The University of Freiburg, Germany, is looking for a Postdoctoral Fellow in the Area of Optogenetics, Immunology and Biochemistry for an initial three-years appointment. The position is available in the Department of Immunology of the Faculty of Biology and the Excellence Cluster BIOSS. Contact persons are Dr. Susana Minguet and Prof. Dr. Wolfgang Schamel.

The T cell receptor (TCR) serves a critical function in the immune system and represents one of the most complex and fascinating receptor structures. Since many years we have worked on the molecular mechanisms by which this receptor transmits information across the membrane (Gil et al., 2002; Minguet et al., 2007; Schamel et al., 2017; Swamy et al., 2016; Wang et al., 2016). We have very recently developed an optogenetic TCR to regulate ligand-binding reversibly and precisely by light (Yousefi et al., submitted).

This project aims to understand how dynamic inputs are processed by T cells to decide whether to mount an immune response or not, by using the opto-TCR and by developing new optogenetic tools. We want to understand principles of signal processing to achieve a new level of understanding of cellular programmes. This knowledge will be applied to design safer and more effective chimeric antigen receptors (CARs) to be used in cancer immunotherapy.

The project will be part of a small consortium including other immunologists and optogeneticists of the Excellence Cluster BIOSS.

The position should start as soon as possible, and payment and social benefits will be in accordance with the regulations of the German TVoeD (salary agreement for public service employees). Women are especially encouraged to apply and handicapped applicants with equal qualification will be given preferential treatment. A childcare facility is attached to the Institute.

Applicants should send their application to miriam.Vitt@bioss.uni-freiburg.de

We are looking forward hearing from you.
Freiburg is the “capital” of the black forest and a lively university town located in the trinational Biovalley area between Switzerland, France and Germany. The Institute has a high percentage of foreign researchers as well as a nursery for children of 6 month to 3 years of age. Our group is also part of the “excellence programs” of the University of Freiburg.

References


