

Yuewei Fei

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EDUCATION

University of Rochester

Rochester, NY

Bachelor of Science in Computational Biology

Bachelor of Arts in Brain and Cognitive Science

August 2017 – May 2021(anticipated)

- Cumulative GPA: 3.57/4.0
- Core Courses: Computational Biology w/lab(A), Biostatistics(A), Undergrad Research in Cog Sci(A-)
- Awards: Dean's List

RESEARCH EXPERIENCE

MicroRNA Expression Level Differences

Rochester, NY

Undergraduate Researcher, Adviser: Prof. Matthew McCall

March 2019 – present

- Examine the different expression levels of microRNA under different experimental conditions, such as different sequencers, library-prep, etc. using the R package microRNAome and DESeq2
- Identified several microRNA that showed statistically significant differences in expression level between two sequencers in all 8 cell types and will examine their unique sequences later
- Develop statistic models that can balance the difference in microRNA expression levels in the same cell type caused by using different sequencer
- Conduct extensive literature research related to microRNA

Vowel Perception in Degraded Contexts

Rochester, NY

Undergraduate Researcher, Adviser: Prof. Chung-Lin Yang & Chigusa Kurumada

September 2019 – present

- Designed our own experiments built upon existing literature (Strange et al. 1983), created stimuli using Pratt and survey questions using Qualtrics, and recruited subjects on Amazon Mechanical Turk
- Concluded that people are not able to perceive vowel correctly with the vowel sound in a syllable was silenced, a result which contradicts that of Strange et al.
- Delivered virtual poster presentation in Undergraduate Research Expo at University of Rochester

Potential Biomarkers Discovery using urine proteomics data

Augusta, GA

Undergraduate Researcher, Adviser: Prof. Jin-Xiong She

May 2019 – July 2019

- Analyzed urine proteomics data set using R package limma to find biomarkers that can predict the presence of renal or bladder cancer
- Researched on top 20 hits for the two analyses (Renal vs. Control, Bladder vs. Control) by matching the peptides to their corresponding proteins using Protein Blast and researched on the properties and function of the protein through literature review such as previous report on biomarker and relation to renal, bladder or other types of cancer
- Researched on literature articles related to cancer, biomarkers and genetic sequencing

INTERSHIP EXPERIENCE

Eagles English Language Training School

Shenzhen, China

Teaching Assistant

June 2018 – July 2018

- Assisted and supervised a class of 15 students ranging from 6th grade to adults in daily English classes
- Graded assignments, class participation and exams

CAMPUS LEADERSHIP ACTIVITIES

University of Rochester Chinese Students and Scholars Association (URCSSA)

Rochester, NY

Committee Member

January 2019 – present

- Collaborated with a group to organize events such as the Spring Lantern Festival, which had approximately 100 audiences

SKILLS

- Computer Skills: Python; R; Java
- International language: Mandarin Chinese (native); English (bilingual); Korean (beginner)