

# DOMINIQUE BRAUMANN, M. Sc. (née Petzold)

Since 2021                    *Research Scientist* Muscle Research Unit, Experimental and Clinical Research Center - Charité Universitätsmedizin Berlin and the Max Delbrück Center for Molecular Medicine in the Helmholtz Society, Berlin, Germany  
Mentor: Prof. Dr. Simone Spuler

## Experience and Training

2020 – 2021	<i>Quality management representative</i> , Further education at the institute of distance learning - Beuth University of Applied Sciences, Berlin, Germany
2019 – 2020	<i>Research Scientist</i> Institute of Laboratory Medicine, Clinical Chemistry and Pathobiochemistry, Charité Universitätsmedizin Berlin, Germany Mentor: Prof. Dr. rer. nat. Véronique Blanchard
2012 – 2016	<i>Research Scientist</i> , Institute for Nutrition Medicine, Laboratories of Immunology und Antibody Glycan Analysis, University of Lübeck in cooperation with Institute of Laboratory Medicine, Clinical Chemistry and Pathobiochemistry, Charité Universitätsmedizin Berlin, Germany Mentors: Prof. Dr. rer. nat. Marc Ehlers and Prof. Dr. rer. nat. Véronique Blanchard
2009 – 2011	<i>Master of Science Chemie</i> Freie Universität Berlin
2006 – 2009	<i>Bachelor of Science Chemie</i> Freie Universität Berlin

## Papers

- (1) Bartsch Y C, Rahmöller J, Mertes M M M, Eiglmeier S, Lorenz F K M, Stoehr A D, **Braumann D**, et al., Sialylated Autoantigen-Reactive IgG Antibodies Attenuate Disease Development in Autoimmune Mouse Models of Lupus Nephritis and Rheumatoid Arthritis, *Front. Immunol.* Vol. 9, No. 1183, 2018.
- (2) Epp A, Hobusch J, Bartsch Y C, Petry J, Lilienthal G-M, Koeleman C A M, Eschweiler S, Möbs C, Hall A, Morris S C, **Braumann D**, et al., Sialylation of IgG antibodies inhibits IgG-mediated allergic reactions, *J. Allergy Clin. Immunol.*, Vol. 141, No. 1, pp. 399-402, 2018.

- (3) Schwedler C, Kaup M, **Petzold D**, Hoppe B, Braicu E I, Sehouli J, Ehlers M, Berger M, Tauber R and Blanchard V, Sialic acid methylation refines capillary electrophoresis laser-induced fluorescence analyses of immunoglobulin G N-glycans of ovarian cancer patients, *Electrophoresis*, Vol. 35, No. 7, pp. 1025-1031, 2014.
- (4) Hess C, Winkler A, Lorenz A K, Holecska V, Blanchard V, Eiglmeier S, Schoen A L, Bitterling J, Stoehr A D, **Petzold D**, et al., T cell-independent B cell activation induces immunosuppressive sialylated IgG antibodies, *J. Clin. Invest.*, Vol. 123, No. 9, pp. 3788-3796, 2013.
- (5) Oefner C M, Winkler A, Hess C, Lorenz A K, Holecska V, Huxdorf M, Schommartz T, **Petzold D**, et al., Tolerance induction with T cell-dependent protein antigens induces regulatory sialylated IgGs, *J. Allergy Clin. Immunol.*, Vol. 129, No. 6, pp. 1647-1655, 2012.
- (6) Karsten C M, Pandey M K, Figge J, Kilchenstein R, Taylor P R, Rosas M, McDonald J U, Orr S J, Berger M, **Petzold D**, et al., Anti-inflammatory activity of IgG1 mediated by Fc galactosylation and association of Fc $\gamma$ RIIB and dectin-1, *Nat. Med.*, Vol. 18, No. 9, pp. 1401-1406, 2012.
- (7) Ye S, Ann Berger A, **Petzold D**, Reimann O, Matt B, Koksch B, Chemical aminoacylation of tRNAs with fluorinated amino acids for in vitro protein mutagenesis, *Beilstein J. Org. Chem.*, Vol. 6, No. 40, 2010.