

Shailee Shahshailee.shah@rochester.edu | www.shailee-shah.com**Positions**

2022 | **Postdoctoral Research Associate**
 Department of Biology, University of Rochester, Rochester, NY
 Supervisor: Dr. Nancy Chen

Education

2016-2022 | **Ph.D. in Ecology and Evolutionary Biology**
 Columbia University, New York, NY
 Advisor: Dr. Dustin Rubenstein

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

Awards and Fellowships

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

2022 | **Warder Clyde Allee Award for Best Student Paper, Winner**
 Animal Behavior Society. Annual Conference in San Jose, Costa Rica

2022 | **W.D. Hamilton Award for Outstanding Graduate Student Presentation, Finalist**
 Society for the Study of Evolution. Annual Conference in Cleveland, OH

2022 (deferred) | **Smithsonian Institution Postdoctoral Fellowship**
 Smithsonian Tropical Research Institute, Panama

2020 | **Student Presentation Award, Honorable Mention**
 North American Ornithological Conference (Online)

2019 | **Travel Award**
 Animal Behavior Society. Annual Conference in Chicago, IL

2019 | **Travel Award**
 American Ornithological Society. Annual Meeting in Anchorage, AK

2017 | **Travel Award**
 American Ornithological Society. Annual Meeting in East Lansing, MI

2016-2021 | **Dean's Fellowship**
 Columbia University, Graduate School of Arts & Sciences

2012 | **Bartels Merit Scholarship Award**
 Coursework at Shoals Marine Lab, ME

2011 | **Bartels Scholarship in Honor of Dr. Myra Shulman**
 Ecology and the Marine Environment class at Shoals Marine Lab, ME

2010-2014 | **Tata Scholarship**
Cornell University and the Tata Education and Development Trust

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

Scientific Publications

In review | **Shah, S.S.** & D. R. Rubenstein. Intraspecific variation in the social structure of a cooperative breeder arises due to fine-scale environmental conditions governing directional dispersal. *Molecular Ecology*.

In revision | **Shah, S.S.** & D. R. Rubenstein. Group augmentation underlies the evolution of complex sociality in the face of environmental instability. *Proceedings of the National Academy of Sciences USA*.

2022 | **Shah, S.S.** & D. R. Rubenstein. Prenatal environmental conditions underlie alternative reproductive tactics that drive the formation of a mixed-kin avian society. *Science Advances*, 8(8): eabk2220
Press: *Columbia News*

2022 | **Shah, S.** Socioecological drivers of complex social structure in an avian cooperative breeder. Doctoral dissertation, *Columbia University*.

- 2015 | **Shah, S. S.**, MacLean, S. A., Greig, E. I. & D. N. Bonter. Risk-based alarm calling in a non-passerine bird. *Animal Behaviour*, 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. *Journal of Ornithology*, 1-8

Presentations at Scientific Meetings

- 2022 | **Shah, S.S.**, Rubenstein, D.R. *Group augmentation underlies the evolution of complex sociality in the face of environmental instability*. Annual meeting of the Animal Behavior Society in San Jose, Costa Rica. Presentation as a finalist in the symposium for *Warder Clyde Allee Award for Best Student Paper*.
- 2022 | **Shah, S.S.**, Rubenstein, D.R. *Group augmentation underlies the evolution of complex sociality in the face of environmental instability*. Joint annual meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists in Cleveland, OH. Presentation as a finalist in the *W. D. Hamilton Award for Outstanding Graduate Student Presentation* symposium.
- 2021 | **Shah, S.S.**, Rubenstein, D.R. *Evolution of complex social structure in a cooperative breeder*. American Ornithological Society meeting (online). Invited presentation in the symposium *Juveniles on the move: Advancing our understanding of dispersal ecology and the mechanisms and outcomes of natal dispersal in birds*.
- 2020 | **Shah, S.S.**, Rubenstein, D.R. *Alternative Reproductive Tactics in a Cooperatively Breeding Bird with Low Kin Structure*. 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

- 2022 **Guest speaker.** “Advanced Animal Behavior” course. School of Integrative Biology. University of Illinois Urbana-Champaign, IL.
- 2022 **Guest lecturer.** “Animal Behavior and the Endocrine System” course. Department of Ecology, Evolution, and Environmental Biology. Columbia University, NY.
- 2022 **Guest lecturer.** “Contemporary Perspectives on Careers in Animal Science” course. Department of Animal Science. Cornell University, NY.
- 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

- 2022- **Postdoctoral research**
Whole-genome sequencing, SNP calling, population genomic and landscape genomic analyses in Florida scrub-jays.
- 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. Coordinating permits, logistics, housing, and travel on a budget.
Lab work: ddRAD sequencing, bioinformatics
Analyses: Long-term data management, mixed effect modelling, population genetics
- 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

- 2022 | **Workshop Participant.** “Building a Better Fieldwork Future”. Joint annual meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists in Cleveland, OH.
- 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	<i>Why cooperate?</i> . Children’s book on cooperation in superb starlings. Co-author: S. Siller.
2022	<i>Two-minute takeaway</i> . Podcast segment . The Animal Behavior Podcast.
2021	<i>Finding my ornithological identity</i> . Blog post for the British Ornithologists’ Union.
2020	Panelist. “ExoLore” live event hosted by M. McTier at Caveat, New York City.
2019	<i>Ten Tips for Applying to Small Ornithology Grants</i> . Article on Wing Beats blog (American Ornithological Society).
2019	<i>A Day in the Life of a Field Researcher</i> . Video on All About Birds (Cornell Lab of Ornithology) featuring my PhD work.
2018	<i>A Midnight Encounter, Kenya Style; or When I Looked Out My Bedroom Window and Saw an Elephant</i> . Article on Science Outside website.
2018	<i>What’s up? Birds!</i> . Livestream panel discussion on Mpala Live! and Explore.org
2016	<i>A Noble Vision of Gulls</i> . Article in <i>Living Bird</i> magazine. Co-author: Dr. David Bonter.
2014	<i>Studying Red-backed Fairywrens in Australia</i> . Video on CornellCast (Cornell University) and All About Birds (Cornell Lab of Ornithology)

Peer-Review Contributions

2022	Grant reviewer . <i>Animal Behavior Society</i>
2016-	Peer reviewer . <i>Animal Behaviour, Behavioral Ecology and Sociobiology, Evolutionary Applications, Frontiers in Ecology & Evolution, Journal of Avian Biology, Ornithological Applications, PLOS One</i>

Service and Outreach

2022-	Member . Science Advisory Council. BirdNote.
2020	Ph.D. student representative . E3B Department, Columbia University, NY. <i>Represented 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</i>
2019-2020	Mentor . Read Ahead (non-profit organization). New York, NY <i>Volunteer reading mentor for an elementary school student</i>
2018-2020	Event Coordinator . 500 Women Scientists (non-profit organization), NYC Pod <i>Plan, organize, and execute local events that promote diversity and inclusion in science.</i>
2017-	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