

Ursula Trigos-Raczkowski

PhD in Applied Mathematics from the University of Michigan, Ann Arbor

Education	University of Michigan, Ann Arbor Ph.D., Applied Mathematics. M.S., Applied Mathematics. California State University Bakersfield B.S., Applied Mathematics. Minor, Chemistry.	Email: utrigos@gmail.com
Dissertation	Coexistence through Life-History Variation: revisited in tractable models with explicit patch aging and/or size-structure.	
Employment	Vermont State University Randolph Assistant Professor, August 2025 - Present (Supervisor Dr. Julie M. Theoret) University of Louisiana at Lafayette Post Doctoral Fellow, July 2024 - July 2025 (Supervisor Dr. Azmy S. Ackleh) Integrative Biology, University of Texas at Austin Post Doctoral Fellow, July 2023 - July 2024 (Supervisor Dr. Annette Ostling) Research Affiliate – Visiting Researcher/Scholar, July 2022 - July 2023 (Supervisor Dr. Annette Ostling) Mathematics, University of Michigan, Ann Arbor Graduate Student Instructor & Graduate Student, July 2016 - July 2022 (Supervisor Dr. Hanna Bennett & Dr. Annette Ostling & Dr. Trachette Jackson) Mathematics, California State University Bakersfield Teaching Assistant, Math 281 (Tutoring in Precalculus and Calculus), Jan-May 2016 (Supervisor Dr. Charles Lam)	
Teaching	Mathematics, University of Michigan, Ann Arbor Graduate Student Instructor of Record (GSI) GSI, Calculus I, one section (4 credits), FA 2021, WN 2021, FA 2019, WN 2017 GSI, Data, Functions and Graphs (a precalculus course), one section (4 credits), FA 2020, FA 2016 Mathematics, California State University Bakersfield Teaching Assistant, Math 281 (Tutoring in Precalculus and Calculus), 2014-2016 Teaching Assistant, Math 204 (Calculus <i>IV</i>), 2013-2014 and 2015-2016 Student Assistant, proctored exams, 2012.	

Publications

A Spatially-Explicit Stochastic Model for the Gulf Coast Ticks (June 13, 2025 in *Ecological Modelling*)
The impact of prey seasonal breeding on evolutionary predator-prey dynamics (out for Review;
submitted June 19 to Journal of Difference Equations and Applications)
Discrete-Time Refuge-Mediated Competition Model (in progress)
Disturbance-Generated Competitive Coexistence (in progress) [BioRxiv link](#)

Talks *Coexistence via life history variation revisited in models with explicit patch aging*

American Institute of Mathematical Sciences, AIMS 2023

in Wilmington, North Carolina (July 2023)

Joint Mathematics Meeting, JMM 2023

in Boston, Massachusetts (January 2023)

International Conference on Mathematical Modeling and

Analysis of Populations in Biological Systems, ICMA-VIII 2022

in Lafayette, Louisiana (October 2022)

EcoLunch Ecology Seminar, UT Austin 2022

in Austin, Texas (October 2022)

Ecological Society of America, ESA 2022

in Montreal, Canada (August 2022)

Awards and
Fellowships

Rackham Merit Fellow (RMF, RSA) (2018)

California Scholarship Federation (2008-2011)

Languages
and Skills

English (native), Spanish (fluent), Polish (advanced)

Matlab, \LaTeX , Mathematica, SLURM HPC Cluster

References

Dr. Azmy S. Ackleh

Mathematics

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Dr. Trachette Jackson

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Dr. Hanna Bennett

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