Casey Zipfel

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EDUCATION

Georgetown University- Washington, DC August 2016- present
Ph.D. in Biology GPA: 3.71
Advisor: Dr. Shweta Bansal

The Pennsylvania State University- University Park, PA August 2012- May 2016
B.S. in Biology: Concentration in Vertebrate Physiology, GPA: 3.46
Minor in Health Policy and Administration

RESEARCH EXPERIENCE

Graduate Research Assistant, Georgetown University August 2016 – present
Bansal Lab, Department of Biology

- Studying interplay of infectious disease and individually motivated human behavior, specifically vaccination and infection-induced contact reduction.

Undergraduate Research Assistant, Pennsylvania State University August 2014-May 2016
Hughes Lab, Department of Biology

- Participated in NSF funded research on ants as a model organism to research infectious disease transmission and behavior.
- Conducted independent research project on SIR modeling of disease dynamics of social insects based on parasite type and colony conditions

TEACHING EXPERIENCE

BIOL 422/522 Modeling Biological Populations: Teaching Fellow (Georgetown University)
January 2017- May 2017 & August 2017-December 2017

- Facilitated laboratory section on modeling utilizing Python within SageMathCloud/CoCalc
- Attended and assisted in lectures, hold office hours, and addressed questions from students
- Graded weekly lab reports, biweekly homework assignments, and group projects

BIOL 142 Physiology Lab: Lead Teaching Assistant (Pennsylvania State University)
August 2015-May 2016

- Lead laboratory section of 25 students through laboratory activities
- Delivered pre and post laboratory lecture
- Graded quizzes and laboratory reports and held office hours

BIOL 110 Basic Concepts and Biodiversity: Lecture Assistant (Pennsylvania State University)
August 2014-December 2014

- Assisted students in lecture and through office hours

CONFERENCE TALKS

Infection-induced behavior change: impact on epidemiological prediction & inference June 2018

NetSci: International School and Conference on Network Science, Paris, France
Satellite Session: Integration of empirical data in network epidemiology

The interplay between human behavior change and infectious disease dynamics February 2018
Graduate Research Symposium, Georgetown University

Relevant Courses

Ph.D.

Mathematics: Mathematical/Statistical computing, Applied Statistical Methods II, Applied Time Series Analysis, Mathematics of Social Networks, Linear Algebra

Biology: Infectious Disease & Conflict, Ecological Analysis

Undergraduate

Biology/epidemiology: Ecology of Infectious Diseases, Principles of epidemiology

Leadership Positions

General Assembly Representative for the Department of Biology October 2017-present
Georgetown University Graduate Student Government

Administration Captain September 2015- April 2016
Relay for Life of Penn State

Overall Competitor Liaison February 2014-September 2014
Penn State Homecoming, Organization Relations Committee

Professional Development

2018 MIDAS (Models of Infectious Disease Agent Study) Network Meeting – Bethesda, MD
2017 Summer Institute in Statistics and Modeling in Infectious Diseases – University of Washington (**Received travel and tuition scholarships**)
2016 Clinic on Dynamical Approaches to Infectious Disease Data- University of Georgia (**Received travel and attendance scholarships**)
2017 Teaching workshops hosted by the Center for New Designs in Learning and Scholarship (CNDLS), Georgetown University

Professional Experience

Independence Blue Cross- Health Resource Center Intern June-August 2014, 2015, 2016

- Participated in College Intern Innovation Challenge- 1st place winner 2016
- Worked in IBC's Healthy Lifestyle program by processing reimbursements, aiding in organization, and the transfer of the program to a third party vendor.
- Transition Nursing Precertification Resources to online database.
- Assisted direct ship injectables department by validating and organizing requests from hospitals and physicians offices

Technical Skills

Programming: Python (2 years), R (2+ years)
Database Management: MySQL (1 year)