

Felisha (Faye) Romero

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EDUCATION

- 2021-Present **PhD Biology—Evolution, Ecology, Genetics, and Genomics**
University of Rochester. *Rochester, NY*
Supervisor: Dr. Nancy Chen
- 2016-2020 **BS Molecular Environmental Biology**
University of California, Berkeley. *Berkeley, CA*
Supervisor: Dr. Noah Whiteman

PUBLICATIONS

- 2025 Alexandre N.M.*, **Romero, F.G.***, English, S.G.*, E. Grames, F. Garzón-Agudelo, K. Epperly, T. Barnes, D.R. Powers, A.E. Smith, Z. Migicovsky, L. Stein, S. Akalu, H. Sridhar, G. Montross, E. Collins, A. Rico-Guevara. Supplemental Feeding as a Driver of Population Expansion and Morphological Change in Anna's Hummingbirds. *Global Change Biology*, 31(5):e70237. DOI: 10.1111/gcb.70237. *Equal contribution
- 2024 **Romero, F.G.**, F.E.G. Beaudry, E. Hovmand Warner, T.N. Nguyen, J.W. Fitzpatrick, N. Chen. A new high quality genome assembly for the threatened Florida Scrub-Jay (*Aphelocoma coerulescens*). *G3: Genes, Genomes, Genetics*, jkae232. DOI: 10.1093/g3journal/jkae232.
- 2023 Porter, C.K., **F.G. Romero**, D. Adams, R.C.K. Bowie, E. Riddell. Adaptive and non-adaptive convergent evolution in feather reflectance of Channel Islands songbirds. *Proceedings of the Royal Society B*, 290:20231914. DOI: 10.1098/rspb.2023.1914.
- 2023 Mason, N.M., E.A. Riddell, **F.G. Romero**, C. Cicero, R.C.K. Bowie. Plumage balances camouflage and thermoregulation in horned larks (*Eremophila alpestris*). *The American Naturalist*, 201:2, E23-E40. DOI: 10.1086/722560.

HONORS and AWARDS

- 2026 Best Graduate Student Poster Award (2nd place). Population, Evolutionary, and Quantitative Genetics Conference 2026. *Genetics Society of America*
- 2025 \$3,500 Frank M. Chapman Memorial Fund. *American Museum of Natural History*
- 2025 \$300 Open Scholarship Award. *University of Rochester*
- 2025 \$6,000 Robert K. Wayne Award in Evolutionary, Ecological, or Conservation Genomics. *American Genetic Association*
- 2024 \$2,500 Student Research Award. *American Ornithological Society*
- 2023 Presidential Membership Award. *Genetics Society of America*
- 2023 \$2,500 R. C. Lewontin Early Award. *Society for the Study of Evolution*

2023-2028	\$147,000	NSF Graduate Research Fellowship. <i>National Science Foundation</i>
2021-2024	\$6,000	Ernst Caspari Fellowship in Evolutionary, Developmental and Molecular Genetics. <i>University of Rochester</i>
2022	\$500	Graduate Student Travel Award. <i>University of Rochester</i>
2022		Student Membership Award. <i>American Ornithological Society</i>

PRESENTATIONS

Invited seminars

- Dec 2025 **Romero, F.G.** "Dynamics of inbreeding depression and gene flow in a wild population of Florida Scrub-Jays." *Student Research Grant Seminar Series. American Ornithological Society* (oral, virtual)
- Dec 2023 **Romero, F.G.** "The genetic architecture of inbreeding depression in a wild population of Florida Scrub-Jays." *Graduate Research Excellence Grants Seminar Series. Society for the Study of Evolution* (oral, virtual)

Contributed Conference Presentations

- June 2026 **Romero, F.G.**, J. Summers, J. Schmidt, D.N. Seidman, S. Barve, J.W. Fitzpatrick, N. Chen. "The genetics of inbreeding depression in a pedigreed wild population of Florida Scrub-Jays." *Population, Evolutionary, and Quantitative Genetics 2026. Asilomar, CA* (poster)
- June 2025 **Romero, F.G.**, J. Summers, J. Schmidt, D.N. Seidman, S. Barve, J.W. Fitzpatrick, N. Chen. "Dynamics of inbreeding depression and gene flow in a pedigreed wild population of Florida Scrub-Jays." *Evolution 2025. Athens, GA* (poster)
- April 2025 **Romero, F.G.**, J. Summers, D.N. Seidman, J. Schmidt, J.W. Fitzpatrick, S. Barve, N. Chen. "The genetics of inbreeding and immigration in a wild population of Florida Scrub-Jays." *Department of Biology E2G2 Seminar Series. University of Rochester, NY* (oral)
- Oct 2024 **Romero, F.G.**, J. Summers, D.N. Seidman, J. Schmidt, J.W. Fitzpatrick, N. Chen. "The genetic architecture of inbreeding depression in a wild population of Florida Scrub-Jays." **Abstract-selected talk. American Genetic Association President's Symposium 2024: Genomic Technologies and the Future of Conservation. Granlibakken, Tahoe, CA* (oral)
- April 2024 **Romero, F.G.**, E. Hovmand Warner, F.E.G. Beaudry, T.N. Nguyen, E.J. Cosgrove, A.G. Clark, R. Bowman, J.W. Fitzpatrick, N. Chen. "Comparative genomic analyses reveal variation in avian microchromosomes." *Department of Biology E2G2 Seminar Series. University of Rochester, NY* (oral)
- Aug 2023 **Romero, F.G.**, E. Hovmand Warner, F.E.G. Beaudry, T.N. Nguyen, E.J. Cosgrove, A.G. Clark, R. Bowman, J.W. Fitzpatrick, N. Chen. "Comparative genomic analyses reveal variation in avian microchromosomes." *Great Lakes Annual Meeting of Evolutionary Genomics 2023. Cornell University, NY* (poster)
- Aug 2023 **Romero, F.G.**, E. Hovmand Warner, F.E.G. Beaudry, T.N. Nguyen, E.J. Cosgrove, A.G. Clark, R. Bowman, J.W. Fitzpatrick, N. Chen. "Comparative genomic analyses reveal variation in avian microchromosomes." *American Ornithological Society & Society of Canadian Ornithologists Conference 2023. London, Ontario, CA* (poster)

- Sept 2022 **Romero, F.G.**, S. Boutin, D.W. Coltman, B. Dantzer, J.E. Lane, A.G. McAdam, N. Chen. "Food supplementation and lifetime reproductive success in a wild population of squirrels." *Arts, Sciences, & Engineering Graduate Research Day. University of Rochester, NY* (oral)
- Aug 2022 **Romero, F.G.**, S. Boutin, D.W. Coltman, B. Dantzer, J.E. Lane, A.G. McAdam, N. Chen. "Food supplementation and lifetime reproductive success in a wild population of squirrels." *Great Lakes Annual Meeting of Evolutionary Genomics. Buffalo, NY* (oral)
- June 2022 **Romero, F.G.**, S. Boutin, D.W. Coltman, B. Dantzer, J.E. Lane, A.G. McAdam, N. Chen. "Food supplementation and lifetime reproductive success in a wild population of squirrels." *Evolution Conference 2022. Cleveland, OH* (oral)
- May 2022 **Romero, F.G.** "Modeling the demographic history of two Solomon Island endemics." *Dept of Biology PhD Student Research Symposium. University of Rochester, NY* (oral)
- Feb 2022 **Romero, F.G.**, S. Boutin, D.W. Coltman, B. Dantzer, J.E. Lane, A.G. McAdam, N. Chen. "Food supplementation and lifetime reproductive success in a wild population of squirrels." *Dept of Biology PhD Student Research Symposium. University of Rochester, NY* (oral)
- Dec 2021 **Romero, F.G.**, S. Hamazaki, T. Zhou, K. Yehle, N. Samanta. "Comparison of thermoregulatory-associated genomic regions across six geographically unique populations of *D. melanogaster*." *Applied Genomics Poster Symposium. University of Rochester, NY* (poster)
- Nov 2021 **Romero, F.G.** "Comparison of *de novo* genome assembly methods using *D. melanogaster*." *Dept of Biology PhD Student Research Symposium. University of Rochester, NY* (oral)

RESEARCH EXPERIENCE

- 2021-present **PhD Candidate. Supervisor: Dr. Nancy Chen. University of Rochester, NY**
Investigating the genetic basis of inbreeding depression in the Florida Scrub-Jay using long-term pedigree and genetic data
- 2022 **Rotating PhD Student. Supervisor: Dr. Al Uy. University of Rochester, NY**
Modeled the demographic history of two bird species endemic to the Solomon Islands to examine the dynamics of reproductive isolation and secondary contact
- 2021 **Rotating PhD Student. Supervisor: Dr. Amanda Larracuente. University of Rochester, NY**
Compared *de novo* genome assemblers to streamline a heterochromatin-enriched pipeline for repeat-rich region assembly of *Drosophila melanogaster* genomes
- 2018-2020 **Undergraduate Researcher. Supervisor: Dr. Noah Whiteman. University of California, Berkeley, CA**
Senior thesis: explored the phenotypic consequences of the Anna's Hummingbird's range expansion into urban environments by measuring museum specimens and conducting statistical analyses
- 2017-2018 **Research & Preparation. Museum of Vertebrate Zoology. University of California, Berkeley, CA**
• Compared thermal reflectance in bird feathers across island and mainland Californian populations

- Responsible for dissecting and preparing specimens for the collections through the MVZ prep lab

TEACHING

- 2022 **Teaching Assistant. “Applied Population Biology”, University of Rochester, NY**
Instructor: Dr. Nancy Chen
 Assisted with laboratory exercises in landscape ecology and population genetics, supervised independent research projects
- 2022 **Teaching Assistant. “Computational Biology”, University of Rochester, NY**
Instructor: Dr. Justin Fay
 Led laboratory sections on computational analysis of genomes, gave lectures on the genetics of pedigrees, graded labs and exams
- 2020-2021 **Tutor. Wyzant Tutoring Company. Pleasanton, CA**
 • Tutored high school and college students in biology and programming
 • Composed and executed high-quality individualized lessons, both for virtual and in-person instruction.

MENTORSHIP

- 2023-present **Undergraduates**
University of Rochester, NY
 • Conall Spaur (population genomic data analyses in Weddell seals, independent research)
 • Jenna Savino (comparative genomic data analyses in birds, DNA extraction and quantification, independent research)
 • Alexandra Gaston (comparative genomic data analyses in birds, independent research)
 • Eyvind Hovmand Warner (genomic data analyses in birds, independent research)

LEADERSHIP and SERVICE

- 2023-present **Founder & Graduate Student Representative. Office of Student Relations, Department of Biology. University of Rochester, NY**
 Develop and execute resources, events, and lines of communication to increase undergraduate participation in biological research and department events
- 2023-2025 **Member. Multimedia Subcommittee, Early Career Leadership Program, Genetics Society of America.**
 Research, interview, and produce episodes for the podcast “Genetics in Your World” to communicate current genetics research to a broad scientific audience
- 2022-2024 **Field Assistant. Braddock Bay Bird Observatory. Rochester, NY**
 • Assist with mist-netting, handling live birds, and bird banding
 • Educate visitors to the banding station on research goals and the trapping process
- 2022-2023 **Founder & Member. Graduate Student Recruitment Committee. University of Rochester, NY**
 Planned and executed events surrounding new graduate student recruitment, including interview week and orientation

OUTREACH

- 2023-present **Press Release Writer. American Society of Naturalists.**

Write press releases for forthcoming papers in the academic journal *The American Naturalist*

- 2022-2024 **STEM Professional. Letters to a Pre-Scientist.**
Exchanged letters with middle and high school students from low-income schools in order to demystify STEM career pathways and inspire students to pursue a future in STEM
- 2023-2024 **Co-instructor. Upward Bound. University of Rochester, NY**
Created and co-led a hands-on workshop introducing the genetics of evolution to low-income/first-generation high school students from Rochester City School District.

POPULAR SCIENCE PUBLICATIONS & MEDIA

- 2026 *How humans have “shaped” the Anna’s Hummingbird.* **Public seminar** for the Los Angeles Birder’s Club Webinar series. ([link](#))
- 2026 *Bridging Disciplines: How a Theory Meant to Aid in Saving Plant and Animal Species is Helping Scientists Reconsider an Evolutionary Approach to Cancer Treatment — A Conversation with Srishti Patil and Dr. Robert Noble.* **Podcast episode** for GSA’s “Genetics in Your World” podcast (researcher). ([link](#))
- 2025 *Age Is Just A Number: Mapping Longevity in Diversity Outbred Mice - A Conversation with Dr. Gary Churchill.* **Podcast episode** for GSA’s “Genetics in Your World” podcast (interviewer, researcher, graphic editor). ([link](#))
- 2025 *Creating a personal website.* **Newsletter article** for the GSA’s Early Career Leadership Program weekly newsletter.
- 2025 *Keep Learning in Your Downtime: Media Recommendations for Scientists.* **Newsletter article** for the GSA’s Early Career Leadership Program weekly newsletter.
- 2025 *To breed or not to breed: explaining partial migration in shorebirds.* **Press release** for the American Society of Naturalists’ “Forthcoming papers” blog. ([link](#))
- 2025 *Breeding Better Berries: Inbreeding and Hybrid Vigor in Strawberries – A Conversation with Dr. Steven J. Knapp.* **Podcast episode** for GSA’s “Genetics in Your World” podcast (interviewer, researcher, graphic editor). ([link](#))
- 2024 *Parasite party: how inbreeding begets a complex life cycle.* **Press release** for the American Society of Naturalists’ “Forthcoming papers” blog. ([link](#))
- 2024 *Social Familiarity and Spatially Variable Environments Independently Determine Reproductive Fitness in a Wild Bird.* **Press release** for the American Society of Naturalists’ “Forthcoming papers” blog. ([link](#))

MEDIA COVERAGE

- 2025 Coverage of Alexandre, Romero, & English et al., *Global Change Biology*, 2025:
- “Bird feeders have caused a dramatic evolution of California hummingbirds”. **News from Science.**
 - “Backyard feeders changed the shape of hummingbird beaks, scientists say”. **National Public Radio (NPR).**
 - “Hummingbirds Rapidly Evolved Longer Beaks to Slurp More Nectar from Yard Feeders, New Study Suggests”. **Audubon.**
 - “Backyard Feeders Are Reshaping Hummingbirds”. **The Wildlife Society.**

- “California’s Hummingbirds Have Changed Their Beaks in Response to Backyard Feeders, Study Finds”. **Smithsonian Magazine**.
- “The rise of the Anthropocene can be tracked in hummingbirds’ beaks”. **Anthropocene Magazine**.
- “Hummingbirds Are Evolving to Adapt to Life With Humans”. **Wired**.
- “California hummingbird beaks transformed by feeders: ‘more tapered and longer’”. **The Guardian**.
- “Berkeley research finds feeders literally reshaped Calif. hummingbirds”. **SFGATE**.

2025 “**Faye Romero**”. Featured scientist on *The Scientist Spotlights Initiative* website.

2023 “**Filipinas in STEM: Faye Romero.**” Written interview by Swastika Issar through the Science Corps Education & Research Fellowship and the Central Visayan Institute Foundation, Bohol, Philippines.

PROFESSIONAL MEMBERSHIPS

Genetics Society of America
 American Genetic Association
 American Society of Naturalists
 Society for the Study of Evolution
 American Ornithological Society

SKILLS

Technical

de novo genome assembly, eukaryotic genome annotation, variant calling from next-generation sequencing data, genotype imputation, population genomic analysis (pedigree-based and large-scale population datasets), inter- and intra-species comparative genomic analysis

Computational

Bash, R, Python, Linux, Git, Slurm, HPC clusters, Conda, Docker/Aptainer, AWS, Claude Code

Bioinformatics

BWA, minimap2, samtools, GATK, bcftools, vcftools, ANGSD, GLIMPSE, PLINK, hifiasm, 3D-DNA/Juicer, BUSCO, RepeatModeler/RepeatMasker, BRAKER, GENESPACE, UCSC Genome Browser utilities

Laboratory

DNA extraction (tube and plate, Qiagen DNeasy), DNA quantification (Qubit, NanoDrop), RNA purification, spectroradiometer, museum specimen preparation, database management