# RICHARD E.W. BERL

Ph.D. Student in Human Dimensions of Natural Resources

Human Dimensions of Natural Resources Colorado State University 1480 Campus Delivery Fort Collins, CO 80523-1480 201 Forestry rewberl@colostate.edu

#### RESEARCH INTERESTS

I take an evolutionary approach to the study of sociality, social learning, and culture in humans, canids, and other non-human animals. Through an interdisciplinary perspective that integrates evolutionary biology, animal behavior, and evolutionary cultural anthropology, I investigate the concept of cultural evolution in order to illuminate our place in the natural world. To this end, my research is focused on examining the effects of cultural transmission biases—including the concept and influence of "prestige"—on the dynamics of social learning and cultural evolutionary processes. Past and ongoing projects include the study of cross-cultural differences in imitation and emulation, social learning and variation in the social behavior of gray wolves (*Canis lupus*) in captivity and in the wild, and the genetic, cultural, linguistic, and demographic history of the Chabu, an isolated group of hunter-gatherers in southwestern Ethiopia. I intend to apply this knowledge of cultural evolutionary processes and a solid foundation in statistics toward a career in data science, using a data-centric approach informed by evolutionary theory and cross-cultural anthropology to enhance social good and conserve biocultural diversity.

#### **EDUCATION**

Ph.D. Human Dimensions of Natural Resources Certificate in Applied Statistics Certificate in Biological Data Analysis Colorado State University, Fort Collins, CO	In Progress In Progress In Progress
M.S. Zoology Washington State University, Pullman, WA	2015
B.A. Biological Sciences, Honors B.A. Anthropology, Honors University of Delaware, Newark, DE	2009 2009

### RESEARCH EXPERIENCE

Co-Investigator, "The Effects of Social Transmission Biases on Human Cultural Evolution"  Colorado State University, Fort Collins, CO and University of Bristol, United Kingdom  Pls: Dr. Michael Gavin, Colorado State University and Dr. Fiona Jordan, University of Bristol  Co-Investigator: Alarna Samarasinghe, University of Bristol	2015-Present
Co-Primary Investigator, "Demography, Subsistence, Culture, and Genetic Variation of the Chabu Hunter-Gatherers of Southwest Ethiopia" Oromiya, Gambella, and SNNP Regions, Ethiopia Co-Pls: Dr. Barry Hewlett, Mr. Samuel Dira, and Dr. Bonnie Hewlett, Washington State University Vancouver	2013-Present
Co-Primary Investigator, "Overimitation in the Aka and Ngandu of the Congo Basin" Bagandou, Central African Republic Co-PI: Dr. Barry Hewlett, Washington State University Vancouver	2012-2015
Primary Investigator, "Comparative Social Behavior of Gray Wolves (Canis Iupus) in Captivity and the Wild" Wolf Park, Battle Ground, IN and Yellowstone National Park	2012-2015
Research Assistant, Charles R. Conner Vertebrate Museum Washington State University, Pullman, WA PIs: Dr. Larry Hufford and Dr. Kelly Cassidy, Washington State University	2011-2012, 2013, 2014
Field Assistant, Lomas Barbudal Monkey Project Reserva Biológica Lomas Barbudal, Guanacaste, Costa Rica PI: Dr. Susan Perry, University of California Los Angeles	2009-2010
TEACHING EXPERIENCE	
<b>Teaching Assistant, General Biology</b> School of Biological Sciences, Washington State University	Spring 2015
<b>Teaching Assistant, General Ecology</b> School of Biological Sciences, Washington State University	Fall 2014

#### **PUBLICATIONS**

Berl, R.E.W. (in prep). Comparative social behavior of gray wolves (Canis lupus) in captivity and the wild.

**Berl, R.E.W.** & Hewlett, B.S. 2015. Cultural variation in the use of overimitation by the Aka and Ngandu of the Congo Basin. *PLoS ONE* 10(3): e0120180. doi: 10.1371/journal.pone.0120180

### NON-PEER REVIEWED PUBLICATIONS

**Berl, R.E.W.** 2015. On the value of conserving human cultural diversity. *Northwest Science* 89(1): 100-101. doi: http://dx.doi.org/10.3955/046.089.0110

## INVITED TALKS AND GUEST LECTURES

<b>Berl, R.E.W.</b> "Sociality and culture in gray wolves and humans." Morrison Institute for Population and Resource Studies, Stanford University, Stanford, CA	Sep 27, 2013
<b>Berl, R.E.W.</b> "Social inheritance and the evolution of culture." Wolf Park, Battle Ground, IN	June 27, 2012
PRESENTATIONS	
<b>Berl, R.E.W.</b> "Cultural evolution and genome-culture coevolution." (Podium) GAUSSI Program Meeting, Fort Collins, CO	Sep 23, 2016
<b>Berl, R.E.W.</b> , Samarasinghe, A.N., Jordan, F.M., & Gavin, M.C. "Prestige of regional accents and effects on cultural transmission." (Poster) 28 <sup>th</sup> Annual Meeting of the Human Behavior and Evolution Society, Vancouver, BC, Canada	May 30, 2016
<b>Berl, R.E.W.</b> "Cultural variation in the use of overimitation by the Aka and Ngandu of the Congo Basin." (Podium) School of Biological Sciences BioLunch Seminar, Pullman, WA	Sep 15, 2015
<b>Berl, R.E.W.</b> & Hewlett, B.S. "Cultural variation in the use of overimitation by the Aka and Ngandu of the Congo Basin." (Podium) Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA	Mar 21, 2015
Adams, A.F., Poznik, G.D., <b>Berl, R.E.W.</b> , Hammond, N.A., Mendez, F.L., Cornejo, O.E., Napel, M., Schertler, M., Underhill, P.A., Feldman, M.W. & Bustamante, C.D. "High-coverage sequencing of diverse Y chromosomes via in-solution capture." (Poster) 64 <sup>th</sup> Annual Meeting of the American Society of Human Genetics, San Diego, CA	Oct 19, 2014
<b>Berl, R.E.W.</b> "Social behavior of gray wolves ( <i>Canis lupus</i> ) in captivity and the wild." (Poster) 51 <sup>st</sup> Annual Conference of the Animal Behavior Society, Princeton, NJ	Aug 11, 2014
<b>Berl, R.E.W.</b> "Social behavior of gray wolves ( <i>Canis lupus</i> ) in captivity and the wild." (Poster) 6 <sup>th</sup> Biennial Meeting of EVO-WIBO: Evolutionary Biology in the Pacific Northwest, Port Townsend, WA	Apr 26, 2014
<b>Berl, R.E.W.</b> & Hewlett, B.S. "Overimitation in the Aka and Ngandu of the Congo Basin." (Podium) 83 <sup>rd</sup> Annual Meeting of the American Association of Physical Anthropologists, Calgary, AB, Canada	Apr 12, 2014

<b>Berl, R.E.W.</b> "A group-level perspective in modeling social learning processes." (Poster)	Mar 29, 2013
Washington State University Academic Showcase, Pullman, WA  Berl, R.E.W. "A group-level perspective in modeling social learning processes."  (Poster)	Mar 1, 2013
School of Biological Sciences Graduate Student Research Symposium, Pullman, WA	
<b>Berl, R.E.W.</b> & Hewlett, B.S. "Overimitation in the Aka and Ngandu of the Congo Basin." (Podium) School of Biological Sciences Graduate Student Research Symposium, Pullman, WA	Mar 1, 2013
<b>Berl, R.E.W.</b> "A group-level perspective in modeling social learning processes." (Poster) Dr. William R. Wiley Research Exposition, Pullman, WA	Feb 1, 2013
<b>Berl, R.E.W.</b> & Hewlett, B.S. "Overimitation in the Aka and Ngandu of the Congo Basin." (Podium) Dr. William R. Wiley Research Exposition, Pullman, WA	Feb 1, 2013
<b>Berl, R.E.W.</b> "The role of adaptiveness in the evolution of social learning and culture." (Poster) School of Biological Sciences Graduate Student Research Symposium, Pullman, WA	Mar 3, 2012
GRANTS AND AWARDS	
GRANTS AND AWARDS  GAUSSI Fellowship  NSF Research Traineeship in Generating, Analyzing, and Understanding Sensory and Sequencing Information, Colorado State University	2016-Present
GAUSSI Fellowship NSF Research Traineeship in Generating, Analyzing, and Understanding	2016-Present 2015
GAUSSI Fellowship NSF Research Traineeship in Generating, Analyzing, and Understanding Sensory and Sequencing Information, Colorado State University  Youth Athletic Facilities Grant, City of Colfax, WA (\$250,000)	
GAUSSI Fellowship NSF Research Traineeship in Generating, Analyzing, and Understanding Sensory and Sequencing Information, Colorado State University  Youth Athletic Facilities Grant, City of Colfax, WA (\$250,000) Washington State Recreation and Conservation Office  William S. Pollitzer Student Travel Award	2015
GAUSSI Fellowship  NSF Research Traineeship in Generating, Analyzing, and Understanding Sensory and Sequencing Information, Colorado State University  Youth Athletic Facilities Grant, City of Colfax, WA (\$250,000)  Washington State Recreation and Conservation Office  William S. Pollitzer Student Travel Award  American Association of Physical Anthropologists  NWSA Student Research Grant	2015 2014
GAUSSI Fellowship  NSF Research Traineeship in Generating, Analyzing, and Understanding Sensory and Sequencing Information, Colorado State University  Youth Athletic Facilities Grant, City of Colfax, WA (\$250,000)  Washington State Recreation and Conservation Office  William S. Pollitzer Student Travel Award American Association of Physical Anthropologists  NWSA Student Research Grant Northwest Scientific Association  James R. King Fellowship in Zoology	2015 2014 2014
GAUSSI Fellowship  NSF Research Traineeship in Generating, Analyzing, and Understanding Sensory and Sequencing Information, Colorado State University  Youth Athletic Facilities Grant, City of Colfax, WA (\$250,000)  Washington State Recreation and Conservation Office  William S. Pollitzer Student Travel Award  American Association of Physical Anthropologists  NWSA Student Research Grant  Northwest Scientific Association  James R. King Fellowship in Zoology  School of Biological Sciences, Washington State University  Exploration Fund Award	2015 2014 2014 2014
GAUSSI Fellowship  NSF Research Traineeship in Generating, Analyzing, and Understanding Sensory and Sequencing Information, Colorado State University  Youth Athletic Facilities Grant, City of Colfax, WA (\$250,000)  Washington State Recreation and Conservation Office  William S. Pollitzer Student Travel Award  American Association of Physical Anthropologists  NWSA Student Research Grant  Northwest Scientific Association  James R. King Fellowship in Zoology  School of Biological Sciences, Washington State University  Exploration Fund Award  The Explorers Club  IPEM Research Fund Award	2015 2014 2014 2014 2013

NSF GRFP Honorable Mention NSF Graduate Research Fellowship Program	2012
TRAINING & WORKSHOPS	
Quantitative Methods in Cultural Evolution Master Class Max Planck Institute for the Science of Human History, Jena, Germany	Sep 8-9, 2016
IBM Datapalooza Denver Sie FilmCenter, Denver, CO	May 19, 2016
SERVICE	
Seminar Coordinator, Frontiers of Conservation Social Science Seminar Series Human Dimensions of Natural Resources, Colorado State University	2015-Present
Seminar Coordinator, Biology Graduate Student Association School of Biological Sciences, Washington State University	2014-2015
Co-Founder, Palouse Interdisciplinary Graduate Society Washington State University & University of Idaho	2014
Chair, School of Biological Sciences Graduate Student Research Symposium School of Biological Sciences, Washington State University	2014
President, Biology Graduate Student Association School of Biological Sciences, Washington State University	2013-2014
Co-Vice President, Biology Graduate Student Association School of Biological Sciences, Washington State University	2012-2013
Organizer, School of Biological Sciences Graduate Student Research Symposium School of Biological Sciences, Washington State University	2011-2014
Reviewer PLOS ONE Behavioural Processes Psychological Reports Proceedings of the National Academy of Sciences	
Member Cultural Evolution Society, Founding Member Human Behavior and Evolution Society American Association of Physical Anthropologists The Explorers Club, Pacific Northwest & Rocky Mountain Chapters Data for Democracy, Founding Member	

## **COMMUNITY SERVICE**

Volunteer, March for Science Denver Civic Center Park, Denver, CO	2017
Parks and Recreation Coordinator	2015
City of Colfax, WA  Volunteer, Biology Open House  Washington State University, Pullman, WA	2014
Volunteer, Biology Family Science Saturday Palouse Discovery Science Center, Pullman, WA	2013
Apartment Coordinator, Family and Graduate Housing Housing and Residence Life, Washington State University, Pullman, WA	2013-2015
Lead Organizer, Palouse Outdoor Science Day Virgil Phillips Farm Park, Moscow, ID	2013-2015
Exhibit Designer, Educational Exhibits for Young Visitors Charles R. Conner Vertebrate Museum, Washington State University, Pullman, WA	2011-2012
<b>Biological Aide, Environmental Stewardship Program</b> Delaware Division of Parks and Recreation, Dover, DE	2011
Guest Presenter, Classroom STEM Talks and Activities Wilmington Friends School, Wilmington, DE	2010
Volunteer, Environmental Education and Community Outreach Guanacaste, Costa Rica	2009-2010