

Hannah Kim Frank, Ph.D.

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EDUCATION AND POSITIONS

- Tulane University**, New Orleans, LA (2020 - present)
Assistant Professor of Ecology and Evolutionary Biology
- Stanford University**, Stanford, CA (2017 - 2020)
Postdoctoral Researcher, Dept. of Pathology; Advisor: Scott Boyd
- Stanford University**, Stanford, CA (2011 – 2017)
Ph.D. in Biology (Ecology, Evolution and Population Biology track); Advisor: Elizabeth Hadly;
Dissertation title: Ecology, Evolution and Disease Risks of Bats in a Changing World
- University of Southern California**, Los Angeles, CA (2011)
Post-baccalaureate Premedical Program; coursework in microbiology and biochemistry
- Harvard College**, Cambridge, MA (2005 - 2009)
A.B. *summa cum laude* in Organismic & Evolutionary Biology with highest honors in field;
secondary field in Chemistry; awarded June 2009; Cumulative GPA: 3.94
- Council on International Educational Exchange**, Monteverde, Costa Rica (2007)
Coursework in tropical biology and agroecology; conducted independent research on predator avoidance in foraging, nectar feeding bats

PUBLICATIONS

^U Undergraduate mentee; *Equal contribution

17. Sanchez CA, Phelps KL, **Frank HK**, Geldenhuys M, Griffiths ME, Jones DN, Kettenburg G, Lunn TJ, Moreno KR, Mortlock M, Vicente-Santos A, Viquez-R LR, Kading RC, Markotter W, Reeder DM, Olival KJ. (Accepted). Advances in understanding bat infection dynamics across biological scales. *Proceedings of the Royal Society B*.
16. *Lamar SK, ***Frank HK**, La Flamme A, Gartrell B, Ormsby D, Nelson N. 2023. The effects of annual cycle, source population, and body condition on leucocyte profile and immune challenge in a basal reptile, the tuatara (*Sphenodon punctatus*). *Journal of Experimental Zoology Part A*. 1-13. doi: 10.1002/jez.2761
15. Aguilar-Setien A, Aréchiga-Ceballos N, Balsamo G, Behrman A, **Frank H**, Fujimoto G, Gilman Duane E, Hudson III T, Jones S, Ochoa Carrera L, Powell G, Smith C, Triniatis Van Sickle J, Vleck S. 2022. Biosafety Practices when Working with Bats: A Guide to Field Research Considerations. *Applied Biosafety*. 27: 3. doi: 10.1089/apb.2022.0019
14. **Frank HK**, Enard D, Boyd SD. 2022. Exceptional diversity and selection pressure on coronavirus host receptors in bats compared to other mammals. *Proceedings of the Royal Society B*. 289: 20220193. doi: 10.1098/rspb.2022.0193 (Preprint [29 citations]: doi: 10.1101/2020.04.20.051656)
13. Fagre AC, Cohen L, Eskew EA, Farrell MJ, Glennon E, Joseph MB, **Frank HK**, Ryan S, Carlson CJ, Albery GF. 2022. Spillover in the Anthropocene: the risk of human-to-wildlife pathogen transmission for conservation and public health. *Ecology Letters*. 25: 1534-1549. doi: 10.1111/ele.14003
12. Carlson CJ, Gibb RJ, Albery GF, Brierley L, Connor R, Dallas T, Eskew EA, Fagre AC, Farrell MJ, **Frank HK**, Muylaert RDL, Poisot T, Rasmussen A, Ryan S, Seifert S. 2022. The Global Virome in One Network (VIRION): an atlas of vertebrate-virus associations. *mBio*. 13(2):e02985-21. doi: 10.1128/mbio.02985-21
11. Patton AH, Harmon LJ, del Rosario Castañeda M, **Frank HK**, Donihue CM, Herrel A, Losos JB. 2021. When adaptive radiations collide: Different evolutionary trajectories between and within

island and mainland lizard clades. *Proceedings of the National Academy of Sciences*. 118(42): e2024451118. doi: 10.1073/pnas.2024451118

10. Donihue CM, Kowaleski AM, Losos JB, Algar AC, Baeckens S, Buchkowski RW, Fabre A-C, **Frank HK**, Geneva AJ, Reynolds RG, Stroud JT, Velasco JA, Kolbe JJ, Mahler DL, Herrel A. 2020. Hurricane effects on Neotropical lizards span geographic and phylogenetic scales. *Proceedings of the National Academy of Sciences*. 117(19): 10429-10434. doi: 10.1073/pnas.2000801117
9. **Frank HK**, Boyd SD, Hadly EA. 2018. Global fingerprint of humans on the distribution of *Bartonella* bacteria in mammals. *PLoS Neglected Tropical Diseases*. 12(11): e0006865.
8. Zepeda Mendoza ML, Xiong Z, Escalera-Zamudio M, Runge AK, Thézé J, Streicker D, **Frank HK**, Loza-Rubio E, Liu S, Ryder OA, Samaniego Castruita JA, Katzourakis A, Taboad B, Löber U, Pybus OG, Li Y, Rojas-Anaya E, Bohmann K, Baez AC, Arias CF, Liu S, Greenwood AD, Bertelsen MF, White NE, Bunce M, Zhang G, Sicheritz-Pontén, T, Gilbert MTP. 2018. Hologenomic adaptations underlying the evolution of sanguivory in the common vampire bat. *Nature Ecology and Evolution*. 2(4): 659.
7. ^UPerkins ML, **Frank HK**, Pauly JM, Hadly EA. 2017. Frequency shifting reduces but does not eliminate acoustic interference between echolocating bats: A theoretical analysis. *Journal of the Acoustical Society of America*. 142 (4): 2133.
6. **Frank HK**, Frishkoff LO, Mendenhall CD, Daily GC, Hadly EA. 2017. Phylogeny, traits and biodiversity of a Neotropical bat assemblage: Responses to deforestation are not conserved among close relatives. *American Naturalist*. 190 (2): 200-212.
5. Solari KA, **Frank HK**, Frishkoff LO, Hsu JL, Kemp ME, Mychajliw AM, Hadly EA. 2016. Opportunity for some, extinction for others: the fate of species in the Anthropocene. *Evolutionary Ecology Research*. 17: 787-813.
4. **Frank HK**, Mendenhall CD, Judson SD, Daily GC, Hadly EA. 2016. Anthropogenic impacts on Costa Rican bat parasitism are sex-specific. *Ecology and Evolution*. 6 (14): 4898–4909.
3. **Frank HK**, Flanders JR. 2016. *Anolis aquaticus* (*Norops aquaticus*) sleep site fidelity. *Herpetological Review*. 47 (1): 131-132.
2. ^UJudson S, **Frank HK**, Hadly EA. (2015). *Bartonella* are prevalent and diverse in Costa Rican bats and bat flies. *Zoonoses and Public Health*, 62(8): 609-17, doi: 10.1111/zph.12188
1. Muñoz MM, Crandell KE, Campbell-Staton SC, Fenstermacher K, **Frank HK**, Van Middlesworth P, Sasa M, Losos J, Herrel A. (2015). Multiple paths to aquatic specialisation in four species of Central American *Anolis* lizards. *Journal of Natural History*, 49: 1717-1730, DOI: 10.1080/00222933.2015.1005714

PREPRINTS AND SUBMITTED MANUSCRIPTS

The Tabula Microcebus Consortium [including **Frank HK**], Ezran C, Liu S, Chang S, Ming J, Botvinnik O, Penland L, Tarashansky A, de Morree A, Travaglini KJ, Hasegawa K, Sin H, Sit R, Okamoto J, Sinha R, Zhang Y, Karanewsky CJ, Pendleton JL, Morri M, Perret M, Aujard F, Stryer L, Artandi S, Fuller M, Weissman IL, Rando TA, Ferrell Jr. JE, Wang B, De Vlaminc I, Yang C, Casey KM, Albertelli MA, Pisco AO, Karkanias J, Neff N, Wu A, Quake SR, Krasnow MA. *Nature* (in revision). Tabula Microcebus: A transcriptomic cell atlas of mouse lemur, an emerging primate model organism. bioRxiv. <https://doi.org/10.1101/2021.12.12.4669460>

The Tabula Microcebus Consortium, Ezran C, Liu S, Ming J, Guethlein LA, Wang MFZ, Dehghannasiri R, Olivieri J, **Frank HK**, Tarashansky A, Koh W, Jing Q, Botvinnik O, Antony J, Chang S, Pisco AO, Karkanias J, Yang C, Ferrell Jr. JE, Boyd SD, Parham P, Long JZ, Wang B, Salzman J, De Vlamnick I, Wu A, Quake SR, Krasnow MA. *Nature* (in preparation for resubmission). Mouse lemur transcriptomic atlas elucidates primate genes, physiology, disease, and evolution. bioRxiv. <https://doi.org/10.1101/2022.08.06.503035>

RESEARCH GRANTS

- National Science Foundation** (09/2022-08/2027); “BII-Implementation: Predicting the global host-virus network from molecular foundations”; Senior personnel (\$12,456,537; \$1,042,540 to HKF; PI: Colin Carlson)
- National Institutes of Health** (04/2022-03/2024); “Development and function of humoral immunity in the Jamaican fruit bat, *Artibeus jamaicensis*”; PI (\$431,000)
- US Fish and Wildlife** (05/2022-04/2024); “Estimating the likelihood of recovery from or the susceptibility to white-nose syndrome in *Myotis lucifugus* maternity colonies using a non-native, colony-level assessment of stress, viral type and immune gene expression”; (\$3,667 to HKF; PI: Christopher Richardson)
- Research Corporation for Scientific Advancement** (12/2021-12/2022); “Zoonotic implications of host genetics, immunity, and virome in bats”; co-PI (\$220,000; \$55,000 to HKF)
- Tulane COR Research Fellowship** (03/2021-03/2022); “Bat community change and disease risk in Ecuador’s Chocó Biogeographic Zone”; PI (\$10,000)
- National Science Foundation** (06/2020-05/2023); “RAPID: Adaptive immunity in bats: foundational knowledge for assessing specific pathogen responses in natural coronavirus reservoirs”; PI (\$199,842.00)
- Environmental Venture Program, Stanford Woods Institute for the Environment** (10/2014-09/2020); “Tracing zoonotic disease risks and immunological adaptations in bats, humans and human commensals across the Central American countryside”; co-wrote grant with advisor (\$200,000)
- Doctoral Dissertation Improvement Grant, National Science Foundation** (09/2014-08/2017); “The impact of ecological traits on the immunogenetic evolution of bats”; co-PI (\$22,000)
- Bat Conservation International Student Research Scholarship** (2014); “Investigating the effect of habitat change on disease risk in bats” (\$3,500)
- Harvard College Research Program** (2008); *Anolis* lizard field work in Costa Rica (\$1,850)
- Museum of Comparative Zoology Grant-in-Aid of Undergraduate Research** (2008); *Anolis* lizard field work in Costa Rica (\$2,500)

FELLOWSHIPS

- Life Sciences Research Foundation Fellowship** (2019); Postdoctoral stipend and research allowance
- Stanford School of Medicine Dean’s Postdoctoral Fellowship** (2019); stipend for one year of postdoctoral research on bat immunoglobulins (\$30,000)
- Stanford Immunology T32 Training Grant Postdoctoral Fellowship, National Institutes of Health** (2018); stipend for one year of postdoctoral research on bat immunoglobulins (\$48,804)
- Center for Computational, Evolutionary and Human Genomics Postdoctoral Fellowship** (2017); stipend for one year of postdoctoral research on bat immunoglobulins (~\$60,000)
- Bing-Mooney Fellowship in Environmental Science and Conservation** (2012); graduate tuition and stipend support for 4 years of PhD study at Stanford (~\$300,000)
- Prof. Gilda H. Loew Fellowship** (2011); graduate tuition and stipend support at Stanford (~\$10,000)
- Fulbright Fellowship** (2010); awarded to conduct research on tuatara in New Zealand (~\$25,000)

AWARDS AND HONORS

- Scialog Fellow, Mitigating Zoonotic Threats** (2021-2023); Selection by the Research Corporation for Scientific Advancement as an early career leader in the field for annual workshops, co-sponsored by USDA

Poster Awards (2014-2018)

- **Stanford Pathology Department Retreat (2018)**; “Are bats special? Immunological insights from an important disease reservoir”, postdoctoral category
- **Stanford OneHealth Symposium (2016)**; “Pathogenic bacterium prevalence and diversity in bats varies across an agricultural landscape in southern Costa Rica”
- **North American Symposium on Bat Research (2014)**; “Bats, bat flies and *Bartonella*: Complex parasitism relationships across a Neotropical agricultural landscape”, Speleobooks Award

Honorable Mention, Student Paper Award (2018), Organization for Tropical Studies; Awarded for “Phylogeny, traits and biodiversity of a Neotropical bat assemblage: Responses to deforestation are not conserved among close relatives”

Frances Lou Kallman Award (2017), Stanford University; Awarded to one female PhD graduate in the biology department in recognition of special excellence in research, teaching and/or coursework

Excellence in Teaching Award (2013), Stanford University Department of Biology

Travel Award (2011), Macroevolutionary Methods in R Workshop, Santa Barbara, CA; Awarded stipend for travel and lodging to attend workshop on phylogenetic comparative methods

Donald and Cathleen Pfister Prize (2009), Harvard University; Awarded to senior with highest achievement in natural sciences in Kirkland House, one of twelve upper class residences

Phi Beta Kappa (2008), Harvard University; Early induction (senior fall)

MENTORSHIP

Postdoctoral advisor (Tulane University)

Ashley Reers, PhD (2023 -)

PhD Thesis advisor (Tulane University)

Hannah Eiseman (PhD, 2021-); Phoebe Reuben (PhD, 2021-); Andrea Calderon Brito (PhD, 2022-); Mika O’Shea (PhD 2023-); Juniper Rosen (PhD, co-advised with James McLachlan, 2022-)

Undergraduate research mentor (*denotes completed an honors thesis)

Tulane University: Andrew Spencer (2023-), Ben Perry (2023-), Chiara Whitehurst (2022-), Becky Lang (2022-), Yuge Xia (2020-2023), Davis Benson (2020-2022), Zachary Ripich (2020-2021)

Stanford University: Xochitl Longstaff (2016), Vikram Vasan (2016); Julia Tsai (2015-2016), Jamieson O’Marr (2015-2016), Haitong Mao (2015), *Mindy Perkins (2014-2016), *Seth Judson (2013-2015), Hilary Vance (2012)

Other research mentorship

Julianna Gilson (MPHTM, Tulane University, 2021 - 2022); Thalia Williamson (MSc, Tulane University, 2021- 2022), William Orrico (DVM/ MPH candidate, Tufts University, 2021 - 2022); Taylor Pursell (PhD candidate, Stanford University, 2020 -); William Carr (Visiting scholar from Medgar Evers College, Fall 2023); Sarah Gurev (VERENA fellow in residence, Harvard/MIT, Spring 2024-); Alicia Rorstaicher (VERENA mini-rotation, University of Oklahoma, Spring 2024)

PhD Committee Membership

Tulane University: Anneliese Blanchette (2020 -), Shannan Yates (2022 -), Judith Santano (2022 -), Whitney Murchison (2022 -)

City University of New York: Thongthai Thavornwatanayong (2023 -)

Masters Committee Membership

Tulane University: Tanner Mazanec (2021-2022), Annalise Dunsmore (2023); Charlotte Hankin (2023-)

Undergraduate academic advisor (Tulane University)

Current: Nicole Bergman (2022 -), Ethan Kutell (2022 -), Ben Perry (2022 -), Matthew Redmond (2022 -), Ainsley Hall (2023 -), Kennedy Rice (2023 -)
Past: Cadmus Balkanski (2022), Marie Kaiser (2020)

TEACHING

EBIO 7010: Practice of Science in Ecology and Evolutionary Biology, Tulane University (Fall 2022)

Instructor; Revamped course on grant writing and professional development for graduate students

EBIO 2661: Disease Ecology, Tulane University (Spring 2022)

Course creator and instructor for an introductory course on disease ecology and evolution

EBIO 6777: Foundations in Ecology and Evolutionary Biology, Tulane University (Fall 2021)

Instructor for required introductory PhD course on foundational texts in ecology and evolution

EBIO 4660: One Health: Disease in an Interconnected World, Tulane University (Fall 2020)

Course creator and instructor for an upper-level undergraduate/ graduate course on One Health and disease ecology

Stanford Postdoctoral Teaching Certificate Candidate (2018 – 2020)

Thirty-six hours of training completed in pedagogy and application of scientific insights to teaching practice

Teaching Assistant, Stanford University; (2012-2014)

- *Biology 1: Human Evolution and the Environment* (2014); Head TA; wrote and graded exams, held office hours
- *Biology 101: Ecology* (2013); Delivered guest lecture, taught weekly section, wrote and graded exams and homework
- *Biology 43: Plant Biology, Evolution and Ecology* (2012); Taught weekly section, wrote and graded exams

Outreach Course Creator and Instructor (2012-2014)

- *Stanford Science*, Stanford University (2014), designed and taught one day outreach course on ecology and microbiology for low income middle school students
- *Stanford Splash*, Stanford University (2013-2014), designed and taught one day outreach courses for middle and high school students on microbiology and alternative metabolism using hands on demonstrations
- *Stanford Splash*, Stanford University (2012), designed and taught one day outreach course for middle and high school students on herpetology
- *Stanford Biocore Explorations*, Stanford University (2012), designed and taught one day laboratory outreach course for undergraduates in introductory biology on pathogen discovery

Mentor in Teaching Fellow, Stanford University, (2012-2013)

Attended training and workshops on mentoring teaching assistants as a TA mentor in the biology department; Mentor to TAs in Biology 43 in 2013

INVITED CONFERENCE PRESENTATIONS

Biodiversity Genomics Conference (Bat1K Session) (Virtual, October 2023); Frank HK, Pursell T, Gilson J, Reers A, Safanova Y, Boyd SD. "Bat immunoglobulins: germline and somatic evolution" (Lightning talk)

American Society for Histocompatibility and Immunogenetics (Las Vegas, October 2022); Bat immunity: Lessons from a thoroughly non-model organism

Symposium on Genetic and Functional Variation of the Vertebrate Immune System (Las Vegas, October 2022); Immune evolution in bats

Infectious Diseases of Bats (Colorado State University, July 2022); Strong selective signatures of viruses on bat innate and adaptive immunity

Immune Polymorphism and Population Dynamics Workshop (New Orleans, October 2019);
They're not flying mice: Immune evolution in bats

OneHealth Symposium: Climate Change and its Impact on Human and Animal Health (Stanford University, 2018); Global fingerprint of humans on *Bartonella* infection: Insights from the field and phylogenies

INVITED SEMINARS

Center for Computational, Evolutionary and Human Genomics Evolgenome Seminar (Stanford University, October 2022); Immunity in Bats

Department of Earth and Environmental Science Seminar (Rutgers University, Newark, October 2022); Ecological and evolutionary signals in bat-infection interactions

Pathogen and Microbiome Institute Department Seminar (Northern Arizona University, February 2022); Bat-pathogen interactions: Lessons from ecology and evolution

Department of Tropical Medicine Seminar (Tulane University, November 2021); Bats, Humans and Disease: What do we have to fear and what can we learn?

Museum Seminar Series (Louisiana State University, September 2021); Bat-infection interactions across time and space

Department of Biological Sciences Seminar (University of New Orleans, March 2021); Bat-infection interactions across time and space

Pharmacology Department Seminar (Tulane University, February 2021); Bat-infection interactions across time and space

Lighthouse Talk (The Viral Emergence Research Initiative, November 2020); Host traits and deforestation impact parasitism and infection in Costa Rican bats

Invited Seminar (Maasai Mara University, Narok, Kenya, 2019); Challenges and opportunities for protecting global bat populations

Integrative Biology Department Seminar (University of Texas at Austin, 2018); Bat-infection interactions: Signals of evolution, ecology, immunity and deforestation

Center for Population Biology Seminar (University of California at Davis, 2018); Bat-infection interactions: Signals of evolution, ecology, immunity and deforestation

OneHealth Symposium: Climate Change and its Impact on Human and Animal Health (Stanford University, 2018); Global fingerprint of humans on *Bartonella* infection: Insights from the field and phylogenies

SELECTED CONTRIBUTED PRESENTATIONS

International Bat Research Conference (Austin TX, 2022); Frank HK, Enard D, Ellison J, Menchaca Rodriguez A, Hadly EA, Boyd SD. Strong selective signatures of viruses on bat innate and adaptive immunity (Talk)

Biodiversity Genomics Conference (Bat1K Satellite) (2020); Frank HK, Enard D, Boyd SD. "Exceptional diversity and selection pressure on SARS-CoV and SARS-CoV-2 host receptor in bats compared to other mammals" (Lightning talk)

Evolution 2019 (Providence, RI; 2019); Frank HK, Hadly EA, Boyd SD & Enard D. "Pathogen-driven selection and immunity in bats" (Talk)

American Society of Naturalists Annual Meeting (Asilomar, CA; 2018); Frank HK, Enard D, Armstrong E, Petrov D, Boyd S & Hadly EA. "Signatures of ecology and biogeography on pathogen-interacting genes in bats" (Talk)

Infectious Diseases of Bats (Fort Collins, CO; 2017); Frank HK, Enard D, Mendenhall C, Lee J, Armstrong E, Prost S, Judson S, O'Marr J, Daily G, Petrov D, Boyd S & Hadly EA. "Bat-infection interactions: Signals of evolution, ecology, immunity and deforestation" (Poster)

Ecology and Evolution of Emerging Infectious Diseases (Santa Barbara, CA; 2017); Frank HK. "Bat-infection interactions: Signals of evolution, ecology, immunity and deforestation" (Lightning talk)

Ecology and Evolution of Emerging Infectious Diseases (Ithaca, NY; 2016); Frank HK, Enard D, Boyd S & Hadly EA. "Contrasting evolutionary and ecological signals in bat-viral interactions" (Poster)

Stanford OneHealth Symposium (Stanford, CA; 2016); Frank HK, O'Marr J, Judson S, Boyd S & Hadly EA. "Pathogenic bacterium prevalence and diversity in bats varies across an agricultural landscape in southern Costa Rica" (Poster; Poster award winner)

American Society of Naturalists Annual Meeting (Asilomar, CA; 2016); Frank HK, Enard D, Petrov D & Hadly EA. "Ecological Correlates of Positive Selection in Bat Viral Interaction Genes" (Poster)

North American Symposium on Bat Research (Monterey, CA; 2015); Frank HK, Enard D, Petrov D & Hadly EA. "Genomic Comparison of Bat Viral Interaction Genes: Signatures of Ecology" (Poster)

North American Symposium on Bat Research (Albany, NY; 2014); Frank HK, Judson S, Mendenhall CD, Daily GC & Hadly EA. "Bats, bat flies and *Bartonella*: Complex parasitism relationships across a Neotropical agricultural landscape" (Poster; Speleobooks award winner)

Species Interaction Workshop (Stanford University; 2013); Frank HK and Judson S. "Bats, bat flies and *Bartonella*: Parasite and disease risk in southern Costa Rica." (Talk)

International Bat Research Conference (San Jose, Costa Rica; 2013); Frank HK, Mendenhall C, Daily GC & Hadly EH. "Land use alters bat ectoparasitism in southern Costa Rica" (Talk)

North American Symposium on Bat Research Symposium (San Juan, Puerto Rico; 2012); Frank HK, Mendenhall C, Hadly EH & Daily GC. "Effect of Land Use and Host Ecology on Ectoparasitism in a Costa Rican Bat Community" (Poster)

Anolis Symposium (Cambridge, MA; 2009); on convergence in *Anolis* toepads (Talk)

Society of Integrative and Comparative Biology National Meeting (Boston, MA; 2009) on convergence in *Anolis* toepads (Talk)

MENTEE-LED CONTRIBUTED PRESENTATIONS

*indicates mentee

International Bat Research Conference (Austin, TX; 2022); Eiseman HJ*, Reuben PL*, Carrion C, Moreno P, Gilson J*, Williamson T*, Orrico W*, **Frank HK**. "A Pilot Study Evaluating Bat-Virus Relationships in Neotropical Bats" (Poster)

International Bat Research Conference (Austin, TX; 2022); Reuben PL*, **Frank HK**. "Impacts of Agricultural Development on Stress and Immunity in the *Carollia* bats of Northwest Ecuador" (Poster; Award winner)

Infectious Diseases of Bats (Fort Collins, CO; 2022); Pursell T*, Ellison J, Boyd S, **Frank HK**. "Characterization of *Eptesicus fuscus* splenic immune populations following rabies infection" (Poster)

OUTREACH AND SERVICE

Tulane University Service (2021 – present)

- Ecology and Evolutionary Biology Dept. Curriculum committee (Spring 2022 -)
- Search committee (Fall 2021 – Spring 2022); tenure-track assistant professor in '-omics'

Peer reviewer (2016 – present)

- *Journals*: The American Naturalist (1), Biodiversity and Conservation (1), Diversity (1), Genome Biology and Evolution (1), Global Ecology and Conservation (1), Herpetological Review (1), Journal of Applied Ecology (1), Molecular Biology and Evolution (1), Molecular Ecology (1), Nature (1), Philosophical Transactions of the Royal Society B (1), PLoS Computational Biology (1), Studies on Neotropical Fauna and the Environment (1), Tropical Medicine and Infectious Disease (1)
- *Grants*: Bat Conservation International student scholarships (2017 - 2022)

Journal editing (2023 – present)

- Special topic editor, *Frontiers in Immunology* (2023); Research Topic: The role of bats and their immune system in structuring host–pathogen interactions.

Meeting organization (2023 – present)

- Co-organizer, “Studying Bats Using a One Health Lens: Bridging the Gap between Bat Virology and Disease Ecology”, satellite symposium of the American Society of Virologists Annual Meeting, June 2024, Columbus, OH

Subject expert for media pieces (2020 – present)

- Providing expertise, information and quotes for popular news media (See “Media”)

Stanford University service (2012 – 2020)

- *Stanford Inclusive Mentoring* (2018-2020), postdoctoral mentor in group focused on supporting and mentoring graduate students with a focus on diversity issues
- *Stanford Biosciences Graduate Student Mentor* (2012-2015), mentor to first year PhD students, helping them navigate the transition to graduate school, advisor relationships, etc.
- *Department of Biology Undergraduate Studies Committee*, Stanford University (2012-2014); helped review and revise undergraduate programs, requirements, courses and policies

Public seminars and STEM outreach (2010 – present)

- *Skype-a-Scientist* (2018-2020), video chatting with K-12 classrooms about my research and careers in STEM
- *California Academy of Sciences Nightlife* (2017, 2018, 2019), presented publicly on research for Women in Science night and on bats for Migration night and Nocturnal night
- *Kibera School for Girls*, Kibera, Nairobi, Kenya (2019), biology lesson and DNA extractions with 5th and 6th grade students at the Kibera School for Girls located in Africa’s largest slum
- *Stanford HyPE* (2018, 2019), led lab tours, led DNA extractions and taught high school students from under-represented groups at Stanford for annual event
- *Monta Vista High School* (2018), visited local high school to present my research and answer questions on pursuing a career in STEM
- *Mosquito and Vector Control Association of California, Coastal California Region* (2017), gave talk on bat ecology, vector potential and role in insect control for local vector control workshop
- *AVID campus visit* (2017), helped organize and lead outreach event at Stanford for local high school students aspiring to be first-generation college students, including materials preparation and research presentation
- *Center to Support Excellence in Teaching* (2017), presented on research for high school biology teachers in training course
- *Center for Computational, Evolutionary and Human Genomics Outreach Committee*, Stanford University (2016-2017), helped organize and lead outreach events for first local generation high school students
- *Outreach Course Creator and Instructor* (2012-2014); see “Teaching Experience”
- *Awhina Day* (2010), organized and taught activities at an outreach day for underrepresented Pacific Island students at Victoria University of Wellington in New Zealand

Las Cruces Biological Station, Costa Rica (2013); Wrote articles in field station newsletter about research findings;

Frank, HK. 2013. The great false vampire bat (*Vampyrum spectrum*) near Las Cruces! Amigos Newsletter, 80: 11.

Frank, HK. 2013. Bat ectoparasitism and disease dynamics in an agricultural landscape. Amigos Newsletter, 79: 8-9.

Group on Earth Observations, Biodiversity Observation Network meeting, Pacific Grove, CA (2012)

Assisted with registration and meeting logistics for international meeting of conservation biologists; attended discussions on including genetic diversity in conservation planning

MEDIA

“Bats could hold the secret to better, longer human life” by Katherine J. Wu, The Atlantic (8 November 2023); Quoted about bat immunology

“Bat biotech takes flight” by Elie Dolgin, Nature Biotechnology (17 July 2023); Quoted about research in bat immunology

“Bats live with dozens of nasty viruses – can studying them help stop pandemics?” by Smriti Mallapaty, Nature (21 March 2023); Quoted about research in bat immunology

“What bat genes can tell us about coronaviruses” by Dana Kobilinsky, The Wildlife Society (6 September 2022); Article and interview about my Proceedings B paper on ACE2 and DPP4

“Louisiana Considered”, WRKF Baton Rouge Radio (August 2022): Interview about my *Proceedings B* paper with local NPR affiliate

“What bats can teach us about stopping the next pandemic” by Barri Bronston, Tulane News (27 July 2022); Article about my Proceedings B paper on ACE2 and DPP4; picked up by >15 other news media sources

“Scientists figure out how vampire bats got a taste for blood” by Christina Larson, AP News (25 March 2022); Interviewed and quoted about vampire bats

WWL Radio (Dec 2021): Interviewed on morning show about bats and my grant

“Tulane researcher receives award to study the threat of diseases from bats” by Barri Bronston, Tulane News (20 December 2021): Article about RCSA grant I received

“Scientists focus on bats for clues to prevent the next pandemic” by Christina Larson, AP News (14 December 2020): Interviewed and quoted about bats and disease

“Out of the Darkness” by Christie Wilcox, Bats Magazine (Issue 3; October 2020): Interviewed and quoted about bat genomics

“Feeling Bats” by Austin Price, Bay Nature Magazine (June 21, 2020): Interviewed and quoted about bats and disease

“Animal source of the coronavirus continues to elude scientists” by Smriti Mallapaty, Nature (May 18, 2020): Provided background information and expert opinion (no direct quotes)

“Covid-19 Reignites a Contentious Debate over Bats and Disease” by Katherine J. Wu, Undark Magazine (May 5, 2020): Interviewed and quoted about bats and COVID-19

“When Illness Strikes, Vampire Bat Moms will still Socialize with their Kids” by Katherine J. Wu, Smithsonian Magazine (March 13, 2020): Interviewed and quoted as outside expert on article about vampire bat sickness behavior

PROFESSIONAL MEMBERSHIPS

American Society of Naturalists (2017-)

Society for the Study of Evolution (2019-)

American Association for the Advancement of Science (2015-2016)

LEAVE ACTIVITY

Spring semester 2023: Maternity leave

Spring semester 2021: Maternity leave