

# Lucy E Delaney

graduate student in biological sciences

## contact

ldelan5@uic.edu

## website

ledelaney.github.io/

## github

ledelaney

## programming

R

## document markup

LaTeX, HTML & CSS,  
R Markdown

## software

Adobe Illustrator,  
Microsoft Office Suite

## licenses

Illinois Substitute  
Teaching, FCC  
Technician Class Radio

## Interests

Conceptual understanding of evolutionary principles, R for undergraduate education, macroevolution, the evolution of plant breeding systems, data manipulation & visualization with tidyverse

## Education

**PhD candidate** in Ecology & Evolutionary Biology

University of Illinois at Chicago

Dissertation: *The Nature of Adaptation and the Epistemology of Natural Selection*

**MA** in Molecular & Cellular Biology, 2016

Hunter College (CUNY)

**BS** in Forensic Molecular Biology, Philosophy, 2012

John Jay College (CUNY)

## University Teaching

**BIOS 220** Mendelian and Molecular Genetics

Fall 2019 - Summer 2020

Sophomore-level course focusing on Mendelian inheritance patterns and molecular mechanisms of inheritance. Helped managed transition from in-person to online delivery. Responsible for teaching discussion section, creating digital course materials & exams, grading, and Blackboard administration.

**BIOS 331** General Ecology Laboratory

Summer 2019

Application of ecological and evolutionary concepts with hands-on experiments and field trips to local natural areas. Responsible for weekly laboratory instruction, office hours, and grading.

**BIOS 230** Ecology and Evolution

Spring 2019

Sophomore-level course with emphasis on basic ecological systems, ecosystem dynamics, and evolutionary principles. Responsible for weekly office hours, assignment creation, and grading.

**BIOS 430** Evolution

Fall 2017 - Fall 2018

Upper-division, programming-focused course on evolutionary theory and principles. Responsible for weekly office hours & debugging, quiz materials, and grading of R programming assignments.

**BIOS 120** Biology of Populations and Communities

2016-2017

Introductory biology laboratory course with emphasis on ecological and evolutionary principles. Responsible for weekly laboratory instruction, office hours, and grading.

## Community Teaching

**UIC Biological Sciences Department** Course Builder & Trainer

2020-Present

Trained in online instructional design & pedagogy, and software relevant to online teaching & learning. Assisting Biological Sciences Department faculty members in transitioning their courses online, and managing technical aspects of courses throughout online delivery.

**Nurturing Wisdom Tutoring** Tutor

2018-2020

Highly-rated individual tutoring for grades 7-12 in test preparation (SAT and high school entrance exams), science, mathematics, and writing.

**Chicago-area Charter Schools** Substitute Teacher

2015-2016

Substitute teacher for elementary, middle, and high school classes.

## Teaching Honors & Awards

- 2020 Nominated for the Graduate Student Excellence in Teaching and Mentoring Award
- 2020 Recipient of the Biological Sciences Department Graduate Teaching Award for BIOS 220
- 2018 Recipient of the Biological Sciences Department Graduate Teaching Award for BIOS 430

## Other Awards & Training

- 2020 Participant in the 2020 Chicago R Collaborative Conference
- 2018 Recipient of the Biological Sciences Department Travel Award
- 2018 Reviewer for International Journal of Botany, Oxford Bibliographies
- 2017 Accepted to NSF-funded workshop on Bayesian analysis of macroevolutionary mixtures
- 2017 Recipient of the Biological Sciences Department Travel Award
- 2017 Accepted to microMORPH Plant Anatomy Summer Course at Harvard University
- 2016 General horticulture volunteer at Garfield Park Conservatory

## Presentations

- Society for the Advancement of Biology Education Research West Online** | Talk 2021  
Delaney, Lucy E, The Four Causes of Adaptation. *Forthcoming*.
- Undergraduate Biology Education Research GRS** at Bates College in Lewiston, ME | Poster 2021  
Delaney, Lucy E, The Four Causes of Adaptation. *Forthcoming*.
- Annual Meeting of the Botanical Society of America** at Rochester, MN | Poster 2018  
Delaney, Lucy E, Ramanauskas, K., & Igić, B., Breeding Systems in the Legumes.
- microMORPH Summer Course** at Arnold Arboretum, Harvard | Talk 2017  
Delaney, Lucy E, Evolutionary Consequences of Plant Mating Systems.

## Publications

- Delaney, Lucy E**, Ramanauskas, K., & Igić, B. (2020a). Breeding systems in the legumes: What do we know? *Manuscript in Prep*.
- Delaney, Lucy E**, Ramanauskas, K., & Igić, B. (2020b). Breeding systems in the orchids. *Manuscript in Prep*.
- Delaney, Lucy E**. (2012). Nietzsche, nerve stimulation-image connection, and ontology. *John Jay's Finest*, 27, 99–103.

## Professional Experience

- Forensic Molecular Biologist** at NYC Office of Chief Medical Examiner 2012-2015  
Examined evidence for the presence of biological fluids, performed serological & DNA analysis techniques, analyzed data & performed statistical analyses, wrote reports, and provided expert scientific testimony in court.
- Health Research Intern** at NYC Department of Health 2011-2012  
Accepted to the Health Research Training Program for a year-long internship with the Bureau of Environmental Disease Prevention. Received training in disease epidemiology, emergency preparedness & response, public health and outreach programs in environmental disease control & prevention, and emerging viral infections.