Rose Postdoctoral Fellow, Lab of Ornithology, Cornell University Email: anusha.shankar@cornell.edu | Website: anushashankar.weebly.com Twitter: @nushiamme

Professional Appointments

Rose Postdoctoral Fellow, Lab of Ornithology

2020-current

(Supervisors: Dr. Irby Lovette & Dr. Maren Vitousek)
Transcriptomics of a sleep-torpor spectrum in hummingbirds.

Cornell University, Ithaca, NY, USA.

Postdoctoral Fellow, Institute of Arctic Biology

(Supervisor: Dr. Cory Williams)

2019-20

Seasonal Affective Disorder in diurnal Nile grass rats: behavior & neuroendocrinology.

University of Alaska Fairbanks, Alaska, USA.

Education

PhD, Ecology and Evolution

(Advisors: Dr. Catherine Graham, Dr. Don Powers)

2012-18

"Field physiology to build hummingbird daily energy budgets: Hummingbirds are energetically flexible". Stony Brook University, New York, USA.

M.Sc. Ecology and Environmental Sciences (Advisor: Dr. Priya Davidar)

2009-11

"Malabar Pied Hornbill (*Anthracoceros coronatus*) nest site parameters in the highly fragmented Northern Western Ghats, India". Pondicherry University, Puducherry, India.

B.Sc. Advanced Zoology and Biotechnology

2006-09

Stella Maris College, Chennai, India.

Publications and Manuscripts

Published = 5, Revision/Review = 2, In prep = 1

Shankar A, Williams CT. 2021. The darkness and the light: diurnal rodent models for seasonal affective disorder. Invited Review. *Disease Models and Mechanisms*. 14(1):dmm047217. DOI:10.1242/dmm.047217.

Shankar A[†], Schroeder RJ[†], Wethington SM, Graham CH, Powers DR. 2020. Hummingbird torpor in context: duration, more than temperature, is the key to nighttime energy savings. ([†]Equal authors). *Journal of Avian Biology.* 51(5):jav.02305. DOI: 10.1111/jav.02305

Shankar A, Powers DR, Dávalos LM, Graham CH. 2020. The allometry of daily energy expenditure in hummingbirds: an energy budget approach. *Journal of Animal Ecology*. 89:12541261. DOI: 10.1111/1365-2656.13185

Shankar A, Graham CH, Canepa JR, Wethington SM, Powers DR. 2019. Hummingbirds budget energy flexibly in response to changing resources. *Functional Ecology*. 3(10):1904-16. DOI: 10.1111/1365-2435.13404.

Graham CH, Supp SR, Powers DR, Beck PA, Lim MCW, **Shankar A**, Cormier, T, Goetz S, and Wethington S. 2016. Winter conditions influence biological responses of migrating hummingbirds. *Ecosphere*. 7(10):e01470.

Shankar A, Cisneros INH*, Thompson S*, Graham CH, Powers DR. Bird torpor, shallow and deep: A torpor spectrum in hummingbirds uncovered using thermal imaging. *In revision*.

Eberts E*, Tattersall G, Auger P, Strauss E, Curley M, Morado M, **Shankar A**. Thermal imaging: Do nesting female hummingbirds use torpor? *In revision*.

Shankar A, McCahon S*, Callegari K*, Seitz TJ, Yan L, Drown DM, Williams CT. SAD rats: Effects of short photoperiod on sleep disruption, gut microbiota, and carbohydrate consumption in diurnal grass rats. *In prep*.

* Mentored students

Recent Research Experience

Postdoctoral work Sleep disruption, carbohydrate consumption, gut microbiome changes in response to short photoperiod in Nile grass rats (A study of Seasonal Affective Disorder). Funded by NIH INBRE Alaska	2019-20
Dissertation work Integrating hummingbird field physiology with ecology (energy expenditure and intake). <u>Funded</u> by NASA.	2012-18
Visiting Scientist, WSL, Switzerland Swiss Federal Institute for Forest, Snow and Landscape Research. 3 months; Analyses and paper writing with Dr. Catherine Graham and Dr. Don Powers.	2017,18
Visiting Researcher, George Fox University, Oregon 6 weeks; Analyses and paper writing with Dr. Don Powers.	2018
Research Assistant, NASA hummingbird diversity grant, Stony Brook, New York Compiled data and performed preliminary data analyses (in R), generated maps for publication, improved methods of data collection and storage.	2013, 2018
Field Technician, Shola evolution project, NCBS Bangalore. Mist-netted, collected blood samples, made morphological measurements, extracted DNA and carried out PCR for high elevation bird species.	2012
Grants & Awards (over \$81,000 raised)	
Research grants	
National Geographic Society, Early Career Grant. "Hot and cold hummingbirds: Comparing birds and mammals to understand vertebrate sleep and torpor". Mar 2021.	\$10,000
National Geographic Society , co-PI, grant for a website/book on "Collective Visions for a Sustainable post-COVID future". Nov 2020.	\$12,500
Rose Postdoctoral Fellowship, Cornell University Research funds for hummingbird physiological transcriptomics project. 2020-2022.	\$20,000
Cost of Education scholarship , Dept of Ecology and Evolution, Stony Brook. For research in ecology. Mar 2018.	\$600
David F. Ludwig travel scholarship, AEHS. For fieldwork on shallow torpor in hummingbirds in Arizona. Aug 2017.	\$1000
Experiment crowd-funded grant, Experiment.com. With Erich Eberts*, Dr. Peter Auger, Dr. Glenn Tattersall, and Maria Curley. To study nesting female hummingbirds' torpor use with thermal cameras. Dec 2016. *Mentored student.	\$5026
Lewis and Clark field scholarship grant, American Philosophical Society. For field work on hummingbird physiological ecology. May 2016.	\$5000
Mildred and Herbert Weisinger dissertation fellowship, Stony Brook University. For dissertation research on hummingbird physiology and ecology. Mar 2016.	\$10,000
Lawrence B. Slobodkin award for research in ecology, Feb 2016.	\$750
Departmental unrestricted research grant, Stony Brook University, Mar 2015.	\$750
Tinker field research grant, Tinker Foundation. For field research in Latin America. May 2014.	\$2300
National Geographic Society Young Explorer's Grant. "Field-based physiological ecology: A key component for forecasting species distributions." Mar 2014.	\$4997

Departmental research excellence award, Stony Brook University, Mar 2014.	\$1000
Lawrence B. Slobodkin award for Research in Ecology, March 2013.	\$900
<u>Awards</u>	
Dorothy Skinner Award, Society for Integrative and Comparative Biology. \$500.	Jan 2021
Professional Development Award Society for Integrative and Comparative Biology. \$300	Jan 2021
INBRE Faculty Travel Award from Alaska INBRE for travel, membership and registration for attending SICB. \$2000.	Jan 2020
Diversity & Inclusion Travel Award from the American Ornithological Society for travel, membership and registration at the AOS meeting. \$760.	June 2019
Resource access project award (RAP), Graduate Student Organization, Stony Brook University. For conference travel. \$500.	Apr 2018
3-Minute Thesis, Stony Brook University. 3rd place	Apr 2018
Best Teaching Assistant Award , Department of Ecology and Evolution. Stony Brook University	Mar 2018
Departmental Service Award for service to the Department of Ecology and Evolution. Stony Brook University	Mar 2018
National Geographic Leadership and Development Program for Young Leaders. 1 of 15 international grantees selected for this year-long program.	2017-18
Charlotte Magnum student support award for housing costs at the Society for Integrative and Comparative Biology (SICB) Meeting.	2017, 2018
Distinguished Travel Award , Graduate Student Organization, Stony Brook University. To attend International Union of Physiological Sciences Meeting, Rio, Brazil. \$1500.	Aug 2017
SICB broadening participation travel award. To attend Society for Integrative and Comparative Biology (SICB) Annual Meeting. \$489.	Jan 2017
Cedar Brook award for best talk at the Ecology and Evolution departmental retreat, Stony Brook University.	Feb 2016
National Science Foundation mentoring program for Young Scientists (Travel and registration award for GRC 2014: "Unifying Ecology across Scales").	Jul 2014
Resource access project award (RAP), Graduate Student Organization, Stony Brook University. For conference travel. \$350.	Jan 2013
Talks and posters	
Invited talks = 50	
Stony Brook University Graduate Career Association. A conversation on balancing research and outreach: who do I want to be?	2021
Exploring by the seat of your pants. Talk to school classrooms Studying hummingbirds.	2021
Explorer classroom. Three talks to audiences aged 4-8yo and 9-14yo. Hummingbird ecology.	2021
Women Blaze Trails festival. Talk, Seeing Science in Everyday Life: Lessons from Hummingbirds.	2021
TEDx IIMBG, India. Talk, What we can learn by listening to nature.	2020

Cornell Youth Bird Club, Ithaca, NY. Hummingbirds: energy ninjas	2020
Advanced Animal Behaviour class , Carleton University, Guest Lecture. Collecting data from hummingbirds, depressed rats, and myself	2020
NCBS BLiSC , Bangalore Life Sciences Cluster, National Centre for Biological Sciences, India. From hornbills to hummingbirds: What watching wildlife can teach us about ourselves.	2020
Cornell Ornithology Seminar, Lab of Ornithology, Cornell University. Collecting data from hummingbirds, depressed rats, and myself	2020
IISER Behrampur La Vida, Ecology series. How do the world's smallest birds - hummingbirds - manage to exist?	2020
Centro de Innovación y Educación, Mexico. La vida secreta de los colibríes	2020
British Ecological Society Ecology Live. Spending energy unusually and flexibly: lessons from flying ninja hummingbirds	2020
Madras Naturalists' Society. How do the world's smallest birds - hummingbirds - manage to exist?	2020
Explorer classroom through National Geographic: Live Zoom call for classrooms. <i>Collecting data to understand yourself.</i>	2020
Explorer classroom in Spanish through National Geographic: Live Zoom call for classrooms. La vida secreta de los colibríes con Anusha Shankar.	2020
Explorer classroom through National Geographic: Live Zoom call for a series featuring women in science and exploration.	2020
Tri-Valley School , 8 talks for grades 1-12. <i>Science at the equator and the North Pole</i> ; and <i>Using data to learn: lessons from life at extremes</i> . Covered by the Daily News Miner.	2020
HHMI Janelia Research Center, seminar. Hummingbirds: A model for understanding sleep?	2019
National Geographic Education Summit, Lessons from animals at the extremes.	2019
Life Sciences Seminar, University of Alaska Fairbanks. Field physiology and energetics: linking ecology and evolution in free-living hummingbirds.	2019
National Geographic After Hours Museum talk, Brightest Young Things event. Data from animals, data from myself!	2019
American Ornithological Society, Anchorage, AK. Mini-talk, Early-professionals Symposium: Bringing field physiology to the tropics.	2019
South Valley School's Explorer Day 'Vamos explorar!' Virtual Speaker, with teacher Jennifer Chavez-Miller.	2019
National Geographic Learning Webinar speaker, Virtual Learning Series: National Geographic Explorers in the Classroom.	2019
Explorer classroom through National Geographic: Live Youtube hangout with seven school classrooms reaching over a 1000 students live.	2019
TEDx Chennai , India. Talk, What can hummingbirds teach us about time management?	2019
Stella Maris College , Chennai, India. Talk, <i>An Indian ecologist in the forests of Ecuador (and how hummingbirds manage to exist).</i>	2019
IISER Tirupati, India. Field physiology and energetics: linking ecology and evolution in free-living hummingbirds.	2019

St. Joseph's College, Bengaluru, India. An Indian Ecologist in the cloud forests of Ecuador (and some of her findings on how hummingbird manage to exist).	2018
Ecology Students' Society: Indian Institute of Science, Bengaluru, India. Field physiology and energetics: linking hummingbird ecology and evolution.	2018
Max Planck Institute for Ornithology, Radolfzell, Germany. Day and night: energy balance in hummingbirds.	2018
Friends of the Long Pond Greenbelt, New York. Surprising secrets of sleeping hummingbirds.	2018
National Geographic Explorer's Festival, Washington D.C. Hummingbirds and Tequila.	2018
Telluride Mountainfilm Festival Telluride, CO. Hummingbirds, energy, pee and infrared.	2018
Explorer classroom through National Geographic: Live Youtube hangout with seven school classrooms reaching over a 1000 students live.	2018
National Geographic Family Day 2018 Why Birds Matter Washington D.C. The secret nightlife of hummingbirds.	2018
Nat Geo Nights Bird Nerd: For the Birds Washington D.C. The secret nightlife of hummingbirds.	2018
SBU Natural History Club Talk - I Know What You Did Last Summer Stony Brook, NY. <i>The secret nightlife of hummingbirds</i> .	2017
Virtual speaker : Comparative animal physiology class, Pontificia Universidad Javeriana, Cali, Colombia. <i>Hummingbird energy management, and a career in Ecology.</i>	2017
Chief Guest, Valedictory speech : Stella Maris College, Zoology Culturals 'Synapse', Chennai, India. <i>Turning failures into successes in a Zoology career.</i>	2017
Seminar speaker : Swiss Federal Institute for Forest, Snow and Land WSL, Zurich, Switzerland. <i>On a shoe string: energy balance in hummingbirds</i>	2017
School of Biology, Universidad del Azuay, Cuenca, Ecuador. Colibríes hipotérmicos y su presupuesto energético (Spanish for: Hypothermic hummingbirds and their energy budgets)	2016
Ecology Students' Society, Indian Institute of Science , Bengaluru, India. <i>Hypothermic hummingbirds: an energy management story.</i>	2016
National Centre for Biological Sciences, Bengaluru, India. Hypothermic hummingbirds: an energy management story.	2016
Guest lecture: Chordate Zoology lecture, Stony Brook University. The Biology of Birds.	2015
Gordon Research Seminar: Unifying ecology across scales, University of New England, Maine. Field physiology: A key component in forecasting species distributions.	2014
To high-school & undergraduate students : at Bala Vidya Mandir Senior Secondary School; Department of Zoology, Stella Maris College; and at Science Sense, Chennai.	2010-12
Conference Talks and Posters = 16	
Society for Integrative and Comparative Biology, Virtual. Talk and session co-chair, Energy budgets to explain allometry: lessons from flying ninja hummin	2021 ngbirds.
Society for Integrative and Comparative Biology, Virtual. Poster, A spectrum of sleep, shallow torpor, and deep torpor in hummingbirds.	2021

North American Ornithological Conference, Virtual. Talk and session chair, From shallow to deep: A torpor spectrum in hummingbirds uncovered by thermal imaging	2020
Society for Integrative and Comparative Biology, Austin, TX. Talk, SAD rats: Effects of short photoperiod on sleep disruption, the gut microbiome, and carbohydrate consumption in diurnal grass rats.	2020
American Ornithological Society, Anchorage, AK. Talk and session chair, From shallow to deep: A torpor spectrum in hummingbirds uncovered using thermal imaging.	2019
Society for Light Treatment and Biological Rhythms, Chicago, IL. Talk, SAD rats: Effects of short photoperiod on sleep and carbohydrate consumption in diurnal grass rats.	2019
American Physiological Society: Comparative Physiology, New Orleans, LA. Talk, Hummingbird daily energy expenditure allometry: Is bigger better?	2018
Society for Integrative and Comparative Biology, San Francisco, CA. Talk and session co-chair, From shallow to deep: A torpor spectrum in hummingbirds.	2018
International Union for Physiological Sciences. Rio de Janeiro, Brazil. Poster, Activity has largest effect on daily energy expenditure in a sub-tropical hummingbird.	2017
Evolution , Portland, Oregon. Dávalos, L.M., Shankar A , and Lauterbur ME. Talk, <i>The unnatural concept of extinction in species-area relationships and teaching conservation biology.</i>	2017
Society for Integrative and Comparative Biology, New Orleans, LA. Talk, Energy budgeting in a temperate hummingbird.	2017
National Geographic, Washington D.C. Talk, Hummingbird energy management!	2016
North American Ornithological Conference, Washington D.C. Talk, Hypothermic hummingbirds - an energy management story.	2016
Reunión Ecuatoriana de Ornithología, Zamora, Ecuador. Poster, Córdova G*, Urgilés G*, Tinoco BA, Shankar A. Ahorro energético nocturno en cuatro especies de colibríes en los Andes del austro Ecuatoriano. (Spanish for: Nocturnal energy savings in four hummingbird species of the southern Ecaudorian Andes).	2016
Reunión Ecuatoriana de Ornithología, Zamora, Ecuador. Poster, Morales AC *, Shankar A, Graham CH, Powers DR. Costos de termorregulación de Heliangelus viola en los Andes sur del Ecuador (Spanish for: Thermoregulatory costs of Heliangelus viola in the Andes in the south of Ecuador).	2016
Gordon Research Conference: Unifying ecology across scales . University of New England, Maine. Poster, <i>Field physiology: A key component in forecasting species distributions</i>	2014
International Biogeography Society. International Biogeography Society 6th Biennial Meeting, Frontiers of biogeography 4:1, p. 174. Shankar A. et al. Poster, The Malabar Pied Hornbill (Anthracoceros coronatus) nests near human habitations in highly fragmented landscapes in the Northern Western Ghats, India.	2013
Students Conference for Conservation Science (SCCS), Bangalore. Talk, Malabar Pied Hornbills nest in fragmented habitats in the Western ghats.	2011

^{*} Mentored students, Poster presenters

Science Communication & News

National Geographic Learning series of six learning modules on biology and the life of an ecologist for beginner, intermediate and advanced English learners.	2020-21
Interviewed by high school student Jack Rifkin from George Mason High school for Women's History Month Interview Series, about career paths.	Mar 24, 2021
Interviewed by IISER* Tirupati students for their annual magazine 'Dhwani'. (*Indian Institute for Science Education and Research).	Mar 16, 2021
Panelist for IIT Madras research affairs Instagram Live panel about career paths.	Mar 13, 2021
Interviewed for children's news website Owliver's Post, on world wildlife day.	Mar 3, 2021
Discussion leader for American Ornithological Society's Careers in Ornithology roundtable discussion.	Feb 2021
Interviewed by K-12 Education, Cornell Lab of Ornithology for a Women (of color) in STEM series.	Feb 9, 2021
Interviewed for Birds and Blooms magazine article on hummingbirds and hummingbird feeders, by Jill Staake.	Feb 2021
Columnist, Current Conservation magazine.	2021-current
Podcast guest, Thriving on the Possibility with Peg Keiner.	Dec 1, 2020
Video for second graders, Ms. Corinne Wright, Mount Daniel Elementary School, VA.	Nov 2020
Interviewed for comment, by Science Magazine To survive frigid nights, hummingbirds cool themselves to record-low temperatures.	Sep 8, 2020
Interviewed by New Hampshire Public Radio Ask Sam: Why Do Hummingbirds Fight Each Other? and article.	Sep 4, 2020
True Facts: The Hummingbird Warrior Interviewed by Ze Frank.	Aug 14, 2020
Children's Book with Pratham Storyweaver Illustrated by Harjyot Khalsa. What do Sunbirds Eat All Day?	Apr 23, 2020
Video for ExplorerHome Madagascar	Apr 15, 2020
Blog article for Functional Ecologist, accompanying paper in Functional Ecology.	Aug 9, 2019
Current Conservation Kids A day in the life of: Anusha Shankar, Vol 13, Issue 1. <i>Humming with Energy</i> .	Mar 2019
Current Conservation Field notes, Vol 13, Issue 1. A city-girl field ecologist.	Mar 2019
Video feature, Kim Michaels' hummingbird documentary Nature's single mom: A hummingbird nest story.	Mar 2, 2019
News article , Mohammed Rayaan for NewsToday, Chennai Wildlife explorer, Anusha Shankar, shares nuggets about her birds research.	Mar 2, 2019
Explorer-Educator partnership through National Geographic: A year long partnership with Steve Kirsche at a school near Jacksonville, Florida, to talk science to sixth graders.	Nov 2018-2019
Featured radio guest, National Geographic Kids' Weird But True radio show.	Apr 27, 2018
National Audubon Society Why Anusha Shankar doesn't mind being the 'Hummingbird Pee Person'. By Jayme Moye. Also feat. on Stony Brook News.	Apr 2, 2018

Featured podcast guest with IndSciComm, A Soupçon of SciComm with Anusha Shankar on hummingbirds and energy budgets.	Mar 28, 2018
Featured video in the New York Times and New York Times Science Take of a hummingbird in and out of torpor.	Mar 20, 2018
Explorer-Educator partnership through National Geographic: A year long partnership with Kate Craven at a school in Ashford, Connecticut, to develop projects revolving around my science: grades 1-7.	Oct 2017-2018
Article for Mental Floss and featured answer on Quora.	Feb 2018
Blog post for National Geographic and Science Outside.	Feb 2018
Voiceover for National Geographic Learning <i>Panorama</i> Video for Grade 1 "How do animals use their body parts?"	2017
Co-founder and contributor: Science Outside, For field scientists to share their crazy, silly, fun stories with the world.	2017-current
Co-founder and contributor: BrainChem & Ecology in collaboration with a Chemical Neurobiologist, to illustrate scientific concepts in simple graphics and videos for the public.	2017-current
"Today I Learned" series for National Geographic Hummingbirds Are the World's Hungriest Birds. YouTube.	Oct 22, 2016
News Youth for Tigers. The Hindu NxG.	Jan 5, 2011
News Pooja Sharma, Dainik Bhaskar (in Hindi).	Dec 6, 2014
News Anusha Parthasarathy, On the Wild Side, The Hindu Education Plus.	October 6, 2014
Teaching (Semesters = 9; Students \approx 570)	
Teaching Assistant, Conservation Biology (BIO 336), SBU (Active learning).	Fall 2016/17/18
Head Teaching Assistant, Chordate Zoology (BIO 344), SBU.	Spring 2015/16
Teaching Assistant, Ecology Lab (BIO 352), SBU.	Fall 2014
Teaching Assistant, Chordate Zoology Lab (BIO 344), SBU.	Spring 2013/14/16
Teaching Assistant, Fundamentals of Scientific Inquiry in the Biological Sciences I (BIO 204), SBU.	Fall 2012
Additional Experience	
Workshop, RNA-seq data analysis, Cornell University Institute of Biotechnology.	2020
Workshop, Microbiome bioinformatics with QIIME 2.	2020
Workshop , Sequence alignment, clustering, and phylogenetic analysis. Cornell University Institute of Biotechnology.	2020
Workshop, Functional Ecology Genomics, Lacawac Sanctuary, Philadelphia.	2017
Volunteer, International Biogeography Society 6th Biennial Meeting, Miami, FL.	2013
Workshop on rescue and relocation of snakes conducted by Gowri Shankar of the Agumbe Rainforest Research Station and Snake Shyam, Mysore, India.	2012
Workshop on basic remote sensing and GIS with a focus on conservation planning, conducted by FERAL, supported by an ATREE-CEPF small grant.	2012
Workshop on wetland bird survey and mark-recapture, by Bombay Natural History Society at Point Calimere, India.	2011
India's Youth Tiger Ambassador , one of two selected by WWF-India to represent the country at the Youth Tiger Summit held in Vladivostok, Russia.	2010

Students officially mentored (Total = 16)

Shelby McCahon, Lab assistant & BLAST scholar, Univ of Alaska, Fairbanks.	Feb 2019 - May 2020
Kyle Callegari, Lab assistant & BLAST scholar, Univ of Alaska, Fairbanks.	Feb 2019 - May 2020
Erich Eberts, Field assistant, now: PhD student, Univ Toronto at Scarborough.	Dec 2015 - current
Rebecca Schroeder, Field assistant, now in the US National Park Service.	Jun 2014 - 2017
Sarah Thompson, Undergraduate student, George Fox University.	Jun - Aug 2018
Alexis Stark, Undergraduate student, Northern Arizona University.	May - Jun 2018
Isabelle Cisneros, Undergraduate student, George Fox University.	Jun - Aug 2017
Ana Morales, Head field assistant, now: M.Sc. at McGill University, Canada.	Oct 2015 - Oct 2016
Gabriela Cordova, Universidad del Azuay, Internship & Bachelor's thesis.	Aug 2015 - Oct 2016
Gabriela Urgiles, Universidad del Azuay, Internship & Bachelor's thesis.	Nov 2015 - Oct 2016
Rosalee Elting, Field assistant, George Fox University.	Sept - Oct 2016
Julisa Ricart, Field assistant, University of Wisconsin-Madison.	Jul 2015 - Jan 2016
Amanda Quezada, Universidad del Azuay, Pasantias (internship) project.	Aug - Sept 2015
Joshua van Bourg, Field assistant, University of California Berkeley.	Sept - Dec 2015
Pedro Jose Machado Tapia, Field assistant, Universidad del Azuay.	Jun - Sept 2015
Joseph Canepa, Undergraduate student, George Fox University.	Jun - Aug 2014

Other Skills

LaTeX, GPS, ArcGIS, qGIS, GitHub /nushiamme, small mammal lab maintenance, Radio-telemetry of snakes, photography; handling people, birds, arachnids and reptiles; mist-netting. With hummingbirds: fieldwork and team management (12 months in Ecuador)- led a team of 11 field assistants; field respirometry, doubly labeled water, stable isotope micro-distillation, plant resource measurements. Science communication, mentoring, active learning methods; coding in R, MCMCglmm, mentoring. With Nile grass rats: Piezosleep data collection and analyses, actogram analyses, lab maintenance, iPrecio pump (continuous drug infusion) implantation, programming, and maintenance euthanasia and dissections (brain extraction, blood, liver, cecum, fat), liver histology and image analyses, gut microbiome collection, DNA extraction. CPR (and AED) certified (May 2017).

Languages: British and American English, Tamil, Hindi, conversational Spanish, some Malayalam; Also, the skill and interest to learn new skills and languages quickly.

Professional Service

Member - Society for Integrative and Comparative Biology, American Physiological Society, British Ecological Society, American Ornithological Society, Graduate Women in Science.

Reviewer- Please see my Publons profile

DEIJB Hiring Practices working group , Diversity, Equity, Inclusion, Justice and Belonging Ecology and Evolutionary Biology department, Cornell University	2020
Selection Committee, Distinguished Travel Award committee, Graduate Student Organization, Stony Brook University	2017
Founder , Departmental mentoring program for & by graduate students, Stony Brook University	2016-18
Founder, cross-departmental Silent Writing group, Stony Brook University	2017

Attendee, Women in Science and Engineering (WISE) Leadership and Career course	2018
Vice President, Graduate Women in Science and Engineering (GWiSE), Stony Brook University	2017-18
Judge, 5th Annual Nassau County Science Competition	2017
Event manager and Newsletter writer, GWiSE, Stony Brook University	2016-17
Student representative to the Faculty, Ecology & Evolution, Stony Brook University	2016-17
Science Educator with Grads for Education and Outreach (GEO)	2016
Treasurer of the Ecology Club, Stony Brook University	2013-14
Departmental representative to the RA union Stony Brook University	2013-14
Senator, Graduate Student Organization, Stony Brook University	2013-15
Executive Officer , Freewheel Collective (helping students learn how to repair their own bicycles), Stony Brook University	2014-18