

Courtney A. Hofman

Graduate Student, Department of Anthropology, University of Maryland
Department of Anthropology, National Museum of Natural History, Smithsonian Institution
Center for Conservation and Evolutionary Genetics, Smithsonian Conservation Biology Institute
hofmanc@si.edu

Education

University of Maryland	Ph.D. in Anthropology	2015
University of Maryland	Masters in Applied Anthropology	2011
University of Notre Dame	Biology, B.S.	2009
University of Notre Dame	Honors Anthropology, B.A.	2009

Appointments

University of Maryland, College Park, <i>Graduate Dean's Dissertation Fellow</i>	2014-2015
Center for Conservation and Evolutionary Genetics, Smithsonian Conservation Biology Institute <i>Pre-doctoral Fellow, Research Student</i>	2009-present
Department of Anthropology, National Museum of Natural History, Smithsonian Institution <i>Pre-doctoral Fellow, Research Student, Intern</i>	2009-present
University of Maryland, College Park, <i>Instructor</i>	2011-2012
University of Maryland, College Park, <i>Teaching Assistant</i>	2009-2011

Research Interests

Historical ecology, ancient DNA, coastal archaeology, genomics, translocations, zooarchaeology, conservation genetics, high-throughput DNA sequencing, bioinformatics, human-environment interactions, archaeogenomics, domestication, and science education.

Publications (* designates peer reviewed publication)

- *2015 **Hofman, Courtney**, Torben C. Rick, Melissa Hawkins, W. Chris Funk, Katherine Ralls, Christina Boser, Paul W. Collins, Tim Coonan, Julie King, Scott Morrison, Seth D. Newsome, T. Scott Sillett, Robert Fleischer, Jesus Maldonado. Mitochondrial genomes suggest rapid evolution of dwarf California Channel Islands foxes (*Urocyon littoralis*). *PLOS One* 10:2.
- *2015 Hawkin, Melissa, **Courtney A. Hofman**, Taylor Callicrate, Molly McDonough, Mirian Tsuchiya, Eliecer Gutierrez, Kristofer Helgen, Jesus Maldonado. In Solution Hybridization for Mammalian Mitogenome enrichment: Pros, Cons, and Challenges Associated with Multiplexing Degraded DNA. *Molecular Ecology Resources*. In Review.
- *2014 Rick, Torben C., T. Scott Sillett, Cameron K. Ghalambor, **Courtney A. Hofman**, Katherine Ralls, R. Scott Anderson, Christina Boser, Todd J. Braje, Dan Cayan, Terry Chessner, Paul W. Collins, Jon M. Erlandson, Kate R. Faulkner, W. Chris Funk, Robert Fleischer, Ann Huston, Julie King, Lyndal Laughrin, Kathryn McEachern, Jesus Maldonado, Daniel R. Muhs, Seth D. Newsome, Leslie Reeder-Myers, Christopher Still, Scott A. Morrison. Ecological Change on California's Channel Islands from the Pleistocene to the Anthropocene. *BioScience*, 64:8, 680-692.
- *2014 **Hofman, Courtney**, Torben C. Rick. The Dogs of CA-SRI-2: Osteometry of *Canis familiaris* from Santa Rosa Island, California, USA. *Ethnobiology Letters* 5, 65-76.
- *2012 Rick, Torben, **Courtney A. Hofman**, Todd J. Braje, Jesus Maldonado, T. Scott Sillett, Kevin Danchisko, Jon M. Erlandson. Flightless ducks, giant mice, and pygmy mammoths: Late Quaternary extinctions on California's Channel Islands. *World Archaeology* 44:1, 3-20.

Grants and Fellowships

2014 Graduate Dean's Dissertation Fellowship. University of Maryland (\$25,000 stipend)

2014 Peter Buck Pre-doctoral Fellowship. Smithsonian Institution (declined)

2014 Jacob K. Goldhaber Travel Grant. For travel to Society of American Archaeology meetings (\$400)

2014 AWS in Education Research Grant Award. Amazon Web Services (\$1000)

2013 Hunter-Gatherers, Archaeogenomics, and the Evolutionary History of the Foxes of California's Channel Islands. Co-PI with Paul Shackel. National Science Foundation Dissertation Improvement Grant (\$24,500)

2013 AMS Radiocarbon Dating and the Origins of the Island Fox (*Urocyon littoralis*) on California's Channel Islands. Co-PI with Torben Rick and Jesus Maldonado. Smithsonian Small Grant (\$5000)

2013 Biodiversity, Genomics, and Human Ecology of California's Channel Islands. Co-PI with Torben Rick, Terry Chessler, Robert Fleischer, Jesus Maldonado, Katherine Ralls, Scott Sillett. Smithsonian Institution (\$100,000 includes stipend for Pre-doctoral fellowship)

2012 Smithsonian Pre-doctoral Fellowship (\$30,000 stipend and \$1000 in research funds)

2012 Archaeogenomics, Conservation, and Extinction of Mammals and Birds on California's Channel Islands, Co-PI with Torben Rick, Robert Fleischer, Jesus Maldonado, Katherine Ralls, Scott Sillett. Smithsonian Institution (\$15,000)

2012 Ancient Biological Invasions? Hunter-Gatherers, Paleogenomics, and 'Endemic' Mammals of California's Channel Islands. Cosmos Club Foundation (\$2300)

2011 Ancient Biological Invasions? Hunter-Gatherers, Paleogenomics, and "Endemic" Mammals of California's Channel Islands. Co-PI with Jesus Maldonado and Torben Rick. Smithsonian Institution Next Generation Sequencing Small Grants Program (\$6500)

2011 Smithsonian Next Generations Sequencing Training Grant for travel to the Paleogenomics Workshop (\$1200)

2011 Ancient Biological Invasions? Hunter-Gatherers, Ancient DNA, and "Endemic" Mammals of California's Channel Islands. Co-PI with Jesus Maldonado and Torben Rick. Smithsonian Institution Small Grants Program (\$5000)

2011 Jacob K. Goldhaber Travel Grant. For travel to Society of American Archaeology meetings. University of Maryland (\$800)

2008 Learning Beyond the Classroom Grant to attend the World Archaeological Congress, Dublin June 29th-July 4th, 2008 (University of Notre Dame) (\$1250)

2008 Nanovic Institute Grant to attend a field school in Archaeology at the necropolis of Pintia, University of Valladolid, Spain and the Cultural Landscapes of Coastal Ireland project. June and July 2008 (University of Notre Dame) (\$4000)

2008 President Allocation Grant for Study Abroad Students provided to travel to Istanbul and Jordan while studying in Egypt (University of Notre Dame) (\$650)

2007 The Sweetman Family Foundation, funding provided for participation in a nine-day educational tour of Ireland, October 20-29, 2007. This included visiting over 50 museums and heritage sites as part of The Archaeology of Ireland class taught by Dr. I. Kuijt (University of Notre Dame) (\$1,500)

2007 Student International Business Council Internship Grant provided for internship teaching English in rural Thailand. Summer 2007 (University of Notre Dame)

Invited Talks and Guest Lectures

- 2014 Ancient Invasive Species? The Origins of the Endemic Mammals of Catalina Island. Invited talk at the Catalina Island Conservancy Research Symposium. Nov. 14, 2014
- 2014 Molecular Methods for Archaeologists. Guest lecture in Archaeological Science class at Boston University. Nov. 11, 2014
- 2014 Ancient Invasive Species? Historical Ecology and Origins of the California Channel Island Mammals. Invited talk at Max Planck Institute of Evolutionary Anthropology, Leipzig. May 16, 2014
- 2014 Archaeogenomics and Translocations. Guest lecture in Archaeological Science classes at Boston University. April 8, 2014
- 2013 Non-Invasive and Ancient DNA Approaches to Animal Translocations on California's Channel Islands. Invited lecture at the Smithsonian's Non-Invasive Genetics Course, June 4, 2013
- 2012 Archaeogenomics, Translocations and Conservation Biology. Guest lecture in Cultural Ecology course, George Washington University. Oct. 4, 2012

Presented Conference Papers

- 2015 Tracking Translocations: Interdisciplinary approaches to animal translocations on the California Channel Islands. C. Hofman, T. Rick, J. Maldonado. Talk at the Society for American Archaeology Meetings. Session Co-organizer. San Francisco, CA April 16-19, 2015.
- 2014 Archaeogenomics and Conservation of the Channel Islands Fox. Paper at the Smithsonian Conservation Biology Institute Student Research Symposium. Front Royal, VA. August 11, 2014
- 2014 Mitochondrial Genomes and radiocarbon dating reveal rapid evolution of dwarf California Channel Islands foxes (*Urocyon littoralis*). Lightning talk at Evolution. Raleigh, NC. June 20-14, 2014
- 2014 Evolutionary History of the Island Fox Based on Complete Mitochondrial Genomes. Paper at the Integrated Island Fox Recovery Team. Ventura, CA. June 17-18, 2014
- 2014 Ancient DNA and the Origin of the Catalina Island Ground Squirrel. Poster at the Society for American Archaeology Meetings. Austin, TX. April 23-27, 2014
- 2014 Genetic Continuity in Chirikof Island Ground Squirrels: Evidence from Ancient DNA. S. Dunning, C. West, and C. Hofman. AK
- 2013 Interdisciplinary Approaches to Understanding the Antiquity and Distribution of the Island Fox. Paper at the Integrated Island Fox Recovery Team, Ventura, CA. June 11, 2013
- 2013 Archaeogenomics and Conservation of the Endangered Island Fox. Paper at Society of Ethnobiology meetings. Denton, May 15-18, 2013
- 2013 Archaeogenomics and Ancient Animal Translocations on California's Channel Islands. Paper at the Society for American Archaeology meetings. Session Co-organizer. Honolulu, April 3-7, 2013
- 2012 Non-Invasive Genetic Sampling Approaches to Understanding Channel Island Deer Mice Origins. Paper at California Island Symposium, Ventura, Oct. 23-26, 2012
- 2012 Ancient Biological Invasions? Hunter-Gatherers, Archaeogenomics, and Channel Islands Mice. Paper at Society for California Archaeology Meetings, San Diego. March 29-April 1, 2012
- 2011 Ancient Biological Invasions? Hunter-Gatherers, Ancient DNA, and "Endemic" Mammals of California's Channel Islands. Poster presented at the Paleogenomics Workshop, Corsica. Oct. 17-21, 2011

2011 Ancient Stowaways: Ancient DNA Analysis of Deer Mice from Daisy Cave, San Miguel Island, CA.
Poster at the Society for American Archaeology Conference, Sacramento. March 30-April 3, 2011

2011 Human Impacts on the Environment: Archaeology, Ancient DNA and California's Channel Islands.
Presentation at the Dept. of Anthropology, UMD Annual Colloquium. March 11, 2011

2010 Ancient DNA and Archaeology: A Case Study from the California Channel Islands. AnthroPlus
Student Conference, University of Maryland. March 6, 2010

Organized Conference Sessions and Symposia

2015 Organized Session: Islands and Invasives: The Archaeology of Plant and Animal Translocations,
Society for American Archaeology Meeting, San Francisco, CA, April 15-19, 2015. Organized by
Courtney Hofman and Catherine West.

2013 Organized Session: Small Samples, Big Questions: New Methods and Applications in Biomolecular
Archaeology. Society for American Archaeology Meeting, Honolulu, HI, April 3-7, 2012. Organized by
Amanda Henry, Courtney Hofman, and Christina Warinner.

Teaching Experience

Cultural Ecology, George Washington University <i>Teaching Assistant</i>	Fall 2013, Fall 2014
Biological Anthropology (lecture and lab), University of Maryland <i>Instructor of Record</i>	2011-2012
Biological Anthropology lab <i>Teaching Assistant</i>	2009-2011

Public Outreach

Ongoing: tours and events at the National Zoo

2013 "Genome Geek" public program at the National Museum of Natural History. July 13, 2013

2013 Decoding the Past: Using DNA in Archaeology. Invited public lecture at the St. Augustine
Lighthouse Museum, Florida. February 23, 2013

2012 "The Scientist Is In" public lecture series at the National Museum of Natural History. Nov. 14, 2012

Archaeological Field Experience

2014 Rappahannock River, VA: Reconnaissance and survey of shell midden sites.

2013 Santa Cruz Island, Nature Conservancy: Survey and excavation of sites under the threat of erosion.

2012 Santa Rosa Island, Channel Islands National Park, CA: Mapping and excavations at several
Paleocoastal sites.

2011-2012 Edgewater, MD: Archaeological and ecological research at the Smithsonian Environmental
Research Center.

2010 Fishing Bay, MD: Survey and excavation of shell midden sites.

2008 Clifden, Ireland: Survey of as part of Cultural Landscapes of the Irish Coastline project.

2008 Pintia, Spain: Field school excavation of Iron age cremation burials.

Workshops

R Workshop. Smithsonian Conservation Biology Institute. September 17-20, 2012

Programming for Evolutionary Biology Workshop. University of Leipzig. Leipzig, Germany. March 17-April 1, 2012.

Workshop on Sequence Capture for Next Generation Phylogenomics, Natural Museum of Natural History, Smithsonian Institution. Washington, DC. January 16-21, 2012

Paleogenomics Summer School. Cargese, Corsica. October 17 -21, 2011

Workshop on Comparative Genomics, Natural Museum of Natural History, Smithsonian Institution. Washington, DC. October 3-7, 2011

Next Generation Sequencing Symposium. Natural Museum of Natural History, Smithsonian Institution. Washington, DC. April 18-19, 2011

Training

- Organizes and co-founded monthly Smithsonian Conservation Biology Institute Women in Science Discussion Group
- Mentors a UMD undergraduate intern (Sabrina Shirazi).
- Co-Organized CCEG High-Throughput DNA Sequencing Workshop, Summer 2013
- Trained four technicians (Kristin Stewardson, Laura Bergner, Kevin Mulder, Naoko Kurata), four post-docs (Eliecer Gutteriez, Phil Lavretsky, Haw C. Law, Molly McDonough), three grad students (Taylor Callicrate, Lillian Parker, and Mirian Tsuchiya), and several visiting researchers in lab-work and/or data analysis.

Professional Memberships

Society for American Archaeology (2010-present)

Peer Review

Molecular Ecology Resources

References

Dr. Paul Shackel Department of Anthropology, University of Maryland, College Park, MD 20472.

Dr. Torben Rick Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, DC, 20013.

Dr. Jesus Maldonado Center for Conservation and Evolutionary Genetics, Smithsonian Conservation Biology Institute, National Zoological Park, Washington, DC 20013.