

# Sarah B. Carey

## *Curriculum vitae*

Department of Biology  
220 Carr Hall  
University of Florida  
Gainesville, FL 32611

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## Education

Expected 2020 **University of Florida, Department of Biology**

Ph.D., Botany

Advisor: Stuart McDaniel

Dissertation topic: Sex chromosome evolution and comparative genomics in bryophytes

2014 **University of Florida, Department of Biology**

B.S., Biology, *Summa cum laude*

2012 **Saint Johns River State College**

A.A., *Summa cum laude*

## Professional Experience

2016-present **Research Assistant, University of Florida**

Genealogy of Flagellate Plants Project

Advisors: J. Gordon Burleigh, Emily Sessa, Stuart McDaniel, and E. Christine Davis

2014-present **Teaching Assistant, University of Florida**

Introductory to Botany, Plant Diversity, Principles of Biology II Lab

2011-2012 **Chemistry Lab Assistant, Saint Johns River State College**

Advisor: Nell Freeman

## Publications

Lewis, L.R., E.M. Biersma, **S.B. Carey**, K. Holsinger, S.F. McDaniel, R. Rozzi, B. Goffinet. Resolving the northern hemisphere source region for the long-distance dispersal event that gave rise to the South American endemic dung moss *Tetraplodon fuegianus*. *American Journal of Botany* 104 (11), 1651-1659. 2017

**Carey, S.B.**, A.C. Payton, and S.F. McDaniel. A method for eliminating bacterial contamination from in vitro moss cultures. *Applications in Plant Sciences* 3(1):1400086. 2015  
doi:/10.3732/apps.1400086

## Non-refereed Publications

F.E. Putz, E.C. Davis, and **S.B. Carey**. University of Florida Introductory Botany Laboratory Manual. 2016.

G. Ionta, M. Blanco, B. Knorr, S. Allen, **S. Carey**, and S. McDaniel. University of Florida Plant Diversity Lab Manual. 2016.

## Grants Awarded

- 2018 Botanical Society of America Genetics Section Student Award (\$1000)
- 2016 Sigma Xi Grant-In-Aid of Research (\$1000)
- 2015 Society for the Study of Evolution Rosemary Grant Award (\$2500)
- 2015 microMORPH Cross-Disciplinary Training Grant (\$3254)
- 2015 Mildred Mason Griffith Botany Grant, UF (\$1000)

## Travel Funding

- 2018 Wellcome Genome Campus 30 Year Anniversary Award (\$300)
- 2017 International Botanical Congress Outstanding Student Award (\$300)
- 2017 Botanical Society of America IBC Travel Award (\$2400)
- 2016 UF Graduate Student Council Travel Grant (\$350)
- 2016 UF College of Liberal Arts and Sciences Travel Award (\$200)

## Honors and Awards

- 2018 Best talk iMoss Meeting, St. Petersburg, FL
- 2016 NSF GRFP Honorable Mention
- 2015 Runner-up best graduate student talk, South Eastern Population Ecology and Evolutionary Genetics Meeting, Eaton, GA
- 2014 Runner-up best talk, UF URAP, Gainesville, FL
- 2012 Saint Johns River State College Hall of Fame
- 2012 Dr. Gary B. Lott Memorial Scholarship (\$750)

## Meeting Oral Presentations

- 2018 **"Genome analysis in a polymorphic moss with large, ancient sex chromosomes"**. Genome Informatics. Hinxton, UK
- 2018 **"Ancient sex chromosomes in plants"**. Botany Meeting. Rochester, MN
- 2018 **"Ancient sex chromosomes in bryophytes"**. iMoss Meeting, St. Petersburg, FL
- 2017 **"An ancient UV sex chromosome system in mosses"**. International Botanical Congress. Shenzhen, China
- 2017 **"An ancient UV sex chromosome system in mosses"**. Evolution Meeting. Portland, OR
- 2016 **"When is it too early to talk about sex? Sex-biased gene expression in 6 day old *Ceratodon purpureus*"**. South Eastern Population Ecology and Evolutionary Genetics Meeting. Madison, FL
- 2016 **"Using a SNP-corrected genome-guided approach to infer transcriptional dimorphism in *Ceratodon purpureus*"**. Evolution Meeting. Austin, TX
- 2016 **"Transcriptional dimorphism in juvenile tissue of the moss *Ceratodon purpureus*"**. UF Plant Molecular and Cellular Biology Meeting. Daytona, FL
- 2015 **"The genetic basis of spore production in the moss *Ceratodon purpureus*"**. South Eastern Population Ecology and Evolutionary Genetics Meeting. Eaton, GA
- 2014 **"A method for eliminating bacterial contamination from in vitro moss cultures"**. UF URAP. Gainesville, FL

## Meeting Poster Presentations

- 2017 **"An ancient UV sex chromosome system in mosses"**. Evolution Meeting. Portland, OR
- 2014 **"A method for eliminating bacterial contamination from in vitro moss cultures"** UF

Undergraduate Research Symposium Poster Session  
2013    **"A method for eliminating bacterial contamination from in vitro moss cultures** UF  
Chemistry Department Alumni Weekend Poster Session

## **Mentoring**

2018-present    Tikahari Khanal, undergraduate REU recipient  
2016-present    Emily Lockwood, undergraduate UF University Scholars Program recipient  
2016-present    Wes Burcher, undergraduate  
Summer 2018    Joan Glenny-Pescov, UF Summer Undergraduate Research Fellow  
Summer 2018    Jordon McBreen, undergraduate (now PhD student, UF)  
2017-2018    Kaylee Hoffman, undergraduate  
2017-2018    Kristen Gaines, undergraduate  
2015-2016    Marna List, undergraduate (UF University Scholars Program recipient; now  
UF Medical Honors Student)  
2014-2016    Roth Conrad, undergraduate (UF University Scholars Program recipient; now  
PhD student, Georgia Tech)

## **Academic Service and Outreach**

2015-2018    UF Biology Department URAP Committee  
2015-2017    Organizer of "Art of Biology" Art Exhibition, UF Dept. of Biology  
2015-2016    UF Biology Department Awards Committee  
2014-2016    Graduate Student Advisor, GROW Botany  
2013-2014    Vice-President & Founding Member, GROW Botany  
(Recipients of Champions for Change Award, Campus Organization  
of the Year)  
2013-2014    Vice-President, Botanical Society of America UF Student Chapter

## **Professional Affiliations**

2015-present    Society for the Study of Evolution  
2013-present    Botanical Society of America

## **Research Skills**

Extensive knowledge in wet lab and computational analysis in transcriptomics and genomics.  
Proficient in PERL, bash, and R.

## **Additional Roles**

Manage the lab's research computing account. Maintain the lab's genome/transcriptome lines.