

#### **Ansgar Potesch**

# Brief and Interests

Professor Ansgar Poetsch received his PhD from the Technical University of Darmstadt, Germany. He has served as professor at Universities in Germany, UK and China, including Ruhr University Bochum, University of Plymouth, and National Laboratory for Marine Science and Technology in Qingdao.

Professor Ansgar Poetsch has received prestigious awards including the CAS President' s Fellowship, National Science Fund Distinguished Young Scholars Award, and Feodor Lynen Research Fellowship. He currently serves as Professor and Director of the Center for Proteomics and Metabolomics at Nanchang University School of Medicine. He has served as Guest Professor at Ocean University China (Qingdao) and Ruhr University Bochum (Germany). His research focuses on developing and applying proteomics, metabolomics and chemical biology technologies.

# • Professional Experience

Feb 2022 - Present, Professor, Nanchang University, School of Medicine (Queen Mary College), China

Jul 2019 - Mar 2022, Professor, Proteomics & Metabolomics platform of Pilot National Lab for Marine Research, National Laboratory for Marine Science and Technology in Qingdao, China Jan 2017 - Jun 2019, Associate Professor, Faculty of Medicine, University of Plymouth, UK Oct 2002 - Jan 2017, Associate Professor, Department of Biology, Ruhr University Bochum, Germany

# Education

Feb 2001 - Jul 2005, MSc, Bioinformatics, University of Manchester, UK
Oct 1995 - May 1999, PhD, Biophysical Chemistry, Technical University of Darmstadt, Germany
Oct 1993 - Sep 1995, MSc, Chemical Engineering Technical University of Darmstadt, Germany
Oct 1990 - Sep 1993, BSc, Chemical Engineering, Technical University of Darmstadt, Germany

### • Honors and Awards

2022, Fellow of the "Thousand Talents Program", Jiangxi Province, China 2018, Fellow of the Higher Education Academy of UK 2014, Chinese Academy of Sciences President's Fellowship 2009, BMBF junior research group 2004, HUPO Young Scientist Award 2000, Feodor-Lynen Fellowship

### • Professional Memberships and Associations

Memberships: German Society for Applied Microbiology, German Proteome Society, HUPO Editor & Reviewer:

Editor - Biology

Guest Editor - Frontiers in Microbiology

Ad-hoc referee for journals - Nature Protocols, Proteomics, Journal of Proteome Research, etc.

Ad-hoc referee for funding bodies - DFG, BBSRC, EU

#### Representative publications

1. Chen, X.; Poetsch,A. , The Role of Cdo1 in Ferroptosis and Apoptosis in Cancer. Biomedicines, 2024, 12, 918.

2. Jian, H.; Poetsch, A. , CASZ1: Current Implications in Cardiovascular Diseases and Cancers. Biomedicines, 2023, 11, 2079.

3. Schmidt, A., Frei, J., Poetsch, A., et al., MeCP2 heterochromatin organization is modulated by arginine methylation and serine phosphorylation. Front Cell Dev Biol, 2022, 10: p. 941493.

4. Luenenschloss, A., Veld, F., Albaum, S., Neddermann, T., Wendisch, V., Poetsch, A., et al., Functional Genomics Uncovers Pleiotropic Role of Rhomboids in Corynebacterium glutamicum. Frontiers in Microbiology, 2022. 13.

5. Marchesini MI, PoetschA., Guidolin L.S., Comerci D.J. Brucella abortus Encodes anActive Rhomboid Protease: Proteome Response after Rhomboid Gene Deletion. Microorganisms, 2022;10(1).

6. Trötschel, C., Hamzeh, H., Alvarez, L., Pascal, R., Lavryk, F., Poetsch, A., et al., Absolute proteomic quantification reveals design principles of sperm flagellar chemosensation. Embo j, 2020. 39(4): p. e102723.

7. Chaoyun, Chen., Harst, W., WuxinY., Poetsch,A., et al., Proteomic study uncovers molecular principles of single-cell-level phenotypic heterogeneity in lipid storage of Nannochloropsis oceanica. Biotechnol Biofuels, 2019. 12: p. 21.

8. Ogorodnikov,A., Poetsch, A., et al., Transcriptome 3 ' end organization by PCF11 links alternative polyadenylation to formation and neuronal differentiation of neuroblastoma. Nature Communications, 2018. 9(1): p. 5331.

9. Guevara, C.R.; Philipp, O.; Hamann, A.; Werner, A.; Osiewacz, H.D.; Rexroth, S.; Rögner, M., Poetsch, A., et al., Global Protein Oxidation Profiling Suggests Efficient Mitochondrial Proteome Homeostasis During Aging. Mol Cell Proteomics, 2016. 15(5): p. 1692-709.

10. Cerletti, M., Paggi, R.A., Guevara, C.R., Poetsch, A., et al., Global role of the membrane

protease LonB inArchaea: Potential protease targets revealed by quantitative proteome analysis of a lonB mutant in Haloferax volcanii. J Proteomics, 2015. 121: p. 1-14.

11. Vera, M., Krok, B., Bellenberg, S., Sand. W., Poetsch, A., Shotgun proteomics study of early biofilm formation process of Acidithiobacillus ferrooxidans ATCC 23270 on pyrite. Proteomics, 2013. 13(7): p. 1133-44.

12. Trotschel, C., et al., Protein turnover quantification in a multilabeling approach: from data calculation to evaluation. Mol Cell Proteomics, 2012. 11(8): p. 512-26.

13. Rietschel, B., Tabiwang, N., Arrey, B., Meyer1, A., Bornemann1, S., Schuerken1, M., Poetsch, A., et al., Elastase digests: new ammunition for shotgun membrane proteomics. Mol Cell Proteomics, 2009. 8(5): p. 1029-43.

14. Gertz, M., Seelert, H., Dencher, N., Poetsch, A., et al., Interactions of rotor subunits in the chloroplast ATP synthase modulated by nucleotides and by Mg2+. Biochim Biophys Acta, 2007. 1774(5): p. 566-74.

15. Fischer, F., Wolters, D., Rögner, M., Poetsch, A., et al., Toward the complete membrane proteome- High coverage of integral membrane proteins through transmembrane peptide detection. Molecular & Cellular Proteomics, 2006. 5(3): p.444-453.

16. Poetsch, A., L. Molday, and R. Molday, The cGMP-gated channel and related glutamic acid-rich proteins interact with peripherin-2 at the rim region of rod photoreceptor disc membranes. Journal of Biological Chemistry, 2001. 276(51): p.48009-48016.

17. Seelert, H., Poetsch, A., et al., Structural biology- Proton-powered turbine of a plant motor. Nature, 2000. 405(6785): p. 418-419.