

Chelsea M. Crooks

Curriculum Vitae

University of Wisconsin-Madison
AIDS Vaccine Research Laboratory
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I. Background

Education

2017-Present Microbiology Doctoral Training Program, *University of Wisconsin-Madison*
2010-2014 Auburn University, Auburn, AL, *Magna Cum Laude*
Bachelor of Science, *Microbial, Cellular, and Molecular Biology*
Bachelor of Arts, *Spanish*

Professional Academic Experience

2017-Present Graduate Research Assistant, Friedrich Lab, *University of Wisconsin-Madison*
2017 Intramural Research Training Award Fellow, *National Institutes of Health*
2013-2014 Undergraduate Research Assistant, A. Gorden Lab, *Auburn University*

Honors, Awards, and Funding

2018-Present Parasitology and Vector Biology T32 Training Grant Recipient
2014 Phi Kappa Phi Honors Society
2014 University Honors Scholar, *Auburn University*
2010-2014 National Merit Scholar Presidential Scholarship, *Auburn University*

II. Research Accomplishments

Poster Presentations

May 2017 "Overcoming Challenges for Antimicrobial Susceptibility Testing"
Post-Baccalaureate Poster Day, National Institutes of Health
Nov. 2013 "Towards the synthesis of a tripyrromethane derivative mimicking the active site of coenzyme F₄₃₀" Southeastern Regional Meeting of the American Chemical Society

Research Experience

2017-Present **Graduate Research Assistant**, *University of Wisconsin-Madison*
In the lab of Dr. Tom Friedrich, I am studying the impact of dengue virus immunity, conferred by either infection or vaccination, on Zika virus infection during pregnancy in a non-human primate model. Additionally, I am working on projects assessing within- and between-host Zika virus evolution.

2017 **Intramural Research Training Award Fellow**, *National Institutes of Health*
Under the supervision of Dr. Karen Frank, during my fellowship in the Department of Laboratory Medicine at the Clinical Center at the NIH, I evaluated the performance of susceptibility testing methods for the polymyxins, a group of last-resort antimicrobials often used in the treatment of multi-drug resistant infections, in order to determine an accurate and reproducible test for use in clinical laboratories.

2013-2014 **Undergraduate Research Assistant**, *Auburn University*
In the lab of Dr. Anne Gorden, I conducted research, culminating in an Honors Thesis, focused on synthesizing a simple, small molecule whose biochemical properties mimic those of the coenzyme F₄₃₀ for methane activation studies.

III. Professional Development

Workshops & Activities

- 2018-Present **Journal Club**, Co-founder, Women and Underrepresented Minorities in Science and Medicine
- 2018-Present **Member, Catalysts for Science Policy (CaSP)**, *University of Wisconsin-Madison*
Journal Club Presentation: "Carbon Capture and Storage," March 21, 2018
- August 2018 **Software Carpentry Workshop**, University of Wisconsin-Madison

Professional Society Memberships

- 2018-Present American Society for Virology, Member
- 2017-Present Infectious Disease Society of America, Member

IV. Teaching & Mentorship

Classroom

- Spring 2019 **Teaching Practicum**, *Medical Microbiology & Immunology 341: Immunology*
I will be serving as a graduate's assistant for MMI 341 in Spring 2019. This is an undergraduate course that serves as an introduction to the immune response to infectious disease.

Mentorship

- 2018-Present **Elizabeth Brown**, undergraduate
Elizabeth is a sophomore undergraduate who joined the lab to gain research experience and plans to apply to graduate or professional school. I am leading her research training and supervising her work in optimizing an assay to isolate and quantify Zika virus RNA from macaque tissue samples.

IV. Additional Experience

Professional Experience

- 2016-2017 **Special Assistant**, *U.S. Department of Health and Human Services*
- 2015-2016 **Confidential Assistant**, *U.S. Department of Health and Human Services*
Served as a political appointee in the Immediate Office of the Secretary as the Special Assistant to the Counselor to the Deputy Secretary. Responsible for facilitating the activities of cross-departmental teams working on multi-faceted policy initiatives in a broad range of public health, healthcare, and human services programs.
- 2015 **Intern**, *U.S. Department of Health and Human Services*
Served as an intern in the Office of the Chief of Staff in the Immediate Office of the Secretary. Responsible for press communications with senior departmental officials and assisted with the compilation of the Department's weekly memo to the White House.