TARA FURSTENAU

Biodesign Institute Center for Evolutionary Medicine and Informatics Arizona State University Tempe, Arizona

PERSONAL INFORMATION

email tfursten@asu.edu

website http://tfursten.github.io

phone (M) +1 (480) 845 2739

EDUCATION

2010- Arizona State University, Tempe

Ph.D. Expected 2015 · Molecular and Cellular Biology · School of Life Sciences

Thesis: Evolution of Self-Incompatibility in Plant Populations

Advisor: Prof. Reed Cartwright

2008-2010 Arizona State University, Tempe

B.S Bioinformatics and Genomics · School of Life Sciences

Magnum Cum Laude · Dean's List

RESEARCH EXPERIENCE

2013- Graduate Research

Prof. Reed Cartwright

Developed simulations to investigate the evolution of self-incompatibility

systems in plant populations

2010-2013 Graduate Research Assistant

Prof. Roberto Gaxiola

Investigated the role of the proton pumping pyrophosphatase, AVP1, in sucrose

transport in Arabidopsis thaliana

2009-2010 Undergraduate Student Researcher

Prof. Lei Lei

Neural development research using conditional knockout mice.

PRESENTATIONS

January 2012 Workshop · Arizona State University

Title: The Univector Plasmid-Fusion System: A Cre-loxP recombination-based cloning

method

March 2012 Molecular and Cellular Biology Colloquium · Arizona State University

Title: Is the H^+ -pyrophosphatase involved in the regulation of sucrose transport in

plants?"

October 2013 Molecular and Cellular Biology Colloquium · Arizona State University

Title: Evolution of Self-Incompatibility: Investigating the role of self-incompatibility

systems in the prevention of biparental inbreeding

October 2013 Workshop · Arizona State University

Title: A LATEXBeamer Tutorial

POSTERS AND ABSTRACTS

May 2012 Childrens Nutritional Research Center · Houston, TX

Meeting Abstract: H⁺-PPase AVP1 is necessary for phloem development in

Arabidopsis

July 2012 Annual Meeting of the American Society of Plant Biologists · Austin, TX

Poster Title: H⁺-PPase AVP1 is necessary for phloem development in Arabidopsis

thaliana

August 2012 Molecular and Cellular Biology Graduate Student Retreat · Tempe, AZ

Poster

TEACHING EXPERIENCE

Fall 2010 MBB 343 · Genetic Engineering and Society · Laboratory

Teaching Associate · Arizona State University

Spring 2011 BIO 181 · General Biology I · Laboratory

Teaching Associate · Arizona State University

Summer 2011 BIO 182 · General Biology II · Laboratory

Teaching Associate · Arizona State University

Fall 2011 BIO 340 · General Genetics · Recitation

Teaching Associate · Arizona State University

Spring 2012 BIO 340 · General Genetics · Recitation

Teaching Associate · Arizona State University

Fall 2012 BIO 340 · General Genetics · Recitation

Teaching Associate · Arizona State University

Spring 2013 BIO 340 · General Genetics · Recitation

Teaching Associate · Arizona State University

Fall 2013 PLB 108 · Concepts in Plant Biology · iCourse

Instructor · Arizona State University

*Developed course materials and produced instructional videos

Spring 2014 MBB 355 · Introduction to Computational Molecular Biology · Lecture

Innovative Teaching Associate · Arizona State University

SERVICE

Phosphorus Sustainability Research Coordination Network · Core Participant

Ask a Biologist · Correspondent

Green Labs Initiative · Coordinator/Spokesperson

Obama Scholars · Mentor

PROFESSIONAL ORGANIZATIONS

American Association for the Advancement of Science

American Society of Plant Biologists

Society for the Study of Evolution

Genetics Society of America

Graduate Integrative Society for Environment Interdisciplinary Research

Central Arizona Chapter of the Association for Women in Science

PROFESSIONAL DEVELOPMENT

Next Generation Population Genomics for Nonmodel Taxa Workshop American Genetics Association

COMPUTER SKILLS

Basic JAVASCRIPT, R, C++, Perl

Intermediate PYTHON, HTML, LATEX, Linux

January 7, 2014