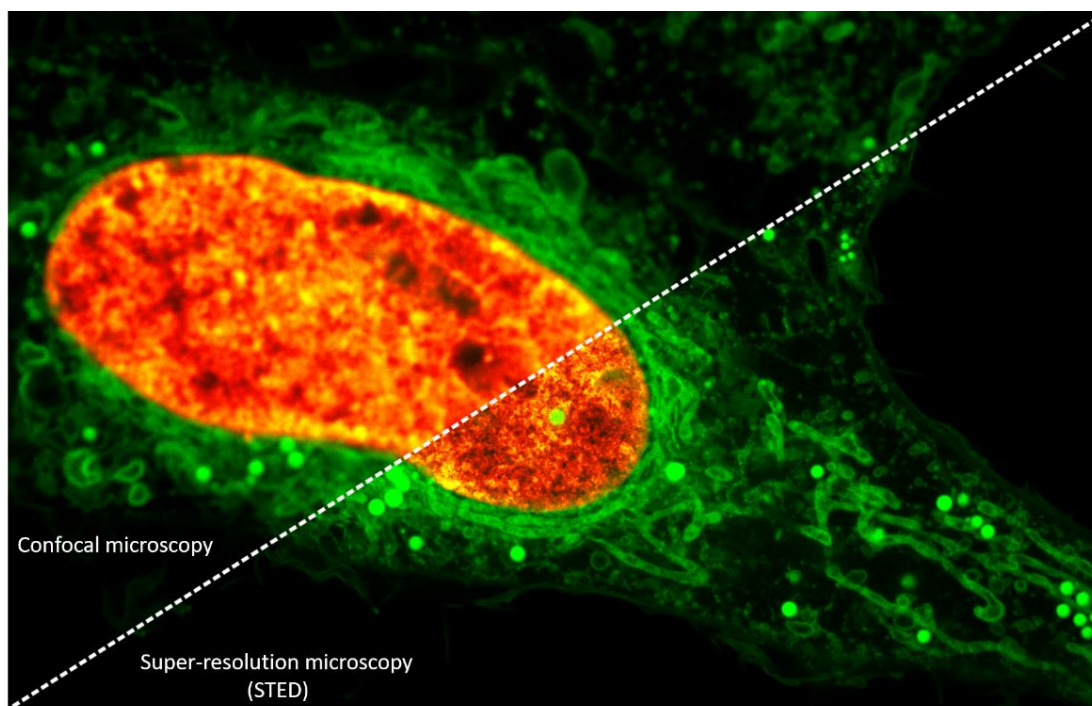


PhD position (E13/65%) – Super-resolution fluorescence microscopy for structural cell biology

We offer a PhD position in **super-resolution fluorescence microscopy for structural cell biology** (“**optical cell biology**”). The project aims (1) to develop fluorophore labels, experimental procedures and image analysis tools for multi-color super-resolution fluorescence microscopy in cells, and to (2) apply this imaging workflow to study the structure and dynamics of protein assemblies with near-molecular spatial resolution. Specifically, we will employ fluorophore labels that transiently and interchangeably bind to their target proteins, which enable novel, question-driven imaging experiments in cell biology.

Our interdisciplinary research group of chemists, biologists, and physicists is located in the Chemistry Department (FB14), Institute for Physical and Theoretical Chemistry, at the Johann Wolfgang Goethe University in Frankfurt am Main. We work at the interface between biology, (bio)chemistry and physical chemistry, using single-molecule and super-resolution techniques to study cellular processes with molecular resolution (further information at www.smb.uni-frankfurt.de and share.smb.uni-frankfurt.de).

We seek for candidates with a background in biochemistry, chemistry, biophysics, or related disciplines, who are interested to dive in the **exciting research field of applying advanced optical microscopy to structural cell biology**.



Confocal and super-resolution microscopy with exchangeable fluorophore labels. The image shows a cell stained for lipid membranes (green) and DNA (orange) (for more information, see Spahn et al.; *Nano Letters* **2019**; *Angewandte Chemie* **2019**; Glogger et al., *Angewandte Chemie* **2021**).

Please send your application by email to s.wegner@em.uni-frankfurt.de (Steffi Wegner, Administration).