Amanda C. Perofsky

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Education

2011-present	Department of Integrative Biology, The University of Texas at Austin, Austin, Texas Ph.D. Candidate, Graduate Program in Ecology, Evolution, & Behavior Supervising Professor: Lauren Ancel Meyers, Ph.D.
2005- 2009	Honors Program, University of Georgia, Athens, Georgia B.Sc. in Ecology and B.Sc. in Biology, *summa cum laude*

Fellowships

2017, 2018	Graduate School Summer Semester Continuing Fellowship, The University of Texas at Austin (UT-Austin)
2014, 2015	Graduate Dean's Prestigious Fellowship Supplement, UT-Austin
2013-2016	Graduate Research Fellowship, National Science Foundation (awarded 2012)
2011	Integrative Biology Graduate Recruitment Fellowship, UT-Austin
2010-2011	Post-baccalaureate Intramural Research Training Fellowship, National Institutes of Health

Research Support

2015	Ecology, Evolution, & Behavior Dissertation Improvement Grant, UT-Austin ($8000)
2015	NSF Center Grant, "BEACON: An NSF Science and Technology Center for the Study of Evolution in Action." ($16,000); co-PIs: L.A. Meyers, R.J. Lewis; project designed by A.C. Perofsky
2012	Research Grant, American Society of Primatologists ($2000)
2012	Research Grant, International Primatological Society ($1500)
2011	Ecology, Evolution, & Behavior Startup Grant, UT-Austin ($2000)

Awards

2017	Network Modeling for Epidemics Course Fellowship, University of Washington
2017	Graduate Student Professional Development Award, College of Natural Sciences/Graduate Program in Ecology, Evolution, and Behavior, UT-Austin
2014, 2015	Summer Institute in Statistics and Modeling in Infectious Diseases Scholarship and Travel Award, University of Washington
2011	Meaningful Modeling of Epidemiological Data Clinic Scholarship and Travel Award, African Institute for Mathematical Sciences
2010, 2011	Ecology and Evolution of Infectious Diseases Conference Workshop Scholarship and Travel Award, Cornell University and University of California, Santa Barbara
2009	Center for Undergraduate Research Opportunities Scholar, University of Georgia (UGA)
2008	NSF Research Experiences for Undergraduates (REU) Internship, UGA
2008	Elected, Phi Beta Kappa Honors Society
2007	Honors International Scholarship, UGA (Field ecology course in Costa Rica)
2005-2009	Charter Scholarship, UGA
2005-2009	National Merit Scholarship, UGA
2005-2009	Georgia HOPE Scholarship
2005-2009	Georgia Governor's Scholarship

Peer-reviewed Publications

A.C. Perofsky, R.J. Lewis, L.A. Abondano, A. Di Fiore, L.A. Meyers. 2017. Hierarchical social networks shape gut microbial composition in wild Verreaux's sifaka. *Proceedings of the Royal Society B* 284: 20172274. doi: 10.1098/rspb.2017.2274.

E.J. Rakotomalala, F. Rakotondraparany, **A.C. Perofsky**, R.J. Lewis. 2017. Characterization of the tree holes used by *Lepilemur ruficaudatus* in the dry, deciduous forest of Kirindy Mitea National Park. *Folia Primatologica* 88:28-41. doi: 10.1159/000464406.

B.S. Berry†, K. Magori†, **A.C. Perofsky,** D. E. Stallknecht, A.W. Park. 2013. Wetland cover dynamics drive hemorrhagic disease patterns in white-tailed deer in the United States. *Journal of Wildlife Diseases* 49(3):501-509. doi: 10.7589/2012-11-283. †: These authors contributed equally

Manuscripts Under Review

A.C. Perofsky, R.J. Lewis, L.A. Meyers. Terrestriality and bacterial transfer: A comparative study of gut microbiomes in sympatric Malagasy mammals**.** *bioRxiv* doi: 10.1101/293282.

Published Abstracts

N. Ismail-O'Keeffe, H. Yin, **A. Perofsky,** J.A. Chiorini. 2012. Soluble BAFF-R Receptor (sBAFF-R) as a Potential treatment for Sjögren Syndrome. *Investigative Ophthalmology & Visual Science* 53(14):1917.

Non-Peer Reviewed Publications

A.C. Perofsky, 2009. Improving abundance estimation for larval stream plethodontids. Undergraduate Honors Thesis. University of Georgia, Athens, Georgia.

Research & Professional Experience

2011-present **Ecology, Evolution, & Behavior Ph.D. Program, Department of Integrative Biology, The University of Texas at Austin.** Graduate student under the advisement of Dr. Lauren Ancel Meyers. Dissertation committee members: Drs. Anthony Di Fiore, Rebecca J. Lewis, Howard Ochman, James G. Scott, and Claus O. Wilke. My dissertation research combines computational modeling, field behavioral observations, and molecular analyses to examine how contact networks influence bacteria transmission and gut microbiome composition in group-living wildlife.

2011-2012 **Research Assistant, Division of International Epidemiology and Population Studies, Fogarty International Center; National Institute for Mathematical and Biological Synthesis.** Collated data on the current state of spatial knowledge for zoonoses and emerging infectious diseases that are priority threats to US animal agriculture. Supervisor: Dr. Juliet C. Pulliam

2010-2011 **Post-baccalaureate IRTA Fellow, Adeno-associated Virus Biology Section, Molecular Physiology and Therapeutics Branch, National Institute of Dental and Craniofacial Research, National Institutes of Health.** Characterized viral profiles unique to Sjögren's Syndrome patients. Supervisor: Dr. John A. Chiorini

2009 **Research Assistant, Odum School of Ecology, University of Georgia.** Investigated the environmental drivers of hemorrhagic disease outbreaks in white-tailed deer. Supervisor: Dr. Andrew Park

2007-2009 **Honors Independent Research, Odum School of Ecology, University of Georgia.** Investigated behavioral effects of exposure to the aquatic herbicide *2,4-D* on paedomorphic mole salamanders, *Ambystoma talpoideum*. Conducted a three-month mark-recapture study of larval stream plethodontid salamanders in six Appalachian headwater streams at the Coweeta LTER site in Otto, NC. **Honors thesis:** "Improving abundance estimation for larval stream plethodontids." Supervisor: Dr. John Maerz

Training

2017 **Network Modeling for Epidemics**, University of Washington

2014, 2015 **Summer Institute in Statistics and Modeling in Infectious Diseases**, University of Washington. Courses: Mathematical Models of Infectious Disease; MCMC I for Infectious Diseases; Stochastic Epidemic Models with Inference (2014); Infectious Diseases, Immunology and Within-Host Models; Simulation-based Inference for Epidemiological Dynamics; Pathogen Evolution, Selection, and Immunity (2015)

2011 **Evolution of Infectious Diseases Modeling Workshop**, Ecology and Evolution of Infectious Diseases Conference, University of California, Santa Barbara

2011 **Meaningful Modeling of Epidemiological Data Clinic**, African Institute for Mathematical Sciences, Cape Town, South Africa

2010 **Ecology of Infectious Diseases Modeling Workshop**, Ecology and Evolution of Infectious Diseases Conference, Cornell University

2007 **Tropical Field Ecology Course in Costa Rica**, Odum School of Ecology, University of Georgia

Conference and Symposia Presentations (Post-baccalaureate)

"Gut microbiome diversity across sympatric mammal populations of Madagascar reflects diet, substrate use, and host phylogeny."

2018 American Association of Physical Anthropologists (AAPA) Conference, Austin, TX (presentation)

"Hierarchical social networks shape gut microbial composition in wild Verreaux's sifaka"

2017 Society of Molecular Biology and Evolution (SMBE) Conference, Austin, TX (poster)

2017 Ecology and Evolution of Infectious Diseases (EEID) Conference, University of California, Santa Barbara (poster)

"Social networks shape gut microbial communities in wild Verreaux's sifaka"

2016 Annual BEACON Congress, BEACON Center for the Study of Evolution in Action, Michigan State University (presentation)

2016 Integrative Biology Graduate Student Symposium, UT-Austin (presentation)

2015 Epidemics International Conference on Infectious Disease Dynamics, Clearwater Beach, Florida (poster)

"Socio-behavioral determinants of infectious disease transmission in a wild lemur population."

2012 Integrative Biology Graduate Student Symposium, UT-Austin (presentation)

"A Vector-Borne Model for Hemorrhagic Disease Virus in White-tailed Deer."

2011 Meaningful Modeling of Epidemiological Data Clinic, African Institute for Mathematical Sciences, Cape Town, South Africa (poster)

"Development of a Loop-mediated Isothermal Amplification (LAMP) Assay for Rapid Detection of Hepatitis C Virus in Minor Salivary Glands of Sjögren's Syndrome Patients"

2011 Post-baccalaureate Fellow Poster Day, National Institutes of Health (poster)

2011 Fellows Research Retreat, National Institute for Dental and Craniofacial Research (poster)

Seminars

2018 Fogarty International Center, National Institutes of Health, Bethesda, Maryland. "Drivers of gut microbial composition and transmission within and among wild lemur populations"

2017 Weekly BEACON seminar, BEACON Center for the Study of Evolution in Action. "Gut microbiome diversity across sympatric mammal populations of Madagascar reflects diet, substrate use, and host phylogeny"

2016 Weekly BEACON seminar, BEACON Center for the Study of Evolution in Action. "Social networks shape gut microbial communities in wild Verreaux's sifaka"

2016 Kirindy Mitea National Park office, Morondava, Madagascar. "Bacteria transmission dynamics among wildlife in Kirindy Mitea National Park."

2015 Integrative Biology Population Biology seminar, UT-Austin. "Social networks shape gut microbial communities in wild Verreaux's sifaka"

2012 Kirindy Mitea National Park office, Morondava, Madagascar. "Infectious disease transmission in a wild lemur population."

Teaching Experience

2016, 2017 **Teaching Assistant, Scientific Inquiry Across Disciplines (Freshman Signature Course),** UT-Austin. This course is non-discipline-specific and the first course in the Freshman Research Initiative sequence. I worked with the instructor to lead two labs of 25 students. I assisted students with designing independent inquiry-based experiments, supervised students in the lab, and graded scientific reports and research proposals. (Instructor: Dr. A. Katie Hansen)

2013 **Teaching Assistant, Social Networks and Infectious Diseases (Freshman Signature Course),** UT-Austin**.** I independently developed and taught a two-day workshop that used Netlogo computer simulations to demonstrate the impact of network structure, vaccination, and properties of disease on the spread of epidemics. For final projects, students developed research questions and hypotheses related to infectious diseases and social networks that could be tested by conducting "experiments" in Netlogo. (Instructor: Dr. Lauren Ancel Meyers)

Guest Teaching Lectures

2015 **Introduction to Biological Statistics Course**, Center for Computational Biology and Bioinformatics, UT-Austin. "Biological Networks and Social Network Analysis"

2014 **Introduction to Biological Statistics Course**, Center for Computational Biology and Bioinformatics, UT-Austin. "Introduction to Networks."

Mentoring Experience

2017 **Undergraduate Student Training, The University of Texas at Austin.** I am training a third-year undergraduate student, Gabrielle Le, in gastrointestinal parasite assays and identification.

2012, 2016 **Malagasy Student Training, Department of Animal Biology, University of Antananarivo**. During my 2012 and 2016 field seasons at Ankoatsifaka Research Station, I trained Malagasy graduate students (Elvis Rakotomalala and Safidy Rasolonjatovo) in field techniques, data collection, and specimen preservation and helped them to develop independent projects. One project resulted in an ongoing collaboration and a peer-reviewed publication.

2010-2011 **Student Training, National Institutes of Health**. As a post-baccalaureate fellow in the Adeno-associated Virus Biology Section of NIDCR, I trained several undergraduate, dental, and medical students in molecular laboratory techniques.

Science Communication & Education Outreach

2011-present **Radio DJ and Science Talk Show Host, KVRX 91.7FM, UT-Austin.** Lead organizer (2013-2017). I co-host "They Blinded Me with Science," a weekly educational talk show that interviews both UT-based and visiting researchers and reviews current science publications and news. I recruit guests, conduct interviews, and produce podcasts that are available for download at http://tbmws.podbean.com/ and iTunes.

2011-present **Co-Organizer and Volunteer, Science Under the Stars, Austin, Texas.** I help coordinate and promote a free monthly lecture series held at UT's field laboratory that provides graduate students an opportunity to communicate ecological research to the greater public. https://scienceunderthestars.org/

2018 **American Association for the Advancement of Science (AAAS) Classroom Science Days, Austin, Texas.** I was one of thirty researchers recruited by AAAS to share my research and personal journey into science with middle school students. https://www.aaas.org/page/aaas-classroom-science-days-2018-texas

2017 **Panel on Public Engagement at UT-Austin, BEACON workshop on STEM public engagement, Austin, Texas.**

2016 **Public Outreach Lecture ("Meet the Lemurs"), Science Under the Stars, Austin, Texas.** I gave a presentation on lemur ecology, evolutionary history, and conservation efforts. Media coverage: KVRX 91.7 and the Daily Texan (http://dailytexanonline.com/2016/11/13/science-under-the-stars-lecture-features-lemurs)

2016 **"BEACON Researchers at Work" blog post, "BEACON: An NSF Science and Technology Center for the Study of Evolution in Action."** As a BEACON grant recipient, I wrote a blog post about my field research experiences: "How lemur social networks shape microbial transmission." http://beacon-center.org/blog/2016/03/14/how-lemur-social-networks-shape-microbial-transmission/

References

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