The Quantitative Evolutionary Microbiology Laboratory led by Prof. Michael Manhart is recruiting a postdoctoral fellow. Our lab seeks to understand how fundamental evolutionary processes shape the ecology and cellular physiology of microbial communities. We are especially enthusiastic about contributing to fundamental microbiology that can benefit human health. We are an interdisciplinary group — our backgrounds range from physics and applied math to systems biology and food science, and we use a wide range of methods, including experimental, computational, and theoretical approaches.

The position will be based at Rutgers University, Robert Wood Johnson Medical School (Piscataway, NJ, USA) in the Center for Advanced Biotechnology and Medicine. CABM is an interdisciplinary research center connecting life scientists from a wide range of fields, including microbiology, cell biology, biochemistry, and neuroscience. The fellow will also be an active member of the Rutgers University Microbiome Program, which links microbiologists across the university through regular seminars, retreats, and collaborations.

Description of the position: The fellow will develop and conduct research projects, present at local and international meetings, write papers, apply for fellowships and other funding, and mentor students and other lab members. Current major research directions in the lab include the evolution of microbial growth dynamics and the effect of ecological interactions on adaptation in microbial communities, but the position will allow for significant flexibility in developing new directions in accordance with the fellow's interests and the broad goals of the lab. The fellow's research may involve any combination of experimental (wet-lab biology), computational, and theoretical components.

The start date is flexible, but we prefer May 1, 2023 or as soon as possible thereafter. The fellow can expect at least two years of support, with additional years contingent on funding availability and mutual agreement. The salary will be commensurate with the applicant's experience and qualifications, with the minimum set by NIH-NRSA stipend levels.

Qualifications: By the start date of the position, applicants must have a Ph.D. in a biological or quantitative discipline, including (but not limited to) biology, physics, chemistry, computer science, applied mathematics, or engineering.

Applicants ideally have previous experience in wet-lab biology research (e.g., microbiology, molecular biology, genetics), coding (e.g., Python, R, C/C++), analysis of large data sets, mathematical modeling, and/or simulations. Applicants without formal training in biology should demonstrate their strong interest in learning the relevant concepts and methods for this position.

Application instructions:

Please submit your application through the university jobs portal:
https://jobs.rutgers.edu/postings/191869

Please include the following documents:

1. A cover letter containing:
   • A narrative summary of your education and work history, especially experiences you feel specifically prepared you or motivated you for this position
   • An explanation of why you are specifically interested in this position and what you hope to gain from it
   • Any other details that you consider important for evaluating your application
   • Where you learned about the position (e.g., e-mail from colleague, Twitter, job website, etc.)
2. Your CV, including all education and previous work experience
3. Names and e-mail address for three references that know you and your work well

We will start reviewing applications on March 1, 2023 and will continue until the position is filled. Our group values an inclusive culture, and we strongly encourage applications from a diverse range of candidates. If you are excited about our lab, please consider submitting an application even if you don't think you are a perfect fit.

If you have any questions, please contact Prof. Michael Manhart at mmanhart@rutgers.edu.