

**MICHIGAN STATE  
UNIVERSITY**



**POSTDOCTORAL POSITION AVAILABLE**  
**REGUERA-KASHEFI LABS**  
**Department of Microbiology and Molecular Genetics**  
**Michigan State University**

The laboratories of Gemma Reguera and Kazem Kashefi at Michigan State University are seeking a postdoctoral fellow to investigate the role(s) of nasopharyngeal bacteria in middle ear functions. Our ultimate goal is to develop synthetic probiotic treatments to modulate middle ear ventilation and prevent barotrauma. We combine tools of microbial ecology (cultivation dependent and independent) with synthetic biology to learn about the adaptive responses of microorganisms to changes in their environment (in this case, the human host) and manipulate the physiology of key resident members.

The primary job responsibility for this position is to move the research project forward through experimental work, critical thinking, as needed to achieve critical milestones timely and fulfill the reporting requirements of our funding agency. Specific tasks include leading a human study for sample collection, community analysis (amplicon-based and shotgun metagenomics, RNAseq), enrichments and isolations, and fitness-driven development of synthetic communities. As part of their career development, this person will help to supervise and mentor others within the laboratory.

**Minimum qualifications:**

The successful candidate will have a doctoral degree or equivalent in a related field.

**Desired qualifications:**

The candidate should be able to work effectively as part of a team and progress on the project independently through critical thinking and a strong work ethic. He/she should have strong written communication skills, as evidenced by previous publications, and excellent oral communication skills. Experience in (meta)genomics data analyses and/or synthetic biology will be considered a plus.

Please, e-mail Dr. Reguera ([reguera@msu.edu](mailto:reguera@msu.edu)) with questions or to formally apply for the position. Complete applications will require a cover letter, curriculum vitae and three or more letters of recommendation.