# Lucy EDelaney

graduate student in biological sciences

#### contact

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#### website

ledelaney.github.io/

#### github

ledelaney

## programming R

#### document markup

LaTeX, HTML & CSS, Markdown & RMarkdown

#### licenses

Illinois Substitute Teaching License & FCC Technician Class Radio License

#### Interests

Evolution outreach & education, macroevolution, the evolution of plant breeding systems, the nature of adaptation, data manipulation & visualization with tidyverse, R for undergraduate education

#### **Education**

**PhD candidate** in Ecology & Evolutionary Biology University of Illinois at Chicago Thesis: *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)

### **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 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.

#### **Professional Experience**

**Online Course Builder** at UIC Biological Sciences Department 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.

**Tutor** at Nurturing Wisdom Tutoring

2018-Present

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

**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 analysis, 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.

## **Honors, Fellowships & Awards**

| 2020 | Recipient of the Biological Sciences Department Graduate Teaching Award for BIOS 220 |
|------|--|
| 2018 | Recipient of the Biological Sciences Department Travel Award                         |
| 2018 | Recipient of the Biological Sciences Department Graduate Teaching Award for BIOS 430 |
| 2017 | Accepted to NSF-funded summer workshop on diversification rates & macroevolution     |
| 2017 | Recipient of the Biological Sciences Department Travel Award                         |
| 2017 | Accepted to microMORPH Plant Anatomy Summer Course at Harvard University             |

## **Extracurricular**

| 2020-Present | Developed R functions for automated Blackboard grade finalization                 |
|--------------|---|
| 2020-Present | Created a website to manage student materials and tutorials in BIOS 220: Genetics |
| 2020         | Participant in the 2020 Chicago R Collaborative Conference                        |
| 2018         | Created programming tutorials for use in BIOS 331: General Ecology Laboratory     |
| 2017-Present | Reviewer for International Journal of Botany, Oxford Bibliographies               |
| 2016         | General horticulture volunteer at Garfield Park Conservatory                      |

#### **Presentations**

| Annual Meeting of the Botanical Society of America at Rochester, Min   Poster  | 2018 |
|--|------|
| Delaney, Lucy E, Ramanauskas, K., & Igić, B., Breeding Systems in the Legumes. |      |
| microMORPH Summer Course at Arnold Aboretum, 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.