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

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*.

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
2017	Leo Evolutionary Dynamics in Nature and the Lab, Kiri

TEACHING

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

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

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

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	Gradaute Student Research Fund	\$200
2020	Wilhelm L. F. Martens Fund	\$2,000
2016	REU Summer Research Grant	\$6,000
2015	HHMI Summer Research Grant	\$4,350
2014	S. Theodore Lande Research Fellowship	\$4,350

MENTORSHIP

2022 **REU Mentor** - Tina Cai, Middlebury College

REVIEWING

Molecular Ecology Resources

AFFILIATIONS AND MEMBERSHIP

Society for Study of Evolution Genetics Society of America

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