Postdoctoral scholar position in innate immunity and RNA biochemistry
Department of Microbiology; Department of Cancer Immunology & Virology
Dana-Farber Cancer Institute
Harvard Medical School
Boston, MA

Description:
The Kranzusch laboratory, located at the Dana-Farber Cancer Institute at Harvard Medical School, is focused on understanding innate immunity and cell signaling. We use a biochemical and structural biology approach to study cGAS-STING signaling, a major system responsible for detection of cytosolic DNA during pathogen replication and cancer. We have shown that human cGAS is part of a large family of signaling enzymes conserved in animals and in bacteria, with many open questions remaining.

Our lab reconstitutes signaling outside of the cell using highly purified components in order to understand the mechanistic and structural underpinnings that control human immunity. We are seeking a highly motivated postdoctoral scholar to join our team and make fundamental insights into antiviral defense and RNA biology. The candidate will investigate how specialized RNA signals control immune activation and the role of uncharacterized enzymes in cellular signaling. This project will provide training in a broad set of techniques, including biochemistry, RNA and molecular biology methods, X-ray crystallography, and cell-based experiments.

Qualifications:
We are interested in applicants from diverse research experience backgrounds, but are particularly seeking applicants with a Ph.D. in biochemistry or molecular and cell biology. Candidates should be enthusiastic about collaborative and interdisciplinary research, be motivated to develop as an independent scientist, and demonstrate excellent scientific communication skills.

Environment:
Located in Boston, Harvard Medical School offers a world-class research environment along with being part of the vibrant research community of the greater Boston/Cambridge area.

Availability:
Immediate

To apply:
Qualified candidates should participate in the HMS Postdoctoral Fellow Recruitment Program or send a cover letter, CV, and contact information for three references to:
Dr. Philip Kranzusch at philip_kranzusch@dfci.harvard.edu

For more information:
Details about the lab can be found at: http://kranzuschlab.med.harvard.edu

Please also see recent publications from our lab:
- Eaglesham et al, Nature 2019 “Viral and metazoan poxins are cGAMP-specific nucleases that control cGAS-STING signaling” (https://www.nature.com/articles/s41586-019-0928-6)