

Anusha Shankar

601 Life Sciences, Stony Brook NY 11794 | anusha.shankar@stonybrook.edu | +1-516-830-1346 | anushashankar.weebly.com

Education

PhD candidate, Ecology and Evolution (Advisor: Dr. Catherine Graham)	2012–Present
Preliminary title: "Field-based physiological ecology: A key component in forecasting species distributions". Stony Brook University, New York.	
M.Sc. Ecology and Environmental Sciences (Advisor: Dr. Priya Davidar)	2009–11
"Malabar Pied Hornbill (<i>Anthracoceros coronatus</i>) 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

- Shankar A***, Schroeder RJ*, Wethington SM, Graham CH, Powers DR. Torpid hummingbirds: energy savings in temperate and tropical sites. (In revision, * Equal first authors)
- Graham CH, Supp SR, Powers DR, Beck PA, Lim MCW, **Shankar A**, Cormier, T, Goetz S, and Wethington S. Winter conditions influence biological responses of migrating hummingbirds. *Ecosphere*. 7(10): e01470. 10.1002/ecs2.1470
- Aguilar JMA, **Shankar A**, Nieto, AV, Tinoco BA. Year-round occurrences of birds in the Southwestern high Andes of Ecuador. *Cotinga*. (In Review).
- Shankar A**, Graham CH, Canepa JR, Wethington SM, Powers DR. Activity has largest effect on daily energy expenditure in a sub-tropical hummingbird. *In advanced prep*

Grants and Hono(u)rs

David F. Ludwig travel scholarship , AEHS, Aug 2017. For fieldwork on shallow torpor in hummingbirds in Arizona.	\$1000
Distinguished Travel Award , Graduate Student Organization, Stony Brook University, Aug 2017. To attend International Union of Physiological Sciences Meeting.	\$1500
SICB broadening participation travel award , Jan 2017. To attend Society for Integrative and Comparative Biology (SICB) Annual Meeting.	\$489
Experiment crowd-funded grant , Experiment.com, Dec 2016. (Together with Erich Eberts*, Dr. Peter Auger, Maria Curley, and Dr. Glenn Tattersall) To study nesting female hummingbirds' torpor use with thermal cameras. *Mentored student	\$5000
Lewis and Clark field scholarship grant , American Philosophical Society, May 2016. For field work on hummingbird physiological ecology.	\$5000
Midred and Herbert Weisinger dissertation fellowship , Stony Brook University, Mar 2016. For dissertation research on hummingbird physiology and ecology.	\$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, May 2014. For research in the field in Latin America.	\$2300
National Geographic Society young explorer's grant , Mar 2014. For field research on hummingbird physiology and ecology.	\$4997
Departmental research excellence award , Stony Brook University, Mar 2014.	\$1000
Resource access project award (RAP) , Graduate Student Organization, Stony Brook University, Jan 2013. To attend International Biogeography Society conference.	\$350
Lawrence B. Slobodkin award for Research in Ecology, March 2013.	\$900

Anusha Shankar

601 Life Sciences, Stony Brook NY 11794 | anusha.shankar@stonybrook.edu | +1-516-830-1346 | anushashankar.weebly.com

Awards

- National Geographic Leadership and Development Program** for Young Explorers. Jul 2017
1 of 15 international grantees selected for this year-long program.
- Charlotte Magnum student support award** for housing costs at the Society for Integrative and Comparative Biology (SICB) Meeting. Jan 2017, 2018
- 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

Research Experience

- Field Dissertation Research (12 months), Ecuador** 2015
Led a team of 11 field assistants for 12 months over 4 years to study hummingbird physiology and ecology.
- Research Assistant, NASA hummingbird diversity grant, Stony Brook University, NY.** 2013
Compiled data and performed preliminary data analyses (in R), generated maps for publication, suggested improvements to methods of data collection and storage.
- Field Technician, Shola evolution project, NCBS Bangalore.** 2012
Mist-netted, collected blood samples, made morphological measurements, extracted DNA and carried out PCR for high elevation bird species.
- Summer Research Fellow, Indian Academy of Sciences, Bangalore.** 2010
Carried out preliminary observational studies on the vertebrate visitors to *Ficus benghalensis* (Banyan), and Lepidopteran visitors of the invasive *Lantana camara*.
- Volunteer, King Cobra Telemetry Project, Agumbe Rainforest Research Station, Karnataka.** 2010
Streamlined data entry, tracked king cobras, set up pitfall traps, did some organic farming.
- Volunteer, Wildlife Trust of India, at Kaziranga, Assam, India.** 2008
Tracked and studied the behavior of a Hoolock gibbon (*Hoolock hoolock*) being rehabilitated into the wild.

Science Communication

- Co-founder** and contributor: [Science Outside](#), 2017-current
For field scientists to share their crazy, silly fun stories with the world
- 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
- Shankar Anusha** Voiceover for National Geographic Learning *Panorama* Video for Grade 1 "How do animals use their body parts?" 2017
- Shankar Anusha** *Hummingbirds Are the World's Hungriest Birds.* October 22, 2016
National Geographic "Today I Learned" series. [YouTube](#).
- Sharma, Pooja. [Dainik Bhaskar](#) (in Hindi) December 6, 2014
- Parthasarathy, Anusha. *On the Wild Side.* The Hindu Education Plus October 6, 2014
- Shankar Anusha.** *Youth for Tigers.* The Hindu NxG January 5, 2011

Anusha Shankar

601 Life Sciences, Stony Brook NY 11794 | anusha.shankar@stonybrook.edu | +1-516-830-1346 | anushashankar.weebly.com

Invited Talks

- Invited speaker:** National Geographic Family Day 2018 | Why Birds Matter 2018
Washington D.C. *The secret nightlife of hummingbirds.*
- Invited speaker:** Nat Geo Nights | Bird Nerd: For the Birds 2018
Washington D.C. *The secret nightlife of hummingbirds.*
- Invited virtual speaker:** Comparative animal physiology class, Pontificia Universidad 2017
Javeriana, Cali, Colombia. *Hummingbird energy management, and a career in Ecology.*
- Chief Guest, Valedictory speech:** Stella Maris College, Zoology Culturals 'Synapse', 2017
Chennai, India. *Turning failures into successes in a Zoology career.*
- Invited speaker:** School of Biology, Universidad del Azuay, Cuenca, Ecuador. 2016
Colibríes hipotérmicos y su presupuesto energético (Spanish for: *Hypothermic hummingbirds and their energy budgets*)
- Invited speaker:** Ecology Students' Society, Indian Institute of Science, Bengaluru, India. 2016
Hypothermic hummingbirds: an energy management story.
- Informal talk:** National Centre for Biological Sciences, Bengaluru, India. 2016
Hypothermic hummingbirds: an energy management story.
- Guest lecture:** Chordate Zoology lecture, Stony Brook University. *The Biology of Birds.* 2015
- Invited speaker:** Gordon Research Seminar: Unifying ecology across scales, University 2014
of New England, Maine. *Field physiology: A key component in forecasting species distributions.*
- Invited speaker:** at Bala Vidya Mandir Senior Secondary School; 2010-12
Department of Zoology, Stella Maris College; and at Science Sense, Chennai.

Conference Talks and Posters

- Oral presentation** and session co-chair: Society for Integrative and Comparative Biology, San Fran- 2018
cisco, CA.
From shallow to deep: A torpor spectrum in hummingbirds
- Oral presentation:** SBU Natural History Club - I Know What You Did Last Summer 2017
Stony Brook, NY. *The secret nightlife of hummingbirds.*
- Poster:** International Union for Physiological Sciences. Rio de Janeiro, Brazil. 2017
Activity has largest effect on daily energy expenditure in a sub-tropical hummingbird.
- Oral presentation:** Society for Integrative and Comparative Biology, New Orleans, LA. 2017
Energy budgeting in a temperate hummingbird.
- Oral presentation:** National Geographic, Washington D.C. 2016
Hummingbird energy management!
- Oral presentation:** North American Ornithological Conference, Washington D.C. 2016
Hypothermic hummingbirds - an energy management story.
- Poster:** Reunión Ecuatoriana de Ornithología, Zamora, Ecuador. 2016
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 Ecuatorian Andes*)
- Poster:** Reunión Ecuatoriana de Ornithología, Zamora, Ecuador. 2016
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*)

Anusha Shankar

601 Life Sciences, Stony Brook NY 11794 | anusha.shankar@stonybrook.edu | +1-516-830-1346 | anushashankar.weebly.com

Poster: Gordon Research Conference: Unifying ecology across scales. University of New England, Maine. *Field physiology: A key component in forecasting species distributions* 2014

Poster: International Biogeography Society. International Biogeography Society 6th Biennial Meeting, Frontiers of biogeography 4:1, p. 174. A. Shankar et al. *The Malabar Pied Hornbill (Anthracoceros coronatus) nests near human habitations in highly fragmented landscapes in the Northern Western Ghats, India.* 2013

Oral Presentation: Students Conference for Conservation Science (SCCS), Bangalore. 2011

* Mentored students, Poster presenters

Teaching

Teaching Assistant, **Conservation Biology** (BIO 336), SBU (Active learning). Fall 2016, 2017

Head Teaching Assistant, **Chordate Zoology** (BIO 344), SBU. Spring 2015, 2016

Teaching Assistant, **Ecology Lab** (BIO 352), SBU. Fall 2014

Teaching Assistant, **Chordate Zoology Lab** (BIO 344), SBU. Spring 2013, 2014, 2016

Teaching Assistant, **Fundamentals of Scientific Inquiry in the Biological Sciences I** (BIO 204), SBU. Fall 2012

Additional Experience

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

Volunteer for one year at the Madras Crocodile Bank, Chennai, India. Young reptiles center, public education and outreach. 2008-2009

Students mentored

Isabelle Cisneros, Undergraduate student, George Fox University. Jun - Aug 2017

Ana Morales, Head field assistant, 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

Erich Eberts, Field assistant, Loyola Marymount University. Dec 2015 - Jan 2016

Pedro Jose Machado Tapia, Field assistant, Universidad del Azuay. Jun - Sept 2015

Rebecca Schroeder, Undergraduate student, George Fox University. Jun 2015 - Aug 2014

Joseph Canepa, Undergraduate student, George Fox University. Jun 2015 - Aug 2014

Anusha Shankar

601 Life Sciences, Stony Brook NY 11794 | anusha.shankar@stonybrook.edu | +1-516-830-1346 | anushashankar.weebly.com

Skills

Coding in R; LaTeX, GPS, ArcGIS, qGIS, GitHub /nushiamme, Mist-netting, bird morphology measurements, DNA extraction, PCR, doubly-labeled water (DLW) method, open-flow respirometry, stable isotope micro-distillation, Radio-telemetry of snakes, photography; handling people, birds, arachnids and reptiles. CPR (and AED) certified (May 2017).

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

Professional Service

Member - Madras Naturalists Society, American Ornithologists' Union, Society for Integrative and Comparative Biology, American Association for University Women, American Physiological Society.

Reviewer- Ecology and Evolution, International Journal of Biometeorology; [Publons profile](#)

Reviewer, Distinguished Travel Award committee, Graduate Student Organization, 2017
Stony Brook University

Founder, Departmental mentoring program for & by graduate students, 2016-18
Stony Brook University

Founder, cross-departmental Silent Writing group, Stony Brook University 2017

Vice President, Graduate Women in Science and Engineering (GWISE), 2017-18
Stony Brook University

Mentor, The New York Academy of Sciences' (NYAS) Next Scholar Program 2017

Event manager and Newsletter writer, GWISE, 2016-17
Stony Brook University

Student representative to the Faculty, Ecology & Evolution, Stony Brook University 2016-17

Participant in Grads for Education and Outreach (GEO) - to teach science concepts to 5th graders 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

Co-administrator of Facebook group Youth Environment Options, India 2013-15
to mentor young environmentalists and ecologists