

Curriculum Vitae

Stephanie L. Schnorr

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Appointments

- 2018-20 National Science Foundation SBE Postdoctoral Research Fellowship
- 2018-19 Postdoctoral Fellow, Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, Austria
- 2015-17 Post-doctoral Research Associate, University of Oklahoma, Laboratories of Molecular Anthropology and Microbiome Research, Department of Anthropology, Norman, OK, USA
- 2011-15 Ph.D. Candidate, Research Group on Plant Foods in Hominin Dietary Ecology, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

Research Interests

Evolution of human diet, human dietary adaptations, ancient and contemporary hunter-gatherers, human microbiome, landscape resource use, food and culinary culture and technology, brain development and cognition, metabolic physiology, neuroendocrinology, meta-community and ecological modeling, domestication, ancient DNA

Education

- 2016 Ph.D. Archaeology, Leiden University & Max Planck Institute for Evolutionary Anthropology, Leipzig, DE
- 2010 M.A. Physical Anthropology, Texas State University, San Marcos, TX, USA
- 2006 B.A. Anthropology, Minor in Biology, Boston University, Boston, MA, USA

Teaching

- 2017 EPFL/ETHZ PhD Winter School, March 12-17 - Invited speaker and specialist mentor
- 2016 Introduction to Anthropology, undergraduate, Fall - Guest lecturer
- 2016 Graduate Discussion in Microbiology, Spring - Guest lecturer
- 2014 Human Variation, undergraduate, Spring - Guest lecturer

Grants & fellowships

- 2018-20 National Science Foundation Postdoctoral Fellowship, co-funded by EPSCoR - Relevance of positive selection on human salivary amylase gene, \$148,000
- 2018-19 Konrad Lorenz Institute for Evolution and Cognition Research Postdoctoral Fellow, 8 month stipendium
- 2017-19 Principle Investigator: The Leakey Foundation general grant - Physiological relevance of salivary amylase copy number variation for starch digestion in human evolution. \$20,601

Awards & honors

- 2017 Scholarship for the Summer Institutes at the University of Washington, Department of Biostatistics: modules in statistical genetics, big data analysis, and modeling in infectious diseases. \$2050.
- 2017 Co-chair of invited-podium session accepted as the Wiley Symposium for the American Association of Physical Anthropologists (AAPA), "Humans as Holobionts: The Microbiome as a Biological System in Human Evolution". \$3000.

- 2014 Juan Comas student presentation prize winner, podium presentation, American Association of Physical Anthropologists (AAPA), Calgary, Alberta, Canada. \$600.
- 2013 Student presentation prize winner, poster presentation, European Society for the study of Human Evolution (ESHE), Vienna, Austria. €1500.
- 2011 PhD studentship stipend for work in independent research group, Plant Foods and Hominin Dietary Ecology, Max Planck Gesellschaft
- 2007 Undergraduate research paper accepted and published, Boston University Brownstone Journal

Referee for

Journals:

Scientific Advances, Human Ecology, Obesity, PeerJ, PLoS ONE, American Journal of Physical Anthropology Yearbook, Beneficial Microbes, PNAS, Microbiome

Funding agencies:

The Leakey Foundation

Outreach

Table leader for the Human Biology Association Student Reception in Atlanta, GA, 2016

Contributor for "Innovations in the Microbiome" special feature in the February 2015 issue of Scientific American and Nature Contributions to the press, including The New York Times, Science Magazine, The New Yorker, National Geographic, Reader's Digest, Vice, Wired

Counseled work presented to the Institute of Medicine of the National Academies of Science

Peer reviewed publications

- 2018 Honap TP, Sankaranarayanan K, **Schnorr SL**, Ozga, AT, Warinner, C, Lewis CM. Biogeographic study of human gut associated crAssphage suggests impacts from industrialization and recent expansion. *bioRxiv*. <https://doi.org/10.1101/384677>.
- 2018 **Schnorr SL**. Meanings, measurements, and musings on the significance of patterns in human microbiome variation. *Current Opinion in Genetics & Development*, 53, December 2018, 43-52.
- 2018 **Schnorr SL**, Hofman CA, Netshifhefhe SR, Duncan FD, Honap TP, Lesnik J, Lewis CM. Taxonomic features and comparisons of the edible fungus-farming termite microbiome and implications for human evolution (*Macrotermes falciger*, *M. natalensis*). *In revision*.
- 2018 **Schnorr SL**, Venema KN, Crittenden AN, Henry AG. Adaptations in metabolism of wild tubers by different human gut microbiome communities. *In prep*.
- 2018 **Schnorr SL**, Candela M, Rampelli S, Turrioni S, Henry AG, Crittenden AN. Comment on "Seasonal cycling in the gut microbiome of the Hadza hunter-gatherers of Tanzania". *bioRxiv*. <https://doi.org/10.1101/284513>.
- 2018 Ayeni FA, Biagi E, Rampelli S, Fiori J, Soverini M, Audu HJ, Cristino S, Caporali L, **Schnorr SL**, Carelli V, Brigidi P, Candela M, Turrioni S. Infant and Adult Gut Microbiome and Metabolome in Rural Bassa and Urban Settlers from Nigeria. *Cell Reports*, 23, 3056-3067.
- 2017 Rampelli S, Turrioni S, **Schnorr SL**, Soverini M, Quercia S, Barone M, Castagnetti A, Biagi E, Gallinella G, Brigidi P, Candela M. Characterization of the human DNA gut virome across human populations with difference subsistence strategies and geographical origin. *Environmental Microbiology*. 19(11):4728-4735.

- 2017 Crittenden AN, **Schnorr SL**. Current views on hunter-gatherer nutrition and the evolution of the human diet. *Yearbook of Physical Anthropology*. 162(S63): 84-109.
- 2016 Turrone S, Fiori J, Rampelli S, **Schnorr SL**, Consolandi C, Barone M, Biagi E, Fanelli F, Mezzullo M, Crittenden AN, Henry AG, Brigidi P, Candela M. Faecal metabolome of the Hadza hunter-gatherers: a host-microbiome integrative view. *Scientific Reports*, 6(32826), doi:10.1038/srep32826.
- 2016 **Schnorr SL**, Sankaranarayanan K, Lewis CM, Warinner C. Insights into human evolution from ancient and contemporary microbiome studies. *Current Opinion in Genetics & Development*, 41:14-26.
- 2016 Soverini M, Rampelli S, Turrone S, **Schnorr SL**, Quercia S, Castagnetti A, Biagi E, Brigidi P, Candela M. Variations in the post-weaning human gut metagenome profile as result of Bifidobacterium acquisition in the Western microbiome. *Frontiers in Microbiology*, 7(1058), doi: 10.3389/fmicb.2016.01058.
- 2016 **Schnorr SL**, Bachner HA. Integrative therapies in anxiety treatment with special emphasis on the gut microbiota. *Yale Journal of Biology and Medicine*. 89(3): 397.
- 2016 Turrone S, Rampelli S, Centanni M, **Schnorr SL**, Consolandi C, Severgnini M, Peano C, Soverini M, Falconi M, Crittenden AN, Henry AG, Brigidi P, Candela M. Enterocyte-associated microbiome of the Hadza hunter-gatherers. *Frontiers in Microbiology*, 7(865), doi: 10.3389/fmicb.2016.00865.
- 2016 **Schnorr SL**, Crittenden AN, Henry AG. Impact of light roasting on tuber starch gelatinization and implications for forager nutritional ecology. *Ethnoarchaeology*, 8:1, 30-56. doi: 10.1080/19442890.2016.1150629.
- 2015 **Schnorr SL**, Crittenden AN, Venema K, Marlowe F, Henry AG. Assessing digestibility of Hadza tubers using a dynamic in-vitro model. *American Journal of Physical Anthropology*, 158(3), 371-385.
- 2015 Rampelli S, **Schnorr SL**, Consolandi C, Turrone S, Severgnini M, Peano C, Brigidi P, Crittenden AN, Henry AG, Candela M. Metagenome sequencing of the Hadza hunter-gatherer gut microbiota. *Current Biology*, 25, 1-12, doi:10.1016/j.cub.2015.04.055.
- 2014 **Schnorr SL** and Candela M, Rampelli S, Centanni M, Consolandi C, Basaglia G, Turrone S, Biagi E, Peano C, Severgnini M, Fiori J, Gotti R, De Bellis G, Luiselli D, Brigidi P, Mabulla A, Marlowe F, Henry AG, Crittenden AN. Gut microbiome of the Hadza hunter-gatherers. *Nature Communications*, 5 (3654), doi: 10.1038/ncomms4645.

Other publications

- 2018 **Schnorr SL**. Chapter 12: Roots and Tubers. In Rob Dunn & Monica Sanchez (Eds.), *A Field Guide to the Kitchen*. Forthcoming.
- 2015 **Schnorr SL**. The Diverse Microbiome of the Hunter-Gatherer. *Nature*, 518(7540):S14-5.

Professional presentations & lectures

- 2018 *Ancient foods, fiber, and bugs: Exploring the ancient human microbiome to understand human nutrition during evolution*. University of Bologna, Department of Pharmacy and Biotechnology (FaBiT), **Invited Speaker**.
- 2018 *Can honey consumption be detected from metagenomic gut microbiome data?* AAPA Austin, TX. **Schnorr SL**. Poster.
- 2018 *Tracing the impact of diet in human evolution using physiological and behavioral roadmaps*. Washington State University, Department of Anthropology, **Invited Speaker**.
- 2018 *Exploring the microbial gene landscape: Evidence of lipid nutritional pathways to support brain growth*. Konrad Lorenz Institute, Klosterneuburg, Austria, **Colloquium Speaker**.
- 2017 *Considering not only what we ate but how we ate it as an insight into Paleolithic dietary strategies*. Palaeodietary Workshop, University of Tübingen, Germany, **Keynote Speaker**.

- 2017 *Evolution of a host-microbiome interaction*. EPFL/ETHZ PhD Winter School, Fiesch, Switzerland on Gut Matters: Human Health, Microbiome, and Nutrition, **Invited Speaker**.
- 2016 *From field to field: Cross disciplinary bridges to microbiology from anthropology*. OU Norman, OK, **Guest Lecturer**.
- 2016 *Lipid metabolism and nutritive factors of the gut microbiota in human foragers*. AAPA Atlanta, GA. **Schnorr SL**, Henry AG, Crittenden AN. Poster.
- 2015 *Plant food consumption among modern foragers informs Paleolithic dietary ecology*. SAA San Francisco, CA. Salazar Garcia DC, Leonard CA, Power RC, **Schnorr SL**, Henry AG. Podium. (Presenting author).
- 2015 *The contribution of plant foods to human nutrition: The adaptive impact of cooking and the gut microbiome*. University of Tübingen, Center for Archaeology, Tübingen, Germany, **Invited Speaker**.
- 2015 IHMC Luxembourg. Insights on the lipid metabolic potential of the gut microbiome in different human and animal groups. **Schnorr SL**, Rampelli S, Turrone S, Biagi E, Consolandi C, Brigidi P, Crittenden A, Candela M, Henry A. Poster.
- 2014 *Assessing human variation: Research topics in human dietary adaptation*. UTSA San Antonio, TX, **Guest Lecturer**.
- 2014 *Assessing diet specialization of Hadza microbiota through activity and composition*. AAPA Calgary, AB. **Schnorr SL**, Venema K, Crittenden AN, Marlowe F, Henry AG. Podium.
- 2013 *Negligible effect of cooking on nutritional value of Hadza tubers*. ESHE Vienna. **Schnorr SL**, Venema K, Crittenden AN, Marlowe F, Henry AG. Poster.
- 2013 *Methods in assessing the role of plants in human diet*. UNLV Las Vegas, NV, **Invited Speaker**.
- 2013 *Nutritional impact of cooking Hadza tubers*. CHaGS Liverpool. **Schnorr SL**, Crittenden AN, Venema K, Marlowe F, Henry AG. Podium.
- 2013 *In-vitro analysis of nutrition in Hadza tubers using Hadza simulated cooking techniques*. AAPA Knoxville, TN. **Schnorr SL**, Crittenden AN, Venema K, Marlowe F, Henry AG. Podium.
- 2011 *Does physical activity impact dietary choice in a modern Western population to correspond to hunter-gatherer macronutrient profiles?* AHS Los Angeles, CA. **Schnorr SL**. Poster.
- 2010 *The impact of physical activity on dietary choices of a western population and its correspondence to hunter-gatherer macronutrient profiles*. AAPA Albuquerque, NM. **Schnorr SL**, Graham KL. Poster.
- 2010 *Human Evolutionary History of Eating and Modern Misfortune*. UT Austin, TX, Integrative Biology, Population Biology Seminar Series, **Guest Speaker**.
- 2009 *Do modern western athletes show a dietary preference for Paleolithic human diets to compensate for high energy output?* TABA Austin, TX. **Schnorr SL**, Graham KL. Podium.
- 2009 *A comparison of macronutrient intake and exercise between extant hunter-gatherers and a modern western population*. MPIG Allendale, MI. **Schnorr SL**, Graham KL. Poster.