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From Basic Research to Structure-Based Drug Design: Using cryoEM to target Voltage-Gated Ion Channels

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Marc Kschonsak is a group leader in the Membrane Protein Group within the Structural Biology Department at Genentech/Roche. He obtained his Bachelor of Science in Biochemistry at the University of Bayreuth (Germany) and his Master of Science in Molecular Biosciences at Heidelberg University (Germany). From 2013-2018, he joined the lab of Christian Haering at EMBL Heidelberg for his doctoral studies applying X-ray crystallography to uncover a DNA binding mechanism of the Condensin complex. He afterwards joined Claudio Ciferri's lab at

Genentech/Roche for his postdoctoral work (2018-2021). Since joining Genentech, he has studied various protein complexes by cryo-EM, including Human Cytomegalovirus glycoproteins bound to human receptors and the leak channel NALCN bound to multiple auxiliary subunits. In 2022, he started his group focusing on purifying high-quality membrane proteins and on determining high-resolution structures to facilitate drug discovery, as well as to elucidate the function and mechanism of action of membrane protein complexes.

