Michael S. Wollenberg – NSF Biographical Sketch July 2017

A) PROFESSIONAL PREPARATION

INSTITUTION	LOCATION	MAJOR or FOCUS	DEGREE YEARS
Swarthmore College	Swarthmore, PA	Biochemistry	B.A. 1997-2002
The Rockefeller University	New York City, NY	Research Technician	2002-2004
University of Wisconsin	Madison, WI	Microbiology	Ph.D. 2004-2011
The Forsyth Institute/ Harvard School of Dental Medicine	Cambridge, MA	Microbiology	Post-Doctoral Fellow 2011-2013

B) PROFESSIONAL APPOINTMENTS

Assistant Professor of Biology	Kalamazoo College	Kalamazoo, MI	2014-Present

C) PUBLICATIONS

Relevant "Products"

[2016] Wollenberg, A.C., Jagdish, T., Slough, G., Hoinville, M., and **M.S. Wollenberg**. Death Becomes Them: Bacterial community dynamics and stilbene antibiotic production in *Galleria mellonella* cadavers killed by *Heterorhabditis*/*Photorhabdus*. *Appl. Environ. Microbiol*. 82(19): 5824-5837. PMCID: PMC5038048

Additional "Products"

[2017] Lentz, T.B., Ott, L.E., Robertson, S.D., Windsor, S.C., Kelly, J.B., **Wollenberg**, **M.S.**, Dunn, R.R., and C.C. Goller. Unique Down to Our Microbes: Assessment of an inquiry-based metagenomics activity. *J. Microbiol*. *Biol. Educ.* 18(2): doi:10.1128/jmbe.v18i2.1284.

[2014] **Wollenberg M.S.**, Claesen J, Escapa I.F., Aldridge K.L., Fischbach M.A., and K.P. Lemon. *Propionibacterium*-produced coproporphyrin III induces *Staphylococcus aureus* aggregation and biofilm formation. *MBio*. Jul 22; 5(4): e01286-14. PMCID 4120196

[2012] **Wollenberg M.S.** and E.G. Ruby. Phylogeny and fitness of *Vibrio fischeri* from the light organs of *Euprymna scolopes* in two Oahu Hawaii populations. *ISME J*. **6**:352-362. PMCID: PMC3260510

[2009] Mandel MJ, **Wollenberg MS,** Stabb E.V., Visick K.L., Ruby E.G. A single regulatory gene is sufficient to alter symbiosis host range. *Nature* **458**: 215-218. PMCID: PMC2713604

[2004] **Wollenberg, M.S.** and S. M. Simon. Signal sequence cleavage of peptidyl-tRNA prior to release from the ribosome and translocon. *J. Biol. Chem.* 279: 24919-24922. PMID: 15082722

D) SYNERGISTIC ACTIVITIES

- **Mentoring Undergraduate Students Leading to Peer-Reviewed Publications:** During the past three years at Kalamazoo College (2014-2016), I mentored two undergraduate students (T. Jagdish and M. Hoinville) who are co-authors on a recent publication in *Applied and Environmental Microbiology* (see above – Wollenberg et al. 2016 *AEM*).

  During my post-doctoral training (2011-2013), I spent two summers mentoring an undergraduate student (K. Aldrich) whose work contributed to a publication (see above – Wollenberg et al. 2014 *mBio*).

- **Mentoring International Undergraduate Students:** Since joining the faculty at Kalamazoo College in January of 2014, I have mentored two international undergraduate students in my lab, giving them their first exposure to laboratory science in a research laboratory environment.

- **Developing Educational Materials for the Teaching of Undergraduate Biology Courses:** In the early summer of 2015, I completed a week-long, regional HHMI workshop for undergraduate educators on strategies for integrating active learning in the classroom and was named a "HHMI Teaching Fellow" as a result of these activities. During this workshop, I was part of a group that created a unit on addressing student misconceptions with how the concepts of Mendelian Genetics were related to chromosome arrangement during meiosis.

  In 2010, I was awarded a Howard Hughes Medical Institute (HHMI)-supported teaching fellowship while at the University of Wisconsin. I used this fellowship to develop a two-week teaching unit on evolution and the tree of life for an introductory, non-majors microbiology class at Univ. Wisconsin.

- **Dissemination of Educational Research and Materials** In 2014, I was invited to give an oral presentation of my a microbiology teaching module I developed at Kalamazoo College for the American Society for Microbiology Conference for Undergraduate Educators in Boston, MA. In 2011, I presented a poster on my findings of long-term retention of my teaching module as part of the HHMI program at the University of Wisconsin.

- **Collaboration with Biology Education Experts and Chemists Leading to Peer-Reviewed Publications.** In 2016-2017, I worked with a group of multi-disciplinary educators at North Carolina State University to implement and assess a set of microbiology teaching materials based on a megagenomics data/visualization framework via an inquiry-based learning module – this work was recently published (see above – Lentz et al. *J. Microbiol*. *Biol. Educ*.).

  Over the last five years, I have worked extensively with two different chemistry groups at different institutions leading to two separate peer-reviewed publications (the Fischbach group leading to the 2014 *MBio* publication; Prof. G. Slough of Kalamazoo College leading to the 2016 *AEM* publication).