

Postdoctoral Position available
Dr. Jennifer Linderman (Chemical Engineering and Biomedical Engineering).
University of Michigan

An estimated one-third of the human population is infected with the pathogen *Mycobacterium tuberculosis (Mtb)*, and approximately two million individuals succumb to tuberculosis annually. Granulomas are self-organizing collections of immune cells that form in the lungs after inhalation of *Mtb*. They both contain the infection and provide a niche for bacterial survival. Understanding granuloma formation and maintenance thus provides a key to identifying as well as manipulating factors that contribute to different outcomes following infection. This project involves both experimental work and mathematical modeling to understand how tumor necrosis factor- α and other factors influence granuloma formation and maintenance. The project is part of a multiple-PI grant to use multi-scale and multi-system approaches to understand tuberculosis and will involve integrating data and *in silico* models.

Ideal applicants will have a PhD in chemical engineering or a similar area with both experimental and modeling experience in receptor-mediated processes. Excellent communication skills are essential. Pay is determined by standard NIH post-doc pay schedule. Start date is negotiable. Interested applicants should send their vita and a letter describing research interests and summarizing Ph.D. work to Jennifer Linderman at linderman@umich.edu. Copies of published papers are welcome.