

## Dr. Christoph Rademacher



Dr. Christoph Rademacher (born 1979) earned his BSc in Molecular Biotechnology (2004) and MSc in Molecular Life Science (2006) at the University of Lübeck. In 2009, Dr. Rademacher received his doctorate from the same University, where he performed studies under the supervision of Prof. Dr. Thomas Peters in the Department of Chemistry working on virus/carbohydrate interactions using NMR spectroscopy. During these years, he also worked in Prof. Dr. David R. Bundle's and Prof. Dr. Todd Lowary's laboratories at the Alberta Ingenuity Center for Carbohydrate Science in Edmonton (Canada) and in Dr. Daron Freedberg's group at CBER/FDA in Bethesda (USA). He then underwent postdoctoral training with Prof. Dr. James C. Paulson at The Scripps Research Institute (USA) in the Department of Chemical Physiology, where he entered the field of glycoimmunology. Since December 2011, Dr. Rademacher is appointed at the Max Planck Institute of Colloids and Interfaces in the Department of Biomolecular Systems, where he became Emmy-Noether Research Group Leader in June 2012. His research is focused on the development and application of novel molecular probes to understand the role of carbohydrates in immune cell regulation.

### Key publications

Aretz J, Wamhoff E, Hanske J, Heymann D and Rademacher C (2014). Computational and experimental prediction of human C-type lectin receptor druggability. *Front. Immunol.* 5:323.

Glas A, Bier D, Hahn G, Rademacher C, Ottmann C, Grossmann TN. (2014). Constrained Peptides with Target-Adapted Crosslinks as Inhibitors of a Pathogenic Protein-Protein Interaction. *Angew Chem Int Ed*, 53, 2489-93.

Nycholat C.\*, Rademacher C.\*, Kawasaki N., Paulson JC. (2012) In silico aided design of a glycan ligand of sialoadhesin for in vivo targeting of macrophages. *J Am Chem Soc.*, 134, 15696-9. (\*equal contribution)

Rademacher, C., and Paulson, J.C. (2012). Glycan fingerprints: calculating diversity in glycan libraries. *ACS Chem Biol*, 7, 829-834.

Rademacher, C., Krishna, N.R., Palcic, M., Parra, F., and Peters, T. (2008). NMR Experiments Reveal the Molecular Basis of Receptor Recognition by a Calicivirus. *J Am Chem Soc*, 130, 3669-3675.