



Postdoctoral Positions in Microbial Mechanobiology Behkam Lab, Virginia Tech, Blacksburg VA

The [Behkam Lab](#) in the Department of Mechanical Engineering at Virginia Tech seeks highly motivated and enthusiastic candidates for a postdoctoral associate position. This position will provide an opportunity to work in a highly collaborative interdisciplinary environment as part of a team of experimentalists, computational modelers, and clinicians.

The project's focus will be on the mechanobiology of microbial interaction with nanostructured surfaces and its applications in engineering the surface of medical devices towards mitigating medical device-associated infection. Combining experimental work with computational modeling, this position will offer a unique opportunity to acquire a well-rounded interdisciplinary skillset. This research project will address a well-defined problem of a significant and pressing clinical need in collaboration with clinicians. The selected candidate will also be encouraged to pursue complementary new research directions, apply for independent grants and fellowships, and will be mentored to develop scientific leadership and management skills.

Compensation for this position will be at or above NIH guidelines and will include competitive benefits and retirement package offered by Virginia Tech. The position is available starting as soon as possible and is eligible for annual renewal contingent upon satisfactory progress and continued funding.

Qualifications:

Candidates must hold a doctorate degree in Mechanical Engineering, Biomedical Engineering, Biophysics, or a related discipline by the start of the postdoc appointment. The ideal candidate will have experience in working with Biosafety Level-2 (BSL-2) microorganisms, proficiency in standard cell- and molecular-biological techniques, and expertise in nanofabrication. However, training to acquire new skills in nanofabrication and characterization will be offered. Preference will be given to candidates with experience in two or more of the following areas: (1) bacteria culture techniques, (2) molecular biology techniques (e.g., RNA-seq, RT-PCR, Western blotting), (3) optical and electron microscopy, (4) microbial mechanobiology, (5) nanofabrication and characterization, (6) finite element modeling and multi-parameter optimization. Candidates must have excellent written and oral communication skills, enthusiasm to conduct independent and collaborative interdisciplinary research, the ability and willingness to mentor graduate and undergraduate students.

Application Process:

Interested candidates should assemble a single pdf document containing a (1) cover letter outlining how this position relates to the candidate's past experience, future goals, and research interests, (2) curriculum vitae with a complete list of publications, (3) name and contact information of three academic references, (4) two key first-author manuscripts that have been published or accepted for publication. The application should be submitted via jobs.vt.edu (job number: 514474). You may follow up by sending the single pdf file to Professor Bahareh Behkam at behkam@vt.edu with "Postdoctoral application" in the subject line.

Review of applications will begin immediately and will continue until it is filled.