

SARAH GIGNOUX-WOLFSOHN

CONTACT

sarah.gignouxwolfsohn@rutgers.edu
114 College Farm Road, New Brunswick, NJ, 08904
610.724.3602

EDUCATION

April 2016

PhD, Ecology, Evolution, and Marine Biology
Northeastern University, Boston, MA
Thesis title: Towards a Better Understanding of White Band
Disease: Transmission, Causes, and Effects
Committee: Drs. Steven Vollmer, Geoffrey Trussell,
Melissa Garren, Jonathan Grabowski, and Yunrong Chai

May 2010

B.A., Biology and French, Honors in Biology
Wesleyan University, Middletown, CT
Thesis title: Methylation and Pigmentation in the Three-Spine
Stickleback
Advisor: Dr. Barry Chernoff

PROFESSIONAL APPOINTMENTS

September 2016-2018

Postdoctoral Associate
Department of Ecology, Evolution, and Natural Resources
Rutgers University, New Brunswick, NJ

September 2018-2019

Smithsonian George E Burch Postdoctoral Fellow
Smithsonian Environmental Research Center, MD

Sept. 2007-Oct. 2010

Chernoff Lab, Wesleyan University
Lab Assistant

Aug.-Dec. 2008

Eichmann Lab, Collège de France, Paris, France
Lab Assistant

June-Aug. 2007

June-Aug. 2008

The Center For Applied Genomics, The Children's Hospital of
Philadelphia, Lab Assistant

PUBLICATIONS

2017

Gignoux-Wolfsohn, SA, Aronson, FM and Vollmer SV (2017)
Complex interactions between potentially pathogenic, opportunistic,
and resident bacteria emerge during infection on a reef-building
coral. *FEMS Microbiology Ecology* 93, 7.

2017

Maslo B, **Gignoux-Wolfsohn SA**, Fefferman N (2017) Success of
Wildlife Disease Treatment Depends on Host Immune Response.
Frontiers in Ecology and Evolution 5, 28.

- 2015 **Gignoux-Wolfsohn SA**, Vollmer SV (2015) Identification of Candidate Coral Pathogens on White Band Disease-Infected Staghorn Coral. *PLOS ONE* DOI: 10.1371/journal.pone.0134416.
- Fuess L*, Eisenlord M*, Closek C*, Tracy A*, Mauntz R*, **Gignoux-Wolfsohn SA***, Moritsch M M*, Yoshioka R*, Burge CA, Harvell CD, Friedman CS, Hewson I, Hershberger PK, Roberts S (2015) Up In Arms: Immune and Nervous System Response to Sea Star Wasting Disease. *PLOS ONE* DOI:10.1371/journal.pone.0133053.
*Authors contributed equally to this work.
- 2012 **Gignoux-Wolfsohn SA**, Marks CJ, Vollmer SV (2012) White Band Disease Transmission in the Threatened Coral, *Acropora cervicornis*. *Scientific Reports* 2: 804 DOI:10.1038/srep00804.
- 2011 Tipton M, **Gignoux-Wolfsohn SA**, Stonebraker P, Chernoff B (2011) Postglacial Recolonization of the Eastern Blacknose Dace, *Rhinichthys atratulus* (Teleostei: Cyprinidae), Through the Gateway of New England. *Ecology and Evolution* 1, 3: 343-358 doi:10.1002/ece3.31.

AWARDS / FELLOWSHIPS / FUNDING

- Sept. 2018-2019 The George Burch Fellowship in Theoretical Medicine and Affiliated Theoretic Science (Smithsonian Institution) \$64,000
- Feb. 2017-2018 U.S. Fish and Wildlife Service. Brooke Maslo, **Sarah Gignoux-Wolfsohn**, Malin Pinsky, and Brooke Hines: Identifying genetic signatures of selection in multiple bat hosts \$39,913
- Jan.-May 2016 Dissertation Completion Fellowship (Northeastern University) \$10,930
- Sept. 2011-May 2016 University Excellence Fellowship (Northeastern University) \$25,000
- May 2014 Experiment.com campaign \$6,300
<https://experiment.com/projects/what-is-killing-caribbean-corals-investigating-a-devastating-coral-disease>
- May 2013 Honorable Mention, Biology department graduate student presentation competition (Northeastern University)
- Apr. 2013 Honorable Mention, NSF Graduate Research Fellowship Program
- Sept.-Dec. 2009 Mellon Foundation Fellowship (Wesleyan University) \$3,000

June-Aug. 2009

Howard Hughes Foundation Fellowship (Wesleyan University)
\$3,000

PRESENTATIONS

Invited

May 2017

White-Nose Syndrome Workshop, Nashville, KY
Are Bat Populations Infected with White-Nose Syndrome
Undergoing Rapid Natural Selection?

December 2016

Princeton HTSeq User group, Princeton, NJ
Are Bat Populations Infected with White-Nose Syndrome
Undergoing Rapid Natural Selection?

Contributed Talks

August 2017

Ecological Society of America, Portland, OR
Are Bat Populations Infected with White-Nose Syndrome
Undergoing Rapid Natural Selection?

January 2017

New York Area Population Genomics Workshop, NYC, NY
Are Bat Populations Infected with White-Nose Syndrome
Undergoing Rapid Natural Selection?

January 2017

Northeast Bat Working Group, Amherst, MA
Are Bat Populations Infected with White-Nose Syndrome
Undergoing Rapid Natural Selection?

March 2016

Benthic Ecology Meeting, Portland, ME
Who, Where, When? Using Time Series Data to Understand the
Roles of Bacteria in Diseased and Healthy *Acropora cervicornis*

Posters

Feb. 2016

Ocean Sciences Meeting, New Orleans, LA
Temporal Sampling of White Band Disease Infected Corals
Reveals Complex and Dynamic Bacterial Communities

July 2015

Applied and Environmental Microbiology Gordon Research
Conference, Mount Holyoke, MA
Understanding the Time-Course of White Band Disease Infection in
the Endangered Staghorn Coral Using 16S Sequencing

May 2015

American Society of Microbiology Meeting, New Orleans, LA
Understanding the Time-Course of White Band Disease Infection in
the Endangered Staghorn Coral Using 16S Sequencing

May 2014

American Society of Microbiology General Meeting, Boston, MA
White Band Disease Bacterial Communities in the Threatened
Staghorn Coral

May 2013 American Society of Microbiology General Meeting, Denver, CO
Next Generation 16s Profiles of White Band Disease in the
Threatened Coral, *Acropora cervicornis*

July 2010 Joint Meeting of Ichthyologists and Herpetologists, Providence, RI
Methylation and Pigmentation in the Three-Spine Stickleback,
Gasterosteus aculeatus

TEACHING EXPERIENCE

Rutgers University

Feb.-Mar. 2017 Taught three classes for Malin Pinsky's Molecular Ecology class

Northeastern University

Sept.-Dec. 2015 Teaching Assistant, Genetics Lab

Sept.-Dec. 2014 *Solo-taught lab*

Sept.-Dec. 2013

Sept.-Dec. 2012

Jan.-Mar. 2015 Teaching Assistant, Biology of Corals

Jan.-Mar. 2013 Three Seas Program, Bocas Del Toro, Panama

Jan.-Mar. 2012 *Designed and taught lab*

Jan.-Apr. 2014 Teaching Assistant, Bioinformatics seminar
Designed and taught course

Sept.-Dec. 2011 Teaching Assistant, Principles of Biology I

OUTREACH / MENTORSHIP / SERVICE

Nov. 2016-Present Member NSF INCLUDES planning team, Rutgers University
*I am representing Rutgers on an application for an NSF INCLUDES
grant to develop a research-intensive summer program for
undergraduates from underserved and underrepresented groups.*

September 2016-Present Member, Rutgers wildlife extension team
*We build and distribute bat houses to local community members
and conduct outreach events focused on the importance of bats to
our ecosystems at local schools.*

January 2017 Paper reviewer for JSBS

January 2017 Co-organizer of the Wildlife Society CV workshop for
undergraduates

Aug. 2016 Experiment.com grants officer, coral reef challenge grant

Apr. 2016 Career panel for Juniors and Seniors

(The Baldwin School, Bryn Mawr, PA)

- Nov. 2015 Three Seas graduate student panel
- Oct. 2015 NU Marine Science Center open house
Oct. 2013 *Designed and implemented an activity to educate families about the
Oct. 2012 impacts of plastic waste on marine ecosystems by creating a coral
reef out of beach waste*
- Jan. 2015 Biology of corals student blog: <http://3seascorals.tumblr.com/>
- 2014-Present Experiment.com project: <https://experiment.com/projects/what-is-killing-caribbean-corals-investigating-a-devastating-coral-disease>
- 2014 Hadley Elementary School Science Night
*Recreated plastic waste activity focusing on the local rocky
intertidal ecosystem*
- 2013- 2016 Presentation on coral disease to Swampscott High School students
- 2012 Cambridge Science Festival
- 2008-2010 Wesleyan University after school science club
Met weekly with local elementary school children
- Mentoring*
- Jessica Ray (*Current Undergraduate, Rutgers University*)
Felicia Aronson (*Northeastern University*)
Kara Wiggan (*B.S. 2014, Northeastern University*)
Stephen Heck (*M.S. 2014, Northeastern University, current PhD
student SUNY Stonybrook*)
Jennifer Davidson (*M.S. 2014, Northeastern University, current lab
tech at HIMB*)
- Peer review* Scientific Reports, Global Change Biology, Ecosphere

CERTIFICATIONS / MEMBERSHIPS

AAUS certified scientific diver
American Society for Microbiology
Association for the Sciences of Limnology and Oceanography

SKILLS

Fluent in spoken and written French
Basic communication skills in Spanish
Proficient in: R, Python, unix shell, SQL, jupyter
Familiar with EC2 and other amazon web services