

Undergraduate research opportunity in 3D bacterial motility

The Taute lab is offering a funded undergraduate research opportunity focused on **studying the motility behavior of well-known bacterial pathogens using high throughput 3D tracking**. Motility and chemotaxis are known to contribute to virulence in a number of bacterial pathogens, but neither the underlying mechanisms nor the species' basic motility behaviors are well understood. Do pathogens exhibit specific motility strategies? How do motility behaviors adapt to lab environments that mimic the physical complexity of the host? How do the bacteria manage to navigate chemical gradients?

The undergraduate researcher will be advised by a postdoc in the lab and will receive training in the following areas:

- Wet lab and microbiological lab skills,
- advanced light microscopy,
- quantitative data analysis,
- Matlab programming.

Candidates should bring along

- enthusiasm for interdisciplinary experimental science,
- strong analytical skills and no fear of quantitative analysis,
- experience in one or more of the training areas listed above.

The project is funded by the *Rowland Foundation Postdoctoral Fellow and Undergraduate Program* for the duration of 12 months and will commence as soon as a suitable candidate is identified. The successful candidate

- will start training in the lab as soon as possible,
- should be committed to conducting summer research on the project,
- will be remunerated at a rate of \$15/h (8-10 h/week during the semester, up to 35 h/week during the summer, possible support for Harvard summer housing).

Interested candidates should contact postdoc Marianne Grognot (grognot@rowland.harvard.edu) with a CV, an academic transcript, and a statement of motivation (max. 1 page).

We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, gender identity, sexual orientation, pregnancy and pregnancy-related conditions or any other characteristic protected by law.