Amanda C. Perofsky, Ph.D.

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Education

2018 **PhD** in Ecology, Evolution, and Behavior, Section of Integrative Biology, The University of Texas at Austin, Austin, TX
Dissertation: "Ecological, Evolutionary, and Behavioral Determinants of Gut Microbiomes in Malagasy Mammals"
Advisor: Dr. Lauren Ancel Meyers

2009 **B.Sc.** in Ecology, **B.Sc.** in Biology, University of Georgia, Athens, GA
Summa cum laude with Highest Honors

Research Positions

2018 – **Postdoctoral Research Fellow**, Fogarty International Center, National Institutes of Health, Bethesda, MD
Division of International Epidemiology and Population Studies
Supervisor: Dr. Cécile Viboud

2011 **Research Assistant**, Fogarty International Center, National Institutes of Health and National Institute for Mathematical and Biological Synthesis, Bethesda, MD
Supervisor: Dr. Juliet R.C. Pulliam

2010 – 2011 **Post-baccalaureate IRTA Fellow**, National Institute of Dental and Craniofacial Research, National Institutes of Health, Bethesda, MD
Adeno-Associated Virus Biology Section, Molecular Physiology and Therapeutics Branch
Supervisor: Dr. John A. Chiorini

2009 **Research Assistant**, University of Georgia, Athens, GA
Park Disease Ecology Lab, Odum School of Ecology
Supervisor: Dr. Andrew Park

2007 – 2009 **Honors Undergraduate Research,** University of Georgia, Athens, GA
Maerz Herpetology Lab, Warnell School of Forestry
Thesis: "Improving abundance estimation for larval stream plethodontids"
Research Mentor: Dr. John C. Maerz

Publications

7. **A.C. Perofsky** and M.I. Nelson. 2020. The challenges of vaccine strain selection. *eLife* 9: e62955. doi: 10.7554/eLife.62955.
6. M.I. Nelson, **A. Perofsky**, D.S. McBride, B.L. Rambo-Martin, M.M. Wilson, J.R. Barnes, H. van Bakel, J.M. Nolting, A.S. Bowman. 2020. A heterogenous swine show circuit drives zoonotic transmission of influenza A viruses in the United States. *Journal of Virology*. doi:10.1128/JVI.01453-20
5. C. Viboud, K. Gostic, M.I. Nelson, G.E. Price, **A. Perofsky**, K. Sun, N. Sequeira Trovão, B. Cowling, S. Epstein, D.J. Spiro. 2020. Beyond Clinical Trials: Evolutionary and Epidemiological Considerations for Development of a Universal Flu Vaccine. *PLOS Pathogens* 16(9): e1008583. doi: 10.1371/journal.ppat.1008583
4. **A.C. Perofsky**, R.J. Lewis, L.A. Meyers. 2018. Terrestriality and bacterial transfer: A comparative study of gut microbiomes in sympatric Malagasy mammals**.** *The ISME Journal* 13, 50–63. doi: 10.1038/s41396-018-0251-5
3. **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.
2. 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.
1. 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. *Co-first authors

Fellowships

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

Research Support

2018	Research Exchange Grant, National Science Foundation IDEAS RCN ($2800)
2015	Dissertation Improvement Grant, Ecology, Evolution, and Behavior, UT-Austin ($8000)
2015	Research Grant, NSF BEACON Center for the Study of Evolution in Action ($16,000); co-PIs: Amanda Perofsky, Lauren Meyers, Rebecca Lewis; project designed by Amanda Perofsky
2012	Small Research Grant, American Society of Primatologists ($2000)
2012	Small Research Grant, International Primatological Society ($1500)
2011	Startup Grant, Ecology, Evolution, and Behavior, UT-Austin ($2000)

Scholarships and Awards

2020	Distinguished Achievement Award, Fogarty Center/NIH and Kelly Government Services
2017	Network Modeling for Epidemics Course Fellowship, University of Washington
2017	Graduate Student Professional Development Award, College of Natural Sciences, UT-Austin
2014, 2015	Summer Institute in Statistics and Modeling in Infectious Diseases (SISMID) Scholarship and Travel Award, University of Washington
2011	Meaningful Modeling of Epidemiological Data (MMED) Clinic Scholarship and Travel Award, African Institute for Mathematical Sciences
2010, 2011	Ecology and Evolution of Infectious Diseases (EEID) Conference Workshop Scholarship and Travel Award, Cornell University and University of California, Santa Barbara
2009	Center for Undergraduate Research Opportunities (CURO) Scholar, University of Georgia
2008	NSF Research Experiences for Undergraduates (REU) Internship, University of Georgia
2008	Elected, Phi Beta Kappa Honors Society
2007	Honors International Scholarship, University of Georgia (Tropical field ecology course in Costa Rica)
2005 – 2009	Honors Program Charter Scholarship, University of Georgia
2005 – 2009	National Merit Scholarship, University of Georgia
2005 – 2009	Georgia HOPE Scholarship (full tuition)
2005 – 2009	Georgia Governor's Scholarship (awarded to high school valedictorians)

Scientific Meetings

"A heterogenous swine show circuit drives zoonotic transmission of influenza A viruses in the United States"

2020 Neglected Influenza Viruses Symposium, Columbus, OH (oral), postponed due to COVID-19

"The impact of antigenic change on seasonal influenza epidemics"

2019 Epidemics International Conference on Infectious Disease Dynamics, Charleston, SC (oral)
2019 Options X for the Control of Influenza, Singapore (oral)
2019 Ecology and Evolution of Infectious Diseases Conference, Princeton, NJ (poster)

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

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

"Social network structure shapes gut microbial communities in wild Verreaux's sifaka"

2017 Society of Molecular Biology and Evolution Conference, Austin, TX (poster)
2017 Ecology and Evolution of Infectious Diseases Conference, Isla Vista, CA (poster)

2016 Annual Congress, BEACON Center for the Study of Evolution in Action, Michigan State University, East Lansing, MI (oral)

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

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

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

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

Seminar Presentations

2019 Influenza Interest Group, National Institutes of Health, Bethesda, MD "The impact of antigenic change on seasonal influenza epidemics"

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

2017 Bansal Research Group, Georgetown University, Washington, DC "Hierarchical social networks shape gut microbial composition in wild Verreaux's sifaka"

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

2016 BEACON Center for the Study of Evolution in Action (web seminar) "Social networks shape gut microbial communities in wild Verreaux's sifaka"

2016 Kirindy Mitea National Park headquarters, Belo Sur Mer, Madagascar. "Bacteria transmission dynamics among wildlife in Kirindy Mitea National Park"

2015 Department of Integrative Biology, UT-Austin, Austin, TX "Social networks shape gut microbial communities in wild Verreaux's sifaka"

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

Teaching Experience

Co-Instructor, Fogarty International Center-DIVERGE Training Workshop on RSV Genomics and Evolution, National Institutes of Health, Bethesda, Maryland. September 2019

Co-Instructor, Fogarty International Center-NICD Training Workshop on Infectious Disease Dynamics and Evolution, National Institutes of Communicable Diseases, Johannesburg, South Africa. December 2018

Graduate Teaching Assistant, Scientific Inquiry Across Disciplines (Freshman Signature Course), UT-Austin. Fall 2016 and Fall 2017

Guest Lecture ("Biological Networks and Social Network Analysis"), Introduction to Biological Statistics Course, Center for Computational Biology and Bioinformatics, UT-Austin. November 2015

Guest Lecture ("Introduction to Networks"), Introduction to Biological Statistics Course, Center for Computational Biology and Bioinformatics, UT-Austin. November 2014

Graduate Teaching Assistant, Social Networks and Infectious Diseases (Freshman Signature Course), UT-Austin. Spring 2013

Mentoring Experience

2012, 2016 Masters' Student Training, Department of Animal Biology, University of Antananarivo. During my 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.

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, Outreach, and Advocacy

2020 Policy essay: "The Use of COVID-19 Prediction Models in Guiding Policy Decisions", "Science Policy for All" blog.

2019 – 2020 Member, NIH Science Policy Discussion Group (SPDG). The NIH SPDG is a fellow-led and run self-governing organization that brings together fellows with a shared passion for understanding the intersection of scientific research and legislative policy. In May 2020, I led a discussion on economic and health policy related to COVID-19, with invited guest speaker Dr. Joel Zinberg,

	former General Counsel and Senior Economist at the Council of Economic Advisers in the Executive Office of the President.
2011 – 2018	Radio DJ and Science Talk Show Host, KVRX 91.7FM, UT-Austin, Austin, TX. Co-organizer and co-host of "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 helped recruit guests, conduct interviews, and produce podcasts that are available for download on Podbean and iTunes.
2011 – 2017	Co-organizer and Volunteer, Science Under the Stars, Austin, TX. I helped 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.
2018	American Association for the Advancement of Science (AAAS) Classroom Science Days selected speaker, Austin, TX. Outreach lecture ("Meet the Lemurs") to middle school students.
2017	Panel on STEM Public Engagement, BEACON Center for the Study of Evolution in Action, Austin, TX
2016	Public Outreach Lecture ("Meet the Lemurs"), Science Under the Stars, Austin, TX. Media coverage: The Daily Texan
2016	"Researchers at Work" essay: "How lemur social networks shape microbial transmission", BEACON Center for the Study of Evolution in Action.

Editorial Activities

2019 – 2020	Essay editor for "Science Policy for All" (science policy blog with contributors from the Washington, DC area)
2018 –	Peer reviewer for American Journal of Primatology, Animal Behaviour, BMJ Global Health, International Journal of Primatology, Ecology and Evolution, Epidemics, FEMS Microbiology Ecology, The ISME Journal, Microbial Biotechnology, Molecular Ecology, Nature Communications, PLOS Computational Biology

Other Service

2020	Poster Judge, National Institutes of Health Annual Graduate Student Research Symposium. Category: Bioinformatics/Biostatistics/Epidemiology/Computational/Systems Biology