

Mei T. S. Rao

Ph.D. Student

[Bird Banding Resume](#) | [Linkedin](#) | [Personal Website](#)

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EDUCATION

- 2025– **Texas A&M University**, College of Arts and Sciences, College Station, TX – Ph.D. Student Ecology and Evolutionary Biology Interdisciplinary Doctoral Program
Advisor: Ian Ausprey, Department of Ecology and Conservation Biology
- 2021–2025 **Cornell University**, College of Agriculture and Life Sciences, Ithaca, NY – B.S. Biological Sciences
[Ecology and Evolutionary Biology]
Honors Distinction in Research
Minor in Environment & Sustainability
Varsity Student-Athlete: Men's Heavyweight Rowing

EMPLOYMENT

- 2025– Texas A&M University – *Graduate Assistant*
Teaching:
 - Department of Biology*Research:*
 - Department of Ecology and Conservation Biology – Animal Functional Ecology and Conservation Lab (Dr. Ian Ausprey)
- 2022–2025 Cornell Lab of Ornithology – *Student Researcher/Lab Assistant*
 - Fuller Evolutionary Biology Program (Drs. Jen Walsh and Irby Lovette)
- 2020–2021 Wildlife Conservation Society – *Bronx Zoo Discovery Guide Leader*

PROFESSIONAL ACTIVITIES

- 2026– Journal of Emerging Investigators
Reviewer
Copy Editor
- 2026– IUCN RedList
Assessor
- 2025– Ecology and Evolutionary Biology Interdisciplinary Student Organization
Seminar Representative (2026–2027)
Darwin Day Planning Committee (2025–present)
- 2014–21 4-H Poultry – Dutchess County, New York
Master Poultry Showman (2020-2021)
President: Flock of Feathers (2019-2020)
Vice President: Flock of Feathers (2018-2019)
Treasurer: Flock of Feathers (2014-2018)
- 2020–21 Students Take Action Club (STAC) – Our Lady of Lourdes High School
Co-Founder and Co-President
- 2019–21 Mock Trial – Our Lady of Lourdes High School
Co-Captain and Lead Counsel (Regional Champion)

PUBLICATIONS

Mei T. Rao, Bronwyn G. Butcher, Bryce W. Robinson, Irby J. Lovette, Jennifer Walsh. 2025. Genomic Data Reveals Mixed Support for Current Subspecies Designations in the *Megascops asio* (Eastern Screech Owl). *Ornithology* 143:ukaf047, <https://doi.org/10.1093/ornithology/ukaf047>

Mei T. Rao*, Grace L. Guo*, Keone Emeliano, Larissa S. Sugai. 2025. Acoustic Surveying for the Hawaiian Hoary Bat (*Lasiurus semotus*) in Māhukona Reserve, Hawai'i. *Cornell Undergraduate Research Journal* 4(1): 24-31.

*authors should be considered joint first author

Bryce W. Robinson, Nicole M. Richardson, Nick A. Alioto, Frank J. Nicoletti, Alexandra M. Pesano, **Mei T. Rao**, Brian L. Sullivan. 2024. A Revision to the Distribution of Plumage Polymorphism in the Red-Tailed Hawk (*Buteo jamaicensis*). *Journal of Biogeography* 0:1-8.

CONFERENCES/PRESENTATIONS

*Prize Awarded

2026 Ponencias Cambio Climatico Bioversidad at UNTRM – Chachapoyas, Peru – May 2026

Symposium: *Bioacústica para Manejo del Uso de Suelo y Conservación*

Ecology and Conservation Biology (ECCB) Seminar Series – Mar. 2026

Seminar: *Following Invisible Trails: Genomic, Acoustic, and Spatial Perspectives on Conservation Ecology*

Fairleigh Dickinson University Undergraduate Capstone Seminar – Feb. 2026

Seminar: *Following Invisible Trails: Genomic, Acoustic, and Spatial Perspectives on Conservation Ecology*

2025 *Texas Master Naturalist Annual Meeting – College Station, TX, United States – Oct. 2025

Poster: *Genomic Data Reveals Mixed Support for the Current Species Designations in Eastern-Screech Owls* – 2nd place (Graduate Category)

International Bioacoustics Society – Kerteminde, Denmark – Sep. 2025

Poster: *Establishing a baseline for Hawaiian hoary bat (Lasiurus semotus) acoustic activity in the Māhukona Navigation and Ecological Complex*

Biology Honors Symposium – Ithaca, NY, United States – May 2025

Poster: *Genomic Data Reveals Mixed Support for the Current Species Designations in Eastern-Screech Owls (Megascops asio)*

K. Lisa Yang Center Student Symposium – Ithaca, NY, United States – May 2025

Poster: *Acoustic activity of Hawaiian Hoary Bat (Lasiurus semotus) in the Māhukona Reserve*

2024 Cornell Lab of Ornithology Board Meeting – Ithaca, NY, United States – Nov. 2024

Poster: *Phylogeography and Subspecies Delineation of M. asio*

American Ornithological Society – Estes Park, CO, United States – Oct. 2024

Poster: *Phylogeography and Subspecies Delineation of M. asio*

FIELD EXPERIENCE

*open-ended timestamps indicate ongoing projects

2026– Banding, WRP molt aging, fecal and feather collection. *Aves de Bosque Montano Peruano*. May-June 2026 [PIs: Ian Ausprey and Felicity Newell]

2026– Point count, vegetation, and insect surveys in the post-oak savannah region of Texas. Spring 2026 [PIs: Ian Ausprey and Felicity Newell]

2025	Field Methods in Bioacoustics Research. <i>In collaboration with the Yang Center of Conservation Bioacoustics, the University of Hawai'i at Hilo, and the Marine Mammal Consortium. Jan 2025. [led by Ben Gottesman//Larissa Sugai/Aaron Rice]</i>
2024–25	Banding songbirds in apple orchards, point counts, and collecting fecal DNA. <i>Orchard Project: Cornell Lab of Ornithology, May–Aug 2024, July 2025. [PIs: Jen Walsh/Gemma Clucas]</i>
2023–24	Woodpecker behavior observations. <i>Woodpecker Diet Project: Cornell Lab of Ornithology, Summer 2023 & 2024. [PIs: Gemma Clucas/Andrew Stillman]</i>
2024	Red-Tailed Hawk trapping/banding. <i>Red-Tailed Hawk Project, Feb 2024. [PI: Bryce Robinson]</i>
2023	Independent Research on Naticidae predation. <i>Winter Semester Course: Neotropical Conservation Biology. Jan 2023, Patagonia, Argentina. [Led by Leonardo Campagna]</i>
2022	Research on <i>Nephtys sp.</i> and <i>Myxini sp.</i> burrowing behavior. <i>Summer Semester Course: Investigative Marine Biology Laboratory. June 2022, Shoals Marine Laboratory, Maine, USA. [Led by Douglas Fudge]</i>

LAB EXPERIENCE

**open-ended timestamps indicate ongoing projects*

***Names provided with projects are PIs and/or mentors*

WET LAB

2024–25	DNA Extraction, qubit, and ddRADseq prep for Song Sparrows. <i>Mandarte Song Sparrow Project with Jen Walsh.</i>
2024	Fecal DNA extraction and ANML PCR for Songbird specimens. <i>Orchard Project with Jen Walsh/Gemma Clucas</i>
2023–24	DNA extraction, Qubit, and ddRADseq library preparation for Eastern Screech Owls. <i>Independent Honors Thesis.</i>
2023–25	DNA extraction, Qubit, PCR Sexing, and whole genome Library Preparations for Red Tailed Hawks. <i>Red Tailed Hawk Project with Bryce Robinson.</i>
2022–23	DNA extraction and Qubit from Petroicidae blood and tissue. <i>Plumage Genomics with Sarah Khalil.</i>

DRY LAB

2025–	Reiterative BirdNET model training for Hawaiian Hoary Bat. <i>‘Ōpe‘ape‘a Monitoring Project.</i>
2024–2025	Reiterative BirdNET model training for Western Red Colobus in Sierra Leone/Liberian REDD+ forests. <i>REDD+ Project with Ben Gottesman/H S Sathya Chandra Sagar/Santiago Perea.</i>
2023–24	ddRADseq demultiplexing, <i>de novo</i> and reference genome alignment in STACKS for Eastern Screech Owls. <i>Independent Honors Thesis.</i>
2023	Qiime and downstream bioanalytics in R. <i>Woodpecker Diet Project with Gemma Clucas/Andrew Stillman.</i>

TEACHING EXPERIENCE

2026	Texas A&M University. BIOL 112: Introductory Biology II Lecture and Lab – Spring 2026
2025	Texas A&M University. BIOL 111: Introductory Biology I Lecture and Lab – Fall 2025
	Cornell University. NTRES 2010: Environmental Conservation – Spring 2025
2022–2024	Cornell Rowing Club – Volunteer Coach
2019–2021	4-H Poultry Advisory – Master Poultry Showman ○ Led biannual poultry showmanship and adjudication workshops
2017–2021	American Taekwondo Association – Instructor ○ Taught youth and adult group taekwondo classes

COMMUNITY & CAMPUS INVOLVEMENT

**open-ended timestamps indicate ongoing engagement*

- 2025– Schubot Center for Avian Health – Graduate Student Member
- 2025– Lights Out, College Station (Texas Conservation Alliance) – Volunteer Surveyor/Collision Response Team Member
 - Help conduct campus-wide surveys to monitor bird-window collisions at Texas A&M University
 - Perform on-call retrieval for bird-window collision mortalities reported through an online form
- 2025 KANM Campus Radio - Texas A&M University
- 2024–25 Cornell Student-Athletes for Sustainability
 - Advocated for sustainability within sports and sporting events.
 - Participated in recycling initiatives at Cornell Hockey games.
- 2021–25 Cornell Varsity Men’s Heavyweight Rowing – Division 1 Student-Athlete
Coxswain (2021–2024)
 - Conducted team practices; communicated coaching standards to team members
 - Mastered quick-decision making in high pressure environments*Team Manager (2024-2025)*
 - Handle data operations, including calculations and organization
 - Oversee equipment management, storage, and maintenance
- 2021–25 Cornell Rowing Club – Volunteer Coxswain
- 2020–21 Students Take Action Club (STAC) – Co-Founder and Co-President
 - Raised ~\$4000 for patients at Dyson Cancer Care Center
 - Raised funds and awareness for SmileTrain and Fugees Academy
- 2018 Wildlife Conservation Society, Bronx Zoo – Volunteer Discovery Guide
 - Worked with the WCS Education Department as an in-person facilitator for educational activities

CERTIFICATIONS/SKILLS

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|--------------------------------------|----------------------------------|
| Class C Texas Driver’s License | Bioacoustics Software |
| SSI Certified Open Water Scuba Diver | - Raven Pro |
| IUCN RedList Assessor | - BirdNET |
| Microsoft Office/Google Suite/Canva | - Kaleidoscope Lite/Pro |
| ArcGISOnline/ArcGISPro/QGIS | Animal Handling: |
| RStudio | - Wild bird trapping and banding |
| Languages: | - Domestic livestock/game |
| - English (fluent) | - Captive reptiles |
| - Spanish (conversational) | |
| - Mandarin Chinese (elementary) | |

AWARDS & GRANTS

- 2025 Texas Master Naturalist Annual Meeting - 2nd Place Graduate Poster (\$250)
- Texas A&M University - September - Lechner Scholarship (\$1860)
- Cornell Lab of Ornithology IBAC Conference Travel Grant
- 2024 Cornell Lab of Ornithology AOS Conference Travel Grant
- American Ornithological Society Travel Grant (\$440)

	Dean's List - Cornell University Spring Semester 2024
	Ann S. and Robert R. Morley Student Research Fund (\$2000)
	The Undergraduate Research Fund at the Cornell Lab of Ornithology (\$2000)
	Experiential Learning Grant - Orchard Project (~\$6000)
	Kristen Rupert and John Foote Undergraduate Research Fund (~\$1500)
2023	Kristen Rupert and John Foote Undergraduate Research Fund (~\$2480)
2022	Dean's List - Cornell University Fall Semester 2022
	Redheads Big Day Team (~\$1000)
	Shoals Marine Laboratory - Diversity Scholarship (\$8000)
2021	Dean's List - Cornell University Fall Semester 2021
	Class of 2021 Faculty Award – Our Lady of Lourdes Catholic High School
2017	Full Tuition – Our Lady of Lourdes Catholic High School
2016	Society of Plastics Engineers Mid Hudson Valley Chapter – Scholarship Award
	Society of Women Engineers Mid Hudson Section – Award for Excellence in Science

RELEVANT ADVANCED COURSEWORK

¹ - Undergraduate ² - Graduate

Spatial Modeling

- GIS Concepts and Application¹ - SP 2025 - Gained proficiency in QGIS, ArcGIS Pro/Online, and Google Earth Engine
- Introductory GIS and Spatial Analysis¹ - FA 2023 - Familiarity with ArcGISOnline and ArcGISPro

Ecology and Evolutionary Biology

- Conservation Bioacoustics¹ - FA 2024 - Physics of bioacoustics, how to operate and deploy autonomous recording units, and analyze acoustic recordings
- Wildlife Population Analysis¹ - SP 2024 - CMR, N-mixture, and detection/occupancy modeling in R
- Advanced Ecology¹ - FA 2023 - Theoretical ecology modeling/simulations in R and dietary isotope analysis
- Genetics and Genomics¹ - SP 2023 - Fundamental principles of genetics and genomics in eukaryotes and bacteria with a laboratory component exploring experimental genetics.
- Applied Population Ecology¹ - FA 2022 - Single- and multi-species population dynamics, with emphasis on Lotka-Volterra competition and population growth and stability modeling in POPULUS, pplane, and Maxima.

EcoHumanities

- Applied Biodiversity Science² - SP 2026 - Cross-disciplinary understanding of biodiversity science and guiding conservation principles
- Skills for Public Engagement¹ - SP 2025 - Strategies for engaging with different community partners, international communities, and governmental/political/NGO engagement
- Black Ecoliterature¹ - SP 2025 - Investigated the various ways that notions of blackness, ecology, and aesthetics converge
- Society and Natural Resources¹ - SP 2024 - Analyzed the intersection of sociology, economics, and philosophy with the natural environment

REFERENCES

Contact information available upon request

Dr. Ian Ausprey – Texas A&M University | Dept. Ecology and Conservation Biology Assistant Professor

Dr. Jen Walsh – Cornell Lab of Ornithology | Fuller Evolutionary Biology Program Research Associate

Dr. Bronwyn Butcher – Cornell Lab of Ornithology | Fuller Evolutionary Biology Program Lab Manager
Bryce Robinson – Cornell Lab of Ornithology | Ph.D. Candidate
Priscilla Hernandez – Wildlife Conservation Society | Manager of Live Interpretation
Todd Kennett – Cornell University | Spirit of '57 Director of Rowing and Head Coach for Men's Heavyweight Rowing