Jorge Arroyo-Esquivel

CONTACT University of California Davis
INFORMATION Department of Mathematics

jarroyoe@ucdavis.edu One Shields Avenue

Davis, California 95616 USA

RESEARCH INTERESTS Theoretical ecology and population dynamics, especially in its applications to conservation biology and agriculture.

http://www.math.ucdavis.edu/~jarroyoe

EDUCATION

University of California Davis

Ph.D. Student, Applied Mathematics (expected 2023)

Advisor: Alan Hastings

Universidad de Costa Rica

B.S. in Mathematics, April 2018

• Honorific graduation

PUBLICATIONS

F. Sanchez, J. Arroyo-Esquivel. Hospitalization in the transmission of dengue dynamics: The impact on public health policies, in preparation.

J. Arroyo-Esquivel, F. Sanchez, and L.A. Barboza. *Infection model for analyzing biological control of coffee rust using bacterial anti-fungal compounds*, Math. Biosci. **307** (2019), 13–24.

Conference Talks Infection model for analyzing biological control of coffee rust using bacterial anti-fungal compounds, 21st International Symposium on Mathematical Methods Applied to Sciences, Universidad de Costa Rica. (February 2018)

Infection model for analyzing biological control of coffee rust using bacterial anti-fungal compounds, 19th Fall School of Mathematical Biology, Universidad de Colima, Mexico. (October 2017)

OTHER TALKS

Applications of bifurcation theory to conservation of marine ecosystems, Mathematics Department Colloquium, Universidad de Costa Rica (October 2016)

 $\begin{array}{ll} {\rm Research} & 2019- \\ {\rm Experience} & 2014-2018 \end{array}$

Graduate Student Researcher
Research Assistant, Pure and Applied Mathematics Center

TEACHING EXPERIENCE Winter 2019 Dynamical Systems Applied to Biology (University of California

Davis)

Fall 2018 Teaching Assistant, Calculus Applied to Biology (University of Cal-

ifornia Davis)

2017 Volunteer tutor for socially excluded groups (Fundacion Rahab)

Summer 2015 Biology Olympiad Trainer (Saint Michael High School)

Honors and Awards 2018 Honorific Graduation

Universidad de Costa Rica

Professional Service Reviewer in the following journals:

 $\bullet \ \ International \ Journal \ of \ Biometeorology$

Relevant Skills Languages: Computer Languages: English, Spanish R, MATLAB, Java