Ozan Kiratli

215 260 3054
kiratli@sas.upenn.edu
evolozzy
ozankiratli

Education

PhD in Biology (Expected 2022)
University of Pennsylvania (UPenn)
Philadelphia,PA
Conc: Evolutionary Biology

MS in Biology (2016)
Middle East Technical University (METU)
Ankara, Turkey
Conc: Evolutionary Biology

BS in Biology (2013)
Middle East Technical University
Ankara, Turkey
Minor in Physics

Selected Publication

Kiratli, O., Rudman, S. M., Torija, E., Babore, Y., Goldfischer, A., & Schmidt, P. (n.d.). Migration-associated epistasis can facilitate adaptive response in *Drosophila melanogaster*. (In prep).

Skills

Analysis Skills

- NGS analysis: Experience using trimming, aligning, cleaning tools, designing custom pipelines and tools.
- Phylogenetics: Building phylogenetic trees with various methods (BEAST, Neighbor Joining etc.).
- Clustering and model fitting: PCA, MDS, linear models.

Computer Skills

Coding
- R
- Bash
- Python
- awk
- C++
- julia

Productivity
- git
- LaTeX
- Inkscape
- GIMP
- Blender
- OBS

Summary

Evolutionary biologist with extensive experience in genomic analysis of Next Generation Sequencing (NGS) data. Strong written and oral communication skills complemented with advanced data visualization expertise. Focused on applying science to real world problems.

Experience

2022 – 2016 Research and Teaching Assistant

Department of Biology, UPenn

Designed, managed, and conducted 2 major experiments with *Drosophila melanogaster*; supervised 7 students in various projects; taught for 9 semesters rotating between 3 classes in person and online.

Project: Effects of Migration on Rapid Adaptation

- Conducted a large scale research project on the ecological importance of migration on epistatic interactions and rapid adaptation with implications in conservation biology as part of the efforts in saving species from extinction.
- Devised custom pipelines and tools to analyze poolseq samples sequenced with NGS.
- Prepared, maintained, handled, and manipulated large number of lines and populations of *D. melanogaster*.
- Designed and constructed phenotypic assays, collected data, performed statistical analysis, and visualized the results.
- Supervised 3 undergraduate students.

Project: Genetic Basis for Dispersal Behavior

- Constructed wooden and mesh structures to connect 15m-apart mesocosms for an outdoor experiment.
- Designed and constructed custom phenotypic assays, collected data, performed statistical analysis, and visualized the results.
- Supervised 2 undergraduate students.

Project: mtDNA Analysis of *D. melanogaster*

- Devised custom pipelines and tools to analyze mitochondrial DNA samples sequenced with NGS.
- Built phylogenies using BEAST and neighbor joining methods.

Teaching

- Designed syllabi for recitations, picked scientific publications matching students' knowledge.
- Applied different methods including active learning.
- Prepared and lead discussions, held office hours, wrote 300+ quiz and exam questions, graded exams.
- Set up and managed Canvas websites.

Lab Skills

- Maintaining *Drosophila* stocks and populations, collecting wild flies, species identification, and manipulating populations.
- Basic genetic and wetlab techniques.
- Designing, building, managing, and conducting large scale experiments.

Soft Skills

- Presentation
- Public speaking
- Willingness to learn
- Troubleshooting
- Collaboration
- Accepting feedback
- Independence
- Punctuality
- Problem solving
- Critical thinking
- Writing skills
- Mentoring
- Diversity and disability awareness
- Enthusiasm
- Cooperation
- Humorous

Hobbies

- Writing poetry
- Playing bass guitar
- Designing and coding electronics projects with Raspberry Pi and Arduino

2015 Research and Teaching Assistant
------- **Department of Molecular Biology and Genetics, METU**
2014

- Coded and modified simulations, analyzed the efficiency and accuracy of simulations from literature.
- Taught 4 different classes in 3 semesters, including recitations and laboratory classes.
- Designed a new lab module.
- Reviewed a lab manual.

Honors and Awards

- **Honorable Mention for the Best Student Talk**, (2020), American Naturalist 2020, Pacific Grove, CA
- **Peachey Grant for Field Research**, (2017, 2019), UPenn, Department of Biology
- **Graduate Scholarship of Scientist Education Support Program**, (2013), The Scientific and Technological Research Council of Turkey (TUBITAK)
- **Undergraduate Scholarship of Scientist Education Support Program**, (2007), The Scientific and Technological Research Council of Turkey (TUBITAK)
- **METU Honor Roll Achievement**, (2008, 2011, 2012)

Outreach and Leadership

- **Organizer of Virtual GREBE 2021**, (2019-2021)
  Organized the annual "Graduate Research in Ecology, Behavior, and Evolution" conference that is exclusive to Penn, Princeton, Rutgers, Columbia, and Yale evolutionary biology, behavior, and ecology graduate students; prepared and hosted the live portion of the conference where the pre-recorded talks and live Q&A sessions were broadcasted on Zoom.
- **Educational content creator**, (2021-Current)
  Creating content about major scientific events, environmental crisis, climate change, and philosophy of science including live content, educational clips, and videos in social media, holding live Q&A sessions, explaining scientific papers and process to public.
- **METU Biology and Genetics Student Club**, (2008-2012)
  Served as officer in Vice President and in Treasurer roles; organizing committee member of conferences including the public talks of Dr. Francisco J. Ayala "Darwin's Contribution to Science and Religion" in 2009, Dr. Jerry Allen Coyne "Rapacious Ignorance and Bigotry: Intelligent Design is against Evolution" in 2008.
- **Peer Educator on Reproductive Health**, (2006-2009)
  UNFPA, "Peer Education on Reproductive Health" project, Ankara, Turkey
  Ran several workshops in different cities and universities; selected as "Peer of the Month" in August 2007.