

**Carolyn Freiwald, Ph.D.**  
Curriculum Vitae September 2019

Assistant Professor of Anthropology  
Department of Sociology and Anthropology  
University of Mississippi  
544 Lamar, P.O. Box 1848  
University, MS 38677-1848

crfreiwa@olemiss.edu  
608-770-1408

**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, Spanish 101 Instructor
- 2009-2010 University of Wisconsin-Madison, Department of Anthropology teaching assistant trainer
- 2008 University of Wisconsin-Madison, Department of Spanish and Portuguese Spanish language instructor
- 2003-2006 University of Wisconsin-Madison, Department of Anthropology Teaching assistant

**PUBLICATIONS**

**Peer-reviewed books and journals**

- 2019 Price, TD, V Tiesler, and C Freiwald. Origins of the sacrificial victims in the Sacred Cenote, Chichén Itzá, Mexico. *American Journal of Physical Anthropology*. doi.org/10.1002/ajpa.23879
- 2019 Freiwald, C, A Novotny, K Green Mink. Mobility among the Maya of the Belize Valley. *Research Reports in Belize Archaeology* 16:91-100.

- 2019 Lytle, W, Brown, MK, R, Horowitz, C Freiwald. Late Classic burials and eccentric caches from Structure D-6 at Xunantunich. *Research Reports in Belize Archaeology* 16:123-132.
- 2019 Freiwald, C, K Miller Wolf (guest editors) 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. doi:10.1017/aap.2018.48.
- 2019 Freiwald, C. Excavation and curation strategies for complex burials in tropical environments. In *Curating the Past: The Practice and Ethics of Skeletal Conservation* Special Issue of *Advances in Archaeological Practices* 7(1):10-22. doi:10.1017/aap.2018.43.
- 2019 Powless, P, C Freiwald. The challenges of dealing with multiple sets of human remains in the cultural resource management setting where tribal resources are limited. In *Curating the Past: The Practice and Ethics of Skeletal Conservation* Special Issue of *Advances in Archaeological Practices* 7(1):55-59. doi:10.1017/aap.2018.44
- 2018 Miller Wolf, K, C Freiwald. Re-interpreting ancient Maya mobility: A strontium isotope baseline for western Honduras. *Journal of Archaeological Science: Reports* 20:799-807.
- 2018 Rice, P, A Boileau, L Cecil, S deFrance, C Freiwald, N Meissner, T Pugh, D Rice, M Yacubic. Zacpetén Structure 719: Activities at a Contact Period *Popol Nah* before rapid abandonment. *Ancient Mesoamerica* 29:137-155.
- 2018 Freiwald, C, T Pugh. 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 Paleoecology* 23(1):278-284.
- 2017 Awe, J, CE Ebert, C Freiwald, K Green. The dead do tell tales: Unraveling the case of Cahal Pech's Jane or John Doe. *Research Reports in Belizean Archaeology* 14:213-225.
- 2017 Wrobel, GD, C Freiwald, S Gibbs, A Michaels, J Awe. Social identity and geographic origin of Maya burials at Actun Uayazba Kab, Roaring Creek Valley, Belize. *Journal of Anthropological Archaeology* 45:98-114.
- 2016 Pugh, TP, K Miller, C Freiwald, PM Rice. Technologies of domination at Mission San Bernabé, Petén, Guatemala. *Ancient Mesoamerica* 27(1):49-70.
- 2016 Patterson, E, C Freiwald. 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.
- 2014 Wrobel, G, C Helmke, C Freiwald, J Awe. 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.
- 2014 Freiwald, C, J Yaeger, J Awe, J Piehl. 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.
- 2014 Freiwald, C, DW Mixter, N Billstrand. 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.
- 2011 Freiwald, C. 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.
- 2010 Freiwald, C. 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.
- 2009 Yaeger, J, C Freiwald. Complex Ecologies: Human and Animal Responses to Ancient Landscape Change in Central Belize. *Research Reports in Belizean Archaeology* 8:83-92.

### **Publications in progress**

- In press Yaeger, J, C Helmke, MK Brown, M Zender, B Cap, C Freiwald. A shell gorget from Feature 384-2 at Buenavista del Cayo, Belize. *Mexicon*.
- In press Freiwald, C. 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.
- In press Hoggarth, J, C Freiwald, J Awe. 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.
- In press Freiwald, C, B Woodfill, R Mills. An isotopic investigation of salt and its implications for exchange and mobility in Mesoamerica. *Journal of Archaeological Science: Reports*.
- Accepted Price, TD, V Tiesler, P Zabala, A Coppa, C Freiwald, H Schroeder, A Cucina. Home is the Sailor. Investigating the Origins of the Inhabitants of La Isabela, the First European settlement in the New World. *Current Anthropology*.
- Accepted Migration and mobility among the ancient Maya. In *The Maya World*, edited by S Hutson and T Ardren. Routledge Press. Book in review.
- Accepted Brown, MK, C Freiwald. Potluck: Building community and feasting amongst the Middle Preclassic Maya. In *From Feast to Famine*, edited by Traci Ardren. University of Texas Press. Book in review.
- In revision Freiwald, C. The Biogeochemistry of childhood diet and migration among the Maya. In *Exploring Human Behavior through Isotope Analysis: Applications in Archaeological Research*, edited by A Somerville and M Beasley. Springer Press.
- In review Hoggarth, JA, C Freiwald, CE Ebert, C Helmke, JJ Awe, K Green, P Powless, and AH McKeown. 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 Braswell and VV Aquino. Routledge Archaeology of the Ancient Americas Series.

- In review Hughes, C, J Lindo, T Pugh, C Marshall, R Malhi, KA Miller Wolf, C Freiwald. 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.
- In review Freiwald, C. 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.
- In prep Dassow, A, C Freiwald. A day in the life of a Memphis Zoo gorilla.
- In prep Freiwald, C, K Miller Wolf, T Pugh, P Rice, R Mills, D Dettman. Reconstructing resettlement at Mission San Bernabé. To be submitted to *PLoS ONE*.
- 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. To be submitted to *Nature*.
- In prep Patterson, E, C Freiwald. Regional Population Movement in the Central Lowlands: Isotopes and Elements at La Corona y El Perú-Waka'. To be submitted to *International Journal of Osteoarchaeology*.
- In prep Special edition of *Ancient Mesoamerica* from 2019 SAA session on ancient borders in the Maya region. Introduction and isotopic migration article planned.

### Other publications

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

### Book essay reviews

- 2010 C. Freiwald. 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

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

### Technical Reports

- June 2019 Chac II, Becan, Oxkintok, Palenque, Chichen Itza, and Candel. Tiesler et al. report to submit to the National Institute of Anthropology and History. Merida, Mexico.

- June 2019 Xunantunich, San Lorenzo, Buenavista, and Arenal osteology MVPP and MVAP 2018 field report. PIs J Yaeger and K Brown.
- August 2018 Ucanal faunal report 2018. PI C Halperin.
- August 2018 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.
- July 2018 Freiwald, C et al. Reconstructing life histories using DNA and bone chemistry. In *New Salem Cemetery Project*. Center for Archaeological Research (edited by T Boudreaux).
- May 2018 Freiwald, C. *Mobility and diet in the Belize River Valley: A resource guide*. Report submitted to the Belize Valley Archaeological Reconnaissance Project, edited by C Ebert and J Hoggarth.
- May 2018 Freiwald, C. *New interpretations on mobility and diet at Xunantunich and San Lorenzo*. Report submitted to the Mopan Valley Preclassic Project.
- May 2018 Freiwald, C. The status of marine shell and other fauna at Actuncan. In *Actuncan Archaeological Project: The 2017 Field Season*, edited by D Mixter. Report submitted to the Belize Institute of Archaeology, May 2018.
- March 2018 *Mobility and diet at Chicoloapan Viejo: A preliminary study*. Report submitted to S Clayton, UW-Madison, for the National Science Foundation/INAH.
- Feb. 2018 Freiwald, C, C Dubois-Francoeur, RA Bigué. 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. Report submitted to the Dirección General de Patrimonio Cultural y Natural, Guatemala City, Guatemala.
- Oct. 2017 Freiwald, C, K Miller, T Pugh. *¿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*. Report submitted to the Instituto de Antropología e Historia (IDEAH), Guatemala City, Guatemala.
- May 2016 Landau, K. with contribution by C Freiwald. 2016. *Maintaining the State: Centralized Power and Ancient Neighborhoods in Copán, Honduras*. PhD dissertation, Department of Anthropology, Northwestern University.
- Feb. 2016 Patterson, E, C Freiwald. *Análisis de isótopos estables: Redes de migración: La Corona muestras exportado en 2013 y 2014*. Report submitted to the Instituto de Antropología e Historia (IDEAH), Guatemala City, Guatemala.
- Jan. 2016 Freiwald, C. *La fauna de Nixtun Ch'ich'*. Report submitted to the Instituto de Antropología e Historia (IDEAH), Guatemala City, Guatemala.
- Dec. 2015 Patterson, E, C Freiwald. *Análisis de Isótopos Estables: Redes de Migración: El Perú-Waka' Muestras Exportado en 2013 y 2014*. Report submitted to the Instituto de Antropología e Historia (IDEAH), Guatemala City, Guatemala.
- 2015 Freiwald, C, with contributions by GT Austin and N Billstrand. Life and death at Actuncan: An examination of burial treatment and taphonomy. In *Actuncan: Report of the 2014 Field Season*, edited by LJ LeCount. Report on file at the Belize Institute of Archaeology, Belmopan.
- 2014 Simova, B with contributions by C Freiwald and N Billstrand. Continuing Excavations at Structure 73. In *Actuncan: Report of the 2013 Field Season*, edited by LJ LeCount. Report on file at the Belize Institute of

- Archaeology, Belmopan.
- 2014 Freiwald, C, N Billstrand. Burial 11 in Structure 41 at Actuncan, Belize. In *Actuncan: Report of the 2013 Field Season*, edited by LJ LeCount. Report on file at the Belize Institute of Archaeology, Belmopan.
- 2013 Freiwald, C. 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. Report on file at the Instituto de Antropología e Historia (IDEAH), Guatemala City, Guatemala.
- 2013 Mixter, D, C Freiwald. Excavations at Group 8. In *Actuncan: Report of the 2012 Field Season*, edited by LJ LeCount. Report on file at the Belize Institute of Archaeology, Belmopan.
- 2013 Freiwald, C, D Micklin. Burial Practices at Group 1. In *Actuncan: Report of the 2012 Field Season*, edited by LJ LeCount. Report on file at the Belize Institute of Archaeology.
- 2013 Freiwald, C. Recording and Excavation Techniques for Comingled Burials. In *Actuncan: Report of the 2012 Field Season*, edited by LJ LeCount. Report on file at the Belize Institute of Archaeology.
- 2012 Freiwald, C. 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. Ph.D. dissertation by M Peuramaki-Brown, Department of Anthropology, University of Calgary.
- Oct. 2012 Freiwald, C. Osteological and contextual analysis of Callar Creek human remains from Structure 14. Report submitted to S. Kurnick for dissertation research.
- Jan. 2012 Freiwald, C. Woodland faunal use at 21CP68, Montevideo, MN. Report of 2011 excavations by Great Lakes Archaeological Research Center, edited by J. R. Haas.
- Dec. 2011 Freiwald, C. 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.
- 2012 Freiwald, C. Actuncan burials: The 2011 field season. In *Actuncan 2011 Field Report*, edited by L LeCount and A Keller. Report submitted to the Belize Institute of Archaeology, Belmopan, Belize.
- Sept. 2011 Freiwald, C. 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. Report submitted to the Guatemala Institute of Anthropology and History, Guatemala City.
- 2008 Freiwald, C. City of Madison Landmark Nomination: Schubert Building (1908). <http://legistar.cityofmadison.com/attachments/23fdd85c-6928-4c22-985a-8303f2b7cb2a.pdf>.
- 2005 Freiwald, C. City of Madison Landmark Nomination: Suhr Building (1885-1887).

[http://www.cityofmadison.com/planning/landmark/nominations/166\\_125StateStreet.pdf](http://www.cityofmadison.com/planning/landmark/nominations/166_125StateStreet.pdf).

## FELLOWSHIPS AND AWARDS

- |           |   |
|-----------|---|
| 2019      | University of Mississippi College of Liberal Arts Dr. Mike L. Edmonds New Scholar Award (\$1,000)   |
| 2019      | SMBHC summer stipend, <i>Human Mobility</i> 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 Principal Investigator C Halperin, Senior Personnel C Freiwald et al. (zooarchaeology).   |
| 2018      | University of Mississippi travel grant (\$700).   |
| 2017      | University of Mississippi Summer Research Grant (\$7,860)<br>DNA of paleopathogens to identify diseases among the ancient Maya.   |
| 2015      | Hurricane Creek, MS faunal analysis (\$2,491) Co-PI Jay Johnson<br>Zooarchaeological analysis of Mississippian-era mound site remains.  |
| 2015      | University of Mississippi ORSP Investment Grant (\$4,239)<br>Archaeological chemistry: Identifying migration and trade in Mesoamerica.  |
| 2015      | University of Mississippi Summer Research Grants (\$9,412)<br>Research grant awarded for ongoing work at the Tayasal Archaeological Project in northern Guatemala to work on analyses of marine remains.  |
| 2014      | Graduate Women in Science Nell Mondy Fellowship (\$8,525)<br>Migration, diet, and dynasty at the sites of La Corona and El Perú -Waka', Guatemala.  |
| 2014      | OSRP Faculty Travel Support Grant (\$1,500)<br>International Council of Archaeozoology Conference, San Rafael, Argentina.   |
| 2014      | University of Mississippi Summer Research Grants (\$9,412)<br>Research grant awarded for ongoing work at the Tayasal Archaeological Project in northern Guatemala to identify changing catchments and culinary patterns before, during, and after the arrival of the Spanish in the region.                           |
| 2013-2014 | Southeastern Conference Faculty Travel Grant (\$1000)<br>Award granted to visit the University of Florida Department of Anthropology to plan zooarchaeology research, give a bioarchaeology presentation, and set up future collaborative efforts with UF faculty and staff at the Florida Museum of Natural History. |
| 2010-2012 | National Science Foundation Grant # BCS 0917918 Senior Personnel<br>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<br>Received teaching award that included opportunity to provide campus-wide training to UW-Madison teaching assistants.  |
| 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)<br>Travel grant to support research trip to Belize in January 2009 and to University of Illinois at Champaign – Urbana February 2010.  |

- 2008-2009 Ruth Dickie Scholarship (SDE-GWIS) UW-Madison Graduate Women in Science research scholarship.
- 2007 Miller Prize in Anthropology, UW-Madison Recognition of innovation in teaching anthropology.
- 2006-2009 UW-Madison Anthropology Department Travel Grant  
Annual grant awarded for research in Chiapas, Mexico, and at the Peabody Museum at Harvard, and to present research at conferences in Mexico, Canada, and the US.
- 2005 Nave Summer Research Grant  
Study of geologic regions and archaeological sites in Chiapas, Mexico as part of predissertation research on human mobility.
- 2003-2005 Foreign Language and Area Studies fellowships (FLAS)  
Two one-year FLAS fellowships to study the Spanish and Yucatec Maya languages.

### **Grant applications pending**

- 9/19-9/24 National Science Foundation - Dynamics of coupled human and natural systems grant (~\$60,000, my allocation of ~\$1.7 million). Megafauna to Maya: Exploring long-term nature-human interactions in the tropics of Lowland Central America. PI L Lucero, co-PIs J Conroy, R Malhi, B Muckley. Senior Personnel C Freiwald, HG McDonald, L Kosakowsky.
- 9/19-9/24 National Science Foundation - Archaeology of Indigenous Maya Entanglement with Spanish Colonialism at Tahcabo, Yucatán (~\$6,000). PI Patricia McAnany.

### **Graduate student grants received**

- 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

### **RESEARCH**

- 2019 Isotope geochemistry at Naachtun, Guatemala. Director: H Goudiaby, Universität Konstanz, Gregory Pereira, French National Centre for Scientific Research
- 2018 Isotope geochemistry St. Goerge's Caye, Belize. Director: J Garber
- 2011, 2019 Siete Templos Project, Tikal (faunal analyst)
- 2016-2018 New Salem Cemetery Relocation. Biogeochemical analysis of historic cemetery in Clinton, MS. Director: Dr. T Boudreaux
- 2014-2016 Development and resilience of complex socioeconomic systems: A theoretical model and case study from the Maya lowlands. Director: Dr. K Prufer
- 2012 UW-Madison Zoological Museum Archaeological Collections Project
- 2012 Chiapa de Corzo archaeological project, Mexico
- 2009-2011 NAGPRA consultation and documentation grant (research assistant/osteologist)
- 2008-2013 UW-Madison Zoological Museum Galápagos pathology project with EE Pillaert
- 2007-2008 Tourism Development Project at Caracol (faunal analyst) Director: Dr. J Awe



- 2007 Belize Valley Archaeological Project (faunal analyst) Blackman Eddy  
Dr. M K Brown and Director Dr. J Garber
- 2006 Analysis of Formative period Soconusco population movement (bone chemist)

## FIELD PROJECTS

- 2016-present Mopan Valley Archaeological Project and Mopan Valley Preclassic Project, Belize (Drs. J Yaeger and MK Brown) Human osteology and zooarchaeology
- 2015-present Proyecto Arqueológico Ucanal (Dr. C Halperin) Zooarchaeology
- 2009-present Proyecto Arqueológico Itza (Dr. T Pugh) Postclassic Period zooarchaeology
- 2014-present Holly Springs Craft House and Chalmer's Institute excavations (with co-director J Skipper)
- 2011-present Actuncan Archaeological Project, Belize (osteologist)  
Director: Dr. L LeCount
- 2007-2008 Belize Summer Field Program in Maya Archaeology (Field Director)  
Director: Dr. J Yaeger
- 2003-2005 Fårvejle and Dragsholm, Denmark Director: Dr. TD Price
- 2003 Xunantunich Palace Excavations, Xunantunich, Belize. Director: Dr. J Yaeger
- 2001 Miercurea Project, Transylvania, Romania field school Director: A Gonciar
- 2000 Ometepe Archaeological Project, Nicaragua survey and petroglyph  
Directors: S Baker, J Martin, and M Smith

## INVITED PRESENTATIONS

- 2016 Graduate Women in Science National Conference (June 25, 2016). Senior thesis student poster displayed at conference (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 2<sup>nd</sup> 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 (January 2015, New Orleans) *Mapping Maya migration networks during the Classic Period*
- 2013-2016 University of Wisconsin – Madison (February 2013, March 2014-2016, UW-Madison Medical School) *The people and history of Belize*
- 2014 Tulane Maya Symposium and Workshop, Middle American Research Institute (February 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 (October 2013, University, MS) *Burial customs of the Classic Maya: A 1300 yr-old household burial ground at Actuncan, Belize*
- 2013 Rochester Institute of Technology (January 2013, Rochester, NY)

- 2012 *Maya migration networks: Reconstructing population movement in the Belize River Valley during the Late and Terminal Classic*  
Washington University in St. Louis (Dec. 2012, St. Louis, MO)
- 2011 *Maya migration networks: Reconstructing population movement in the Belize River Valley during the Late and Terminal Classic*  
University of Mississippi Department of Anthropology (Dec. 2011, Oxford, MS)
- 2011 *Maya migration networks: Reconstructing population movement in the Belize River Valley during the Late and Terminal Classic*  
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

- 2019 Maya Symposium, Okayama University, Japan (December 10-16, 2019)
- 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. 300900 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 autonima de Yucatan (Oct. 30-Nov. 4, 2018, Merida, Mexico) Freiwald C. *Esmalte, huesos, e isotopos: estudios en la química arqueología*
- 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, El Salvador) *Identity and Migration in the Belize Valley during the Classic and Postclassic Periods*. J Hoggarth (presenter), 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 12<sup>th</sup> 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 11<sup>th</sup> International Council for Zooarchaeology (August 2010, Paris)  
Freiwald, C, J Yaeger, TD Price, JH Burton. *Late Classic Maya Resource Management: A Case Study from the Belize River Valley.*
- 2010 International Council for Zooarchaeology poster presentation (August 2010, Paris) *Zooarchaeology in Modern Settings: the Life and Death of the Galapagos Sea Lion (Z. wolfebaeki).* Co-author 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; and 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 320 Archaeozoology: Animal Use in History  
 ANTH 326 Archaeology of Maya Civilization  
 ANTH 311 Archaeological Science (in development)  
 ANTH --- The Anthropology of Human Migration  
 ANTH 342/542 Independent Study in Osteology/Bone Chemistry  
 ANTH 607 Introduction to Biocultural Anthropology

## STUDENT ADVISING

### Ph.D. Candidates

Memorial University, Newfoundland: Co-supervisor

Asta Rand (expected 2019) *Modeling a Sulfur Baseline in Mesoamerica for Diet and Migration*

Whitney Lytle (expected 2019) *A Diachronic Approach to the Sociopolitical Role of Ancestor Veneration at Xunantunich, Group D*

Washington University: committee member

Diana Fridberg (Anthropology, 4/21/15) *Classic Maya Human-Animal Relations at El Perú-Waka' and La Corona, Northwest Petén, Guatemala*

### Master's Degree Candidates

University of Mississippi Master's degree projects: advisor

Rachel Smith (expected 2020) *Strontium Isotope Ratios in Human Teeth and Migration at Ambergris Caye, Belize*

Jacob Harris (expected 2020) *Zooarchaeological Analysis of Bone Tool Production 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 projects: committee member

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 member

Arianne Boileau (2014) *Maya Exploitation of Animal Resources during the Middle Preclassic: An Archeozoological Analysis from Pacbitun, Belize*

University of Texas at Arlington: committee member

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 (expected 2020) *aDNA of the Ancient Maya Microbiome at Xunatunich and San Lorenzo, Belize*

Sloan Weeden (expected 2020) *Diet and Migration at Chicoloapan Viejo, Mexico*

Forensic Chemistry undergraduate project supervisor

Amelia Craze (expected 2020) project in development

Mina Brandon (expected 2020) *Clay Consumption in the US South* (in development)

Rebecca Pfeiffer (2017) *Isotope Geochemistry of Maya Dogs*

Acacia Leavitt (2016 with C Freiwald, E Patterson D Dettman, P Fullagar, TD Price) *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*

Forensic Chemistry undergraduate project participant

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 member (anthropology)

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

## **PROFESSIONAL SERVICE AND DEVELOPMENT**

April 2019 Sheegog Plantation tour/history of slavery

April 2018-19 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 Campus Twilight Tour, University of Mississippi library and historic architecture tour (with UM Slavery Research Group L McWhite, J Jackson)

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

Feb. 2017 Maya Week with invited speakers Alex Tokovinine (University of Alabama) and Katherine Miller Wolf and Marc Wolf (East Indiana University)

Feb. 2016 UM Slavery Research Group Joseph McGill visit with faculty and history, anthropology, NAACP, and other students

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* campus event and classroom visits

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

|           |  |
|-----------|--|
|           | administrator and seminar competition organizer  |
| 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/Probys 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                    |
| 1993-1994 | Finca San Cayetano, Retaluheu, Guatemala, independent microbusiness project  |

#### **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)