# Kurt M. Wilson

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### **Research Expertise**

Methods expertise in the application of statistical, geospatial and digital ecological, and modeling techniques (ABM, ABC) to archaeological, behavioral, environmental, and ethnographic data. Topical expertise in humanenvironment interactions and complex societies, climate change, and socioecological influences on inequality, territoriality, and vulnerability. Regions of interest are the Central Andes and western North America.

#### Appointments

Academic

- 2022-Pr. National Science Foundation SBE Postdoctoral Research Fellow (SPRF), Department of Geography, University of Utah. Salt Lake City, UT
- 2022-Pr. Research Affiliate. University of Utah Archaeological Center, University of Utah. Salt Lake City, UT
- 2020-21 Marriner Eccles Graduate Fellow. Graduate College, University of Utah. Salt Lake City, UT
- 2019-20 University Teaching Assistant. University of Utah, Salt Lake City, UT
- 2017-18 Graduate Fellow. Global Change & Sustainability Center, University of Utah, Salt Lake City, UT

#### Higher Education

- 2013-15 Hall Director (undergraduate and underrepresented student programs). Department of Residence, Iowa State University, Ames, IA
- 2011-13 Graduate Student Academic Advisor (undergraduate student advising). College of Business, Iowa State University, Ames IA

#### Education

- 2017-22 Ph.D. Anthropology, University of Utah, Salt Lake City, UT. "The Ecology of Inequality: Assessing Environmental Influence on Tradeoffs for Differential Resource Access". Committee: Brian Codding (chair), Daniel Contreras, Kristen Hawkes, Jack Broughton, Joan Brenner Coltrain.
- 2015-17 M.A. Anthropology, Iowa State University, Ames, IA. "Late Pleistocene Extinction of the Flat-Headed Peccary on the Ozark Plateau: Paleozoological Insights from Peccary Cave, Arkansas". Committee: Matthew G. Hill (chair), Alan Wanamaker, Jill Pruetz
- 2015-17 Graduate Certificate Geographic Information Systems, Iowa State University, Ames, IA
- 2011-13 M.Ed. Higher Education, Iowa State University, Ames, IA
- 2006-10 B.A. History, University of Wisconsin-La Crosse, La Crosse, WI

#### Summary

**Publications** 

15: 12 published/accepted; 3 submitted/under review

Peer Review Journal: 12

Edited Volumes/Book Chapters: 3

Grant Funding

#### \$268,394 Total

External: \$156,698 (incl. National Science Foundation & Bureau of Land Management) Internal: \$111,696 (\$93,696 for research and \$18,000 for teaching)

## Teaching

8 Courses

4 undergraduate and 1 graduate as instructor of record; 3 as instructor of record for lab sections *Student Mentorship* 

#### 26 B.S./B.A. and M.S./M.A. students

Advised/ing students on student led publications (3), research and analytical skills via lab and fieldwork, developing public education skills, masters theses (4), and on professional presentations

#### **Publications**

Peer Reviewed Articles \*\* graduate or \*undergraduate student co-author

Published

- 2023 Wilson, Kurt M., \*\*Cole, Kasey E., Codding, Brian F. Identifying key socioecological factors influencing the expression of egalitarianism and inequality among foragers. *Philosophical Transactions of the Royal Society B* https://doi.org/10.1098/rstb.2022.0311
- 2023 Wilson, Kurt M., McCool, Weston C., Brenner-Coltrain, Joan. Climate and oceanic condition changes influence subsistence economic adaptation through intensification on the Central Andean coasts. *Quaternary International* https://doi.org/10.1016/j.quaint.2023.07.002
- 2023 Magargal, Kate E., **Wilson, Kurt M.,** \*Chee, Shaniah, Campbell, Michael J., Bailey, Vanessa, Dennison, Philip E., Anderegg, William R. L., Cachelin, Adrienne, Brewer, Simon, and Codding, Brian F. The impacts of climate change, energy policy, and traditional ecological practices on firewood availability for Diné (Navajo) people. *Philosophical Transactions of the Royal Society B* <u>https://doi.org/10.1098/rstb.2022.0394</u>
- 2023 \*\*Kievman, Hayley T., **Wilson, Kurt M.**, \*\*Lamson, Roxanne Lois F., \*Gyumushyan, Arthur, Codding, Brian F., Greenwald, Alexandra M. Exploring how human-environment interactions impact mussel size during the Late Period of Northern CA. *California Archaeology* https://doi.org/10.1080/1947461X.2023.2223494
- 2022 Wilson, Kurt M., McCool, Weston C., Brewer, Simon C., \*Zamora-Wilson Nicole, \*Schryver, Percy., \*\*Lamson, Roxanne Lois F., \*Huggard, Ashlyn M., Brenner Coltrain, Joan, Contreras, Daniel A., and Codding, Brian F. Climate and demography drive 7,000 years of dietary change in the central Andes. *Scientific Reports* 12:2026 (2022). https://doi.org/10.1038/s41598-022-05774-y
- 2022 McCool, Weston C., Codding, Brian F., Vernon, Kenneth B., **Wilson, Kurt M.**, Yaworsky, Peter M., Marwan, Norbert, and Kennett, Douglas J. Climate change induced population pressure drives high rates of lethal violence in the Prehispanic central Andes. *Proceedings of the National Academy of Sciences* <u>https://doi.org/10.1073/pnas.2117556119</u>
- 2022 McCool, Weston C., **Wilson, Kurt M.**, and Vernon, Kenneth B. Ecological constraints on violence avoidance tactics: An explanation for high rates of lethal and sublethal violence in the Prehispanic Andean Highlands. *Environmental Archaeology* https://doi.org/10.1080/14614103.2022.2137652
- 2020 Wilson, Kurt M. and Codding, Brian F. The marginal utility of inequality: A global examination across ethnographic societies. *Human Nature* 31(4): 361-386. https://doi.org/10.1007/s12110-020-09383-4
- 2020 Wilson, Kurt M. and Hill, Matthew G. Synthesis and assessment of the flat-headed peccary record in North America. *Quaternary Science Reviews* 248:106601. https://doi.org/10.1016/j.quascirev.2020.106601

#### Under Review

\*\*Lamson, Roxanne Lois F., Wilson, Kurt M., \*\*Kievman, Hayley T., Vernon, Kenneth Blake, Yaworsky, Peter, Codding, Brian F. Environmental drivers of wealth inequality among Ancestral Puebloan populations in the Basin-Plateau region. American Antiquity Reports

Codding, Brian F., Cole, Kasey E., and **Wilson, Kurt M**. Exploring the ecological foundations of uniquely human social organization. *Evolutionary Anthropology* 

\*\*Weitzel, Elic M., Wilson, Kurt M., Spake, Lauren, Schaffnit, Susan B., Lynch, Robert, Sear, Rebecca, Shaver, John H., Shenk, Mary K., and Sosis, Richard. Modeling the costs of allocare in humans. *Evolution and Human Behavior* 

#### Submitting

McCool, Weston C., Vernon, Kenneth B., Medina, Ishmael D., Brenner Coltrain, Joan, **Wilson, Kurt M.**, and Codding, Brian F. "Inequality and the socio-climatological drivers of inter-group conflict in the precontact North American Southwest." *American Antiquity* 

#### In Prep.

**Wilson, Kurt M.** Vernon, Kenneth Blake, and Brewer, Simon C. "Approximate Bayesian Computation evaluation of the interactive effects of climate change and subsistence economic intensification on pre-contact population dynamics"

McCool, Weston C. and **Wilson, Kurt M.** "The socioecology of peace: Machine learning, osteology, paleoclimate, and paleo-population reconstructions reveal how long-term climate patterns promote peace and violence in the Central Andes"

\*\*Noe, Sarah, **Wilson, Kurt M.**, and McCool, Weston C. "The changing ecologies of camelid herding: 8000 years of agropastoralism in Peru"

#### Edited Volume/Book Chapter (†peer reviewed, ‡invited paper)

Published

- 2023 Wilson, Kurt M. and McCool, Weston C. The environmental null: Documenting the changing influence of physical and social environments on Prehistoric Andean diets. In *Foodways of the Ancient Andes: Transforming Diet, Cuisine, and Society* edited by Marta P. Alfonso-Durruty and Deborah E. Blom. Amerind Studies in Archaeology. University of Arizona Press, Tucson.<sup>‡‡</sup> pp: 23-44
- 2023 Baitzel, Sarah I., \*\*Folk, Maureen E., \*\*Diaz, Lucia M., Wilson, Kurt M., Rivera Infante, Arturo F., Langlie BrieAnna S. Diasporic foodways and the transformation of Andean agropastoralism in the wake of Tiwanaku collapse (11th-12th century CE) at Los Batanes, Sama Valley. In *Foodways of the Ancient Andes: Transforming Diet, Cuisine, and Society* edited by Marta P. Alfonso-Durruty and Deborah E. Blom. Amerind Studies in Archaeology. University of Arizona Press, Tucson.<sup>‡</sup> pp: 220-239
- 2022 Codding, Brian F., Cole, Kasey, and Wilson, Kurt M. Socioecological Factors Influence Hunter-Gatherers Group Size, Lifetime Interactions, and Emergent Properties of Culture. In Scale Matters: The Quality of Quantity in Human Culture and Sustainability edited by Thomas Widlok, and Dores Cruz. Transcript Verlag, Bielefield ‡ https://doi.org/10.14361/9783839460993

# **Teaching Experience**

# Teaching Interests

Statistical Analysis of Anthropological Data, The Anthropology of Inequality, Simulation and Anthropology, Environmental Archaeology, Geospatial Analysis, Latin American Prehistory, North American Prehistory, Climate Change and Human Behavior, World Prehistory, Human-Environment Interactions and Complex Societies

#### Instructor of Record

Anthropology Capstone: Hidden Research Skills (Undergraduate, Spring 2020, 2021, 2022)

Developed and delivered a repeatable capstone course to advance student skills in academic writing, critical thinking, communicating original research, providing effective peer-feedback, and making peer and faculty connections to enhance collaboration, research capability, resiliency, self-belief, and student ability to face fear of failure. (in-person and online via Zoom and Canvas)

Department of Anthropology, University of Utah

#### Advanced North American Prehistory (co-instructor; Graduate, Fall 2020)

Co-taught a graduate seminar-course focused on teaching North American Prehistory while developing student skills in presenting and leading learning, conducting effective identification of gaps in archaeological knowledge, and critically assessing archaeological topics. (online via Zoom and Canvas) Department of Anthropology, University of Utah

#### Introduction to Cultural Anthropology - Lab Sections (Undergraduate, Spring 2016, 2017)

Taught multiple lab sections and designed weekly lesson plans for lab sections/instructors to provide experiential learning and critical thinking and reading skills relating to expand understandings of human diversity. (in-person) Department of Anthropology, Iowa State University

#### Skeletal Biology – Lab Section (Undergraduate/Graduate, Spring 2017)

Conducted formal training in element and feature identification for undergraduate and graduate students. (in-person) Department of Anthropology, Iowa State University

#### Archaeology Lab Methods – Lab Sections (Undergraduate, Fall 2015, 2016)

Designed weekly lesson plans and instructed all lab sections to provide experiential, hands-on, learning guiding students in thinking critically about archaeological survey planning, artifact identification, and artifact and pattern interpretation. (in-person)

Department of Anthropology, Iowa State University

#### Expanded Orientation: Learning Communities (Undergraduate, Fall 2012 – Fall 2013)

Taught orientation course and coordinated non-residential major-based learning communities to develop community, connections to peers and the college, and enhance time to degree and retention. (in-person) College of Business, Iowa State University

#### Orientation (Undergraduate, Fall 2011 – Spring 2013)

Taught a half semester orientation to the college to enhance student time to degree and retention. (in-person) College of Business, Iowa State University

#### Women's Studies: Gender Justice (Undergraduate, Fall 2011)

Instructed a half semester course providing an introduction to patriarchy, sexism, and ally development. (in-person) Department of Women's Studies, Iowa State University

#### Teaching Assistant

Sama Valley (Peru) Archaeological Field School (June - August 2019)

Assisted in supervising and instructing students on residential and burial excavation of a complex post-Tiwanaku site, transect survey for archaic through historic period site locations, artifact identification, and cataloging recovered artifacts.

Washington University in St. Louis

#### Invited Guest Lecturer

World Prehistory (University of Utah, K.B. Vernon [Spring 2019, Fall 2019]; B.F. Codding [Fall 2021]), Introduction to Cultural Anthropology (Iowa State University, C. Gish Hill [Fall 2017]), Archaeology Methods (University of

California Merced, B. Scaffidi [Spring 2022]), World Prehistory (University of Utah, K.E.Cole [Spring 2023])

# Student Mentorship

Advising 4 student researchers (3 M.A., 1 undergraduate) on student led publications Mentoring 1 undergraduate researcher on a Wilkes Center for Climate Science & Policy fellowship Mentoring 1 M.A. and 1 B.S. researcher on a public facing historic archaeology project Advised/advising 8 B.S./B.A. researchers on individual research projects Mentored/mentoring 7 B.S./B.A. & 2 M.A. researchers on skill development via my research Advised 6 M.A. (current and former) students on public education lesson design project Advised 4 M.A. students on components of their M.A. theses, all successfully defended

# Grants & Funding

- In Prep National Science Foundation Human-Environment and Geographical Sciences Program (HEGS) National Science Foundation, HEGS. "Scaling the Central Andes (SCA): Multi-scalar adaptation and resilience to climate change using artificial intelligence driven downscaling in the Central Andes". Daniel A. Contreras (Co-PI, Univ. of Florida), **Kurt M. Wilson (Co-PI, Univ. of Utah)**, Nicholas Gauthier (Co-PI, Univ. of Florida), John Krigbaum (Co-PI, Univ. of Florida). (\$400,000)
- In Prep National Science Foundation Human Networks and Data Science (HNDS) National Science Foundation, HNDS-R (Core Research). "Intensification, Inequality, and Resilience: The Dynamic Responses of Human-Environment Systems to Climate Change". Simon C. Brewer (PI), Brian F. Codding (Co-PI), Kurt M. Wilson (Co-PI), Kenneth Blake Vernon (Co-PI), Weston C. McCool (Co-PI). (\$1,419,546)

# Sub. Research Incentive Seed Grant Program University of Utah, Vice President for Research. "Isotopes, Salvage Archaeology, and Complexity (ISAC): Exploring the Human-Environment Interactions of Everyday People During the Rise and Fall of Complex Civilizations on Peru's North Coast". Kurt M. Wilson (Co-PI), Joan Coltrain (Co-PI), Weston C. McCool (Co-PI). (\$10,000)

- 2022 National Science Foundation SBE Postdoctoral Research Fellowship (NSF-SMA #2203767)
   National Science Foundation, Directorate for Social, Behavioral, and Economic Sciences (SBE).
   "Socioecological System Dynamics and the Emergence of Inequality: Evaluating the Impacts of Climate Change, Demography, and Privatization". Kurt M. Wilson (PI), Simon C. Brewer (Co-PI). (\$138,000)
- 2020 Bureau of Land Management Award L20AC00267 Bureau of Land Management Utah State Office. "Archaeological Survey of Cottonwood Wash, San Rafael Desert, Emory County, Utah". Brian F. Codding (PI), Jerry Spangler (Co-PI), Kate Magargal and Weston McCool (Senior Personnel), Kurt M. Wilson (PhD Researcher), Kenneth B. Vernon, Kasey E. Cole, Ishmael Medina (PhD/Graduate Researchers) (\$18,698)
- 2020 Marriner S. Eccles Graduate Research Fellowship Graduate College, University of Utah. "Ideal Despotism: An Agent-Based Modeling Analysis of Emergence of, and Interventions to Lessen, Despotic Behavior". **Kurt M. Wilson (PI)** (\$18,900)
- 2019 University Teaching Assistantship Teaching Grant Graduate College, University of Utah. "Hidden Research Skills: Developing a Capstone Course to Address Research and Resiliency". **Kurt M. Wilson (PI)** (\$18,000)
- 2019 Interdisciplinary Faculty Research Seed Grant Global Change and Sustainability Center, the Society, Water and Climate Research Group, and Nexus: Interdisciplinary Exchange for Utah Science, University of Utah. "Climatic and Dietary Drivers of Land Cover Change in the Peruvian Andes".

	Brian F. Codding (PI), Kurt M. Wilson (Co-PI) (\$10,000)
2019	Department of Anthropology Travel Grant Department of Anthropology, University of Utah, <b>Kurt M. Wilson</b> (\$600)
2018	Global Change and Sustainability Center Travel Grant Global Change and Sustainability Center, University of Utah, <b>Kurt M. Wilson</b> (\$500)
2018	Funding Incentive Seed Grant University of Utah Research Foundation, Vice President for Research. "Origins of Social Inequality: Developing and Testing a Novel Ecological Model in Prehistoric Peru". Brian F. Codding (PI), <b>Kurt M. Wilson (Co-PI)</b> (\$34,946)
2018	Pre-Dissertation Field Research Grant Center for Latin American Studies, University of Utah. "The Marginal Value of Inequality: Pre-Dissertation Field-Work" <b>Kurt M. Wilson (PI)</b> (\$1,900)
2017	Global Change & Sustainability Center Interdisciplinary Fellowship Global Change & Sustainability Center, University of Utah, <b>Kurt M. Wilson (PI)</b> (\$18,000 + tuition)
2015-17	Miller Graduate Fellowship Iowa State University, <b>Kurt M. Wilson</b> (\$8,000)
2016	Nancy R. Coinman Award for Anthropological Research Department of Anthropology, Iowa State University, "Dating the Regional Extinction of Flat- headed Peccary at Peccary Cave, AR" <b>Kurt M. Wilson</b> (\$1,650)
2016	Nancy R. Coinman Award for Summer Anthropological Research Department of Anthropology, Iowa State University, "Taphonomy of the Flat-headed Peccary Assemblage of Peccary Cave" <b>Kurt M. Wilson</b> (\$300)
2016	Graduate and Professional Student Senate Professional Development Grant Iowa State University, <b>Kurt M. Wilson</b> (\$180)

# Field & Research Experience

# **Ongoing & Forthcoming**

2023-	Coupling and Cohesion as vulnerability factors in socio-climatic networks: the case of agro-ecology
	in the Chicama Valley
	Invited Collaborator
	Archaeological survey of Chicama Valley drainages for agricultural fields, irrigation structures, and other
	materials for comparing agricultural extensification with ENSO frequency variation in the pre-Hispanic
	Chicama Valley. Sampling of huaca adobe for temporal controls.
	July, Chicama Valley, Peru. Ben Vining, University of Arkansas (PI), Dan Contreras, University of
	Florida (PI)
2022-	The Evolutionary Dynamics of Religion, Family Size, and Child Success
	Team Member
	Agent-based modeling evaluating conditions under which allocare may outcompete non-allocare
	strategies and comparing the competitiveness of differing allocare strategies in post-industrial societies

strategies and comparing the competitiveness of differing allocare strategies in post-industrial societies. Rich Sosis, University of Connecticut (PI), Elic Weitzel, University of Connecticut (Co-Team Member)

2022- Dynamic Impacts of Environmental Change and Biomass Harvesting on Woodland Ecosystems and

Traditional Livelihoods Project: National Science Foundation CNH-L - 1741972 Agent-Based Modeling Expert Aiding the development of an agent-based model, as part of a much larger project, to evaluate the feedback effects of human firewood harvesting on forest condition and composition and the impact of changing condition and composition on Indigenous wood-harvester's ability to meet their energy needs. Kate Magargal, University of Utah (Co-PI), Brian Codding, University of Utah (Co-PI), Simon Brewer, University of Utah (Co-PI)

2022- Bonneville Basin Taphonomic Correction Interdisciplinary National Science Foundation Project BCS – 1921072

Researcher

Systematic survey of landforms and open-air archaeological sites to link local geologic processes with preservation of dateable material for taphonomic correction to radiocarbon date-based estimates of past population density.

(intended 2020, postponed due to Covid-19), Bonneville Basin, UT/NV. Brian F. Codding, University of Utah (PI), Daniel Contreras, University of Florida (Co-PI)

#### **Completed**

2022 Bear River Massacre Site Archaeological Survey partnered with Shoshone Tribal Leadership Volunteer

Systematic survey of the Bear River Massacre site surrounding locations. Preparatory work for an interpretive center and memorial plus ecological reconstruction led by the Shoshone Tribe. October, Franklin County, ID. Shoshone Council (PI), Brian F. Codding (Co-PI)

2022 Sama Archaeological Project

Researcher

Transect survey of Sama Valley, Peru, and inter-valley regions recording archaic through historic artifacts, residential and burial sites, and Colonial period roadways. Household, wall, midden, and burial excavation on the Los Botanes walled settlement.

June-August, Sama, Peru. Sarah Baitzel, Washington University of St. Louis (PI), Arturo Rivera-Infante (Co-PI), Noa Corcoran-Tadd, Princeton & Harvard Universities, (Co-PI), Brianna Langlie, Binghampton University (Co-PI)

Archaeological Survey of Cottonwood Wash, San Rafael Desert, Emory County, Utah
 PhD Field Technician
 Section 110 Archaeological inventory of rock art and survey to locate and record artifact clusters, features, isolated tools, and sites.
 March, Cottonwood Wash, Emory County, UT. Brian F. Codding, University of Utah (PI), Jerry
 Spangler, Colorado Plateau Archaeological Alliance (Co-PI)

Strawberry Reservoir Archaeological Project
 PhD Field Technician
 Site recording and preliminary test excavation of archaic hearth and paleo-archaic lithic features in collaboration with the Forest Service. Training for undergraduate students in field methods.
 July, Strawberry Reservoir, UT. Tom Flannigan, Forest Service (PI), Brian F. Codding, University of Utah (Co-PI)

Weaning & Life History in the Late Intermediate Period, Peru
 Preparation and processing of dental specimens for serial isotope sampling from Nazca region, Peru for investigation of life-history changes.
 Alex Greenwald, University of Utah, Weston McCool, Univ. of California Santa-Barbara (Co-PIs)

- 2019 Sama Archaeological Project
  - PhD TA Supervisor

Transect survey of Sama Valley, Peru, and inter-valley regions recording archaic through historic artifacts, residential and burial sites, and Colonial period roadways. Household, wall, midden, and burial excavation on the Los Botanes walled settlement. Training for undergraduate students in field methods. June-August, Sama, Peru. Sarah Baitzel, Washington University of St. Louis (PI), Arturo Rivera-Infante (Co-PI)

Sibinacocha Archaeo-Paleo-Environmental Expedition
 PhD Field Technician
 Test excavations and site feature recordings of high elevation late-prehistoric to colonial households and corrals on the shore of Lake Sibinacocha as part of an inter-disciplinary project conducting paleo-environmental reconstruction and archaeological investigation.
 May, Lake Sibinacocha, Cusco Highlands, Peru. Bronwen Konecky, Washington University of St. Louis

May, Lake Sibinacocha, Cusco Highlands, Peru. Bronwen Konecky, Washington University of St. Louis (PI), Sarah Baitzel, Washington University of St. Louis (Co-PI).

2018-19 Central Andean Isotope Database Project
 Director
 Development and compilation of a comprehensive database of stable isotope records on archaeological individuals from Peru and Northern Chile. Instruction and mentorship of students on database design, data entry, and geographic information systems.

Kurt Wilson (PI), University of Utah Archaeological Center (UUAC), University of Utah

2018 Sama Archaeological Project
 PhD Field Technician

 Pransect survey of Sama Valley, Peru, recording archaic through historic artifacts and sites. Household
 and burial excavation on the Los Botanes walled settlement.
 June-July, Valley of Sama, Peru. Sarah Baitzel, Washington University of St. Louis (PI), Arturo Rivera Infante (Co-PI)

2016-17 Butterfly Geolocation & Peccary Dietary Reconstruction Isotope Analysis
Light stable carbon, nitrogen, and oxygen sample preparation and analysis of modern butterfly wings for geolocation of migration and of extinct peccary tusks for dietary reconstruction.
Kurt Wilson, Iowa State University (Co-PI), Matthew G Hill, Iowa State University (Co-PI), & Alan Wanamaker, Iowa State University (Co-PI) – Peccary Project
Royce Bitzer, Iowa State University (Co-PI) & Alan Wanamaker, Iowa State University (Co-PI) – Butterfly Project

2015 Greybull River Sustainable Landscape Ecology (GRSLE) Pre- and Historic-Archaeological Project Systematic survey, site recording, and test excavation of high elevation prehistoric habitation sites, lithic scatters, and a historic cabin.
 June-July, Absaroka Mountains, Meeteetsee, WY. Lawrence C. Todd, GRSLE and Colorado State University Professor Emeritus (PI)

#### Professional Presentations \*\*graduate or \*undergraduate student co-author

- 2024 (forthcoming) Wilson, Kurt M., Vernon, Kenneth Blake, Brewer, Simon C. "Approximate Bayesian Computation evaluation of the interactive effects of climate change and subsistence economic intensification on pre-contact population dynamics in western North America"
   Poster Presentation. Society of American Anthropology Annual Meeting 89, New Orleans, LA organized session Global Perspectives on Human Population Dynamics, Innovation, and Ecosystem Change
- 2023 Wilson, Kurt M., \*\*Cole, Kasey E., and Codding, Brian F. "Modeling key socioecological factors

influencing the expression of egalitarianism and inequality among foragers" Podium Presentation: *Society of American Anthropology Annual Meeting 88*, Portland, OR – organized session Behavioral Ecology and Archaeology

- \*\*Lamson, Roxanne F., Wilson, Kurt M., \*\*Kievman, Hayley T., Yaworsky, Peter M., Vernon, Kenneth B., & Codding, Brian F. "Environmental Drivers of Wealth Inequality Among Ancestral Puebloan Populations in the Basin-Plateau Region"
   Poster Presentation: Society for California Archaeology 57th Annual Meeting, Oakland, CA
- 2023 Wilson, Kurt M. "Socioecological Dynamics of Climate Change, Subsistence Change, and Inequality" Invited Talk: *GROW Presentation*, Department of Geography, Salt Lake City, UT
- Wilson, Kurt M., McCool, Weston C., Brewer, Simon C., \*Zamora-Wilson Nicole, \*Schryver, Percy J., \*\*Lamson, Roxanne Lois F., \*Huggard, Ashlyn M., Brenner Coltrain, Joan, Contreras, Daniel A., and Codding, Brian F. "Climate Change Drives 7,000 Years of Dietary Variation in the Central Andes"
   Podium Presentation: *Society of American Anthropology Annual Meeting 87*, Chicago, IL organized session Climatic Influences on Diet, Demography, and Conflict.
- McCool, Weston C., Codding, Brian F., Vernon, Kenneth B., Wilson, Kurt M., Yaworsky, Peter M., Marwan, Norbert, Kennett, Douglas J. "Divergent Climactic and Demographic Stressors Predict High Rates of Morbidity in the Prehispanic Central Andes"
   Podium Presentation: Society of American Anthropology Annual Meeting 87, Chicago, IL – organized session Climatic Influences on Diet, Demography, and Conflict
- 2022 \*\*Weitzel, Elic M., Wilson, Kurt M., and Sosis, Rich. "Modeling the Conditions of Adaptive Allocare" Podium Presentation: *Human Behavior & Evolution Society*, virtual
- 2022 Codding, Brian F., Magargal, Kate E., Wilson, Kurt M., \*\*Cole, Kasey E., Parker, Ashley K., Smith, Eric A. "Ecological and economic factors scale cooperative group size across foraging activities in western North America"
   Podium Presentation: *Conference on Hunting and Gathering Societies (CHAGS) XIII*, Dublin, Ireland organized session.
- 2022 \*\*Kievman, Hayley T., **Wilson, Kurt M.**, \*\*Lamson, Roxanne Lois F., Codding, Brian F., Greenwald, Alexandra M. "Exploring Links between Late Holocene Environmental Change and Indigenous Mussel Harvesting Strategies on the Northwest Coast of California" Podium Presentation: *Society for California Archaeology Annual Meeting*, Visalia, CA
- Wilson, Kurt M., Contreras Daniel A., Brenner Coltrain, Joan, Yaworsky, Peter M., Vernon Kenneth Blake, Allgaier, Paul E., Lamson, Roxanne Lois F., Young, D. Craig, Louderback, Lisbeth, Brewer, Simon C., Spangler, Jerry D., Codding, Brian F. "Evaluating the Impacts of Spatio-Temporal Patterns of Past Climate Change on Demographic and Subsistence Patterns in the Bonneville Basin of Western North America"
   Poster Presentation: *Society of American Anthropology Annual Meeting 86* (2021 virtual) invited session People, Climate, and Proxies in Holocene Western North America
- 2021 Codding, Brian F., Cole, Kasey, Wilson, Kurt M. "The Socioecological Drivers of Hunter-Gatherer Group Size and Interaction Rates"
   Virtual Invited Workshop: Scale Matters: The Quality of Quantity in Research on Social Relations.

- McCool, Weston C., Vernon, Kenneth Blake, Yaworsky, Peter M., Wilson, Kurt M., Codding, Brian F. "Examining the Trade-off between Food Acquisition and Violence Avoidance: Population-level Effects and Variability in Risk-preference"
   Podium Presentation: Society of American Anthropology Annual Meeting 86 (2021 virtual) invited session Life is Risky: Human Behavioral Ecology Approaches to Variable Outcomes
- Wilson, Kurt M., Codding, Brian F., Brenner Coltrain, Joan. "The Environmental Null: Exploring the Intersection of Climate, Society, and Diet in the Prehistoric Andes"
   Podium Presentation: Society of American Archaeology Annual Meeting 85 (virtual) invited session Food, Diet, and Cuisine in the Ancient Andes (selected for the American Indian Museum Seminar Symposium)
- 2020 Codding, Brian F., Contreras Daniel A., Wilson, Kurt M., Brenner Coltrain, Joan, Yaworsky, Peter M., Vernon, Kenneth Blake, Allgaier, Paul E., Lamson, \*\*Roxanne Lois F., Young, D. Craig, Louderback, Lisbeth, Brewer, Simon C., Spangler, Jerry D. "Evaluating the Impacts of Past Climate Change on Demographic and Subsistence Patterns in the Basin-Plateau Region of Western North America"
  Poster Presentation: America Cuthwird Union (sintee)

Poster Presentation: American Geophysical Union (virtual)

- 2019 **Wilson, Kurt M.** and Codding, Brian F. "The Marginal Utility of Inequality" Podium Presentation: *Society of American Archaeology Annual Meeting*, Albuquerque, NM
- 2019 **Wilson, Kurt M.** "Testing the Marginal Utility of Inequality Model Ethnographically" Poster Presentation: University of Utah Environment and Sustainability Research Symposium, Salt Lake City, UT
- 2018 **Wilson, Kurt M.** and Codding, Brian F. "The Marginal Utility of Inequality: A BE Informed Approach to the Emergence of Social Inequality" Podium Presentation: *Northwest Evolution, Ecology, and Human Behavior Symposium*, Boise ID
- 2018 **Wilson, Kurt M.** "An Ethnographic Test of the Marginal Value of Inequality" Poster Presentation: *College of Social and Behavioral Sciences Research Day*, Salt Lake City, UT
- 2018 Wilson, Kurt M. "The Marginal Value of Inequality" Poster Presentation: University of Utah Environment and Sustainability Research Symposium, Salt Lake City, UT
- 2017 **Wilson, Kurt M.** "Late Pleistocene extinction of the flat-headed peccary on the Ozark Plateau: Paleozoological Insights from Peccary Cave, Arkansas" Podium Presentation: *Iowa State University Anthropology Symposium*, Ames IA
- 2016 **Wilson, Kurt M.** and Hill, Matthew G. "Taphonomy and Paleozoology of the Flat-Headed Peccary and Dire Wolf Assemblages from Peccary Cave, Arkansas" Podium Presentation: *Plains Anthropological Conference*, Lincoln, NE
- 2016 **Wilson, Kurt M.** "δ13C and δ18O Isotopic Analysis of a *Platygonus compressus* Tusk" Podium Presentation: *Iowa State University Anthropology Symposium*, Ames, IA
- 2015 **Wilson, Kurt M.**, Todd, Lawrence C., and Hill, Matthew G. "Exploitation of Bighorn Sheep at a Late Prehistoric Site in Northwestern Wyoming" Poster Presentation: *Plains Anthropological Conference*, Des Moines, IA

## Press Releases & Popular Media Summaries

2022 Climate drove 7,000 years of dietary changes (press release) https://attheu.utah.edu/facultystaff/climate-drove-dietary-changes/ 2022 Climate change induced refugee crisis, chronic war, in ancient Peru (press release) https://attheu.utah.edu/facultystaff/climate-change-nasca-highlands/

#### **Professional Service and Development**

#### **University & Department Service** University of Utah Archaeological Center Undergraduate Research Assistant Mentoring 2022-24 Department of Anthropology, University of Utah 2022 Writing & Obtaining Grants Workshop for Graduate Students Department of Geography, University of Utah 2021-22 Ad Hoc committee developing the assessment plan for departmental learning outcomes Department of Anthropology, University of Utah Mentor to department of anthropology graduate students for creating lesson plans on anthropology 2021-22 for the Natural History Museum of Utah Department of Anthropology, University of Utah 2021 Graduate student interview & feedback co-organizer for faculty hiring committee Department of Anthropology, University of Utah Anthropology/Geography agent-based modeling seminar series co-organizer 2020-22 Departments of Anthropology & Geography, University of Utah Undergraduate Virtual Fall & Spring Symposium judge 2020-21 Office of Undergraduate Research, University of Utah 2020 Graduate researcher: developing learning outcomes for the undergraduate curriculum Department of Anthropology, University of Utah 2020 Undergraduate Research Mentor Development Program Office of Undergraduate Research, University of Utah Graduate student Professional Development Series organizer 2019-22 Department of Anthropology, University of Utah 2019-20 Anthropology undergraduate curriculum redesign committee member Department of Anthropology, University of Utah 2018-20 Graduate Student Advisory Council & Faculty Representative co-chair Department of Anthropology, University of Utah 2019 Undergraduate Research Symposium judge Office of Undergraduate Research, University of Utah College of Social and Behavioral Sciences Research Day judge 2018 College of Social and Behavioral Science, University of Utah

#### **Professional Service**

2022-23 Co-Guest Editor with Weston McCool, *Quaternary International* Special Issue "The dynamic influences of climate change on prehistoric lifeways in the Americas"

2022 Co-Organizer with Weston McCool, Symposium, "Climatic Influences on Diet, Demography, and Conflict", 87th Annual Meeting of the Society for American Archaeology, Chicago, IL, USA

Peer Reviewer: Journal of Hunter-Gatherer Research (1), Evolutionary Anthropology (1)

#### **Professional Development**

2021	R Spatial Workshop University of Utah Archaeological Center
2021	Learning Github Workshop Departments of Geography & Anthropology, University of Utah
2020	General Education Designation Workshop Office of Undergraduate Studies, University of Utah
2020	Humboldt State Agent/Individual-based Modeling Program College of Extended Education & Global Engagement, Humboldt State University
2020	Natural History Museum of Utah Science Communication Fellows Program Natural History Museum of Utah, University of Utah
2018	Introduction to Agent-based Modeling: Distance Course/Training Santa Fe Institute
Awards	
2021	Graduate Division Poster Session Research Day 2 <sup>nd</sup> Place (all graduates in CSBS) College of Social and Behavioral Sciences, University of Utah
2018	Graduate Division Poster Session Research Day 1st Place (all graduates in CSBS) College of Social and Behavioral Sciences, University of Utah
2016	Professional Development Award Department of Anthropology, Iowa State University
2015	Mapworks Excellence Award for Assessment

Affiliations

Society for American Archaeology (SAA)

Computer Applications & Quantitative Methods in Archaeology – North America (CAA-NA) & International (CAA-International)

Iowa State University Learning and Assessment Committee, Skyfactor Mapworks

Coalition for Archaeological Synthesis (CfAS) - Associate

Global Change and Sustainability Center (GCSC, University of Utah)

Spatial Utah Data Science Group (SUDS, University of Utah)