**JACOB P. GARBER**

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POSITION

University of Georgia, Athens, GA

Graduate Research Assistant Fall **2019-Present**

EDUCATION

Clemson University, Clemson, SC

**Bachelor of Science, Chemistry, Fall 2014-Spring 2018**

**Concentration in Organic Chemistry**

**Cumulative GPA: 3.64/4.00**

PROFESSIONAL AND RESEARCH EXPERIENCE

**Undergraduate Research Assistant,** Clemson University, Clemson, SC

Sept 2017-May 2019

* Worked under Dr. Dev Arya in utilizing Hoechst bisbenzimidazole derivatives as DNA intercalators in bacteria such as E. coli
* Synthesized a variety of bisbenzimidazole acids while varying substituents in order to increase inhibitory activity.
* Monitored the activity of these compounds by observing color change in the dyes during in vitro studies.

**Peer Learning Leader,** Clemson University, Clemson, SC

Aug 2017–May 2018

* Worked for the Clemson University Academic Success Center in facilitation of learning between students in an Organic Chemistry I and II class that I had previously taken and done well in.
* Sat in the student’s class each time they met, took the same notes as those students, then held two eighty-minute review sessions each week where I helped them learn how to communicate with their peers and use efficient problem solving strategies

**Internship**, Thermo Fisher Scientific, Greenville, SC

Jun 2017-Aug 2017

* Assisted PhDs in the Research and Development of active pharmaceuticals
* Assisted Process Technology in the development, conduction, and refinement of pharmaceutical manufacturing techniques
* Communicated with quality control in testing product quality while providing analytical insight when inquired upon
* Maintained chemical inventory and workplace environment in compliance with OSHA and EHS standards

**Undergraduate Research Assistant,** Clemson University, Clemson, SC

Aug 2016-May 2017

* Worked under Dr. Daniel Whitehead in utilizing Hypervalent Iodo-Peptide Catalysts in Asymmetric Organic Reactions
* Synthesized a library of 2-iodo-benzoic acid capped pentapeptides to act as catalysts in the Oxytosylation of Propiophenone and cyclization reactions of δ-Alkynyl-β-Ketoesters

**Internship,** Janed Enterprises, Taylors, SC

Jun 2016-Aug 2016

* Maintained vital development parameters, such as pH, pressure, and temperature, in the manufacturing of industrial cleaners
* Performed both quality control and development duties to create large quantities of industrial cleaners
* Used metal coating techniques to prevent oxidation of finished metallic products

HONORS AND AWARDS

* Calhoun Honors College: **Clemson University:** Clemson, SC (2016)
* Departmental Honors in Chemistry: **Clemson University:** Clemson, SC (2017)
* Al & Lynn Bullington Endowed Scholarship: **Clemson University:** Clemson, SC (2016)
* Dean’s List (GPA=3.50-3.99): **Clemson University:** Clemson, SC (2015-2018)
* Presidents List(GPA=4.00): **Clemson University:** Clemson, SC (2017)

PRESENTATIONS

1. **Development and Applications of Iodoarene Peptide Catalysts for Asymmetric Organic Transformations.** Poster presented at the Clemson Chemistry Symposium, Clemson, SC April 2017.

TEACHING EXPERIENCE

**CH-1011: General Chemistry Laboratory 1:** Clemson University

Undergraduate Level Freshman Lab course

**CH-2211: Modern Organic Chemistry Laboratory 1**: University of Georgia

Undergraduate Level Sophomore Lab course

SERVICE ACTIVITIES (EXTERNAL)

**Vice-President of the Student Association for the American Chemical Society.** Assisted the current president of the association with the planning of various outreach activities to local schools and fundraisers. Clemson, SC (2017-2018)