

# Prof. Enrico Klotzsch

Faculty of Life Sciences

Department of Biology

Biophysics and Mechanobiology

## Expertise

Professor Klotzsch research is focussed on the field of materials science for optiminzing adaptive immuntherapies. Furthermore he is engaged in the immun systems mechanobiology.

He and his team aim to bridge the gap between structural and cell biology, and in particular to unravel the mechanistic aspects of how cells sense and respond to their environment. This includes how cells use forces to study interactions with other molecules such as receptor-ligand interactions to switch biochemical functions, such as T-cell activation, migration, or their interaction with the extracellular matrix. We are also investigating how these findings can be used for biomedical applications.

We use state-of-the-art single molecule microscopy techniques such as super-resolution microscopy, AFM and optical tweezers to gain insights into general aspects of mechanobiology, membrane biophysics, neurobiology and immunology.

## Scientific Services

- Super-Resolution Mikroskopy
- transcriptomics
- mechanical tests with biological materials
- T-cells activation
- characterization of lymphocytes

## Testimonials

- comparative studies of products for CAR T cell therapy



## Topics / Trends

Health

## Industries

Education

Healthcare & Life Sciences

<https://www.linkedin.com/in/enrico-klotzsch-3201a639/>