

JOHN NGUYEN

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EDUCATION

University of Houston, Houston, TX

Doctor of Philosophy – Biology; Ecology and Evolution Track
Advisor: Dr. Adam Stuckert

August 2024 - Present

Columbia University (Columbia College), New York, NY

Bachelor of Arts - Environmental Biology, GPA: 3.90 (Dean's List x6)

May 2023

Research Interests: Evolutionary biology, sensory ecology, herpetology, animal coloration

RESEARCH EXPERIENCE

Smithsonian Tropical Research Institute

NSF RaMP Fellow and Global Sustainability Scholar
Advisors: Drs. Owen McMillan, Christian Cox, Michael Logan

Gamboa, Panamá

October 2023 – October 2024

- Led an independent project to investigate the ecological correlates, genetics, and maintenance of a female-limited polymorphism in slender anoles (*Anolis apletophallus*) and collaborated with international researchers. Designed and curated digital assets for the Gamboa Heliconius Lab.

University of North Carolina at Asheville, Dept of Biology

Herpetology Field Technician
Advisor: Dr. Becca Hale

Asheville, NC

July 2023 – October 2023

- Conducted bi-weekly coverboard field surveys independently at Sandy Bottom Wetland Preserve, a critically threatened montane floodplain slough forest in western North Carolina. Documented temporal changes in herpetofauna community composition to inform local conservation management and policies. Developed off-road navigation and herpetological photography skills.

California Academy of Sciences, Dept of Herpetology

Undergraduate Student Researcher
Advisor: Dr. Rayna Bell

San Francisco, CA

June 2022 – September 2022

- Determined the historical prevalence of the panzootic chytrid fungus (*Batrachochytrium dendrobatidis*) in amphibian populations in West Africa by swabbing 3,300 specimens to provide a greater context for disease dynamics in Africa. Developed a species distribution model of chytrid in Africa using Maxent, R, and QGIS. Cultivated skills in writing research grants and research proposals.

NSF-REU Intern - Summer Systematics Institute

June 2021 – August 2021

- Assessed the diversity and distribution of reed frogs on Bioko Island in the Gulf of Guinea archipelago to gain an understanding of species and genetic composition. Investigated how population divergence from continental Africa is shaping the diversification of this genus of frogs on the island. Revised incorrect species identifications for fluid specimens spanning several decades of field studies. Performed bioinformatics analysis of DNA sequences using BLAST and Geneious. Published a first-author manuscript.

Mpala Research Centre

Tropical Biology Field Semester Abroad Student
Advisors: Drs. Dustin Rubenstein, Kevin Uno, Julien Ayroles, and Robert Pringle

Nanyuki, Kenya

January 2022 – April 2022

- Collaborated with fellow students and scientists on 10 independent research projects on savanna ecology, paleoecology, biology, and conservation. Conducted field data collection in remote and hazardous conditions that required adaptability, teamwork, and quick problem-solving skills; specific locations include Laikipia County, Turkana Basin, Tsavo West, Amboseli, Chyulu Hills, and Mt. Kenya.

Cary Institute of Ecosystem Studies

Undergraduate Student Researcher
Advisors: Drs. Sarah Batterman, Michelle Wong, Will Barker, and Wenguang Tang

Millbrook, NY

September 2020 – September 2022

- Quantified leaf herbivory and nutrient concentration across nutrient treatment to understand how plant-nutrient responses influence carbon sequestration in tropical carbon sinks. Analyzed more than 2,700 unstructured raster data files using ImageJ. Performed data management, visualization, and analysis in R.

NSF-REU Intern – Translational Ecology

May 2020 – August 2020

- Analyzed the effects of nutrient treatment on leaf functional traits across forest succession in a 30-year chronosequence in Agua Salud, Panama to understand how trees in tropical carbon sinks respond to environmental and climate change. Authored a blog on diversity and representation in nature-oriented STEM fields.

Columbia University Irving Medical Center, Dept of Microbiology

New York, NY

Undergraduate Student Researcher

January 2020 – January 2021

Advisors: Drs. David Fidock and Brian Jonat

- Identified mutations in *P. falciparum*-infected mice treated with novel antimalarial compounds to provide a basis for antimalarial drug development. Practiced aseptic technique while handling clinical samples used to model antimalarial resistance *in vivo*.

PUBLICATIONS

Nguyen, J., McLaughlin, P., Irian, C., Scheinberg, L., Bell, R. (2024) Diversity and distribution of reed frogs (*Hyperolius* spp.) on Bioko Island, Equatorial Guinea. *The Herpetological Journal*. 34(4): 211–220.
<https://doi.org/10.33256/34.4.211220>.

Nguyen, J., Becker, C.G., Byrne, A., Medina, D., Harrod, A., Bell, R. Historical prevalence of the chytrid fungus (*Batrachochytrium dendrobatidis*) in amphibian populations in West Africa. *Herpetologica*. 81(3): 206–214.
<https://doi.org/10.1655/Herpetologica-D-24-00049>.

Lordan, R., Jahan, J., Etienne, F., Guillard, J., **Nguyen, J.**, & Ratti, C. (2025). Brewing Public Engagement With Pint of Science USA. *Science Communication*. <https://doi.org/10.1177/10755470251388393>.

Nguyen, J., Alujević, K., Bakewell, L., David Curlis, J., Grey, C., Hoffman, E., Lopez-Tacoaman, Y., Wuthrich, K., Cox, C., Logan, M., Williams, C., McMillan, WO. Ecological correlates, genetics, and maintenance of a female-limited polymorphism in the slender anole (*Anolis apletophallus*). (*In preparation*)

FELLOWSHIPS AND GRANTS

Society for Integrative and Comparative Biology Fellowship of Graduate Student Travel Grant (\$2,000)	2026
University of Houston Cullen Fellowship Travel Grant (\$750)	2026
University of Houston Biology Departmental Travel Grant (\$500)	2026
American Society of Ichthyologists and Herpetologists Gaige Fund (\$1,500)	2025
Harvard Travelers Club Fund (\$5,000)	2025
Skype-A-Scientist: Science IRL Community Science Grant (\$800)	2025
University of Houston Presidential Fellowship (\$4,000)	2025
Smithsonian Tropical Research Institute BioDiversity Fellowship (\$38,583)	2023 – 2024

HONORS AND AWARDS

University of Houston Biosciences Students Graduate Society Symposium: First Place Poster	2026
Society for Integrative and Comparative Biology: Abbott S. Gaunt Top Research Award	2026
Houston Regional Ecology and Evolution Symposium: First Place Talk	2025
University of Houston Biosciences Students Graduate Society Symposium: First Place Talk	2025
Society for Integrative and Comparative Biology: Charlotte Mangum Support Award	2025
National Science Foundation Graduate Research Fellowship Program (GRFP): Honorable Mention	2024
National Science Foundation Graduate Research Fellowship Program (GRFP): Honorable Mention	2023
Columbia University Department of Ecology, Evolution, and Environmental Biology: Dobzhansky Prize	2023
Columbia University UGE Photography Contest: Grand Prize Winner	2023
Society for Integrative and Comparative Biology: Charlotte Mangum Support Award	2022
Society for Integrative and Comparative Biology: Professional Development Award	2022

TEACHING EXPERIENCE

SERVICE AND OUTREACH

Pint of Science United States of America
Communications and Social Media Manager

Houston, TX
January 2025 – December 2025

- Oversaw communications for 10+ major U.S. cities for a nonprofit hosting the world's largest annual science festival. Managed social media pages with a collective following of 4,000+, creating digital media assets, flyers, and outreach campaigns. Coordinated on-the-ground engagement efforts to expand community participation and event visibility.

SKILLS

Bioinformatics: Genome assembly and analysis, pangenome graph inference and analysis, association studies

Computer: R, QGIS, Geneious, JMP, Maxent, Linux, HTML, CSS, ImageJ, Adobe Photoshop and Illustrator

Lab: DNA extraction, RNA extraction, PCR, qPCR, library preparation, gel electrophoresis

Field: Camera trap setup, clay model studies, outdoor photography, herpetological field work, transect and quadrat sampling, navigation and operation of four-wheel drive vehicles

PROFESSIONAL AFFILIATIONS

American Society of Naturalists	2024 - Present
Society for Integrative and Comparative Biology	2022 - Present
American Society of Ichthyologists and Herpetologists	2022 - Present
American Junior Academy of Science	2020

PRESENTATIONS

Nguyen, J., Bell, R., Stuckert, A. Curiously chromatic: the evolution of color in caecilians.

- Poster at University of Houston Biosciences Students Graduate Society Symposium. Houston, TX. April 2026.
- Talk at Society for Integrative and Comparative Biology Annual Meeting. Portland, OR. January 2026.

Nguyen, J., Alujević, K., Bakewell, L., David Curlis, J., Grey, C., Hoffman, E., Lopez-Tacoaman, Y., Wuthrich, K., Cox, C., Logan, M., Williams, C., McMillan, W.O. Ecological correlates, genetics, and maintenance of a female-limited polymorphism in the slender anole (*Anolis apletophallus*).

- Talk at University of Houston Biosciences Students Graduate Society Symposium. April 2025.
- Talk at Society for Integrative and Comparative Biology Annual Meeting. Atlanta, GA. January 2025.
- Poster at International Joint Congress on Evolution. Montreal, Québec, Canada. July 2024.
- Poster at Smithsonian Tropical Research Institute Barro Colorado Island 100 Symposium. Gamboa, Panamá. June 2024.

Nguyen, J., Bell, R. Diversity and distribution of reed frogs (*Hyperolius spp.*) on Bioko Island, Equatorial Guinea.

- Poster at Society for Integrative and Comparative Biology Annual Meeting. Austin, TX. January 2023.
- Talk at California Academy of Sciences Summer Systematics Institute Symposium. San Francisco, CA. July 2021.

Nguyen, J., Batterman, S., Wong, M., Tang, W. Nutrient effects on leaf biomass allocation and herbivory across tropical forest succession.

- Talk at Cary Institute of Ecosystem Studies Symposium. Online. July 2020.

REFERENCES

Rayna Bell, PhD

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Phone: 415-847-4118
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Adam Stuckert, PhD

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Matthew Palmer, PhD

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