Curriculum Vitae

Montana Knight (864) 631-4659 mknight@ncsu.edu

Executive Summary

Well-versed candidate in biotechnology with software, lab, and real-world experience capable of critical thinking and analytical problem solving seeking program that will further scientific knowledge in order to contribute to future discovery.

Education

North Carolina State University

Fall 2018- Present

Pursuing a Doctor of Philosophy degree in Bioinformatics

Florida Gulf Coast University

Bachelor of Science in Biotechnology with a Minor in Chemistry Active Member of Florida Gulf Coast University Honors Program

Fall 2014- May 2018

GPA: 3.91

Work and Research Experience

Analytical Chemistry Intern at Algenol Biofuels

May 2017-December 2017

- Processed 300+ samples each week for different departments using spectrophotometry, SDS-PAGE, Western Blot, and BCA Assay.
- Developed new methods to process and analyze protein samples.
- Performed annual maintenance on spectrophotometers and computer software.

Teaching Assistant at Bioinformatics Summer Workshop

Summer 2017

- Taught 30 middle and high school students various biotechnology software including Figtree, Aliview, Clustal, and Garli.
- Educated students on molecular evolution through the human race and how it can impact the world around us.

Laurel Wilt Literary Review Project

January 2017-April 2017

- Conducted a literary review of possible solutions to the spread of Laurel Wilt throughout Southwest Florida.
- Analyzed past and current scientific research on Laurel Wilt and its effects in the United States.

Research Assistant Studying Tillandsia recurvata

Fall 2015

- Studied the molecular biology of *Tillandsia recurvata* (ball moss) in order to see what enzymes might be activated during a time where ball moss is being desiccated.
- Used PCR and gel electrophoresis techniques to determine if genes linked to stress enzymes could be found in the ball moss.

Mathematics Instructional Support Leader at the Student Athletic Learning Center

October 2014- December 2015

- Instructed other college students on many different subjects including General and Finite Mathematics, Intermediate and College Algebra, and Calculus.
- Advised student athletes on study skills, maximizing their resources, and encouraged them to be more involved in their schoolwork.

Skills and Relevant Coursework

- Computational Tools for Engineering, Methods in Biotechnology, and Molecular Evolution in the Omics Age
- Biology I&II, Chemistry I&II, Organic Chemistry I&II, Biochemistry, Cell Biology, Genetics, Molecular Genetics
- Aliview, Clustal, Garli, and Workbench
- Microsoft Word, Excel, and Powerpoint
- · R, Matlab
- Have worked with PCR equipment, Gel Electrophoresis, SDS-PAGE, Western Blot, Bacterial Transformation, DNA MiniPrep, Protein Extraction, Bradford Assay, Size-Exclusion Column

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Community Involvement

Florida Gulf Coast University Student Government Supervisor of Elections

Spring 2018

- Informed 60 candidates on the rules and procedures of the election code.
- Kept track of incident reports and responded to filed infractions within 24 hours.
- Verified and presented the election results.

Chi Omega President

December 2016-December 2017

- Organized an executive board of nine women that oversees the academics, programming, and standards of the
- Led 180 women in the organization and create leadership opportunities for them within the organization as well as encourage them to be more involved outside of the organization.

National Panhellenic Council Vice President of Scholarship and

December 2015-December 2016

Service

- Created new relationships among the academic and philanthropy chairs of each organization.
- Work with local companies to provide funding and sponsorship for the Circle of Sisterhood.

Eagles of Tomorrow—Founder and President

January 2015-August 2017

- Gave the Lee County Elementary School System a new opportunity for free afterschool STEM education.
- Led a team of fifteen student volunteers and train them to be ready to go into the schools.
- Applied for and was awarded four grants through the university and the local community.

FGCU Student Government Senator

May 2016-April 2017

- Voted on resolutions and bills that come to the Student Senate every week.
- Represented my peers and their voices in an active and professional manner.
- Advocated on behalf of other students on issues like DACA and freedom of speech.

FGCU Student Government Appropriations Committee Vice Chair

May 2016-April 2017

- Took weekly minutes at each Appropriations Committee Meeting.
- Worked with a team of five to create a 4 million dollar budget.
- Spent three weeks meeting with over thirty student organizations and ten FGCU departments in budget hearings to hear what they needed and see what could be cut to create our budget.

Honors Internal and External Events Committee Chair on Honors Senate

January 2015-May 2016

- Create new programming for the FGCU Honors community that aided in the facilitation of networking opportunities.
- Voted on issues that came to the Honors Senate and represented my peers in the Honors Program every week.

Alternative Break Participant

December 2015

April 2018

- Participated in a week of community service in Atlanta, Georgia.
- Worked a minimum of eight hours a day with six different community partners.

Honors and Awards

Florida Gulf Coast University President's List

Florida Gulf Coast University Dean's List

Inducted into the Florida Gulf Coast University Hall of Fame Fall 2014-May 2018 Florida Gulf Coast University Honors Student

Fall 2014-May 2018 Florida Gulf Coast University President's Gold Recipient (4x) Florida Bright Futures Academic Scholar (4x) Fall 2014-May 2018

Algenol Biofuels Scholarship for STEM Education (3x) Fall 2015-May 2018

Recipient of the Senate Contributor of the Year 2016-2017

2016 Recipient of the Panhellenic Executive Council Member of the Year Whitaker Center for STEM Education Grant Recipient (3x) 2015-2016

Honors Development Grant Recipient Fall 2015

Honors Research Symposium Grant Recipient Spring 2015