

Georgia Mies

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EDUCATION

University of Pennsylvania, Perelman School of Medicine (Philadelphia, PA) 2022-present
PhD candidate in Genomics and Computational Biology Graduate Group

University of Michigan, College of Literature, Science & Arts (Ann Arbor, MI) 2018-2021
B.S. in Ecology, Evolution & Biodiversity and Evolutionary Anthropology, Highest Honors

RESEARCH INTERESTS

Evolutionary Biology, Computational Genomics, Population Genetics, Human Evolution, Human Genetics, Hybridization, Ancient DNA, Population Admixture

RESEARCH EXPERIENCE

PhD Candidate in Mathieson Lab 2023-present
Iain Mathieson Lab, University of Pennsylvania

- Conducting computation research in human genetics, with projects on cancer risk across populations, natural selection, and demographic history in ancient populations, with the goal of advancing cross-population and ancestry-inclusive genomics research

Research Staff in Human Genetics Lab 2022
Jeffery Kidd Lab, University of Michigan

- Investigated transposable elements and tRNAs in the dog genome

Research Assistant in Biodiversity Lab 2019-2021
Lacey Knowles Lab, University of Michigan

- Honors thesis on genetic basis of exploratory behavior in birds across environmentally fragmented landscapes

Research Assistant in Primate Behavior Lab 2020-2021
Stacy Rosenbaum Lab, University of Michigan

- Validated methods for cortisol and testosterone hormone assays in mountain gorillas

PUBLICATIONS

- Mies, G., Tsao, N. L., Houy, A., Coupland, S. E., Kalirai, H., Försti, A., Hemminki, K., Thomsen, H., Stern, M.-H., Shields, C. L., Damrauer, S. M., Ewens, K. G., Ganguly, A., & Mathieson, I. (2025). *Meta-analysis of uveal melanoma genome-wide association studies identifies novel risk loci and population effect size heterogeneity*. *Human Genetics & Genomics Advances*, 6(3), Article 100465. <https://doi.org/10.1016/j.xhgg.2025.100465>
- Mandla, R., Shi, Z., Hou, K., Wang, Y., Mies, G., Aw, A. J., et al. (2025). *Large-scale admixture mapping in the All of Us Research Program improves the characterization of cross-population phenotypic differences*. medRxiv. <https://doi.org/10.1101/2025.04.02.25325115>

PRESENTATIONS AND POSTERS

- Mies, G., Mathieson I., “Evaluating local ancestry inference methods to identify post-admixture adaptation in Neolithic Europe.” Probabilistic Modeling in Genomics Conference. March 2025.

- Mies, G., Ewens K., Ganguly A., Mathieson I. “Individual and Population Level Risk of Uveal Melanoma”, Perelman School of Medicine Genetics Department Symposium. April 2024.
- Mies, G. “Brazilian Rainforest Microhabitat Associations’ Effect on the Exploratory Behavior Genes *DRD4* and *SERT* in Two Avian Species.” Knowles Lab Meeting Presentation. Dec. 2020.
- Mies, G., et al. “Comparing Lab and Field Methods and Ethanol and Methanol on the Extraction of Cortisol from Mountain Gorilla (*Gorilla beringei beringei*) Fecal Samples.” Midwest Primate Interest Group Conference. October 2021.
- Mies, G. “Associations between *DRD4* gene polymorphisms and exploratory behavior in three passerine bird species from fragmented and non-fragmented landscapes.” Honors Thesis Presentation. Dec 10th, 2021.
- Wadleigh, R., Roth, M., Vicini, K., Mies, G., “Association between landscape and avian exploration: a behavioral comparison of three passerine species from highly versus minimally fragmented landscapes.” American Ornithologist Conference. Summer 2022.

PROFESSIONAL AND TEACHING EXPERIENCE

- Penn Science Policy and Diplomacy Group 2024-present
- Acting treasurer of organization, plan student events, apply for funding, hosted Environmental Justice and Policy Panel, ran local advocacy working group, designed and ran Science Diplomacy Simulation
- AAAS Catalyzing Advocacy in Science and Engineering Workshop April 2025
- Attended American Association for the Advancement of Science CASE workshop in Washington DC with workshops on science policy and science advocacy, met with PA state legislators’ offices to advocate for NIH and NSF funding

AWARDS AND SCHOLARSHIPS

- Genetics T32 Awardee 2023
- Biology Tutor of the Year Award 2022
- LSA Honors Program 2018-2021
- James B. Angell Scholar 2020, 2021
- University Honors 2020, 2021