

Bettina Warscheid, Prof. Dr.

Institution: Institute of Biology II, Faculty of Biology, University of Freiburg, Schänzlestr. 1, 79104 Freiburg
Contact: Phone: +49-761-203-2690, Email: bettina.warscheid@biologie.uni-freiburg.de
Position: Full Professor (W3) for Functional Proteomics

Academic education including academic degrees

1991 – 1997 Study of Chemistry, Technical University Dortmund, Diploma

Scientific graduation

1997 – 2002 PhD, Analytical Chemistry, Leibniz-Institute of Analytical Sciences, Dortmund (supervisor: Prof. Dr. Thorsten Hoffmann)

Employment

Since 2010 Full Professor (W3) for Functional Proteomics, BIOSS – Centre for Biological Signalling Studies and Faculty of Biology, University of Freiburg
2009 – 2010 Professor (W2) for Clinical and Cellular Proteomics, Medical Faculty and Centre for Medical Biotechnology, University of Duisburg-Essen
2004 – 2009 Junior-Professor (W1) for Protein Mass Spectrometry, University of Bochum
2003 – 2010 Group leader, Medical Proteome-Centre, University of Bochum
2002 – 2003 Postdoc, University of Maryland, College Park, MD, USA

Other activities, awards and honours

Since 2016 Dean of the Faculty of Biology, University of Freiburg
2014 – 2016 Academic Dean of Student Affairs, Faculty of Biology, University of Freiburg
Since 2013 Member of the DFG-TRR 'B Cells: Immunity and Autoimmunity' (Speaker: Prof. Dr. Lars Nitschke, DFG-TRR130)
Since 2010 Member of the BIOSS Steering Board
Since 2010 Member of the board of directors, 'Zentrum für BioSystemAnalyse' (ZBSA)
Since 2010 Member of the executive board of the Excellence Cluster BIOSS
2010 Innovative research project award, Structural and Innovation Fond for Research (SI-BW), a program to support top professorial appointments by the Ministry of Science, Research and the Arts Baden-Württemberg
2004 – 2010 Member of the DFG-CRC 'GTP- and ATP-dependent Membrane Processes' (Speaker: Prof. Klaus Gerwert, DFG-SFB 642)
2002 – 2003 DFG fellowship for research in the laboratories of Prof. Catherine Fenselau at the University of Maryland, College Park, MD, and Prof. Robert Cotter at the Johns Hopkins University, School of Medicine, Baltimore, MD, USA
1996 Undergraduate studies fellowship from the German Academic Exchange Program for research stay at Leiden University, NL

Ten most important publications

Mitochondrial proteins: from biogenesis to functional networks.

Pfanner N, Warscheid B, Wiedemann N (2019).
Nat Rev Mol Cell Biol. 20(5):267-284

Quantitative proteomics identifies redox switches for global translation modulation by mitochondrially produced reactive oxygen species.

Topf U, Suppanz I, Samluk, L, Wrobel L, Böser A, Sakowska P, Knapp B, Pietrzyk MK, Chacinska A*, Warscheid B* (2017). Nat Commun. 2017; 9:324.

Definition of a high confidence mitochondrial proteome at quantitative scale.

Morgenstern M, Stiller SB, Lübbert P, Peikert CD, Dannenmeier S, Drepper F, Weill U, Höß P, Feuerstein R, Gebert M, Bohnert M, van der Laan M, Schuldiner M, Schütze C, Oeljeklaus S, Pfanner N, Wiedemann N*, Warscheid B* (2017). Cell Rep. 9:2836-2852.

Charting organellar importomes by quantitative mass spectrometry.

Peikert CD, Mani J, Morgenstern M, Sandro K, Knapp B, Wenger C, Harsman A, Oeljeklaus S, Schneider A*, Warscheid B* (2017).
Nat Commun. 8, 15272. *corresponding

Myofibrillar Z-discs are a protein phosphorylation hot spot with protein kinase C (PKC α) modulating protein dynamics.

Reimann L, Wiese H, Leber Y, Schwäble AN, Fricke A, Rohland A, Knapp B, Peikert CD, Drepper F, van der Ven PFM, Radziwill G, Fürst DO, Warscheid, B (2016).
Mol Cell Proteomics 16, 346-67.

Mistargeted mitochondrial proteins activate a proteostatic response in the cytosol.

Wrobel L, Topf U, Bragoszewski P, Wiese S, Sztolszener ME, Oeljeklaus S, Varabyova A, Lirski M, Chroscicki P, Mroczek S, Januszewicz E, Dziembowski A, Koblowska M, Warscheid B*, Chacinska A (2015)*. Nature 524, 485-8. *corresponding

Functional proteomics identifies acinus L as a direct insulin- and amino acid-dependent mammalian target of rapamycin complex 1 (mTORC1) substrate.

Schwarz JJ, Wiese H, Tölle RC, Zarei M, Dengjel J, Warscheid B*, Thedieck K (2015)*.
Mol Cell Proteomics 14, 2042-55. *corresponding

The membrane proteome of sensory cilia to the depth of olfactory receptors.

Kuhlmann K, Tschapek A, Wiese H, Eisenacher M, Meyer HE, Hatt HH, Oeljeklaus S, Warscheid B (2014). Mol Cell Proteomics 13, 1828-43.

MITRAC links mitochondrial protein translocation to respiratory-chain assembly and translational regulation.

Mick DU, Dennerlein S, Wiese H, Reinhold R, Pacheau-Grau D, Lorenzi I, Sasarman F, Weraarpachai W, Shoubridge EA, Warscheid B, Rehling P (2012).
Cell. 151(7):1528-41.

Identification of core components and transient interactors of the peroxisomal importomer by dual-track SILAC analysis.

Oeljeklaus S, Reinartz BS, Wolf J, Wiese S, Tonillo J, Podwojski K, Kuhlmann K, Stephan C, Meyer HE, Schliebs W, Brocard C, Erdmann R, Warscheid B (2012).
J Proteome Res. 11(4):2567-80.