POSITION DESCRIPTION

**Job title:** NSF-funded postdoctoral position in Statistics and/or Machine Learning applied to microbial datasets.

The David Lab in the Department of Microbiology received a 5 years NSF-funded project through the Rules of Life mechanisms URoL:MTM2 (in collaboration with 4 other laboratories) at Oregon State University. The project is titled “Defining the ecological and genomic properties that underlie microbiome sensitivity and resilience” and will leverage public datasets as well as new data generated during the project. This project aims to define the unifying principles and properties that describe a microbiome sensitivity and resilience to environmental changes using multivariate statistical analysis and deep learning methods on metagenomics and multi-omics data. The abstract of the project can be found here: [https://www.nsf.gov/awardsearch/showAward?AWD_ID=2025457](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2025457)

The David lab seeks a motivated postdoctoral researcher with a background in statistics, or data science and machine learning, and an interest in microbiology or ecology. The position is funded up to 3 years (one year renewable twice). Starting date is flexible, but we aim to welcome this new lab member by January 1st 2021, summer 2021 the latest. The new postdoctoral researcher will integrate a biocomputing team of 4 members, including a Ph.D student, a researcher assistant and two undergraduate students. Our lab comprises 11 members altogether, you can find more information on our website: davidlab.science.oregonstate.edu. The position will also be co-advised by Dr. Xiaoli Fern at the School of Electrical Engineering and Computer Science.

**Qualification:**
- Very proficient in R and/or python, as well as bash.
- Be very familiar with machine learning (especially deep learning) approaches
- Notions of genomic and/or microbial datasets is a plus.

**Relevant publications for this position by the group:**

Please submit a detailed CV, three references, and code/or github repository you may want to share, by email to Dr. Maude M. David: maude.david@oregonstate

Feel free to contact Dr. David if you have any questions by email as well. Women, native Americans, African-American, minorities, individuals with disabilities and veterans are encouraged to apply!