

Division of Immunology | Department of Pediatrics
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Postdoctoral Fellowship Position: Division of Immunology, Boston Children's Hospital

A ***Postdoctoral Fellow*** Position is available within the Division of Immunology at Boston Children's Hospital to spearhead studies on the pathogenesis of juvenile arthritis. This position is ideal for candidates interested in translational immunology research and bioinformatics. A minimum two-year commitment is required. The research project will utilize human samples to study interactions between T and B cells in the arthritic joint that may drive inflammatory arthritis in children. There will be a focus on understanding the functionality of several Treg subsets in the joint that were recently identified by the PI. Multidimensional analyses will be used to conduct the research, including flow cytometry, mass cytometry, bulk RNAseq, single cell RNAseq, metabolomics, high throughput T and B cell repertoire analysis, autoantibody arrays, and in vitro functional assays. These techniques are all well established in the Lab, which will allow the Postdoctoral Fellow to learn in a supportive environment. In addition, there are plans to leverage CRISPR-Cas to study the function of candidate transcription factors in human immune cells.

The PI is a NIH funded faculty member within the Division of Immunology and a practicing pediatric rheumatologist. The Lab has experience in leveraging detailed immunophenotyping to understand human diseases. The PI has established an infrastructure for translational research in pediatric rheumatology at Boston Children's Hospital, including active IRB protocols and a large biorepository. The Postdoctoral Fellow will also have the opportunity to participate in patient based research in a pediatric setting and learn the intricacies of maintaining a biorepository. The Division of Immunology is a vibrant and collaborative research community that provides many opportunities to interact with other PIs and trainees. Further, the Postdoctoral Fellow will have access to the larger Harvard Medical School environment for training, access to core facilities, and seminars.

The applicant should have a PhD or MD with substantial laboratory/translational research experience related to immunology, molecular/cellular biology, and/or bioinformatics. Individuals with a master's degree in bioinformatics will also be considered. The ideal candidate will have solid experience in computer programming and bioinformatics as a major focus of the project will include the analysis of complex data sets. If desired, the PI will support further training/classwork in bioinformatics through the Harvard Chan Bioinformatics Core and other program in the Harvard system. The applicant should have a track record of productivity and an ability to work independently. The Postdoctoral Fellow should also be able to collaborate with others and function as a member of a research team. Potential for partial self-funding is welcome but not essential.

Interested applicants should email a current CV, the names/contact information for 2-3 references, and a brief statement on your experience and goals relevant to this position to:

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