

Curriculum Vitae

RYAN M. SHEICK

EDUCATION

Master of Science, Professional Science Master's - Cell and Molecular Biology, Biotechnology (2015)
Grand Valley State University, Allendale, MI

Bachelor of Science - Biology, Honors Program (2008)
University of Michigan, Flint, MI

EXPERIENCE

Research Intern, 2015-
Washington State University – Tree Fruit Research and Extension Center
PI: Dr. Stefano Musacchi

Laboratory Technician, 2014-2015
Robert B. Annis Water Resources Institute
PI: Dr. Ryan Thum
Characterizing microbial communities associated with 2,4-D herbicide resistance in invasive watermilfoil;
AquaGen aquatic plant identification

- Experimental design
- Maintained mesocosm for milfoil experiments
- Prepped and processed plant samples
- DNA extractions, PCR, restriction digest, DNA sequencing (chain termination), sequence analysis
- Record keeping

Laboratory Assistant, 2007-2008
University of Michigan-Flint, Biology Department
PI: Dr. Ann Sturtevant
Molecular characterization of invasive, native, and hybrid species of watermilfoil in Michigan Lakes

- Harvested buds and flowering parts of collected watermilfoil samples
- Performed phenol-chloroform DNA extractions, polymerase chain reaction (PCR), plasmid mini-prep, gel electrophoresis and DNA sequence analysis
- Record keeping

Laboratory Intern, Summer 2007

University of Arizona, Plant Sciences Department

PI: Dr. Scott Kroken

Investigating endophytic fungi in chili peppers (*Capsicum annuum*).

- Extracted endophytic fungi from chili pepper plants
- Performed fungal DNA extractions
- Phylogeny analysis
- Aided in fungal inoculation of chili pepper plants

ASSISTANTSHIPS

Graduate Assistant, 2015

Grand Valley State University, Cell and Molecular Biology Department

Supervisor: Dr. Sheila Blackman and Dr. Osman Patel

Laboratory preparation and class aide for the Cell and Tissue Culture course

- Prepared media, buffers, reagents, etc. and autoclaved utensils for student use
- Assisted students with techniques in Cell and Tissue Culture

Graduate Assistant, 2014

Grand Valley State University, Cell and Molecular Biology Department

Supervisor: Dr. Margaret Dietrich

Maintenance of soybean seedlings and aiding in lab activities for the Nucleic Acids course

- Germinated and tended to soybean seedlings in a growth chamber setting
- Daily observation of seedling health and fungal contamination
- Aided lab activities, including handling liquid nitrogen and cleaning mortars and pestles

SKILLS

- Nucleic acids
- PCR
- cDNA synthesis/RT-PCR
- Enzymatic reactions
- Gel electrophoresis
- Molecular cloning and plasmid miniprep
- Chain termination sequencing and analysis
- Cell and tissue culture
- Microscopy

PUBLICATIONS

Sturtevant, A.P., N. Hatley, G. D. Pullman, **R. Sheick**, D. Shorez, A. Bordine... A. Mortimer. (2009). Molecular characterization of Eurasian watermilfoil, northern milfoil, and the invasive interspecific hybrid in Michigan lakes. *Journal of Aquatic Plant Management*. 47. 128-135.

PUBLISHED ABSTRACTS

Sheick, R. (2008). Investigating the potential agricultural use of naturally occurring endophytic fungi in *Capsicum annuum*. Abstract. Michigan Academy of Science, Arts, and Letters Annual Conference. Western Michigan University, Kalamazoo, MI. March, 2008.

AWARDS

Graduate Dean's Citation for Academic Excellence for Outstanding Final Project (2015)
Excellence in a Discipline Award – Cell and Molecular Biology, M.S. (2015)
CMB Outstanding Graduate Student Award for Academic and Scholarly Excellence (2015)
Outstanding CMB Graduate Student (2014, 2015)
Freeman Honors Scholarship (2006)
Michigan Competitive Scholarship (2006)
McKinnon Scholarship Award (2005)
Honors Program Award (2005)
Honors Program Award (2005)
Branstrom Award (2005)