René D. Clark

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EDUCATION

Rutgers University, New Brunswick, NJ

Ph.D. in Ecology & Evolution (Expected May 2022)

• **Dissertation Title:** Spatial and temporal patterns of adaptation and adaptive potential in a changing ocean

Cumulative GPA: 4.00/4.00

Cumulative GPA: 3.95/4.00

Cumulative GPA: 3.98/4.00

- Advisor: Malin Pinsky, Ph.D.
- **Committee Members:** Debashish Bhattacharya, Ph.D., Holly Kindsvater Ph.D & Peter Smouse, Ph.D.

Saint Joseph's University, Philadelphia, PA

M.S. in Biology – with Thesis (May 2017)

- **Thesis Title:** The effect of microtopography on blackfly larval settlement & an analysis of female postcopulatory behavior in *Drosophila suzukii* **Advisor:** Jonathan Fingerut Ph.D.
- Committee Members: Scott McRobert Ph.D. & Matthew Nelson Ph.D.

Pennsylvania State University, University Park, PA

B.S. in Biology – Ecology Option (May 2014)

• Graduated with Highest Honors (top 10 students in program)

PUBLICATIONS

Bold is self. *Italicized* is undergraduate mentee.

2021

René D. Clark, Matthew L. Aardema, Peter Andolfatto, Paul H. Barber, Akihisa Hattori, Jennifer A. Hoey, Humberto R. Montes Jr. & Malin L. Pinsky. (2021) Genomic signatures of spatially divergent selection at clownfish range margins. *Proceedings of the Royal Society B: Biological Sciences*, **288**:20210407. (doi:10.1098/rspb.2021.0407)

Zoë J. Kitchel, R. M. W. J. Bandara, Jaelyn T. Bos, **René D. Clark**, Daniel L. Forrest, Malin L. Pinsky. (2021) Book Review: Ocean Recovery: A Sustainable Future for Global Fisheries? *Fisheries*. (doi:10.1002/fsh.10580)

2020

René D. Clark, Marissa DiPiero, Jonathan T. Fingerut, & Scott P. McRobert. (2020) An analysis of female postcopulatory behavior in *Drosophila suzukii* and *Drosophila biarmipes*. Journal of Insect Behavior, **33**:193-200. (doi:10.1007/s10905-020-09761-x)

2017

René D. Clark. (2017) The effect of micro-topography on *Simulium tribulatum* larval settlement and recruitment & An analysis of female postcopulatory behavior in *Drosophila suzukii* and *Drosophila biarmipes*. Saint Joseph's University, Philadelphia, PA. (*Master's Thesis – print edition*)

IN PREPARATION

Marial Malabag, **René D. Clark** & Malin L. Pinsky. The effect of reproductive traits on the maintenance of genetic diversity in marine species. (pre-print available upon request)

Eric Garcias, Jemalyn Baldisimo, **René D. Clark**, Iván Lopez, Brendan N. Reid, Roy Roberts, John Whalen & Chris E. Bird. A comparison of de novo genome assemblers using wholegenome shotgun short reads. (pre-print available upon request)

René D. Clark & Malin L. Pinsky. Exploring global patterns of marine genetic diversity. (preprint available upon request)

René D. Clark, Katrina A. Catalano, Kyra Fitz, Eric Garcia, Kyle Jaynes, Brendan N. Reid, Allyson S. Sawkins, Anthony Snead, John Whalen & Malin L. Pinsky. Temporal genomics: Best practices, common pitfalls, and future directions. (pre-print available upon request)

Anthony Snead & **René D. Clark**. Temporal 'omics: Spanning the biological hierarchy. (preprint available upon request)

TEACHING EXPERIENCE

INSTRUCTION

Teaching Assistant, Biological Research Lab School of Biological Sciences, Rutgers University

January – May 2021

Teaching Assistant, Conservation Biology

January – May 2020, 2021

Ecology, Evolution, and Natural Resources Department, Rutgers University

Head Teaching Assistant, Principles of Biology School of Biological Sciences, Rutgers University August 2020 – December 2020

Ecology Teacher, Little Owls Enrichment Cranbury, NJ

2018-2021

GeoKids Fellow, Saint Joseph's University Philadelphia School District, Philadelphia PA

2015 - 2017

Science Camp Teacher, Ross Twp. Summer Program Ross Township, Pittsburgh PA

June - July 2014, 2015 & 2017

AmeriCorps Member, City Year Philadelphia School District, Philadelphia PA August 2014 – June 2015

Teaching Assistant, Biology 427 (Evolution) Biology Department, Pennsylvania State University August - December 2013

LECTURES & WORKSHOPS

Instructor, Bioinformatics & Genomics Workshop
Silliman University, Dumaguete Philippines

June 2018, 2019

Guest lecture, Ecological Data Analysis (Instructor: Alexa Fredston)

March, April 2022

Guest lecture, Conservation Biology (Instructor: Rae Winfree)

April 2020, 2021

Guest lecture, Molecular Ecology (Instructor: Malin Pinsky)

April 2019

MENTORING

2020 - current: Rutgers University undergraduate, <u>Marial Malabag</u>, "The effect of reproductive traits on the maintenance of genetic diversity in marine species."

2021: North Hills High School senior, <u>Daniel Ross-Miller</u>, "Genetic diversity between populations of Amphiprion clarkii"

*1st place in regional Pennsylvania Junior Academy of Science (PJAS) competition

2019 - 2020: Rutgers University undergraduate, <u>Adriana Chumacero</u>, "Reproductive biology of the yellow-tail barracuda in the Philippines."

2018 - 2020: Rutgers University undergraduate, <u>Marhuma Zaman</u>, "An analysis of gut and gill microbial diversity in Leiognathus equulus."

2016 - 2017: St. Joseph's University undergraduate, <u>Marissa DiPiero</u>, "An analysis of reproductive behavior in Drosophila suzukii."

GRANTS, HONORS, & AWARDS

RCN for Evolution in Changing Seas Working Group Grant (\$16,000) Conference Travel Award (\$500)	2020 2019
Ecology & Evolution Small Grant (\$1000)	2019
SEBS Graduate School Excellence Fellowship (\$30,000)	2017 - 2018
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Sigma Xi Honors Society	2017
Outstanding Student Presentation, NABFA	2017
Saint Joseph Travel Award (\$300)	2017
GeoKids Fellowship, Saint Joseph's University (\$40,000)	2015 – 2017
Phi Kappa Phi Honors Society	2013 – 2015
Evan Pugh Scholar Senior Award, Pennsylvania State University	2014
Undergraduate Research Grant, Pennsylvania State University	2013 & 2014
Evan Pugh Scholar Junior Award, Pennsylvania State University	2013
Dean's List, Pennsylvania State University	2010 - 2014

PROFESSIONAL & RESEARCH EXPERIENCE

^{*}Special award in state PJAS competition

Ecology & Evolution Graduate Program, Rutgers University New Brunswick, NJ

Graduate Student Researcher, Fingerut Lab

2015 - 2017

Biology Graduate Program, Saint Joseph's University Philadelphia, NJ

Undergraduate Research Assistant, Baums Lab

August 2012 – January 2014

Biology Department, Pennsylvania State University State College, PA

Animal Husbandry Intern, Sea Turtles & Seahorses

June – August 2012

Pittsburgh Zoo & PPG Aquarium Pittsburgh, PA

Laboratory Intern, Telecardia Inc.

May – August 2011

Pittsburgh PA

PRESENTATIONS

Bold is self. *Italicized* is undergraduate mentee.

2022

René Clark. Large-scale patterns of adaptation and adaptive potential in a changing ocean. *St. Joseph's University Biology Seminar Series*, Philadelphia PA. March 2022 (Invited talk)

2021

René Clark. The role of fishing as a driver of genomic change in tropical near-shore fish populations. *Rutgers Ecology & Evolution Graduate Student Association Seminar*, New Brunswick NJ. October 2021

René Clark & Malin Pinsky. Genomic signatures of spatially divergent selection at clownfish range margins. *Evolution Conference*, Virtual. June 2021 (faux-live talk)

2020

René Clark & Malin Pinsky. Exploring global patterns of marine genetic diversity. Rutgers Ecology & Evolution Graduate Student Association Seminar, New Brunswick NJ. October 2020

2019

René Clark & Malin Pinsky. Genomic signatures of spatially divergent selection in *Amphiprion clarkii* populations across a thermal gradient. *Ecological Society of America Conference*, Louisville KY. August 2019 (poster presentation)

René Clark & Malin Pinsky. Genomic signatures of spatially divergent selection in *Amphiprion clarkii* populations across a thermal gradient. *Rutgers Ecology & Evolution Graduate Student Association Seminar*, New Brunswick NJ. April 2019

2017

René Clark. A tale of two flies: The effect of micro-topography on *Simulium tribulatum* larval settlement and recruitment & An analysis of female postcopulatory behavior in *Drosophila suzukii* and *Drosophila biarmipes*. *Master's Thesis Public Defense*, Saint Joseph's University, Philadelphia, PA. June 2017

René Clark & Marissa DiPiero. Reproductive behavior in Drosophila suzukii (update). Sigma Xi Research Symposium, Saint Joseph's University, Philadelphia, PA. April 2017 (poster presentation)

René Clark. The effect of micro-topography on *Simulium tribulatum* larval settlement and recruitment. *North American Black Fly Association Conference*, Harrisburg, PA. March 2017 (student presentation)

2016

René Clark, Nicole Sullivan, Mark Tingey. Small but powerful: what can we learn from flies, worms, and yeast? *Science on the Hill*, Saint Joseph's University, Philadelphia, PA. October 2016. (invited talk)

René Clark, Hannah Bartling, Marissa Diorio, & Marissa DiPiero. Reproductive behavior in Drosophila suzukii. Sigma Xi Research Symposium, Saint Joseph's University, Philadelphia, PA. April 2016. (poster presentation)

2013

René Clark. The effect of triggerfish and mussel interactions on coral reproduction. *Undergraduate Research Symposium*, Pennsylvania State University, University Park, PA. April 2013. (poster presentation)

ACADEMIC & COMMUNITY SERVICE

Outreach Chair , Ecology & Evolution Graduate Student Association Board Rutgers University, NJ	2020 - 2021
Secretary , Ecology & Evolution Graduate Student Association Board Rutgers University, NJ	2020 - 2021
Treasurer , Ecology & Evolution Graduate Student Association Board Rutgers University, NJ	2018-2020
Vice President, Biology Graduate Student Council Saint Joseph's University, PA	2016 – 2017
Rules & Regulations Captain, IFC/Panhellenic Dance Marathon (THON) Pennsylvania State University	2014

SKILLS & INTERESTS

Certified in Adult/Child CPR & AED Administration • Certified PADI Open Water Diver • Experienced in R, Unix, RegEx, ImageJ, & OpenBUGS • Member of Phi Kappa Phi Honors Society, Sigma Xi Honors Society, Ecological Society of America & Society for the Study of Evolution • Reviewer for: Ecology & Evolution, Journal of Animal Ecology