## Fengling Hu

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#### **EDUCATION**

Amherst College
Amherst, MA
Bachelor of Arts
Expected May 2019

Major: Statistics & Biology

• GPA: 3.98/4.00

### RESEARCH EXPERIENCE

# **Amherst College - Jeong Lab**

Amherst, MA

Research Assistant

July 2017 - Present

Investigate essential metal characteristics in weedy rice species to determine the metal uptake mechanisms.

Establish Arabidopsis thaliana lines with mutations in essential iron-deficiency response proteins.

#### Northwestern University - Yee Lab

Chicago, IL

Student Researcher

June 2016 - Present

- Perform mixed-methods, thematic analysis on a program designed to improve postpartum return to care.
- Investigate themes in text-message-based communication correlated with return for postpartum care.

### **University of Michigan - Big Data Summer Institute**

Ann Arbor, MI

Student Intern

June 2017 - July 2017

- Analyzed single cell RNA sequencing data to determine appropriate methodology for analyzing cell populations and characterizing data collection errors.
- Learned theory behind statistics methodology, applications of big data statistics, and implementation of learned concepts in R.

#### **WORK AND VOLUNTEER EXPERIENCE**

# **Amherst College Statistics Department**

Amherst, MA

Statistics Fellow

March 2017 - Present

- Tutor students in Introduction to Statistics, Intermediate Statistics, and Probability in lecture materials, homework, and R code.
- Review class handouts and create solution sets R worksheets.
- Serve as statistical analysts for various on-campus academic and administrative departments and projects.

### Amherst College Emergency Medical Service (ACEMS)

Amherst, MA

Emergency Medical Technician - Crew Chief and Director of Recruitment

February 2016 – Present

- Serve on the ACEMS Board of Directors to organize continued education training, build community, and conduct quality control for over 50 active members.
- Organized a three-week, intensive EMT certification course over winter break to fully train thirty students as EMTs.
- Implemented protocols to decrease burnout, increase Board efficiency, and collect and address member feedback.
- Lead a three-person EMT crew on biweekly 12-hour shifts to provide emergency 24/7 Basic Life Support services.

# **Kidney Disease Screening and Prevention (KDSAP)**

Amherst, MA

Communications Director

February 2016 – Present

- Organize and execute kidney disease screenings involving student and nephrologist volunteers in surrounding lowincome communities with low access to healthcare.
- Manage communication between the KDSAP Executive Board and KDSAP members, Amherst College administration, and fellow Amherst College pre-health organizations.

### **Northwestern Memorial Hospital**

Chicago, IL

Anesthesia Technician I

August 2015 – Present

- Resupply and decontaminate anesthesia equipment and machines between uses to ensure optimal patient safety and care for one month each summer.
- Provide support to anesthesiologists during routine surgical operations and anesthesia emergencies.

# No Pain Labor & Delivery - Global Health Initiative

China

Translation Coordinator

June 2013 – Present

- Mediate conversation between American obstetricians, obstetrical anesthesiologists, neonatologists, and nurses and their Chinese counterparts in the delivery rooms of target hospitals for one week each summer. The goals were to facilitate use of labor analgesia, decrease Cesarean rates, and provide better neonatal care.
- Provide instruction and guidance to a team of mostly American high school, college, and medical school students who are semi-fluent to fluent in Chinese.
- Maintain and distribute an updating list of commonly encountered medical terminology and their translations.
- Act as an initial contact for all translators.

# **SKILLS AND INTERESTS**

Skills: Chinese (Fluent), French (Proficient), R (Advanced), Microsoft Office Suite (Advanced), Java (Familiar) Academic Interests: Public health, global outreach, applied biostatistics research, emergency medicine, basic science research

#### **PUBLICATIONS**

- **Hu F**, Strohbach AM, Martinez NG, Hajjar N, Simon MA, Yee LM. Patient and Provider Evaluation of a Postpartum Patient Navigation Program to Improve Postpartum Care Among Publicly Insured Women. Poster presented at the Society for Reproductive Investigation's 64<sup>th</sup> Annual Scientific Meeting in March 2017. Manuscript submitted to Patient Education and Counseling in January 2018.
- Strohbach AM, **Hu F**, Martinez NG, Hajjar N, Simon MA, Yee LM. Navigating New Motherhood: Evaluating the Role of Patient-Navigator Communication on Postpartum Follow-up in a Low-Income Community. Poster presented at the Society for Reproductive Investigation's 64<sup>th</sup> Annual Scientific Meeting (manuscript being drafted).
- Bouziat R, Hinterleitner R, Brown JJ, Stencel-Baerenwald JE, Ikizler M, Discepolo V, Meisel M, Kim SM, Pruijssers AJ, Iskarpatyoti JA, Costes LMM, Lawrence I, Varma M, Zurenski MA, Khomandiak S, Ernest J, McAllister N, Aravamudhan P, Hu F, Samsom JN, Reinecker H, Khosla C, Kupfer SS, Guandalini S, Semrad C, Barreiro LB, Xavier RJ, Ng A, Dermody TS, Jabri B. Reovirus infection triggers inflammatory responses to dietary antigens and development of celiac disease. Science. 2017;356(6333):44-50.
- Hu LQ, Flood P, Li Y, Tao W, Zhao P, Xia Y, Pian-Smith MC, Stellaccio FS, Ouanes JP, **Hu F**, Wong C. No Pain Labor & Delivery: A Global Health Initiative's Impact on Clinical Outcomes in China. Anesth Analg. 2016;122(6):1931-8.
- Zhao P, **Hu F**. American-trained Chinese anesthesiologists: how are they doing?. J Clin Anesth. 2016;33:351-6.