

Connor French

Montclair, NJ

☎ 972 768 2025 | ✉ french.connor.m@gmail.com | 🏠 connor-french.com | 📷 connor-french | 🌐 connormfrench | 🐦 frog_phylo

Education

City University of New York

New York, New York

PHD CANDIDATE, BIOLOGY- ECOLOGY, EVOLUTION, AND BEHAVIOR

2018 - 2023

Southern Illinois University

Carbondale, Illinois

M.S., ZOOLOGY

2016 - 2018

University of Texas

Austin, Texas

B.S., BIOLOGY- ECOLOGY, EVOLUTION, AND BEHAVIOR

2011 - 2015

Professional experience

Graduate Research Assistant

City University of New York

MICHAEL J. HICKERSON LAB

2018 - 2023

- Investigating evolutionary responses to environmental change across spatial scales.

Software Developer

University of Maine

ANDREW ROMINGER

2022 - 2023

- Developing an R Shiny web application to simulate community assembly using the Rules of Life Engine model. It is meant to facilitate education and research.

Digital Fellow

City University of New York

GRADUATE CENTER

2019 - 2021

- Consulted on technical projects across disciplines.
- Delivered workshops to multi-disciplinary audiences on topics like R, Python, GIS, reproducible analysis, text analysis, data visualization, and data wrangling.
- Formed the CUNY R User Group and held monthly meetings.

Graduate Research Assistant

Southern Illinois University

JASON L. BROWN LAB

2016 - 2018

- Completed thesis work on the evolution of Andean poison frogs.

Research Assistant

University of Texas

TEXAS BIODIVERSITY COLLECTIONS

2016 - 2016

- Herpetology Division
- Supported data collection and collections management for conservation efforts.

Undergraduate Researcher

University of Texas

DANIEL I. BOLNICK LAB

2013 - 2014

- Completed an independent project through the National Science Foundation Research Experience for Undergraduates. Experimental design, field work in British Columbia, lab work, data analysis, and first-author publication.

Undergraduate Researcher

University of Texas

DAVID CANNATELLA LAB

2013 - 2014

- Field work in support of frog acoustic research.

Field Technician

Middlesex, Belize

TOUCAN RIDGE ECOLOGY AND EDUCATION SOCIETY

2014

- Designed and executed field protocols for monitoring amphibian populations.

Collections Assistant

University of Texas

TEXAS BIODIVERSITY COLLECTIONS

2014

- Ichthyology Division
- Collected and analyzed fish morphometric data for taxonomic research and digitized research collections.

Preprints

Global determinants of insect genetic diversity (2022)

BIORxIV. 10.1101/2022.02.09.479762

- *French, C.M.*, Bertola, L.D., Carnaval, A.C., Economo, E.P., Kass, J.M., Lohman, D.J., Marske, K.A., Meier, R., Overcast, I., Rominger, A.J., Staniczenko, P., Hickerson, M.J.
- Preprint. Accepted at Nature Communications, conditional on revisions.

Publications

Forest cover and geographical distance influence fine-scale genetic structure of leaf-toed geckos in the tropical dry forests of western Mexico (2022)

BIOLOGICAL JOURNAL OF THE LINNEAN SOCIETY. 137(4), PP. 686-699

- *French, C.M.*, Berezin, C.T., Overcast, I., De La Cruz, F.R.M., Basu, S., Bernal, R.L.M., Murphy, R.W., Hickerson, M.J., Blair, C.

Phylogenetic relationships and systematics of the Amazonian poison frog genus *Ameerega* using ultraconserved genomic elements (2020)

MOLECULAR PHYLOGENETICS AND EVOLUTION. 142, 106638.

- Wilson, G.X., *French, C.M.*, Twomey, E.M., Chávez, G., Prates, I., von May, R., la Riva, I.D., Lötters, S., Reichle, S., Serrano-Rojas, S.J., Whitworth, A., Brown, J.L.

Morphological correlates of invasion in Florida cane toad (*Rhinella marina*) populations: Shortening of legs and reduction in leg asymmetry as populations become established (2020)

ACTA OECOLOGICA. 109, 103652

- Rubio, A.O., *French, C.M.*, Catenazzi, A.

Speciation with introgression: Phylogeography and systematics of the *Ameerega* petersi group (Dendrobatidae). (2019)

MOLECULAR PHYLOGENETICS AND EVOLUTION. 138, 31-42.

- *French, C.M.*, Deutsch, M.S., Chávez, G., Almora, C.E., Brown, J.L.

The tadpole of *Ameerega boehmei* in southeastern Bolivia (2019)

ZOOTAXA. 4661, 1.

- *French, C.M.*, Burkette, C., Reichle, S., Brown, J.L.

Geographical variation in colour of female threespine stickleback (*Gasterosteus aculeatus*). (2018)

PEERJ. 6:E4807.

- *French, C.M.*, Ingram, T., and Bolnick, D.I.

Rana juliani. Vocalization. (2017)

MESOAMERICAN HERPETOLOGY. 4(1). PP. 170.

- *French, C.M.*, Kilborn, V., and Jäger, K.L.

Diadophis punctatus regalis (Regal Ringneck Snake). DIET. (2017)

HERPETOLOGICAL REVIEW. 48(2). PP. 448.

- *French, C.M.*

SDMtoolbox 2.0: the next generation python-based: GIS toolkit for landscape genetic, biogeographic and species distribution model analyses. (2017)

PEERJ. 5:E4095.

- Brown, J.L., Bennett, J., and *French, C.M.*

Presentations and Posters

Estimating spatial demographic patterns in a dynamic environment with species distribution models and genome-wide data

EVOLUTION

2022

- *French, C.M.*, Hickerson, M.J., Carnaval, A.C.
- Oral presentation
- Presidential symposium: Species distributions and coexistence: the intersection of evolution and ecology.

Determinants of the global distribution of genetic diversity in terrestrial insects

NEW YORK SPECIES DISTRIBUTION MODELING DISCUSSION GROUP

2021

- *French, C.M.*
- Invited presentation

Comparative phylogeography of the Brazilian Atlantic Forest leaf litter lizards (genus *Enyalius*)

WORLD CONGRESS OF HERPETOLOGY

2020

- *French, C.M.*, Damasceno, R., Rodrigues, M., Carnaval, A.C., Hickerson, M.J.
- Oral presentation

Using genetics to understand species responses to climate change

NEW YORK CITY COLLEGE OF TECHNOLOGY- SYSTEMATICS UNDERGRADUATE COURSE

2020

- *French, C.M.*
- Invited presentation

A dynamic history in the Tropical Andes: phylogeography and systematics of the *Ameerega petersi* group (Dendrobatidae)

EVOLUTION

2019

- *French, C.M.*, and Brown, J.L.
- Oral presentation

Predicting global insect genetic diversity

EVOLUTION

2019

- *French, C.M.*, Bertola, L., Hickerson, M.J.
- Poster presentation

Climate-driven diversification in a clade of Peruvian poison frogs

EVOLUTION

2017

- *French, C.M.*, Brown, J.L.
- Oral presentation

Climate fluctuation as a driver of diversification in a clade of Peruvian poison frogs

JOINT MEETING OF ICHTHYOLOGISTS AND HERPETOLOGISTS

2017

- *French, C.M.*, Brown, J.L.
- Oral presentation

Morphological divergence among multiple *Notropis oxyrhynchus* populations

AMERICAN FISHERIES SOCIETY

2015

- *French, C.M.*
- Poster presentation

Morphological assessment of hybridization between two ranid species, *Lithobates juliani* and *L. vaillanti*

SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES

2015

- *French, C.M.*
- Oral presentation

Peer Review

Journal of Biogeography, Biotropica, Environmental Biology of Fishes, Molecular Ecology, Global Ecology and Biogeography

Teaching

Ecology and Evolution

CCNY BIOLOGY DEPARTMENT

- TA, BIO 228
- Led and prepared labs.

New York, NY

2022

Reproducible Research

CITY COLLEGE OF NEW YORK

- Co-organizer and panelist. 1.5 hour panel on techniques for reproducible research.
- Hosted for members of the Ecology, Evolution, and Behavior PhD program.

New York, NY

2022

R for Reproducible Scientific Analysis

COLUMBIA UNIVERSITY

- Invited workshop.
- Half-day online workshop as part of the Pre-Statistics Course Bootcamp.
- Facilitated by Software Carpentries.

New York, NY

2021

Introduction to Text Analysis in R

CUNY GRADUATE CENTER

- 1.5 hour online workshop for CUNY Graduate Center faculty and students.
- Hosted on rstudio.cloud
- Given as part of the GC Digital Fellows.

New York, NY

2021

Digital Research Institute

CUNY GRADUATE CENTER

- Five day series of workshops introducing CUNY faculty and students to digital tools for research.
- Two sessions- one in January 2020 and one in February 2021.
- Led the R track.

New York, NY

2020 - 2021

Reproducible Data Analysis in R

CUNY GRADUATE CENTER

- 2.5 hour workshop on using RMarkdown and github for reproducible data analysis.
- Hosted within the workr R package as an interactive tutorial.
- Given as part of the GC Digital Fellows

New York, NY

2020

Data Visualization in R

CUNY GRADUATE CENTER

- 2.5 hour workshop on using ggplot2 for data visualization.
- Hosted within the workr R package as an interactive tutorial.
- Given as part of the GC Digital Fellows

New York, NY

2020

Exploring population structure in R with adegenet and sNMF

CUNY GRADUATE CENTER

- 1.5 hour online workshop given to an international group of evolutionary biology faculty and graduate students as part of the four day Bioinformatics Bootcamp for Ecology and Evolution.

New York, NY

2020

Introduction to R and RStudio

CUNY GRADUATE CENTER

- Two hour online workshop for CUNY Graduate Center faculty and students.
- Given as part of the GC Digital Fellows.

New York, NY

2020

Introduction to population structure inference in R

SIUC ZOOLOGY DEPARTMENT

- Invited workshop.
- Two hour workshop for Zoology graduate and undergraduate students.

Carbondale, IL

2019

Introductory R and RStudio

CUNY GRADUATE CENTER

- Invited workshop.
- 1.5 hour workshop for graduate students in the Quantitative Zoogeography graduate course.

New York, NY

2019

Bioinformatic processing of ultraconserved elements for phylogenetic analysis

SIUC ZOOLOGY DEPARTMENT

- Two hour workshop to introduce graduate students to a bioinformatic pipeline.

Carbondale, IL

2019

Data Wrangling in R

CUNY GRADUATE CENTER

New York, NY

2019

- 2.5 hour workshop on using the tidyverse for data manipulation.
- Hosted within the workr R package as an interactive tutorial.
- Given as part of the GC Digital Fellows

BioSkills

SIUC BIOLOGY DEPARTMENT

Carbondale, IL

2017 - 2018

- TA, BIO 212
- Co-developed material for new writing and discussion-based course section.
- Concurrently ran ecology and developmental biology sections.

Introduction to Evolution and Ecology Lab

SIUC BIOLOGY DEPARTMENT

Carbondale, IL

2017

- TA, BIO 212
- Led and prepared labs.

Vertebrate Anatomy Lab

SIUC ZOOLOGY DEPARTMENT

Carbondale, IL

2017

- TA, ZOOL 418
- Led and prepared labs.
- Advised undergraduate lab assistant.

Reptile and amphibian survey and capture techniques

SIUC ZOOLOGY DEPARTMENT

Carbondale, IL

2017

- Invited lecture, Curation of Collections (PLB 401).
- One hour lecture on best practices for herpetological surveys.

Appropriate techniques for identifying and handling reptiles and amphibians in the field.

SIUC ZOOLOGY DEPARTMENT

Carbondale, IL

2017

- Invited lecture, SIUC Wildlife Techniques (ZOOL 469).
- One hour lecture and field demonstration on best practices for herpetological surveys.

Introductory Biology for Non-Majors Lab

SIUC ZOOLOGY DEPARTMENT

Carbondale, IL

2016

- TA, ZOOL 115
- Led and prepared labs.

Instructor

CAMP EINSTEIN AFTERSCHOOL STEM PROGRAM

Austin, TX

2016

- Summer afterschool program for early elementary school students.

Biostatistics

UT BIOLOGY DEPARTMENT

Austin, TX

2014 - 2015

- Undergraduate TA
- Assisted graduate TA with leading and grading R programming labs, and facilitating course discussion.

Awards and Honors

Graduate Center Digital Fellowship

CITY UNIVERSITY OF NEW YORK

2019 - 2021

- \$56250
- \$28,125/year

Helen and Frederick Gaige Fund

AMERICAN SOCIETY OF ICHTHYOLOGY AND HERPETOLOGY

2020

- \$900

Provost's Pre-Dissertation Research Fellowship for the Sciences

CITY UNIVERSITY OF NEW YORK

2020

- \$5000

Student Scholarship

WORLD CONGRESS OF HERPETOLOGY

- \$940

2020

Graduate Research Excellence Grant RC Lewontin Early Award

SOCIETY FOR THE STUDY OF EVOLUTION

- \$2300

2019

Charles & Florence Foote Teaching Award in Zoology

SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

- \$750

2018

Biodiversity Under Environmental Change Seed Grant

CITY COLLEGE OF NEW YORK

- \$2500

2018

Digital Initiatives Training Grant

CITY UNIVERSITY OF NEW YORK

- \$500

2018

Zoology Graduate Student Association Travel Award

SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

- \$100

2017

Cooperative Wildlife Research Lab Featured Graduate Student

SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

2017

Undergraduate Research Fellowship

UNIVERSITY OF TEXAS AT AUSTIN

- \$1000

2015

University Honors

UNIVERSITY OF TEXAS AT AUSTIN

2014

General Education Scholarship

UNIVERSITY OF NORTH TEXAS

- \$6000

2011 - 2012

Dean's List

UNIVERSITY OF NORTH TEXAS

2012

Outreach

Predicting global insect diversity

SCIENCE DAY

- Invited oral presentation

City College of New York

2019

Peru: where plan C comes first

HERPETOLOGY CLUB

- Oral presentation

SIU Carbondale

2017

There and back again: divergence and convergence in poison frogs

DARWIN WEEK

- Invited oral presentation

SIU Carbondale

2017

Sightseers slither into southern Illinois for Snake Road

DAILY EGYPTIAN

- Interview

2017

Frog diversity and evolution

KEALING MIDDLE SCHOOL MAGNET PROGRAM ZOOLOGY CLUB

- Invited lecture

2016

Frogs: weird wonders of the natural world

LAMAR FINE ARTS ACADEMY MIDDLE SCHOOL

2016

- Invited lecture

Professional Development

Insights from Macro-Ecology and Macro-Evolution for Biodiversity Assessment

SCHOODIC INSTITUTE, MAINE

2022

- Workshop

Applied Machine Learning

Austin, TX

R STUDIO CONFERENCE

2019

- Workshop

Machine Learning for Scientists

CITY UNIVERSITY OF NEW YORK

2019

- Course

The Fundamentals of UX Research

CITY UNIVERSITY OF NEW YORK

2019

- Workshop

Genome Assembly and Annotation

AMERICAN MUSEUM OF NATURAL HISTORY

2019

- Workshop

SLiM 5-day workshop

New York, NY

CUNY BIOLOGY DEPARTMENT

2019

- Co-organized five full-day workshop on SLiM population genetic simulation program

Analysis of Rad-Sequence Data (RadCamp)

Universidade de São Paulo

INSTITUTO DE BIOCIÊNCIAS

2018

- Workshop

Biostatistics

CITY UNIVERSITY OF NEW YORK

2018

- Course

Introduction to GIS

SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

2017

- Course

Quantitative Zoogeography

SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

2017

- Course

Intermediate Computational Statistics

SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

2016

- Course

Biostatistics

UNIVERSITY OF TEXAS AT AUSTIN

2014

- Course

Intro to NGS Bioinformatics

UNIVERSITY OF TEXAS AT AUSTIN

2013

- Workshop

Mentorship

Undergraduate Diversity at Evolution

EVOLUTION MEETING

2019

- Mentored two undergraduates attending their first conference

Krista Jäger

DALHOUSIE UNIVERSITY

2016 - 2017

- Assisted honors thesis investigating ranid frog population genetics
- Co-authored natural history note on *Rana juliani* vocalization

Michael Deutsche

SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

2017

- Undergraduate assistant, learning lab techniques and experimental design in anuran morphometrics
- Senior project on poison frog call variation
- Co-authored resulting publication

Writing

Sonification for Data Communication

New York, NY

BLOG POST

2021

- Post introducing the concept of sonification, its uses, and its benefits.

RStudio Cloud for Education

New York, NY

BLOG POST

2020

- Post outlining the advantages of using the RStudio Cloud system for teaching.

Funding sources for undergraduate research in ecology and evolution

New York, NY

BLOG POST

2020

- Post highlighting funding resources for undergraduate research

PDIG Training Grant Spotlight: Connor French

New York, NY

BLOG POST

2019

- Overview of a project I used the Provost's Digital Innovation Grant to prepare for.

Interactively explore geographic data in R using leaflet

New York, NY

BLOG POST

2019

- Walk through of creating an interactive map in R.

Technical Skills

Frameworks	Software
R, Python, SQL, QGIS, ArcGIS, Unix shell, Microsoft Office, High-Performance Computing	Git, tidyverse, tidymodels, Quarto, Shiny, msprime, sklearn, SLiM, conda, snakemake, common bioinformatics tools

Affiliations

Society for the Study of Evolution (2017 - 2023)

American Genetics Association (2022 - 2023)