

Jason S. Silverman
Curriculum Vitae

University of Wisconsin-Madison
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Education

Ph.D. (in progress, currently dissertator), Microbiology Doctoral Training Program,
University of Wisconsin-Madison

B.S. in Biochemistry and Molecular Biology, Dept. Honors, Ursinus College.
(Graduated May 2007)

Research Experience

Graduate Student with Jay Bangs at the University of Wisconsin-Madison (2007-present)

- Characterization of *Trypanosoma brucei* endosomal protein trafficking machinery, including Rab small GTPases
- Determination of the *Trypanosoma brucei* endosomal compartments through which different classes of proteins destined for the lysosome or cell surface sort

Undergraduate Summer Research with Miriam Braunstein at the University of North Carolina-Chapel Hill (2006)

- Sought to identify novel *M. tuberculosis* secreted virulence factors
- Identified multiple proteins exported by the twin-arginine translocation pathway in *M. tuberculosis* using genetic selections and genomic expression libraries

Undergraduate Focused, Summer, and Honors Research with Eric Williamsen at Ursinus College (2004-2007)

- Investigated the molecular mechanism of general anesthesia
- Exposed weakly-electric fish and goldfish to anesthetic alcohols of different carbon-chain lengths, extensively used gas chromatography-mass spectrometry and blood sampling techniques

Publications

- Silverman JS** and JD Bangs. Role of the multivesicular body in *Trypanosoma brucei*. (In preparation).
- Silverman JS** and JD Bangs. (2012) Form and function in the trypanosomal secretory pathway. *Current Opinions in Microbiology*. (In the press).
- Silverman JS**, Schwartz KJ, Hajduk SL, and JD Bangs. (2011) Late endosomal Rab7 regulates lysosomal trafficking of endocytic but not biosynthetic cargo in *Trypanosoma brucei*. *Molecular Microbiology*. 82(3): 664-78.
- Tazeh NN, **Silverman JS**, Schwartz KJ, Sevova ES, Sutterwala S, and JD Bangs. (2009) The role of AP-1 in developmentally regulated lysosomal trafficking in *Trypanosoma brucei*. *Eukaryotic Cell*. 8(9): 1352-61.
- McDonough JA, McCann JR, Tekippe EM, **Silverman JS**, Rigel NW, and M Braunstein. (2008) Identification of functional Tat signal sequences in *Mycobacterium tuberculosis* proteins. *Journal of Bacteriology*. 190(19):6428-38.

Presentations

- Silverman JS**, Hajduk SL, and JD Bangs. "Trypanosoma brucei Rab7 regulates lysosomal delivery of endocytosed but not newly synthesized proteins." Oral presentation at the Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2011.
- Silverman JS**, Hajduk SL, and JD Bangs. "Trypanosoma brucei Rab7 regulates lysosomal delivery of endocytosed but not newly synthesized proteins." Oral presentation at the Burroughs Wellcome Fund parasitology training grant meeting, Athens, Georgia, June 2011.
- Silverman JS** and JD Bangs. "Trypanosoma brucei Rab7 regulates lysosomal delivery of endocytosed but not newly synthesized proteins." Oral presentation at the Kinetoplastid Molecular Cell Biology Meeting, Woods Hole, Massachusetts, April 2011.
- Bissell H, Brossard D, Khatib H, **Silverman JS**, and MA Wattiaux. "Effective teaching in a diverse college classroom." Panel presentation at the 2011 Teaching and Learning Symposium, University of Wisconsin-Madison.
- Silverman JS** and JD Bangs. "Trypanosoma brucei Rab7 regulates lysosomal delivery of endocytosed but not newly synthesized proteins." Oral presentation for the Cellular and Molecular Parasitology seminar series, University of Wisconsin-Madison, March 2011.
- Silverman JS** and JD Bangs. "Trypanosoma brucei Rab7 regulates lysosomal delivery of endocytosed but not newly synthesized proteins." Oral presentation for the Microbiology Doctoral Training Program seminar series, University of Wisconsin-Madison, March 2011.

Silverman JS and JD Bangs. “AP-1 and developmentally regulated protein trafficking in *Trypanosoma brucei*.” Oral presentation for the Microbiology Doctoral Training Program seminar series, University of Wisconsin-Madison, November 2009.

Tazeh NN, **Silverman JS**, and JD Bangs. “The role of AP-1 in post-Golgi trafficking in African trypanosomes.” Poster presentation at the Medical Microbiology and Immunology departmental retreat, University of Wisconsin-Madison, June 2008.

Silverman JS and EJ Williamsen. “GC-MS measurements of alkyl alcohol uptake in weakly electric fish and goldfish.” Poster presentation at the 2007 American Association for the Advancement of Science national meeting, San Francisco, California.

Silverman JS and EJ Williamsen. “GC-MS measurements of alkyl alcohol uptake in weakly electric fish and goldfish.” Oral presentation at the 2006 Eastern Analytical Symposium, Somerset, New Jersey.

Silverman JS and EJ Williamsen. “GC-MS measurements of alkyl alcohol uptake in weakly electric fish and goldfish.” Poster presentation at the ninth annual Undergraduate Research Symposium in the Chemical and Biology Sciences, University of Maryland-Baltimore County, October 2006. Awarded 1st place prize, Biological Sciences Division.

Silverman JS and EJ Williamsen. “GC-MS measurements of alkyl alcohol uptake in weakly electric fish and goldfish.” Oral presentation at the 70th Intercollegiate Student Chemistry Conference, Ursinus College, April 2006. Awarded 1st place prize, Biochemistry Division.

Awards and Funding

NIH Cellular and Molecular Parasitology training grant, University of Wisconsin-Madison (2010-present)

Phi Beta Kappa (2007)

Beta Beta Beta, National Biology Honor Society (2007)

Teaching and Learning

Mentored undergraduates and rotating graduate students, Jay Bangs lab, University of Wisconsin-Madison (2007-present)

Involved with the Delta program (teaching and learning community) at University of Wisconsin-Madison. Took the courses “The College Classroom,” “Effective Teaching in a Diverse College Classroom,” and “Outreach Education.” (2010-2011)

Teaching Assistant, Parasitology undergraduate laboratory course, Medical Microbiology and Immunology, University of Wisconsin-Madison (2009)

Teaching Assistant, Diseases of Human Beings (nursing and physician assistant students), Medical Microbiology and Immunology, University of Wisconsin-Madison (2008)

Teaching Assistant, General and Organic Chemistry laboratory courses, Ursinus College
(2004-2007)

Other

Attended Biology of Parasitism summer course, Marine Biological Laboratory, Woods
Hole, MA (2011)

Skilled in computer programming (C++, Perl, PHP, Java)