

Iman Hamid

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*Versatile scientist with 7+ years of research experience in population genetics, genomics, bioinformatics, and evolutionary biology.
Collaborative team player passionate about advancing computational and statistical methods to study genetic variation.*

EDUCATION

Duke University, Durham, NC
Doctor of Philosophy (PhD), Genetics & Genomics

- Certificate in College Teaching

Expected Dec 2021

UCLA, Los Angeles, CA
Bachelor of Science, Biology

Jun 2016

- Summa cum laude
- Departmental Highest Honors

RELEVANT EXPERIENCE

Genetics & Genomics PhD Program, Duke University, Durham, NC

Aug 2017 - present

Dissertation Project: *Detecting adaptation in admixed populations*. (PI: Dr. Amy Goldberg)

- integrated genetic ancestry information and genomic simulations to detect adaptation in populations with mixed ancestry
- conceived and implemented new summary statistics to characterize evolutionary history in admixed populations
- developed novel applications of machine learning and computer vision methods to localize adaptive genetic variants

NASA Ames Research Center, Mountain View, CA

Jun 2016 - May 2017

Research Associate

- analyzed genetic and molecular responses to hypergravity-induced endoplasmic reticulum stress in *Drosophila melanogaster*
- characterized loss of dopaminergic neurons and associated behavioral changes in flies exposed to chronic hypergravity
- presented research at American Society for Gravitational and Space Research conference (Oct 2016)

SKILLS

- **Technical:** Coding languages (Python, R, Unix/Linux systems), genetic variant calling pipelines, population simulation software, machine learning (computer vision, random forests, clustering), statistics (Bayesian probability, hypothesis testing, regression analyses), data visualization (Python, R, Adobe Illustrator)
- **Lab:** DNA/RNA extraction, PCR, luciferase assay, gel electrophoresis, human cell culture, fruit fly husbandry
- **Languages:** English (Fluent/native), Arabic (intermediate/conversational), Spanish (basic)
- **Other:** Science communication & outreach, project leadership, teaching, creative writing, grant writing

LEADERSHIP AND SERVICE

President & Founder, *MicroMoles: Learning STEMs from Curiosity*, Durham, NC, 2018-present

- wrote short illustrated children's stories based on recent graduate student publications (<https://sites.duke.edu/micromoles>)

General Assembly Representative, *Graduate and Professional Student Council*, Durham, NC, 2018-2020

- represented my graduate program in campus-wide student government

IMPACTS Scholar, *UNC Morehead Planetarium*, Chapel Hill, NC, 2018-present

- designed and conducted genetics and evolutionary biology classroom and community expo activities

Invited speaker

- Guest lecture in Dr. Megan Phifer-Rixey's Evolution course at Monmouth University (Nov 2020)
- Club EvMed (<https://tricem.org/education-and-outreach/club-evmed/>) research presentation (Sept 2020)

HONORS AND AWARDS

Bass Instructor of Record Fellowship, Duke University, 2020

- awarded funding to independently design and teach an intermediate human population genetics course in Fall 2021

NSF Graduate Research Fellowship - Honorable Mention, National Science Foundation, 2019

Dean's Graduate Fellowship, Duke University, 2017

PUBLICATIONS

Hamid, I., Korunes, K. L., Beleza, S., & Goldberg, A. (2021). Rapid adaptation to malaria facilitated by admixture in the human population of Cabo Verde. *eLife*, 10, e63177. <https://doi.org/10.7554/eLife.63177>

- media recognition: <https://today.duke.edu/2021/01/malaria-threw-human-evolution-overdrive-african-archipelago>