage, T. F.; Sharir, H.; Gettys, K. E.; Hurst, D. P.; Kotsikorou, E.; Shore, D. M.; Caron, M. G.; Rao, N.; Barak, L. S.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Design, Synthesis, and Analysis of Antagonists of GPR55: Piperidine-Substituted 1,3,4-Oxadiazol-2-ones" *Bioorganic & Medicinal Chemistry Letters* **2016**, *26*, 1827-1830.
- 21) Sy-Cordero, A. A.; Figueroa, M.; Raja, H. A.; Meza-Aviña, M. E.; Croatt, M. P.; Adcock, A. F.; Kroll, D. J.; Wani, M. C.; Pearce, C. J.; Oberlies, N. H. "Spiroscytalin, a New Tetramic Acid and Other Metabolites of Mixed Biogenesis from *Scytalidium cuboideum*" *Tetrahedron* **2015**, *71*, 8899-8904.
- 20) Fakhouri, L.; El-Elimat, T.; Hurst, D. P.; Reggio, P. H.; Pearce, C. J.; Oberlies, N. H.; Croatt, M. P. "Isolation, Semisynthesis, Covalent Docking and Transforming Growth Factor Beta-Activated Kinase 1 (TAK1)-Inhibitory Activities of (5Z)-7-Oxozeanol Analogues" *Bioorganic & Medicinal Chemistry* **2015**, *23*, 6993-6999.

- 19) Hyatt, I. F. D.; Nasrallah, D. J.; Maxwell, M. A.; Hairston, A. C. F.; Abdalhameed, M. M.; Croatt, M. P. "Formation and *in situ* Reactions of Hypervalent Iodonium Alkynyl Triflates to Form Cyanocarbenes" *Chemical Communications* **2015**, *51*, 5287-5289. (invited article for 2015 Emerging Investigators Special Issue)
- 18) Nasrallah, D. J.; Croatt, M. P. "Rhodium(I)-Catalyzed [2+2+2+2] Cycloaddition of Dienes to Form Cyclooctatetraenes" *European Journal of Organic Chemistry* **2014**, 3767-3772.
- 17) Kotsikorou, E.; Sharir, H.; Shore, D. M.; Hurst, D. P.; Lynch, D. L.; Madrigal, K. E.; Heynen-Genel, S.; Milan, L. B.; Chung, T. D. Y.; Seltzman, H. H.; Bai, Y.; Caron, M. G.; Barak, L. S.; Croatt, M. P.; Abood, M. E.; Reggio, P. H. "Identification of the GPR55 Antagonist Binding Site Using a Novel Set of High Potency GPR55 Selective Ligands" *Biochemistry* **2013**, *52*, 9456-9469.
- 16) Hyatt, I. F. D.; Nasrallah, D. J.; Croatt, M. P. "Synthesis of Hypervalent Iodonium Alkynyl Triflates for the Application of Generating Cyanocarbenes" *Journal of Visualized Experiments* **2013**, *79*, e50886, doi: 10.3791/50886.
- 15) Althagafy, H. S.; Meza-Aviña, M. E.; Oberlies, N. H.; Croatt, M. P. "Mechanistic Study of the Biomimetic Synthesis of Flavonolignan Diastereoisomers in Milk Thistle" *The Journal of Organic Chemistry* **2013**, *78*, 7594-7600.
- 14) Meza-Aviña, M. E.; Patel, M. K.; Croatt, M. P. "Exploring the reactivity of 1,5-disubstituted sulfonyl-triazoles: Thermolysis and Rh(II)-catalyzed synthesis of  $\alpha$ -sulfonyl nitriles" *Tetrahedron* **2013**, *69*, 7840-7846. (invited article for Symposium-In-Print on Professor Wender)
- 13) Althagafy, H. S.; Graf, T. N.; Sy-Cordero, A. A.; Gufford, B. T.; Paine, M. F.; Wagoner, J.; Polyak, S. J.; Croatt, M. P.; Oberlies, N. H. "Semisynthesis, Cytotoxicity, Antiviral Activity, and Drug Interaction Liability of 7-O-methylated Analogues of Flavonolignans from Milk Thistle" *Bioorganic & Medicinal Chemistry* **2013**, *21*, 3919-3926.
- 12) Nagy, E. E.; Hyatt, I. F. D.; Gettys, K. E.; Yeazell, S. T.; Frempong Jr., S. K.; Croatt, M. P. "Sequential Pd(0)-, Rh(I)-, and Ru(II)-Catalyzed Reactions in a Nine-Step Synthesis of Clinprost" *Organic Letters* **2013**, *15*, 586-589. (highlighted in *SYNFACTS* **2013**, *9*, 470)
- 11) Hyatt, I. F. D.; Meza-Aviña, M. E.; Croatt, M. P. "Alkynes and Azides: Not Just for Click Reactions" *Synlett* **2012**, *23*, 2869-2874. (invited *SYNFACTS* article)
- 10) Hyatt, I. F. D.; Croatt, M. P. "Reactions of Hypervalent Iodonium Alkynyl Triflates with Azides: Generation of Cyanocarbenes" *Angewandte Chemie International Edition* **2012**, *51*, 7511-7514. (featured with the front cover graphic of that issue of *Angewandte Chemie International Edition* and highlighted in *Angewandte Chemie International Edition* **2012**, *51*, 12169-12171.)
- 9) Meza-Aviña, M. E.; Patel, M. K.; Lee, C. B.; Dietz, T. J.; Croatt, M. P. "Selective Formation of 1,5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl Azides" *Organic Letters* **2011**, *13*, 2984-2987. (highlighted in *SYNFACTS* **2011**, *9*, 1005)
- 8) Croatt, M. P.; Carreira, E. M. "Probing the Role of the Mycosamine C2'-OH on the Activity of Amphotericin B" *Organic Letters* **2011**, *13*, 1390-1393.
- 7) Croatt, M. P.; Wender, P. A. "The Diene Effect: The Design, Development, and Mechanistic Investigation of Metal-Catalyzed Diene-yne, Diene-ene, and Diene-allene [2+2+1] Cycloaddition Reactions" *European Journal of Organic Chemistry* **2010**, 19-32.
- 6) Wender, P. A.; Croatt, M. P.; Kühn, B. "Rhodium(I)-Catalyzed [2+2], [2+2+2], and [2+2+2+2] Cycloadditions of Dienes or Alkynes with a Bis-ene" *Organometallics* **2009**, *28*, 5841-5844.
- 5) Wender, P. A.; Croatt, M. P.; Deschamps, N. M. "Higher Order Cycloadditions" In *Comprehensive Organometallic Chemistry III*; Crabtree, R. H.; Mingos, D. M. P. Eds.; Elsevier: Oxford, **2007**; Vol. 10, pp 603-648.
- 4) Croatt, M. P.; Williams, T. J.; Wender, P. A. "Carbonyl(chloro)bis(triphenylphosphine)rhodium(I)" *Encyclopedia of Reagents for Organic Synthesis* John Wiley & Sons, Ltd., **2006**, online.
- 3) Wender, P. A.; Croatt, M. P.; Deschamps, N. M. "Metal-Catalyzed [2+2+1] Cycloadditions of 1,3-Dienes, Allenes, and CO" *Angewandte Chemie International Edition* **2006**, *45*, 2459-2462.

2) Wender, P. A.; Croatt, M. P.; Witulski, B. "New Reactions and Step Economy: The Total Synthesis of (±)-Salsolene Oxide Based on the Type II Transition Metal-Catalyzed Intramolecular [4+4] Cycloaddition" *Tetrahedron* **2006**, *62*, 7505-7511.

1) Wender, P. A.; Croatt, M. P.; Deschamps, N. M. "Rhodium(I)-Catalyzed [2+2+1] Cycloadditions of 1,3-Dienes, Alkenes, and CO" *Journal of the American Chemical Society* **2004**, *126*, 5948-5949.

## PATENTS

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Croatt, M. P., Fakhouri, L.; Oberlies, N. H.; Pearce, C. J. "Non-Aromatic Difluoro Analogues of Resorcylic Acid Lactones" **Patent Number 10434085**, Issue Date 10/08/2019, and **Patent Number 10632099**, Issue Date 04/28/2020.

## EXPERT WITNESS TESTIMONY

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United States Federal Court, Virginia Eastern District Court, Norfolk, January 18, 2017

Case 4:15-cr-00018: *Criminal trial by jury*

Defendant: Benjamin Galecki

Proffered and qualified as an expert in medicinal and organic chemistry

Provided expert testimony and opinion on the chemical similarity between JWH-018 and UR-144 and between JWH-018 and XLR-11, with respect to the Controlled Substance Analogue Act

## INVITED RESEARCH TALKS

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50) "JSNN – Home to Cutting-Edge Research Here in Greensboro" *Greensboro Kiwanis Club* **December 5, 2024**, Greensboro, NC.

49) "Using Semisynthesis to Ideally Identify Medicinal Leads" *Adelphi University* **February 1, 2023**, Garden City, NY.

48) "Discovery of Medicinal Leads by Synergistic Collaboration of Synthetic and Natural Product Chemists" *Southwest Regional Meeting of the ACS* **November 8, 2022**, Baton Rouge, LA.

47) "Approaches Towards a Diverse Field. Intentional DEI Actions at UNCG" *National Diversity Equity Workshop* **August 2, 2022**, Alexandria, VA.

XX) "Exploring the Many Methods for New Reaction Design and Discovery" *Johnson C. Smith University* **October 1, 2020**, Charlotte, NC. – Cancelled due to COVID.

XX) "TBD" *St. Augustine's University* **September 10, 2020**, Raleigh, NC. – Cancelled due to COVID.

46) "Favoring Luck by Prepared Minds: Design and Discovery of New Reactions" *University of North Carolina at Greensboro* **February 7, 2020**, Greensboro, NC.

45) "New Reaction Discovery Using Mechanism, Synthesis, and Semi-Synthesis" *University of Michigan* **January 30, 2020**, Ann Arbor, MI.

44) "Using Semisynthesis to Generate Medicinal Leads and New Reactions" *Mona Symposium: Natural Products and Medicinal Chemistry* **January 6-9 21, 2020**, Kingston, Jamaica.

43) "Semisynthesis: Unexpected Pathway to Novel Methodology Development" *Southeastern Meeting of the American Chemical Society* **October 21, 2019**, Savannah, GA.

42) "Design and Discovery of New Reactions: Cyanocarbenes, Decarboxylations, and Dehydrations" *Florida Heterocyclic and Synthetic Conference* **March 4-7, 2018**, Gainesville, FL.

41) "Design, Discovery, and Development of New Reactions to Create New Compounds" *Joint School of Nanoscience and Nanoengineering* **Feb. 3, 2018**, Greensboro, NC.

40) "New Reactions and Step-Economical Syntheses: Inspiration from Wender Group Members" *Stanford University*

– 2017 Wender Symposium **July 1, 2017**, Palo Alto, CA.

- 39) “Using Strategy, Design, and Luck to Approach the Ideal Synthesis” *Tennessee Tech University* **Oct. 28, 2016**, Cookeville, TN.
- 38) “Synthesis and Reactivity of Hypervalent Iodonium Alkynyl Triflates with Azides: Formation of Cyanocarbenes” *5<sup>th</sup> International Conference on Hypervalent Iodine Chemistry* **July 4, 2016**, Les Diablerets, Switzerland.
- 37) “Study of New Reactions: Finding Needles in the Haystack” *University of Alabama at Huntsville* **Feb. 5, 2016**, Huntsville, AL.
- 36) “Targeted and Serendipitous Discovery of New Reactions” *University of Virginia* **Oct. 2, 2015**, Charlottesville, VA.
- 35) “New Reactions, New Targets, and New Diversification Points: A Holistic Approach to the Ideal Synthesis” *Research Triangle Institute International* **Sept. 10, 2015**, Raleigh, NC.
- 34) “Towards the Ideal Synthesis: Discovery and Design of New Reactions” *University of North Carolina at Greensboro* **Feb. 27, 2015**, Greensboro, NC.
- 33) “Utilizing Desperation and Luck to Approach the Ideal Synthesis” *University of North Carolina at Wilmington* **Oct. 24, 2014**, Wilmington, NC.
- 32) “Synergistic Use of Step-Saving Strategies in the Synthesis of Clinprost” *248<sup>th</sup> National ACS Meeting* **Aug. 10, 2014**, San Francisco, CA.
- 31) “Synthesis of Isocarbacyclin Analogues Utilizing a Novel Decarboxylation Reaction and Cyanocarbenes” *Organic Reactions & Processes Gordon Research Conference* **July 14, 2014**, Bryant University, RI.
- 30) “Lessons Learned from Teaching and Researching Organic Chemistry” *Winston-Salem State University* **April 22, 2014**, Winston-Salem, NC.
- 29) “Efforts to Approach the Ideal Synthesis: New Reactions, Function-Oriented Synthesis, and Late-Stage Diversification” *University of California at Merced* **April 18, 2014**, Merced, CA.
- 28) “Efforts to Approach the Ideal Synthesis: New Reactions, Function-Oriented Synthesis, and Late-Stage Diversification” *University of Texas at San Antonio* **April 11, 2014**, San Antonio, TX.
- 27) “Significance of New Approaches: How Umpolung Translated Triazoles into Cyanocarbenes” *San Jose State University* **April 8, 2014**, San Jose, CA.
- 26) “Significance of New Approaches: How Umpolung Translated Triazoles into Cyanocarbenes” *University of Southern California* **April 3, 2014**, Los Angeles, CA.
- 25) “Significance of New Approaches: How Umpolung Translated Triazoles into Cyanocarbenes” *University of California at Irvine* **April 2, 2014**, Irvine, CA.
- 24) “Significance of New Approaches: How Umpolung Translated Triazoles into Cyanocarbenes” *University of Pittsburgh* **March 27, 2014**, Pittsburgh, PA.
- 23) “Discovery, Design, and Desperation: Three Excellent Tools for New Reactions” *University of Wisconsin at Madison* **March 13, 2014**, Madison, WI.
- 22) “Discovery, Design, and Desperation: Three Excellent Tools for New Reactions” *University of Minnesota* **March 11, 2014**, Minneapolis, MN.
- 21) “New Reactions, Function-Oriented Synthesis, and Late-Stage Diversification: Three Additive Tools to Enhance Synthesis” *University of Texas at Austin* **March 7, 2014**, Austin, TX.
- 20) “Discovery and Design of New Reactions and Their Impact on Strategies and Tactics to Synthesize Molecules”

*University of Houston* **March 4, 2014**, Houston, TX.

- 19) "Triazoles and Carbenes and Clinprost, Oh My!" *Ball State University* **Feb. 20, 2014**, Muncie, IN.
- 18) "Triazoles and Carbenes and Clinprost, Oh My!" *DePauw University* **Feb. 19, 2014**, Greencastle, IN.
- 17) "Triazoles and Carbenes and Clinprost, Oh My!" *Indiana State University* **Feb. 18, 2014**, Terre Haute, IN.
- 16) "Lessons Learned from Teaching and Researching Organic Chemistry" *Appalachian State University* **Jan. 24, 2014**, Boone, NC.
- 15) "Discovery, Design, and Desperation: Three Excellent Tools for New Reactions" *University of North Carolina at Chapel Hill* **Nov. 8, 2013**, Chapel Hill, NC.
- 14) "Cycloadditions, Carbenes, and Clinprost: Discovery, Design, and Utilization of Metal-Free and Metal-Catalyzed Reactions" *Virginia Tech* **Nov. 1, 2013**, Blacksburg, VA.
- 13) "Discovery, Design, and Dumb Luck: Three Equally Useful Tools for Synthetic Chemists" *North Carolina State University* **Oct. 14, 2013**, Raleigh, NC.
- 12) "Use of Three Additive Methods to Approach the Ideal Synthesis" *Wake Forest University* **Oct. 9, 2013**, Winston-Salem, NC.
- 11) "Design of New Reactions and Tools to Teach Organic Chemistry" *Davidson College* **Sept. 13, 2013**, Davidson, NC.
- 10) "Making Discoveries by Exploring New Areas of Both Research and Teaching" *Barton College* **Sept. 12, 2013**, Wilson, NC.
- 9) "Harnessing Reactive Intermediates in the Design of New Reactions" *Telluride Workshop on Accelerating Reaction Discovery* **Aug. 7, 2013**, Telluride, CO.
- 8) "ReactIR-Assisted Design and Development of New Reactions" *Mettler-Toledo Info Day/Symposium* **May 14, 2013**, Research Triangle Park, NC.
- 7) "New Methods in Organic Chemistry, From Synthesis to Teaching" *University of Western Florida* **April 5, 2013**, Pensacola, FL.
- 6) "Design, Discovery, and Utilization of Novel Metal-Catalyzed and Metal-Free Reactions" *Florida State University* **April 4, 2013**, Tallahassee, FL.
- 5) "Cycloadditions, Carbenes, and Clinprost: Discovery, Design, and Utilization of Metal-Free and Metal-Catalyzed Reactions" *University of Florida* **April 2, 2013**, Gainesville, FL.
- 4) "Towards the Ideal Synthesis: Design and Development of New Synthetic Strategies and Reactions" *The University of Southern Mississippi* **Sept. 9, 2011**, Hattiesburg, MS.
- 3) "Optimizing the Synthetic Methods to Explore Structure-Activity Relationships" *Triad Drug Discovery Discussion Group* **May 19, 2011**, Greensboro, NC.
- 2) "Step-Economical Synthesis: Exploration of the Options" *East Carolina University* **April 15, 2011**, Greenville, NC.
- 1) "Towards the Ideal Synthesis: New Methods for Shorter Syntheses" *North Carolina A&T State University* **April 7, 2011**, Greensboro, NC.

## CONFERENCE AND SYMPOSIUM ORGANIZATION

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Co-chair with Dr. Yi Xiao – *Gordon Research Conference: Organic Reactions and Processes*, **July 21-26, 2019**, Stonehill College, Easton, MA.

All-day symposium co-organizer with Dr. Simon Meek – *Southeast Regional Meeting of the American Chemical Society*, **Nov. 8-10, 2017**, Charlotte, NC.

All-day symposium co-organizer with Dr. Jennifer Love – *2017 Wender Symposium*, **July 1, 2017**, Palo Alto, CA.

## POSTER PRESENTATIONS

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155) Jones, Sydney; Tanas, David K.; Croatt, Mitchell P. Towards the Total Synthesis of the Epoxyquinone Natural Product Jesterone Dimer *Carolyn and Norwood Thomas Undergraduate Research Expo*, **2025**, Greensboro, NC.

154) Guin, Emily; Tanas, David K.; Croatt, Mitchell P. Studies Towards the Regioselective Claisen Rearrangement of Meta-Substituted Allyloxy Benzenes *Carolyn and Norwood Thomas Undergraduate Research and Creativity Expo*, **2025**, Greensboro, NC.

153) Garci, Nolan K.; Li, Runzi; Croatt, Mitchell P. Regioselectivity of the Claisen Rearrangement Reaction: Research on Tethered Amines. *UNCG 19th Annual Carolyn & Norwood Thomas Undergraduate Research Expo*, **2025**, Greensboro, NC.

152) Skarda, Jarom R.; Croatt, Mitchell P. Application of the Regioselective Aromatic-Claisen Rearrangement in the total syntheses of Violaceoid A, C and F *23rd Central North Carolina American Chemical Society Poster Vendor Night*, **2025**, Greensboro, NC.

151) Wiswell, Christina; Sohail, Saad; von Dolen, David; Croatt, Mitchell P. Studies of Reactivity of Cyanocarbenes with Linear Conjugated  $\pi$ -Systems and Rearrangement of Aryl Vinyl and Divinyl Cyclopropanes *23rd Central North Carolina American Chemical Society Poster Vendor Night*, **2025**, Greensboro, NC.

150) Tanas, David K.; Jones, Sydney E.; Canning, Drew; Croatt, Mitchell P. Total Synthesis of Biologically Relevant Natural Products: An Aromatic Claisen Rearrangement Application *23rd Central North Carolina American Chemical Society Poster Vendor Night*, **2025**, Greensboro, NC.

149) Tanas, David K.; Li, Ruzni; Johnson, Tangela; Khan, Harris; Brown, Logan; Guin, Emily; Jones, Sydney E.; Garci, Nolan; Pierce, Tanner; Croatt, Mitchell P. Investigations into the Contra-Steric Aromatic Claisen Rearrangement and Applications Towards the Synthesis of Important Molecules *National Spring ACS*, **2025**, San Diego, CA.

148) Wiswell, Christina; Sohail, Saad; von Dohlen, David Croatt, Mitchell P. Studies of the Reactivity of Cyanocarbenes with Dienes *SERMACS*, **2024**, Atlanta, GA.

147) Li, Runzi; Tanas, David K.; Khan, Harris H.; Guin, Emily J.; Johnson, Tangela C.; Garci, Nolan K.; Croatt, Mitchell P. Investigations of the Internal Base-Directed Regioselective Aromatic-Claisen Rearrangement *ACS Poster-Vendor Night*, **2024**, Greensboro, NC.

146) Wiswell, Christina; Sohail, Saad; von Dohlen, David Croatt, Mitchell P. Studies of the Reactivity of Cyanocarbenes with Dienes *ACS Poster-Vendor Night*, **2024**, Atlanta, GA.

145) Tanas, David; Jones, Sydney E.; Guin, Emily J.; Pierce, Tanner; Croatt, Mitchell P. Internal Base Directed Regioselective Aromatic-Claisen Rearrangement and Efforts Towards the Efficient Synthesis of Cycloepoxydon and Jesterone Dimers *ACS Poster-Vendor Night*, **2024**, Greensboro, NC.

144) Li, Runzi; Tanas, David K.; Khan, Harris H.; Guin, Emily J.; Johnson, Tangela C.; Garci, Nolan K.; Croatt, Mitchell P. Investigations of the Internal Base-Directed Regioselective Aromatic-Claisen Rearrangement *UNCG Graduate Showcase*, **2024**, Greensboro, NC.

143) Wiswell, Christina; Sohail, Saad; von Dohlen, David Croatt, Mitchell P. Studies of the Reactivity of Cyanocarbenes with Dienes *UNCG Graduate Showcase*, **2024**, Atlanta, GA.

- 142) Tanas, David; Jones, Sydney E.; Guin, Emily J.; Pierce, Tanner; Croatt, Mitchell P. Internal Base Directed Regioselective Aromatic-Claisen Rearrangement and Efforts Towards the Efficient Synthesis of Cycloepoxydon and Jesterone Dimers *UNCG Graduate Showcase*, **2024**, Greensboro, NC.
- 141) Develle, Grant; Korb, Sarah; Russo-Weatherly, Felix; Garci, Nolan; Croatt, Mitchell P.; Petersen, Kimberly; Walsh, Jerry Understanding the Biochemical Applications of pH Manipulation in Dairy Products *UNCG Undergraduate Research Expo*, **2024**, Greensboro, NC.
- 140) Guin, Emily; Croatt, Mitchell P. Studies Towards the Regioselective Claisen Rearrangement of Meta-Substituted Allyloxy Benzenes *UNCG Undergraduate Research Expo*, **2024**, Greensboro, NC.
- 139) Guin, Emily J.; Croatt, Mitchell P. Studies Towards the Regioselective Meta-Substituted Allyloxy Benzenes *Southern Conference Undergraduate Research Forum (SURF)*, **2023**, Wofford College, SC.
- 138) Tanas, David; Li, Runzi; Croatt, Mitchell P. Investigations of the Internal Base-Directed Regioselective Aromatic-Claisen Rearrangement *SERMACS*, **2023**, Durham, NC.
- 137) Tanas, David; Sekhon, Gurjant; Croatt, Mitchell P. Studies Towards the Regioselective Aromatic-Claisen Rearrangement of Gentisic Acid Derivatives *Accelerate to Industry (A2i)*, **2023**, Raleigh, NC.
- 136) Tanas, David; Sekhon, Gurjant; Croatt, Mitchell P. Studies Towards the Regioselective Aromatic-Claisen Rearrangement of Gentisic Acid Derivatives *CNC-ACS Poster Vendor Night*, **2023**, Greensboro, NC.
- 135) Brown, Logan E.; Ramirez, Emily J.; Croatt, Mitchell P. The Study of Organic Synthetic Techniques for Novel Syntheses of Drug Targets *UNCG Undergrad Research Expo*, **2023**, Greensboro, NC.
- 134) Brown, L.; Ustoyev, A.; West, P. M.; Croatt, M. "Influence of Various Migratory Alkyl Ethers in Regioselectivity of the Aromatic Claisen Rearrangement" *The Annual Biomedical Research Conference for Minoritized Scientists*, **2022**, Anaheim, CA.
- 133) Brown, L.; Ustoyev, A.; West, P. M.; Croatt, M. "Influence of Various Migratory Alkyl Ethers in Regioselectivity of the Aromatic Claisen Rearrangement" *The Southern Conference Undergraduate Research Forum*, **2022**, Spartanburg, SC.
- 132) Li, T.; Al Subeh, Z.; Ustoyev, A.; West, P. M.; Oberlies, N. H.; Croatt, M. P. "Semisynthesis of (5Z)-7-Oxozeaenol/Hypothemycin Analogues Targeting the C8-C9 Diol" *Gordon Research Conference: Organic Reactions & Processes* **2022**, Bryant University, RI.
- 131) Ustoyev, A.; West, P. M.; Croatt, M. P. "Towards the Synthesis of Ambuic Acid and Analogues" *Gordon Research Conference: Organic Reactions & Processes* **2022**, Bryant University, RI.
- 130) Li, T.; Al Subeh, Z.; Ustoyev, A.; West, P. M.; Oberlies, N. H.; Croatt, M. P. "Semisynthesis of (5Z)-7-Oxozeaenol/Hypothemycin Analogues Targeting the C8-C9 Diol" *20<sup>th</sup> Florida Heterocyclic Conference* **2022**, University of Florida, FL.
- 129) Ustoyev, A.; West, P. M.; Croatt, M. P. "Towards the Synthesis of Ambuic Acid and Analogues" *20<sup>th</sup> Florida Heterocyclic Conference* **2022**, University of Florida, FL.
- 128) West, P. M.; Ustoyev, A.; Croatt, M. "Towards the Total Synthesis of Ambuic Acid and Analogues" *16th Annual Carolyn & Norwood Thomas Undergraduate Research & Creativity Expo*, **2022**, Greensboro, NC.
- 127) Brown, L.; Alam, K.; Croatt, M. "Synthesis of Isomaleimide and its Reaction with Danishefsky's Diene in a Diels-Alder Fashion" *16th Annual Carolyn & Norwood Thomas Undergraduate Research & Creativity Expo*, **2022**, Greensboro, NC.
- 126) Brown, A.; Croatt, M. "Reactivity of Cyanocarbenes with Electron-Rich Systems" *16th Annual Carolyn & Norwood Thomas Undergraduate Research & Creativity Expo*, **2022**, Greensboro, NC.

- 125) Ustoyev, A.; West, P. M.; Croatt, M. P. "Towards the Synthesis of Ambuic Acid and Analogues" *262<sup>nd</sup> National Meeting of the American Chemical Society 2021*, Atlanta, GA (Virtual).
- 124) Li, T.; Al Subeh, Z.; Ustoyev, A.; West, P. M.; Oberlies, N. H.; Croatt, M. P. "Semi-Synthesis of (5Z)-7-Oxozeaenol/Hypothemycin Analogues for TAK-1 Inhibition" *262<sup>nd</sup> National Meeting of the American Chemical Society 2021*, Atlanta, GA.
- 123) West, P. M.; Ustoyev, A.; Croatt, M. P. "Towards the Total Synthesis of Ambuic Acid and Analogues" *262<sup>nd</sup> National Meeting of the American Chemical Society 2021*, Atlanta, GA (Virtual).
- 122) Ustoyev, A.; West, P. M.; Croatt, M. P. "Towards the Synthesis of Ambuic Acid and Analogues" *72<sup>nd</sup> Southeast Regional Meeting of the ACS 2021*, Birmingham, AL.
- 121) Alam, K.; Li, T.; Croatt, M. P. "Aluminum-Catalyzed Intermolecular Mono- and Bis-Hydroalkoxylation of Allenamides with Alcohols" *72<sup>nd</sup> Southeast Regional Meeting of the ACS 2021*, Birmingham, AL.
- 120) West, P. M.; Ustoyev, A.; Croatt, M. P. "Towards the Total Synthesis of Ambuic Acid and Analogues" *72<sup>nd</sup> Southeast Regional Meeting of the ACS 2021*, Birmingham, AL.
- 119) West, P. M.; Ustoyev, A.; Croatt, M. P. "Towards the Total Synthesis of Ambuic Acid and Analogues" *20<sup>th</sup> Central North Carolina American Chemical Society Poster Vendor Night 2021*, Greensboro, NC (Virtual).
- 118) Sohail, S.; Li, T.; Croatt, M. P. "Design and Development of Novel Reactions Utilizing Dienes, Strained Ring Systems, and Carbene Intermediates" *Graduate Research and Creative Activity Expo 2020*, Greensboro, NC.
- 117) Ustoyev, A.; West, P. M.; Reyes, P. A.; Croatt, M. P. "Synthesis of Ambuic Acid Analogues" *Graduate Research and Creative Activity Expo 2020*, Greensboro, NC.
- 116) Li, T.; Croatt, M. P. "Semi-Synthesis of 5Z-7-Oxozeaenol Analogues: Potential Analogues for TAK-1 Inhibition and Therapeutic Strategy for Ovarian Cancer" *19<sup>th</sup> Florida Heterocyclic Conference 2020*, University of Florida, FL.
- 115) Stanley, J.; Croatt, M. P. "Palladium Catalyzed Dehydrations of Primary Amides to Generate Nitriles" *19<sup>th</sup> Florida Heterocyclic Conference 2020*, University of Florida, FL.
- 114) Sohail, S.; Li, T.; Croatt, M. P. "Design and Development of Novel Reactions Utilizing Dienes, Strained Ring Systems, and Carbene Intermediates" *19<sup>th</sup> Florida Heterocyclic Conference 2020*, University of Florida, FL.
- 113) Ustoyev, A.; West, P. M.; Reyes, P. A.; Croatt, M. P. "Synthesis of Ambuic Acid Analogues" *19<sup>th</sup> Florida Heterocyclic Conference 2020*, University of Florida, FL.
- 112) Ustoyev, A.; West, P. M.; Croatt, M. P. "Synthesis of Ambuic Acid Analogues" *Gordon Research Conference: Organic Reactions & Processes 2019*, Stonehill College, MA.
- 111) Al-Huniti, M. H.; Croatt, M. P.; Oberlies, N.; Rivera-Chavez, J. "Palladium-Catalyzed Chemoselective Dehydration of Primary Amides" *70<sup>th</sup> Southeast Regional Meeting of the ACS 2018*, Augusta, GA.
- 110) Stanley, J. L.; Sohail, S. B.; Croatt, M. P.; Al-Huniti, M. H.; Hyatt, I. F. D.; Sullivan, Z. B.; Carson, J. A. "Croatt Research Group: Reactivity of Cyanocarbenes" *ACS 18<sup>th</sup> Poster Vendor Night, 2018*, Greensboro, NC.
- 109) Perez, M.; King, B.; Tadili, H.; Al-Huniti, M.; Croatt, M. "Palladium Catalyzed Deoxygenation of Allylic Alcohols" *12<sup>th</sup> Annual Carolyn & Norwood Thomas Undergraduate Research & Creativity Expo, 2018*, Greensboro, NC.
- 108) Al-Huniti, M.; Croatt, M. P.; Garr, M. K. "Detour Yet Not a Dead End: Reactivity Guided Optimization of Palladium (II) Catalyzed Decarboxylation of Poly-Conjugated Carboxylic Acids" *69<sup>th</sup> Southeast Regional Meeting of the ACS 2017*, Charlotte, NC.

- 107) Oyekunle, O. S.; Rivera-Chavez, J.; Al-Huniti, M.; Raja, H.; Pearce, C.; Croatt, M. P.; Oberlies, N. H. "Growth media studies approach to enhanced production of the bioactive fungal metabolite Viridicatumtoxin A" *69<sup>th</sup> Southeast Regional Meeting of the ACS 2017*, Charlotte, NC.
- 106) Stempin, J.; Britton, E.; Paguigan, N.; Rivera-Chavez, J.; Raja, H.; Al-Huniti, M.; Croatt, M. P.; Oberlies, N.; Cech, N. "Identifying Hyaluronidase Inhibitors Using a Mass Spectrometry Based Bioassay" *69<sup>th</sup> Southeast Regional Meeting of the ACS 2017*, Charlotte, NC.
- 105) Al-Huniti, M.; Garr, M. K.; Croatt, M. P. "Palladium Catalyzed Decarboxylation of Polyenoic Acids" *254<sup>th</sup> ACS Meeting 2017*, Washington, DC.
- 104) Al-Huniti, M. H.; Abu Deiab, G.; Hyatt, I. F. D.; Nagy, E. E.; Sargent, A. L.; Morehead, A. T.; Croatt, M. P. "Decarboxylative Coupling of Pentadienyl Dienoates and Related Novel Reactions" *Gordon Research Conference: Organic Reactions & Processes 2017*, Stonehill College, MA.
- 103) Colon, K.; Sayed, S.; Rifaie, B.; Johnson, L.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. "Synthesis and Evaluation of GPR55 Antagonists" *11th Annual Carolyn & Norwood Thomas Undergraduate Research & Creativity Expo, 2017*, Greensboro, NC.
- 102) Garr, M. K.; Al-Huniti, M. H.; Croatt, M. P. "New Reaction Design: Decarboxylation" *11<sup>th</sup> Annual Carolyn and Norwood Thomas Undergraduate Research and Creativity Exposition, 2017*, Greensboro, NC.
- 101) Colon, K.; Sayed, S.; Rifaie, B.; Johnson, L.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. "Synthesis and Evaluation of GPR55 Antagonists" *CNC-ACS 17<sup>th</sup> Annual Poster Vendor Night, 2017*, Greensboro, NC.
- 100) Garr, M. K.; Al-Huniti, M. H.; Croatt, M. P. "New Reaction Design: Decarboxylation" *ACS 17<sup>th</sup> Poster Vendor Night, 2017*, Greensboro, NC.
- 99) Olsen, L. B.; Kaiserlik, J.; Spano, M. B. S.; Nehls, A. R.; Nasrallah, D. J.; Croatt, M. P. "Design of a Do-It-Yourself Flow Chemistry System" *BioProcessing & Process Development Analytical Symposium & Vendor Show 2016*, Durham, NC. (**2<sup>nd</sup> place prize for undergraduate presenters**)
- 98) Abu Deiab, G. I.; Croatt, M. P. "Total Synthesis of Neuroprotective Agents against Stroke" *35th National Medicinal Chemistry Symposium, 2016*, Chicago, IL.
- 97) Sayed, S. S.; Adkins, M.; Al Rifaie, B. F.; Abood, M. E.; Hurst, D. P.; Reggio, P. H.; Croatt, M. P. "Synthesis of GPR55 Antagonists: Pyrimidine Analogues" *CNC-ACS 16<sup>th</sup> Annual Poster and Vendor Night, 2016*, Greensboro, NC.
- 96) Pittman, P. L.; Fakhouri, L.; Alali, F. Q.; Croatt, M. P. "Synthesis of Homoisoflavonoid Core" *CNC-ACS 16<sup>th</sup> Annual Poster and Vendor Night, 2016*, Greensboro, NC. (**2<sup>nd</sup> place prize for undergraduate presenters**)
- 95) Olsen, L. B.; Kaiserlik, J.; Spano, M. B. S.; Nehls, A. R.; Nasrallah, D. J.; Croatt, M. P. "UNCG Flow Experience" *CNC-ACS 16<sup>th</sup> Annual Poster and Vendor Night, 2016*, Greensboro, NC.
- 94) Abu Deiab, G. I.; Hyatt, I. F. D.; Nagy, E. E.; Al-Huniti, M.; Gettys, K. E.; Sayed, S. S.; Vummalaneni, R. M.; Joliat, C. M.; Daniel, P. E.; Croatt, M. P. "A Novel Decarboxylation of Bis-Allylic Esters Lacking Anion-Stabilizing Groups" *CNC-ACS 16<sup>th</sup> Annual Poster Vendor Night, 2016*, Greensboro, NC.
- 93) Pittman, P. L.; Fakhouri, L.; Alali, F. Q.; Croatt, M. P. "Synthesis of Homoisoflavonoid Core" *10th Annual Carolyn and Norwood Thomas Undergraduate Research Expo, 2016*, Greensboro, NC.
- 92) Adkins, M.; Sayed, S. S.; Al Rifaie, B. F.; Abood, M. E.; Hurst, D. P.; Reggio, P. H.; Croatt, M. P. "Synthesis of Compounds for the Treatment of Cancer and other Diseases or Disorders" *10th Annual Carolyn and Norwood Thomas Undergraduate Research Expo, 2016*, Greensboro, NC.
- 91) Hyatt, I. F. D.; Sargent, A. L.; Morehead, A. T.; Croatt, M. P. "Inter- and intramolecular Decarboxylation of Bis-allylic Esters Lacking Anion-Stabilizing Groups" *44<sup>th</sup> National Organic Chemistry Symposium, 2015*, Baltimore, MD.

- 90) Cook, C.; Fakhouri, L.; Hurst, D. P.; Barak, L.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Synthesis of GPR55 Agonists" *44<sup>th</sup> National Organic Chemistry Symposium*, **2015**, Baltimore, MD.
- 89) Hyatt, I. F. D.; Nagy, E. E.; Abu Deiab, G.; Gettys, K. E.; Sayed, S.; Joliat, C.; Daniel, P. E.; Vummalaneni, R.; Sargent, A.; Morehead, A.; Croatt, M. P. "Decarboxylation of Bis-allylic Dienoates Lacking Anion-Stabilizing Groups" *Gordon Research Conference: Organic Reactions & Processes* **2015**, Bates College, ME.
- 88) Abu Deiab, G. I.; Croatt, M. P. "Synthesis of Neuroprotective Agents Against Stroke in Less than 10 Steps" *250<sup>th</sup> American Chemical Society National Meeting & Exposition*, **2015**, Boston, MA.
- 87) Cook, C.; Fakhouri, L.; Hurst, D. P.; Barak, L.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Synthetic Routes to GPR55 Agonists" *Syngenta 15<sup>th</sup> Annual Poster and Vendor Night*, **2015**, Greensboro, NC.
- 86) Spano, M. B. S.; Nasrallah, D. J.; Croatt, M. P. "Don't Overreact, Go with Flow!" *Syngenta 15<sup>th</sup> Annual Poster and Vendor Night*, **2015**, Greensboro, NC.
- 85) Hairston, A. C. F.; Hyatt, I. F. D.; Nasrallah, D. J.; Maxwell, M. A.; Abdalhameed, M. M.; Croatt, M. P. "Cyanocarbenes: Copper(II)-Catalyzed and Cyclopropanation" *Syngenta 15<sup>th</sup> Annual Poster and Vendor Night*, **2015**, Greensboro, NC.
- 84) Johnson, L. C.; Sayed, S. S.; Al Rifaie, B.; Abood, M. E.; Hurst, D. P.; Reggio, P. H.; Croatt, M. P. "Synthesis of Polyheterocyclic Antagonists of GPR55 and Biological Activity" *Syngenta 15<sup>th</sup> Annual Poster and Vendor Night*, **2015**, Greensboro, NC.
- 83) Abu Deiab, G. I.; Croatt, M. P. "Use of Transition Metal-Catalysts to Access a Step-Economical Synthesis of Neuroprotective Agents" *Syngenta 15<sup>th</sup> Annual Poster and Vendor Night*, **2015**, Greensboro, NC.
- 82) Fakhouri, L.; Hurst, D. P.; Barak, L.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Design, Synthesis and Biological Evaluation of GPR55 Agonists" *Graduate Research and Creativity Expo*, **2015**, Greensboro, NC.
- 81) Abu Deiab, G. I.; Croatt, M. P. "Synthesis and Bioanalysis of Isocarbacyclin Agents" *Graduate Research and Creativity Expo*, **2015**, Greensboro, NC.
- 80) Vummalaneni, R.; Abu Deiab, G. I.; Nagy, E. E.; Sayed, S. S.; Hyatt, I. F. D.; Gettys, K. E.; Croatt, M. P. "Exploration and Optimization of a Novel Decarboxylative Coupling Reaction" *9<sup>th</sup> Annual Carolyn and Norwood Thomas Undergraduate Research Expo*, **2015**, Greensboro, NC.
- 79) Spano, M. B. S.; Nasrallah, D. J.; Croatt, M. P. "The Magic of Flow Chemistry" *9<sup>th</sup> Annual Carolyn and Norwood Thomas Undergraduate Research Expo*, **2015**, Greensboro, NC.
- 78) Al Rifai'e, B.; Deeb, B.; Abu Deiab, G. I.; Croatt, M. P. "Synthesis and Bioanalysis of Isocarbacyclin Analogues" *9<sup>th</sup> Annual Carolyn and Norwood Thomas Undergraduate Research Expo*, **2015**, Greensboro, NC.
- 77) Vummalaneni, R.; Abu Deiab, G. I.; Nagy, E. E.; Sayed, S. S.; Hyatt, I. F. D.; Gettys, K. E.; Croatt, M. P. "Exploration and Optimization of a Novel Decarboxylative Coupling Reaction" *10<sup>th</sup> State of NC Undergraduate Research and Creativity Symposium*, **2014**, Raleigh, NC.
- 76) Fakhouri, L.; Sharir, H.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. P. "Synthesis and SAR Studies of GPR55 Agonists" *8<sup>th</sup> Carolina Cannabinoid Collaborative Conference*, **2014**, Winston-Salem, NC.
- 75) Abdalhameed, M.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. P. "Design, Synthesis and Biological Evaluation of GPR35 Antagonists" *8<sup>th</sup> Carolina Cannabinoid Collaborative Conference*, **2014**, Winston-Salem, NC.
- 74) Lingerfelt, M. A.; Meza-Aviña, M. E.; Sharir, H.; Gettys, K. E.; Hurst, D. P.; Kotsikorou, E.; Shore, D. M.; Bai, Y.; Gamage, T. S.; Console-Bram, L. M.; Rao, N.; Barak, L.; Abood, M.; Reggio, P.; Croatt, M. P. "Design, Synthesis, and Analysis of Antagonists of GPR55 Containing Piperidine-Substituted 1,3,4-Oxadiazol-2-ones" *8<sup>th</sup> Carolina Cannabinoid Collaborative Conference*, **2014**, Winston-Salem, NC.

- 73) Abdalhameed, M.; Hurst, D. P.; Abood, M.; Reggio, P.; Croatt, M. P. "Synthesis of GPR35 Antagonists" *128<sup>th</sup> NC ACS Sectional Conference, 2014*, Durham, NC. (**2<sup>nd</sup> place prize for graduate presenters**)
- 72) Fakhouri, L.; Sharir, H.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. P. "Design, Synthesis and Biological Evaluation of GPR55 Agonists" *128<sup>th</sup> NC ACS Sectional Conference, 2014*, Durham, NC.
- 71) Sayed, S.; Johnson, L.; Al Rifaie, B.; Croatt, M. P. "Synthesis of Polyheterocyclic Antagonists of GPR55 and Biological Activity" *128<sup>th</sup> NC ACS Sectional Conference, 2014*, Durham, NC.
- 70) Abu Deiab, G. I.; Vummalaneni, R. M.; Nagy, E. E.; Sayed, S. S.; Hyatt, I. F. D.; Gettys, K. E.; Croatt, M. P. "Exploration and Optimization of a Novel Decarboxylative Coupling Reaction" *128<sup>th</sup> NC ACS Sectional Conference, 2014*, Durham, NC. (**1<sup>st</sup> place prize for graduate researchers**)
- 69) Sayed, S.; Abu Deiab, G.; Gettys, K.; Nagy, E. E.; Croatt, M. P. "Exploration of Nonsymmetric Pentadienyl Groups in a Novel Palladium-Catalyzed Decarboxylative Reaction" *66<sup>th</sup> Southeast Regional Meeting of the ACS 2014*, Nashville, TN.
- 68) Fakhouri, L.; Sharir, H.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. P. "Synthesis of GPR55 Agonists" *66<sup>th</sup> Southeast Regional Meeting of the ACS 2014*, Nashville, TN.
- 67) Abu Deiab, G. I.; Croatt, M. P. "Synthesis and Biological Activity of Neuroprotective Agents" *66<sup>th</sup> Southeast Regional Meeting of the ACS 2014*, Nashville, TN. (**selected to also present at SciMix**)
- 66) Al Rifaie, B.; Johnson, L.; Croatt, M. P. "Synthesis of Polyheterocyclic Antagonists of GPR55" *248<sup>th</sup> ACS Meeting 2014*, San Francisco, CA.
- 65) Vummalaneni, R. M.; Sayed, S. M.; Nagy, E. E.; Hyatt, I. F. D.; Croatt, M. P. "Palladium-Catalyzed Decarboxylation Reactions of Nonsymmetrical Pentadienyl Dienoates" *248<sup>th</sup> ACS Meeting 2014*, San Francisco, CA.
- 64) Hyatt, I. F. D.; Croatt, M. P. "*In Situ* Method for the Generation and Trapping of Cyanocarbenes Formed from Alkynes and Azides" *248<sup>th</sup> ACS Meeting 2014*, San Francisco, CA.
- 63) Nagy, E. E.; Abu Deiab, G.; Gettys, K. E.; Hyatt, I. F. D.; Sayed, S.; Paudel, D.; Croatt, M. P. "Synthesis of Isocarbacyclin Analogues Utilizing a Novel Decarboxylation Reaction" *Gordon Research Conference: Organic Reactions & Processes 2014*, Bryant University, RI.
- 62) Vummalaneni, R.; Sayed, S.; Hyatt, I. F.; Croatt, M. P. "Exploration and Optimization of a Novel Decarboxylative Coupling Reaction" *CNC-ACS 14<sup>th</sup> Annual Poster Vendor Night, 2014*, Greensboro, NC.
- 61) Maxwell, M. A.; Hyatt, I. F.; Croatt, M. P. "Insight into the Generation of Cyanocarbenes" *CNC-ACS 14<sup>th</sup> Annual Poster Vendor Night, 2014*, Greensboro, NC.
- 60) Nasrallah, D. J.; Croatt, M. P. "Generation of Cyanocarbenes" *Syngenta 14<sup>th</sup> Annual Poster and Vendor Night, 2014*, Greensboro, NC.
- 59) Johnson, L.; Al Rifaie, B.; Croatt, M. P. "Synthesis of Polyheterocyclic Antagonists of GPR55" *Syngenta 14<sup>th</sup> Annual Poster and Vendor Night, 2014*, Greensboro, NC.
- 58) Abu Deiab, G. I.; Croatt, M. P. "Synthesis of Neuroprotective Agents" *CNS-ACS 14<sup>th</sup> Annual Poster Vendor Night, 2014*, Greensboro, NC.
- 57) Vummalaneni, R.; Sayed, S.; Hyatt, I. F.; Croatt, M. P. "Exploration and Optimization of a Novel Decarboxylative Coupling Reaction" *8<sup>th</sup> Annual Office of Undergraduate Research Expo, 2014*, Greensboro, NC.
- 56) Maxwell, M. A.; Hyatt, I. F.; Croatt, M. P. "Insight into the Generation of Cyanocarbenes" *8<sup>th</sup> Annual Office of Undergraduate Research Expo, 2014*, Greensboro, NC.

- 55) Johnson, L.; Al Rifai'e, B.; Croatt, M. P. "Synthesis of Polyheterocyclic Antagonists of GPR55" *8th Annual Carolyn and Norwood Thomas Undergraduate Research Expo*, **2014**, Greensboro, NC.
- 54) Maxwell, M. A.; Hyatt, I. F. D.; Croatt, M. P. "Further Insight into the Generation of Cyanocarbenes" *North Carolina State University Undergraduate Educational Symposium*, **2013**, UNC-Charlotte, NC.
- 53) Sayed, S.; Nagy, E.; Hyatt, I. F. D.; Gettys, K. E.; Croatt, M. P. "Palladium Catalyzed Decarboxylation Reaction of Nonsymmetrical Pentadienyl Dienoates" *North Carolina State University Undergraduate Educational Symposium*, **2013**, UNC-Charlotte, NC.
- 52) Maxwell, M. A.; Hyatt, I. F. D.; Croatt, M. P. "Further Insight into the Generation of Cyanocarbenes" *65<sup>th</sup> Southeast Regional Meeting of the ACS* **2013**, Atlanta, GA.
- 51) Hyatt, I. F. D.; Croatt, M. P. "One-pot Procedure for the Generation of Cyanocarbenes" *65<sup>th</sup> Annual Southeast Regional Meeting of the ACS*, **2013**, Atlanta, GA.
- 50) Abdalhameed, M.; Zhao, P.; Hurst, D. P.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Synthesis and Structure-Activity Relationships of GPR35 Antagonists" *43<sup>rd</sup> National Organic Symposium* **2013**, University of Washington, WA.
- 49) Nasrallah, D. J.; Frempong, S.; Patel, M.; Croatt, M. P. "Exploration of DMSO effects on metal catalysts in the synthesis of cyclooctatetraenes" *245<sup>th</sup> ACS Meeting* **2013**, New Orleans, LA, New Orleans, LA.
- 48) Meza-Aviña, M. E.; Patel, M. K.; Croatt, M. P. "Thermolysis and Rh(II) catalyzed reactions of 1,5-disubstituted-1,2,3-sulfonyl-triazoles" *245<sup>th</sup> ACS Meeting* **2013**, New Orleans, LA.
- 47) Fakhouri, L.; Sharir, H.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. "Synthesis and biological evaluation of GPR55 agonists" *245<sup>th</sup> ACS Meeting* **2013**, New Orleans, LA.
- 46) Lingerfelt, M. A.; Hurst, D. P.; Kotsikorou, E.; Sharir, H.; Bai, Y.; Gettys, K.; Barak, L.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Exploration and Maximization of GPR55 Antagonists Using Synthetically Diversified Ligands" *245<sup>th</sup> ACS Meeting* **2013**, New Orleans, LA.
- 45) Gettys, K. E.; Croatt, M. P. "Synthesis and Bioanalysis of Isocarbacyclin Analogs Involving Transition Metal Catalysis" *245<sup>th</sup> ACS Meeting* **2013**, New Orleans, LA.
- 44) Nagy, E.; Croatt, M. P. "Use of Transition Metal-Catalysts to Access a Step-Economical Synthesis of Clinprost and Clinprost Analogs" *245<sup>th</sup> ACS Meeting* **2013**, New Orleans, LA.
- 43) Sayed, S.; Nagy, E.; Gettys, K.; Croatt, M. P. "Novel Decarboxylation Reaction" *American Chemical Society, Central North Carolina Section* **2013**, *13<sup>th</sup> Annual Poster and Vendor Night*, Syngenta, Greensboro NC.
- 42) Maxwell, M.; Hyatt, I. F.; Croatt, M. P. "Optimization of the Synthesis of Hypervalent Iodonium Alkynyl Triflate" *American Chemical Society, Central North Carolina Section* **2013**, *13<sup>th</sup> Annual Poster and Vendor Night*, Syngenta, Greensboro NC.
- 41) Nasrallah, D. J.; Frempong, S.; Patel, M.; Croatt, M. P. "Exploration of DMSO effects on metal catalysts in the synthesis of cyclooctatetraenes" *American Chemical Society, Central North Carolina Section* **2013**, *13<sup>th</sup> Annual Poster and Vendor Night*, Syngenta, Greensboro NC. (**1st place prize for undergraduate researchers**)
- 40) Meza-Aviña, M. E.; Patel, M. K.; Croatt, M. P. "Thermolysis and Rh(II) catalyzed reactions of 1,5-disubstituted-1,2,3-sulfonyl-triazoles" *American Chemical Society, Central North Carolina Section* **2013**, *13<sup>th</sup> Annual Poster and Vendor Night*, Syngenta, Greensboro NC.
- 39) Fakhouri, L.; Sharir, H.; Hurst, D.; Abood, M.; Reggio, P.; Croatt, M. P. "Synthesis of GPR55 Agonists" *American Chemical Society, Central North Carolina Section* **2013**, *13<sup>th</sup> Annual Poster and Vendor Night*, Syngenta, Greensboro NC. (**2nd place prize for graduate researchers**)

- 38) Lingerfelt, M. A.; Hurst, D. P.; Kotsikorou, E.; Sharir, H.; Bai, Y.; Gettys, K.; Barak, L.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Exploration and Maximization of GPR55 Antagonists Using Synthetically Diversified Ligands" *American Chemical Society, Central North Carolina Section 2013, 13th Annual Poster and Vendor Night*, Syngenta, Greensboro NC.
- 37) Maxwell, M.; Hyatt, I. F.; Croatt, M. P. "Optimization of the Synthesis of Hypervalent Iodonium Alkynyl Triflate" *6th Annual Office of Undergraduate Research Expo, 2012*, Greensboro, NC.
- 36) Sayed, S.; Nagy, E.; Gettys, K.; Croatt, M. P. "Novel Decarboxylation Reaction" *6th Annual Office of Undergraduate Research Expo, 2012*, Greensboro, NC.
- 35) Meza-Aviña, M. E.; Patel, M. K.; Croatt, M. P. "Exploring the Reactivity of 1,5-sulfonyl-triazoles; thermolysis and Rh(II)-Catalyzed Reactions" *64th Southeast Regional Meeting of the ACS 2012*, Raleigh, NC.
- 34) Hyatt, I. F. D.; Croatt, M. P. "Reactions of Hypervalent Iodonium Alkynyl Triflates with Azides: Generation of Cyanocarbenes" *64th Southeast Regional Meeting of the ACS 2012*, Raleigh, NC.
- 33) Nasrallah, D. J.; Frempong, S.; Patel, M.; Croatt, M. P. "Exploration of the selective synthesis of cyclooctatetraenes by addition of dimethyl sulfoxide to metal catalysts" *North Carolina State University Undergraduate Educational Symposium, 2012*, Duke University, NC.
- 32) Lingerfelt, M. A.; Hurst, D. P.; Sharir, H.; Bai, Y.; Gettys, K.; Barak, L.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Synthetic Efforts Toward a Potent and Selective GPR55 Antagonist" *10th Annual Discovery on Target 2012*, Boston, MA.
- 31) Hyatt, I. F. D.; Croatt, M. P. "Synthesis and Reactions of Cyano-Carbenes from Alkynes and Azides" *Gordon Research Conference: Organic Reactions & Processes 2012*, Bryant University, RI.
- 30) Nasrallah, D.; Patel, M. K.; Frempong, S.; Croatt, M. P. "Modification of Transition Metal-Catalyzed Reactions: Addition of Dimethyl Sulfoxide to Produce Cyclooctatetraenes" *Big South Undergraduate Research Symposium 2012*, Winthrop University, SC.
- 29) Patel, M. K.; Meza-Aviña, M. E.; Lee, C. B.; Dietz, T. J.; Croatt, M. P. "Regioselective Formation of 1, 5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl-Azides" *6th Annual Office of Undergraduate Research Expo, 2012*, Greensboro, NC.
- 28) Hyatt, I. F. D.; Croatt, M. P. "Utilization of Hypervalent Iodonium Alkynyl-Triflates for the Generation of Cyanocarbenes" *American Chemical Society, Central North Carolina Section 2012, 12th Annual Poster and Vendor Night*, Syngenta, NC.
- 27) Nasrallah, D.; Patel, M. K.; Frempong, S.; Croatt, M. P. "Modification of Transition Metal-Catalyzed Reactions by the Addition of DMSO: Selective Synthesis of Cyclooctatetraenes" *American Chemical Society, Central North Carolina Section 2012, 12th Annual Poster and Vendor Night*, Syngenta, NC.
- 26) Lingerfelt, M. A.; Sharir, H.; Hurst, D. P.; Kotsikorou, E.; Gettys, K.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Rational Design, Synthesis, and Biological Analysis of GPR55 Antagonists" *American Chemical Society, Central North Carolina Section 2012, 12th Annual Poster and Vendor Night*, Syngenta, NC.
- 25) Althagafy, H. S.; Croatt, M. P.; Oberlies, N. H. "Biomimetic Synthesis of Flavonolignans via *Ortho*-Quinone Diels-Alder Reaction" *American Chemical Society, Central North Carolina Section 2012, 12th Annual Poster and Vendor Night*, Syngenta, NC. (**3<sup>rd</sup> place prize in the category of Graduate Students**)
- 24) Patel, M. K.; Meza-Aviña, M. E.; Lee, C. B.; Dietz, T. J.; Croatt, M. P. "Regioselective Formation of 1, 5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl-Azides" *American Chemical Society, Central North Carolina Section 2012, 12th Annual Poster and Vendor Night*, Syngenta, NC.

- 23) Lingerfelt, M. A.; Sharir, H.; Hurst, D. P.; Kotsikorou, E.; Gettys, K.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Rational Drug Design: The Synthesis and Biological Analysis of GPR55 Antagonists for the Treatment of Neuropathic Pain" *Graduate Research and Creativity Expo* **2012**, UNCG, NC.
- 22) Nasrallah, D.; Patel, M. K.; Frempong, S.; Croatt, M. P. "Modification of Transition Metal-Catalyzed Reactions by the Addition of DMSO: Selective Synthesis of Cyclooctatetraenes" *243rd ACS Meeting* **2012**, San Diego, CA.
- 21) Lingerfelt, M. A.; Sharir, H.; Hurst, D. P.; Kotsikorou, E.; Gettys, K.; Abood, M. E.; Reggio, P. H.; Croatt, M. P. "Rational Design, Synthesis, and Biological Analysis of GPR55 Antagonists" *243rd ACS Meeting* **2012**, San Diego, CA.
- 20) Hyatt, I. F. D.; Croatt, M. P. "Utilization of Hypervalent Iodonium Alkynyl-Triflates for the Generation of Cyanocarbenes" *243rd ACS Meeting* **2012**, San Diego, CA.
- 19) Patel, M. K.; Meza-Aviña, M. E.; Lee, C. B.; Dietz, T. J.; Croatt, M. P. "Regioselective Formation of 1,5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl-Azides" *7th State of NC Undergraduate Research and Creativity Symposium* **2011**, Greenville, NC.
- 18) Hyatt, I. F. D.; Croatt, M. P. "Utilization of Hypervalent Iodonium Alkynyl Triflates for the Generation of Cyanocarbenes" *4th Bi-Annual Chemical Science Symposium* **2011**, North Carolina A&T State University, NC.
- 17) Meza-Aviña, M. E.; Patel, M. K.; Lee, C. B.; Croatt, M. P. "Regioselective Formation of 1,5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl Azides" *4th Bi-Annual Chemical Science Symposium* **2011**, North Carolina A&T State University, NC.
- 16) Nagy, E.; Yeazell, S.; Croatt, M. P. "Towards the Synthesis of Neuroprotective Compounds: Divergent Synthesis of Isocarbacyclin Analogs" *4th Bi-Annual Chemical Science Symposium* **2011**, North Carolina A&T State University, NC.
- 15) Hyatt, I. F. D.; Croatt, M. P. "Utilization of Hypervalent Iodonium Alkynyl Triflates for the Generation of Cyanocarbenes" *North Carolina American Chemical Society's 125th Sectional Conference* **2011**, Raleigh, NC.
- 14) Meza-Aviña, M. E.; Patel, M. K.; Lee, C. B.; Croatt, M. P. "Regioselective Formation of 1,5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl Azides" *North Carolina American Chemical Society's 125th Sectional Conference* **2011**, Raleigh, NC.
- 13) Nagy, E.; Yeazell, S.; Croatt, M. P. "Towards the Synthesis of Neuroprotective Compounds: Divergent Synthesis of Isocarbacyclin Analogs" *North Carolina American Chemical Society's 125th Sectional Conference* **2011**, Raleigh, NC. (*1st place prize in the category of Postdoctoral Fellows and Non-Students*)
- 12) Hyatt, I. F. D.; Croatt, M. P. "Utilization of Hypervalent Iodonium Alkynyl Triflates for the Generation of Cyanocarbenes" *63rd Southeastern Regional Meeting* **2011**, Richmond, VA.
- 11) Meza-Aviña, M. E.; Patel, M. K.; Lee, C. B.; Croatt, M. P. "Regioselective Formation of 1,5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl Azides" *242nd ACS Meeting* **2011**, Denver, CO.
- 10) Nagy, E.; Yeazell, S.; Croatt, M. P. "Towards the Synthesis of Neuroprotective Compounds: Divergent Synthesis of Isocarbacyclin Analogs" *242nd ACS Meeting* **2011**, Denver, CO.
- 9) Meza-Aviña, M. E.; Patel, M. K.; Lee, C. B.; Dietz, T. J.; Croatt, M. P. "Synthesis of 1,5-Substituted Sulfonyl-Triazoles from Alkynes and Sulfonyl-Azides" *42nd National Organic Symposium* **2011**, Princeton University, NJ.
- 8) Meza-Aviña, M. E.; Patel, M. K.; Lee, C. B.; Croatt, M. P. "Regioselective Formation of 1,5-Substituted Sulfonyl Triazoles using Acetylides and Sulfonyl Azides" *American Chemical Society, Central North Carolina Section* **2011**, *11th Annual Poster and Vendor Night*, Syngenta, NC.
- 7) Croatt, M. P.; Wender, P. A.; Carreira, E. M. "Design and Development of Rhodium(I)-Catalyzed Cycloadditions and Synthesis of Designed Amphotericin B Analogues" *238th ACS Meeting*, **2009**, Washington D.C.

- 6) Wender, P. A.; Christy, J. P.; Croatt, M. P.; Darmency, V.; Paxton, T. J.; Sirois, L. E.; Strand, A. D. "The Design and Development of New Reactions: Step Economical Access to Novel Ligand Scaffolds and Medicinal Leads" *22<sup>nd</sup> Annual William S. Johnson Symposium, 2007*, Stanford University, CA.
- 5) Croatt, M. P.; Wender, P. A.; Deschamps, N. M. "Diene-ene and Diene-allene [2+2+1] Cycloadditions" *12<sup>th</sup> Biennial Lilly Grantee Symposium, 2006*, Indianapolis, IN.
- 4) Wender, P. A.; Christy, J. P.; Croatt, M. P.; Deschamps, N. M.; Paxton, T. J.; Sirois, L. E.; Sun, R.; Williams, T. J. "Towards the Ideal Synthesis: The Invention of New Complexity Increasing Reactions" *21<sup>st</sup> Annual William S. Johnson Symposium, 2006*, Stanford University, CA.
- 3) Wender, P. A.; Christy, J. P.; Croatt, M. P.; Deschamps, N. M.; Gamber, G. G.; Sun, R.; Williams, T. J. "Step Economy, New Reactions, and the Ideal Synthesis" *20<sup>th</sup> Annual William S. Johnson Symposium, 2005*, Stanford University, CA.
- 2) Wender, P. A.; Croatt, M. P.; Deschamps, N. M.; Gamber, G. G.; Williams, T. J. "New Reactions for Step-Economical Synthesis: Rhodium(I)-Catalyzed [2+2+1] Cycloadditions of 1,3-Dienes,  $\pi$ -Systems, and CO" *19<sup>th</sup> Annual William S. Johnson Symposium, 2004*, Stanford University, CA.
- 1) Croatt, M. P.; O'Doherty, G. A.; Haukaas, M. "Use and Study of Diastereo- and Enantioselective Dihydroxylation Reactions: A Study Towards the Enantioselective Synthesis of Nagstatin" *223<sup>rd</sup> ACS Meeting, 2002*, Orlando, FL.

## RESEARCHERS MENTORED

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### Summary:

- 116 total researchers mentored
- 8 researchers went on to earn PhD after UNCG
- 13 researchers went on to earn professional degrees (11 MD/DO, 1 Dent, 1 Pharm) after UNCG
- 4 researchers went on to become tenured/tenure-track faculty members after UNCG

### Postdoctoral Scholars/Research Scientists:

- 4) **Dr. Khyarul "Fahim" Alam**; December 2019-September 2023; *Milliken & Company*
- 3) **Dr. Mohammed Al-Huniti**; August 2015-March 2019; *Staff Scientist at MilliporeSigma*
- 2) **Dr. Ivan Fabe Dempsey Hyatt**; January 2011-July 2015; *Associate Professor at Adelphi University*
- 1) **Dr. Maria Elena Meza-Aviña**; July 2010-August 2014; *Staff Scientist at UNCG*

### Ph.D. Students:

- 11) **Mr. Jarom Skarda**; August 2024-Present
- 10) **Ms. Christina Wiswell**; December 2022-Present
- 9) **Mr. David Tanas**; May 2023-Present
- 8) **Dr. Tian Li**; October 2018-May 2023; *Postdoc at High Point University*
- 7) **Dr. Abraham Ustoyev**; November 2018-May 2023; *Visiting Assistant Professor at Adelphi University*
- 6) **Dr. Rhashanda Haywood**; November 2016-May 2017; *UNC SPIRE Postdoc Fellow*
- 5) **Dr. Ghina'a Abu Deiab**; December 2012-December 2016; *Assistant Professor at Yarmouk University (Jordan)*
- 4) **Dr. Lara Al Fakhouri**; November 2011-July 2015; *Assistant Professor at Jordan University of Science and Technology (JUST)*
- 3) **Dr. Manahil Abdalhameed**; June 2011-August 2015; *Lecturer at Howard University*
- 2) **Dr. Mary Lingerfelt**; November 2010-June 2013; *Adjunct Professor at NCA&T State University*
- 1) **Dr. Hanan Althagafy**; January 2011-May 2013; (Co-advised with Dr. Oberlies) *Academic Position in Saudia Arabia*

### Master's Students:

- 16) **Mr. Drew Canning**; October 2024-Present
- 15) **Mr. Calvin Semczuk**; August 2024-Present

- 14) Mr. Jarom Skarda; November 2023-August 2024; *Pursuing PhD at UNCG*
- 13) Ms. Runzi Li; February 2023-May 2024; *Pursuing PhD at Princeton*
- 12) Mr. Harris Khan; January 2021-May 2023; *Environmental Chemist at NC Dept of Environmental Quality*
- 11) Mr. David Tanas; November 2020-May 2023; *Pursuing PhD at UNCG*
- 10) Ms. Tangel Johnson; November 2021-May 2023; *Working at Henkel*
- 9) Mr. David von Dohlen; August 2020-Present; *Lecturer at UNCG*
- 8) Mr. Elvis McFee; August 2019-May 2021; *Pursuing PhD at the U of Michigan*
- 7) Mr. Jarrod Stanley; August 2019-May 2021; *Pursuing PhD at the U of Michigan*
- 6) Mr. Saad Sohail; August 2018-December 2020; *Scientist at Zymergen*
- 5) Mr. Mohammad Kareemzada; January 2016-November 2017
- 4) Ms. Alexandra Leiby; December 2015-May 2016; *Earned MS in Chemistry from NCA&T*
- 3) Ms. Sommayah Sayed; August 2014-July 2016; *Earned Dental degree at Roseman University*
- 2) Ms. Kristen Gettys; November 2011-July 2013; *Earned her PhD in Chemistry at Purdue University*
- 1) Ms. Lorraine Malek; August 2010-April 2013; *Teaching at UNCG, GTCC, and Forsyth Tech.*

Undergraduate Students:

- 69) Ms. Katelin Parra-Castro; January 2026-Present
- 68) Mr. Caden Pfeffer; January 2026-Present
- 67) Ms. Madison Marks; January 2025-May 2025
- 66) Mr. Ahmad Samir Maanaki; January 2024-May 2024
- 65) Mr. Charli Witherspoon; January 2024-May 2024
- 64) Mr. Cannon Metcalf; January 2024-August 2024
- 63) Mr. Nolan Garci; January 2024-Present
- 62) Ms. Sydney Jones; January 2024-Present
- 61) Mr. Tanner Pierce; May 2023-May 2025
- 60) Mr. Hamdi Abdalla; May 2023-August 2023
- 59) Ms. Emily Guin; January 2023-May 2025
- 58) Ms. Mikah Bass; December 2022-May 2023; *Chemist at Veranova*
- 57) Mr. Danty Hesiquio-Jeronimo; August 2022-December 2022; *QC Lab Technician at Ecolab*
- 56) Ms. Asra Gasem; August 2022-December 2022; *Chemist at Ipca Laboratories*
- 55) Mr. Gurjant Sekhon; August 2022-May 2023; *Pursuing MD at UNC-Chapel Hill*
- 54) Ms. Amber Collins; August 2022-December 2022; *Lab Tech at ThermoFisher Scientific*
- 53) Mr. Grant Develle; May 2022-May 2025; *Pursuing MS in Biomedical Sciences at ECU*
- 52) Ms. Emily Ramirez; May 2022-May 2023; *Pursuing MS at Campbell University*
- 51) Mr. Logan Brown; August 2021-May 2023; *Pursuing PhD at Harvard*
- 50) Mr. William Bradshaw; August 2020-May 2021
- 49) Mr. Austin Daughtrey; January 2020-December 2020; *Chemist at Piedmont Chemical Industries*
- 48) Ms. Ashley Brown; January 2020-May 2022; *Chemist at Innospec Inc.*
- 47) Ms. Rachel Hodges; August 2019-August 2020; *Pursuing MD at Wake Forest*
- 46) Mr. Aaron West; August 2019-May 2020; *Pursuing MD at East Carolina University*
- 45) Mr. Hisham Mohamad; January 2019-May 2020
- 44) Mr. Pablo Mora Forte; January 2019-May 2019; *Earned PhD at ICIQ; Senior scientist at Jiuzhou Pharma*
- 43) Ms. Madison Reynolds; August 2018-December 2018
- 42) Mr. Philip West; August 2018-May 2022; *Pursuing PhD at MIT*
- 41) Mr. Thien Le; January 2018-August 2018; *Data Analyst at InfoSys*
- 40) Mr. Daniel Naderi; May 2018-May 2019
- 39) Ms. Celine Kisimba; May 2018-May 2019; *NIH Postbac as IRTA Fellow; pursuing MD at ECU*
- 38) Ms. Hajar Tadili; January 2018-December 2018; *Medical Assistant at Eagle Pharmaceuticals*
- 37) Mr. Charles Crawford; January 2018-June 2021; *Pursuing PhD at U of Illinois Chicago*
- 36) Ms. Hanifah Hendricks; January 2018-August 2018; *Earned her MD at ECU*
- 35) Mr. Jamison Breeding; August 2017-May 2018
- 34) Mr. Mark Perez; May 2017-May 2018; *Earned his MD from Wake Forest*
- 33) Mr. Saad Sohail; May 2017-August 2018; *Earned his MS at UNCG; Chemist at Moderna*
- 32) Ms. Oluwatobiloba Jimoh; May 2017-May 2019; *Pursuing her MD degree at University College London*

- 31) Mr. Brandon King; January 2017-May 2018; *Earned MD at UNC Chapel Hill*
- 30) Mr. Kevin Doheny; January 2017-December 2017; *Purification Scientist at Eurofins*
- 29) Mr. Matthew Garr; September 2016-May 2018; *Pursuing MD at UNC Chapel Hill*
- 28) Ms. Bobbi Love; September 2016-December 2016
- 27) Mr. Katsuya Colón; July 2016-May 2017; *Earned his PhD at Caltech; Postdoc at UCI*
- 26) Mr. Jarrod Stanley; May 2016-May 2019; *Earned his MS at UNCG; Pursuing PhD at UMich*
- 25) Mr. James Carson; May 2016-August 2017; *Chemist at ITG Brands*
- 24) Mr. Juan Polanco Francisco; May 2016-December 2016
- 23) Mr. Luke Olsen; May 2015-May 2017;
- 22) Mr. Peter Matusik; May 2015-May 2017
- 21) Mr. Adam Nehls; August 2015-July 2017; *Data Analyst at US Dept. of Veterans Affairs*
- 20) Mr. Zachary Adkins; May 2015-August 2016
- 19) Mr. John Kaiserlik; January 2016-May 2016; *Analyst at Deutsche Bank*
- 18) Ms. Patricia Pittman; May 2015-May 2016; *DO School at Edward Via College*
- 17) Ms. Angela Hairston; May 2014-December 2015
- 16) Ms. Rupa Vummalaneni; August 2013-March 2015; *Clinical Trials Assistant at Duke Cancer Institute*
- 15) Mr. Matt Phillips; August 2015-May 2016; *Graduate School at University of Delaware*
- 14) Mr. Christopher Cook; May 2014-August 2015; *Earned his PhD in Chemistry at Baylor; Chemistry at Vertex*
- 13) Ms. Buthainah Al Rifaie; August 2013-August 2015; *Earned her PhD in Chemistry at Utah; QC at Biogen*
- 12) Ms. Laura Johnson; May 2013-May 2015; *Earned her PhD in Biochemistry at Rutgers*
- 11) Mr. Michael Maxwell; January 2013- July 2015; *Pursuing his PhD in Chemistry at Florida State*
- 10) Mr. Michael Brandon Schroder Spano; August 2014-July 2015; *Earned his PhD at UC-Irvine*
- 9) Ms. Sommayah Sayed; January 2013-August 2013; *Earned her MS at UNC-Greensboro and her Dental Degree at Roseman University; Dentist at Triad Kids Dental*
- 8) Mr. Daniel Nasrallah; January 2011-May 2014; *Earned his PhD in Chemistry at the University of Michigan; Postdoc at UCLA; Assistant Professor at Roanoke College*
- 7) Ms. Dipti Paudel; May 2013-December 2013; *Earned her MS in Biochem at North Carolina State University*
- 6) Ms. Kristen Gettys; January 2011-May 2011; *Earned her MS at UNC-Greensboro and then her PhD in Chemistry at Purdue University*
- 5) Ms. Cylvia Lee; August 2010-December 2011; *Working at Greer Labs*
- 4) Ms. Mudita Patel; August 2010-May 2012; *Postbac research at the NIH for 2 years; earned her Medical Degree at West Virginia School of Medicine*
- 3) Mr. Stephen Frempong; January 2011-May 2012; *Earned his MD at the UNC-Chapel Hill*
- 2) Mr. Shawn Yeazell; August 2010-May 2011; *Earned his MD at UNC-Chapel Hill Medical School*
- 1) Mr. Thomas Dietz; August 2010-December 2010; *Earned his Pharmacy Degree at UNC Eshelman School of Pharmacy*

Postbaccalaureate Researchers:

- 12) Ms. Mary-Margaret Crabb; January 2020-May 2021; *Pursuing her MD at the University of Queensland*
- 11) Mr. Michael Brandon Schroder Spano; August 2017-May 2018; *Earned his PhD in Chemistry at UC-Irvine*
- 10) Ms. Crystal Odom; May 2017-August 2017; *Pursuing her Dental Degree at ECU*
- 9) Mr. Vasili Katsadourous; August 2015-May 2017; *Earned his MD at Edward Via College of Osteopathic Medicine*
- 8) Mr. Zach Sullivan; May 2015-December 2016; *Earned his MD at Duke University*
- 7) Mr. Bashir Deeb; August 2014-May 2015; *Earned his MS in Chemical Engineering at NC A&T State University*
- 6) Mr. Daniel Nasrallah; August 2014-May 2015; *Earned his PhD in Chemistry at the University of Michigan; Postdoc at UCLA; Assistant Professor at Roanoke College*
- 5) Ms. Christine Joliat; May 2014-January 2015; *Earned her MD at Ross University*
- 4) Ms. Paige Daniels; August 2012-May 2013; *Earned her PhD in Chemistry at Duke University*
- 3) Mr. Silas Cardwell; January 2012-August 2012; *Earned his MD at the University of Michigan Medical School*
- 2) Mr. Philip Ramirez; November 2011-May 2012; *Earned his MD at UNC-Chapel Hill Medical School*
- 1) Ms. Emma Nagy; September 2010 – March 2013; *Earned her PhD in Molecular Biology at Harvard University*

Visiting Faculty Members:

**1) Dr. Yomica Powder-George;** July 2022-September 2022; *From The University of West Indies – Trinidad and Tobago St. Augustine Campus*

High School Researchers:

**3) Mr. Wyatt Bland;** June 2023-August 2023; *Pursuing BS degree at University of Maryland*

**2) Ms. Alexis Croatt;** May 2023-July 2023; *Pursuing BA in Biology at Oberlin College*

**1) Mr. Payton Reyes;** May 2019-December 2019; *Earned BS in Biomed/Med Engineering at NCSU*

## **PROFESSIONAL ASSOCIATIONS**

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Member of the American Chemical Society since 2001

Reviewed at least one article for:

*Angewandte Chemie International Edition*  
*Organic Letters*  
*Journal of the American Chemical Society*  
*Journal of Organic Chemistry*  
*Nature Chemistry*  
*Nature Catalysis*  
*Tetrahedron*  
*Tetrahedron Letters*  
*Journal of Natural Products*  
*Journal of Medicinal Chemistry*  
*European Journal of Organic Chemistry*  
*Chemical Communications*  
*Chemistry - A European Journal*  
*Organic Reactions Processes & Developments*  
*Synthesis*  
*Synlett*  
*ACS Catalysis*  
*Chemical Science*  
*RSC Advances*  
*Royal Society Open Science*  
*Catalysis Science & Technology*  
*Scientia Pharmaceutica*  
*Organic Chemistry Frontiers*  
*Analytical Chemistry*  
*Chemistry Letters*  
*Advanced Synthesis & Catalysis*  
*Langmuir*  
*Journal of Physical Chemistry*  
*Organic Chemistry Frontiers*  
*Current Medicinal Chemistry*  
*Current Organic Chemistry*  
*Organic Chemistry: Current Research*  
*ChemCatChem*  
*Catalysts*  
*Crystals*  
*Materials*  
*The Chemical Record*  
*Israel Journal of Chemistry*  
*Journal of Sulfur Chemistry*

**(Reviewed 225 articles from 1/1/2014 to 12/31/23 as verified by Web of Science)**

**Received Awards from Publons for being in Top 1% in Field for Chemistry in 2017 and 2018.**

Served on Grant Review Panels for the following agencies:

*National Science Foundation* (2014, 2015, 2020, 2021, 2022, 2023, 2024, 2025)

*NIH SBCB* (2020)

*ACS PRF* (several ad hoc reviews)

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