KEYSTONE SYMPOSIA
on Molecular and Cellular Biology

Targeted Protein Degradation: From Small Molecules to Complex Organelles (EK40)

June 7-8, 2021 • Virtual at your computer

Scientific Organizers: Sascha Martens, Tim Clausen and Judith Frydman

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MONDAY, JUNE 7

Protease Machines (8:00am Denver/Mountain Time Start)

*__Eilika Weber-Ban__, ETH Zürich, Switzerland
Substrate Recruitment to Proteasomal Degradation in Mycobacteria

*__Tim Clausen__, Research Institute of Molecular Pathology, IMP, Austria
Regulation, Substrate Targeting and Reprogramming of the Bacterial ClpC:ClpP Protease

Kylie J. Walters, NCI, National Institutes of Health, USA
Structural and Mechanistic Insights into Proteasome Function

Michal Sharon, Weizmann Institute of Science, Israel
Specific Regulation of the 20S Proteasome Complex

Daniel J. Finley, Harvard University, USA
Proteome Remodeling by the Ubiquitin-Proteasome System

Yangnan Gu, University of California Berkeley, USA
Short Talk: Proximity Labeling Proteomics Reveals Critical Regulators for Inner Nuclear Membrane Protein Degradation in Plants

John Hanna, 275.00
Short Talk: Structures of Chaperone-Associated Assembly Intermediates Reveal Coordinated Mechanisms of Proteasome Biogenesis

Yue Feng, 150.00
Short Talk: Serine and Threonine Phosphorylation Marks Proteins for Degradation by Mitochondrial ClpXP

Poster Session (11:30am Denver/Mountain Time Start)

Meet the Editors (12:30pm Denver/Mountain Time Start)

Shawnna Buttery, STAR Protocols - Cell Press, USA
Angela R. Parrish, Nature Communications, USA
Martina Rembold, EMBO Reports, Germany
Nonia Pariente, PLOS Biology, UK
Petra Gross, Journal of Cell Science, The Company of Biologists, UK

Networking Lounge (2pm Denver/Mountain Time Start)

Autophagy and Lysosomal Degradation Pathways (3:00pm Denver/Mountain Time Start)

*__Sascha Martens__, University of Vienna, Austria
Protein Degradation by Selective Autophagy

Anne Simonsen, University of Oslo, Norway
Selective Autophagy Pathways

*__Malene Hansen__, Sanford Burnham Prebys Medical Discovery Institute, USA
Role of Autophagy in Aging and Disease

Hong Zhang, Chinese Academy of Sciences, China
Phase Separation and Autophagy

Jonathan Goodwin, Casma Therapeutics, USA
Control of TFEB/TFE3 Family Transcription Factors through FLCN Sequestration

Alessio Reggio, 275.00
Short Talk: Role of FAM134 Family Members in Endoplasmic Reticulum Remodeling, ER-Phagy and Collagen Quality Control

Chunmei Chang, 275.00
Short Talk: Reconstitution of Cargo-Induced LC3 Lipidation in Mammalian Selective Autophagy

Liang Ge, 275.00
Short Talk: Multiple Chaperones Function as Autophagic Receptors for Aggreghagy

TUESDAY, JUNE 8

Signaling Degradation (8am Denver/Mountain Time Start)

*__Brenda A. Schulman__, Max Planck Institute of Biochemistry, Germany
Cullin-RING E3 Ligase Specificity

*__Raymond J. Deshaies__, Amgen, Inc., USA
Reprogramming E3-Ligases using Small Molecules

Ivan Dikic, Goethe University Medical School, Germany
Targeting Ubiquitin Signaling in Infectious Diseases

J. Wade Harper, Harvard Medical School, USA
Proteomics of Ubiquitin Signaling

Ingrid E. Wertz, Bristol Myers Squibb, USA
Co-opting the Ubiquitin System for Therapeutic Benefit

Nicolas H. Thomä, Friedrich Miescher Institute for Biomedical Research, Switzerland
Diversion of E3 Ligase Function by Small Molecules

Mikolaj Slabicki, 275.00
Short Talk: Functional Genomic Dissection of the Mechanisms of Molecular Glue Degraders

Career Roundtable (12pm Denver/Mountain Time Start)

Kylie J. Walters, NCI, National Institutes of Health, USA
Ingrid E. Wertz, Bristol Myers Squibb, USA
Judith Frydman, Stanford University, USA

Proteostasis and Proteome Remodeling (3pm Denver/Mountain Time Start)

*__Judith Frydman__, Stanford University, USA
Interplay between Chaperones and Degradation Machineries

Ursula Jakob, University of Michigan, USA
Protein Degradation in Response to Reactive Oxygens

*__Della David__, Eberhard Karls Universität Tübingen, Germany
Mechanisms to Prevent Age-Dependent Protein Aggregation

Eric J. Bennett, University of California, San Diego, USA
Tuning Translation with Ubiquitin

Carolyn R. Bertozzi, Stanford University, USA
Targeted Protein Degradation through the Endosome/Lysosome Pathway

Richa Sardana, Cornell University, USA
Short Talk: Quality Control of Mistargeted Membrane Proteins: Ubiquitin-Mediated Sorting to the Lysosome for Degradation

Vinay Verghese Eapen, 275.00
Short Talk: Quantitative Proteomics Reveals the Selectivity of Ubiquitin-Binding Autophagy Receptors in the Turnover of Damaged Lysosomes by Lysophagy

Serena Carra, 275.00
Short Talk: Hsp90-Mediated Regulation of DYRK3 Couples Stress Granule Disassembly to Stress Adaptation and Cell Growth: Implications for Amyotrophic Lateral Sclerosis

Closing Remarks (5:50pm Denver/Mountain Time Start)