The University of Freiburg, Germany, is looking for

a Postdoctoral Fellow

in the Area of Optogenetics, Immunology and Biochemistry. The position is available in the Department of Immunology of the Faculty of Biology and the Excellence Cluster CIBSS - Centre for Integrative Biological Signalling Studies. Contact person is 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 CIBSS.

The position should start mid to end 2019, and payment and social benefits will be in accordance with the regulations of the German TVL (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 as one single pdf to miriam.Vitt@bioss.uni-freiburg.de

We are looking forward hearing from you.

For further information please contact:
wolfgang.schamel@biologie.uni-freiburg.de
https://www.bioss.uni-freiburg.de/departmentimmunology/home/

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


