

Camden Cutright

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(205) 639-3730

EDUCATION

North Carolina State University Raleigh, NC
Ph. D Chemical Engineering Expected December 2020
National Science Foundation Graduate Research Fellow

Vanderbilt University Nashville, TN
B.E. *magna cum laude*, Honors in Chemical Engineering, GPA 3.86/4.00 May 2016

LEADERSHIP EXPERIENCE

North Carolina State University Raleigh, NC
Undergraduate Research Mentor August 2017-Present

- Mentored five undergraduate students through ongoing research projects

Teaching Fellow January-December 2017

- Wrote exams and reviewed coursework for mathematical modelling and process control

Recruiting Captain Spring 2018

- Organized the annual departmental recruiting weekend
- Coordinated travel, meetings, dining, entertainment, and activities for fifty prospective students

Lab Safety Official January-December 2018

- Created the first comprehensive safety plan including inventory and SOPs
- Trained all new personnel for the 2018 calendar year on non-equipment specific protocols and best practices within the lab

Vanderbilt University Nashville, TN
Teaching Assistant Fall 2015

- First ever undergraduate teaching assistant within the Chemical and Biomolecular Engineering department at Vanderbilt University

Vanderbilt Students Volunteer for Science (VSVS) January 2014-May 2016

- Lead lab experiments and taught basic scientific principles weekly at local middle schools

RESEARCH EXPERIENCE

North Carolina State University Raleigh, NC
Ph.D. Research January 2017-Present

- Designed novel membranes with adaptive permeability from nonwoven materials
- Developed a new platform for controlled radical polymerization using nanoparticle initiators
- Constructed scalable nonwoven/hydrogel composite systems from crosslinked stimuli responsive microgels and polymers
- Awarded the best presentation at the Industrial Advisory Board conference in December 2018

Vanderbilt University Nashville, TN
Undergraduate Research August 2014-May 2016

- Synthesized shaped controlled gold nanostructures and thermally sensitive liposomes
- Functionalized nanostructures with biomolecules for stability, ligand affinity, and in-situ imaging
- Performed surface enhanced Raman imaging for oncogene detection
- Analyzed diagnostic and therapeutic effects of functionalized nanostructures in cells and mice
- Awarded Vanderbilt University's Exceptional Undergraduate Researcher in May 2016
- Two second author publications, *ACS Omega 2016*, *ACS Omega 2017*