SELIN KUBALI

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EDUCATION

Smith College, Northampton, MA   Expected graduation May 2023

Bachelor of Arts, Biological Sciences and Statistical and Data Sciences   GPA 3.93

Thesis candidate in the Biology department in the Williams Lab

Honors:

- Recipient of STRIDE scholarship: award given to 50 first-year students to participate in undergraduate research
- Dean's List 2020-2021: represents top 25% of student body by GPA

RELEVANT EXPERIENCE

Smith College, Honors Candidate / Research Assistant in Williams Lab   September 2021 - present

- Lead a research project to alter mosquito immunity pathways with RNAi and CRISPR/Cas9 technologies
- Perform molecular biology techniques, including PCR, gel electrophoresis, and RNA/DNA isolation
- Perform tissue culture and maintain mosquito cell lines

Smith College, Summer Research Fellowship recipient   May 2022 - August 2022

- Researched immunity gene knockdown with RNAi in *Aedes albopictus*
- Used molecular biology techniques including qPCR and reverse transcription to collect data
- Designed experiments to process and analyze data

Participant in REU at Mathematical Biosciences Institute   June 2021 - August 2021

- Analyzed the mathematical properties of phylogenetic networks to aid understanding of horizontal gene transfer.
- Wrote Perl programs that detected and analyzed properties of phylogenetic networks.
- Collaborated with University of Ohio faculty and student participants to determine research directions
- Interpreted and presented research results.

Smith College, Research Assistant in Beery Lab   September 2019 - May 2021

- Participated in neuroendocrinology research studying social behavior in prairie voles.
- Learned how to use new software for analyzing animal behavior and created a guide for new users.
- Assisted in experimental set-up for partner preference tests.

PROJECT EXPERIENCE

Smith College, Bioinformatics, Rob Dorit   Fall 2021

"Synonymous and Nonsynonymous Mutation Rates in Selected SARS-CoV-2 Proteins"

- Wrote programs to analyze rate of mutations within and across strains of coronavirus to understand selection pressures. Modeled and visualized data. Discussed results in final paper.

SKILLS

Technical: Working proficiency in R, Python, Perl, and Java. Significant experience with Github, Tableau, Excel, Word, and PowerPoint, Unix. Familiar with standard molecular biology and tissue culture techniques.

Languages: Native fluency in Turkish and English. Proficient in Spanish.

RELEVANT COURSEWORK

Bioinformatics, Programming With Data Structures, Research Design and Analysis, Genomes and Genetics Analysis, Molecular Biology of Eukaryotes, Quantitative Genetics, Modeling for Machine Learning