

JAZLYN MOONEY

University of Southern California
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APPOINTMENTS

University of Southern California
Gabilan Assistant Professor in Quantitative and Computational Biology 2022-Present

EDUCATION

Stanford University of California
Postdoc in Biology 2020- January 2022
Advisor: Noah Rosenberg

University of California Los Angeles
Ph.D. in Genetics and Genomics 2015-September 2020
Advisor: Kirk Lohmueller

University of New Mexico
BS with Honors Anthropology and Biology (Summa Cum Laude) 2010-May 2014
Honors Thesis: "Inferring Evolutionary History from Ancestry Informative Markers (AIMs)"
Advisor: Jeffrey Long

PREVIOUS RESEARCH EXPERIENCE

DNA Science Intern at Ancestry.com June 2019-August 2019
Mentor: David Turissini
DNA Science summer intern with the Population Genetics team at Ancestry.com in San Francisco.
Project title: Generating Hierarchical Population Labels Informed by Genetics

University of California Los Angeles Genetics and Genomics Department 2015-2020
Advisor: Kirk Lohmueller
Analyzed sequence and array data to determine the impact of recent and ancient demography on genetic diversity and the distribution of deleterious variation in the genome.

University of New Mexico Evolutionary Anthropology Department 2012-2014
Undergraduate Research Assistant
Advisor: Jeffrey Long
Research focused on using African and Non-African ancestry informative markers, AIMs, to identify potential archaic introgression in Non-African populations.

University of Chicago - Pritzker School of Medicine Experience in Research (PSOMER) 2013
Undergraduate Research Assistant
Advisor: Michael Maitland
My research project focused on using genetic haplotypes to explore patient reactivity to Sunitinib and Sorafenib, drugs used to treat advanced cancer.

University of New Mexico - Research in Molecular Biology 2013
Undergraduate Research Assistant
Advisors: Donald Natvig and Coenraad Adema
This research integrated both benchwork and computational work where I processed DNA and RNA sequences from both plants and animals, analyzed the raw sequence data, then sent the novel sequence data to GenBank.

RESEARCH FUNDING

National Science Foundation Postdoctoral Research Fellow in Biology 2021-2022
Stanford CEHG Fellow 2020-2021

UCLA Dissertation Year Fellowship	2019
Graduate Programs in Bioscience Fellowship Incentive Program/Shine Fellowship	2016
National Science Foundation Graduate Research Fellowship	2015

AWARDS AND HONORS

USC Women in Science and Engineering Gabilan Assistant Professorship	2022
UCLA Human Genetics Leena Peltonen Award winner	2019
Platform Session moderator for the American Society of Human Genetics annual meeting	2018
Presidential Scholarship at University of New Mexico	2010-2014
New Mexico Lottery Success ABQ Scholarship	2010-2014
Undergrad Minority Scholarship	2013
Honors Award/Anthropology Scholarship	2013
Miscellaneous Scholarships	2012
Enterprise Rent-a-Car Diversity Scholarship	2011
Dean's List at University of New Mexico	2010-2014

PUBLICATIONS

3. **Mooney JA**, Clare D Marsden, Abigail Yohannes, Robert K Wayne, Kirk E Lohmueller, *Long-term small population size, deleterious variation, and altitude adaptation in the Ethiopian wolf, a severely endangered canid*, Molecular Biology and Evolution, 2022; msac277, <https://doi.org/10.1093/molbev/msac277>
2. **Mooney JA**, Yohannes A, Lohmueller KE. *The impact of identity-by-descent on fitness and disease in domesticated and natural Canid populations*. Proceedings of the National Academy of Sciences USA. 2021 Apr 20;118(16):e2019116118.
1. **Mooney JA**, Huber CD, Service S, Sul JH, Marsden CD, Zhang Z, Sabatti C, Ruiz-Linares A, Bedoya G, Costa Rica/Colombia Consortium for Genetic Investigation of Bipolar Endophenotypes, Freimer N, Lohmueller KE. *Understanding the hidden complexity of Latin American population isolates*. American Journal of Human Genetics, 2018; 103:707-726.

RESEARCH SUPERVISION

Shirin Nataneli, Computational Biology and Bioinformatics Graduate Student, USC	2023-present
Tessa Ferrari, Quantitative Biology Undergraduate student, USC	2022-present
Julie Li, Quantitative Biology Undergraduate student, USC	2022-present
Tina Lasisi, Quantitative Biology Postdoctoral Fellow, USC	2022-present
Anika Shrivastava, Quantitative Biology Undergraduate student, USC	2022-present
Mengdi Chai, Quantitative Biology Undergraduate student, USC	2022-present
Abigail Yohannes, Political Science Undergraduate student, UCLA	2019-2020

TEACHING EXPERIENCE

University of Southern California Co-Instructor for QBIO105 Introduction to Quantitative Biology Seminar	Spring 2023
University of Southern California Co-Instructor for QBIO475 Statistical and Evolutionary Genetics	Fall 2022
San Francisco State University Instructor for BIOL 870 Biology Colloquium	Fall 2020
University of California Los Angeles Co-instructor for HUMGEN 19: How Genetics has Contributed to Racial Injustice in America and the World	Fall 2020
University of California Los Angeles Teaching Assistant for Population Genetics	Fall 2019
University of California Los Angeles Computational instructor for Advanced Human Genetics	Fall 2017
University of California Los Angeles Teaching Assistant for Life Sciences core genetics course	Fall 2016

UNIVERSITY AND DEPARTMENTAL SERVICE

Member of CBB PhD graduate committee for Dallace Francis	2023-present
Member of MEB graduate committee for Jenna Dilworth	2023-present

Member of MEB graduate committee for Daniel Olivares-Zambrano	2023-present
Member of MCB graduate committee for Joseph Hale	2023-present
Member of MCB graduate committee for Joseph Hale	2023-present
Member of Biology master's committee for Caroline Solis (CSUN)	2023-present
Faculty founder of Women and other Minoritized Genders in Computational Biology	2022-present
Member of CBB graduate admissions committee	2022-present

OTHER ACADEMIC AND PROFESSIONAL ACITIVIES

Co-organizer SACNAS Scientific/STEM Symposia Session Workshop " <i>Introduction to Data Analysis in R using the Tidyverse</i> "	2022
Co-organizer of SMBE 2021 symposium " <i>Population genetics of identity-by-descent and runs of homozygosity: causes, consequences, and utility</i> " with Zachary Szpiech	2021
Co-organizer SACNAS Scientific/STEM Symposia Session Workshop " <i>Beyond Excel: Data Visualization with RStudio to Improve Your Posters, Presentations, and Publications</i> "	2019
Student Advisory Committee Member for Graduate Programs in Bioscience (GPB) at UCLA	2018-2020
Organizing Committee, UCLA QCBio Annual Career Panel and Networking Event	2017
American Society of Human Genetics Member	2015-2023
Member of the Association for Multi-Ethnic Bioscientists' Advancement at UCLA	2015-2020
Founder and Chair of the Association for Multi-Ethnic Bioscientists' Advancement at UCLA	2015-2020
Primate Enrichment at Rio Grande Zoo in New Mexico	2010-2015

INVITED REVIEWER FOR

American Journal of Human Genetics, American Journal of Biological Anthropology, Molecular Biology and Evolution, PLoS Genetics, Frontiers in Genetics, Evolutionary Applications, Proceedings of the National Academy of Sciences, Heredity

INVITED PRESENTATIONS

Seminar for the Population Biology Seminar, Los Angeles, CA	2023
Seminar for the Natural History Museum Los Angeles County, Los Angeles, CA	2022
Seminar for Introduction to Genetics, Ethics, and Society, Stanford University, Stanford, CA	2022
Seminar for the USC Computational Biology Symposium, USC, Los Angeles, CA	2022
Seminar for the Molecular Biology Interdepartmental Doctoral Program, UCLA, Los Angeles, CA	2022
Seminar for The Center for Theoretical and Evolutionary Genetics, UC Berkeley, Berkeley, CA (<i>virtual</i>)	2022
Seminar for the Department of Ecology and Evolutionary Biology, U of A, Tucson, AZ	2022
Seminar for the Department of Ecology and Evolutionary Biology, MSU, Lansing, MI (<i>virtual</i>)	2022
Seminar for the Department of Biology, SDSU, San Diego, CA	2022
Seminar for Department of Biology, PSU, State College, PA	2021
Seminar for the Department of Genetics, UGA, Athens, GA (<i>virtual</i>)	2021
Seminar for the Department of Quantitative and Computational Biology, USC, Los Angeles, CA	2021
Seminar for the Molecular Biology Interdepartmental Doctoral Program, UCLA, Los Angeles, CA	2021
Seminar for the Department of Biology Colloquium, CSU Dominguez Hills, Carson, CA (<i>virtual</i>)	2021

CONFERENCE PRESENTATIONS

Mooney JA*, Clare D Marsden, Abigail Yohannes, Robert K Wayne, Kirk E Lohmueller, *Long-term small population size, deleterious variation, and altitude adaptation in the Ethiopian wolf, a severely endangered canid.*
2023 Plant and Animal Genomics XXX (PAG)

Mooney JA*, Lily Agranat-Tamir, Jonathan Pritchard, Noah Rosenberg. On the number of genealogical ancestors tracing to the source groups of an admixed population.

2022 American Society of Human Genetics (ASHG)
2022 USC Computational Biology Symposium
2022 Computational Genomics Summer Institute (CGSI) Symposium

Mooney JA*, Yohannes A, Lohmueller KE. The impact of identity-by-descent on fitness and disease in domesticated and natural *Canid* populations.

2021 Society for Molecular Biology and Evolution (SMBE)
2020 Society for Molecular Biology and Evolution (SMBE)

Mooney JA*, Huber CD, Service S, Sul JH, Marsden CD, Zhang Z, et al. Understanding the hidden complexity of Latin American population isolates.

2018 Bay Area Population Genomics (BAPG)
2018 Informatics Center for Neurogenetics and Neurogenomics (ICNN) Symposium