CHRISTINA "TINA" WARINNER

CURRICULUM VITAE

Harvard University Peabody Museum 570 Department of Anthropology Radcliffe Institute for Advanced Study 11 Divinity Ave., Cambridge, MA USA 02138 +1 617-495-1279 warinner@fas.harvard.edu https://anthropology.fas.harvard.edu/people/christina-warinner

Max Planck Institute for Evolutionary Anthropology (MPI-EVA) Department of Archaeogenetics Deutscher Platz 6, 04103 Leipzig, Germany +49 34135500

christina warinner@eva.mpg.de www.christinawarinner.com

Twitter: @WarinnerGroup

APPOINTMENTS

	2021-present 2021-present
	2021-present
	2019-present
Assistant Professor, Department of Anthropology, Harvard University, USA	2019-2021
University Professor, Friedrich Schiller University, Jena, Germany	2018-present
Group Leader of Microbiome Sciences, Dept. of Archaeogenetics, Max Planck Institute	2016-2021
for the Science of Human History, Jena, Germany	
Presidential Research Professor, Univ. of Oklahoma, USA	2014-2019
Assistant Professor, Dept. of Anthropology, Univ. of Oklahoma, USA	2014-2019
Adjunct Professor, Dept. of Periodontics, College of Dentistry, Univ. of Oklahoma, USA	2014-2019
Visiting Associate Professor, Dept. of Systems Biology, Technical University of Denmark	2015
Research Associate, Dept. of Anthropology, Univ. of Oklahoma, USA	2012-2014
Acting Head of Group, Centre for Evolutionary Medicine, Univ. of Zürich, Switzerland	2011-2012
Research Assistant, Centre for Evolutionary Medicine, Univ. of Zürich, Switzerland	2010-2011
Archaeology Laboratory Manager, Anthropology Department, Harvard University	2008-2009
Senior Staff and Head Librarian, Lowell House, Harvard University	2006-2008
Resident Tutor, Lowell House, Harvard University	2005-2008
EDUCATION	
Ph.D., Anthropology, Dept. of Anthropology, Harvard University	2010
Thesis Title: "Life and Death at Teposcolula Yucundaa: Mortuary, Archaeogenetic,	
and Isotopic Investigations of the Early Colonial Period in Mexico"	
A.M., Anthropology, Dept. of Anthropology, Harvard University	2008
B.A., with Honors, Anthropology, University of Kansas	2003
B.A., Germanic Literatures and Languages, University of Kansas	2003
FELLOWSHIPS, HONORS AND AWARDS	
Keynote speaker, <u>Hochschulrektorenkonferenz (HRK)</u> (annual German Rectors' Conference)	2022
Top 10 Archaeological Discoveries of 2019, Archaeology Magazine	2019
Science News: Top 10 Scientists Ready to Transform their Fields, Society for Science & the Public	2017
Invited participant, White House Microbiome Innovation Forum, Office of Science and Tech. Policy	2015
Top 100 Scientific Discoveries of 2014, Discover Magazine	2014
Kavli Foundation Fellow, US National Academy of Sciences	2014
Omenn Prize Honorable Mention, International Society for Evolution, Medicine and Public Health	2014

Research and Impact Visitor Travel Award, University of York TED Fellowship, Technology, Entertainment, Design (TED) Science Foo Camp ("SciFoo"), Invited Scientist, sponsored by Nature, O'Reilly Media, and Google Commencement Marshal, Harvard University, Graduate School of Arts and Sciences Invited participant, On History and Deep Time Exploratory Workshop, Radcliffe Institute for Advanced Study, Harvard University, Cambridge, MA Distinction in Teaching Award, Derek Bok Center for Teaching and Learning, Harvard University Distinction in Teaching Award, Derek Bok Center for Teaching and Learning, Harvard University Graduate Research Fellowship (GRF), National Science Foundation DAAD.edu Undergraduate Scholarship, Deutscher Akademischer Austauschdienst	2013 2012 2012 2010 2007 2007 2006 2004-2007 2002-2003	
SCIENTIFIC ADVISORY BOARDS, EDITORIAL BOARDS, AND COMMISSIONS OF TRUST		
Vice President, International Society for Biomolecular Archaeology (ISBA) Board of Trustees, International Society for Biomolecular Archaeology (ISBA) Center for Materials Research in Archaeology and Ethnology (CMRAE) representative for Harvard University Invited member, Current Issues in Ancient DNA Research (CIADR) Working Group Scientific Advisory Board, European Research Council, "Remaking Health in a Microbial Planet by Crossing Space, Time, Species and Epistemic Cultures (HealthXCross)", PI Roberta Raffets Wellcome Trust, Expert Panel Member for review of the Sanger Insitute Tree of Life Programme Editorial Board, Environmental Archaeology, Elements Series, Cambridge University Press Leadership Team, Max Planck – Harvard Research Center for the Archaeoscience of the Ancient	2022- 2022- 2022- 2021- 2020- a 2020- 2019-	
Mediterranean Scientific Advisory Board, Phylagen Inc. Invited member, The American Gut Consortium Invited member, Center for Academic Research and Training in Anthropogeny (CARTA) Invited member, The Scientists for Advancement of Microbiome Research	2016-2022 2017 2016 2014	
RESEARCH GRANTS RESEARCH GRANTS (PI OR CO-PI)		
US National Science Foundation, Archaeology Program "Collaborative Research: Reconstructing Classic Maya Genetic and Social Kinship Networks at Belize River Valley Polities" (BCS-2150813); Role: PI	2022-2024	
Werner Siemens Stiftung " <u>Paleobiotechnology</u> – Ancient Drugs for Modern Bugs"; Role: Co-PI	2020-2030	
Deutsche Forschungsgemeinschaft (DFG), Exzellenzstragegie Exzellenzclusters: Balance of the Microverse, EXC 2051 #390713860; Role: Co-PI	2019-2025	
European Research Council (ERC), Starting Grant "Cultures of dairying: gene-culture-microbiome evolution and the ancient invention of dairy foods (804884, DAIRYCULTURES)"; Role: PI	2018-2022	
Bundesministerium für Bildung und Forschung (BMBF), Bekanntmachung im Rahmen der Strategie Bundesregierung zur Internationalisierung von Wissenschaft und Forschung Richtlinien zur Förderu Vernetzungs- und Sondierungsreisen deutscher Hochschulen und Forschungseinrichtungen ("Trav Conferences") zum Aufbau von Kooperationen mit Partnern im Südkaukasus, Zentralasien und der "Mobile Mikroben: Milchvielfalt und Ernährungssicherheit in den Steppen Eurasiens"; Role: Co-Rec	ung von elling Mongolei	
Wenner Gren, Awarded Symposium "Cultures of Fermentation"; Role: Co-Recipient	2019	

Max Planck Society, Donation Award "Heirloom Microbes: The History and Legacy of Ancient Dairying Bacteria"; Role: Co-Pl	2016-2019
US National Institutes of Health, General Medicine, R01 "Microbial Ecologies of Indigenous Communities (2R01GM089886)"; Role: Co-PI	2016-2020
US National Science Foundation, Early Concept Grants for Exploratory Research (EAGER) "Identification of specific pathogens in human dental calculus" (BCS-1643318); Role: Co-PI	2016-2018
US National Science Foundation, Archaeology Program "Direct Proteomic Investigation of Dairying in the Near Eastern and European Neolithic" (BCS-1523264); Role: PI	2015-2019
US National Science Foundation, Biological Anthropology Program "Evolution and Ecology of the Human Oral Microbiome" (BCS-1516633); Role: PI	2015-2018
US National Science Foundation, Archaeology Program "Testing models of population history and high altitude adaptation in Lo Manthang, Upper Mustang, Nepal, within a multidisciplinary framework" (BCS1528698); Role: Subcontract PI	2015-2017
Swiss Foundation for Nutritional Research "Ancient DNA and Paleoprotein Investigation of Dairying and the Evolution of Swiss Diet" (#440); Role: PI	2011-2012
RESEARCH GRANTS (SENIOR INVESTIGATOR OR COLLABORATOR)	
National Science Foundation of Korea, Starting Grant "Reconstructing the genetic history of the ancient Xiongnu empire" PI: Choongwon Jeong, Collaborator: Christina Warinner	2020-2022
University Research Priority Programs Evolution in Action Grant, University of Zürich "Ancient Egyptian Microbiome" PI: Frank Rühli, Senior External Collaborator: Christina Warinner	2016-2020
European Research Council Early Career Grant "Transformations of Food in the Eastern Mediterranean Late Bronze Age (FoodTransforms)." Pl: Philipp Stockhammer, Collaborator: Christina Warinner	2016-2020
European Research Council Early Career Grant "Plant foods in human evolution: Factors affecting the harvest of nutrients from the floral environment (HARVEST)." PI: Amanda Henry, Collaborator: Christina Warinner	2016-2020
Oxford University Fell Fund Investigating the effects of the Industrial Revolution on oral biology and health (EBD10130) PI: Greger Larson, Senior Investigator: Christina Warinner, £60,000	2015-2016
Generalitat Valenciana, Ayudas para la realización de proyectos de I+D para grupos de investigación emergentes, "Investigation of the dental calculus microbiome in archaeological modern and archaic humans." Pl: Domingo Salazar Garcia, External Collaborator: Christina Warinner	2015
University of York C2D2 Research Priming Fund "Did Rheumatoid Arthritis Really Begin in 1800?" PI: Malin Holst, External Collaborator: Christina Warinner	2015
European Research Council, Synergy Grant "NEXUS1492: Transformation of Amerindian Cultures across the Historical Divide" Pls: C Hofman, U Brandes, G Davies, External Collaborator: Christina Warinner	2013-2019

INTRAMURAL GRANTS

Radcliffe Institute for Advanced Study, Research Teams Program grant, "Reevaluating Mexico's 16th century cocoliztli epidemics using ethnohistoric and archaeological evidence." Role: PI	2020
University of Oklahoma Faculty Improvement Program, "Acquisition of High Performance Liquid Chromatography (HPLC) System and Lyophilizer to Characterize Key Biomarkers in Modern and Ancient Human Microbiomes." Role: Co-PI	2015
University of Oklahoma College of Arts and Sciences, Travel Assistance Program grant	2014
Writing Fellowship, Cora du Bois Charitable Trust	2009
Graduate Society Fellowship, Harvard University Graduate School of Arts and Sciences	2009
Harvard University Graduate School of Arts and Sciences, Summer Research Grant	2009
Harvard University Graduate School of Arts and Sciences, Summer Research Grant	2008
Harvard University, David Rockefeller Center for Latin American Studies, Travel Grant	2008
Harvard University Graduate School of Arts and Sciences, Summer Research Grant	2007
Harvard University Department of Anthropology, Owens Fund Research Grant	2007
Harvard University Graduate School of Arts and Sciences, Summer Research Grant	2006
Harvard University Department of Anthropology, Owens Fund Research Grant	2006

PUBLICATIONS

*senior corresponding author, †supervised student or postdoc, ‡visiting student in my lab articles marked as *in prep* are fully drafted and only awaiting final co-author approval for submission NCBI: http://www.ncbi.nlm.nih.gov/sites/myncbi/1Jce0k1BbeZ5U/bibliography/44414157/public/Google Scholar:
https://scholar.google.com/citations?hl=en&user=cDFcc3cAAAAJ
https://scholar.google.com/citations
https://scholar.

JOURNAL PUBLICATIONS

In Preprint

Moraitou M, Forsythe A, Fellows Yates JA†, Brealey JC, **Warinner C**, Guschanski K. Dental calculus metagenomics suggest that ecology, not host phylogeny, shapes the oral microbiome in closely related species. *In review at Molecular Biology and Evolution.* BioRxiv, https://doi.org/10.1101/2022.06.06.494923

Velsko IM†, Gallois S, Stahl R, Henry A, **Warinner C***. High conservation of the dental plaque microbiome across populations with differing subsistence strategies and market integration. *In review at Molecular Biology and Evolution*. BioRxiv, https://www.biorxiv.org/content/10.1101/2022.07.27.501666v1

In Press

Warinner C. An Archaeology of Microbes. Journal of Anthropological Research 108.

Dimopouls EA, Carmagnini A, Velsko IM†, **Warinner C**, Larson G, Frantz LA, Irving-Pease E. HAYSTAC: A Bayesian framework for robust and rapid species identification in high-throughput sequencing data. *In press at PLoS ONE*. Manuscript available on the BioRxiv: https://www.biorxiv.org/content/10.1101/2020.12.16.419085v1

Published

Velsko I†, Semerau L†, Inskip SA, García-Collado MI, Ziesemer K, Serrano Ruber M, Benítez de Lugo Enrich L, Molero-García JM, Gallego Valle D, Peña Ruiz AC, Salazar Garcia DC, Hoogland MLP, **Warinner C***. Ancient dental calculus preserves signatures of biofilm succession and inter-individual variation independent of dental pathology. *PNAS Nexus* 1: 1-14. https://doi.org/10.1093/pnasnexus/pgac148.

Austin RM, Zuckerman M, Honap TP, Lee H, Ward GK, **Warinner C**, Sankaranarayanan K, Hofman CA. Remembering St. Louis Individual: Structural violence and acute bacterial infections in a historical anatomical collection. *Communications Biology* 5:1050. https://doi.org/10.1038/s42003-022-03890-z

Warinner C*, Richter K†, Collins, M. (2022) Paleoproteomics. *Chemical Reviews* 122, 13401-13446. https://doi.org/10.1021/acs.chemrev.1c00703

Borry M†, Hübner A†, **Warinner C**. (2022) sam2lca: Lowest Common Ancestor for SAM/BAM/CRAM alignment files. *Journal of Open Source Science* 7(74), 4360. https://joss.theoj.org/papers/10.21105/joss.04360.pdf

Richter K†, Seabrook M†, Codlin M, **Warinner C***. (2022) A primer for ZooMS applications in archaeology. *PNAS* 119(20) e2109323119. https://www.pnas.org/doi/10.1073/pnas.2109323119

Andrades Valtueña A, Neumann GU, Spyrou MA, Musralina L, Aron F, Beisenov A, Belinskiy AB, Bos KI, Buzhilova A, Conrad M, Djansugurova LB, Dobes M, Ernée M, Fernández-eraso J, Frohlich B, Furmanek M, Haluszko A, Hansen S, Éadaoin Harney, Hiss AN, Hübner A, Key FM, Khussainova E, Kitov Y, Kitova AO, Knipper C, Kühnert D, Lalueza-Fox C, Littleton J, Massey K, Mittnik A, Mujika-Alustiza JA, Olalde I, Papac L, Penske S, Peska J, Pinhasi R, Reich D, Reinhold S, Stahl R, Stäuble H, Tukhbatova RI, Vasilyev S, Veselovskaya E, **Warinner C**, Stockhammer PW, Haak W, Krause J, Herbig A. (2022) Stone Age Yersinia pestis genomes shed light on the early evolution, diversity, and ecology of plague. *PNAS* 119(17): e2116722119. https://www.pnas.org/cgi/doi/10.1073/pnas.2116722119

Scott A†, Reinhold S, Hermes T†, Kalmykov AA, Belinskiy A, Buzhilova A, Berezina N, Kantorovich AR, Maslov VE, Guliyev F, Lyonnet B, Gasimov P, Jalilov B, Eminli J, Iskandarov E, Hammer E, Nugent S, Hagan R, Majander K, Onkamo P, Nordqvist K, Shishlina N, Kaverzneva E, Korolev A, Khokhlov AA, Smolyaninov RV, Sharapova SV, Krause R, Karapetian M, Stolarczyk E, Krause J, Hansen S, Haak W, **Warinner C***. (2022) Emergence and intensification of dairying in the Caucasus and Eurasian steppes. *Nature Ecology and Evolution*. DOI: 10.1038/s41559-022-01701-6; https://www.nature.com/articles/s41559-022-01701-6

Fagernäs Z†, Salazar-Garcia DC, Avilés Ferández A, Haber Uriarte M, Henry A, Lomba Maurandi J, Ozga A, Velsko IM†, **Warinner C***. (2022) Understanding the microbial biogeography of ancient human dentitions to guide study design and interpretation. *FEMS Microbes* 3: xtac006. https://doi.org/10.1093/femsmc/xtac006

Liu C, Witonsky D, Gosling A, Lee JH, Ringbauer H, Hagan R†, Patel N†, Stahl R, Novembre J, Aldenderfer M, **Warinner C***, Di Rienzo A*, Jeong C*. (2022) Ancient genomes from the Himalayas illuminate the genetic history of Tibetans and their Tibeto-Burman speaking neighbors. *Nature Communications* 13:1203. https://doi.org/10.1038/s41467-022-28827-2

Zhang F, Chao N, Scott A†, Fu Q, Bjorn R, Li W, Wei D, Wang W, Fan L, Abuduresule I, Hu X, Ruan Q, Niyazi A, Dong G, Cao P, Liu F, Dai Q, Feng X, Yang R, Tang Z, Ma P, Li C, Gao S, Xu Y, Wu S, Wen S, Zhu H, Zhou H, Roberts M, Kumar V, Krause J*, **Warinner C***, Jeong C*, Cui Y*. (2021) The genomic origins of the Bronze Age Tarim mummies. *Nature*, https://www.nature.com/articles/s41586-021-04052-7

Alpaslan-Roodenberg S, Anthony D, Babiker H, Bánffy E, Booth T, Capone P, Deshpande-Mukherjee A, Eisenmann S, Fehren-Schmitz L, Frachetti M, Fujita R, Frieman CJ, Fu Q, Gates Jr. HL, Gibbon V, Haak H, Hajdinjak M, Hofmann KP, Holguin B, Inomata T, Kanzawa-Kiriyama H, Keegan W, Kelso J, Krause J, Kumaresan G, Kusimba C, Kusimba S, Lalueza-Fox C, Llamas B, MacEachern S, Mallick S, Matsumura H, Morales-Arce AY, Motuzaite Matuzeviciute G, Mushrif-Tripathy V, Nakatsuka N, Nores R, Ogola C, Okumura M, Patterson N, Pinhasi R, Prasad SPR, Prendergast ME, Punzo JL, Reich R, Sawafuji R, Sawchuk E, Schiffels S, Sedig J, Shnaider S, Sirak K, Skoglund P, Slon V, Snow M, Soressi M, Spriggs M, Stockhammer PW, Szécsényi-Nagy A, Thangaraj K, Tiesler V, Tobler R, Wang CC, **Warinner C**, Yasawardene S, Zahir M. (2021) Ethics of DNA Research on Human Remains: Five Globally Applicable Guidelines. *Nature*, https://doi.org/10.1038/s41586-021-04008-x.

Reichhardt B†, Enkh-Amgalan Z†, **Warinner C**, Rest M†. (2021) Photo Essay: Enduring Cycles: Documenting dairying in Mongolia and the Alps. *Current Anthropology* 62, supplement 24. https://www.journals.uchicago.edu/doi/pdf/10.1086/716065

Hendy J, Rest M†, Reichhardt B†, Aldenderfer M, **Warinner C**. (2021) Cultures of Fermentation: Living with Microbes. *Current Anthropology* 62, supplement 24. https://www.journals.uchicago.edu/doi/10.1086/715476

Kocher A, Papac L, Barquera R, Key F, Spyrou MA, Hübler R, Prüfer K, Rohrlach AJ, Aron F, Stahl R, Wissgott A, Mittnik A, Feldman M, Neumann G, Villalba V, Majander K, Ghalichi A, Rivollat M, Penske S, Tukhbatova RI, Keller

M, Musralin L, Nelson E, van de Loosdrecht M, Nägele K, Michel M, Ferraz da Silva T, Sabin S, Gretzinger J, Skourtanioti E, Parker C, Gnecchi Ruscone GA, Giffin K, Friederlich S, Meller H, Ernee M, Dobes M, Massy K, Skeates R, Erdal YS, Sayer D, Küßner M, Deguilloux MF, Mannerma K, Moiseyev V, Steiner H, Salazar-Garcia DC, Guevara E, Tung TA, Mannino M, Schimmernti V, Hallgren F, Kitov EP, Hernández-Zaragoza DI, Máquez-Morfín L, Rademaker K, Carmona Ballestero E, Harbeck M, Shishlina N, Kaverzneva E, Utrilla P, Lösch S, Shnayder S, Mazzarello V, Schultz M, Sperduit A, Semal P, Rottier S, Ramsl P, Van de Vijver K, Sagona C, Read C, Samashev Z, Beisenov AZ, Djansugurova LB, Khussainova E, Rojo-Guerra M, Tejedor-Rodriguez C, Garcia-Martinez de Lagran I. Aarcusa-Magallon H, Garrido-Pena R, Royo-Guillen JI, Roksandic M, Chinique de Armas Y, Hernandez Godoy ST, Kostka M, Kacki S, Saintot S, Baird D, Fernandez-Dominguez E, Veleminsky P, Limbursky P, Lefranc P, Binder D, Amkreutz L, Altena E, Llamas B, Alvarez CAlmet M, Krauß, Slavchv V, Rosenstock E, Francken M, Karapetian MK, Chaplygin MS, Kufterin VV, Khohlov AA, Chizhevsky AA, Stashenkov DA, Kochkina AF, Longova M, Danielisova A, Warinner C, Schiffels S, Stockhammer PW, Bos K, Posth C, Herbig A, Haak W, Krause J, Kühnert D. (2021) Ten millennia of hepatitis B virus evolution. *Science* 374 (6565): 182-188. https://www.science.org/doi/10.1126/science.abi5658

Borry M†, Hübner A†, Rohrlach AB, Haak W, **Warinner C***. (2021) Pydamage: automated ancient damage identification and estimation for contigs in ancient DNA de Novo assembly. *PeerJ* 9:e11845. <u>DOI:</u> 10.7717/peerj.11845.

Jacobson DK, Moore KN, Gunderson CC, Rowland MR, Austin RM†, Honap T, Xu J, **Warinner C**, Sankaranarayanan K, Lewis C. (2021) Shifts in gut and vaginal microbiomes are associated with cancer recurrence time in women with ovarian cancer. *PeerJ* 9:e11574. https://peerj.com/articles/11574/

Wibowo MC†, Yang Z, Tierney BT, Borry M, Huebner A, Barajas-Olmos F, Contreras-Cubas C, García-Ortiz H, Martínez-Hernández A, Luber JM, Kirstahler P, Blohm T, Zimmerman S, Smiley FE, Ballal SA, Pamp SJ, Reinhard K, Russ J, Orozco L, **Warinner C**, Snow M, LeBlanc S, Kostic AD. (2021) Reconstruction of ancient microbial genomes from the human gut. *Nature*. https://doi.org/10.1038/s41586-021-03532-0

Fellows Yates J†, Velsko I†, Aron F, Hofman C, Austin R†, Arthur J, Crevecoeur I, Dalén L, Gonzalez Morales M, Guschanski K, Henry AG, Humphrey LT, Mann AE, Nägele K, Parker CE, Posth C, Rougier H, Semal P, Stock J, Straus L, Weedman Arthur K, Wrangham R, Curtis M, Diez JC, Gibbon V, Menedez M, Peresani M, Roksandic M, Walker MJ, Power RC, Lewis CM, Sankaranarayan K, Salazar-Garcia DC, Krause J, Herbig A, **Warinner C***. (2021) The evolution and changing ecology of the African hominid oral microbiome. *PNAS* 118 (20) e2021655118. https://doi.org/10.1073/pnas.2021655118

Taylor W, Pruvost M, Posth C, Rendu W, Krajcarz M, Brancaleoni G, Spengler R, Hermes T†, Schiavinato S, Hodgins G, Stahl R, Abdykanova A, Saltanat A, Fedorowicz S, Orlando L, Douka K, Krivoshapkin A, Jeong C, **Warinner C**, Shnaider S. (2021) Evidence for the early dispersal of Near Eastern domesticates into high mountain Central Asia. *Nature Human Behavior*. https://doi.org/10.1038/s41562-021-01083-y

Orlando L, Allaby R, Skoglund P, Sarkissian C, Stockhammer PW, Avila M, Fu Q, Krause J, Willerslev E, Stone A, **Warinner C**. (2021) Ancient DNA analysis. *Nature Reviews Methods Primers* 1:14. https://doi.org/10.1038/s43586-020-00011-0

Rampelli S, Turroni S, Mallol C, Hernandez C, Galván B, Sistiaga A, Biagi E, Astolfi A, Brigidi P, Benazzi S, Lewis CM, **Warinner C**, Hofman CA, Schnorr SL, Candela M. (2021) Components of a Neanderthal gut microbiome recovered from fecal sediments from El Salt. *Communications Biology* 4:169. https://doi.org/10.1038/s42003-021-01689-y

Fellows Yates J†, Andrades Valtueña A, Vägene AJ, Cribdon B, Velsko IM†, Borry M†, Bravo-López MJ, Fernandez-Guerra A, Green EJ, Ramachandran SL, Heintzman PD, Spyrou MA, Hübner A, Gancz AS, Hider J, Allshouse AF†, **Warinner C**. (2021) Community-curated and standardised metadata of published ancient metagenomic samples with AncientMetagenomeDir. *Nature Scientific Data* 8(31). https://doi.org/10.6084/m9.figshare.13241537

Scott AS†, Power RC, Altmann-Wendling V, Artzy M, Martin MAS, Eisenmann S, Hagan R, Salazar-Garcia DC, Salmon Y, Yegorov D, Milevski I, Finkelstein I, Stockhammer PW*, **Warinner C***. (2020) Evidence for long-distance trade in exotic foods and spices from South Asia to the Near East in the 2nd millennium BCE. *Proceedings of the National Academy of Sciences USA*. https://doi.org/10.1073/pnas.2014956117.

Nielsen RL, Helenius M, Garcia S, Roager HM, Aytan D, Hansen LBS, Lind MV, Vogt J, Dalgaard M, Dahl MI, Jensen CB, Muktupavela R, **Warinner C**, Appel V, Gøbel R, Vestergaard H, Hansen Torben, Kristiansen K, Pedersen SB, Petersen TN, Lauritzen L, Licht TR, Pedersen O, Gupta R. (2020) Data integration for prediction of weight loss in dietary cross-over studies. *Scientific Reports* 76097. https://doi.org/10.1038/s41598-020-76097-z

Skourtanioti E†, Erdal YS, Frangipane M, Balossi Restelli F, Yener A, Pinnock F, Matthiae P, Özbal R, Schoop U, Guliyev F, Akhundof T, Lyonnet B, Hammer EL, Nugent SE, Burri M, Neumann G, Penske S, Ingman T, Akar M, Shafiq R, Palumbi G, Eisenmann S, d'Andrea M, Schachner A, **Warinner C***, Jeong C*, Stockhammer P*, Haak W*, Krause J*. (2020) Genomic history of Neolithic to Bronze Age Anatolia, Northern Levant and South Caucasus. *Cell* 181:1158-1175. https://doi.org/10.1016/j.cell.2020.04.044

Fagernäs Z†, Garcia Collado MI, Hendy J, Hofman C, Speller C, Velsko I†, **Warinner C***. A unified protocol for simultaneous extraction of DNA and proteins from archaeological dental calculus. (2020) *Journal of Archaeological Science* 118:105135. https://doi.org/10.1016/j.jas.2020.105135

Borry M†, Cordova B†, Perri A, Wibowo MC†, Ko WTJ, Yu J, Kagone TS, Meda N, Carabin H, Jacobson D†, Honap T, Reinhard K, Lewis CM, Kostic A, Jeong C, Herbig A, Hübner A, **Warinner C***. (2020) CoproID predicts the source of coprolites and paleofeces using microbiome composition and endogenous DNA content. *PeerJ* 8:e9001. https://doi.org/10.7717/peerj.9001

Wilkin S†, Ventresca Miller A, Taylor WTT, Miller BK, Hagan RW†, Bleasdale M, Scott A†, Gankhuyg S, Ramsøe A, Trachsel C, Nanni P, Grossmann J, Orlando L, Horton M, Stockhammer P, Myagmar E, Boivin N, **Warinner C**, Hendy J. (2020) Dairy pastoralism sustained Eastern Eurasian steppe populations for 5000 years. *Nature Ecology and Evolution* 4:346-355. https://doi.org/10.1038/s41559-020-1120-y. Article translation in Mongolian: Cуу, цагаан идээ голлосон мал аж ахуй Зүүн Евразийн тал нутгийн ард түмний амь зуулгыг 5000 жилийн турш залгуулжээ

Honap T, Sankaranarayanan K, Schnorr SL, Ozga AT, **Warinner C**, Lewis C. (2020) Biogeographic study of human gut associated crAssphage suggests impacts from industrialization and recent expansion. PLoS ONE, https://doi.org/10.1371/journal.pone.0226930

Hagan RW†, Hofman CA, Hübner A†, Reinhard K, Schnorr S, Lewis CM, Sankaranarayanan K, **Warinner C***. (2020) Comparison of extraction methods for recovering ancient microbial DNA from paleofeces. *American Journal of Physical Anthropology* 171(2):275-284, https://doi.org/10.1002/ajpa.2397B

Huebler R, Key FM, **Warinner C**, Bos KI, Krause J, Herbig A. (2019) HOPS: Automated detection and authentication of pathogen DNA in archaeological remains. *Genome Biology* 20:280. https://doi.org/10.1186/s13059-019-1903-0

Hernández-Hernández O, Hernández-Zaragoza DI, Barquera R, **Warinner C**, López Gil C, Arrieta-Bolaños E, Clayton S, Bravo-Acevedo A, Ramos-de la Cruz F, Méndez-Mani P, Pavón-Vargas M, Zúñiga J, Yunis EJ, Bekker-Méndez C, Granados J. (2019) Genetic diversity of HLA system in two populations from Oaxaca, Mexico: Oaxaca City and rural Oaxaca. *Human Immunology* 81(9):553-556, https://doi.org/10.1016/j.humimm.2019.07.278

Aronsen GP, Fehren-Schmitz L, Krigbaum J, Kamenov GD, Conlogue G, **Warinner C**, Ozga A†, Sankaranarayanan K, Griego A, DeLuca DW, Eckels HT, Byczkiewicz R, Grurich T, Pellatier N, Brownlee S, Marichal A, Williamson K, Tonoike Y, Bellantoni NF. (2019) The dead shall be raised: Multidisciplinary analysis of 19th century human skeletons reveals complexity in New Haven Connecticut immigrant socioeconomic history and identity. *PLoS ONE* 14(9): e0219279. https://doi.org/10.1371/journal.pone.0219279

Geber J, Tromp M, Scott A†, Bouwman A, Nanni P, Grossmann J, Hendy J, **Warinner C**. (2019) Relief food subsistence revealed by microparticle and proteomics analyses of dental calculus from victims of the Great Irish Famine. *Proceedings of the National Academy of Sciences USA* 201908839. https://doi.org/10.1073/pnas.1908839116

Velsko IM†, Fellows-Yates JA†, Aron F, Hagen RW, Frantz LAF, Loe L, Rodriguez Martinez JB, Chaves E, Gosden C, Larson G, **Warinner C***. (2019) Microbial differences between dental plaque and historic dental calculus are related to oral biofilm maturation stage. *Microbiome* 7:102. https://doi.org/10.1186/s40168-019-0717-3

Radini A, Tromp M, Beach A, Tong E, Speller C, McCormick M, Dudgeon JV, Collins MJ, Rühli F, Kröger R, **Warinner C***. (2019) Medieval women's early involvement in manuscript production suggested by lapis lazuli identification in dental calculus. *Science Advances* 5, eaau7126. https://doi.org/10.1126/sciadv.aau7126

Ziesemer KA†, Ramos-Madrigal J, Mann AE†, Brandt B, Sankaranarayanan K, Ozga A, Hoogland M, Salazar Garcia D, Frohlich B, Milner G, Aldenderfer M, Lewis CM, Hofman C, **Warinner C**, Schroeder H*. (2018) The efficacy of whole human genome and high-throughput sequencing on ancient dental calculus. *American Journal of Physical Anthropology*. https://doi.org/10.1002/ajpa.23763

Jeong C, Wilkin S†, Amgalantugs T, Bouwman A, Taylor W, Bromage S, Tsolmon S, Hagan R†, Trachsel C, Grossman J, Littleton J, Makarewicz C, Krigbaum J, Burri M, Irmer F, Scott A†, Davaasambuu G, Wright J, Myagmar E, Boivin N, Robbeets M, Rühli F, Krause J, Frohlich B, Hendy J, **Warinner C***. (2018) Bronze Age population dynamics and the rise of dairy pastoralism on the eastern Eurasian steppe. *Proceedings of the National Academy of Sciences USA* 115(48): E11248-E11255. https://doi.org/10.1073/pnas.1813608115

Lindo J, Haas R, Hofman C, Apata M, Moraga M, Verdugo R, Watson JT, Llave CV, Witonsky D, Vargas Pacheco E, Villena M, Soria R, Beall C, **Warinner C**, Novembre J, Aldenderfer M, Di Rienzo A. (2018) The genetic prehistory of the Andean highlands 7,000 years BP through European contact. *Science Advances* 4(11): eaau4921. https://doi.org/10.1126/sciadv.aau4921

Mann AE†, Sabin S, Ziesemer KA†, Vågene Å, Schroeder H, Ozga A, Sankaranarayanan K, Hofman CA†, Fellows-Yates J†, Salazar Garcia D, Frohlich B, Aldenderfer M, Hoogland M, Read C, Krause J, Hofman C, Bos K, **Warinner C***. (2018) Differential preservation of endogenous human and microbial DNA in dental calculus and dentin. *Scientific Reports* 8:9822. https://doi.org/10.1038/s41598-018-28091-9

Velsko IM†, Frantz LAF, Herbig A, Larson G, **Warinner C***. (2018) Selection of appropriate metagenome taxonomic classifiers for ancient microbiome research. *mSystems* 3:e00080-18. https://doi.org/10.1128/mSystems.00080-18

Hendy J, **Warinner C**, Barnes I, Bouwman A, Collins M, Fiddyment S, Fischer R, Hagan R†, Hofman CA†, Holst M, Chaves E, Klaus L†, Larson G, Mackie M, McGrath K, Mundorff A, Radini A, Rao H, Trachsel C, Velsko I†, Speller C. (2018) Proteomic evidence of dietary sources in ancient dental calculus. *Proceedings of the Royal Society B* 285: 20180977. https://doi.org/10.1098/rspb.2018.0977

Martínez Tuñón A, Robles García NM, Clark D, **Warinner C**, Tuross N. (2018) Clandestine pulque production during the sixteenth century in the Tlacolula Valley, Oaxaca, Mexico. *Mexicon* 40(2):52-59.

McDonald D, Hyde E, Debelius JW, Morton JT, Gonzalez A, Ackermann G, Aksenov A, Chen Y, Dorrestein PC, Dunn RR, Fahimpour AK, Gaffney J, Gilbert JA, Gogul G, Green JL, Hugenholz P, Humphrey G, Huttenhower C, Jackson MA, Kelley ST, Knights D, Ladau J, Leach J, Melnik A, Metcalf JL, Montassier E, Navas-Molina J, Peddada S, Pollard KS, Rahnavard G, Robbins-Pianka A, Sangwan N, Shorenstein J, Spector T, Thackray VG, Thompson LR, Vasquez-Baeza Y, Wischmeyer P, Wolfe E, **The American Gut Consortium**, Knight R. (2018) American Gut: an Open Platform for Citizen-Science Microbiome Research. *mSystems* 3(3): e00031-18. https://doi.org/10.1128/mSystems.00031-18

Hendy J, Welker F, Demarchi B, Speller C, **Warinner C**, Collins MJ. (2018) Assessing Ancient Protein Studies: A Guide for Researchers, Reviewers and Editors. *Nature Ecology and Evolution*. https://doi.org/10.1038/s41559-018-0510-x

Vågene AJ, Campana MG, Robles García N, **Warinner C**, Spyrou MA, Andrades Valtueña A, Huson D, Tuross N, Herbig A, Bos KI, Krause J. (2018) *Salmonella enterica* genomes recovered from victims of a major 16th century epidemic in Mexico. *Nature Ecology and Evolution* 1-9. https://doi.org/10.1038/s41559-017-0446-6

Morales-Arce AY‡, Hofman CA†, Duggan A, Benfer A, Katzenberg MA, McCafferty G, **Warinner C***. (2017) Successful reconstruction of whole mitochondrial genomes from ancient Central America and Mexico. *Scientific Reports* 7, 18100. https://doi.org/10.1038/s41598-017-18356-0

Velsko IM†, Overmyer KA, Speller C, Loe L, Sankaranarayanan K, Collins M, Lewis CM, Bautista Rodriguez J, Chaves E, Coon JJ, Larson G, **Warinner C***. (2017) The dental calculus metabolome in modern and historic samples. *Metabolomics* 13:134. https://doi.org/10.1007/s11306-017-1270-3

Warinner C, Herbig A, Mann AE†, Fellows Yates JA†, Weiss CL, Burbano HA, Orlando L, Krause J. (2017) A robust framework for microbial archaeology. *Annual Reviews in Genomics and Human Genetics* 18. https://doi.org/10.1146/annurev-genom-091416-035526

Bouwman A, Shved N, Akgül G, Rühli F, **Warinner C***. (2017) Ancient DNA investigation of a medieval German cemetery confirms long-term stability of CCR5-Δ32 allele frequencies in Central Europe. *Human Biology* 89(2). https://doi.org/10.13110/humanbiology.89.2.02

Velsko I†, **Warinner C***. (2017) Bioarchaeology of the human microbiome. *Bioarchaeology International* 1(1-2):86-99. https://doi.org/10.5744/bi.2017.1004

Schnorr S, Sankaranarayanan K, Lewis CM, **Warinner C***. (2016) Insights into human evolution from ancient and contemporary microbiome studies. *Current Opinion in Genetics and Development* 41:14-26. https://doi.org/10.1016/j.gde.2016.07.003

Jeong C, Ozga AT, Witonsky D, Malmstrom H, Edlund H, Hofman CA, Hagan RW†, Jakobsson M, Lewis CM, Aldenderfer M, Di Rienzo A, **Warinner C***. (2016) Long-term genetic stability and a high altitude East Asian origin for the peoples of the high valleys of the Himalayan arc. *Proceedings of the National Academy of Sciences USA* 113(27):7485-7490. https://doi.org/10.1073/pnas.1520844113

Ozga AT, Sankaranarayanan K, Tito RY, Obregon-Tito AJ, Foster M, Tallbull G, Spicer P, **Warinner C**, Lewis Jr. CM. (2016) Oral microbiome characterization of Cheyenne and Arapaho individuals of Oklahoma. *American Journal of Physical Anthropology*, 161:321-327. https://doi.org/10.1002/ajpa.23033

Warinner C. (2016) Dental calculus and the evolution of the human oral microbiome. *California Dental Association Journal* 44(7):411-420. PMID: 27514153.

Olsen K, White CD, Longstaffe FJ, Rühli FJ, **Warinner C**, and Salazar-Garcia DC. (2016) Isotopic anthropology of rural German medieval diet: intra- and inter-population variability. *Archaeological and Anthropological Sciences* 10(5): 1053-1065. https://doi.org/10.1007/s12520-016-0432-y

Ozga AT†, Nieves-Colón MA‡, Honap T, Sankaranarayanan K, Hofman C, Milner G, Lewis CM, Stone AC, **Warinner C***. (2015) Successful enrichment and recovery of whole mitochondrial genomes from ancient human dental calculus. *American Journal of Physical Anthropology*, 160:220-228. https://doi.org/10.1002/ajpa.22960

Sankaranarayanan K, Ozga AT, **Warinner C**, Tito RY, Obregon-Tito AJ, Xu J, Gaffney PM, Jervis L, Cox D, Stephens L, Foster M, Tallbull G, Spicer P, Lewis CM. (2015) Gut microbiome diversity among the Cheyenne & Arapaho of Oklahoma. *Current Biology*, 25(24):3161-3169. https://doi.org/10.1016/j.cub.2015.10.060

Ziesemer KA†, Mann AE†, Sankaranarayanan K, Schroeder H, Ozga AT, Brandt BW, Zaura E, Waters-Rist A, Hoogland M, Salazar Garcia DC, Aldenderfer M, Speller C, Hendy J, Weston DA, MacDonald SJ, Thomas GH, Collins MJ, Lewis CM, Hofman C, **Warinner C***. (2015) Intrinsic challenges in ancient microbiome reconstruction using 16S rRNA gene amplification. *Scientific Reports* 5, 16498. https://doi.org/10.1038/srep16498

Warinner C, Lewis CM* (2015). Microbiome and health in past and present human populations. *American Anthropologist*, 117(4):736-737. https://doi.org/10.1111/aman.12367

Obregon-Tito A, Tito R, Metcalf J, Sankaranarayanan K, Clemente J, Ursell L, Xu Z, Van Treuren W, Knight R, Gaffney P, Spicer P, Lawson P, Marin-Reyes L, Trujillo-Villarroel O, Foster M, Guija-Poma E, Troncoso-Corzo L, **Warinner C**, Ozga A, Lewis, CM. (2015) Subsistence strategies in traditional societies distinguish gut microbiomes. *Nature Communications*, 6, 6505. https://doi.org/10.1038/ncomms7505

Warinner C, Speller C, Collins MJ, Lewis CM. (2015) Ancient Human Microbiomes. *Journal of Human Evolution*, **79**, 125-136. https://doi.org/10.1016/j.jhevol.2014.10.016

Warinner C*, Speller C, Collins MJ. (2014) A New Era in Paleomicrobiology: Prospects for Ancient Dental Calculus as a Long-Term Record of the Human Oral Microbiome. *Philosophical Transactions of the Royal Society B* **370**, 20130376. https://doi.org/10.1098/rstb.2013.0376

Warinner C*, Rodrigues JFM, Vyas R, Trachsel C, Shved N, Grossmann J, Radini A, Hancock Y, Tito RY, Fiddyment S, Speller C, Hendy J, Charlton S, Luder HU, Salazar-García DC, Eppler E, Seiler R, Hansen L, Samaniego Castruita JA, Barkow-Oesterreicher S, Teoh KY, Kelstrup C, Olsen JV, Nanni P, Kawai T, Willerslev E, von Mering C, Lewis, Jr. CM, Collins MJ, Gilbert MTP, Rühli F, Cappellini E*. (2014) Pathogens and host immunity in the ancient human oral cavity. *Nature Genetics* 46, 336-344. https://doi.org/10.1038/ng.2906

Warinner C*, Hendy J, Speller C, Cappellini E, Fischer R, Trachsel C, Arneborg J, Lynnerup N, Craig OE, Swallow DM, Fotakis A, Christensen RJ, Olsen J, Liebert A, Montalva N, Fiddyment S, Mackie M, Canci A, Bouwman A, Rühli F, Gilbert MTP, Collins MJ*. (2014) Direct Evidence of Milk Consumption from Ancient Human Dental Calculus. *Scientific Reports* 4, 7104. https://doi.org/10.1038/srep07104

Krüttli A†, Bouwman A, Akgül G, della Casa P, Rühli F, **Warinner C***. (2014) Ancient DNA analysis reveals high frequency of European lactase persistence allele in medieval Central Europe. *PLoS ONE* 9, e86251. https://doi.org/10.1371/journal.pone.0086251

Curtis Huttenhower C, Knight R, Brown CT, Caporaso JG, Clemente JC, Gevers D, Franzosa EA, Kelley ST, Knights D, Ley RE, Mahurkar A, Ravel J, **The Scientists for Advancement of Microbiome Research**, White O (2014). Advancing the Microbiome Research Community. *Cell* 159, 227-230. https://doi.org/10.1016/j.cell.2014.09.022

Shved N, Haas C, Papageorgopoulou C, Guelfirde A, Paulsen K, **Warinner C**, Bouwman A, Ruehli F*. (2014) Postmortem DNA degradation of human tissue experimentally mummified in salt. *PLoS ONE* 9, e110753. https://doi.org/10.1371/journal.pone.0110753

Warinner C, Robles García N, and Tuross N. (2013) Maize, beans and the floral isotopic diversity of highland Oaxaca, Mexico. *Journal of Archaeological Science* 40(2):868-873. https://doi.org/10.1016/j.jas.2012.07.003

Guedes J*, Carrasco D, Flad R, Fosse E, Herzfeld M, Lamberg-Karlovsky K, Lewis C, Liebman M, Meadow R, Patterson N, Price M, Reiches M, Richardson S, Shattuck-Heidorn H, Ur J, Urton G, **Warinner C**. (2013) Is poverty in our genes? A reply to Ashraf and Galor. *Current Anthropology* 54(1), 71-79. https://doi.org/10.1086/669034

Warinner C, Robles García N, Spores R, Tuross N. (2012) Disease, demography, and diet in early colonial New Spain: Investigation of a 16th century Mixtec epidemic cemetery at Teposcolula Yucundaa. *Latin American Antiquity* 23, 467-489. https://doi.org/10.7183/1045-6635.23.4.467

Warinner C*, d'Alpoim Guedes J, and Goode D. (2011) Paleobot.org: Establishing open-access online reference collections for archaeobotanical research. *Vegetation History and Archaeobotany* 20(3), 241-244.

Warinner C* and Tuross N. (2010) Tissue isotopic enrichment associated with growth depression in a pig: implications for archaeology and ecology. *American Journal of Physical Anthropology* 141, 486-493. https://doi.org/10.1002/ajpa.21222

Warinner C* and Tuross N. (2009) Alkaline cooking and stable isotope diet-tissue discrimination in swine: archaeological implications. *Journal of Archaeological Science* 36(8), 1690-1697. https://doi.org/10.1016/j.jas.2009.03.034

Tuross N*, **Warinner C**, Kirsanow K and Kester C. (2008) Organic Oxygen and Hydrogen Isotopes in a Porcine Controlled Dietary Study. *Rapid Communications in Mass Spectrometry* 22(11), 1741-1745. https://doi.org/10.1002/rcm.3556

SCHOLARLY MAGAZINES AND NEWSLETTERS

Warinner C, Beach A. (2020) Anonymous was a Woman: Illuminating the Writing and Art of Religious Women in the Middle Ages. *In Situ: News and Events of the Harvard Standing Committee on Archaeology,* Spring Semester 2020.

Hofman CA, **Warinner C***. (2019) Ancient DNA 101: An introductory guide in the era of high-throughput sequencing. *SAA Record* 19(1):18-25.

Radini A, **Warinner C**, Tromp M, Warinner C. (2019) We found lapis lazuli hidden in ancient teeth – revealing the forgotten role of women in medieval arts. The Conversation, January 11, 2019.

Aali A, Abar A, Boenke N, Pollard M, Rühli F, Stöllner T, Brothwell D, Good I, Le Bailly M, Link K, Mashkour M, Mowlavi G, Nezamabadi M, Nasab MV, **Warinner C**. (2012) Ancient Salt mining and salt men: the interdisciplinary Chehrabad Douzlakh project in north-western Iran. *Antiquity+ Project Gallery* 86, 333.

BOOKS AND EDITED VOLUMES

Houston S, Brittenham C, Mesick C, Tokovinine A, and **Warinner C**. (2006) Veiled Brightness: A History of Ancient Maya Color. Austin: University of Texas Press. (Book).

Marston JM, d'Alpoim Guedes J, and **Warinner C** (eds.). (2014) Method and Theory in Paleoethnobotany. University Press of Colorado, Boulder. (Edited Volume) DOI: 10.5876/9781607323167

BOOK CHAPTERS

Fagernäs Z, **Warinner C**. "Biomolecular archaeology of dental calculus." In: Pollard M, Makarewicz C, and Armitage, R, eds., Handbook of Archaeological Sciences. Wiley. *In press*.

Smith T, **Warinner C**. Developmental, evolutionary, and behavioral perspectives on oral health. In: Plomp K, Roberts C, Elton S, Bentley G, eds., Evolving Health: Paleopathology and Evolutionary Medicine, Oxford University Press. *In press*.

Hendy, J., Rest, M., and **Warinner**, **C.** (2022). "The Ancient History of Yoghurt." In *The Book of Fermentology* (1st ed.). NC State University Libraries. https://doi.org/10.52750/679579

Hendy, J., Rest, M., and **Warinner, C.** (2022). "The Ancient History of Yoghurt." In *The Book of Fermentology* (1st ed.). NC State University Libraries. https://doi.org/https://doi.org/10.52750/679579

Hendy, J., Rest, M., and **Warinner**, **C**. (2022). "The Modern History of Yoghurt." In *The Book of Fermentology* (1st ed.). NC State University Libraries. https://doi.org/10.52750/679579

Warinner C. (2020). "Microbial Archaeology," In Renfrew C and Bahn P, eds., Archaeology: Theories, Methods and Practice, 8th Edition. Thames and Hudson.

Warinner C, Ozga A, Radini A, Sankaranarayanan K, Lewis CM. (2019) "Genetic and microscopic analysis of human dental calculus from Swift Water Place, Alaska," in Anderson D, Anderson W, eds., Life at Swift Water Place, Alaska, at the Threshold of European Contact. University of Alaska Press.

Warinner C and Tuross N. (2015) "Ancient DNA and Stable Isotope Analysis of the Teposcolula Grand Plaza Cemetery," in Nelly Robles-García, ed. Yucundaa: La ciudad mixteca Yucundaa-Pueblo Viejo de Teposcolula y su transformación prehispánica-colonial. Vol. 2. Instituto Nacional de Antropología e Historia.

Tuross N, **Warinner C**, and Robles Garcia N. (2015) "Evidence for Mixtec/Dominican Interaction from the Radiocarbon Dates at Yucundaa (Pueblo Viejo de Teposcolula)," in Nelly Robles-García, ed. Yucundaa: La ciudad mixteca Yucundaa-Pueblo Viejo de Teposcolula y su transformación prehispánica-colonial. Vol. 2. Instituto Nacional de Antropología e Historia.

Warinner C. (2014) "From the Ground Up: Advances in Stable Isotope-Based Paleodietary Inference," in John M. Marston, Jade d'Alpoim Guedes, and Christina Warinner (eds.) Method and Theory in Paleoethnobotany. University Press of Colorado, Boulder.

Warinner C and d'Alpoim Guedes J. (2014) "Digitizing the Archaeobotanical Record" in John M. Marston, Jade d'Alpoim Guedes, and Christina Warinner (eds.) Method and Theory in Paleoethnobotany. University Press of Colorado, Boulder.

Marston JM, d'Alpoim Guedes J, and **Warinner C**. (2014) "Paleoethnobotanical Method and Theory in the 21st Century," in John M. Marston, Jade d'Alpoim Guedes, and Christina Warinner (eds.) Method and Theory in Paleoethnobotany. University Press of Colorado, Boulder.

ONLINE LABORATORY PROTOCOLS

Fellows Yates J, Aron F, Neumann GU, Velsko I, Skourtanioti E, Orfanou E, Fagernäs Z, Stahl R, Valtuena AA, **Warinner C**, Haak W, Brandt G. (2021) A-Z of ancient DNA protocols for shotgun Illumina Next Generation

Sequencing: A compilation of 12 complete bench protocols for each step of ancient DNA laboratory procedures. dx.doi.org/10.17504/protocols.io.bj8nkrve

Scott A, **Warinner C** (2021) Ancient Protein Extraction from Skeletal Material Protocol, dx.doi.org/10.17504/protocols.io.7vwhn7e

SOFTWARE

sam2lca, https://github.com/maxibor/sam2lca/tree/taxopy

PyDamage, https://github.com/maxibor/pydamage

cuperdec, https://github.com/jfy133/cuperdec

CoproID, https://github.com/maxibor/coproid-article

SourcePredict, https://github.com/maxibor/sourcepredict

nf-core / funcscan, https://github.com/nf-core/funcscan

WEBSITES AND ONLINE DATABASES

Warinner C, Reichhardt B†, Rest M†, Enkh-Amgalan Z†. (2020) DairyCultures: https://www.dairycultures.org

Warinner C, Reichhardt B†, Rest M†, Enkh-Amgalan Z†. (2020) DairyCultures Ethnographic Database: https://dairycultures.org/ethnographic data/

Fellows Yates J†, Andrades Valtueña A, Vägene AJ, Cribdon B, Velsko IM†, Borry M†, Bravo-López MJ, Fernandez-Guerra A, Green EJ, Ramachandran SL, Heintzman PD, Spyrou MA, Hübner A, Gancz AS, Hider J, Allshouse AF†, **Warinner C.** (2020) Ancient Metagenome Dir: https://github.com/SPAAM-community/AncientMetagenomeDir

Warinner C. Research website: http://www.christinawarinner.com

Warinner C and d'Alpoim Guedes J. (2010) Paleobot.org: Online Archaeobotanical Reference Database. http://www.paleobot.org

INVITED COMMENTARY

- Warinner C. Panelist, *Anthro Debates*, topic: Anthropology in and of a Pandemic. Department of Anthropology, Harvard University, April 17, 2020.
- Warinner C. Panelist, *Anthro Debates*, topic: Climate Change. Department of Anthropology, Harvard University, December 6, 2019.
- Vågene Å, **Warinner C**, Barquera R, Bos K. "<u>Mixtecs, Aztecs and the great cocoliztli epidemic of AD 1545-1550</u>." Invited blog post in the *Behind the Paper* forum of *Nature Ecology and Evolution*, February 8, 2018.

ORGANIZED CONFERENCES AND WORKSHOPS

- Introduction to Ancient Metagenomics, Summer School co-sponsored by the Max Planck-Harvard Center for the Archaeoscience of the Ancient Mediterranean (MHAAM), the Max Planck Institute for Evolutionary Anthropology (MPI-EVA), and the Standards, Precautions, and Advances in Ancient Metagenomics community (SPAAM), and financially supported by the Werner Siemens Foundation. Organizers: C Warinner and J Fellows Yates, August 1-5, 2022, https://spaam-community.github.io/wss-summer-school/#/2022/README
- 2019 Cultures of Fermentation Conference, Wenner Gren Symposium. Hosted at the Hotel Tivoli Palacio de Seteais, Sintra, Portugal, October 11-17, 2019. With financial support from the Wenner Gren Foundation. Organized by **C Warinner**, J Hendy, M Rest, and M Aldenderfer.

- 2019 Seeing Microbes Workshop. Organized by **C Warinner** and the DairyCultures Team and the Blessed by Yak women's dairy cooperatives. With financial support from the ERC. Khatgal, Mongolia, July 20-29, 2019.
- 2019 Microbes on the Move Conference, BMBF Travelling Conference. Hosted at the Mongolian University of Science and Technology (MUST) and the Kyrgyzstan BIO-KG Federation of Organic Development in Ulaanbaatar, Mongolia and Bishkek, Kyrgyzstan, May 18-26, 2019. With financial support from the Bundesministerium für Bildung und Forschung (BMBF) and the ERC. Organized by **C Warinner**, J Hendy, B Reichhardt, and M Rest.
- 2018 Microbial Biodiversity of Traditional Dairy Ecologies Workshop. Hosted at the Max Planck Institute for the Science of Human History, Jena, Germany June 18-20, 2018. Organized by **C Warinner**, J Hendy, and M Rest.
- International Symposium for Biomolecular Archaeology (ISBA) Conference, hosted by the MPI-SHH, Jena, Germany. Organizational Committee, **C Warinner**.
- Ancient Proteins Practical Workshop. Hosted at the Max Planck Institute for the Science of Human History, Jena, Germany, May 7-18, 2018. Organized by **C Warinner** and J Hendy.
- 2018 Ancient Dietary Proteins Workshop. Hosted at the Functional Genomics Center Zürich (FGCZ), Zürich, Switzerland, January 29, 2018. Organized by **C Warinner**, J Hendy, P Nanni, and J Grossmann.

INVITED WORKSHOP PARTICIPATION

- 2020 Invited participant, Virtual Workshop on Ethics in Ancient DNA Research, Harvard University, Cambridge, MA, USA, November 4-5, 2020.
- 2020 Invited participant, Reflective Archaeology and Archaeo-Gen-Ethics Workshop, Max Planck Institute for the Science of Human History, Jena, Germany, May 19, 2020
- 2007 Invited participant, On History and Deep Time Exploratory Workshop, Radcliffe Institute for Advanced Study, Harvard University, Cambridge, MA

ORGANIZED SESSION SYMPOSIA

- Invited convenor of the session "Ancient microbial DNA and ancient microbial ecology". 18th
 International Symposium on Microbial Ecology (ISME), Cape Town, South Africa, August 9-14, 2020.
 Organized by **C Warinner** and Anders J. Hansen. *Cancelled due to COVID-19*
- 2018 Organized Session: "Ancient Dairying." Ancient Proteins Meeting, Copenhagen, Denmark, August 21, 2018. Organized by **C Warinner** and J Hendy.
- 2013 Organized Session: "Small Samples, Big Questions: New Methods and Applications in Biomolecular Archaeology." Society for American Archaeology Meeting, Honolulu, HI, April 3-7, 2012. Organized by A Henry, CA Hofman, and **C Warinner**.
- 2011 Electronic Symposium: "Current Methods in Paleoethnobotany." Society for American Archaeology Meeting, Sacramento, CA, March 30 April 3, 2011. Organized by M Marston, J d'Alpoim Guedes, and **C Warinner**.
- 2010 Symposium: "Issues and Methods in Archaeobotany." Society for American Archaeology Meeting, St. Louis, MO, April 14-18, 2010. Organized by Jade d'Alpoim Guedes and **C Warinner**.

KEYNOTES, PLENARY LECTURES, AND INVITED TALKS

- Warinner C. TBA. Invited lecture, to be presented at the New Frontiers in Reconstructing Human Evolution History, Keystone Symposia on Molecular and Cellular Biology, Hannover, Germany, May 29 to June 1, 2023.
- Warinner C. Archaeology of the Invisible. Invited keynote, to be presented at the annual German Rectors' Conference, Jena, Germany, November 14, 2022.
- Warinner C. A tale of two sugars: the epic human story of amylose and lactose. Invited seminar, to be presented in the Club EvMed online seminar series, Duke University, November 2, 2022.

- 2022 **Warinner C.** A tale of two sugars: the epic human story of amylose and lactose. Invited lecture presented presented in the Department of Molecular Biosciences Seminar Series, University of Texas, Austin, October 12, 2022
- Warinner C. A tale of two sugars: the epic human story of amylose and lactose. Invited lecture presented in the Nutrition and Global Health Program Seminar series, Harvard TH Chan School of Public Health, Boston, MA, USA, October 3, 2022.
- Warinner C. Hologenomic adaptations to amylose and lactose in the evolving human diet. Invited talk, presented at the Applied Hologenomics Conference, Bilbao, Portugal, September 11, 2022.
- Warinner C. The evolution and changing ecology of the human microbiome. Invited lecture presented at the Forsyth Institute, Cambridge, MA, USA, March 10, 2022.
- Warinner C. The evolution and changing ecology of the human microbiome. JAR Distinguished Lecture, presented at the University of New Mexico, March 2022.
- Warinner C. The evolution and changing ecology of the human microbiome. Invited talk presented at the workshop "Ancient DNA: from humans to human pathogens and microbiomes." Department of Genomes and Genetics, Pasteur Institute, organized by Nicolás Rascovan, November 4, 2021.
- Warinner C. Investing in responsible and inclusive science: accessibility, outreach, and education. Invited talk presented at the international seminar "Archaeological heritage and its social dissemination: New challenges and proposals for education in equality through museums." Universidad Autónoma de Madrid, organized by Lourdes Prados Torreira and Ana B. Herranz Sánchez, November 19-20, 2021.
- Warinner C. Seeing together: a transdisciplinary view of our shared human past. Keynote address presented at the 2021 Summer School of the MPI-SHH International Max Planck Research School (IMPRS), August 16-27, 2021.
- Warinner C. Archaeology of the Invisible: New frontiers in biomolecular zooarchaeology. Invited talk presented in the International Association for Archaeological Research in Western and Central Asia (ARWA) webinar series, July 22, 2021.
- Warinner C. Archaeology of the Invisible. Keynote address presented at the 9th International Symposium on Biomolecular Archaeology (ISBA), Toulouse, France, June 4, 2021.
- Warinner C. Archaeology of the Invisible: New frontiers in biomolecular zooarchaeology. Invited talk presented to Altai State University, Barnaul, Russia, May 12, 2021.
- Warinner C. Archaeology of the invisible. One of five speakers selected to represent the Harvard faculty at the Veritas Thinks Big freshman recruitment week. Presented April 18, 2021.
- 2021 Warinner C. Archaeology of the invisible. MIT Microbiome Symposium. Presented April 15, 2021.
- 2021 Warinner C. Biomedical archaeology. Partners in Health Seminar. Presented April 2, 2021.
- Warinner C. The evolution and ecology of the hominid oral microbiome. Wellcome Trust
 Symposium on the Ancient Biomolecules of Plants, Animals, and Microbes. Presented March 2931, 2021.
- Warinner C. The Archaeology of the Invisible. Lowell Conversations, Harvard College, February 22, 2021.
- Warinner C. The Archaeology of the Invisible. Invited lecture presented at in the Friedrich Schiller University Seminar Series at the Institute of Zoology and Evolutionary Research, February 4, 2021.
- Warinner C. The Archaeology of the Invisible. Invited lecture presented at the UCONN Archaeology Seminar, USA, December 20, 2020.
- Warinner C. The Archaeology of the Invisible. Invited lecture presented to the German Archaeological Institute, Germany, December 15, 2020.
- Warinner C. The Archaeology of the Invisible. Invited lecture presented at the Pasteur Institute, Paris, France, November 19, 2020. *Postponed to 2021 due to COVID-19*
- Warinner C. Archaeology of the Invisible. Invited lecture presented in the Martin Aitken Archaeological Science Seminar Series, Oxford University, UK, October 22, 2020.
- Warinner C. The evolution and ecology of the hominid oral microbiome. Invited lecture presented in the Journée François Jacob Symposium "Paleo-biology" at the College de France, Paris, France, September 28, 2020.
- Warinner C. Archaeology of the Invisible. Invited lecture presented to the Faculty of Archaeology, University of Leiden, Netherlands, September 15, 2020.

- Warinner C. Archaeology of the Invisible. Keynote address presented at the 9th International Symposium on Biomolecular Archaeology (ISBA), Toulouse, France, September 22-25, 2020. *Postponed due to COVID-19*
- Warinner C. Roundtable discussant on "Developing a bioethos for paleogenomics: from the individual sequence to the grand narrative," Theoretical Archaeological Group, Stanford University, May 1-3, 2020. *Cancelled due to COVID-19*
- Warinner C. Archaeology of the invisible. One of five speakers selected to represent the Harvard faculty at the Veritas Thinks Big freshman recruitment week, April 19, 2020. *Cancelled due to COVID-19*
- Warinner C. The evolution and changing ecology of the human microbiome. Keynote address presented at the MIT Microbiome Symposium, Cambridge, MA USA, March 30, 2020. *Cancelled due to COVID-19*
- Warinner C. The archaeology of microbes. Keynote address at the final conference of the ArchSci2020 Marie Curie Action, Groningen, Netherlands, March 23-25, 2020. *Cancelled due to COVID-19*
- Warinner C. Archaeology of the Invisible. Distinguished invited speaker for the annual Albert Reckitt Archaeological Lecture of the British Academy, London, UK, December 10, 2019.
- 2019 **Warinner C**. Tracking the invisible: new frontiers in biomolecular zooarchaeology. Invited talk presented at the Proteins and Fibers Inquiry micro-workshop at the Max Planck Institute for the History of Science, Berlin, Germany, June 27, 2019.
- Warinner C. "Archaeology of the invisible: ancient microbes in food, health, and disease." Invited public talk presented at the Hebrew University-Hadassah School of Dental Medicine, Institute of Dental Sciences, June 13, 2019.
- Warinner C. "The evolution and changing ecology of the human microbiome." Invited scientific talk presented at the Hebrew University-Hadassah School of Dental Medicine, Institute of Dental Sciences, June 13, 2019.
- Warinner C, Hübner A. "Archaeology of the Invisible". Invited talk presented in the Archaeology Seminar Series at the Ruhr-Universität Bochum, Bochum, Germany, April 26, 2019.
- Warinner C. "The archaeology of microbes." Invited talk presented at the Harvard Microbial Sciences Initiative Symposium, Harvard University, Cambridge, MA, USA, April 13, 2019.
- Warinner C. "The archaeology of beneficial microbes." Invited lecture presented at the EMBL Science and Society Conference, "Reconstructing the Human Past," Heidelberg, Germany, March 31 to April 4, 2019.
- Warinner C. "Prehistoric dairying in East Asia." Presented to the Archaeology Department, Jilin University, Changchun, China, March 25, 2019.
- Warinner C. "Evolution and changing ecology of the human oral microbiome." Invited lecture presented to the Department of Stomatology, Sichuan Dental School, Sichuan, China, March 19, 2019.
- Warinner C. "The archaeology of microbes." Invited lecture presented to the Department of Archaeology, Sichuan University, China, March 18, 2019.
- Warinner C. "Archaeology of the Invisible: Why archaeology and genetics need each other". Keynote address presented at the workshop State of the Field: Archaeological Perspectives on the Ancient DNA Revolution. Joukowsky Institute of Archaeology and the Ancient World, Brown University. Providence, RI, USA, February 22-24, 2019.
- Warinner C. "Heirloom Microbes: The history and legacy of ancient dairy cultures," Invited lecture presented to J-Milk Japan Dairy Association, Tokyo, Japan, August 3, 2018.
- Warinner C. "Microbial and molecular ecology of humans: from the microbiome to milk," Invited lecture presented at the Max Planck Institute for Chemical Ecology Symposium, Jena, Germany April 6, 2018.
- 2018 **Warinner C**. "Microbial archaeology: from the microbiome to milk," Invited lecture presented at the Department of Anthropology Seminar Series, University of Pennsylvania, March 12, 2018.
- Warinner C. "Microbial archaeology: from the microbiome to milk," Invited lecture presented at the Department of Anthropology Seminar Series, Dartmouth College, March 9, 2018.
- Warinner C. "Molecular archaeology: from microbes to milk," Invited lecture presented at Harvard University, Cambridge, MA, USA, February 15, 2018.

- Warinner C. "Heirloom Dairy Cultures: The Prehistoric Origins and Modern Diversity of Eurasian Dairying," Invited lecture presented at the Mongolei Colloquium, Humboldt University, Berlin, Germany, January 24, 2018.
- Warinner C. "The future of archaeological science," Invited lecture presented at the McDonald Institute for Archaeological Research, Cambridge University, Cambridge, UK, November 20, 2017.
- Warinner C. "The evolution and changing ecology of the human microbiome," Invited lecture presented at the Wellcome Trust Advanced Scientific Conference, Cambridge, UK, November 22, 2017.
- Warinner C. "The Evolution and Changing Ecology of the Human Microbiome: Insights from Paleogenomics," Invited plenary lecture presented at the Leibniz-Institut für Alternsforschung Fritz-Lipmann-Institut e.V. (FLI) Annual Retreat, Luisenthal, Germany, September 6, 2017.
- Warinner C and Hendy J. "Das wiederentdeckte Erbe der Milchbakterien: Eine kulturelle, archäeologische und mikrobiologische Untersuchung der Entwicklungsgeshichte von Milchprodukten," Invited lecture presented at the Max Planck Society Donor Meeting, Jena, Germany, June 22, 2017.
- Warinner C. "The evolution and changing ecology of the human microbiome," Invited lecture presented in the Jena Stars Microbial Communication Colloquium (MiCoCo), Jena School of Microbial Communication, University of Jena, Germany, May 3, 2017.
- Warinner C. "The ancestral human microbiome: the evolution and ecology of our microbial self," Invited lecture presented in the Department of Plant and Microbial Biology Seminar Series, University of California, Berkeley, CA, USA, April 5, 2017.
- Warinner C. "Archaeology of the invisible: Molecular approaches for reconstructing diet, health, and the ancestral human microbiome," Invited lecture presented in the Archaeology Seminar Series, Harvard University, Cambridge, MA, USA, March 27, 2017.
- Warinner C. "The genetics of grime and dust," Invited lecture presented in the Science of Parchment Symposium, University of Oklahoma, Norman, OK, USA, March 23-34, 2017.
- Warinner C. "The evolution and changing ecology of the human microbiome," Invited lecture presented in the Seminar Series in Evolutionary Medicine, Institute for Evolutionary Medicine, University of Zürich, Switzerland, March 1, 2017.
- 2017 **Warinner C.** "Sampling Dental Calculus for Metagenomics and Proteomics," Invited presentation at the Wellcome Trust Workshop on Sampling in Biomolecular Archaeology, London, UK, February 23, 2017.
- Warinner, C. Invited Discussant for session on "Megafauna from Molecules," Megafauna and Methods: New Approaches to the Study of Megafaunal Extinctions, organized by the Max Planck Institute for the Science of Human History, Department of Archaeology, Jena, Germany, February 20, 2017.
- Warinner C. "Diet, Health, and our Ancient Microbial Self," Invited lecture presented at the Garrod Seminar, Division of Archaeology, Cambridge University, UK, October 27, 2016.
- 2016 **Warinner C.** "Begrimed with sweat and smeared all with dust: Prospects for reading the social life of books through biomolecular analyses." Invited lecture presented at the Shakespeare Association of America, New Orleans, March 25, 2016.
- Warinner C. "Reconstructing the ancestral human microbiome," Invited lecture presented at the Max Planck Institute for the Science of Human History, Jena, Germany, March 15, 2016.
- Warinner C. "Data generation from ancient microbiota: Laboratory strategies and considerations." Invited lecture presented at the workshop on Standards, Precautions, and Advances in Ancient Metagenomics. Max Planck Institute for the Science of Human History, Jena, Germany, March 16, 2016
- Warinner C. "Reconstructing the ancestral human microbiome," Invited lecture presented in the Integrative Biology Seminar Series, University of Texas, Austin, Texas, March 3, 2016.
- Warinner C. "Ancient Microbiomes and Human Health." Invited lecture presented at the Omics Bioinformatics and Systems Biology course sponsored by the Sino-Danish Center, Beijing, China, June 12, 2015.
- Warinner C. "Ancient Human Microbiomes." Invited lecture presented at the Marjorie I. and Bernard A. Mitchell Conference in Human Genetics, "Everything old is new again: frontiers in ancient DNA research," at the University of Chicago, May 21-22, 2015.

- Warinner C. "Diet, Health, and our Microbial Self." Invited lecture presented at the 10th Annual Frontiers in Genomics conference at the National Autonomous University of Mexico (UNAM), Morelos, Mexico, May 11-12, 2015.
- Warinner C. "Reconstructing our ancient microbial self." Invited lecture presented at the Paleogenomics Meetings organized by the Department of Anthropology, University of California, Santa Cruz, April 14, 2015.
- Warinner C. "Reconstructing our ancient microbial self." Invited lecture presented at the Center for Evolution and Medicine, Arizona State University, February 12, 2015.
- Warinner C. "Reconstructing our ancient microbial self." Invited lecture presented in the Department of Molecular and Computational Biology Seminar Series, University of Southern California, February 6. 2015.
- Warinner C. "Ancient Human Microbiomes." Plenary lecture presented at the 23rd International Plant and Animal Genomes conference in San Diego, CA, January 14, 2015.
- Warinner C. "The evolution and ecology of the human oral microbiome." Invited lecture presented at the Kavli Frontiers of Science Symposium in partnership with the US National Academy of Sciences, November 17-19, 2014.
- 2014 Warinner C. "Promoting healthy Native American communities." Invited lecture presented in the OU Health Sciences Center Department of Microbiology and Immunology Seminar Series, October 28, 2014.
- Warinner C. "Reconstructing our ancient microbial self." Invited lecture presented at the Hilgendorf Lecture at the University of Tuebingen, Germany, October 21, 2014.
- Warinner C. "Reconstructing the Ancient Human Oral Microbiome." Invited lecture presented at the Seminar on Paleogenomics sponsored by the Centro de Ciencias Genomicas and the Universidad Nacional Autonoma de Mexico (UNAM), Morelos, Mexico, October 14, 2014.
- Warinner C. "Ancient microbiomes: the evolution and ecology of our microbial self." Invited lecture presented to the University of Oklahoma Department of Botany and Microbiology, Sept. 26, 2014.
- Warinner C. "The Evolution and Ecology of the Human Oral Microbiome." Invited lecture presented to the University of Oklahoma College of Dentistry, July 1, 2014.
- Warinner C. "Exploring Ancient Diets." Invited lecture presented at the Lambda Alpha Senior Spring Dinner at the University of Tulsa, Tulsa, OK, May 1, 2014.
- Warinner C. "Microbiomes and Paleomicrobiology." Invited lecture presented to the Department of Anthropology at the University of Tulsa, Tulsa, OK, May 2, 2014.
- Warinner C. "The future of dental calculus research." Invited lecture presented at the University of York Department of Archaeology Seminar Series, York, UK, November 27, 2013.
- Warinner C, Speller C, Collins, MJ. "A new era in paleomicrobiology: microbiomes." Invited lecture presented at the Royal Society Meetings, "Ancient DNA: The first three decades," in London, UK, November 19, 2013.
- Warinner C. "Ten Percent Human: The Science of the Human Superorganism." Invited lecture presented at the Research Campus Spotlight Lecture, sponsored by the University of Oklahoma Center for the Creation of Economic Wealth, University of Oklahoma, April 13, 2013.
- Warinner C. "Dental Calculus: A Novel Biomolecular Reservoir of Ancient Health and Dietary Information." Invited lecture presented at the Department of Oral Biology, College of Dentistry, University of Florida, Gainesville, February 18, 2013.
- Warinner C. "Dental calculus: Biomolecular approaches to inferring ancient diet," Invited lecture presented at the Institute for Plant Biology, University of Zürich, July 23, 2012.
- 2012 Rühli F and **Warinner C**. "Evolutionary Medicine," Invited lecture presented to the ETH Joining Forces Symposium, Swiss Institute of Technology, Zürich, Switzerland, June 22, 2012.
- 2012 **Warinner C**. "Dental Calculus: A Novel Biomolecular Reservoir of Ancient Health and Dietary Information." Invited lecture presented at the Forsyth Institute, Cambridge, MA, April 23, 2012.
- Warinner C. "The role of ancient DNA in evolutionary medicine." Invited lecture presented to the Arbeitsgruppe für Klinische Paläopathologie, Medizinhistorisches Institut und Museum der Universität Zürich und Uniklinik Balgrist Zürich. Sponsored by the Arbeitsgemeinschaft für Historische Anthropologie der Schweiz (AGHAS), Zürich, Switzerland, December 9, 2011.

CONFERENCE PODIUM PRESENTATIONS

- Walden JP, **Warinner C**, Kennett DJ, Hoggarth JA, Green Mink K, Izzo VSR, Ebert CE, Guerra RA Krause J, Awe JJ. Local-Level Approaches to Understanding Social Kinship and Biological Relatedness among the Classic Maya Polities of the Belize River Valley. Lecture to be presented at the Theoretical Archaeology Group (TAG) Conference, Edinburgh, UK 15-17 December 2022.
- Hübner A, Hofman C, Velsko I, Fagernäs Z, Mann AE, Boenke N, Bouwman A, Jeong C, Honap T, Hagan R, Wibowo M, Kostic A, Reinhard K, Aali A, Lewis CM, Stöllner T, Rühli F, Sankaranarayanan K, **Warinner C**. Paleofeces reveal recent loss of diversity and microbial symbionts in the human gut microbiome. To be presented at the Applied Hologenomics Conference, Bilbao, Portugal, September 2022.
- Velsko IM, **Warinner C**. Distinctive Streptococcus clades characterize oral niches regardless of industrialization status and oral pathology. To be presented at the Applied Hologenomics Conference, Bilbao, Portugal, September 2022.
- Warinner C. "High altitude food culture in prehistoric Nepal," Presented at the Society for American Archaeology meetings, Chicago, IL, March 30-April 3, 2022.
- 2022 Rest M, **Warinner C.** "Breaking out of the mold: imagining new forms of scholarly communication for archaeological science." To be presented at the Society for American Archaeology meetings, Chicago, IL, March 30-April 3, 2022.
- 2019 **Warinner C**. Welcome Address. Presented at the Wenner Gren Symposium "Cultures of Fermentation," Sinta, Portugal, October 11-17, 2019.
- Hendy J, **Warinner C**. "The origins and antiquity of dairying." Presented at the BMBF Microbes on the Move Traveling Conference, Bishkek, Kyrgyzstan, May 25, 2019.
- 2019 **Warinner C**. "Conference welcome address and opening remarks." Presented at the BMBF Microbes on the Move Traveling Conference, Bishkek, Kyrgyzstan, May 24, 2019.
- 2019 Hendy J, **Warinner C.** "The origins and antiquity of dairying." Presented at the BMBF Microbes on the Move Traveling Conference, Ulaanbaatar, Mongolia, May 22, 2019.
- 2019 **Warinner C**. "Conference welcome address and opening remarks." Presented at the BMBF Microbes on the Move Traveling Conference, Ulaanbaatar, Mongolia, May 21, 2019.
- Warinner C. "Archaeology of the Invisible: Proteins and Metabolites," Presented in the session Mass Spectrometry: New Advances in Chemistry, Archeology, and Paleontology at the AAAS Annual Meeting, Washington, D.C., USA, February 16, 2019.
- Warinner C. "Reconstructing prehistoric dairy cultures: tracking the spread of dairying on the Eurasian steppe." International Seminar on Archaeology of Central Asia. Vilnius, Lithuania, January, 14, 2019.
- 2019 **Warinner C**. "Dairying on the eastern fringes of the Eastern Eurasian Steppe." Presented at the Interdisciplinary Conference in Tandem Style, Transeurasian Millets and Beans, Language and Genes, Jena, Germany, January 9-10, 2019.
- Warinner C. "The archaeology of microbes," Invited lecture presented at the EMBL Science and Society Conference, "Infectious Diseases: Past, Present, and Future," Heidelberg, Germany, November 15-16, 2018.
- Warinner C. "Who made the books of the Middle Ages? Dental calculus and the role of women in medieval manuscript production," Presented at the Max Planck Harvard Center for the Ancient Mediterranean (MHAAM) Symposium and Scientific Advisory Committee Meeting, Jena, Germany, September 17, 2019.
- 2018 **Warinner C.** "Bronze Age population dynamics and the rise of dairy pastoralism on the eastern Eurasian steppe," Presented at the 8th annual International Symposium for Biomolecular Archaeology (ISBA), Jena, Germany, September 20, 2018.
- 2018 **Warinner C.** "Population migration and dairy pastoralism on the Bronze Age Mongolian steppe," Presented at the European Association of Archaeologists meetings, Barcelona, Spain, September 5-8, 2018
- 2018 **Warinner C.** "Why ancient dairying?" Presented at the Ancient Proteins meeting, Copenhagen, Denmark, August 21, 2018.
- Warinner C. Population migration and dairy pastoralism on the Bronze Age Mongolian steppe," Presented at the Society for Molecular Biology and Evolution meetings, Yokohama, Japan, July 8-12. 2018.
- Warinner C. "Population migration and dairy pastoralism on the Bronze Age Mongolian steppe," Presented at the Society for East Asian Archaeology meetings, Nanjing, China, June 8-11, 2018.

- Warinner C. "Heirloom Dairy Cultures: The Prehistoric Origins and Modern Diversity of Eurasian Dairying." Invited talk presented at the 28rd International Plant and Animal Genomes conference in San Diego, CA, January 2018.
- Warinner C. "The Anthropology of Microbes," Invited talk presented at the Associazione Genetica Italiana-AAI Conference, Cortona, Italy, September 9, 2017.
- Warinner C. "Debunking the Paleo myth," Invited talk presented at the International Conference on Nutrition in Medicine sponsored by George Washington University School of Medicine and the Physicians Committee for Responsible Medicine, Washington, D.C., July 29-30, 2016.
- Warinner C. "The evolution of our microbial self," Invited talk presented at the Society for Molecular Biology and Evolution (SMBE), Queensland, Australia, July 3-7, 2016.
- Warinner C. "Long-term genetic stability and a high altitude East Asian origin for the peoples of the high valleys of the Himalayan arc," Invited talk presented at the Society for East Asian Archaeology, Cambridge, MA, June 8-12, 2016.
- 2016 **Warinner C**. "The anthropology of microbes." Invited talk presented in the Genetic Evidence Panel Executive Session at the 115th Annual meeting of the American Anthropological Association, Minneapolis, MN, November 17, 2016.
- 2016 Camilla Speller, Jessica Hendy, Anita Radini, Sarah Fiddyment, **Christina Warinner**, Matthew Collins. "Proteomic evidence for dietary biomolecules entrapped in dental calculus." 7th International Symposium on Biomolecular Archaeology, Oxford, UK, September 15, 2016.
- 2016 **Warinner C**, Sankaranarayanan K, Lewis C. "An empty gut: the recent loss of our microbial symbionts," Talk presented at the Society for American Archaeology Annual Meetings, Orlando, FL, April 7-10, 2016.
- 2016 Lewis C, **Warinner C**. "A biocultural assessment of gene flow, the Andes and the Himalayas," Presented at the Role of High Altitude Landscapes in the Peopling of the New World Symposium, Society for American Archaeology Annual Meetings, Orlando, FL, April 7-10, 2016.
- Jeong C, Ozga AT, Witonsky D, Malmstrom H, Jakobsson M, Lewis CM, Aldenderfer M, Di Rienzo A, **Warinner C**. "Long-term genetic stability and a high altitude East Asian origin for the peoples of the high valleys of the Himalayan arc." Presented at the 85th American Association of Physical Anthropologists meeting, Atlanta, GA, April 12-16, 2016.
- Warinner C. "The evolution and ecology of our microbial self," Invited talk presented at the Evolutionary Biology Impacts on Medicine and Public Health Symposium, AAAS Annual Meeting, Washington, D.C., February 11-15, 2016.
- Warinner C. "Ancient Human Microbiomes." Invited talk presented at the 9th Annual International Society for Applied Biological Sciences (ISABS) Conference in Forensics, Anthropological, and Medical Genetics and Mayo Clinic Lectures on Translational Medicine in Bol, Island of Brac, Croatia, June 22-26, 2015.
- Warinner C. "Direct evidence of milk consumption from ancient human dental calculus." Talk presented at the Society for American Archaeology conference in San Francisco, CA, April 18, 2015.
- 2015 **Warinner C**. "Direct evidence of milk consumption from ancient human dental calculus." Talk presented at the American Association of Physical Anthropologists conference in St. Louis, MO, March 25, 2015.
- Warinner C. "Direct evidence of milk consumption from ancient human dental calculus." Talk presented at the 23rd International Plant and Animal Genomes conference in San Diego, CA, January 14, 2015.
- Warinner C. "Reconstructing our ancient microbial self." Invited talk presented at the 9th International Conference on Genomics (ICG-9) in Shenzhen, China, September 9-12, 2014.
- 2014 Hendy J, **Warinner C**, Speller C, Collins MJ. "Direct evidence of milk consumption from ancient human dental calculus." Talk presented at the International Symposium on Biomolecular Archaeology in Basel, Switzerland, August 27-29, 2014.
- Warinner C. "Ancient biomolecules and new possibilities in Mixtec archaeology." Invited talk presented at the Society for American Archaeology meetings in Austin, TX, April 25, 2014.
- 2014 Lewis CM, **Warinner C**, Ozga A. "Human microbiomes and non-traditional molecular archaeology." Presented at the American Association of Physical Anthropologists meeting in Calgary, Alberta, Canada, April 12, 2014.

- 2014 Craig L and **Warinner C**. "Characterizing the Reproductive Microbiome: The ChaRM Study." Invited talk presented at the Department of Obstetrics and Gynecology, University of Oklahoma Health Sciences Center, April 14, 2014.
- 2013 Speller C, Fiddyment S, McDonald S, **Warinner C**, Charlton S, Hendy J, Thomas GH, Collins M. "By the skin of your teeth: a biomolecular study of periodontal disease through time." Presented at the British Association for Biological Anthropology and Osteoarchaeology (BABAO), York, UK, September 13-15, 2013.
- 2013 Speller C, **Warinner C**, McDonald S, Fiddyment S, Holst M, Charlton S, Hendy J, Thomas GH, Hofreiter M, Collins M. "The 'Omics of Dental Calculus: Insights into the history of oral and systemic diseases." Presented at the First International Environmental 'Omics Synthesis Conference, Cardiff, UK, September 9-11, 2013.
- Warinner C. "Ancient DNA and the Metagenomics of Disease." Talk presented at the American Association of Physical Anthropologists in Knoxville, TN, April 9-13, 2013.
- Warinner C. "Paleopathology and Paleodiet in the Era of Metagenomics." Talk presented at the Society for American Archaeology in Honolulu, HI, April 3-7, 2013.
- Warinner C, Rodrigues J, Vyas R, Trachsel C, Shved N, Radini A, Hancock Y, Grossmann J, Samaniego-Castruita JA, Charlton S, Eppler E, Seiler R, Luder HU, Fiddyment S, Teoh KY, von Mering C, Collins M, Gilbert MTP, Rühli F, Cappellini E. "Dental Calculus: A Novel Biomolecular Reservoir for Paleopathology and Paleodietary Inquiry." Talk presented at the Archaeological Sciences of the Americas Symposium in Nashville, TN, October 5-6, 2012.
- Warinner C, Cappellini E, Samaniego JA, Teoh KY, Sophy Charlton, Shved N, Anita Radini, Collins MJ, Gilbert MTP, Rühli F. "Biomolecular Approaches to Recovering Health and Dietary Information from Ancient Dental Calculus." Invited talk presented at the Fifth International Symposium on Biomolecular Archaeology in Beijing, China, August 2012.
- Warinner C, Cappellini E, Teoh KY, Collins MJ, Gilbert MTP, and Rühli F. "Dental Calculus: A novel biomolecular reservoir of ancient dietary and health indicators." Invited talk presented at the Society for American Archaeology meetings in Memphis, TN, April 18-22, 2012.
- Warinner C, Shved N, Link K, and Rühli F. "Archaeogenetic and histological analysis of salt mummification under natural and artificial conditions." Invited talk presented at the 1st International Symposium on Ancient Cadaver Protection and Research, hosted by the Chinese Museum Association and the Hunan Provincial Museum, Changsha, China, September 16-20, 2011.
- 2011 Shved N, Papageorgopolou C, Paulsen K, Haas C, **Warinner C**, Rühli F. "Archaeogenetic and histological analysis of natural mummification under high salt conditions: Investigation of the Chehr Abad Salt Men (1500-2500 BP)." Talk presented at the 2011 World Mummy Congress in San Diego, CA, June 12-16, 2011.
- Warinner C. "From the ground up: advances in stable-isotope based paleodietary inference." Talk presented at the Society for American Archaeology meetings in Sacramento, CA, March 30 April 3, 2011.
- Warinner C, Robles N, Spores R, Tuross N. "Life and death at Teposcolula Yucundaa: mortuary, archaeogenetic, and isotopic investigations of the Early Colonial Period in Mexico." Talk presented at the Fourth International Symposium on Biomolecular Archaeology in Copenhagen, Denmark, September 7-11, 2010.
- 2008 **Warinner C**, Spores R, Robles-Garcia N, Tuross N. "More than 100% Maize: The Mesoamerican isotope dilemma." Talk presented at the Society for American Archaeology meetings in Vancouver, Canada, 2008.
- Warinner C, Raju R, Buikstra J, Tuross N. "Protein-based Approaches to Identifying Tuberculosis in the Archaeological Record." Talk presented at the American Association of Physical Anthropologists meetings in Philadelphia, PA, 2007.
- 2006 **Warinner C** and Tuross N. "Maize Bread for Everyone? Putting Mesoamerican paleodiet models to the test." Talk presented in the Fryxell Symposium at the Society for American Archaeology meetings in San Juan, Puerto Rico, 2006.

CONFERENCE POSTER PRESENTATIONS

- Warinner C, Jeong C, Wilkin S, Amgalantugs T, Bouwman A, Taylor W, Bromage S, Tsolmon S, Hagan R, Trachsel C, Grossman J, Littleton J, Makarewicz C, Krigbaum J, Burri M, Irmer F, Scott A, Davaasambuu G, Wright J, Myagmar E, Boivin N, Robbeets M, Rühli F, Krause J, Frohlich B, Hendy J, Warinner C. Bronze Age population dynamics and the rise of dairy pastoralism on the eastern Eurasian steppe. Poster presented at the Society for Molecular Biology and Evolution meetings, Yokohama, Japan, July 8-10, 2018.
- Ozga A, Honap T, Nieves-Colon M‡, Sankaranarayanan K, Milner G, Hofman CA†, Lewis C, Stone AC, **Warinner C**. "Successful enrichment and recovery of whole mitochondrial genomes from ancient human dental calculus." Poster presented at the 85th American Association of Physical Anthropologists meeting, Atlanta, GA, April 12-16, 2016.
- Ziesemer K†, Hoogland Y, Hoogland M, **Warinner C**, Hofman C & Schroeder H. "Ancient DNA research in Caribbean archaeology: challenges and prospects." Poster presented at the 26th International Congress for Caribbean Archaeology, Saint Martin, July 19-25, 2015.
- Ziesemer K†, Mann A†, Schroeder H, Hoogland MLP, Sankaranarayanan K, Hofman C, **Warinner C**. "Intrinsic challenges in ancient microbiome reconstruction using 16S rRNA gene amplification." Poster presented at the Society for Molecular Biology and Evolution meetings, Vienna, Austria, July 12-16, 2015.
- Ziesemer K†, Hoogland M, **Warinner C**. "Assessment of DNA preservation in dental calculus from a select group of post-medieval Dutch and pre-colonial Caribbean human skeletal remains." Poster presented at the International Symposium on Biomolecular Archaeology in Basel, Switzerland, August 27-29, 2014.
- Warinner C, Krüttli A†, Bouwman A, Rodrigues JFM, Vyas R, Radini A, Trachsel C, Grossmann J, Luder HU, Shved N, Salazar-García DC, Speller C, Tito RY, Hendy J, Fiddyment S, Mering C, Lewis, Jr. CM, Gilbert MTP, Collins MJ, Cappellini E, Rühli F. "Ancient DNA and Paleoprotein Investigation of Dairying and the Evolution of European Diet." Poster presented at in the Ernährung: Leistung und Gesundheit session at the Nationale Fachtagung der Schweizerische Gesellschaft für Ernährung, Inselspital Bern, Switzerland, September 5, 2013.
- Warinner C, Tito R, Rodrigues J, Vyas R, Speller C, Trachsel C, Grossmann J, Luder HU, Shved N, von Mering C, Rühli F, Cappellini E, Lewis, Jr. CM. "Extending oral and gut microbiome research into the human evolutionary past." Poster presented at the National Institutes of Health Human Microbiom Sciences Conference, Bethesda, MD, July 24-26, 2013.
- 2013 Charlton S, Collins MJ, Hendy J, Fiddyment S, Speller C, **Warinner C**. "Proteomic analyses of dental calculus: A Victorian Oral Microbiome." Poster presented at the UK Archaeological Science (UKAS) Biennial Conference in Cardiff, England, April 11-14, 2013.
- 2013 Hendy J, Charlton S, Speller C, Fiddyment S, Collins MJ, **Warinner C**. "A novel approach to the study of disease, health and diet in the Transatlantic Slave Trade." Poster presented at the UK Archaeological Science (UKAS) Biennial Conference in Cardiff, England, April 11-14, 2013.
- 2013 Law M, Sykes N, **Warinner C**, d'Alpoim Gudes C. "The case for digital reference collections in environmental archaeology." Poster presented at the UK Archaeological Science (UKAS) Biennial Conference in Cardiff, England, April 11-14, 2013.
- D'Alpoim Guedes J, **Warinner C.** "Establishing open-access online reference collections for archaeobotanical research: macrobotanical, microbotanical, and isotopic data." Poster presented at the International Work Group for Paleoethnobotany meetings in Wilhelmshaven, Germany, May 31-June 5, 2010.
- Warinner C, Robles-García N, Tuross N. "The isotopic diversity of the Middle American dietome: implications for paleodiet reconstruction and the origins of maize agriculture." Poster presented at the UK Archaeological Science (UKAS) Biennial Conference in Nottingham, England, September 8-10, 2009.

CURRENT AND PAST RESEARCH PROJECT AFFILIATIONS

- 2022- PI, MAYAKINSHIP. Department of Anthropology, Harvard University
- 2020- Co-PI (with Pierre Stallforth), Paleobiotechnology. Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany, and the Leibniz Institute for Infection Biology and Natural Products Research Hans Knoll Institute Jena, Germany
- 2020- Senior Researcher. Herodium Wine Project, Ariel University, Israel.
- 2018- PI, DAIRYCULTURES. Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany.

- 2017-2020 PI, Heirloom Microbes Project. Max Planck Institute for the Science of Human History.
- 2016-2022 Affiliated Researcher, FoodTransforms. University of Heidelberg, Heidelberg, Germany. PI: Philipp Stockhammer
- 2016- Affiliated Researcher, HARVEST. Max Planck Institute of Evolutionary Anthropology, Leipzig, Germany. Pl: Amanday Henry
- 2015- PI, Evolution and Ecology of the Human Oral Microbiome. University of Oklahoma, USA
- 2015- PI, Origins of Dairying Project. University of Oklahoma, USA
- 2014- Affiliated Researcher, Greyfriars Project. University of Leicester, UK. Pl: Turi King
- 2013- Affiliated Researcher, NEXUS 1492, European Research Council Synergy Project. University of Leiden, Netherlands. PI: Corinne Hofmann
- 2012- Co-I (with Mark Aldenderfer), Prehistoric Migrations of the Lo Manthang, Upper Mustang, Nepal Project. University of California, Merced, USA
- 2012- Affiliated Researcher, C2D2. University of York, UK. PI: Camilla Speller
- 2011-2014 PI, Ancient Dental Calculus Biomolecular Reservoir Project. University of Oklahoma, USA
- 2011-2013 PI, Origins of the European lactase persistence allele and the evolution of Swiss dairying. University of Zurich, Switzerland
- 2010-2011 Ancient DNA Analyst, Chehr Abad Iranian Salt Men Project. Ruhr-Universitaet Bochum. PI: Thomas Stöllner
- 2006-2010 Ancient DNA and Stable Isotope Analyst, Proyecto Arqueológico Pueblo Viejo Teposcolula-Yucundaa. INAH. Pls: Nelly Robles-García and Ronald Spores
- 2006-2010 Co-PI (with Noreen Tuross) Middle American Isotopic Diversity Project, Harvard University, USA.
- 2005-2008 Stable Isotope Analyst, Controlled Diet Experiments in Swine Project. Harvard University, USA. PI: Noreen Tuross
- 2006 Physical Anthropologist, Proyecto Arqueológico Pueblo Viejo Teposcolula-Yucundaa. INAH.
 - Pls: Nelly Robles-García and Ronald Spores
- 2002 Student Archaeologist, Government of Belize, Tourism Development Project

FURTHER TRAINING

- 2012 Training course, Programming for Evolutionary Biology, University of Leipzig (Germany) and Volkswagen Stiftung
- 2008 Ancient DNA laboratory methods training, Department of Anthropology, Simon Fraser University, Vancouver, Canada
- 2007 Visiting Scientist, Smithsonian Institution, Laboratories of Analytical Biology
- 2007 Training course, Advanced PCR Methodologies, National Institutes of Health, Bethesda, MD
- 2005 Training course, University of Bradford, Human Skeletal Paleopathology Short Course, UK
- 2005 Training course, University of New Mexico, Bioarchaeology Field School, Kampsville, IL
- 2001 Student Archaeologist, Belize Valley Archaeological Reconnaissance Project Field School

TEACHING EXPERIENCE

- 2022 Course Instructor, Harvard University, Human Diet: From Neanderthals to the Future of Food
- 2022 Course Co-Organizer and Co-Instructor, co-sponsored by the Max Planck-Harvard Center for the Archaeoscience of the Ancient Mediterranean (MHAAM), the Max Planck Institute for Evolutionary Anthropology (MPI-EVA), the Standards, Precautions, and Advances in Ancient Metagenomics community (SPAAM), and the Jena School of Microbial Communication, Friedrich Schiller University, Jena, Germany, Introduction to Ancient Metagenomics
- 2021 Course Co-Instructor, Studientstiftung Summer Academy, Von Antibiotika aus der Steinzeit zu Krankheitserregern in der Neuzeit (From Stone Age Antibiotics to Modern Pathogens)
- 2021 Course Co-Instructor, Harvard University, Osteoarchaeology
- 2020 Course Instructor, Harvard University, Sick: 10,000 years of health and disease
- 2020 Course Instructor, Harvard University, *Professionalization in Archaeology* (no Q score given due to COVID-19)

- 2020 Course Instructor, Harvard University, *Introduction to Archaeological Science* (no Q score given due to COVID-19)
- 2019 Course Instructor, Harvard University, *Human Diet: From Neanderthals to the Future of Food* (Q score 4.86/5.00)
- 2018 Course Instructor, MPI-SHH International Max Planck Research School (IMPRS), Introduction to Scientific Publication
- 2015 Course Instructor, University of Oklahoma, Anthropology of Microbes
- 2015 Course Instructor, University of Oklahoma, Anthropology of Human Diet and Nutrition
- 2014 Course Instructor, University of Oklahoma, Anthropology of Human Diet and Nutrition
- 2012 Course Assistant, University of Zurich, Practical Histology I. Instructor: Frank Rühli
- 2011 Course Assistant in Training, University of Zurich, Practical Histology II. Instructor: Frank Rühli
- 2011 Course Assistant in Training, University of Zurich, Practical Histology I. Instructor: Frank Rühli
- 2009 Head Teaching Fellow, Harvard University, Digging the Glyphs. Instructor: Marc Zender
- 2008 Teaching Fellow, Harvard University, *Human Colonizations of Australia and the Americas*. Instructor: lain Davidson
- 2008 Head Teaching Fellow, Harvard University, *Feeding the World, Feeding Yourself.* Instructors: Noreen Tuross and Missy Holbrook
- 2007 Teaching Fellow, Harvard University, *Introduction to Mesoamerican Civilizations*. Instructor: David Carrasco
- 2007 Teaching Fellow, Harvard University, *Feeding the World, Feeding Yourself.* Instructor: Noreen Tuross and Missy Holbrook
- 2006 Teaching Fellow, Introduction to Archaeology. Instructor: Jason Ur and Noreen Tuross
- 2002 Undergraduate Teaching Assistant, University of Kansas, *Principles of Cellular and Molecular Biology, Honors*
- 2001 Undergraduate Teaching Assistant, University of Kansas, Principles of Biology
- 2001 Undergraduate Teaching Assistant, University of Kansas, *Principles of Cellular and Molecular Biology*

Workshops

- Co-Instructor, *Introduction to Ancient Metagenomics,* Summer School co-sponsored by the Max Planck-Harvard Center for the Archaeoscience of the Ancient Mediterranean (MHAAM), the Max Planck Institute for Evolutionary Anthropology (MPI-EVA), and the Standards, Precautions, and Advances in Ancient Metagenomics community (SPAAM), and financially supported by the Werner Siemens Foundation. Organizers: **C Warinner** and J Fellows Yates, August 1-5, 2022, https://spaam-community.github.io/wss-summer-school/#/2022/README
- Co-Instructor, "Von Antibiotika aus der Steinzeit zu Krankheitserregern in der Neuzeit" (From Stone Age Antibiotics to Today's Pathogens), Summer School organized by the Schweizerische Studientstiftung (Swiss Study Foundation). Instructors: **C Warinner**, P Stallforth, T. Böttscher. Magliaso, Switzerland, September 4-10, 2021.
- 2019 Instructor (together with Courtney Hofman), Society for American Archaeology (SAA) Online Seminar Series, *Ancient DNA 101*. Virtual course, December 3, 2019.
- 2018 Guest Lecturer,"Job talk seminar: How to give an academic job talk,"," Invited seminar presented at the MPI-SHH Department of Archaeology Professional Development Seminar Series, Jena, Germany, April 21, 2018.
- 2018 Guest Lecturer, "Bioinformatics and Problem Solving in Paleogenomics," Freie Universität Berlin, *Programming for Evolutionary Biology*
- 2017 Instructor (together with Courtney Hofman), Society for American Archaeology (SAA) Online Seminar Series, *Ancient DNA 101*. Virtual course, December 12, 2017.
- 2017 Instructor (together with Jessica Hendy), Department of Archaeogenetics, Max Planck Institute for the Science of Human History, *Scientific Illustration using Adobe Illustrator and Inkscape*
- 2015 Visiting Professor on Paleogenomics, Sino-Danish Center, *Omics Bioinformatics and Systems Biology*
- 2013 Instructor, Anthropology Department, University of Oklahoma, *Professional Development Workshop: Making Publication Quality Figures with Adobe Illustrator*

Classroom Guest Lectures

- 2022 "Archaeology of the Invisible," University of New Mexico. Organizer: Lawrence Straus
- 2021 "Archaeology of the Invisible: disease, craft, and microbiome", Harvard University, Department of Human Evolutionary Biology, HEB 1290 Genes, Mind, and Culture. Instructor: Joseph Henrich and Amy Clarke
- 2021 "Archaeology of the Invisible: Who Made the Books of the Middle Ages?", Harvard University, Department of History, *HIST 1056 The New Science of the Human Past.* Instructor: Michael McCormick
- 2021 "Molecular methods in Zooarchaeology", University of Colorado, Boulder, *Introduction to Zooarchaeology*. Instructor: William Taylor
- 2020 "What is an epidemic? Insights from molecular archaeology and evolutionary biology,"
 Harvard University, *GED Ed 1170: Confronting COVID- 19*. Instructors: Ingrid Katz and Allan Brandt
- 2020 "What geneticists study," Harvard University, ANTHRO 1824: Race and Genetics. Instructor: Anna Jabloner
- 2019 "Archaeology of the Invisible," Harvard University, *History 1056: The New Science of the Human Past: Case Studies at the Cutting Edge.* Instructor: Michael McCormick
- 2019 "Bioarchaeology," Harvard University, *GENED 1105: Can we know our past?* Instructors: Rowan Flad and Matt Liebmann
- 2018 "Microbial Archaeology," University of Pennsylvania, *Graduate Seminar*. Instructor: Kathleen Morrison
- 2018 "Microbial Archaeology," Harvard University, Graduate Proseminar. Instructor: Jason Ur
- 2017 "The science and cultural history of chocolate," Harvard University, *Anthro 1095 Urban Revolutions: Archaeology and the Investigations of Early States.* Instructor: Jason Ur
- 2015 "Our Ancient Microbial Self," University of Oklahoma, *Microbiomes and Microbial Systematics*. Instructor: Paul Lawson
- 2015 "Bubonic Plague," University of Oklahoma, Plagues and Peoples. Instructor: Rob Dreibelbis
- 2015 "Genetic Perspectives on the Peopling of the New World," University of Oklahoma, *Peopling of the New World*. Instructor: Bonnie Pitblado
- 2014 "Genetic Techniques in Anthropology," University of Oklahoma, *Human Health and Biology Methods*. Instructor: Lori Jervis
- 2014 "Ancient Microbiomes," University of Oklahoma, Medical Anthropology. Instructor: Tassie Hirschfeld
- 2013 "Smallpox", University of Oklahoma, Plagues and Peoples. Instructor: Diane Warren
- 2013 "The Oral Microbiome," University of Oklahoma, *President's Dream Course: The Human Microbiome*. Instructors: Tyrell Conway, Paul Lawson, Cecil M. Lewis, Jr.
- 2013 "Dental calculus and bioarchaeology," University of Nevada at Las Vegas, *Bioarchaeology*. Instructor: Deb Martin
- 2011 "Ancient DNA," University of Basel, Current Topics in Archaeoanthropology.
- 2009 "Archaeological Science," Harvard University, Anthro S-1011 Road to Discovery
- 2009 "Ancient DNA," Harvard University, *Anthro 2250: Archaeology Graduate Proseminar*. Instructor: Ofer Bar-Yosef
- 2009 "Stable Isotope Analysis," Harvard University, *Anthro 2250 Archaeology Graduate Proseminar*. Instructor: Ofer Bar-Yosef
- 2008 "Ancient DNA," Harvard University, *Anthro 98 Junior Tutorial in Archaeology*. Instructor: Richard Meadow

ACADEMIC SUPERVISION

Postdocs:

- 2022- Roshan Paladugu, Department of Archaeogenetics, Max Planck Institute for the Science of Human History. Project: DAIRYCULTURES
- 2022- Ashley Scott, Department of Anthropology, Harvard University.
- 2022- John Walden, Department of Anthropology, Harvard University. Project: MAYAKINSHIP

2022-	James Fellows Yates, Department of Paleobiotechnology, Leibniz Institute for Infection Biology and Natural Products Research Hans Knoll Institute. Project: PALEOBIOTECHNOLOGY
2021-	Aja Lans, Inequality in America Initiative, Harvard University
2020-	Taylor Hermes, Department of Archaeogenetics, Max Planck Institute for the Science of Human History. Project: DAIRYCULTURES
2018-	Alexander Hübner, Department of Archaeogenetics, Max Planck Institute for the Science of Human History. Project: DAIRYCULTURES and Microverse
2018-	Irina Velsko, Department of Archaeogenetics, Max Planck Institute for the Science of Human History. Project: Paleobiochemistry
2017-	Matthäus Rest, Department of Archaeogenetics, Max Planck Institute for the Science of Human History. Project: Heirloom Microbes and DAIRYCULTURES
2018-2019	Jessica Hendy, Department of Archaeogenetics, Max Planck Institute for the Science of Human History. Project: DAIRYCULTURES. Current position: Lecturer in Paleoproteomics, University of York.
2015-2016	Courtney Hofman, Department of Anthropology, University of Oklahoma. Topic: Gut microbiome evolution. Current position: Assistant Professor of Anthropology, University of Oklahoma
2015-2016	Irina Velsko, Department of Archaeology, University of Oxford (co-supervised with Greger Larson). Topic: Radcliffe Infirmary dental calculus project. Current position: Postdoctoral researcher in Warinner Microbiome Sciences Group, Max Planck Institute for the Science of Human History.
PhD (chair):	
2022-	Percy Hei Chun Ho, Department of Anthropology, Harvard University. Topic: Paleogenomic characterization of prehistoric livestock management
2022-	Keri Burge, Department of Anthropology, Harvard University
2018-	Maxime Borry, Department of Archaegenetics, Max Planck Institute for the Science of Human History. Topic: Authentication and metagenomic assembly of ancient microbiota
2018-	Melina Seabrook, Department of Anthropology, Harvard University. Topic: Caprine management on the Iranian Plateau from the Neolithic to the Bronze Age
2017-	Aurora Allshouse, Department of Anthropology, Harvard University. Topic: Seafood management and consumption in the Bronze Age Aegean
2017-2022	Ashley Scott, Department of Archaegenetics, Max Planck Institute for the Science of Human History. Topic: Dairy protein characterization and proteomics protocol development
2017-2022	Zandra Fagernäs, Department of Archaegenetics, Max Planck Institute for the Science of Human History. Topic: Oral microbiome evolution and laboratory protocol development
2016-2022	James Fellows-Yates, Department of Archaegenetics, Max Planck Institute for the Science of Human History. Topic: Oral microbiome evolution and computational methods development
PhD (committe	e)·
2022-	I-Ting Huang, Organismic and Evolutionary Biology, Harvard University. Topic: microbial adaptation within biofilms
2022-	Reed Morgan, Department of History, Harvard University. Topic: Byzantine Europe
2021-	Eden Hill, Department of Archaegenetics, Max Planck Institute for Evolutionary Anthropology. Topic: Investigation of steppe animal management using ZooMS
2019-	Chengrui Zhang, Anthropology Department, Harvard University. Topic: East Asia zooarchaeology
2017-	Sarah Loomis, Anthropology Department, Harvard University. Topic: Bioarchaeological analysis of Formative and Classic period human remains at Los Guachimontones, West Mexico.
2017-	Megan Michel, Department of Human Evolutionary Biology, Harvard University. Topic: Paleogenomic approaches to understanding malaria and dental caries
2017-2021	Enrique Rayo, Institute for Evolutionary Medicine, University of Zürich. Topic: Biomolecular analysis of Egyptian canopic jars
2016-2022	Marsha Christanvia Wibowo, Harvard Medical School, Harvard University. Biological and Biomedical Sciences. Topic: Discovery of novel microbial genomes that are missing in modern
2015-2020	populations from ancient human gut microbiome. Rita Austin, "Museum biomolecules: Examining human pathogens and assessing differential collection preservation with dental calculus from the National Museum of Natural History." Department of Anthropology, University of Oklahoma.

2015-2018	Nicha Datal "Characterization of antihistic registence in the gut microbiams of hunter gatherer and
2015-2016	Nisha Patel, "Characterization of antibiotic resistance in the gut microbiome of hunter-gatherer and horticulturalist societies." PhD thesis, Dept. of Microbiology and Plant Biology, University of Oklahoma. Current position: Senior Scientist, Kintai Therapeutics
2014-2018	Allison Mann, "Novel techniques for the description and interpretation of microbial communities in
	the modern human gut and ancient human oral microbiome." PhD Thesis, Dept. Anthropology, University of Oklahoma. Current position: Postdoctoral Research Associate, Clemson University
2014-2018	Kirsten Ziesemer, Department of Archaeology, University of Leiden. Topic: Oral microbiome of pre- Columbian Caribbean and characterization of dental calculus as a biological system. Withdrew
	from program for personal and medical reasons. Current position: Medical Information Specialist
2015-2017	and Data Manager, Northwestern Hospital Group, University of Leiden, Netherlands Lindsey O'Neal, "Characterization of novel bacterial species in the gut microbiome of hunter-
	gatherer and horticulturalist societies." PhD thesis, Department of Microbiology and Plant Biology, University of Oklahoma.
Master's (ch	
2019-2021	Lena Semerau, "Historical impact of smoking on the oral microbiome." MS Thesis, Dept. of Microbial Communications, Friedrich Schiller Universität Jena.
2017-2019	Bryan Cordova, "Investigation of gut microbiome preservation in medieval paleofeces." MS Thesis,
	Dept. of Microbial Communications, Friedrich Schiller Universität Jena. Current position: Research Associate at the Hussman Institute for Human Genomics at the University of Miami, USA.
2016-2017	Richard Hagan, "Comparison of five different DNA extraction methods for microbiome reconstruction from coprolites." MA Thesis, Dept. Anthropology, University of Oklahoma. Current
	position: Senior Research Technician, BioArCh, University of York.
2016-2017	Lauren Klaus, "Proteomic investigation of periodontal disease: A pilot study investigating dental calculus as a substrate for understanding disease pathogenesis." MA Thesis, Dept.
	Periodontology, University of Oklahoma Health Sciences Center. Current position: Licensed
Montorio (on	periodontologist in private dental practice in Oklahoma, USA.
<i>Master's (cd</i> 2018-2020	Shannon Fulton, "Heirloom microbes: a survey of lactic acid bacteria in traditional Mongolian dairy."
	MA Thesis, Dept. Anthropology, University of Oklahoma. MS student, Dept. of Microbiology and Plant Biology, University of Oklahoma.
2015-2016	Justin Lund, "Characterizing microbiome changes in the graduate student gut." MA Thesis, Dept.
5	Anthropology, University of Oklahoma. MA student, Dept. Anthropology, University of Oklahoma.
Bachelor's to	hesis (committee): Sebastian Millien, Topic: Methodological improvements of collagen recovery for ZooMS analysis at
2022	the Indus Valley site of Harappa, Pakistan. BA Honors Thesis. Harvard College, Harvard University
2022-	Nour Khachemoune, Topic: ZooMS and stable isotope investigation of animal foddering and management at the Classic Maya site of Copan, Honduras. BA Honors Thesis. Department of
2022-	Anthropology, Harvard College, Harvard University Lindsey Bouldin, Topic: Investigation of 17 th century Harvard student diets through
2022	zooarchaeological and ZooMS analysis. BA Honors Thesis. Department of Anthropology, Harvard
2011-2012	College, Harvard University Annina Krüttli, "Investigating lactase persistence in a Medieval German cemetery." BA Thesis,
	Institute for Archaeology and Center for Evolutionary Medicine, University of Zürich.
EXTERNAL E	VALUATOR FOR DISSERTATION/THESIS
2022	Rodrigo Barquera, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "The human host-pathogen interaction in the light of ancient genomics revolution."
2022	Ron Hübler, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation:
2022	"Method development for screening archaeological samples for ancient pathogens." Figure Skourtanioti. Faculty of Biological Sciences. Friedrich Schiller University. PhD dissertation:
2022	Eirini Skourtanioti, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "Archaeogenetic perspectives on the Southwest Asian and Aegean prehistory from the Neolithic
	to the Bronze Age."

2022	Luca Papac, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "Tracking population history, social structure and intergroup exchange in Neolithic to Bronze Age Europe using ancient human and virus genomes."
2021	Aida Andrades, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "Beyond phylogenies: advancing analytical approaches for the field of ancient pathogenomics."
2021	Marieke van der Loosdrecht, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "Archaeogenetic perspectives on the hunter-gatherers and prehistoric farmers of the Mediterranean."
2021	Thiseas Christos Lamnidis, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "Exploring the effects of migration and admixture on human populations through time, using ancient DNA."
2021	Jamie Ostmann, Committee on Degrees in History and Literature and the Department of Anthropology, Harvard College, Harvard University, Undergraduate Honors Thesis: "Scenes of Smoke and Scarlet: Cochineal and tobacco in the Early Modern English Theater"
2021	Sandra Ojeaburu, Department of Anthropology, Harvard College, Harvard University, Undergraduate Honors Thesis: "Despite all odds: Deconstructing "risk" through Black birth support groups in Mississippi."
2020	Ke Wang, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "Investigating human population structure through time with new computational methods and ancient DNA data."
2020	Shevan Wilkin, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "An investigation into diet and economy in ancient Mongolia through multiple biomolecular datasets."
2020	Sandra Ojeaburu, Department of Anthropology, Harvard University, BA Thesis: "Despite all odds: Deconstructing 'Risk' Through Black Birth Support Groups in Mississippi".
2019	Ponnandai Shanmugavel Komathisree, Faculty of Biological Sciences, Friedrich Schiller University, MA Thesis: "Use of ancient DNA as a tool for the study of human diversity: Mitochondrial diversity in Mesoamerica."
2019	Susanna Sabin, Faculty of Biological Sciences, Friedrich Schiller University, PhD dissertation: "Insights into microbial evolution and ecology from genetic analysis of diverse archaeological materials."
2015	Kaspar Nielsen, Department of Systems Biology, Technical University of Denmark, PhD dissertation: "Genetic variation and human disease."

SUPERVISED STUDENT RESEARCH ASSISTANTS

2022-	Sebastian Millien, undergraduate student, Harvard College
2021-	Lindsey Bouldin, undergraduate student, Harvard College
2020-2021	Helena Moreno, undergraduate student, Harvard College, 12 weeks
2020-2021	Jamie Ostmann, undergraduate student, Harvard College, 12 weeks
2020	Aneeyá Lowe, high school student, Community Charter School of Cambridge, 6 weeks
2017-2020	Zoljargal Enkh-Amgalan, undergraduate student, Frei University Berlin, 3 years
2018-2019	Mara Bakaniev, undergraduate student, Friedrich-Schiller University, Jena, Germany, 12
	months
2017-2018	Omayya Matar, undergraduate student, Friedrich-Schiller University, Jena, Germany, 12 months

VISITING STUDENT AND FACULTY TRAINING

2022	Victoria Izzo, Texas A&M University, USA, 3 weeks
2022	Roshan Paladugu, University of Évora, Portugal, 2 weeks
2022	Jie Shen, Stanford University, USA, 1 week
2022	Jingbo Li, Stanford University, 1 week
2022	Dimitry Shcherbakov, Altai State University, Russia, 2 weeks
2019	Taryn Johnson, Texas A&M, 2 weeks
2018, 2019	Dr. Christiana Scheib, University of Tartu, Estonia, 4 weeks

2018	Chelsea Chiovelli, University of Alberta, 12 weeks
2018	Linyuan Fan, Jilin University, China, 5 weeks
2017	Niall O'Sullivan, University College Dublin, 6 months
2016	LaShanda Williams, Rutgers University, 2 weeks (July)
2016	Ana Morales, University of Calgary, Canada, 3 weeks (May)
2016	Kirsten Ziesemer, Univ. of Leiden, Netherlands, 3 weeks (April)
2016	Dr. John Lindo, University of Chicago, 2 weeks (March)
2015	Joel Olvera, UNAM, Mexico, 4 weeks (Sept/Oct)
2015	Kirsten Ziesemer, Univ. of Leiden, Netherlands, 3 weeks (Aug)
2015	Dr. Turi King, Univ. of Leicester, UK, 1 week (April)
2014	Kirsten Ziesemer, Univ. of Leiden, Netherlands, 6 weeks (Oct/Nov)
2014	Maria Nieves Colon, Arizona State University, 3 weeks (June)
2014	Patrick Schiller, Harvard University, 4 weeks (June)
2014	Jessie Hendy, University of York, UK, 4 weeks (March)
2014	Kirsten Ziesemer, Univ. of Leiden, Netherlands, 4 weeks (Feb)
2012	Sophy Charlton, University of York, UK, 1 week (March)

PROFESSIONAL SERVICE

2022-	Vice President and member of the Board of Trustees, International Society for Biomolecular Archaeology (ISBA)
2019-	Leadership Team member, Max Planck – Harvard Research Center for the Archaeoscience of the Ancient Mediterranean (MHAAM)
2021	External member of the faculty search committee (Berufungskommission) for Archaeosciences/Bioarchaeolgy, Humanities Faculty, University of Bonn
2020	Expert panel member, Wellcome Trust, Tree of Life Programme review
2018	Expert evaluator for the Horizon 2020 Marie Skłodowska-Curie Actions Individual Fellowships programme (H2020-MSCA-IF), ECOSOC panel
2018	External Reviewer for Tenure and Promotion, National Museum of Natural History, Smithsonian Institution
2018	NIH review panel chair, Bioengineering Sciences and Technology Integrated Review Group (BST IRG) study section
2018	External Reviewer for Tenure and Promotion, Texas A&M University
2018	Faculty Search Assessment Committee, Department of Bio and Health Informatics, Technical University of Denmark (DTU)
2017-2018	Organizational Committee for the 2018 Ancient Proteins meeting, hosted by the University of Copenhagen, Denmark
2017-2018	Organizational Committee for the 2018 International Symposium for Biomolecular Archaeology (ISBA) Conference, hosted by the MPI-SHH, Jena, Germany
2017, 2019	Society for American Archaeology (SAA), Online Seminar Series instructor, Ancient DNA 101

INSTITUTIONAL SERVICE

2022-	Human Remains in the Harvard Museum Collections Research Review Committee, Harvard
	University
2022-	Archaeology Faculty Search Committee, Department of Anthropology, Harvard University
2021-	Elected Member, Faculty of Arts and Sciences Faculty Council, Harvard University
2021-2022	Appointed Member, University Steering Committee on Human Remains in Harvard Museum
	Collections, Harvard University
2020-2021	Chair, Standing Committee for a Supportive Departmental Community, Anthropology
	Department, Harvard University
2020-	Steering Committee on Archaeology, Harvard University
2020	Postdoctoral Fellowship Review Committee, Inequality in America Initiative, Harvard University
2018-2019	Ombudsperson, Max Planck Institute for the Science of Human History

2018	Postdoctoral Research Associate Search Committee, Department of Archaeogenetics, Max Planck Institute for the Science of Human History
2017	Technical Assistant Search Committee, Department of Archaeogenetics, Max Planck Institute for the Science of Human History
2017	Administrative Staff Search Committee, Max Planck Institute for the Science of Human History
2016	Technical Assistant Search Committee, Department of Archaeology, Max Planck Institute for the Science of Human History
2016	Postdoctoral Research Associate Search Committee, Department of Archaeology, Max Planck Institute for the Science of Human History
2015-2016	Provost's Advisory Committee on Women's Issues (PACWI), University of Oklahoma
	Plant Systematics Search Committee, Bebb Herbarium, University of Oklahoma
2014-2016	Vice President of Research Planning Group for Consolidated Sequencing Facilities and Related Research and Collaboration, University of Oklahoma
2014-2015	Vice President of Research Informatics Search Committee, University of Oklahoma
2014-2016	Curriculum and Scheduling Committee, Department of Anthropology, University of Oklahoma
2015	Professionalism Faculty Mentor, Anthropology Graduate Student Association, University of Oklahoma
2014-2015	Dean's Advisory Committee on Women's Issues (DACWI), University of Oklahoma
2007-2008	Sophomore Advisor, Lowell House, Harvard University
2007-2008	Archaeology Speaker Series Co-Coordinator, Harvard University, Anthropology Dept.
2006-2007	Graduate Student Representative, Harvard University, Anthropology Dept.
2005-2009	Freshman Fortnight Advising, Archaeology Wing Representative
2008-2009	Non-Resident Tutor, Harvard University, Lowell House.
2007-2008	Sophomore Advisor, Harvard University, Lowell House. Official academic advisor for five sophomore students.
2006-2008	Senior Staff, Harvard University, Lowell House. Administrative, disciplinary, and advisory responsibilities for a community of 500 undergraduate students.
2006-2008	Librarian, Harvard University, Lowell House. Managed a collection of 15,000 books, 2,000
0005 0000	videos, and staff of 12 student assistants
2005-2008	Resident Tutor, Harvard University, Lowell House. Directly responsible for approximately 25
	undergraduate students per year and indirect responsibilities for a community of 500
	undergraduate students. Included writing recommendation letters, participating in student award and scholarship selection, academic program development, and advising.
	awaru anu scriolarsnip selection, academic program development, and advising.

PROFESSIONAL MEMBERSHIPS

2022-	International Society for Biomolecular Archaeology (ISBA); founding member
2005 -	Society for American Archaeology (SAA)
2012 -	Association of American Physical Anthropologists (AAPA)
2013 -	American Society for Microbiology (ASM)
2013 -	Society for Molecular Biology and Evolution (SMBE)
2015-	Society for East Asian Archaeology (SEAA)
2016 -	Center for Academic Research and Training in Anthropogeny (CARTA)
2016 -	Register of Professional Archaeologists (RPA)
2020 -	Society of Black Archaeologists (Ally member)

JOURNAL EDITORIAL BOARD

2015-2018 Scientific Reports (Nature) 2019- Genetics & Genomics Next (Wiley)

JOURNAL AND FUNDING AGENCY INVITED REVIEWER

Journals

Archives of Oral Biology

American Journal of Physical Anthropology

Comprehensive Reviews in Food Science and Food Safety

Current Anthropology

Current Biology

Ethnobiology Letters

FEMS Microbial Ecology

International Journal of Osteoarchaeology

International Journal of Paleopathology

Journal of Archaeological Science

Latin American Antiquity

Medical Principles and Practice

Molecular Ecology Resources

Nature

Nature Communications

Proceedings of the National Academy of Sciences (PNAS)

Proceedings of the Royal Society B: Biological Sciences

Public Library of Science (PLoS) ONE

Rapid Communications in Mass Spectrometry

Science

Science Advances

Scientific Reports

Science and Technology of Archaeological Research

Funding Agencies

Deutsche Forschungsgemeinschaft (German Research Foundation, DFG), Germany

Hungarian Scientific Research Fund (OTKA), Hungary

Israel Science Foundation, Israel

Leakey Foundation, USA

Marie Skłodowska-Curie Individual Fellowships, Horizon2020, European Union

National Geographic Society (NGS), USA

Natural Environment Research Council (NERC), UK

National Science Foundation (NSF), USA

Natural Sciences and Engineering Research Council of Canada (NSERC), Canada

Tromso Research Foundation, Sweden

University of Zurich Institute of Evolutionary Medicine (IEM), Switzerland

Wellcome Trust, UK

PUBLIC LECTURES AND ONLINE EDUCATIONAL TALKS

- 2016 **Warinner C.** "Prehistoric human biology as inferred from dental calculus," Ancient DNA and Human Evolution Symposium, UCSD/Salk Center for Academic Research and Training in Anthropogeny (CARTA), La Jolla, CA, April 29, 2016.
- 2016 **Warinner C**. "How 'Paleo' is your diet?" Leakey Foundation Speaker Series on Human Origins, SciCafe, American Museum of Natural History, New York, New York, April 6, 2016. Audio, YouTube
- 2016 **Warinner C.** "How 'Paleo' is your diet?" Leakey Foundation Speaker Series on Human Origins, YouthCafe, American Museum of Natural History, New York, New York, April 6, 2016.
- 2016 **Warinner C.** "Archaeology of the human body," Middle school outreach lecture presented to an assembly of approx. 400 6th graders, P.S. 86, Bronx, New York, New York, April 5, 2016.
- 2013 Alemseged Z and **Warinner C**. "Exploring Ancient Diets," Invited lecture presented at the Leakey Foundation Speaker Series on Human Origins, California Academy of Sciences, San Francisco, CA, December 3, 2013.
- Warinner C. "<u>Debunking the Paleo Diet</u>." Presented at TEDxOU, University of Oklahoma, Norman, OK, January 25, 2013, viewed more than *1,500,000 times* on youtube.com.

- 2012 **Warinner C**. "How We Know What Our Ancestors Ate." Presented at ZURICH.MINDS Flagship Event in Zürich, Switzerland, December 12, 2012.
- Warinner C. "<u>Tracking ancient diseases using...plaque</u>," TED Talks, Long Beach, CA, March 1, 2012, viewed more than **650,000 times** on ted.com.

EXHIBITIONS

- 2018 MINT Festival, educational booth on science, technology, education, and mathematics (STEM) at Friedrich Schiller University.
- 2017 Long Night of Science, Exhibition held at the Max Planck Institute for the Science of Human History on 24 November, 2017. Exhibits I have organized include: (1) Strawberry DNA Cocktails: Extract your own DNA, (2) Coloring Book Corner: Adventures in Archaeological Science, (3) Science Portrait Studio, and (4) Animalicules! Recreate Antoni van Leeuwenhoek's classic discovery of bacteria using a Foldscope. A photo album of the event is available: http://christinawarinner.com/. The Adventures in Archaeological Science coloring book is available in multiple translations: http://christinawarinner.com/
- 2011 Mummies: Man, Medicine, Magic, Scientific Exhibition at the University of Zurich, Winter 2011-2012.

EDUCATIONAL DOCUMENTARIES

- 2020 <u>Microbes on the Move</u>, MPI-SHH short documentary on the BMBF-funded 2019 Microbes on the Move Traveling Conference. Directed and edited by Hans Sell; produced by **C Warinner**, M Rest, and B Reichhardt.
- 2019 The Game Changers, Netflix, feature-length documentary, executive producer James Cameron
- 2017 Secrets of the sky tombs, PBS NOVA, feature-length documentary. Trailer.
- 2016 What does dental calculus reveal about human evolution? Latest Thinking, documentary
- 2015 Archaeology of the Invisible, Illumina Adventures in Genomics Series, documentary
- 2015 The Ancestral Human Microbiome, Illumina Adventures in Genomics Series, documentary
- 2011 <u>Mummies: Man, Medicine, Magic,</u> Scientific Exhibition, University of Zürich. Ancient DNA module designed in part by **C Warinner**. Film trailer for the 2011-2012 Mummies Exhibition at the University of Zurich.
- 2011 Ancient DNA Research: A Behind the Scenes Tour of an Ancient DNA Laboratory, Documentary short written and narrated by **C Warinner**. Produced for the 2011-2012 Mummies Exhibition at the University of Zurich.

MUSIC AND **S**OUNDTRACKS

- 2020 <u>Songs from the Mongolian Steppe</u>, 4 tracks. A collection of folk songs from the Mongolian countryside, sung by Baasan and Erdene-Ochir. Available on SoundCloud.
- 2020 <u>Kyrgyz Bonfire Songs</u>, 19 tracks. A collection of Kyrgyz folk songs, performed during the Microbes on the Move conference in Bishkek, Kyrgyzstan. Available on SoundCloud.

RADIO, TV, AND PODCASTS

- 2019 Утреннее шоу "С утра пораньше", Kyrgyz morning television, May 25, 2019.
- 2019 All Things Considered, National Public Radio, "A blue clue in medieval teeth may be a woman's artistry circa AD 1000", with Nell Greenfieldboyce, January 9, 2019.
- 2019 Quirks & Quarks, Canadian Broadcasting Corporation, "<u>Blue pigment found on a medieval woman's teeth suggests she was a skilled, literate artist</u>", January 12, 2019.
- 2019 <u>BBC Science in Action radio interview</u> about our work on early evidence of dairying in Asia, November 25, 2019
- 2016 TV interview with Hari Sreenivasan on PBS NewsHour. Interviewed about ancestral microbiome research on April 5, 2016.
- 2016 SciTech Now, PBS: "Going Paleo, what it actually means," with Margaret Leigh Sinrod, March 15, 2016.

2016 The Crush, with Davin Sweeney, Interviewed May 19, 2016. iTunes.

CHILDREN'S BOOKS

- 2017 <u>"Adventures in Archaeological Science Coloring Book,"</u> by **C Warinner** and PhD students of the MPI-SHH. Available under Creative Commons license in more than 40 languages, including English, German, Spanish, Chinese, Greek, Nahuatl, Mayan, Mongolian, Swahili, Tibetan and more: http://christinawarinner.com/outreach/children/adventures-in-archaeological-science/
- "Secrets of the Sky Caves: Danger and Discovery on Nepal's Mustang Cliffs," by Sandra Athans. Nonfiction book for grades 4-8 featuring the Nepal archaeological expeditions led by Prof. Mark Aldenderfer, with **C Warinner** as project geneticist. Reviewed by the National Science Teacher Association (NSTA).

OTHER OUTREACH

- 2020 Евразийн Зүүн тал нутаг дахь 6000 жилийн динамик генетик түүх. To facilitate the accessibility of our research article, "A dynamic 6,000-year genetic history of Eurasia's Eastern Steppe" (2020), my students, collaborators, and I produced a full Mongolian translation of the article and published it as a Supplementary file on the Cell website: https://www.cell.com/cms/10.1016/j.cell.2020.10.015/attachment/2e2ac105-9d7d-4297-81d5-
- 2020 Сүү, цагаан идээ голлосон мал аж ахуй Зүүн Евразийн тал нутгийн ард түмний амь зуулгыг 5000 жилийн турш залгуулжээ. To facilitate the accessibility of our research article, Dairy pastoralism sustained Eastern Steppe populations for 5000 years (2020), my students and I produced a full Mongolian translation of the article and published it as a companion to the English version on the Nature Ecology and Evolution website:

https://natureecoevocommunity.nature.com/users/348900-shevanwilkin/posts/59870-mongolian-translation-of-dairy-pastoralism-sustained-eastern-steppe-populations-for-5000-years?fbclid=lwAR3kfWyG89DqE7qpEvbaDIII3h 4ckRXNis0X 7batEbaSFoLamRHI M3Fw

SELECTED MEDIA COVERAGE OF RESEARCH

d58491cb0779/mmc6.pdf

Scientific Press

- 2021 <u>DNA reveals unexpected origins of enigmatic mummies buried in a Chinese desert, CNN</u>
 2021 <u>Western China's mysterious mummies were local descendants of ice age ancestors, Science</u>
- 2021 DNA reveals surprise ancestry of mysterious Chinese mummies, Nature
- 2020 Horse mastery helped mysterious Mongolian warriors build a multiethnic empire, Science
- 2019 These 1000-year-old teeth belonged to a skilled female artist, pigment remains reveal, Science
- 2018 How Mongolia's milk-based empire got its start, Nature
- 2018 How can you eat dairy if you lack the gene for digesting it? Fermented milk may be key, ancient Mongolian study suggests, Science
- 2018 One of history's worst epidemics may have been caused by a common microbe, Science
- 2017 <u>Christina Warinner</u>, Anthropology News (AAA)
- 2016 Ancient teeth reveal clues about microbiome evolution, PNAS
- 2016 Ancient DNA divide, Science
- 2016 Ancient Genomes from Tooth Plaque, Nature
- 2016 Researchers conduct the first ancient DNA investigation of the Himalayan arc, Science 360 News (Top story on the National Science Foundation website)
- 2015 Ancient bacteria found in hunter-gatherer guts, Science
- 2014 Ancient human oral plaque preserves a wealth of biological data, Nature Genetics
- 2014 History lessons from bacteria, Cell
- 2014 <u>Microbiome revealing secrets from ancient dental calculus, Nature Reviews Microbiology</u>
- 2014 Calculus is a long-term reservoir of disease, British Dental Journal

2014 <u>Periodontal Pathogens from Medieval Teeth</u>, *Microbe Magazine (ASM)* 2013 <u>Fossilized teeth offer mouthful on ancient microbiome</u>, *Science*

Popular Press

2020	Philistines had a taste for far-flung foods, fossilized tooth plaque reveals, National Geographic
2020	The answer to lactose intolerance might be in Mongolia, Popular Science
2020	What bacterial cultures reveal about ours, Sapiens Magazine
2020	What Mongolia's Dairy Farmers Have to Teach Us About the Hidden History of Microbes, Discover
	Magazine
2020	Solving an ancient dairy mystery could help cure modern food ills, Horizon EU Research and Innovation
	Magazine
2020	Filling in gaps in our understanding of how cities began to rise, Harvard Gazette
2019	Top 10 Discoveries of 2019, Archaeology Magazine
2019	The archaeology of plaque (yes plaque), Harvard Gazette
2019	In an ancient nun's teeth, blue paint – and clues to medieval life, The New York Times
2019	Female medieval master artist revealed by dental calculus, National Geographic
2019	The woman with lapis lazuli in her teeth, The Atlantic
2018	Ancient DNA reveals complex migrations of the first Americans, National Geographic
2018	Ancient Tooth Tartar Traps Clues to Iron Age Diet, Scientific American podcast
2018	Conquistador contagion, Archaeology Magazine
2017	Explore ancient civilizations (and their diseases) in this delightful coloring book, The Verge
2017	The heights we go to, Archaeology Magazine
2016	Worlds within us, Archaeology Magazine
2016	Tooth plaque may hold clues about ancient life, National Geographic
2016	Dental Calculus Yields Human DNA, Archaeology Magazine
2015	Meet the Dentist to the Dead, Scientific American
2015	Uncovering our ancestral microbiomes, Discover Magazine
2015	Study of hunter-gatherers' guts reveals ancient microbes, National Geographic
2015	Top 100 Stories of 2014, Discover Magazine
2014	Preserved in plaque of ancient teeth, a fossilized microbial world, The LA Times
2014	Heritage plaque: Our ancestors' health read from teeth, The New Scientist
2014	Dental plaque offers a window to the past, Archaeology Magazine
2012	History to sink your teeth into, UK Observer
2012	Our ancestors' dirty teeth help Christina Warinner decode our past, WIRED UK
2012	Why your dental plaque is valuable, CNN
2012	Sky caves of Nepal, National Geographic

For a complete list of media coverage, see: http://christinawarinner.com/media-press/media-coverage/