
BIOGRAPHICAL SKETCH

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NAME Michael Stephen Wollenberg		POSITION TITLE Assistant Professor	
eRA COMMONS USER NAME (credential e.g. agency login) WOLLENBERG_MICHAEL			
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education such as nursing include postdoctoral training and residency training if applicable.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Swarthmore College	B.A.	05/02	Biochemistry
University of Wisconsin Madison	Ph.D.	05/11	Microbiology
Forsyth Institute		11/13	Microbiology

A. Personal Statement

The goal of my current research is to better understand the molecular biology and ecology of the bioluminescent terrestrial bacteria *Photorhabdus luminescens*.

My unique background – studying microbial ecology and evolution in a symbiotic system for my graduate thesis – has prepared me to succeed with this proposed work. During this graduate work, I demonstrated both a willingness to lead in my own thesis project (which has so far resulted in three peer-reviewed first-author publications) and work with others on a variety of other science (resulting in four peer-reviewed middle-author publications). This breadth of interest allowed me to enrich my own science by collaborating not only with researchers at the University of Wisconsin, but also spending time hosted by both Dr. Paul Rainey at the Institute of Advanced Study in New Zealand as well as Dr. Ruth Gates at the Hawaii Institute of Marine Biology. At the Forsyth Institute, I continued this record of broad-minded, independent, and collaborative research in the laboratory of Dr. Katherine Lemon. My work there has produced one manuscript that is currently under review. My work in the Lemon Lab yielded a better understanding of the opportunistic pathogen *S. aureus* and its ecological associates with other commensal human microbiota.

B. Positions and Honors.

Positions and Employment:

2002 - 2004 Research Technician, Laboratory of Cellular Biophysics, Rockefeller University, NY.
2004 - 2011 Graduate Fellow, Dept. of Medical Microbiology, University of Wisconsin, Madison WI.
2011 - 2013 Postdoctoral Fellow, Dept. of Microbiology, The Forsyth Institute, Cambridge MA.

Other Experiences and Professional Memberships:

2004 - Member, American Society of Microbiology.
2006 - 2011 Member, International Society for Microbial Ecology.
2007 Participant, Hopkins Microbial Diversity Summer Course, Stanford University.
2008 Visiting Fellow, Institute for Advanced Study, Massey University, New Zealand.
2009 - 2010 Member, International Symbiosis Society.
2010 Visiting Scientist, Hawaii Institute of Marine Biology, University of Hawaii, Oahu HI.

Teaching Experience:

2005 Teaching Assistant, Bacterial Physiology, University of Wisconsin Madison WI.
2006 Teaching Assistant, Parasitology Laboratory, University of Wisconsin Madison WI.
2007 Teaching Assistant, Bacterial Physiology, University of Wisconsin Madison WI.
2010 Team Teacher, The Microbial World, University of Wisconsin Madison WI.

Honors:

- 2004 - 2005; Molecular Biosciences, Traineeship, University of Wisconsin – NIH.
2006 - 2010
2005 - 2008 Graduate Research Fellowship, NSF.
2008 Travel Award to ISME 2008, International Society for Microbial Ecology.
2008 East Asia and Pacific Summer Institute Fellowship, NSF.
2009 - 2010 HHMI Teaching Fellow, University of Washington.
2010 Vilas Travel Grant, University of Wisconsin.
2010 - 2011 Microbes in Health and Disease Traineeship, University of Wisconsin – NIH.

C. Peer-reviewed Publications (in chronological order) (Selected from 8 total).

1. **Wollenberg MS**, Simon SM. (2004) Signal sequence cleavage of peptidyl-tRNA prior to release from the ribosome and translocon. *J. Biol. Chem.* **279**: 24919-24922.
2. **Wollenberg MS**, Ruby EG. (2009) Population structure of *Vibrio fischeri* within the light organs of *Euprymna scolopes* from two Oahu populations. *Appl. Environ. Microbiol.* **75**: 193-202. PMID: PMC2612210
3. Mandel MJ, **Wollenberg MS**, Stabb EV, Visick KL, Ruby EG. (2009) A single regulatory gene is sufficient to alter symbiosis host range. *Nature* **458**: 215-218. PMID: PMC2713604
4. Pollack-Berti AG, **Wollenberg MS**, Ruby EG. (2010) Natural transformation of *Vibrio fischeri* requires *tfoX* and *tfoY*. *Environ. Microbiol.* **12**: 2302-2311. PMID: PMC3034104
5. Miyashiro TM, **Wollenberg MS**, Cao X, Oehlert D, Ruby EG. (2010) A single *qrr* gene is necessary and sufficient for LuxO-mediated regulation in *Vibrio fischeri*. *Mol. Microbiol.* **77**:1556-1567. PMID: PMC2947852
6. Bose JL, **Wollenberg MS**, Colton DM, Mandel MJ, Septer AN, Dunn AK, Stabb EV. (2011) Contribution of rapid evolution of the *luxR-luxI* intergenic region to the diverse bioluminescence outputs of *Vibrio fischeri* strains isolated from different environments. *Appl. Environ. Microbiol.* **77**: 2445-2457. PMID: PMC3067414
7. **Wollenberg MS**, Ruby EG. (2012) Phylogeny and fitness of *Vibrio fischeri* from the light organs of *Euprymna scolopes* in two Oahu Hawaii populations. *ISME J.* **6**:352-362. PMID: PMC3260510 [Available on 2013/02/01]
8. **Wollenberg MS**, Preheim SP, Polz MP, Ruby EG. (2012) Polyphyly of non-bioluminescent *Vibrio fischeri* sharing a *lux*-locus deletion. *Environ. Microbiol.* **14**: 655-668.

D. Research Support.

Completed Research Support

- 5 T32-DE007327-12 Van Dyke (PI) 07/2012 – 11/2013
Forsyth Postdoctoral Training in Oral Health Grant
Postdoctoral Research Award: Award for three years of graduate research support to pursue postdoctoral training at The Forsyth Institute.
Role: Postdoctoral Fellow
- 2T32 AI055397 Klein (PI) 08/10 - 05/11
Microbes in Health and Disease Training Grant
Graduate Research Fellow Award: Award for three years of graduate research support to pursue Ph.D. training at the University of Wisconsin, Madison - ten months of award used because of graduation.
- Teaching Fellow, HHMI Miller (PI) 08/09 - 05/10
This award allowed for my participation in a semester-long course on teaching in the STEM (Science, Technology, Engineering, and Math) disciplines with other HHMI Teaching Fellows at UW. I utilized knowledge gained from this course to team teach an introductory microbiology course and test a hypothesis

