Lucy EDelaney

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.