RESEARCH SEMINAR

Phil Selenko Ph.D.
Leibniz Institute of Molecular Pharmacology, Berlin

“Looking at proteins in live cells with atomic resolution: From Science Fiction to Science Reality”

Most atomic resolution methods in Structural Biology fail to analyze proteins in their native cellular settings. Here, I outline how we can use high-resolution NMR spectroscopy to directly 'visualize' proteins inside live cells. Specifically, I present recent results on the 3-dimensional structures of the human amyloid protein alpha-synuclein in different neuronal and non-neuronal mammalian cells, under 'healthy' cell conditions. In turn, I will demonstrate how we can use in-cell NMR spectroscopy to monitor the repair-, or the formation of intracellular alpha-synuclein aggregate structures in a time-resolved fashion and at atomic resolution.

Date & time: Friday, June 10, 2016 at 02:00 pm
Location: Lecture Hall Y44-H-11, UZH Irchel

Contact: Prof. Ben Schuler, Email schuler@bioc.uzh.ch