**Edna Chiang**

5140 Microbial Sciences, 1550 Linden Dr., Madison, WI 53706  (608) 890-3972  [echiang3@wisc.edu](mailto:chianged@umich.edu)

**EDUCATION**

**University of Wisconsin-Madison** Madison, WI

- Microbiology Ph.D. Student, Department of Bacteriology

**University of Michigan** Ann Arbor, MI

- Bachelor of Science with High Distinction *Graduation: April 30, 2015*

- Microbiology High Honors and Spanish GPA: 3.85/4.00

- Honors Thesis: Ecology of Verrucomicrobia in a Freshwater Estuary

**University of Santiago de Compostela** Santiago de Compostela, Spain

- Studied abroad for spring term, participating in a cultural immersion program

**SCIENTIFIC PUBLICATIONS**

Denef VJ, Carrick HJ, Cavaletto J, **Chiang E**, Johengen TH, Palladino D, Vanderploeg HA (2017). Lake  
 bacterial assemblage composition is sensitive to biological disturbance caused by an invasive filter  
 feeder. *mSphere* 2:e00189-17. doi: 10.1128/mSphere.00189-17  
Denef VJ, Mueller RS, **Chiang E**, Liebig JR, Vanderploeg HA (2015) Chloroflexi CL500 11 populations

That predominate deep lake hypolimnion bacterioplankton rely on nitrogen-rich DOM metabolism

and C1 compound oxidation. *Appl. Environ. Microbiol.* doi:10.1128/AEM.03014-15.

McCarthy A, **Chiang E**, Schmidt ML, Denef VJ (2015) RNA Preservation Agents and Nucleic Acid

Extraction Method Bias Perceived Bacterial Community Composition. *PLoS ONE* 10(3): e0121659.  
 doi:10.1371/journal.pone.0121659

**SCIENTIFIC PRESENTATIONS**

Poster presentation, “Ecology of freshwater Verrucomicrobia, an abundant yet understudied bacterial

phylum,” at The Beckman Symposium, Aug 8, 2015, Irvine, CA.

Poster presentation, “Ecology of Verrucomicrobia in a Freshwater Estuary,” at the American Society of

Microbiology General Meeting, Jun 2, 2015, New Orleans, LA.

Presentation, “RNA Preservation Agents and Nucleic Acid Extraction Method Bias Perceived Bacterial

Community Composition,” at the University of Michigan Microbial Ecology Working Group,

Oct 30, 2014.

**RESEARCH EXPERIENCE**

***Undergraduate researcher/Lab technician***, **Denef Lab**, University of Michigan, *Sep 2012 – Aug 2016*

- Optimized fluorescence microscopy techniques, created cultures, extracted DNA/RNA

- Participated in field sampling on Muskegon Lake and Lake Michigan

- Applied statistical and bioinformatics techniques to analyze 16S rRNA data using Mothur and R

***Undergraduate researcher*, Jay Reed**, University of Michigan *May 2012 – Jul 2012*

- Examined mite distribution on preserved lizards at the Ruthven Museum of Natural History.

***Undergraduate Research Opportunity Student***, **Beehner Lab**, University of Michigan *Sep 2011 – Apr 2011*

- Studied gelada baboons (*Theropithecus gelada*) by comparing hormonal levels with chest patch swelling

- Conducted hormone elutions and assays, and analyzed chest patch color using Photoshop

**AWARDS**

- NIH Biotechnology Training Program Traineeship *Jan 2017*

- Romance Languages and Literatures Student Achievement Award *Apr 2015*

- Phi Beta Kappa *Mar 2015*

- Beckman Scholars Award *May 2014 – Aug 2015*

- American Society of Microbiology Undergraduate Research Fellowship *May 2014 – Dec 2014*

- University of Michigan Honors Summer Fellowship  *May 2014 – Aug 2014*

- Sophomore Honors Award *Nov 2013*

- Summer Vincenti Study Abroad Scholarship *Apr 2013*

- Honors Travel Grant *Mar 2013*

- James B. Angell Scholar *Mar 2013*

**LEADERSHIP EXPERIENCE**

***Biochemistry Study Group Facilitator***, **Science Learning Center**, University of Michigan *Sep 2013 – Apr 2015*

- Created engaging activities to help students enhance their understanding of biochemistry

- Formed strong sense of community to encourage collaborative discussions between students

***Editorial Board Member***, **University of Michigan Undergraduate Research Journal** *Sep 2012 – Apr 2015*

- Assisted students in improving writing submissions for publication

- Coordinated meetings with corporate sponsors and university departments to increase journal

funding,

- Performed outreach by conducting presentations to inform undergraduates about research  
 opportunities.

***Co-President***, **Arabian Dance Ensemble**, University of Michigan *Sep 2011 – Apr 2015*

- Instructed beginner belly dance class and created choreography to teach students

- Oversaw usage of group funds, coordinated costumes purchases, and organized performances.

**VOLUNTEER EXPERIENCE**

***Spanish Translator***, **Translate-a-thon**, University of Michigan *Oct 2014*

- Translated multiple documents from English to Spanish for non-profit organizations

***Worker and Interpreter***, **Jatun Sacha,** Galapagos Islands *Jul 2013 – Aug 2013*

- Participated in environmental conservation by removing invasive species, cleaning tortoise nest sites,  
 and working with local farmers to develop sustainable farming practices

- Facilitated communication between volunteers and staff by interpreting English and Spanish