

Carolyn Freiwald
curriculum vitae January 2021

Associate Professor of Anthropology
Department of Sociology and Anthropology
University of Mississippi
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RESEARCH INTERESTS

Maya and Mesoamerican archaeology, bioarchaeology, mortuary practices, zooarchaeology, archaeological chemistry, migration, diet

EDUCATION

- 2011 PhD, University of Wisconsin-Madison Department of Anthropology
Maya Migration Networks: Reconstructing Population Movement in the Belize River Valley during the Late and Terminal Classic
- 2004 MS, University of Wisconsin-Madison Department of Anthropology
Specializing in Mesoamerican and Northern European Mesolithic archaeology
- 1989 BA, University of Wisconsin-Madison
International Relations and History (emphasis on economics, graduated with distinction)

ACADEMIC POSITIONS

- 2019-present University of Mississippi, associate professor in biological anthropology
- 2013-2019 University of Mississippi, assistant professor in biological anthropology
- 2012-2013 University of Mississippi, visiting assistant professor in biological anthropology
- 2012-present University of Wisconsin-Madison, Department of Anthropology honorary fellow
- 2010 University of Wisconsin Richland Center, anthropology adjunct faculty
- June 2012 University of Texas at San Antonio, archaeology field school staff
- 2009-2012 University of Wisconsin-Madison, Zoology 699 Instructor
- 2009-2010 University of Wisconsin-Madison, Department of Spanish and Portuguese,
Spanish language instructor
- 2003-2006 University of Wisconsin-Madison, Department of Anthropology, teaching assistant

PUBLICATIONS

- Freiwald, C. (2021). Barton Ramie and in-migration to the Belize River Valley: Strontium isotopes and burial patterns. In *Mobility and Migration in Ancient Mesoamerican Cities*. edited by MC Arnauld, C Beekman, and G Pereira. University Press, Colorado.
- Hoggarth, J, C Freiwald, & J Awe. (2021). Evidence for Classic and Postclassic population movement at Baking Pot, Belize. In *Mobility and Migration in Ancient Mesoamerican Cities*. edited by MC Arnauld, C Beekman, and G Pereira. University Press, Colorado.
- Freiwald, C, C Halperin, C Dubois-Francoeur, C Schlinsog, & K Bauer. (2021). A Microscopic View of Needle and Perforator Production at Ucanal, Guatemala. *The intersection and integration of worked bone studies, zooarchaeology and archaeometry; Proceedings of the ICAZ WBRG conference*.
- Halperin, C, C Freiwald, & G Iannone. (2020). Introduction to the Special Section in *Ancient Mesoamerica: Borders, Frontiers, and Boundaries in the Maya World: Concepts and Theory*. *Ancient Mesoamerica*, 31(3), 453-460.
- Freiwald, C, K Miller Wolf, T Pugh, A Rand, & P Fullagar (2020). Early colonialism and population movement at the Mission San Bernabé, Guatemala. *Ancient Mesoamerica*, 31(3), 543-553.
- Price, TD, V Tiesler, P Zabala, A Coppa, C Freiwald, H Schroeder, & A Cucina. (2020). Home is the Sailor. Investigating the origins of the inhabitants of La Isabela, the first European settlement in the New World. *Current Anthropology*, 61(5). <https://doi.org/10.1086/711157>

- Brown, MK & C Freiwald. (2020). Potluck: Building community and feasting amongst the Middle Preclassic Maya. In *From Feast to Famine*, edited by T Ardren, pp. 25-46. University of Texas Press.
- Freiwald, C. (2020). Migration and mobility among the ancient Maya. In *The Maya World*, edited by S Hutson and T Ardren, pp. 203-222. Routledge Press.
- Rand, A, V Matute, V Grimes, C Freiwald, & J Žračka. (2020). Prehispanic Maya diet and movement at Nakum, Guatemala: A multi-isotopic approach. *Journal of Archaeological Science: Reports*, 32C. DOI: 10.1016/j.jasrep.2020.102374
- Freiwald, C, B Woodfill, & R Mills. (2019). An isotopic investigation of salt and its implications for exchange and mobility in Mesoamerica. *Journal of Archaeological Science: Reports*, 27, 101990.
- Price, TD, V Tiesler, & C Freiwald. (2019). Origins of the sacrificial victims in the Sacred Cenote, Chichén Itzá, Mexico. *American Journal of Physical Anthropology*. doi.org/10.1002/ajpa.23879
- Freiwald, C, A Novotny, & K Green Mink. (2019). Mobility among the Maya of the Belize Valley. *Research Reports in Belize Archaeology*, 16, 91-100.
- Lytle, W, MK Brown, R, Horowitz, & C Freiwald. (2019). Late Classic burials and eccentric caches from Structure D-6 at Xunantunich. *Research Reports in Belize Archaeology*, 16, 123-132.
- Freiwald, C, & K Miller Wolf (guest editors). (2019). Considering conservation of human skeletal remains in archaeological contexts. In *Curating the Past: The Practice and Ethics of Skeletal Conservation* Special Issue of *Advances in Archaeological Practices*, (1), 3-9.
- Freiwald, C. (2019). Excavation and curation strategies for complex burials in tropical environments. In *Curating the Past: Advances in Archaeological Practices*, 7(1), 10-22.
- Powless, P, C Freiwald. (2019). The challenges of dealing with multiple sets of human remains in the cultural resource management setting where tribal resources are limited. *Advances in Archaeological Practices*, 7(1), 55-59.
- Miller Wolf, K, & C Freiwald. (2018). Re-interpreting ancient Maya mobility: A strontium isotope baseline for western Honduras. *Journal of Archaeological Science: Reports*, 20, 799-807.
- Rice, P, A Boileau, L Cecil, S deFrance, C Freiwald, N Meissner, T Pugh, D Rice, & M Yacubic. (2018). Zacpetén Structure 719: Activities at a Contact Period *Popol Nah* before rapid abandonment. *Ancient Mesoamerica*, 29, 137-155.
- Freiwald, C, & T Pugh. (2018). The origins of Early Colonial Cows at San Bernabé, Guatemala: Strontium isotope values at an early Spanish Mission in the Petén Lakes region of northern Guatemala. *Environmental Archaeology: The Journal of Human Paleoeology*, 23(1), 278-284.
- Awe, J, CE Ebert, C Freiwald, & K Green. (2017). The dead do tell tales: Unraveling the case of Cahal Pech's Jane or John Doe. *Research Reports in Belizean Archaeology*, 14, 213-225.
- Wrobel, GD, C Freiwald, S Gibbs, A Michaels, & J Awe. (2017). Social identity and geographic origin of Maya burials at Actun Uayazba Kab, Roaring Creek Valley, Belize. *Journal of Anthropological Archaeology*, 45, 98-114.
- Pugh, TP, K Miller, C Freiwald, & PM Rice. (2016). Technologies of domination at Mission San Bernabé, Petén, Guatemala. *Ancient Mesoamérica*, 27(1), 49-70.
- Patterson, E, & C Freiwald. (2016). Migraciones regionales en las Tierras Bajas Centrales: Nuevos valores de isótopos de estroncio en La Corona y El Perú-Waka'. In *XXVI Simposio de investigaciones arqueológicas en Guatemala*, edited by B Arroyo, L Méndez Salinas, and G Ajú Álvarez, pp. 797-807. Instituto de Antropología e Historia Asociación Tikal, Guatemala City.
- Wrobel, G, C Helmke, C Freiwald, & J Awe. (2014). A case study of reverential cave use from Je'reftheel, Central Belize. In *The Bioarchaeology of Space and Place: Ideology, Power and Meaning in Maya Mortuary Contexts*, edited by GD Wrobel, pp. 77-106. Springer Press.
- Freiwald, C, J Yaeger, J Awe, & J Piehl. (2014). Isotopic insights into mortuary treatment and origin at Xunantunich, Belize. In *The Bioarchaeology of Space and Place: Ideology, Power and Meaning in Maya Mortuary Contexts*, edited by GD Wrobel, pp.107-141. Springer Press.
- Freiwald, C, DW Mixter, & N Billstrand. (2014). Burial practices at Actuncan, Belize: A seated burial and

ongoing analysis from the 2001-2013 field seasons. *Research Reports in Belize Archaeology*, 11, 95-110.

- Freiwald, C. (2011). Patterns of population movement at Xunantunich, Cahal Pech, and Baking Pot during the Late and Terminal Classic (AD 600-900). *Research Reports in Belize Archaeology*, 9, 89-100.
- Freiwald, C. (2010). Dietary diversity in the Upper Belize River Valley: Interpreting Late Classic foodways using chemistry and zooarchaeology at Xunantunich. In *Pre-Columbian Foodways: Interdisciplinary Approaches to Food, Feasting, and Festivals in Ancient Mesoamerica*, edited by JE Staller and M Carrasco, pp. 399-420. Springer Verlag, New York.
- Yaeger, J, & C Freiwald. (2009). Complex Ecologies: Human and Animal Responses to Ancient Landscape Change in Central Belize. *Research Reports in Belizean Archaeology*, 8, 83-92.

Publications in progress

- Yaeger, J, C Helmke, MK Brown, M Zender, B Cap, & C Freiwald. (In press). A shell gorget from Feature 384-2 at Buenavista del Cayo, Belize. *Mexicon*.
- Hoggarth, JA, C Freiwald, CE Ebert, C Helmke, JJ Awe, K Green, P Powless, & AH McKeown. (Accepted). As the Baktun Turned: Reconstructing Classic to Postclassic population dynamics in the Belize River Valley. In *Identity, Power, and Politics: 3,000 Years of War and Peace in the Maya Lowlands*, edited by GE and VV Aquino. Routledge Archaeology of the Ancient Americas Series.
- Rand, A, C Freiwald, & V Grimes. (Resubmitted). Stable sulphur isotope analysis in the Maya region: A faunal baseline for dietary and mobility studies. *Journal of Archaeological Sciences: Reports*.
- Rand, A, & C Freiwald. (In review). Reconstructing the isotopic life histories of the Nakum Maya. In Nakum monograph (title pending).
- Price, TD, & C Freiwald. (In review). Isotopes, residential histories, and migration in Mesoamerica. In *Handbook of Mesoamerican Bioarchaeology*, edited by Vera Tiesler. Routledge.
- Freiwald, C, A Rand, & J Belanich. (In review). What's new in molecular approaches to bones, inside and out. In *Handbook of Mesoamerican Bioarchaeology*, edited by Vera Tiesler. Routledge.
- Hughes, C, J Lindo, T Pugh, C Marshall, R Malhi, KA Miller Wolf, & C Freiwald. (In review). Assessing ancestry at San Bernabé: Insights from an ancient DNA feasibility study. In *Colonialism at Tayasal, Petén, Guatemala*, edited by T Pugh. University of Colorado Press.
- Freiwald, C. (In review). Changes and continuity in animal use in early Colonial households at San Bernabé, Tayasal, Guatemala. In *Colonialism at Tayasal, Petén, Guatemala*, edited by T Pugh. University of Colorado Press.
- Ebert, C, AJ Rand, K Green-Mink, JA Hoggarth, C Freiwald, JJ Awe, C Helmke, W Trask, M Danforth, & DJ Kennett. (In review). Applying sulfur isotopes to paleodietary reconstruction and human mobility from the Preclassic through Colonial Periods in the eastern Maya lowlands. PLOSOne.
- Freiwald, C, J Cizdziel, et al. (In prep). Burial practices and cemetery contamination in Historic Mississippi.
- Freiwald, C, D Micklin, K Fulton, D Mixer, & L LeCount. (In prep). Making a place for ancestors at Actuncan, Belize: An osteobiography of a Maya burial ground. In *Osteobiographies in Mesoamerica*, edited by G Wrobel & A Cucina. University of Arizona Press.
- In prep Belanich, J, C Freiwald, J Yaeger, K Brown, J Awe, H Jordan, etc. The DNA of Maya dental health: Bacteria and the oral microbiome.
- In prep Hoggarth, J, CE Ebert, BJ Culleton, JJ Awe, SFM Breitenbach, C Freiwald, C Helmke, J Walden, RA Guerra, K Green, A McKeown, DJ Kennett. Dynamics of the Maya collapse in the Belize Valley.
- In prep Patterson, E, C Freiwald. Regional population movement in the central lowlands: Isotopes and elements at La Corona and El Perú-Waka'. To be submitted to *Latin American Antiquity*.

OTHER PUBLICATIONS

- Meiggs, DC, & C Freiwald. (2014, 2018). Bioarchaeological approaches to human migration. In *Encyclopedia of Global Archaeology*, edited by A Simon & C Wells, pp. 3583-3545. Springer-Verlag.
- Freiwald, C. Archaeological chemistry. (2010). *Imagine* 18(2):18-19. Johns Hopkins University Center for Talented Youth.
- Freiwald, C. (2007). *Trachte Photo Gallery*. <http://www.madisonpreservation.org/galleries>.
- Clados, C, C Freiwald (Ed.). (2004). *Reconstructing the Pre-Columbian World*.
- Freiwald, C. (2004). Downtown Madison Loses One Building after Another. *Isthmus* 3/5/04.

BOOK ESSAY REVIEWS

- Freiwald, C. (2010). Dietary, Environmental, and Societal Implications of Ancient Maya Animal Use in the Petexbatun: A Zooarchaeological Perspective on the Collapse by Kitty F. Emery. Reviewed in the *SAS Bulletin Newsletter for the Society for Archaeological Sciences* 33(4):28-29.

STUDENT PUBLICATIONS

- Craze, A, M Brandon. (2019). Scanning electron microscopy and elemental analysis of clay from the Copperbelt Province of Zambia. *University of Mississippi Undergraduate Research Journal*.

TECHNICAL REPORTS

- Freiwald, C et al. (2019). Chac II, Becan, Oxkintok, Palenque, Chichen Itza, and Caucel. Submitted to the National Institute of Anthropology and History, Merida, Mexico.
- Freiwald, C. (2019). Xunantunich, San Lorenzo, Buenavista, and Arenal osteology MVPP and MVAP 2018 field report. Submitted to J Yaeger and K Brown, University of Texas at San Antonio.
- Freiwald, C. (2019). Contributor (faunal analysis) to *The Caste War, the San Pedro Maya, and British Honduras* (provisional title). MC Church, JR Yaeger, CA Kray, and RM Leventhal. Colorado University Press.
- Freiwald, C et al. (2019). Reconstructing life histories using DNA and bone chemistry. In *New Salem Cemetery Project*. Center for Archaeological Research (edited by T Boudreaux).
- Freiwald, C. (2018). *Mobility and diet in the Belize River Valley: A resource guide*. Belize Valley Archaeological Reconnaissance Project, edited by C Ebert and J Hoggarth. <https://www.bvar.org>.
- Freiwald, C. (2018). *New interpretations on mobility and diet at Xunantunich and San Lorenzo*. Report submitted to the Mopan Valley Preclassic Project.
- Freiwald, C. (2018). The status of marine shell and other fauna at Actuncan. In *Actuncan Archaeological Project: The 2017 Field Season*, edited by D Mixter. IOA, Belmopan, Belize.
- Freiwald, C. (2018). *Mobility and diet at Chicoloapan Viejo: A preliminary study*. Report submitted to S Clayton, UW-Madison, for the National Science Foundation/INAH, Mexico City, Mexico.
- Freiwald, C, C Dubois-Francoeur, & RA Bigué. (2018). Análisis preliminar de la fauna de Ucanal (Temporada 2016 - 2017). In *Proyecto Arqueológico Ucanal: 3ra Temporada del Campo Año 2017*, edited by Christina Halperin and José Garrido López. IDAEH, Guatemala City, Guatemala.
- Freiwald, C, K Miller, & T Pugh. (2017). *¿Quién está enterrado en la misión San Bernabé? Un estudio de isotópica y biológico de un de las primeras misiones coloniales en el Petén, Guatemala*. IDEAH, Guatemala City, Guatemala.
- Landau, K. with C Freiwald. (2016). *Maintaining the State: Centralized Power and Ancient Neighborhoods in Copán, Honduras*. PhD dissertation, Department of Anthropology, Northwestern University.
- Patterson, E, & C Freiwald. (2016). *Análisis de isótopos estables: Redes de migración: La Corona muestras exportado en 2013 y 2014*. IDEAH, Guatemala City, Guatemala.
- Freiwald, C. (2016). *La fauna de Nixtun Ch'ich'*. IDEAH, Guatemala City, Guatemala.
- Patterson, E, & C Freiwald. (2015). *Análisis de isótopos estables: Redes de migración: El Perú-Waka' muestras exportado en 2013 y 2014*. IDEAH, Guatemala City, Guatemala.
- Freiwald, C, with GT Austin & N Billstrand. (2015). Life and death at Actuncan: An examination of

- burial treatment and taphonomy. In *Actuncan: Report of the 2014 Field Season*, edited by LJ LeCount. IOA, Belmopan, Belize
- Simova, B, with C Freiwald and N Billstrand (2014). Continuing excavations at Structure 73. In *Actuncan: Report of the 2013 Field Season*, edited by LJ LeCount. IOA, Belmopan, Belize.
- Freiwald, C, & N Billstrand. (2014). Burial 11 in Structure 41 at Actuncan, Belize. In *Actuncan: Report of the 2013 Field Season*, edited by LJ LeCount. IOA, Belmopan, Belize.
- Freiwald, C. (2013). Los recursos lacustres y fluviales de Tayasal y la misión San Bernabé. In *Proyecto Arqueológico Tayasal: Informe presentado al Instituto de Antropología e Historia de la cuarta temporada de investigaciones 2012*, edited by T Pugh. IDEAH, Guatemala City, Guatemala.
- Mixter, D, & C Freiwald. (2013). Excavations at Group 8. In *Actuncan: Report of the 2012 Field Season*, edited by LJ LeCount. IOA, Belmopan, Belize.
- Freiwald, C, & D Micklin. (2013). Burial practices at Group 1. In *Actuncan: Report of the 2012 Field Season*, edited by LJ LeCount. IOA, Belmopan, Belize.
- Freiwald, C. (2013). Recording and excavation techniques for comingled burials. In *Actuncan: Report of the 2012 Field Season*, edited by LJ LeCount. IOA, Belmopan, Belize.
- Freiwald, C. (2012). Appendix VI: Human skeletal remains, independent report #5. In *The Integration and Disintegration of Ancient Maya Urban Centres: Charting Households and Community at Buenavista del Cayo, Belize*, pp. 664-668. PhD dissertation by M Peuramaki-Brown, Department of Anthropology, University of Calgary.
- Freiwald, C. (2012). Osteological and contextual analysis of Callar Creek human remains from Structure 14. Report submitted to S. Kurnick for dissertation research.
- Freiwald, C. (2012). Woodland faunal use at 21CP68, Montevideo, MN. Report of 2011 excavations by Great Lakes Archaeological Research Center, edited by J. R. Haas.
- Freiwald, C. (2011). Plains Woodland subsistence strategies at Site 32RY473, Ramsey County, North Dakota. In *Phase III Mitigation for Archaeological Site 32RY473, Ramsey County, North Dakota*, edited by J. R. Haas.
- Freiwald, C. (2012). Actuncan burials: The 2011 field season. In *Actuncan 2011 Field Report*, edited by L LeCount and A Keller. IOA, Belmopan, Belize.
- Freiwald, C. (2011). Cambios y estabilidad en el uso de animales en Tayasal: Resultados iniciales. In *Proyecto Arqueológico Tayasal: informe preliminar presentado al Instituto de Antropología e Historia de Guatemala*, edited by Timothy Pugh. IDAEH, Guatemala City.
- Freiwald, C. (2008). City of Madison Landmark Nomination: Schubert Building (1908). <http://legistar.cityofmadison.com/attachments/23fdd85c-6928-4c22-985a-8303f2b7cb2a.pdf>.
- Freiwald, C. (2005). City of Madison Landmark Nomination: Suhr Building (1885-1887). http://www.cityofmadison.com/planning/landmark/nominations/166_125StateStreet.pdf.

FELLOWSHIPS, AWARDS, AND GRANTS

- Pending ORSP-MRI-Proposal *Acquisition of Isotopic and Gas Concentration Analyzers for the Mid-south United State*. PI J Cizdziel. Senior Personnel C Freiwald et al.
- Pending CONACYT Ciencia de Frontera 2019 CF-MG-20191007101357254-61256 Comprendiendo la experiencia sensorial de los Mayas antiguos y modernos. Nueve estudios arqueométricos de compuestos orgánicos alimenticios y fragantes. The archaeometry of the senses, PI: V Tiesler. Foreign participant C Freiwald et al.
- 2020 University of Mississippi Critical Thinking Redesign faculty development (team) grant (\$4,000)
- 2019 University of Mississippi College of Liberal Arts Mike L. Edmonds New Scholar Award (\$1,000)
- 2019 SMBHC summer stipend, *Human Mobility* course (\$5,000)
- 2019 Excellence in Community Engagement Award Recipient (\$5,000), PI J Skipper
- 2016-2018 SSHRC Insight Grant (\$96,632) Cosmopolitanism in the wake of Classic Maya political collapse: Ucanal, Petén, Guatemala. PI C Halperin, Senior Personnel C Freiwald et al.

- 2018 University of Mississippi travel grant (\$700)
- 2017 University of Mississippi Summer Research Grant (\$7,860) DNA of paleopathogens to identify diseases among the ancient Maya
- 2015 Hurricane Creek, MS faunal analysis (\$2,491) Co-PI Jay Johnson. Zooarchaeological analysis of Mississippian-era mound site remains
- 2015 University of Mississippi ORSP Investment Grant (\$4,239) Archaeological chemistry: Identifying migration and trade in Mesoamerica
- 2015 University of Mississippi Summer Research Grants (\$9,412) Tayasal Archaeological Project in Guatemala analyses of marine fauna
- 2014 Graduate Women in Science Nell Mondy Fellowship (\$8,525) Migration, diet, and dynasty at the sites of La Corona and El Perú -Waka', Guatemala
- 2014 OSRP Faculty Travel Support Grant (\$1,500) International Council of Archaeozoology Conference, San Rafael, Argentina
- 2014 University of Mississippi Summer Research Grants (\$9,412) Tayasal Archaeological Project changing catchments and culinary patterns before, during, and after the arrival of the Spanish
- 2013-2014 Southeastern Conference Faculty Travel Grant (\$1000) University of Florida Department of Anthropology zooarchaeology research and bioarchaeology presentation
- 2010-2012 National Science Foundation Grant # BCS 0917918 Senior Personnel. Principal Investigator T Pugh Pathways of power and the Colonial process in the Petén, Guatemala
- 2009-2010 UW-Madison College of Letters and Sciences Teaching Fellow
- 2009-2010 SDE/GWIS Eloise Gerry Fellowship Sigma Delta Epsilon Graduate Women in Science national research scholarship
- 2009-2010 UW-Madison Vilas International Travel Award (\$1000)
- 2008-2009 Ruth Dickie Scholarship (SDE-GWIS) UW-Madison Graduate Women in Science research scholarship
- 2007 Miller Prize in Anthropology, UW-Madison
- 2006-2009 UW-Madison Anthropology Department Travel Grant
- 2005 Nave Summer Research Grant, isotopic baseline information Chiapas, Mexico
- 2003-2005 Foreign Language and Area Studies fellowships (FLAS, Spanish, Yucatec Maya)

GRADUATE STUDENT GRANTS

- 2019 Graduate Student Research Grant (\$1,000) Rachel Smith
- 2019 Graduate Student Research Grant (\$1,000) Jacob Harris
- 2019 Summer Graduate Research Assistantship (\$2,500) Jacob Harris
- 2016 Summer Graduate Research Assistantship (\$2,500) Stephanie Orsini
- 2015 Graduate Student Research Grant (\$1,000) Spencer Oliver
- 2014 Graduate Student Research Grant (\$1,000) Nicholas Billstrand

FIELD PROJECTS

- 2016-present Mopan Valley Archaeological Project (J Yaeger), Mopan Valley Preclassic Project (MK Brown) Osteologist
- 2015-present Proyecto Arqueológico Ucanal (C Halperin) Zooarchaeologist
- 2009-present Proyecto Arqueológico Itza (T Pugh) Postclassic Period zooarchaeology
- 2014-present Holly Springs Craft House and Chalmer's Institute excavations (with J Skipper)
- 2011-present Actuncan Archaeological Project, Belize (L LeCount) Osteologist
- 2007-2008 Belize Summer Field Program in Maya Archaeology (J Yaeger) Field Director
- 2003-2005 Fårevejle and Dragsholm, Denmark (TD Price) Archaeologist
- 2003 Xunantunich Palace Excavations, Xunantunich, Belize. PI: J Yaeger

2001 Miercurea Project, Transylvania, Romania field school Director: A Gonciar

2000 Ometepe Archaeological Project, Nicaragua petroglyph survey. PIs S Baker, J Martin, M Smith

INVITED PRESENTATIONS

2013-2020 University of Wisconsin–Madison (February 2013, March 2014-2016, UW-Madison Medical School) *The people and history of Belize*

2019 Departments of Geological Sciences and Anthropology, University of North Carolina at Chapel Hill Isotopes and Archaeology: Migration, trade, and warfare in Mesoamerica (Oct. 9, 2019)

2019 Department of Anthropology Brown bag talk, UW-Madison Isotopes and Archaeology: Migration, trade, and warfare in Mesoamerica (Nov. 8, 2019)

2016 Graduate Women in Science National Conference (June 25, 2016). Senior thesis student poster (A Leavitt, C Freiwald, E Patterson, P Fullagar, D Dettman, TD Price)

2016 UM/UMMC Research Day (March 6, Jackson, MS) 3-minute research presentation

2015 Maya week at The University of Southern Mississippi (Oct. 1, Hattiesburg, MS) Migration, culture change, and the arrival of the Spanish in the last independent Maya Kingdom

2015 UM-Mississippi State 2nd annual Anthropology Lecture Series (March 2015, Starkville, MS) *Maya burials and beliefs: Funerary treatment in a Classic Maya household*

2015 Archaeological Institute of America Annual Meeting (Jan. 2015, New Orleans) *Mapping Maya migration networks during the Classic Period*

2014 Tulane Maya Symposium and Workshop, Middle American Research Institute (Feb. 2014) On the Maya trail: Ancient traveler's, epic voyages. *Mapping Maya Migration Networks during the Classic Period*

2013 Fall 2013 Anthropology Program DCS Sponsored Archaeology Talk (Oct. 2013, CUNY Graduate Center, New York). *Burial customs of the Classic Maya: A 1300-yr- old burial ground at Actuncan, Belize*

2013 University of Mississippi Department of Sociology and Anthropology Fall Lecture Series (Oct. 2013, University, MS) *Burial customs of the Classic Maya: A 1300 yr-old household burial ground at Actuncan, Belize*

2013 Rochester Institute of Technology (Jan. 2013, Rochester, NY) *Maya migration networks: Reconstructing population movement in the Belize River Valley during the Late and Terminal Classic*

2012 Washington University in St. Louis (Dec. 2012, St. Louis, MO) *Maya migration networks: Reconstructing population movement in the Belize River Valley during the Late and Terminal Classic*

2011 University of Mississippi Department of Anthropology (Dec. 2011, Oxford, MS) *Maya migration networks: Reconstructing population movement in the Belize River Valley during the Late and Terminal Classic*

2011 UW-Madison Department of Anthropology Brown Bag Lecture Series (Sept. 2011) *Sitio arqueológico Tayasal: The Itzá Maya, Spanish animals, and archaeology in Guatemala*

2005 Anthrocircle Spring Seminar (April 2005, Madison, WI) *Reconstructing Classic Maya Animal Use: A Zooarchaeological Study from Belize*

CONFERENCE PRESENTATIONS

2020 Chicoloapan symposium (Feb. 19-23, Madison, WI)

2019 III Simposio Internacional de los Mayas en Japón. Okayama University, Japan (Dec. 10-16, 2019) *Baseline strontium isotope ratios in Mesoamerica* Freiwald, C, TD Price.

2019 *Archaeology meets archaeometry*. Worked Bone Research Group, International Council on Zooarchaeology (Oct. 7-9, 2019) *Bone tool production at Ucanal, Guatemala*. Freiwald, C, C Dubois-Francoeur, J Harris, C Halperin

2019 Early Urbanism, Land Use, and Community Life: Archaeological and Paleoenvironmental Research

- at Chicoloapan symposium (May 5-12, Paris, France) *Epiclassic diet and origin at Chicoloapan Viejo*. Freiwald, C, S Weeden
- 2019 Society for American Archaeology, Albuquerque, NM. Freiwald, C Crossing Borders (session co-organizer) What Isotope Geochemistry Reveals about the Ancient Maya; Dani-Flynn, Y, K Miller Wolf, C Halperin, C Freiwald *Isotopic Analysis and Social Identities from Classic Period (ca. 300-900 CE) Burials at the Maya Site of Ucanal, Petén, Guatemala*; Lytle, W, R Horowitz, C Freiwald and MK Brown *Ritual Deposits within the Eastern Pyramidal Structure at Group D, Xunantunich – Belize; The Undiscussed Paperwork of Archaeology: Applications, Waivers, and Contracts*
- 2018 Bioarchaeology Symposium, Universidad autonoma de Yucatan (Oct. 30-Nov. 4, 2018, Merida, Mexico) Freiwald C. *Esmalte, huesos, e isótopos: estudios en la química arqueológica*
- 2018 Belize Archaeology Symposium (June 26-29, 2018, San Ignacio, Belize) Freiwald et al. *Mobility and Molecules among the Maya of the Belize Valley: New Techniques, New Knowledge, and New Directions*
- 2018 Society for American Archaeology annual meeting (April 2018, Washington, DC) Alsgaard et al. *Hunter Gatherer Archaeology*, Freiwald et al. *Palimpsest urbanism*, Ebert et al. *Using Stable Isotopes to Explore Ancient Farming and Herding Practices*, Patterson, E, C Freiwald, *La Corona Archaeological Project*
- 2017 South Central Maya Conference (October 2017, New Orleans, LA) *The Biogeochemistry of San Bernabe* (with K Miller Wolf).
- 2017 Society for American Archaeology annual meeting (March 2017, Vancouver, BC) Session organizer (with K Miller Wolf) *Curating the Past: The Practice and Ethics of Skeletal Conservation*. Paper presented (with L Halverson) *A step-by-step Guide to Excavating Burials, or how a Bioarchaeologist can be in Two (or Three) Places at Once*.
- 2016 Society for American Archaeology annual meeting (April 2016, Orlando, FL) Freiwald, C, T Pugh. *Strontium Isotope Values for Early Colonial Cows at San Bernabe, a Spanish Mission in the Peten Lakes Region of Guatemala*. Patterson, E, and C Freiwald. *Mobility in the Central Maya Lowlands: Strontium, Oxygen, and Carbon Isotope Values from La Corona and El Perú-Waka’*. Orsini, S, C Freiwald, K Prufer. *Changing Food Choices from Paleoindian to Classic Maya Periods: A Zooarchaeological Analysis*. Austin, TG, C Freiwald, H Niles, T Pugh. *Animal Use at Nixtun-Ch'ich': Preclassic Canids, Postclassic Crocodiles, and Contact Period Cows*
- 2015 Intercontinental Conference of the Americas (July 2015, San Salvador) *Identity and Migration in the Belize Valley during the Classic and Postclassic Periods*. J Hoggarth, C Freiwald, J Awe
- 2015 Simposio de Investigaciones Arqueológicas en Guatemala (July 2015, Guatemala City) Patterson, E, C Freiwald. *Migraciones regionales en las Tierras Bajas Centrales: nuevos valores de isótopos de estroncio en La Corona y El Perú-Waka’*.
- 2015 Society for American Archaeology annual meeting (April 2015, San Francisco, CA) Freiwald, C, K Miller, T Pugh. *The Effect of Missionization on the Itza Maya from Isotopic and Biodistance Evidence*.
- 2015 The Midwest Conference on Mesoamerican Archaeology and Ethnohistory (March 2015, Murfreesboro, TN) *Burial Practices in the Americas: Funerary Treatment and Taphonomy in a Classic Maya Household*.
- 2014 12th International Council on Archaeozoology (Sept. 2014, San Rafael, Argentina) Freiwald, C, MK Brown. *Preclassic Animal Use at Blackman Eddy, Belize*
- 2014 Society for American Archaeology annual meeting (April 2014, Austin, TX) *Using Multivariate and Quantitative Methods for Understanding Diachronic Change: Classic to Postclassic Household and Community Dynamics at Baking Pot, Belize* (Hoggarth, J, C Freiwald, A Novotny, J Awe); *Mobility and Migration over Mesoamerica in Classic and Postclassic Times* (Freiwald, C, K Miller, TD Price, J Burton, P Fullagar, C Wells); *Recent Work at Nixtun Ch'ich' and Tayasal, Peten, Guatemala* (Shiratori, Y, C Freiwald, T Pugh)
- 2013 American Anthropological Association annual meeting (Nov. 2013, Chicago) *The Meaning of Maya*

- Migration: Bone Chemistry and Burial Treatment in the Eastern Lowlands.*
- 2013 Belize Archaeology and Anthropology Symposium (July 2013, San Ignacio, Belize) *An Actuncan Burial Ground: A Biocultural Analysis of Funerary Treatment and Taphonomy.*
- 2013 Society for American Archaeology annual meeting (April 2013, Honolulu, HI) *Urban and Rural Population Movement Patterns during the Late and Terminal Classic in the Belize River Valley.*
- 2013 American Chemical Society national meeting (April 2013, New Orleans, LA) Miller, K, C Freiwald, *Identifying Ancient Population Movement in Honduras using Strontium and Oxygen Isotopes: New Values and Interpretations.*
- 2012 Society for American Archaeology annual meeting (April 2012, Memphis) Freiwald, C, S Ambrose. *Adult and Childhood Diet in the Belize River Valley: Classic Maya Dietary Differences Seen through Isotope Assays.*
- 2011 Society for American Archaeology annual meeting (April 2011, Sacramento) Freiwald, C, J Yaeger, J Awe, C Helmke, J Garber, J Piehl. *Local Nobility, Imported Ceramics: Isotopic Insights into Mortuary Treatment and Political Authority in the UBRV.*
- 2010 American Anthropological Association annual meeting (Nov. 2010, New Orleans) *Reconstructing Population Movement in the Belize River Valley during the Late and Terminal Classic: An Isotopic and Contextual Model of Ancient Maya Migration.*
- 2010 11th International Council for Zooarchaeology (Aug. 2010, Paris) Freiwald, C, J Yaeger, TD Price, JH Burton. *Late Classic Maya Resource Management: A Case Study from the Belize River Valley; Zooarchaeology in Modern Settings: The Life and Death of the Galapagos Sea Lion (Z. wollebaeki).* Poster, with EE Pilleart
- 2010 Belize Archaeology Symposium (July 2010, Belize City) *Population Movement in the Belize River Valley: An Isotopic Analysis of Migration and its Meaning among the Late Classic Maya.*
- 2010 Central States Anthropological Society (March 2010, Madison, WI) *Identity and Population Movement in the Belize River Valley: A Contextual and Isotopic Analysis of Migration and its Meaning among the Late Classic Maya*
- 2010 Society for American Archaeology annual meeting (April 2009, Atlanta) *Identity and the Non-Local Population of Xunantunich, Belize: A Contextual Isotopic Analysis*
- 2009 Belize Archaeology Symposium (July 2008, Belize City) *Complex Ecologies: Human and Animal Response to Ancient Change in Central Belize.* Co-author J. Yaeger
- 2008 Society for American Archaeology annual meeting (March 2008, Vancouver) Poster session: *Classic Maya Migration Networks: Methods for Studying Population Movement in Belize.* Co-author TD Price
- 2007 Chacmool Conference (Nov. 2007, University of Calgary) *Mobile Maya Menus: Complications in Interpreting Classic Period Diet*
- 2007 Society for American Archaeology annual meeting (April 2007, Austin) *Identifying Environmental and Hunting Practices in the Upper Belize River Valley*
- 2007 Midwest Mesoamerican Conference (March 2007, Chicago) *Colonialism and Integration: A Zooarchaeological Analysis of the Subsistence Practices of the San Pedro Maya*
- 2006 International Council for Zooarchaeology (August 2006, Mexico City) *Interpreting Missing Patterns: Maya Zooarchaeology from Xunantunich, Belize; Identifying Environmental and Hunting Practices at San Lorenzo, Belize using Strontium, Carbon, and Oxygen Isotopes* (with co-author J Yaeger)
- 2005 Midwest Mesoamerican Conference (March 2005, Bloomington, IN) *An Interpretation of Faunal Remains at Group B, Xunantunich: A Preliminary Report*

CORE CURRICULUM

- ANTH 101 Introduction to Anthropology
 ANTH 304 Introduction to Biological Anthropology
 ANTH 405 Human Osteology
 ANTH 311 Archaeological Science

ANTH 320 Archaeozoology: Animal Use in History
 ANTH 326 Archaeology of Maya Civilization
 ANTH 351 Human Mobility: Studies in Migration
 ANTH 607 Introduction to Biocultural Anthropology

STUDENT ADVISING

Ph.D. Candidates
 Memorial University, Newfoundland: Co-supervisor Asta Rand (2021) *Modeling a Sulfur Baseline in Mesoamerica for Diet and Migration*
 University of Texas at San Antonio: Committee member Whitney Lytle (Anthropology, 2020) *A Diachronic Approach to the Sociopolitical Role of Ancestor Veneration at Xunantunich, Group D*
 Washington University: committee member Diana Fridberg (2015) *Classic Maya Human-Animal Relations at El Perú-Waka' and La Corona, Northwest Petén, Guatemala*
 University of Mississippi Master's degree advisor:
 Rachel Smith (2020) *Isotopic Analysis of Human Migration among the Ancient Maya of Ambergris Caye, Belize*
 Jacob Harris (2020) *Maya Bone Tool Technologies at Ucanal, Guatemala*
 Caitlin Stewart (2019) *Minimum Number of Individuals: A Methodological Comparison using Human Remains from Caves Branch Rockshelter in the Cayo District of Belize*
 Stephanie Orsini (2016) *Paleoindian to Postclassic Zooarchaeological Analysis of Bladen, Belize Faunal Assemblage*
 Nicholas Billstrand (2016) *Linearly Stressed to Death: Early Childhood Stress as a Contributor to Regional Variability in Late and Terminal Classic Maya Mortuary Profiles*
 Morgan Isaacs (2016) *Dating Techniques at Caves Branch, Belize*
 Hanna Stewart (2014) *From the Mouths of Mississippians: Determining Biological Affinity between the Oliver Site (22-Co-503) and the Hollywood Site (22-Tu-500)*
 Whitney Broughton (2014) *Childhood Growth in an Oneota Community: Examining Long Bone Growth Differences in the Juveniles at Norris Farms 36*
 University of Mississippi Master's degree committee: Paul Martin (August 2015) *Evaluation of Geophysical Methods in the Detection of Toddler Sized Burials within the First Six Months of Burial*
 Trent University Master's degree committee: Arienne Boileau (2014) *Maya Exploitation of Animal Resources during the Middle Preclassic: An Archeozoological Analysis from Pacbitun, Belize*
 University of Texas at Arlington committee: Destiny Micklin (May 2015) *Using Isotope Analysis to Understand the Interaction between Migration and Burial at the Eastern Structure of Group 1 at Actuncan, a Maya Archaeological Site in Belize*
 Forensic Chemistry/Honors College thesis undergraduate project supervisor:
 Skyler McCoy (2020) *aDNA of the Ancient Maya Microbiome at Xunantunich and San Lorenzo, Belize*
 Sloan Weeden (2020) *Epiclassic Mobility and Diet at Chicoloapan Viejo, Valley of Mexico*
 Forensic Chemistry undergraduate projects
 Mina Brandon (2020) *Compound Analysis of Edible Clays via X-ray Diffraction*
 Amelia Craze (2019) *Bioavailable lead in edible clays (provisional title)*
 Rebecca Pfeiffer (2017) *Isotope Geochemistry of Maya Dogs*
 Acacia Leavitt (2016) *Identifying Migration Using Elemental and Isotopic Variables from El Perú-Waka' and La Corona, Guatemala*
 Shelby Hilton (2016) *Finding Patterns of Migration from Elemental Analysis of Tooth Enamel*
 Jasmine Cross (2016) *Isotopic and Elemental Analysis of Tooth Enamel at the Maya site Cahal Pech, Belize*
 Lindsay Brown and Kendall Wontor (2016) *Developing a Method of RNA Extraction in Teeth*

for the Purpose of Sex Determination, with Dr. Murrell Godfrey

Heidi Witteveen (2014) *Modern and Ancient DNA Techniques: Extracting DNA from Actuncan, Belize Tooth Dentin*, with Dr. Murrell Godfrey

Melissa Quartarone (2014) *The Potential uses for Trace Element Analysis of Tooth Enamel in Past Populations*

Honors Thesis committee: Alexandra Gochenauer (2017) *An Analysis of the Jaketown (22HU505) Collection at The University of Mississippi*

PROFESSIONAL SERVICE

Feb. 2021 TED featured talk go.ted.com/carolynfreiwald

Sept-Oct 2020 *Migrants in the Mid-South*. University of Mississippi library display

Sept. 2020 *Archaeological Science: Our Teeth Tell (Migration) Tales*. Science Café, with L O'Donnell

Oct. 2020 Hispanic Heritage Month Celebration: A showcase of research presentations

Feb. 2020 TEDx University of Mississippi Speaker [The Story of Human Migration: Your Life in a Tooth](#)

April 2019 Sheegog Plantation tour/history of slavery tour development

April 2018-20 Behind the Big House, Holly Springs, MS

April 2018 Campus tour/history of slavery with Leigh McWhite and Andrew Marion

April 2018-19 Slave Dwelling Project sleepover at Rowan Oak, with History, African American Studies, and Anthropology department undergraduates and Joseph McGill

Oct. 2017 This is your life, in a tooth. Science Café, Oxford, MS.

Oct. 2017 Campus Twilight Tour, University of Mississippi library and historic architecture tour

Sept. 2017 Angela Dassow (Carthage College) Memphis Zoo research trip and campus event

Feb. 2017 Maya Week with A Tokovinine (University of Alabama), K Miller Wolf, M Wolf (East Indiana University)

Feb. 2016 UM Slavery Research Group Joseph McGill campus visit

Spring 2016 Reviews for Graduate Women in Science and UM ORSP IG Round 2 research grants

Nov. 2015 Drs. Zachary Throckmorton (LUM) and Juliet Brophy (LSU) Meet *Homo naledi*

2009-2010 Graduate Women in Science, UW-Madison Beta Chapter Scholarship seminar competition

2005-2008 UW-Madison Zoological Museum, Zooarchaeology instructor and collections staff (including Dermestid beetle colony management)

2004-2005 Geology Museum, University of Wisconsin–Madison, volunteer

2002-2003 Anthropology Brown Bag lunch series lecture co-organizer

NON-ACADEMIC PROFESSIONAL EXPERIENCE

1998-2011 Deloitte Consulting/Proby Solutions, Software testing manager

2002 Hudson Institute, consultant

1995-1997 State of Wisconsin, Public assistance program policy and software specialist

1990-1995 Dane County Human Services, Public assistance case worker

PROFESSIONAL MEMBERSHIPS

Society for American Archaeology (SAA), American Association of Physical Anthropologists (AAPA), International Council for Archaeozoology (ICAZ), Graduate Women in Science (GWIS-Beta Chapter), American Association of University Women (AAUW)