Bryan Wakefield, Ph. D.

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EDUCATION AND TRAINING

2008-2010	Emory University - Post-Doctoral Researcher	Advisor: Dr. Lanny S. Liebeskind
2002-2008	University of Pittsburgh - Ph. D. Chemistry Thesis: "Synthetic Studies on (*E*)-Alkene Peptide Isosteres and Thiophene-containing Furanosteroids"	Advisor: Dr. Peter Wipf
1998-2002	West Virginia University - B.S. Chemistry Minor Physics	

EMPLOYMENT

2018-present *Associate Professor of Chemistry,* Coastal Carolina University

- Wrote the renewal of the CCU INBRE program grant. This continued the program on campus that provides $500,000 over five years to CCU to support faculty and student research.
- Serve as the PI of the INBRE program grant on the CCU campus. As the Director of CCU INBRE this requires managing hiring of students and faculty, submission of reports and other work to support the program. I also have continued my role of the Director of the SCoRE Program.
- Worked for over two years to secure the donation of a Nuclear Magnetic Resonance (NMR) spectrometer from NOAA. This required securing approximately $130,000 from various sources for the transfer and repair of the instrument.

2012-2018 *Assistant Professor of Chemistry*, Coastal Carolina University

- Wrote the majority of the white paper to SC INBRE that led to CCU being accepted into the network. This work resulted in $500,000 being awarded over five years to CCU to support faculty and student research.
- Serves as the Co-Director of CCU INBRE. Responsible for helping to plan and execute the program, schedule the Coastal Biomedical Research Seminar Series (CoBRAS), advertise for events and help address participant concerns to insure the best possible program.
- Serves as the Director of the SCoRE (Summer Coastal Research Experience) program. Responsible for scheduling all professional development seminars, off-campus events and planning the annual poster session.
- Manages a research group of two to six students per semester working on the development of new synthetic methods and biologically interesting compounds. My group has developed a method for a Friedel-Crafts cyclization as an approach to the tricyclic core of the flinderoles, a family of antimalarial alkaloids. The current research focuses on the synthesis of analogues of the phidianidines with the goal of determining the importance of the central heterocyclic ring and indole substitution on biological activity.
- Teach 3-4 sections a semester of a combination of Organic Chemistry 1 and 2 lecture and lab.
- Serves as the Organic Chemistry laboratory coordinator by providing schedules and laboratory manuals to all instructors in the organic chemistry laboratory sections.
- Created a laboratory manual for Organic Chemistry lab (Chem 331L/332L) for all instructors. Work with colleagues to update and refine the experiments annually.
- Worked with members of the curriculum committee to rewrite the learning objectives for General Chemistry and updated the General Chemistry laboratory manual (Chem 112L).
- Serves as the faculty advisor for the Biochemistry and Chemistry Club.

2010-2012 *Assistant Professor of Chemistry*, Delaware State University

- Taught courses at the graduate and undergraduate level in organic chemistry (lecture and lab) and general chemistry (lab).
- Worked in my research group toward the total synthesis of the antimalarial alkaloid flinderole C employing an intramolecular Friedel-Crafts alkylation is ongoing. We have demonstrated the feasibility of this approach in a model system and are applying it to complete the core of the natural product.

- Our selective synthesis of functionalized 2,6-naphthalene dicarboxylic acid derivatives has lead to the development of new linkers for incorporation in metal organic frameworks (MOF). Materials containing one of this new linkers store significantly more hydrogen than their unfunctionalized counterparts.
- Worked on the curriculum committee to update the prerequisites for all chemistry courses, these changes will be submitted to faculty senate this semester.
- Served as the graduate program director overseeing the progress of seven chemistry graduate students and have brought higher standards to the program by modernizing the student handbook, working with faculty to improve student evaluation and clearly communicating the departments expectations with students.
- Secured funds from the Dean's office to support graduate student teaching positions for laboratory sections and graduate tutors.
- Updated the safety guidelines for undergraduate laboratory course to ensure a uniform policy is in place for all laboratory sections as a member of the safety committee.
- Organized and participated in fund raising events and community service projects while serving as the mentor for the student ACS organization.
- Participated in the SMILE program, which focuses on improving the math and basic science skills of incoming freshman, by supervising an organic laboratory experiment and grading presentations from students across different disciplines.

1/2010-5/2010 *Adjunct Instructor*, Department of Natural Sciences, Georgia Perimeter College-Newton Campus

- Courses taught Spring 2010 - General Chemistry 1, Allied Health Chemistry Lab

RESEARCH EXPERIENCE

2008-2010 *Post-Doctoral Researcher*, Emory University
Advisor: Dr. Lanny S. Liebeskind

- Developed a concise synthesis of novel Mo-containing organic scaffolds.
- Exposure of these Mo-scaffolds to stabilized carbanions at elevated temperature led to products containing a quaternary carbon as a single diastereomer in 42-85% yield.
- Prepared the group for an EPA Peer Review and served as the group representative to the auditors.

2002-2008 *Research Fellow,* University of Pittsburgh
Advisor: Dr. Peter Wipf

- The total synthesis of thiohalenaquinone was realized using iterative thiophene metalations, a Diels-Alder reaction naphthalene synthesis, Heck cyclization and ring closing metathesis. This compound was found to be a potent anti-malarial that inhibited Pfnek-1 with an IC_{90} value of 2.8-3.9 μM.
- Based on the biological results from thiohalenaquinone, truncated analogues were designed and synthesized for biological testing via a short, scalable 8-step route. This led to a compound being identified with 3.0-5.3 μM activity against Pfnek-1, which was then moved into animal testing.
- Evaluated the reactivity of BUS-activated allylic aziridines toward cuprate mediated ring opening and applied this knowledge to a solid-phase library synthesis of (*E*)-alkene peptide isosteres.
- Parallel synthesis experience with CEM Discovery Microwave, Biotage Emrys Optimizer Microwave, Bohdan Mini Blocks XT, CombiFlash Isco, Gilson HPLC used for the synthesis and purification of a peptide isostere library.
- Computational experience with Gaussian 03 to determine small molecule interactions for catalyst design.

1999-2002 *Laboratory Technician,* NIOSH Morgantown
Advisor: Dr. Diane Miller

- Care and maintenance of laboratory animals including daily care, experiment set-up and animal sacrifice.

- Use of western blot techniques to discover new markers for neurotoxicity and to determine the extent of neurological damage.
- Experience in histology directed toward the evaluation of markers for Alzheimer's disease including sample preparation, immunohistochemical staining and mounting.

TEACHING EXPERIENCE

2018-present *Associate Professor of Chemistry*, Coastal Carolina University

Organic Chemistry I (Chem 331)	Organic Chemistry I Lab (Chem 331L)
Organic Chemistry II (Chem 332)	Organic Chemistry II Lab (Chem 332L)
Advanced Organic Chemistry (Chem 433)	Advanced Organic Chemistry Lab (Chem 433L)

2012-2018 *Assistant Professor of Chemistry*, Coastal Carolina University

Organic Chemistry I (Chem 331)	Organic Chemistry I Lab (Chem 331L)
Organic Chemistry II (Chem 332)	Organic Chemistry II Lab (Chem 332L)
Communication in the Physical Sciences (Chem 150)	General Chemistry Lab II (Chem 112L)

2010-2012 *Assistant Professor of Chemistry*, Delaware State University

Organic Chemistry I (Chem 301)	Organic Chemistry I Lab (Chem 301)
Organic Chemistry II (Chem 302)	Organic Chemistry II Lab (Chem 302)
Advanced Organic Chemistry (Chem 402/520)	Seminar in Chemistry (Chem 407/557)
Chemical Literature (Chem 560)	

1/2010-5/2010 *Instructor*, Department of Natural Sciences, Georgia Perimeter College-Newton Campus

General Chemistry I (Chem 1211)	Allied Health Chemistry Lab (Chem 1151)

2002-2003 *Teaching Fellow*, Department of Chemistry, University of Pittsburgh

Organic Chemistry I Lab (Chem 0330)	Organic Chemistry II Lab (Chem 0340)

RESEARCH SUPPORT

- Horry County Higher Education Commission Grant 7/1/22-6/30/23
  Title: *Foundation of the Disease Modeling Research Center at CCU*
  Amount = $59,705

- SC-INBRE Grant – PUI Participant 9/1/20-8/31/25
  Title: *Coastal Carolina University INBRE Program*
  Amount = $530,000

- Horry County Higher Education Commission Grant 7/1/19-6/30/21
  Title: *NMR Spectrometer Move*
  Amount = $17,800

- SC-INBRE Developmental Research Project Program 7/1/17-6/30/19
  Title: *Synthesis and Biological Evaluation of Phidianidine Analogues*
  Amount = $106,000

- CCU PEG Grant 3/28/18-8/1/18
  Title: *Synthesis of Phidianidine Analogues for Biological Evaluation*
  Amount: $6,000

- CCU INBRE Summer Coastal Research Experience (SCoRE) program 6/4/18-8/10/18
  Title: *Synthesis of Phidianidines A and B analogues*
  Amount = $ 20,600

- CCU INBRE Summer Coastal Research Experience (SCoRE) program 6/6/16-8/11/16
  Title: *Synthesis of Phidianidines A and B and related analogues*
  Amount = $ 20,600

- SC-INBRE Grant – PUI Participant 7/1/15-6/30/20
  Title: *Coastal Carolina University's Plan for SC-INBRE participation*
  Amount ≈ $500,000

- CCU PEG Grant 11/8/13-8/1/14
  Title: *Synthesis of Novel Antimalarial Drugs Based on the Flinderole Scaffold*
  Amount: $3,075

- Delaware INBRE Grant 3/1/12-2/28/14
  Title: *The Total Synthesis and Biological Evaluation of Phidianidines A and B and Related Analogues*
  Amount: ≈ $150,000 – *Declined due to accepting my current position at CCU*

- Delaware EPSCoR RII-2-CIBER Seed Grant Program 1/3/11-2/29/12
  Title: *Synthesis of New Naphthalene Linkers for Incorporation and Evaluation in Hydrogen Storing Metal Organic Frameworks*
  Amount: $30,000

- HBCU-UP Science & Mathematics Initiative for Learning Enhancement Undergraduate Research Support 4/15/11-12/31/11
  Title: *Synthesis of Flinderole C and related analogues.*
  Amount: $10,500

- Delaware State University Professional Development Grant 3/1/11-6/30/11
  Title: *The Development of a Catalytic Asymmetric Allylation of Indole with Allylic Alcohols*
  Amount: $3,483

AWARDS AND HONORS

2001-2002 *John Moore Trust Scholarship*, West Virginia University
- Awarded to B.S. chemistry majors who maintain a 3.0 GPA.

PUBLICATIONS

1. Wakefield, B. H.; Barnes, R.; Brown, T.; Jones, A.M.; Martinetti, C.; "Intramolecular Friedel-Crafts Addition of Indoles to Tertiary Allylic Alcohols" *J. South Carolina Acad. Sci.* **2022**, *20, 1,* https://scholarcommons.sc.edu/jscas/vol20/iss1/3

2. Muller, J. N.; Moroco, A.; Loloi, J.; Portolese, A.; Wakefield, B., H.; King, T. S.; Olympia, R.; "Violence Depicted in Superhero-Based Films Stratified by Protagonist/Antagonist and Gender" (Feb. 1, 2020) *Cureus* 12*(2):*e6843. DOI: 10.7759/cureus.6843
3. Olympia, R. P; Lucas, C.; Doraiswamy, V.; Funghi, C.; Wakefield, H. M.; Wakefield, B. H.; Brady, J.; "SPORTS ARE FUN": A Guide for the Discussion of Sport-Related Films "*Glob. Pediatr. Health* **2019**, *6*, 1. DOI: 10.1177/2333794X19860657.
4. Olympia, R. P.; Wakefield, H.; Wakefield, B.; Weber, C. J.; "Injuries Depicted in Sports-Related Films" *Clin. Pediatr.* First Published 28, Nov **2017** DOI: 10.1177/0009922817743570
5. Laws, III, David; King, D.; Wakefield, B.H.; "Progress toward phidianidine analogues containing a 1,2,3-triazole ring" *J. South Carolina Acad. Sci.* **2017,** *15*, 5.
6. Bauer, M.; Georgeson, A.; McNamara, C.; Wakefield, B.; King, T.S.; Olympia, R.P.; "Positive and Negative Themes Found in Superhero Films" *Clin. Pediatr.* First Published 22 Dec **2016**, DOI: 10.1177/0009922816682744
7. Wakefield, H.M.; Olympia, R.P.; King, T.S.; Wakefield, B.H.; Weber, C.J.; "Positive and Negative Themes Found in Sport-Related Films" *Clin. Pediatr.* ***2016,*** *56 (6), 525-534* DOI: 10.1177/0009922816675115
8. Orefuwa, S.; Iriowen, E.; Yang, H.; Wakefield, B. H.; Goudy, A.; "Effects of nitro-functionalization on the gas adsorption properties of isoreticular metal-organic framework-eight" *Micropor. Mesopor. Mat.* **2013**, *177*, 82.
9. Wakefield, B. H.; Halter, R. J.; Wipf, P. "Synthesis of (+/-)-Thiohalenaquinone by Iterative Metalations of Thiophene" *Org. Lett.* **2007**, *9*, 3121.

POSTER PRESENTATIONS

Student Presentations

1. Newton, L.; Tingler, A.; Wakefield, B.; "Phidianidine Analogs Containing Furan Ring Structures and a Biaryl Ring System" *14th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2022**.
2. Dunnery, B.; Wakefield, B.; "Synthesis of a phidianidine Analogue Containing a 2,4-disubstituted Oxazole Ring in Place of a 1,2,4-oxadiazole" *SC INBRE Science Symposium*, Online, **2021**
3. Lowe, D.; Wakefield, B.; Synthesis of a phidianidine Analogue that Replaces the 1,2,4-oxadiazole with a Benzene" *SC INBRE Science Symposium*, Online, **2021**
4. Altman, K.; Wakefield, B.; "Optimization of Indole Additions to Aromatic Aldehydes for the Synthesis of Phidianidine Analogues" *11th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2019**.
5. Bialousow, L.; Wakefield, B.; "Alternative Methods in Synthesis of Phidianidine Analogues" *11th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2019**.
6. Cox, E.; Laws, III, D.; Wakefield, B.; "Two Synthetic Approaches to Phidianidine Analogues" *11th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2019**.
7. Holt, E.; Leake, K.; Wakefield, B.; "Indole Addition to Benzylic Alcohols to Synthesize Phenyl Phidianidine Analogs" *11th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2019**.
8. Leake, K.; Holt, E.; Wakefield, B.; "Synthesis of Phenyl Analogues Replacing the Oxadiazole Ring of Phidianidines" *11th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2019**.
9. Anderson, K.; Bao, R.; Cox, E.; Wakefield, B.; "Optimization of the First Coupling in Phidianidine Furan Analog Synthesis" *11th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2019**.
10. Hatton, J.; Anderson, K.; Bao, R.; Cox, E.; Wakefield, B.; "Optimization of the Bromination of the Bis-Furan Intermediate in the Synthesis of Phidianidine Analogues" *11th Annual Coastal Carolina University Undergraduate Research Competition*, Conway, SC. **2019**.

11. Cox, E.; Laws, III, D.; Wakefield, B.; "Two Synthetic Approaches to Phidianidine Analogues" *70th Southeastern Regional Meeting of the American Chemical Society,* Augusta, GA, **2018**.
12. Holt, E.; Leake, K.; Wakefield, B.; "Indole Addition to Benzylic Alcohols to Synthesize Phenyl Phidianidine Analogs" *70th Southeastern Regional Meeting of the American Chemical Society,* Augusta, GA, **2018**.
13. Hatton, J.; Anderson, K.; Bao, R.; Cox, E.; Wakefield, B.; "Optimization of the Bromination of the Bis-Furan Intermediate in the Synthesis of Phidianidine Analogues" *70th Southeastern Regional Meeting of the American Chemical Society,* Augusta, GA, **2018**.
14. Leake, K.; Holt, E.; Wakefield, B.; "Synthesis of Phenyl Analogues Replacing the Oxadiazole Ring of Phidianidines" *70th Southeastern Regional Meeting of the American Chemical Society,* Augusta, GA, **2018**.
15. Anderson, K.; Bao, R.; Cox, E.; Wakefield, B.; "Optimization of the First Coupling in Phidianidine Furan Analog Synthesis" *70th Southeastern Regional Meeting of the American Chemical Society,* Augusta, GA, **2018**.
16. Klatka, R.; Laws, III, D.; Wakefield, B.; "The Synthesis of 2,4-Furan Containing Phidianidine Analogues" *70th Southeastern Regional Meeting of the American Chemical Society,* Augusta, GA, **2018**.
17. Cox, E.; Laws, III, D.; Wakefield, B.; "Two Synthetic Approaches to Phidianidine Analogues" *SC INBRE Science Symposium,* Columbia SC, **2018**.
18. Holt, E.; Leake, K.; Wakefield, B.; "Indole Addition to Benzylic Alcohols to Synthesize Phenyl Phidianidine Analogs" *SC INBRE Science Symposium*, Columbia SC, **2018**.
19. Hatton, J.; Anderson, K.; Bao, R.; Cox, E.; Wakefield, B.; "Optimization of the Bromination of the Bis-Furan Intermediate in the Synthesis of Phidianidine Analogues" *SC INBRE Science Symposium*, Columbia SC, **2018**.
20. Leake, K.; Holt, E.; Wakefield, B.; "Synthesis of Phenyl Analogues Replacing the Oxadiazole Ring of Phidianidines" *SC INBRE Science Symposium,* Columbia SC, **2018**.
21. Anderson, K.; Bao, R.; Cox, E.; Wakefield, B.; "Optimization of the First Coupling in Phidianidine Furan Analog Synthesis" *SC INBRE Science Symposium*, Columbia SC, **2018**.
22. Klatka, R.; Laws, III, D.; Wakefield, B.; "The Synthesis of 2,4-Furan Containing Phidianidine Analogues" *SC INBRE Science Symposium*, Columbia SC, **2018**.
23. Rohal, K.; Laws, III, D.; Wakefield, B.; "Progress Towards Phidianidine Synthesis" *10th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2018**.
24. Laws, III, D.; King, D.; Schroeder, I.; Rohal, K.; Williams, D.; Wakefield, B.; "Synthesis and Biological Evaluation of Phidianidine Analogues" *255th ACS National Meeting and Exposition,* New Orleans, LA, **2018**
25. Wilson, B.; Stafford, N.; Wakefield, B.; "Phidianidine Analogs Containing an Isoxazole Ring Structure" *9th Annual Costal Carolina University Undergraduate Research Competition,* Coway, SC. **2017**.
26. Laws, III, D.; King, D.; Wakefield, B.H.; "Progress toward phidianidine analogs" *69th Southeastern Regional Meeting of the American Chemical Society,* Charlotte, NC, **2017**.
27. Laws III, D.; Wakefield, B.; "Synthesis of phidianidine analogs containing 1,2,3-triazoles" *South Carolina Academy of Science 90th Annual Meeting,* Conway, SC, **2017**.
28. Wilson, B.; Stafford, N.; Wakefield, B.; "Phidianidine analogues containing an isoxazole ring structure." *South Carolina Academy of Science 90th Annual Meeting,* Conway, SC, **2017**.
29. Wakefield, B.; King, D.; Batten, A. "Synthesis of phidianidine analogs containing 2,5-disubstituted oxazoles" *68th Southeastern Regional Meeting of the American Chemical Society,* Columbia, SC, **2016**.
30. Wakefield, B.; Stafford, N. "Phidianidine analogues containing an isoxazole ring" *68th Southeastern Regional Meeting of the American Chemical Society,* Columbia, SC, **2016**.
31. Wakefield, B.; Batten, A. "Progress toward phidianidine analogs containing oxazoles and isoxazoles" *68th Southeastern Regional Meeting of the American Chemical Society,* Columbia, SC, **2016**.
32. Wakefield, B.; Laws, D.; King, D. "Synthesis of phidianidine analogs containing 1,2,3-triazoles" *68th Southeastern Regional Meeting of the American Chemical Society,* Columbia, SC, **2016**.
33. Wakefield, B.; King, D.; Batten, A. "Synthesis of phidianidine analogs containing 2,5-disubstituted oxazoles" *SC INBRE Poster Session,* Columbia SC, **2016**.

34. Wakefield, B.; Stafford, N. "Phidianidine analogues containing an isoxazole ring" *SC INBRE Poster Session*, Columbia SC, **2016**.
35. Wakefield, B.; Batten, A. "Progress toward phidianidine analogs containing oxazoles and isoxazoles" *SC INBRE Poster Session*, Columbia SC, **2016**.
36. Wakefield, B.; Laws, D.; King, D. "Synthesis of phidianidine analogs containing 1,2,3-triazoles" *SC INBRE Poster Session*, Columbia SC, **2016**.
37. Wakefield, B.; King, D.; Batten, A. "Synthesis of phidianidine analogs containing 2,5-disubstituted oxazoles" *Coastal Carolina Summer Research Symposium*, Conway SC, **2016**.
38. Wakefield, B.; Stafford, N. "Phidianidine analogues containing an isoxazole ring" *Coastal Carolina Summer Research Symposium*, Conway SC, **2016**.
39. Wakefield, B.; Batten, A. "Progress toward phidianidine analogs containing oxazoles and isoxazoles" *Coastal Carolina Summer Research Symposium*, Conway SC, **2016**.
40. Wakefield, B.; Laws, D.; King, D. "Synthesis of phidianidine analogs containing 1,2,3-triazoles" *Coastal Carolina Summer Research Symposium*, Conway SC, **2016**.
41. Stady, S.; Beebe, B.; Jackson, A.; Wakefield, B. "Synthesis of the Tricyclic Core of Flinderole C from o-Iodoaniline" *8th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2016**.
42. Georgeson, A,; McNamara, C.;, Bauer, M.; Wakefield, B.; King, T. S., Olympia, R.P.; "Positive and negative themes found in superhero-based films. *National Scientific Meeting of the Ambulatory Pediatric Association/Society for Pediatric Research National Meeting*, Baltimore, MD, **2016**
43. Georgeson, A, McNamara C, Bauer M, Wakefield B, King TS, Olympia RP. Positive and negative themes found in superhero-based films. *Academic Pediatric Association (APA) Region II/III Meeting*, New York, NY, **2016**
44. Baykal, L.; Neal, K.; Wakefield, B. "Synthesis of Leu-RS Analogues" *7th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2015**.
45. Thurn, N.; Wakefield, B. "Progress Towards the Grandisines" *7th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2015**.
46. Cufley, M.; Lance, V.; Wakefield, B. "Optimization of Friedel Crafts Alkylation with Indoles to form the core of Flinderole C" *7th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2015**.
47. Stady, S.; Ruff, J.; Wakefield, B. "Synthesis of the Flinderole C Core Using a LaRock Indole Synthesis" *7th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2015**.
48. Baykal, L.; McGee, S. T.; Wakefield, B. "Synthesis of Flinderole C Analogues" *6th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2014**.
49. Martinetti, C.; Segreto, J.; Klarich, A.; Knotts, V.; Barnes, R.; Chisolm, T.; Wakefield, B. "New applications of a Brønsted Acid Catalyzed Friedel-Crafts Reaction" *6th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2014**.
50. Chaplin, K.; Klarich, A.; Knotts, V.; Wakefield, B. "A New Approach to the Synthesis of Flinderole C" *6th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2014**.
51. Barnes, R.; Chisolm, T; Klarich, A.; Knotts, V.; Wakefield, B. "Bronsted Acid Catalyzed Intramolecular Friedel-Crafts Addition of Indoles to Tertiary Allylic Alcohols" *65th Annual Meeting of the Southeast Regional Meeting of the American Chemical Society*, Atlanta, Ga. **2013**
52. Klarich, A.; Knotts, V.; Barnes, R.; Chisolm, T.; Wakefield, B. "Acid-Catalyzed Intramolecular Friedel-Crafts Reactions with Indole and Allylic Alcohols" *5th Annual Costal Carolina University Undergraduate Research Competition*, Coway, SC. **2013**.
53. Wakefield, B.; Benson, A.; Brown, M. K.; Williams, N. "Progress toward the flinderole alkaloids" *243rd ACS National Meeting*, San Diego, Ca. **2012**.
54. Benson, A.; Brown, M. K.; Williams, N.; Wakefield, B. **"**Progress to Flinderole C." *2011 Annual Biomedical Research Conference for Minority Students (ABRCMS)*, St. Louis, Mo. **2011**
55. Wakefield, B.; Goudy, A.; Orefuwa, S.; Lott, L. Q.; Alexander, D.; Kerr, A. "Synthesis of New Naphthalene Linkers for the Incorporation in Hydrogen Storage Metal Organic Frameworks" *242nd ACS National Meeting*, Denver, Co. **2011**

56. Orefuwa, S; Yang, H.; Alexander, D.; Wakefield, B.; Goudy, A. "Characterization and Hydrogen Enthalapy of a Novel IRMOF-8-NO_2 Prepared by Rapid Solvothermal Method" *Gordon Research Conference: Hydrogen Metal Systems*, Easton, MA. **2011**
57. Benson, A.; Brown, M. K.; Williams, N.; Wakefield, B.; "Progress Toward Flinderole C." *Delaware State University Summer Undergraduate Research Symposium*, Dover, DE. **2011**

Presentations by Bryan Wakefield

1. Wakefield, H.; Olympia, R.P.; King, T.S.; Wakefield, B.; Weber, C. "Positive and Negative Themes Found in Sports-related Films" *MUSC Pediatric Research Day*, Charleston, SC. **2016**.
2. Wakefield, B.; Wipf, P. "The Total Synthesis of (+/-)-Thiohalenaquinone and Related Furanosteriod Analogues." *3rd Annual CMLD Meeting*, Cambridge, MA. **2007**.
3. Wakefield, B.; Halter, R. J. ; Wipf, P. "Total Synthesis of Thiohalenaquinone." *Science 2006*, Pittsburgh, PA. **2006**.
4. Wipf, P.; Wakefield, B.; Nunes, R. L. "S_N2'-Aziridine Ring Opening Approach to Solid Phase Synthesis of an (*E*)-Alkene Peptide Isostere Library." *38th National Organic Symposium*, Bloomington, IN, **2002**.

PRESENTATIONS

Presentations by Collaborators

1. Olympia, R. P.; Wakefield, H.; King, T. S., Wakefield, B, Webber, C.; "Injuries depicted in sport-related films." *National Scientific Meeting of the Ambulatory Pediatric Association/Society for Pediatric Research National Meeting*, Baltimore, MD, **2016**
2. Olympia, R. P.; Wakefield, H.; King, T. S., Wakefield, B, Webber, C.; "Injuries depicted in sport-related films." *John M. Templeton Pediatric Trauma Symposium, Children's Hospital of Philadelphia*, Philadelphia, PA, **2016**

Presentations by Bryan Wakefield

1. Wakefield, B.; "Various Approaches to the Core of Phidianidine Analogues" *SC INBRE Science Symposium*, Columbia SC, **2018**.
2. Wakefield, B.; "Bronsted Acid Promoted Friedel-Crafts Addition of Indoles" *65th Annual Meeting of the Southeast Regional Meeting of the American Chemical Society*, Atlanta, Ga. **2013**
3. Wakefield, B.; Benson, A.; Brown, M. K.; Williams, N. "Intramolecular Friedel-Crafts reactions with indole and allylic alcohols" *243rd ACS National Meeting*, San Diego, Ca. **2012**

AFFILIATIONS

2008-current American Chemical Society member

PROFESSIONAL ACTIVITIES

- Presided over New Reactions and Methodology AM session 3/27/12 *243rd ACS National Meeting*, San Diego, Ca. **2012**

SYNERGISTIC ACTIVITIES

Coastal Carolina University

- Faculty advisor for the Biochemistry and Chemistry Club *10/2013-current*

South Carolina Section of the American Chemical Society Executive Committee Member

- Chair-elect 1/2019-12/2019
- Chair 1/2020-12/2020
- Past-chair 1/2021-current

COMMITTEES

Coastal Carolina University
Departmental
- Lecturer Search Committee: *10/2012-5/2013*
- Curriculum Committee: *11/2012*-8/2014
- Assistant Professor Physical Chemistry Search Committee: *12/2013-3/2014*
- Lecturer Search Committee Chair: 6/2015-9/2015
- Assistant Professor Biochemistry Search Committee: *8/2015-4/2016*
- Visiting Assistant Professor Search Committee: *5/2016-6/2016*
- Assistant Professor Biochemistry Search Committee: *10/2016-3/2017*
- Assistant Professor Organic Search Committee - Chair: 1/2021-4/2021
- Visiting Assistant Professor Organic Search Committee – Chair: 5/2021-7/2021
- Lecturer Organic Search Committee – Chair: 5/2021-7/2021
- Assistant Professor Organic Search Committee: 9/2021-12/2021
- Lecturer Organic Search Committee: 9/2021-2/2022
- Promotion and Tenure Guideline Review – Chair: 9/2022-12/2022

College
- College of Science Technology committee *8/2014-8/2017*
- Pre-Health Advisory Committee *1/2016-current*
    - Advise and evaluate students for medical, dental, pharmacy and other health related professional schools.
    - Contribute to the committee letters that are written for students

University
- Faculty Senate Representative for the Department of Chemistry *8/2016-8/2019*

Delaware State University
Departmental
- Graduate Student Committee *8/2010-5/2012*
    - Graduate Program Director *8/2011-5/2012*
- Curriculum Committee *8/2010-8/2011, 12/2011-5/2012*
- Departmental Safety Committee *8/2010-12/2011*
- Scholarship Committee *8/2010-12/2011*
- Faculty Senate Alternate *8/2011-5/2012*

College
- College of Mathematics, Natural Sciences and Technology (CMNST) Honors Committee *8/2010-5/2012*
- College of Mathematics, Natural Sciences and Technology (CMNST) Graduate Committee *8/2011-5/2012*

STUDENTS MENTORED

Name	**Dates**	**Major**
Christina Gentile	August 2022 - current	Biochemisry
Sadie Disselkoen	August 2022 - current	Biochemistry
Trinity Ghering	August 2021 - current	Biochemistry
Anna Tingler	June 2021 - current	Biochemistry
Lindsay Newton	June 2021 – May 2022	Biochemistry
Dustin Lowe	January 2020-May 2022	Chemistry

Kwesi Jackson	August 2020- December 2021	Chemistry
Caitlyn Evans	August 2020 – December 2021	Chemistry
Brooke Dunnery	January 2020 - May 2021	Marine Science
Jonah Nordeen	June 2019-December 2020	Biochemistry
James Heldman	August 2019 – December 2020	Biochemistry
Kurtis Anderson	January 2018 – May 2019	Chemistry
Elisabeth Cox	January 2018 – May 2019	Biochemistry
Esther Holt	June 2018 - May 2019	Biochemistry
James Hatton	June 2018 - May 2019	Biology
Kadarius Leake	June 2018 - May 2019	Chemistry
Reilly Klatka	June 2018 – August 2018	Biochemistry
Ryan Bao	June 2018 – August 2018	High School
David Laws	June 2016 – June 2018	Biochemistry
Dillon King	June 2016-December 2017	Marine Science/Biochemistry
Breana Wilson	August 2016 – May 2017	Biochemistry
Augustine Batten	June 2016-August 2016	High School Student
Nehemiah Stafford	June 2016-August 2016	Chemistry
Breauna Beebe	January 2016-May 2016	Biochemistry
James Jones	August 2015-December 2015	Chemistry
Kingsley Neal	January 2015-December 2015	Biochemistry
Samantha Stady	January 2015-May 2016	Marine Science
Veronica Lance	January 2015-May 2015	Marine Science
Maria Cufley	January 2015-May 2015	Undeclared
Nicholas Thurn	August 2014-May 2015	Biochemistry
Jonathan Ruff	August 2014-December 2014	Biology
Layla Baykal	January 2014-May 2015	Biology and Biochemistry
Tyler McGee	January 2014-December 2014	Biology
Kelly Chaplin	August 2103-May 2014	Biology
Christina Martinatti	January 2013 – May 2014	Biochemistry
John Segreto	September 2013 – December 2014	Chemistry
Victoria Knotts	January 2013–December 2014	Biochemistry
Romie Barnes	January 2013-December 2013	Biology
Ashley Klarich	January 2013–December 2013	Biochemistry
Traeannah Chisolm	January 2013–May 2013	Biology
Andre Kerr	May 2010-May 2011	Chemistry
Lewis Lott	May 2010-May 2011	Chemistry
Allen Benson	May 2010-May 2011	Chemistry
Dante Alexander	November 2010-May 2010	Chemistry
Michael K. Brown	September 2010- May 2010	Biology
Nicole Williams	September 2010- May 2010	Chemistry