Opening for 2019

Project Title: Visualizing immune cell activation at single molecule resolution

Research Group: Visualisation of Immune Signalling

Supervisor: Marcus J. Taylor

Address:
Max Planck Institute for Infection Biology
Campus Charité Mitte
Charitéplatz 1
10117 Berlin

Project Description:

We are looking for creative and motivated Ph.D. students to join our research group at the Max Planck Institute for Infection Biology in Berlin Germany. Our laboratory is focused on using high spatial and temporal resolution microscopy to visualize the protein dynamics of immunological signalling reactions. We have developed assays and approaches that allow us to visualize the biochemistry of immune signalling at the single molecule level within live cells (read more at taylor-lab.org). Our scientific vision is to leverage a detailed understanding of molecular mechanism to be able to re-engineer and control immune signalling systems.

The successful Ph.D. applicant will undertake a project that seeks to understand how immunological signalling pathways process the chemical signals of infection and disease. The successful student will have the opportunity to receive hands on training in single-molecule imaging, image analysis, and cellular engineering approaches developed in the lab. Applicants that are experienced/interested in bioengineering, biophysics, biochemistry, cell biology, as well as the physical and engineering sciences are invited to apply.