

David Tian

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EDUCATION

2019-Present **University of California, Berkeley**

PhD Candidate in Integrative Biology | Museum of Vertebrate Zoology
Advisor: Christopher Martin

2013-2017 **Swarthmore College**

B.A. in Biology | Minor in History
Semester in Environmental Science at Marine Biological Laboratory (2015)
Advisor: Vince Formica

PUBLICATIONS

- Published Alexandre, N.M., Cameron, A.C., **Tian, D.**, Chatla, K., Whiteman, N.K., Turner, T.F., and P. N. Reinthal. 2023. Chromosome-level Reference Genomes of Two Imperiled Desert Fishes: Spikedace (*Meda fulgida*) and Loach Minnow (*Tiaroga cobitis*). *G3: Genes, Genomes, Genetics*.
- Tian, D.**, Patton, A.H., Turner, B. J., and C. H. Martin. 2022. Severe inbreeding, increased mutation load and gene loss-of-function in the critically endangered Devils Hole pupfish. *Proceedings of the Royal Society B*.
- Zhao, Z., **Tian, D.**, and C. S. McBride. 2021. Development of a pan-neuronal driver in *Aedes aegypti* mosquitoes. *Cell Reports Methods*.
- Concha, C., Wallbank, W. R., Hanly, J., Fenner, J., Livraghi, L., Santiago, E., Paulo, D., Arias, C., Vargas, M., Sanjeev, M., Morrison, C., **Tian, D.**, Massardo, D., Counterman, A. B., Scott, M., Jiggins, C., Papa, R., Martin, A. and W. O. McMillan. 2019. Interplay between developmental flexibility and determinism in the evolution of mimetic *Heliconius* wing patterns. *Current Biology*.
- Preprint Adavi, E. D., Dos Anjos, V. L., Kotb, S., Metz, H. C., **Tian, D.**, Zhao, Z., Zung, J. L., Rose, N. H. and C. S. McBride. 2024. Olfactory receptor coexpression and co-option in the dengue mosquito. biorxiv.

- Journalism **D. Tian.** 2016. Ecosystem Engineers: Modifying our Surrounding Environments. *Swarthmore Journal of Science*. 2(1):10-11.
- D. Tian.** 2015. Unraveling the Links Between Ecosystems and Public Health. *Swarthmore Journal of Science*. 1(2):36-37.

PREVIOUS RESEARCH EXPERIENCE

- 2017-2019 **Research Specialist** - Princeton University, McBride Lab
 2017 **Research Assistant** - Swarthmore College, Formica Lab
 2016 **REU Student** - Smithsonian Tropical Research Institute, McMillan Lab
 2015 **Research Assistant** - Marine Biological Laboratory, Neill Lab
 2015 **Research Assistant** - Swarthmore College, Kaplinsky Lab
 2014 **Research Assistant** - Cornell University, Kessler Lab

WORKSHOPS AND COURSES

- 2017 Eco-Evolutionary Dynamics in Nature and the Lab, KITP

TEACHING

- Fall 2023 **Graduate Student Instructor** - UC Berkeley, Practical Genomics
 Spring 2020 **Graduate Student Instructor** - UC Berkeley, Ecological Genetics
 Fall 2019 **Graduate Student Instructor** - UC Berkeley, General Biology
 Summer 2017 **Teaching Assistant** – KITP, Eco-Evolutionary Dynamics in Microbial Communities
 Spring 2017 **Science Associate** - Swarthmore College, Organismal and Population Biology

OUTREACH AND SOCIAL ENGAGEMENT

- Spring 2024 **Volunteer and Presenter** – Cal Day 2024
 Fall 2023 **Student Representative** – “Night at the Museum”, Museum of Vert. Zoology
 Fall 2023 **Tour Guide** – Berkeley Bird Festival
 Spring 2023 **Volunteer and Presenter** – Cal Day 2023
 Fall 2022 **Co-organizer** – Integrative Biology Research Mixers
 Fall 2022 **Mentor/Reviewer** – UC Berkeley GRFP Workshop
 Spring 2022 **Mentor** - Breaking Language Barriers in Ecology and Evolution
 Spring 2022 **Curriculum Developer** – Biological Collections in Ecology and Evolution Network
 Fall 2021 **Volunteer** – Skype a Scientist Program
 Spring 2021 **Mentor** – Willard Middle School (Berkeley, CA) Be a Scientist Program
 Fall 2016 **Student Delegate** - Marrakech, Morocco, UNFCCC (COP22)
 2016-2017 **Biology Editor** – Swarthmore College, Swarthmore Journal of Science
 Summer 2015 **Student Mentor** - Swarthmore College, Science For Kids Program
 2015-2016 **Biology Contributor** – Swarthmore College, Swarthmore Journal of Science

PRESENTATIONS

2024	Contributed talk. Evolution 2024, Montreal, CA.
2024	Invited talk. Prep Lab Course, UC Berkeley.
2023	Invited talk. University of San Francisco Biology Department.
2023	Contributed talk. Desert Fishes Council, Bishop, CA.
2023	Poster. SMBE Molecular Evolution in Small Populations. Princeton, NJ.
2022	Contributed talk. NACCB 2022, Reno, NV.
2022	Poster. PEQG 2022, Asilomar, CA.
2022	Invited talk. Museum of Vertebrate Zoology Symposium, UC Berkeley.
	*Received award for best student presentation
2021	Guest lecture. Ichthyology, UC Berkeley
2021	Contributed talk. Ecological and Evolutionary Ethology of Fishes 2021.
	*Received Jack Ward Memorial Prize for best oral presentation
2021	Contributed talk. Virtual Evolution 2021.
2021	Invited talk. Devils Hole Pupfish ICT Meeting, National Park Service.
2021	Contributed talk. Bay Area Conservation Biology Symposium.
2021	Contributed talk. Museum of Vertebrate Zoology Symposium, UC Berkeley.
2020	Guest lecture. Ichthyology, UC Berkeley
2020	Contributed talk. Museum of Vertebrate Zoology Symposium, UC Berkeley.
2016	Contributed talk. REU Symposium, Smithsonian Tropical Research Institute.
2015	Contributed talk. SES Symposium, Marine Biological Laboratory.
2017	Poster. Evolution 2017, Portland, OR.
2014	Poster. Sigma Xi Student Research Poster Session, Swarthmore College.

GRANTS AND AWARDS

2024	David and Marvalee Wake Fund	\$1000
2024	Integrative Biology Summer Research Award	\$5000
2024	Outstanding Graduate Student Instructor Award	\$250
2024	MVZ Alexander Fellowship	\$15,500
2023	Philomathia Graduate Fellowship in Environmental Sciences	\$20,000
2023	Integrative Biology Summer Research Award	\$3,500
2023	David and Marvalee Wake Fund	\$1,500
2022	MVZ Travel Fund	\$500
2022	IB GRAC Travel Fund	\$250
2022	Integrative Biology Summer Research Award	\$2,870
2022	David and Marvalee Wake Fund	\$1,500
2021	Robert and Nancy Beim Endowed Graduate Field Research Fund	\$2,800
2021	MVZ Travel Fund	\$35
2021	Graduate Student Research Fund	\$260
2021	Wilhelm L. F. Martens Fund	\$1,500
2020-2023	NSF Graduate Research Fellow	\$138,000
2020	Graduate Student Research Fund	\$200

2020	Wilhelm L. F. Martens Fund	\$2,000
2016	Smithsonian Tropical Research Institute REU Grant	\$6,000
2015	Howard Hughes Medical Institute Summer Research Grant	\$4,350
2014	S. Theodore Lande Research Fellowship	\$4,350

MENTORSHIP

2023-2024	Senior Thesis Mentor – Joyce Wang, UC Berkeley
2022	REU Mentor - Tina Cai, Middlebury College

REVIEWING

Molecular Ecology Resources, Molecular Biology and Evolution

AFFILIATIONS AND MEMBERSHIP

Society for Study of Evolution
Genetics Society of America
Desert Fishes Council
Society for Conservation Biology

MEDIA COVERAGE

Sanders, Robert. "[Endangered Devils Hole pupfish is one of the most inbred animals known](#)"
Berkeley News. November 4, 2022
Secon, Holly. "[Rarest Fish on Earth: Devils Hole Pupfish](#)" Discover Magazine. May 11, 2022

REFERENCES

Christopher Martin, Associate Professor, UC Berkeley	chmartin@berkeley.edu
Craig Miller, Associate Professor, UC Berkeley	ctmiller@berkeley.edu
Priya Moorjani, Assistant Professor, UC Berkeley	moorjani@berkeley.edu
Stephanie Carlson, Professor, UC Berkeley	smcarlson@berkeley.edu