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Objective

Work in a lab that researches how cells function either on their own or in systems. Seeking a position that applies science to human health, for example, vaccine research or gene regulatory modeling.

Education

Cornell University, College of Agriculture and Life Sciences, Ithaca, NY
B.S. Biological Engineering, expected May 2018

Experience and Interests

- **Academics**
  Successfully completed Cornell engineering prerequisites. Took classes in Machine Learning for Biomedical Research, Immunology, Calculus Based Statistics, Biochemistry, Linear Algebra, Comparative Physiology, and Calculus Based Physics: Electricity and Magnetism.

- **Research Experience**

  Spring 2017 – present. Research Assistant, Dr. Ilana Brito Lab, Cornell University, Ithaca, NY
  Assisted in microbiome data processing by creating OTU tables and summary files from sequence data. Performed data analysis using machine learning techniques: elastic net regression, random forest regression, and Bray-Curtis PCA. Looked at differences in the microbiomes of mice with and without certain disease traits.

  Summer 2017. Intern, Dr. Noah Sather Lab, Center for Infectious Disease Research, Seattle, WA
  Transfected and cultured cells with novel plasmids to increase serum expression of HIV surface proteins. Worked in Bio Safety Level 2+ facility.

  Spring 2016 – Spring 2017. Research Assistant, Dr. Minglin Ma Lab, Cornell University, Ithaca, NY
  Worked with micro contact printing to develop a technique to study cell curvature. Assisted with implants of micro devices in animal models. Trained in Bio Safety Level 1 sterile cabinets.

- **Software Experience**

  QIIME: 1 year – Familiar with full pipeline analysis.
  Python: 2 years – Familiar with packages such as Scikit-Learn, Scikit-Bio, Numpy, and Keras.
  Java: 1 year – Took Cornell ENGRD 2110: Intro to Object Oriented Programming.
  R: 6 months – Familiar with R studio and basic plotting.
  Matlab: 6 months – Familiar with basic functionality.

Varsity Athletics

Cornell Lightweight Rowing Team (IRA Division I)
Varsity athlete, 2014 to 2017