

Benjamin B. Minkoff

Michael Sussman Laboratory
425 Henry Mall
Madison, WI 53706

643 E. Johnson St.
Madison, WI 53703
240-421-9836

EDUCATION

University of Wisconsin-Madison, Madison, Wisconsin 2010-Present

Ph.D Candidate, Area of Specialization: Mass spectrometry, Proteomics

University of Pittsburgh, Pittsburgh, Pennsylvania, 2006-2010

B.S. Molecular Biology, Biochemistry focus
Minor degree in Chemistry

AWARDS and HONORS

Morgridge Fellowship, 2011-present

University of Pittsburgh Honors College Undergraduate Research Fellowship, 2009

University of Pittsburgh Academic Scholarship, 2006-2010

RESEARCH EXPERIENCE

Doctoral Research: Department of Biochemistry, University of Wisconsin-Madison, 2010-present, (research adviser: Dr. Michael R. Sussman).

- Untargeted mass spectrometry analyses to probe for abscisic acid-induced phosphoproteomic changes in *Arabidopsis thaliana*.
- Optimization and implementation of heavy offline fractionation of protein/peptide samples to reduce complexity prior to spectral analysis.
- Assaying utility of complementary fragmentation techniques during untargeted, Orbitrap mass spectral analysis.

Undergraduate Research: Department of Biological Sciences, University of Pittsburgh, 2007-2010, (research adviser: Dr. Lewis A. Jacobson).

- Construction of an RNAi *E. coli* strain for use in RNAi-based expression silencing in *C. elegans*.
- Cross-bred *C. elegans* to produce knockout, *LacZ*-expressing mutants.
- Assayed *C. elegans* knockout mutants for protein degradation using *LacZ* staining method.
-

Internship: J. Craig Venter Institute, Rockville, Maryland, Summer 2008.

- Performed high-throughput DNA sequencing on samples including those associated with “metagenomics 2004-2006” project.

TEACHING EXPERIENCE

Teaching Assistant: Introduction to Biochemistry, University of Wisconsin-Madison, 2011-present.

- Sole graduate student responsible Peer Mentor Tutor (PMT) program, designed for “at-risk” students, to provide guidance and discussion sections supplementary to graduate-led discussion sections.

Undergraduate Assistant: Gene Team, Summer 2009.

- One of three undergraduates responsible for assisting with program. Prepared laboratory reagents/*C. elegans* strains/materials for a group of high school-aged students/teachers from around the area as part of multi-week intense genetics instruction and hands-on laboratory work.

PUBLICATIONS and PRESENTATIONS

Minkoff, B.M., Burch, H.B., and Sussman, M.R. A Pipeline for ¹⁵N Metabolic Labeling and Phosphoproteome Analysis in *Arabidopsis thaliana*, *Arabidopsis* Protocols, Methods in Molecular Biology (in press)