



## **PhD Student Position (f/m) in Rapid Identification of Autoantigens in Autoimmune Disease**

### **Employer**

BioMed X Innovation Center, Im Neuenheimer Feld 515, 69120 Heidelberg, Germany

### **About BioMed X**

The BioMed X Innovation Center is an exciting collaboration model at the interface between academia and industry. At our center, distinguished early career scientists recruited from all over the world are working jointly on novel pre-clinical research projects in the fields of biomedicine, molecular biology, cell biology, diagnostics, and consumer care. These interdisciplinary project teams are conducting groundbreaking biomedical research in an open innovation lab facility on the campus of the University of Heidelberg, under the guidance of experienced mentors from academia and industry while expanding their scientific network.

### **What we are looking for**

A PhD student position is available in a new team developing methods for the rapid identification of autoantigens in autoimmune disease. The objective of the group is to deconvolute the autoimmune T-cell receptor (TCR) repertoire functionally with respect to unknown cognate peptide:HLA complexes. We will use high-throughput screening approaches coupling sequence to specificity in order to identify critical points of attack in the treatment of autoimmune diseases. We are looking for a highly enthusiastic and creative researcher to broaden our think-tank with intellectual power, technical excellence, and problem-solving expertise. The ideal candidate should have a Master's degree or equivalent in molecular biology, cell biology, or immunology. You will contribute to a team effort to establish a high-speed, high-throughput platform, and independently develop a methodology focusing on unique aspects of the screening system at the crossroads of biotechnology and fundamental immunology.

### **Required skills**

- Up-to-date molecular and cell biological techniques
- Strong theoretical and technical background in human adaptive immune processes
- Experience manipulating gene expression in mammalian cells (RNAi, CRISPR/Cas9)
- Independent critical thinking and experimental design
- Experience working in interdisciplinary teams
- Excellent English communication skills

## Additional preferred skills

- Theoretical and/or technical background in adaptive immune processes, with emphasis on T-cell:antigen-presenting cell interactions
- Cellular transgene delivery (e.g. viral vectors)
- Experience with high-throughput screening techniques

## Candidates are requested to submit

- 1-page cover letter explaining their interest in joining our team
- Curriculum vitae outlining scientific interests, research achievements, publications (where applicable), future personal goals, and extracurricular passions
- Contact information for 2 referees
- Max. 2-page outline of a proposed thesis project. Concepts with a primary focus on creative approaches for the identification of previously unknown, post-translationally modified antigens/epitopes will be preferred over TCR repertoire profiling without functional characterization or restricted to discovery of TCR sequences with known specificities.

## What we offer

The position is offered for an initial duration of 2 years, with possible extension to a total of 4 years.

BioMed X is a multidisciplinary and international research institution with a very collegial and flexible working environment. As part of the remuneration package we offer a competitive salary, access to training and lecture courses in house as well as in neighboring research institutions on the Life Science Campus in Heidelberg. Team recognition events, such as our annual two-day retreat, joint luncheons and after work events, a Summer and a Christmas party are just some of the other perks our fellows enjoy.

The position is sponsored by Janssen, with a start date of August 1st, 2018. Please submit your application to the attention of Dr. John Lindner before June 15<sup>th</sup>, 2018 via our online application system: <https://apply.bio.mx>

## Contact

BioMed X Innovation Center  
Im Neuenheimer Feld 515  
69120 Heidelberg  
Germany

Email: [lindner@bio.mx](mailto:lindner@bio.mx)

Internet: [www.bio.mx](http://www.bio.mx)