

Postdoctoral Position in Sydney, Australia

How does T cell signalling begin?

Antigen recognition by the T cell receptor (TCR) is a hallmark of the adaptive immune system. T cells recognize antigens on the surface of antigen presenting cells but how antigen recognition leads to TCR signaling and activation responses is not clear. A key criteria in signaling is the spatial organization of the TCR on the highly dynamic topology of T cell plasma membrane. In this project, we aim to image and analyze the T cell membrane with super-resolution fluorescence microscopy techniques such as 3-dimensional single molecule localization microscopy (SMLM, e.g. PALM, dSTORM, PAINT) and lattice light-sheet microscopy.

A PhD in cell biology, (bio)physics, (bio)chemistry, or related science is required and experience in advanced fluorescence microscopy and image analysis is essential. Knowledge of receptor signalling, cellular immunology and/or molecular biology is highly desirable.

The successful candidate will join our team of cell biologists and biophysicists at the EMBL Australia Node in Single Molecule Science, University of New South Wales, Sydney, Australia (http://sms.unsw.edu.au) and the ARC Centre of Excellence in Advanced Molecular Imaging (http://www.imagingcoe.org). The postdoctoral researcher will have an active role in conceiving and implementing approaches, training and supervision of research staff and students and presentation of the results in the form of publications, international conference presentations and potentially grant applications.

The postdoctoral position is a full-time 1-year position with strong prospects for a 2-year extension. Salary range is A\$91,743-A\$98,127 per year plus 9.5% superannuation and leave loading. Applications including CV, contact details of referees and cover letter should be emailed to Prof Katharina Gaus (k.gaus@unsw.edu.au) before **5 August 2018**.