

Shailee Shah

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Positions

2022 | **Postdoctoral Research Associate**
Department of Biology, University of Rochester

Education

2016-2022 | **Ph.D. in Ecology and Evolutionary Biology**
Columbia University, New York, NY
Advisor: Dr. Dustin Rubenstein | Dissertation: *Socioecological drivers of complex social structure in an avian cooperative breeder*

2010-2014 | **B.A. in Biological Sciences (*cum laude*) and minor in English Literature**
Cornell University, Ithaca, NY

Grants

2019 | **Grant-in-Aid of Research (\$1,000)**
Sigma Xi Society

2019 | **Van Tyne Research Award (\$2,500)**
American Ornithological Society

2019 | **Chapman Grant (\$3,000)**
American Museum of Natural History

2019 | **Educational Outreach Grant (\$895)**
Animal Behavior Society (with S. Siller)

2019 | **Small Grant for Outreach (\$500)**
Society for the Study of Evolution (with S. Siller)

2017 | **Preliminary Research Grant (\$3,000)**
E3B Department, Columbia University

2013 | **Savoca and Orrock Research Grant (\$1,000)**
Research and filming of student research in Darwin, Australia

2012 | **Rupert-Foote Fund Grant (\$1,000)**
Communications internship at Cornell Lab of Ornithology, NY

2012, 2013 | **Redheads Fund Grant (all housing and research costs)**
Fieldwork at Shoals Marine Lab

Awards and Fellowships

(NB: An international student in the United States, I was not eligible for NSF fellowships before Sep 2021)

2020	Student Presentation Award, Honorable Mention North American Ornithological Conference (Online)
2019	Travel Award (\$500) Animal Behavior Society. Annual Conference in Chicago, IL
2019	Travel Award (\$680) American Ornithological Society. Annual Meeting in Anchorage, AK
2017	Travel Award (\$400) American Ornithological Society. Annual Meeting in East Lansing, MI
2016-2021	Dean's Fellowship (5 years tuition and stipend) Columbia University, Graduate School of Arts & Sciences
2012	Bartels Merit Scholarship Award (\$2,500) Coursework at Shoals Marine Lab, ME
2011	Bartels Scholarship in Honor of Dr. Myra Shulman (\$2,500) Ecology and the Marine Environment class at Shoals Marine Lab, ME
2010-2014	Tata Scholarship (4 years tuition and living expenses) Cornell University and the Tata Education and Development Trust

Scientific Publications

2022	Shah, S.S. & D. R. Rubenstein. Prenatal environmental conditions underlie alternative reproductive tactics that drive the formation of a mixed-kin avian society. <i>Science Advances</i> , 8(8): eabk2220
2015	Shah, S. S. , MacLean, S. A., Greig, E. I. & D. N. Bonter. Risk-based alarm calling in a non-passerine bird. <i>Animal Behaviour</i> , 106: 129-136.
2014	Bonter, D. N., MacLean, S. A., Shah, S. S. , & M.C. Moglia, Storm-induced shifts in optimal nesting sites: a potential effect of climate change. <i>Journal of Ornithology</i> , 1-8

Presentations at Scientific Meetings

2021	Shah, S.S. , Rubenstein, D.R. <i>Evolution of complex social structure in a cooperative breeder</i> . American Ornithological Society meeting (online). Invited presentation in the symposium <i>Juveniles on the move: Advancing our understanding of dispersal ecology and the mechanisms and outcomes of natal dispersal in birds</i> .
2020	Shah, S.S. , Rubenstein, D.R. <i>Alternative Reproductive Tactics in a Cooperatively Breeding Bird with Low Kin Structure</i> . North American Ornithological Conference (online). Presentation.

- 2020 **Shah, S.S.**, Rubenstein, D.R. *Alternative Reproductive Tactics in a Cooperatively Breeding Bird with Low Kin Structure*. Animal Behavior Society meeting (online). Presentation.
- 2019 **Shah, S.S.**, Rubenstein, D.R. *Alternative Male Reproductive Tactics in a Plural Cooperative Breeding Bird*. Animal Behavior Society meeting, Chicago, IL. Poster.
- 2019 **Shah, S.S.**, Rubenstein, D.R. *Alternative Male Reproductive Tactics in a Plural Cooperative Breeding Bird*. American Ornithological Society meeting, Anchorage, AK. Poster.
- 2017 **Shah, S.S.**, Greig, E.I., & M.S. Webster. *Form follows function: the effect of function on signal evolution in the genus Malurus*. American Ornithological Society and Society of Canadian Ornithologists meeting, East Lansing, MI. Poster.
- 2014 **Shah, S.S.**, Greig, E.I., MacLean, S.A., & Bonter, D.N. *Risk-based alarm calling in a non-passerine*. American Ornithologists Union, Cooper Ornithological Society, and Society of Canadian Ornithologists meeting, Estes Park, CO. Presentation.
- 2013 **Shah, S.S.**, Greig, E.I., MacLean, S.A., & Bonter, D.N. *Herring gulls encode urgency in their alarm calls*. Wilson Ornithological Society meeting, College of William & Mary, VA. Poster.

Invited Talks and Guest Lectures

- 2021 **Seminar speaker**. Department of Biology, University of Rochester, NY.
- 2020 **Seminar speaker**. Department of Ecology, Evolution, and Organismal Biology, Kennesaw State University, GA.
- 2020 **Seminar speaker**. Long-term Animal Research Seminar Series. Duke University, NC.
- 2020 **Guest lecturer**. “Global Avian Diversity” course. Department of Ecology and Evolutionary Biology, Cornell University, NY.
- 2019 **Panelist**. Frontiers in Ornithology symposium. Delaware Ornithological Society, DE.
- 2019 **Invited speaker**. Ornithology Seminar. Department of Ecology and Evolutionary Biology, Cornell University, NY.
- 2018 **Guest lecturer**. “Ornithology” course. E3B Department, Columbia University, NY.
- 2015 **Invited speaker**. Celebrate Urban Birds workshop. Cornell Lab of Ornithology, NY.
- 2013, 2014 **Guest lecturer**. “Field Methods in Bird Banding” course. Cornell University, NY
- 2013 **Invited speaker**. Young Birders Event. Cornell Lab of Ornithology, NY.

Research Experience

- 2016-2022 | **Ph.D. Research**
Field work: Studying superb starlings in Kenya at Mpala Research Centre and in other parts of rural Kenya. Trapping birds, collecting blood, hormone, and feather samples, behavioral observations. Managing and working alongside field assistants and coordinating permits, logistics, housing, and travel on a budget.
Lab work: Extracting DNA, preparing ddRAD library for genetic sequencing, bioinformatics for filtering and aligning reads
Analyses: Database management, mixed effect modelling, models of genetic structure and gene flow
- 2015 | **Field assistant** to Sahas Barve and Dr. André Dhondt (Cornell University) in India
Mist-netting, point-counts, measurements, collecting blood samples from birds
- 2014 | **Field assistant** to Andy Johnson (Cornell University) in Churchill, Canada
Trapping whimbrel, nest-finding, filming research in the field
- 2012-2014 | **Undergraduate Thesis Research**
Field work: Audio recording and playback experiments with herring gulls at Shoals Marine Lab, ME. Filming research in the field.
Analyses: Acoustic analysis using Raven Pro and Luscinia
- 2012-2014 | **Independent Research Project**
Field work: Audio recording and playback experiments with red-backed fairywrens in Darwin, Australia, filming research in the field.
Analyses: Evolution modeling, acoustic analysis using Raven Pro and Luscinia
- 2012 | **Research Intern in Field Science.** Shoals Marine Lab, ME
Monitoring nests, banding adults and chicks, and collecting blood samples from a long-term study population of herring and black-backed gulls
- 2011 | **Research assistant** for Dr. Emma Greig (Cornell Lab of Ornithology)
Analyzing fairy-wren vocalizations using Raven Pro and Luscinia

Mentorship Experience

- 2019-2020 | **Arden Berlinger. Undergraduate Thesis.** *Direct Benefits of Helping Behavior in a Cooperatively Breeding Bird, the Superb Starling (Lamprotornis superbus).* E3B Department, Columbia University, NY.
- 2019 | **Paul Kiplangat. Field Assistant.** Mpala Research Centre, Kenya.
Taught bird identification by sound, mist-netting, trapping, handling live birds, reading color bands, data entry.

Teaching Experience

- 2019 | **Teaching Assistant** for “Biology of African Animals and Ecosystems”. Mpala Research Centre, Kenya. Instructor: Dr. Dustin Rubenstein.
Assisted with teaching and field logistics, supervised projects, wrote and graded exams

- 2018 **Teaching Assistant** for “Ornithology”. Columbia University, NY. Instructors: Dr. Susan Elbin and Dr. Felicity Arengo.
Led field trips, facilitated class, and lectured on cooperative breeding behavior
- 2017 **Teaching Assistant** for “Environmental Biology I”. Columbia University, NY. Instructors: Dr. Shahid Naeem and Dr. Danielle Tufts
Led weekly discussion sections and monthly review sessions, lectured on the nervous system, wrote exam questions and graded exams
- 2017 **Teaching Assistant** for “Biology of African Animals and Ecosystems”. Mpala Research Centre, Kenya. Instructor: Dr. Dustin Rubenstein.
Assisted with teaching and field logistics, supervised projects, and graded exams
- 2014 **Teaching Assistant** for “Field Methods in Bird Banding”. Cornell University, NY. Instructor: Dr. David Bonter.
Demonstrated and supervised banding of birds caught using mist-nets and cage traps
- 2013 **Teaching Assistant** for “Field Ornithology”. Cornell University, NY and Shoals Marine Lab, ME. Instructor: Dr. David Bonter.
Demonstrated field methods for ornithological research, supervised independent research projects, coordinated course logistics, graded exams

Professional Training

- 2021 **Selected Workshop Participant.** “Professional Development for Animal Behavior Graduate Students”. Weaving the Future of Animal Behavior (WFAB), Animal Behavior Society.
- 2021 **Workshop Participant.** “Truth Be Told: Safety and Support in the Field”. School of Anthropology and Conservation, University of Kent, the Women in Conservation Canterbury Network, and WildHub. (Online).
- 2021 **Workshop Participant.** Bystander Intervention Training. Hollaback!. (Online).
- 2020 **Workshop Participant.** “Connect, Share, Learn: Enhancing the E3B TA Experience”. E3B Department. Columbia University, NY.
- 2020 **Workshop Participant.** “Introduction to Research Mentorship (For Graduate Students)”. Centre of Teaching and Learning. Columbia University, NY.

Work Experience

- 2015-2016 **Communications Specialist.** Bird Cams. Cornell Lab of Ornithology, NY
Managing social media and volunteer base for livestreaming cameras on feeders and nests
- 2015 **Multimedia assistant.** Cornell Alliance for Science. Cornell University, NY
Assisting with multimedia production, monthly newsletter, and fellowship program
- 2014 **Assistant Editor.** Conservation Media. Cornell Lab of Ornithology, NY
Reviewing and annotating footage, editing, and sound for “Bird of Prey” documentary

- 2013-2014 | **Photography Editor.** *Cornell Daily Sun*. Ithaca, NY
 Managed a team of photographers for a student-run, daily newspaper (ranked #1 nationally)
- 2011-2013 | **Staff Photographer,** *Cornell Daily Sun*, Ithaca, NY
 Completed weekly assignments for a student-run, daily newspaper (ranked #1 nationally)

Popular Science Publications, Media, and Events

- In prep | *Why cooperate?.* **Children’s book** on cooperation in superb starlings. Co-author: S. Siller.
- 2022 | *Why do some birds for mixed-kin groups?* Columbia News.
- 2021 | *Finding my ornithological identity.* **Blog post** for the British Ornithologists’ Union.
- 2020 | Panelist. “ExoLore” **live event** hosted by Moiya McTier at Caveat, New York City.
- 2019 | *Ten Tips for Applying to Small Ornithology Grants.* **Article** on Wing Beats blog (American Ornithological Society).
- 2019 | *A Day in the Life of a Field Researcher.* **Video** on All About Birds (Cornell Lab of Ornithology) featuring my PhD work.
- 2018 | *A Midnight Encounter, Kenya Style; or When I Looked Out My Bedroom Window and Saw an Elephant.* **Article** on Science Outside website.
- 2018 | *What’s up? Birds!.* **Livestream panel discussion** on Mpala Live! and Explore.org
- 2016 | *A Noble Vision of Gulls.* **Article** in *Living Bird* magazine. Co-author: Dr. David Bonter.
- 2014 | *Studying Red-backed Fairywrens in Australia.* **Video** on CornellCast (Cornell University) and All About Birds (Cornell Lab of Ornithology)

Peer-Review Contributions

- 2022 | **Grant reviewer.** *Animal Behavior Society*
- 2016- | **Journal peer reviewer.** *Animal Behaviour* (4), *Behavioral Ecology and Sociobiology* (2), *Evolutionary Applications* (1), *Frontiers in Ecology & Evolution* (1), *Ornithological Applications* (1), *PLOS One* (1)

Service and Outreach

- 2020 | **Ph.D. student representative.** E3B Department, Columbia University, NY.
 Represent Ph.D. student concerns to Department Chair, Director of Graduate Studies and faculty, work on initiatives to promote Ph.D. student well-being in the department
- 2019-2020 | **Mentor.** Read Ahead (non-profit organization). New York, NY
 Volunteer reading mentor for an elementary school student

- 2018-2020 | **Event Coordinator.** 500 Women Scientists (non-profit organization), NYC Pod
Plan, organize, and execute local events that promote diversity and inclusion in science.
- 2017- | **Committee Member.** Diversity and Inclusion Committee, American Ornithological Society
Co-leader of “Promoting Diversity and Inclusion in Ornithology” workshop at NAOC 2020, co-organizer for other initiatives to promote diversity and inclusion in ornithology and birding communities
- 2017-2021 | **Co-chair.** Student Affairs Committee, American Ornithological Society
Lead organizer of the Student-Mentor Lunch (2019, 2020) and “Writing Successful Small Grants” Workshop (2019); co-organizer for other student activities and workshops
- 2016-2019 | **Workshop Leader.** Northern Kenya Conservation Clubs, Laikipia, Kenya
Designed and led a game for learning about cooperative behavior in animals, led bird identification workshops
- 2016 | **Workshop Leader.** Girls’ Science Day, Columbia University, NY
Co-led workshop on predator-prey interactions for middle grade girls
- 2015 | **Speaker.** Celebrate Urban Birds workshop, Cornell Lab of Ornithology, NY
Talked to young adults from inner city areas about college, careers and ornithology
- 2014 | **Workshop Leader.** Expanding Your Horizons Conference, Cornell University, NY
Co-led the “Afternoon at the Museum” workshop for 9th grade girls
- 2013, 2014 | **Volunteer.** Migration Celebration, Cornell Lab of Ornithology, NY
Taught children bird anatomy and bird banding
- 2013-2014 | **Student Advisor.** Office of Undergraduate Biology, Cornell University, NY
Mentored underclassmen and prospective students in the Biology department through regular office hours and special programming
- 2011 | **Orientation Leader.** Cornell University, NY
Lead activities for freshmen and providing advice and support throughout the year