

Karina Sanchez

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ACADEMIC APPOINTMENTS

2022 - present University of New Hampshire | Durham, NH
Postdoctoral Diversity and Innovation Scholar
Department of Natural Resources and the Environment

EDUCATION

May 2022 Ph.D. University of Northern Colorado (UNCO) | Greeley, CO
Biological Education
Dissertation: *Effects of Noise, Light, and Landscape on Birds
in a Recently Urbanized County*
Advisor: Dr. Lauryn Benedict

2014 B.S. Westminster College | Salt Lake City, UT
B.S. Biological Sciences.

SUMMARY

Research: Broadly trained biologist with an emphasis in **behavioral ecology**, **urban ecology**, **ornithology**, and **biological education research**; 3 papers in press, 3 under review, and 2 in preparation for submission; 3 invited presentations, 4 poster presentations and 11 oral presentations at national and international conferences. Have obtained ~ \$100,000 in research and dissertation associated funding combined.

Teaching: Instructor of record for 2 semesters (Organismal Biology, Environmental Biology) at 2 universities; co-taught for 1 semester; teaching assistant for 14 lab sections (2 different courses), and 5 lecture sections (2 different courses). Experience in curriculum development, pedagogy training from 4 program courses and 3 workshops. Funding support to transform a high-enrollment course into an accessible Open Educational Resource.

Mentoring: As a doctoral student, I mentored 12 undergraduate students including 5 independent study research projects. Currently, I am mentoring 1 PhD student at the University of New Hampshire.

Current Projects:

- 1) *Biodiversity matters: Exploring links between species richness and psychological wellbeing* (Co-PI)
- 2) *Assessing the efficacy of research programs designed for post-baccalaureates: an assessment of the NSF Research and Mentoring Program (RaMP) program across 12 institutions* (Lead-PI)
- 3) Multimodal sensory in urban American Robin mate selection.

PUBLICATIONS

1. [Sanchez, K.A.](#), Fialko, K., Benedict, L., Cicero, C., *Time alters urban singing strategies in a North American songbird.*, Journal of Urban Ecology. (In Press)
2. [Sanchez, K.A.](#), Bevan, A., Vita, A., Royse, E.A., Januszkiewicz, E., Holt, E.A., *Grit matters to biology doctoral students' perception of barriers to degree completion.*, Journal of Biological Education. (In Press)

3. Stracey, C.M., [Sanchez, K.A.](#), Brown, B., Hawkins, D., Shepherd, T., *Singing on the nest is a common behavior in incubating Northern Mockingbirds*, Ornithology. (In Press)
 4. Layden, T., Nelson, J., Bombaci, S., Laverty, T., Edder, A., Verahmi, A., [Sanchez, K.A.](#), Khalighifar, A., Starr., S, *The consequences of inequitable noise on urban wildlife*. (Under Review)
 5. [Sanchez, K.A.](#), Bevan, A., Holt, E.A. Bringing awareness of social justice issues in ecology to the classroom. (Under Review)
 6. [Sanchez, K.A.](#), *Landscape is a stronger determinant than noise and light of avian community structure in a newly urbanized county*. Frontiers of Ecology and Evolution. (Under Review)
- [Sanchez, K.A.](#), Benedict, L., *The effects of noise, light, and landscape composition on singing behavior and reproduction of a common urban bird*. (In Prep)
- Barros, C., Benedict, L., [Sanchez, K.A.](#), *Current evidence for the functions of female song*. (In Prep)

INVITED PRESENTATIONS

- | | |
|------|---|
| 2023 | University of New Hampshire Department of Biological Sciences
<i>Bringing awareness of social justice issues in ecology to the classroom, Spring 2023!</i> |
| 2022 | University of New Hampshire Department of Natural Resources and the Environment
<i>Effects of noise, light, and landscape on birds in a recently urbanized county, Fall 2022</i> |
| 2019 | Colorado State University Department of Natural Resources
<i>Uptown birds: Living in an altered world, Fall, 2019</i> |

RESEARCH POSTERS* AND ORAL PRESENTATIONS

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|------|--|
| 2022 | <p>*Bevan, A., Sanchez, K.A., Holt, E., Intervention to Address Representation and Social Justice Issues in Ecology. 2022 Ecological Society of America / Canadian Society for Ecology and Evolution joint meeting. Montreal, Canada</p> <p>Sanchez, K.A., Benedict, L., Development drives song changes but has little effect on reproductive success in American Robins (<i>Turdus migratorius</i>).</p> <ul style="list-style-type: none"> - American Ornithological Society and the Birds of the Caribbean 2022 meeting. San Juan, Puerto Rico. - Colorado Field Ornithologists 2022 Convention, Pueblo, CO. |
| 2021 | Sanchez, K.A., Kennedy, C., Benedict, L., Avian community structure across an urbanizing county: The effects of noise, light, and landscape composition. |
| 2021 | <p>American Ornithological Society/ Society of Canadian Ornithologists joint meeting.</p> <p>Sanchez, K.A., Benedict, L., Cicero, C., Fialko, K., Bird song characteristics respond differently to landscape development at two points in time. Animal Behavior Society meeting.</p> |

Sanchez, K., Studying birds in a rapidly urbanizing county. University of Northern Colorado Biology Lightning Talks, Greeley, CO.

Sanchez, K.A., Benedict, L., Cicero, C., Fialko, K., Patterns of change in bird song characteristics across space and time; an update. Front Range Student Ecology Symposium, Fort Collins, CO

- 2020 Sanchez, K.A., Measuring the effects of urban characteristics on a common backyard bird. University of Northern Colorado 2020 Research Day.
*Sanchez, K.A., Benedict, L., Cicero, C., Fialko, K., Patterns of change in bird song characteristics across space and time. University of Northern Colorado Fall 2020 Research Evening.
- 2019 Sanchez, K.A., Kennedy, C., Salo, J., Benedict, L., Uptown birds living in an altered world: Urban characteristics and avian species in Weld County, CO, 56th Annual Conference of the Animal Behavior Society and the 36th International Ethological Conference, Chicago, IL.
Sanchez, K.A., Salo, J., Benedict, L., Urban landscape characteristics and avian diversity. University of Northern Colorado 2019 Research Day.
Sanchez, K.A., Kennedy, C., Salo, J., Benedict, L., The effects of urban landscape characteristics on avian diversity and abundance in Weld County, Colorado, US-International Association for Landscape Ecology Annual Meeting, Fort Collins, CO.
- 2018 Sanchez, K.A., Benedict, L., Cicero, C., Fialko, K., Spotted Towhee (*Pipilo maculatus*) song characteristics at two time points across an urban gradient,
- American Ornithology 136th Meeting, Tucson, AZ.
- University of Northern Colorado 2018 Research Day
*Sanchez, K.A., Benedict, L., The effects of urban noise and light on songbird abundance, richness, and song characteristics in a rapidly urbanizing area, Front Range Student Ecology Symposium, Fort Collins, CO
- 2015 Sanchez, K.A., Neville, A., Predator Control on Utah's managed wetlands, Utah Wetlands Foundation Annual Meeting, Salt Lake City, UT.
- 2013 *Sanchez, K.A., Hawkins, D., Stracey, C., Singing on the nest: the occurrence of a paradoxical behavior
- 98th Annual Ecological Society of America Meeting, Minneapolis, MN
- 2013 Utah Conference on Undergraduate Research, Logan, UT
- Utah Audubon Society Meetings, Salt Lake City, UT

FUNDING, GRANT SUPPORT, AND AWARDS

Research

- 2023 NSF EES – Racial Equity in STEM Ed. *Who gets to belong? Intersectional understandings of racial equity and sense of belonging within conservation sciences* (Proposal submitted)

2022	\$50,000	Collaborative Research Enhancement and Team Exploration grant, New Hampshire Agricultural Experiment Station [co-PI]
2021	\$20,000	American Dissertation Fellowship, American Association of University Women
2021	\$3235	Summer Research Funding, UNCO School of Biology
2020	\$900	Publication Grant, UNCO CARES Funding
2020	\$2433	Hesse Research Award, American Ornithological Society
2020	\$480	NHS Student Research Award, UNCO
2020	\$3200	Summer Research Funding, UNCO School of Biology
2019	\$1500	Diversity in Light Grant, Zoological Lighting Institute
2019	\$1500	Colorado Field Ornithologists Research Grant
2019	\$3200	Summer Research Funding, UNCO School of Biology
2019	\$300	NHS Student Research Award, UNCO
2018	\$150	UNCO Graduate Student Association Research Award
2018	\$3200	Summer Research Funding, UNCO School of Biology
2013-14	\$3000	Great Salt Lake Institute B.R.I.N.E. Research Grant
2012-14	\$7500	Westminster College Summer Undergraduate Research Award

Travel

2019	\$150	Animal Behavioral Society Diversity Travel Award
2019	\$600	UNCO Graduate Student Association Travel Award
2018	\$300	UNCO Graduate Student Association Travel Award

Teaching /Service

2021	\$500	CO-WY/ LEAP Summer STEM Mentor
2020	\$3000	UNCO Open Educational Award: OER Adopt-Adapt-Create Grant

Graduate academic support

2020	\$3500	Colorado Graduate Grant
2019	\$762.5	Dr. Albert M. Winchester Graduate Fellowship in Biology
2019	\$3500	Colorado Graduate Grant
2018	\$3500	Colorado Graduate Grant

Awards and Honors

2022		The Graduate Dean's Citation for Excellence (UNCO)
2021		UNCO Graduate Student Excellence in Teaching Award
2021		UNCO Graduate Student Excellence in Mentorship Award

2020	UNCO Research Excellence Award -First Place in NHS Graduate
2020	Oral Presentation Competition (\$100 prize)
2019	Hutchinson -Lahman Research Award- First Place (\$500 prize)
2019	NSF Graduate Research Fellowship Program Honorable Mention

TEACHING EXPERIENCE

University of New Hampshire

2023 [Instructor of record](#) | Environmental Biology – 50 undergraduate students.

University of Northern Colorado

2020 [Instructor of record](#) | Introduction to Organismal Biology - 60 undergraduate students

2017- 2018 [Teaching assistant](#) | Introduction to Biology: Atoms to Cells – *taught & graded*
4 lab sections, 3 lecture sections

2018 -2019 [Teaching assistant](#) | Museum Studies – taught
3 sections

2018 – 2021 [Teaching assistant](#) | Introduction to Organismal Biology – *taught & graded*
3 lab sections (2018)
2 lab sections, 1 lecture section, preparation lead for 9 lab sections (2019)
2 lab sections, 1 lecture section, preparation lead for 9 lab sections (2020)

Curriculum development

2020 – 2021 Introduction to Organismal Biology

- Developed online and in-person materials for both lecture and lab.
- Organized and led committee to redesign and transform the course to an Open (cost-free to students) course by adapting and curating an online textbook.
- Developed active learning activities for lecture and lab courses.

SERVICE

Student Mentoring

University of Northern Colorado

2021 [Aubree Raimer](#), Colorado-Wyoming Alliance for Minority Participation / LEAP Summer STEM Program Mentee. Nestling diet in urban and non-urban habitats

2021 [Amirah Brockington](#), Undergraduate field research assistant

- 2020-2021 Michelle Mutu, Colorado Wyoming Alliance for Minority Participation mentee in undergraduate research experience.
- 2020-2021 Alex Glennemeier, Research: Standardizing American Robin Recordings
- 2019-2020 Yessica Rodriguez, McNair Scholar Program Mentee. Research: Feather coloration and heat in American Robin male and females.
- 2019-2020 Branden Lawson, Research: Tree cover and nest survival of American Robins in urban and non-urban environments.
- 2019-2020 Kali Thompson and Gabrielle Mendoza Undergraduate field research assistants for several research projects
- 2018-2019 Cameron Kennedy, Research: Effects of habitat composition on avian composition.
- 2018-2019 Kinsey Freeman, Undergraduate research experience
- 2018-2019 Alexandria Colpitts, Research: Avian dawn chorus across urban and non-urban landscapes.

Westminster College SLC

- 2016-2017 Claire Prasad, Biology Undergraduate Student, Alumni Mentoring Program

Institutional service

- 2022 – Present **Chair**, Diversity & Inclusion Committee Postdoctoral Association, UNH
- 2020-2022 **Graduate School Representative**, Enhance and Invest subcommittee, UNCO
- 2019 **Graduate School Representative**, Student First Subcommittee, UNCO
- 2018-2019 **Graduate Student Representative**, School of Biological Sciences, UNCO

Professional service - Manuscript reviews

- 2021 Journal of Urban Ecology
- 2019 Journal of Animal Behavior

Community service

- 2021 **Graduate student panelists** at Association of Field Ornithologists Café Series: Demystifying grad school: how to find, apply, and get into graduate school.
- 2020 **Coordinator, creator, and panelist** for the First-Generation Students in Graduate School Panel. University of Northern Colorado graduate school 2020 orientation
- 2018-2022 **Founder and President** of University of Northern Colorado Women In Graduate STEM (WIGS) Organization
- 2018-2022 **Community Outreach and Education** with the UNCO's Natural History Museum
- 2016 **Committee Member**, Great Salt Lake Audubon Education Committee

Professional memberships

- 2022 – Present The Wildlife Society
- 2021 – Present Society for the Advancement of Biological Education Research
- 2021 – Present American Association of University Women
- 2019 – Present US-International Association for Landscape Ecology
- 2019 – Present Colorado Field Ornithologists
- 2019 – Present Animal Behavior Society
- 2017 – Present American Ornithological Society

TRAINING / CERTIFICATES

Pedagogical training

- 2022 Implicit Biases and Bystander Awareness Training
- 2020 Diversity, Equity, and Inclusion in Biology
- 2020 College Biology Course Development
- 2019 Teaching College Biology
- 2017 Teaching Assistant Development

Professional development

- 2021 Supporting Student Success Through Teaching & Learning, LA Learning Lab
- 2021 Understanding & Navigating Inclusion Through Education (UNITE) Program
 - Examining Race Relations and Racism Training
 - Exploring Equity and Including Foundations Training
 - Disability & Accessibility Training
- 2020 Graduate Student Teaching Group, UNCO
- 2020 COMPASS Scientist Sentinels: Civic Engagement & Leadership Program