

Mechanobiology Meets Proteostasis 2.0

DFG FOR 2743 - Conference 2025

September 30 - October 2, 2025

University of Bonn, Hörsaalzentrum Poppelsdorf



Sep 30

12.00 - 13.00 Registration and Snacks

13.00 - 13.10 Jörg Höhfeld (Institute for Cell Biology, University of Bonn)
Welcome

13.10 - 13.50 Ivan Dikic (Institute of Biochemistry II, Goethe University Frankfurt)
Proteostasis and cryptic splicing

13.50 - 14.30 Jörg Höhfeld (Institute for Cell Biology, University of Bonn)
BAG3-mediated mechanical stress protection

14.30 - 15.10 Lea Sistonen (Faculty of Science and Engineering, Cell Biology, Åbo Akademi University, Turku)
Interacting Partners and Targets of Heat Shock Factors in Cell Stress and Cell Adhesion

15.30 - 16.00 Coffee Break

16.00 - 16.40 Dieter O. Fürst (Institute for Cell Biology, University of Bonn)
The role of podin proteins in mechanical stress protection in muscle

16.40 - 17.20 Wolfgang Linke (Institute of Physiology II, University Hospital Münster)
The role of the giant muscle protein titin in sarcomere maintenance and mechanical connectivity

17.20 - 18.00 Sebastian Gehlert (Institute of Sports Science, University of Hildesheim)
Investigating mechano-protective mechanisms in human skeletal muscle

Oct 1

- 09.00 - 09.40 Bernd Hoffmann (Institute of Complex Systems, Forschungszentrum Jülich)
Mechanosensors under stress - Unravelling the interplay between protein unfolding, signalling and proteolysis
- 09.40 - 10.20 Dietmar Manstein (Medizinische Hochschule Hannover)
Allostery in Motion: The Regulatory Landscape of Contractile Proteins
- 10.30 - 11.00 Coffee Break
- 11.00 - 11.40 Thorsten Hoppe (CECAD, Institute of Genetics, University of Cologne)
Stress-induced regulation of the myosin-directed quality control network
- 11.40 - 12.20 Bernd Bukau (ZMBH and DKFZ, Heidelberg)
Mechanism of co-translational folding and assembly of proteins
- 12.20 - 13.00 Vincent Timmerman (Peripheral Neuropathy Research Group, University of Antwerp)
Small heat shock proteins and their pathomechanistic role in mitochondria and for autophagy
- 13.00 - 14.30 Snacks and Posters
- 14.30 - 15.10 Michael Hesse (Life & Brain Center, University Hospital Bonn)
Pathomechanism of BAG3-associated myofibrillar myopathy
- 15.10 - 15.50 Carsten Grashoff (Institute of Integrative Cell Biology and Physiology, University of Münster)
Conservation of talin-mediated force coupling in eukaryotic cell-substrate adhesion
- 16.00 - 16.30 Coffee Break

16.30 - 17.10 Bettina Warscheid (Theodor-Boveri-Institute, Biocenter, Universität Würzburg)
Disentangling protein signalling networks in contracting myotubes

17.10 - 17.50 Maja Köhn (Institute for Cell Biology, University of Bonn)
Studying protein phosphatases with chemical biology tools

18.30 - end Speakers' Dinner

Oct 2

09.00 - 09.40 Dominic Winter (Research Center One Health Ruhr of the University of Duisburg-Essen)
Absolute Quantification Reveals Lysosomal Proteome Stoichiometry and Dynamics

09.40 - 10.20 Markus Rinschen (Center for Metabolomics and Mass Spectrometry, The Scripps Research Institute, La Jolla, and Department II of Internal Medicine and Center for Molecular Medicine, University of Cologne)
Mechanical stress protection at the kidney filtration barrier

10.30 - 11.00 Coffee Break

11.00 - 11.40 Pitter F. Huesgen (CIBSS-Centre for Integrative Biological Signaling Studies, University of Freiburg)
Proteolytic regulation of protein abundance and function under mechanical stress

11.40 - 12.20 Lydia Sorokin (Institute of Physiological Chemistry and Pathobiochemistry, University of Münster)
Biochemical and mechanical signals in leukocyte transmigration of vascular basement membranes

12.20 - 13.00 Carien Niessen (Department of Cell Biology of the Skin and CECAD, University of Cologne)
Mechanical stress responses in epithelial barriers

13.00 - 13.10 J. Höhfeld (Bonn)

Concluding remarks

Conference free of charge

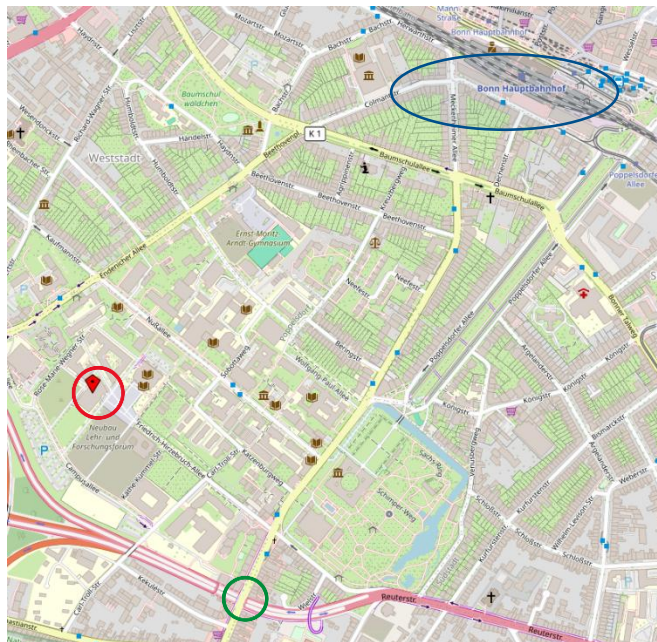
Please register under: msp2025@uni-bonn.de

13.10 - 14.00 Lunch Snacks and Farewell

Conference venue: Hörsaalzentrum Poppelsdorf, Friedrich-Hirzebruch-Allee 5, 53115 Bonn

Conference hotel: Best Western Hotel President, Clemens-August-Straße 32-36 53115 Bonn

Bonn Main Station



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