Stephanie Marciniak

Professional Appointments and Education

2021-2022 Assistant Research Professor, Department of Anthropology, Pennsylvania State University
2016-2021 Postdoctoral scholar, Perry Lab, Pennsylvania State University
2011-2016 Ph.D. Anthropology, McMaster University
2006-2008 M.A. Anthropology, Trent University
2002-2006 Hons. BSc. Forensic Science and Anthropology, University of Toronto

Select Publications

Peer-reviewed

Marciniak, S., Bergey, C.M., Silva, A.M., Hałuszko, A., Furmanek, M., Veselka, B., Velemínský, P., Vercellotti, G., Wahl, J., Zariņa, G., Longhi, C., Kolář, J., Garrido-Pena, R., Flores-Fernández, R., Herrero-Corral, A.M., Simalcsik, A.,, Müller, W., Sheridan, A., Miliauskienė, Z., Jankauskas, R., Moiseyev, V., Köhler, K., Király, A., Gamarra, B., Cheronet, O., Szeverényi, V., Kiss, V., Szeniczey, T., Kiss, K., Zoffmann, Z.K., Koós, J., Hellebrandt, R. Maier, M., Domboróczki, L., Virag, C., Novak, M., Reich, D., Hajdu, T., von Cramon-Taubadel, N., Pinhasi, R., Perry, G.H. (2022). An integrative skeletal and paleogenomic analysis of prehistoric stature variation suggests relatively reduced health for early European farmers. *Proceedings of the National Academy of Sciences*, *119, e2106743119.*

Marciniak, S., Mughal, M.R., Godfrey, L.R., Bankoff, R.J., Randrianatoandro, H., Crowley, B.E., Bergey, C.M., Muldoon, K.M., Randrianasy, J., Raharivololona, B.M., Schuster, S.C., Malhi, R.S., Yoder, A.D., Louis Jr., E.E., Kistler, L., Perry, G.H. (2021). Evolutionary and phylogenetic insights from a nuclear genome sequence of the extinct, giant 'subfossil' koala lemur *Megaladapis edwardsi*. *Proceedings of the National Academy of Sciences, 118*, e2022117118.

Sullivan, A.P., **Marciniak, S.**, O'Dea, A., Wake, T.A., Perry, G.H. (2021). Modern, archaeological, and paleontological DNA analysis of a human-harvested marine gastropod (*Strombus pugilis*) from Caribbean Panama. (2021). *Molecular Ecology Resources*, doi: 10.1111/1755-0998.13361

Harris, A., Duggan, A.T., **Marciniak, S.**, Marshall, I., Fuller, B..T, Southon, J., Poinar, H.N., Grimes, V. (2019). Dorset Pre-Inuit and Beothuk foodways in Newfoundland, ca. AD 500-1829. *PLOS ONE*. doi.org/10.1371/journal.pone.0210187

Marciniak, S., Herring, D.A., Sperduti, A., Poinar, H.N., Prowse, T.L. (2018). A multi-faceted anthropological and genomic approach to framing *Plasmodium falciparum* malaria in Imperial period central-southern Italy (1st-4th c. C.E.). *Journal of Anthropological Archaeology, 49*, 210-224.

Marciniak, S., Perry, G.H. (2017). Harnessing ancient genomes to study the history of human adaptation. *Nature Reviews Genetics, 18*, 659–674.

Duggan, A.T., Harris, A.J.T., **Marciniak, S.**, Marshall, I., Kuch, M., Kitchen, A., Renaud, G., Southon, J., Fuller, B., Young, J., Fiedel, S., Golding, G.B., Grimes, V., Poinar, H.N. (2017). Genetic discontinuity between the Maritime Archaic and Beothuk populations in Newfoundland, Canada. *Current Biology*, *27*, 3149-3156.

Marciniak, S., Prowse, T.L., Herring, D.A., Klunk, J., Kuch, M., Duggan, A.T., Bondioli, L., Holmes, E.C., Poinar, H.N. (2016). *Plasmodium falciparum* malaria in 1st-2nd century CE, southern Italy. *Current Biology*, *26*, R1220-R1222.

Duggan, A. T., Perdomo, M. F., Piombino-Mascali, D., **Marciniak, S.**, Poinar, D., Emery, M. V., Poinar, H.N. (2016). 17th century Variola virus reveals the recent history of smallpox. *Current Biology*, *26*, 3407-3412.

Marciniak, S., Klunk, J., Devault, A., Enk, J., Poinar, H. (2015). Ancient genomics: reconstructing human evolutionary pathways. *Journal of Human Evolution*. *79*, 21-34.

Marciniak, S . (2009). A preliminary assessment of the identification of saw marks on burned bone. *Journal of Forensic Sciences*, *54*, 779-785.

Book chapters

Newfield, T., **Marciniak, S** ., Cameron-Steinke, S. (2022). "'Verbalist Ingenuity' and the Evidential Basis for Virgin-Soil Smallpox Epidemics in the Sixth Century: From Iona to Sana". In: Oram, R., (Ed.). *'With our Backs to the Ocean': Land, Lordship. Climate and Environmental Change in the North-West European Past.* Brepols: Belgium. (Forthcoming).

Marciniak, S., Poinar H.N. (2019). Ancient Pathogens Through Human History: A Paleogenomic Perspective. In: Lindqvist, C., Rajora, O.P. (Eds). *Paleogenomics: Genome-Scale Analysis of Ancient DNA*. Springer: Switzerland. pp. 115-138.

Marciniak, S. (2016). Hunting for pathogens: ancient DNA and the historical record. In: Mant, M., Holland, A. (Eds). *Beyond the Bones: Engaging with Disparate Datasets*. pp. 81-100. Elsevier.

Research Grants and Fellowships

Wenner-Gren Post PhD Research Grant for "Biological consequences of the agricultural transition: A multi-proxy biomolecular and skeletal investigation of stature across a 9,000-year transect" (Grant 222377) – $16,855 (2019-21)

Social Sciences and Humanities Research Council Doctoral Award for "Scourge of the Roman Empire: A Biomolecular Hunt for Malaria – $40,000 (2014-16)

Ontario Graduate Scholarship for "Malaria in ancient Rome" – $15,000 (2013-14)

Select Conference Presentations (first and presenting author)

June 2021 — Insights from the nuclear genome of an extinct, giant lemur *Megaladapis edwardsi*. *Podium presentation*. Evolution 2021 (Virtual).

April 2021 — Evolutionary and phylogenetic insights from a nuclear genome of the extinct giant koala lemur *Megaladapis edwardsi. Podium presentation*. American Association for Biological Anthropologists (Virtual).

April 2021 — Revealing the imprints of malaria in antiquity: an integrated ancient DNA and bioarchaeological framework. *Invited podium*. Paleopathology Association. (Virtual).

November 2020 — Delving into the nuclear genome of an extinct, giant 'subfossil' koala lemur *Megaladapis edwardsi*. *Podium presentation*. Northeastern Evolutionary Primatologists (Virtual).

October 2019 — The biological impact of the agricultural transition on human stature: evidence from ancient DNA and skeletal data. *Podium presentation*. Canadian Association for Biological Anthropology (Banff, AB).

June 2019 — Plasticity and human stature: A 9,000 year perspective from ancient DNA and skeletal data. *Poster presentation.* Evolution. (Providence, RI).

March 2019 — Investigating human stature variation in prehistory with per-individual ancient DNA and osteological data. *Podium presentation.* American Association of Biological Anthropologists (Cleveland, OH).

April 2018 — Malaria in the rural hinterland of southern Italy: A multi-faceted anthropological and genomic perspective from Vagnari (1st-4th c. CE). *Symposium: Malaria in the Past: Current research into one of humanity's oldest plagues.* American Association of Biological Anthropologists (Austin, TX).

October 2017 — Underrepresented pathogens in the archaeological record: integrating ancient DNA techniques within a multi-faceted framework. *Invited podium presentation*. Canadian Association for Biological Anthropology (Edmonton, AB).

Invited Seminars

April 2022 — Pennsylvania State University, ANTH414 (Microbial Anthropology), "Malaria in ancient Rome: Integrating ancient DNA, bioarchaeology and the historical record."

February 2022 — Georgetown University, HIST099 (Science of the Human Past), "Ancient DNA: What is it and why is it interesting?"

June 2021 — Stanford University, Pritchard Lab Mini-Conference, "An integrated paleogenomic and skeletal investigation of stature variation and health across prehistory."

May 2021 — Research Centre for Anthropology and Health, University of Coimbra, "Biological consequences of the agricultural transition: A paleogenomic and skeletal investigation of stature variation and health across prehistory."

March 2021 — Rutgers University, Center for Human Evolutionary Studies, "The promises and challenges of primate paleogenomics: Insights from the nuclear genome of a large extinct lemur *Megaladapis edwardsi*."

February 2021	University of Cincinnati, ANTH 4046 Human Evolutionary Genetics and Genomics, “Ancient DNA: Revealing evolutionary history one genome at a time.”
December 2020	Pennsylvania State University, ANTH/BIOL460 (Human Genetics), “Personal Genomics: Promises and Pitfalls.”
November 2020	LeHigh University, BIOS396 (Personal Genomics), “Ancient DNA: Revealing evolutionary history one genome at a time.”
November 2018	Georgetown University, Department of History seminar (New Approaches to Old Diseases in Late Antiquity), “A multi-faceted paleogenomic and anthropological investigation of malaria in Roman antiquity.”

Service

August 2021	Discussant on “PNAS Science Sessions” podcast for the episode “Genome sequencing of extinct giant lemur”
June 2021	Session Chair, “Population Genomics/Selection”, Evolution 2021 meeting
April 2021	Interviewed for a student podcast project for PSU ANTH413 (Forensic Molecular Anthropology) about forensic biology and the application of ancient DNA
March 2021	Discussant on the podcast Infectious Historians for the episode “Ancient DNA and Paleogenetics”
2018	Co-organizer of the symposium *“Malaria in the Past: Current research into one of humanity’s oldest plagues”* at the AABA 2018 meeting