Levi Raskin

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Education

Fall 2024—ongoing PhD program in Integrative Biology with a designated emphasis in computational biology, University of California, Berkeley.
Advisor: Dr. John Huelsenbeck.
Advisory committee: Dr. John Huelsenbeck, Dr. Rasmus Nielsen, and Dr. Jack Tseng.

2020 – 2024 Haverford College, Biology and Anthropology double major at Bryn Mawr College via Haverford-Bryn Mawr Bi-College consortium.
Advisors: Dr. Maja Šešelj and Dr. Bárbara Bitarello
Honors: cum laude, departmental honors in Biology, departmental honors in Anthropology

Appointments

Fall 2024 – Spring '25 Graduate Student Instructor, Department of Integrative Biology, University of California, Berkeley

Preprints

Raskin, Levi Y.; Šešelj, Maja; and Bitarello, Bárbara D. (2024). Assessing phylogenetic information content and redundancy in hominin craniodental traits. bioRxiv. https://doi.org/10.1101/2024.10.31.616875

Manuscripts in prep

Chatar, Narimane; Vankelst, Melvin; Pérez Ramos, Alejandro, Pollock, Tahlia; Tamagnini, Davide; Michaud, Margo; **Raskin, Levi Y.**; Tseng, Z. Jack (in prep). Novel experimental insights into the functional evolution of mammalian carnassials.

Raskin, Levi Y.; Bitarello, Bárbara D.; O'Hara, Mackie C.; and Šešelj, Maja (in prep). Perikymata are unlikely to differentiate between Middle Pleistocene hominin taxa.

Raskin, Levi Y.; Bitarello, Bárbara D.; Šešelj, Maja; Stroustrup, Sofia; Li, Jacky; and Huelsenbeck, John (in prep). Principal Components Analysis is inaccurate for Plio-Pleistocene hominin systematics.

Published Abstracts

Raskin, Levi Y.; Bitarello, Bárbara D.; O'Hara, Mackie C.; and Huelsenbeck, John (2025). Principal Components Analysis is inaccurate for Plio-Pleistocene hominin systematics [Poster presentation]. European Society for the study of Human Evolution.

Raskin, Levi Y.; Bitarello, Bárbara D.; O'Hara, Mackie C.; and Šešelj, Maja (2025). Hidden state prediction suggests perikymata are unlikely to differentiate Middle Pleistocene hominins [Podium presentation]. American association of Biological Anthropologists.

Raskin, Levi Y.; Šešelj, Maja; and Bitarello, Bárbara D. (2024). The effect of trait redundancy on parsimony-inferred tree topologies from a hominin character matrix [Podium presentation]. Paleoanthropology Society.

Raskin, Levi Y.; O'Hara, Mackie C.; Erskine, Amy I.; and Šešelj, Maja. (2024). Moving great ape

osteobiographies forward: digitally linking macro and micro data and media at the individual level [Podium presentation]. American Association of Biological Anthropologists.

Raskin, Levi Y.; Reeves, Jonathan S.; Douglass, Matthew J.; and Braun, David R. (2023). Least-effort knapping as a baseline to study social transmission in the Early Stone Age [Poster]. Society for American Archaeology.

Reeves, Jonathan S.; **Raskin, Levi Y.**; Douglass, Matthew J.; and Braun, David R. (2023). Establishing baselines for stone tool variation across the Early Pleistocene: A least effort approach [Podium presentation]. Society for American Archaeology.

Presentations

Fall 2025	*Principal Components Analysis is inaccurate for Plio-Pleistocene hominin systematics*. European Society for the study of Human Evolution. Paris, France.
Summer 2025	*Hominin systematics and the promise of morphometrics*. Center for Computational Evolutionary Morphology Stochastic Morphometrics Workshop. Copenhagen, Denmark.
Spring 2025	*Hidden state prediction suggests perikymata are unlikely to differentiate Middle Pleistocene hominins*. Annual Meeting of the American Association of Biological Anthropologists, Baltimore, MD.
Spring 2025	*Assessing the influence of hominin craniodental traits on parsimony-inferred tree topologies*. Tooth Talks.
Fall 2024	*What fossils do and don't tell us: pruning the human evolutionary tree*. PubScience, Albany, CA.
Spring 2024	*Perikymata are unlikely to differentiate between Middle Pleistocene hominin taxa*. Biology Senior Presentations, Bryn Mawr, PA.
Spring 2024	*The effect of trait redundancy on parsimony-inferred tree topologies from a hominin character matrix.* Annual meeting of the Paleoanthropology Society, Los Angeles, CA.
Spring 2024	*Moving great ape osteobiographies forward: digitally linking macro and micro data and media at the individual level*. Annual Meeting of the American Association of Biological Anthropologists, Los Angeles, CA.
Summer 2023	*Developing imaging techniques for perikymata*. Summer Science Research Poster Session, Bryn Mawr, PA.
Spring 2023	*Least-effort knapping as a baseline to study social transmission in the Early Stone Age*. Annual Meeting of the Society for American Archaeology, Portland, OR.
Fall 2022	*Least-effort handaxes*. Koobi Fora Training and Research Project Workshop, Washington, D.C.

Fall 2022 *Are handaxes the first culture?* Hurford Center for Arts and Humanities Breaking the Rules Fellow talk, Haverford, PA.

Grants, Fellowships, and Awards

Spring 2025 Department of Energy Computational Science Graduate Fellowship.

Spring 2025 National Science Foundation Graduate Research Fellowship honorable mention.

Spring 2025 American Association of Biological Anthropology Mildred Trotter student presentation prize.

Spring 2025 American Association of Biological Anthropology William S. Pollitzer Student Travel Award: $595.

Fall 2023 Louis Green Fund and the Koshland Integrated Natural Sciences Center Conference Fund: $2400

Fall 2023 Bryn Mawr College Award for Conference Travel: $450

Summer 2023 Bryn Mawr College Summer Science Research Program Stipend

Spring 2023 Barry Goldwater Scholarship

Fall 2022 Louis Green Fund: $1500

Spring 2022 Pauline Adams Fund for Excellence in Anthropology: $4500

Spring 2022 Deborah Lafer-Scher International Internship: $1800

Spring 2022 Hurford Center Breaking the Rules Fellowship: $3200

Spring 2022 Frederica de Laguna Fund: $700

Research Experience

2024 – ongoing Graduate research:

Integrating 3D geometric morphometric methods with likelihood based phylogenetic inference. Mentored by Professor John Huelsenbeck (UC California, Berkeley).

2020 – 2024 Bachelor's research:

Investigate the utility of great ape perikymata for taxonomy. Mentored by Professors Maja Šešelj and Bárbara Bitarello (Bryn Mawr College).

Experimental archaeology research into social transmission in the Early Pleistocene using 3D geometric morphometrics and a novel application of elliptical Fourier analysis I developed. With Jonathan Reeves (PI, Max Planck Institute for Evolutionary Anthropology).

2019 – 2020 High School research – research at the University of Chicago Alemseged lab. 2D morphometrics of Oldowan and Acheulean tool typologies from Olduvai Gorge.

Collections Experience

2024 – ongoing	University of California Museum of Paleontology (Berkeley, California) – affiliated student.
2024 – ongoing	University of California Museum of Vertebrate Zoology (Berkeley, California) – 3D scanning great ape specimens for phylogenetics research.
2023	Field Museum of Natural History (Chicago, Illinois) – 3D scanning great ape specimens for senior thesis research. Scans are, or will be, available on MorphoSource. Noticed poor treatment of specimens by past researchers since I had last been in the collection, communicated with FMNH mammals curator, and storage policies have improved to prevent misuse of specimens by researchers.
2022	Field Museum of Natural History (Chicago, Illinois) – dental mold making of great ape specimens for senior thesis research.

Fieldwork Experience

2022	Excavation at a 1.5 Ma Acheulean site in Koobi Fora, Kenya. Led by Dr. Jonathan Reeves as part of the Koobi Fora Field School.
2021	Excavation at the ancestral Wichita site of Etzanoa, near Arkansas City, Kansas. Led by Dr. Donald Blakeslee and Dr. Crystal Dozier.

Workshops

2025	Center for Computational Evolutionary Morphology Stochastic Morphometrics Workshop (Copenhagen, Denmark). Presented on applications of stochastic morphometric models for hominni systematics.
2024	Phylogenetic Biogeography Workshop (Washington University in St. Louis). Learned to do Bayesian phylogenetic biogeography with RevBayes.
2022	Intro to GIS using R (University of Reading). Learned how to integrate R and GIS for spatial analysis.
2022	Koobi Fora Research and Training Project Workshop (George Washington University). Presented my research on the Acheulean industry and received feedback on my study design and research.
2021	TOOTH workshop (University of Zurich). Learned how to do dental occlusal wear and fingerprinting.

Relevant Coursework

Fall 2024	UC Berkeley Integrative Biology 206 Statistical Phylogenetics
Summer 2023	Statistical Rethinking, taught by Richard McElreath on GitHub
Spring 2023	UPenn Anthropology 6020 Evolutionary Anthropology

Courses Taught

Spring 2025	UC Berkeley Integrative Biology 35AC Human Biological Variation, Graduate Student Instructor
Fall 2024	UC Berkeley Integrative Biology Bio 1B lab, Graduate Student Instructor
Fall 2023	Bryn Mawr College Biology Biostatistics with R, undergraduate TA
Fall 2022	Bryn Mawr College Anthropology Introduction to Biological Anthropology, undergraduate TA

Mentoring Experience

Fall 2024 – Jan 2025	Mentored undergraduate at the University of Wisconsin Eau Claire via the Goldwater Ambassadors program.
Summer 2024	Helping mentor a Bryn Mawr College Sumer Science Research student studying fluctuating asymmetry in incremental dental microstructures to test hypotheses about embodied morphologies in those tissues.
Summer 2023	Helped mentor a University of St. Andrews summer research student 3D scanning dental casts and conducting archival research into the Field Museum of Natural History great apes. She is a coauthor on my 2024 AABA podium presentation.
Spring 2023 – Fall '23	Mentored undergraduate at University of Hartford via the Goldwater Ambassadors program.

Service

2025	*Systematic Biology*, reviewer.
2025	Helped organize the annual Integrative Biology department research symposium.
2024	Tan a phylogenetics methods reading group at UC Berkeley.
2023	Helped design and write an R package for teaching biostatistics at Bryn Mawr College.
2022 – 2023	Helping plan the "Inclusivity in Fieldwork" workshop with Yale's Paleoarchaeology Laboratory to develop more ethical fieldwork practices drawing from a diversity of disciplines which do fieldwork.

Professional Memberships

Society for Systematic Biologists (SSB)

American Association of Biological Anthropologists (AABA)

European Society for the study of Human Evolution (ESHE)

Paleoanthropology Society

Society for American Archaeology (SAA) [former]