

Catalina Medina

Statistics PhD Student
University of California, Irvine
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Education

PhD Statistics

University of California, Irvine (UCI)
Advisor: Vladimir N. Minin

September 2019 - June 2024 [Projected]

MS in Statistics

University of California, Irvine

September 2019 - June 2021

BS Mathematics (specialization in Statistics)

Minor in Biology

University of Nevada, Reno (UNR)

August 2015 - May 2019

Research Interests

Epidemiological applications of statistics to better understand disease and infection.

Statistics and data science education and accessibility.

Publications

(In submission to *Acta Tropica*) Parker DM, **Medina C**, Bohl J, Lon C, Chea S, Lay S, et al. Determinants of exposure to Aedes mosquitoes: a comprehensive geospatial analysis in peri-urban Cambodia. *medRxiv*. 2022. <https://doi.org/10.1101/2022.09.12.22278870>.

Parker DM, Bruckner T, Vieira VM, **Medina C**, Minin VN, Felgner PL, et al. Epidemiology of the early COVID-19 epidemic, Orange County, California, USA. *Emerging Infectious Diseases*. 2021 Oct. <https://doi.org/10.3201/eid2710.210103>.

Fellowships

2022 Summer Teaching Apprenticeship Program Fellow. UCI Division of Teaching Excellence and Innovation.

2019 UC Irvine Graduate Dean's Recruitment Fellow. UCI Graduate Division.

Awards

2020 Outstanding Graduate Teaching Assistant Award. UCI Donald Bren School of Information and Computer Sciences, Department of Statistics.

2019 Nevada Undergraduate Research Award.

2018 Runner Up for the Prize for Undergraduate Research in Quantitative Biology. NSF-Simons Center for Quantitative Biology and Department of Molecular Biosciences, Northwestern University.

2018 SACNAS Conference Travel Award.

2018 Mathematical Biosciences Institute Capstone Conference Travel Award. Ohio State University.

Certifications

2021 Certification in Stochastic Epidemic Models with Inference. University of Washington, Seattle, WA
Summer Institute in Statistics and Modeling in Infectious Diseases (SISMID).

2021 Certification in MCMC II for Infectious Diseases. (SISMID).

2021 Certification in Evolutionary Dynamics and Molecular Epidemiology of Viruses. (SISMID).

Programs and Professional Membership

2018-2019 McNair Scholar. University of Nevada, Reno

American Statistical Association Member

Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Member

Teaching Experience

UCI Instructor of Record

Basic Statistics (Stats 7)	Summer 2022
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UCI Teaching Assistant

Introduction to Probability and Statistics I (Stats 120A)	Fall 2022
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Statistical Methods for Data Analysis I (Stats 110)	Summer 2021
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Introduction to Probability and Statistics (Stats 120A)	Summer 2020
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Introduction to Probability and Statistics for Computer Science (Stats 67)	Spring 2020
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Statistical Methods for Data Analysis II (Stats 111)	Winter 2020
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Introduction to Biological Statistics (Stats 8)	Fall 2019
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UNR Instructor of Record

Elementary Algebra (Math 95)	Summer 2019
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Intermediate Algebra (Math 96)	Summer 2019
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Conference Presentations and Posters

UNR College of Science Poster Competition (Poster)* UNR Reno, NV.	November 2018
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Conference on Quantitative Approaches in Biology (Poster)* Northwestern University, Evanston, IL.	November 2018
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SACNAS The National Diversity in STEM Conference (Poster)* San Antonio, TX.	October 2018
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MBI Capstone Conference (Poster)* Mathematical Biosciences Institute, Columbus, OH.	August 2018
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UNR McNair Symposium (Oral presentation)* University of Nevada, Reno, Reno, NV.	August 2018
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UCLA National McNair Conference (Oral Presentation)* University of California Los Angeles, Los Angeles, CA.	July 2018
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*Host-pathogen dynamics: Quantifying process-level variation using a system-specific dynamical model in a non-linear mixed effects modeling framework. (under: Dr. Paul Hurtado and Dr. Deena Schmidt)

Professional Service and Outreach

Student representative in the UCI statistics department. Fall 2021 - Current

Created and maintain animated maps for COVID-19 Trends by UC Irvine website to visualize Orange County COVID-19 cases, tests, and percent positivity by zip code for the public.

(<https://www.stat.uci.edu/covid19/index.html>) 2021

Panelist for college career discussion for 1st year class of Mathematics, Physics, and Atmospheric Science majors at UNR. Nov 2020

Panelist for graduate school panel for UNR students hosted by Association for Women in Mathematics (AWM). Nov 2020

Presented on my early graduate school experience and life at UCI for the UNR 2020 cohort of McNair Scholars. Dec 2020.
