Yemko Pryor, Ph.D.

Postdoctoral Researcher | University of Michigan
Email: ypryor@umich.edu
GitHub: github.com/ypryor
ORCID: orcid.org/0000-0002-1942-786X

Professional Experience

Academic

2025—present **Postdoctoral Researcher**
Supervisor: Dr. Tina Lasisi
Department of Anthropology
University of Michigan
Ann Arbor, MI

2018—2019 **Postbaccalaureate Research Fellow**
Supervisors: Dr. Nancy Schwartz (Biological Sciences Division) & Dr. Carol Ober (Department of Human Genetics)
University of Chicago
Chicago, IL

Education

2019—2025 **Ph.D.**, Genetics & Molecular Biology
Advisor: Dr. John Lindo
Department of Anthropology
Emory University
Atlanta, GA

2014—2018 **B.A.**, Biology and Africana Studies (High Honors)
Advisors: Dr. Mary Garvin (Department of Biology) & Dr. Meredith Gadsby (Department of Africana Studies)
Oberlin College
Oberlin, OH

Research Interests

Human genetic variation | Population genomics | Epigenetics | Skin pigmentation | Ancient DNA | Evolutionary constraint | Gene regulatory networks | Genotype-phenotype mapping | Natural selection | Science equity & education

Fellowships, Grants, Honors & Awards

2026	Michigan Pioneer Fellowship
2026	U-M Postdoctoral Association Outstanding Postdoctoral Fellow Award, University of Michigan
2026	Midwestern Population Genetics Conference Best Postdoctoral Poster Award, University of Chicago
2024	Kharen Fulton Diversity Graduate Award, Emory University
2023	Edward Bouchet Graduate Honor Society, Emory University
2022–2025	National Science Foundation Graduate Research Fellow
2022–2023	Laney Graduate School Emory Diversifying Graduate Education (EDGE) Fellow
2021–2022	Ford Foundation Predoctoral Fellow
2019–2024	Laney Graduate School Centennial Scholars Fellowship
2020	University of Washington Summer Institute for Statistical Genetics, NSF DEB 2016186 Grant

Peer-Reviewed Publications

Published

2026 Lindo, J., Rivas Alava, D., Juengst, S., **Pryor, Y.**, Joseph, S.K., Ortiz Aguilu, J.J., & Lunniss, R. Ancient Ecuadorian genomes reveal millennia of genetic continuity on the Pacific Coast of South America. *PNAS Nexus*, 2026, *5*, pgag323. doi.org/10.1093/pnasnexus/pgag323

2026 **Pryor, Y.**, V, Ranka., Donadio, J.P., Muller, S.C., Wilson, J., & Lasisi, T. National and state-level datasets of United States forensic DNA databases 2001–2025. *Sci Data*, 2026. doi.org/10.1038/s41597-026-07605-5

2026 **Pryor, Y.**, He, J., Kang, J., Jenkins, B., & Lasisi, T. Optical Limits in Skin Reflectance Measurement: Quantifying Melanin-Dependent Constraints on Erythema Detection. *Journal of Investigative Dermatology*, 2026, 146, 1740-1751. doi:10.1016/j.jid.2026.03.025

2025 **Pryor, Y.**, Lindo, J., Migliore, N.R., Alava, D.R., Di Gerlando, R., Tineo, D.H.T., Gusmão, L., Gonzalez-Andrade, F., & Achilli, A. Whole Methylomes Reveal High-Altitude–Associated Methylation at Hypoxia and Pigmentation Genes in South American Indigenous Populations. *Environmental Epigenetics*, 2025, dvaf026. doi.org/10.1093/eep/dvaf026

2023 **Pryor, Y.** & Lindo, J. Deconstructing Eurocentrism in skin pigmentation research via the incorporation of diverse populations and theoretical perspectives. *Evolutionary Anthropology*, 2023, 1–11. doi:10.1002/evan.21993

2018 Garvin, M.C., Austin, A., Boyer, K., Gefke, M., Wright, C., **Pryor, Y.**, Soble, A., & Whelan, R.J. Attraction of *Culex pipiens* to House Sparrows Is Influenced by Host Age but Not Uropygial Gland Secretions. *Insects*, *9*, 127.

In Review

2026 **Pryor, Y.**, Heald, L., & Lasisi, T. Classical Foundations and Genomic Advances in Human Pigmentation and Hair Morphology. Under review at *Trends in Genetics*. Preprint: doi.org/10.20944/preprints202610.0784.v1

In Preparation

Migliore, N.R., **Pryor, Y.**, Tineo, D.H.T., Gusmão, L., Gonzalez-Andrade, F., Achilli, A., & Lindo, J. How DNA Records the History and Environmental Adaptation of Indigenous People from Panama, Peru, and Ecuador. Target: *Current Biology*.

Pryor, Y., Adams, N., Ricaut, F.-X., Brucato, N., & Lasisi, T. Genomic and phenotypic insights into hair morphology diversity in Oceania. Target: *American Journal of Human Genetics*.

Pryor, Y., Contreras, P., Ruiz, E., He, J., Ostheimer, L., Saravanan, A., Devgan, S., Jones, A., Wilson, J., Kang, J., & Lasisi, T. Defining a unit of hair: quantifying fiber count per unit mass for hair-based biomarker assays. Target: *Journal of Analytical Science and Technology*.

Contreras, P., **Pryor, Y.**, Beehner, J., & Lasisi, T. Accounting for low mass and morphological variation in the quantification of hair cortisol. Target: *Psychoneuroendocrinology*.

Lasisi, T., **Pryor, Y.**, Abhimanyu, A., Coussens, A.K., Naude, C.E., Chaplin, G., Pearson, L.N., Goliath, R., Shriver, M.D., Wilkinson, R.J., & Jablonski, N.G. Fast photoadaptation and slow endocrine integration in human skin: evidence from a South African cohort. Target: *Evolution, Medicine and Public Health*.

Guest Lectures

2026 Nov	Michigan	University of Michigan Department of Molecular, Cellular, and Developmental Biology, Advanced Topics (MCDB 401). Lectured on what genetics shows about human skin and hair variation, how racial classification has shaped pigmentation research, and why the distinction between phenotypic variation and race matters for health.
2025 Apr	Oberlin	Oberlin College Department of Biology Speaker Series. Lectured on applying epigenomic and genomic techniques to investigate high-altitude adaptation in Indigenous Andean populations.
2024 Nov	Oberlin	Oberlin College Department of Neuroscience, Foundations of Global Health (NSCI 103). Lectured on how studying population genetics can inform global health research, covering skin pigmentation, vitamin D, and human adaptation to differing UV intensities.
2022 Oct	Oberlin	Oberlin College Department of Biology, Genetics, Evolution & Ecology (BIOL 200). Lectured on the application of epigenetic research techniques in gene regulatory networks, and how these techniques have broadened understanding of DNA.
2022 Mar	Oberlin	Oberlin College Department of Biology, Global Health and Culture (BIOL 035). Lectured on the impact of historically significant moments in human history on genetic and phenotypic variation, and how historical racism impacts global health research.

Selected Presentations

2026 **Pryor, Y.**, Lasisi, T. *Testing Network-Based Predictions of Genetic Constraint in Melanogenesis.* [Poster]. Midwest Population Genetics Conference, Chicago, IL. August 2026.

2026 **Pryor, Y.**, Lasisi, T. *Testing Network-Based Predictions of Genetic Constraint in Melanogenesis.* [Poster]. Population, Evolutionary, and Quantitative Genetics (PEQG) Conference, Pacific Grove, CA. June 2026.

2025 **Pryor, Y.**, Lindo, J. *Exploring the Evolutionary Histories of High-Altitude Andean Populations.* [Oral Presentation]. Oberlin College Biology Department Seminar, Oberlin, OH. April 2025.

2023 **Pryor, Y.**, Lindo, J. *Deconstructing Eurocentrism in Skin Pigmentation Research: The Value of Public Health and Genetic Data from Ancient and Contemporary Populations.* [Oral Presentation]. Edward Bouchet Graduate Honors Society Conference, Yale Graduate School of Arts & Sciences, New Haven, CT. April 2023.

2022 **Pryor, Y.** *Epigenetics, Slavery and Transgenerational Trauma.* [Oral Presentation]. Oberlin College Department of Neuroscience, Virtual. December 2022.

2022 **Pryor, Y.**, Lindo, J. *Marginalizing Melanin: Historical Pigmentation-Based Prejudices Obscuring Research on the Microevolution of Skin Pigmentation.* [Poster]. American Association of Biological Anthropologists (AABA) Conference, Denver, CO. March 2022.

2021 **Pryor, Y.**, Lindo, J. *Marginalizing Melanin: Historical Pigmentation-Based Prejudices Obscuring Research on the Microevolution of Skin Pigmentation.* [Oral Presentation]. 2nd Annual Research Symposium on Racial and Social Disparities, Inequities, and Injustice, Atlanta, GA. November 2021.

2019 **Pryor, Y.** *Resilience, Research and Resistance: Diary of a Black Woman Scientist.* [Oral Presentation]. Chicago Health and Medical Careers Citywide Student Conference, Chicago, IL. May 2019.

Trainees and Teaching

Trainees

Current

Undergraduate Students

Sanaa Devgan	U-M Neuroscience (research supervisor; expected graduation 2028)
Elena Ruiz	U-M Biology, Health & Society (research supervisor; expected graduation 2028)
Laine Ostheimer	U-M Biochemistry (research supervisor; expected graduation 2028)
Morgan Morris	U-M Neuroscience (UROP research supervisor; expected graduation 2028)

Recent Graduates

Lily Heald	University of Michigan (honors thesis and post graduate, 2025-present)

Former

Doctoral Students

Daniel Rivas	Emory University, Department of Anthropology (lab mentor, 2024–2025)
Thaís Vieira dos Santos Hauskre	Emory University, Department of Anthropology (lab mentor, 2024–2025)

Undergraduate Students

Aiswarya Saravanan	University of Michigan (honors thesis mentor, 2025-2026)
Zinnia Robinson	Emory University (outreach mentor, 2024–2025)
Soju Hokari	Emory University (outreach and research mentor, 2023–2025)

Ruth Kroder	Emory University (honors thesis and lab research mentor, 2021–2023)
Rosseirys De La Rosa	Emory University (honors thesis and lab research mentor, 2020–2022)
Alexander Sandberg	Emory University (lab research mentor, 2020)

Teaching Experience

University of Michigan

Leo Lecturer, *Introduction to Genetics* (BIOL 305) *Fall 2026*

- Leading and designing lectures
- Organizing and designing course syllabus
- Managing and constructing course Canvas site
- Administering and compiling course exams
- Managing course Teaching Assistants

Teaching Assistant, ANTHBIO 471: Measuring Human Traits *Fall 2025*

- Assisted in designing the course syllabus.
- Led students through in-class lab activities.
- Managed student lab safety trainings and lab notebook assessments.
- Held office hours for students twice a week.
- Managed course Canvas page.

Emory University

Program Coordinator, LGS-SOAR (Laney Graduate School) *Summer 2023*

- Coordinated and reviewed classroom materials from graduate student lecturers.
- Facilitated ice breakers and Q&A sessions during orientation.
- Assisted summer students in attending virtual and in-person lectures.
- Lectured on professional development topics for summer students.
- Coordinated summer student poster and abstract submission for summer symposium.

Teaching Assistant, Epigenetics and the Human Condition *Fall 2020*

- Developed lecture materials with other TAs.
- Lectured small groups during class.
- Developed exam and homework questions.
- Graded exams and homework.

Peer Review

Reviewer for: Frontiers in Genetics

University & Professional Service

2023—2025	Emory Office of LGBT Life, **Graduate Programming Assistant**
Winter 2024	Oberlin College Africana Studies Black History Month Alumni Program, **Host**

2023	Laney Graduate School EDGE Recruitment, ABRCMS, **Recruiter**
2022—2023	Laney Graduate School EDGE Recruitment, SACNAS, **Recruiter**
2022—2023	Laney Graduate School EDGE Recruitment, Learning about Laney, **Recruiter**
2022—2023	Laney Graduate School EDGE, **Fellow & Ambassador**
2021—2025	Emory University Identity Space Ambassador, Office of LGBT Life
2020—2025	Emory Office of LGBT Life, Queer Discussion Group, **Facilitator**
2021—2022	Laney Graduate School EDGE, **Ambassador**
2021—2022	Emory Genetics & Molecular Biology Graduate Program DEI Committee, **Student Representative**
2021—2022	Emory University Collective: Black Graduate & Professional Student Coalition, **Vice President**
2019—2022	Emory University IMSD, **Undergraduate Mentor**
2020—2021	Emory University Black Graduate Students Association Executive Board, **Historian**
2020—2021	Emory University Collective: Black Graduate & Professional Student Coalition, **Divisional Representative**
Spring 2019	IMSD/PREP Midwest Regional Symposium, **Organization Committee Member & Workshop Facilitator**

Research Experience

Postdoctoral Researcher, University of Michigan, Ann Arbor, MI *2025—present*
Research Advisor: Dr. Tina Lasisi

- Quantifying genetic constraint across the melanogenesis signaling network.
- Applying population-genomic methods to characterize human variation in skin pigmentation across underrepresented populations.
- Optimizing biomarker extraction protocols for work on human hair.
- Assessing human hair morphology and variation using novel cross-sectional and imaging techniques.
- Mentoring and training undergraduate and graduate students in wet-lab and computational methods.
- Contributing directly to grant and manuscript writing.

Graduate Research, Emory University, Atlanta, GA *2020—2025*
Research Advisor: Dr. John Lindo

- Extracted DNA from ancient Peruvian, Ecuadorian, and Roman individuals.
- Managed maintenance of ancient DNA lab clean room space.
- Trained three undergraduates and two graduate students in ancient DNA extraction methods.
- Acquired computational skills in population genetics: admixture proportions, phylogenetic modeling, selection scans, eQTL analysis, differential methylation analysis, and gene ontology analysis.
- Built and analyzed a whole genome–whole DNA methylome sequence dataset.

Postbaccalaureate Research, University of Chicago, Chicago, IL *2018—2019*
Supervisors: Dr. Nancy Schwartz and Dr. Carol Ober

- Examined the interaction between stress, preterm birth, and DNA methylation in an African American cohort.
- Optimized a protocol for high-quality extraction of DNA/RNA from Zymo Shield Blood.

Technical Skills

- DNA & RNA Quantification & Purification
- Quantitative PCR
- Ancient DNA Quantification & Purification
- Ancient DNA Library Builds
- Construction of DNA Libraries
- Genetic Crosses
- Immunoassays
- Cloud Data Storage & Computing (AWS S3, Batch)
- Command Line–Based Data Analysis
- Python-Based Data Analysis
- R & RStudio-Based Data Analysis
- scRNA-seq Analysis
- Repository Management & Version Control (Github & VS Code)
- AI-Assisted Development (Claude Code)
- Ancestry Inference Analysis
- Haplotype-based Selection Scans
- Allele-frequency-based Selection Scans
- DNA Methylation Analysis
- WGS QC Analysis
- Gene Ontology Analysis
- Hair Cross Section Microscopy
- High-Performance Computing (Slurm, Torque)