SUNDAY, JANUARY 23
Arrival and Registration

MONDAY, JANUARY 24
Welcome and Keynote Address (J6)
Benjamin L. Ebert, Dana-Farber Cancer Institute, USA
Targeted Protein Degradation for the Treatment of Cancer

Welcome and Keynote Address (J5)
Eric J. Bennett, University of California, San Diego, USA
Phosphoribosyl-Dependent Ubiquitination and Pathogenesis

Proteolysis Targeting Chimeras (PROTACs) (J6)
Alessio Ciulli, University of Dundee, School of Life Sciences, UK
Structural Chemical Biology and Insights into PROTAC Mechanism of Action

Nathanael Gray, Stanford University, USA
Targeting Kinases Via Protein Degradation

Shaomeng Wang, University of Michigan, USA
Targeting Transcriptional Factor STAT3 and Other STAT Proteins by PROTAC

Bikash Adhikari, University of Wuerzburg, Germany
Short Talk: Targeted Protein Degradation of Oncogenic Proteins using PROTACs

Charlotte Crowe, University of Dundee, UK
Short Talk: Novel Biophysical Assays for Small-Molecule Mediated Ternary Complex Formation and Ubiquitination

Regulating Nuclear Function with Ubiquitin (J5)
Michael Rape, University of California, Berkeley, USA
Goran Kokic, Max Planck Institute for Biophysical Chemistry, Germany
Transcription-coupled DNA Repair: Lessons Learned on the Ubiquitylation of Complex Substrates

Tom Deegan, University of Edinburgh, UK
Short Talk: A Conserved Mechanism for Regulating Replication Ubiquitylation and Disassembly in Eukaryotes

Jo R. Morris, University of Birmingham, UK
SUMOylation in the DNA Double-Strand Break Response

Niels Mailand, University of Copenhagen, Denmark
Ubiquitin-Dependent Signaling in the DNA Damage Response

Stefan Muller, Goethe University Frankfurt, Germany
Short Talk: Safeguarding Proteome and Genome Integrity by Sumo-ubiquitin Networks

Imke Leonie Lemmer, LMU Munich, Germany
Short Talk: Nfe2l1 Shapes the Muscle Ubiquitome to Regulate Fiber Type and Metabolic Fitness

Mechanisms of Protein Ubiquitylation and Degradation (Joint)
Ingrid E. Wertz, Bristol Myers Squibb, USA
Brenda A. Schulman, Max Planck Institute of Biochemistry, Germany
Cullin-RING E3 Ligation Mechanisms

Weaam Ibrahim Mohamed, Institute of Biochemistry, Switzerland
Short Talk: Regulation of RING E3 Ubiquitin Ligases by Oligomerization: What do we Learn from CRL4(DCAF1) and the hGID Complexes?

Kylie J. Walters, NCI, National Institutes of Health, USA
Outskirts of the Proteasome: Substrate Receptors and Beyond

Nicolas H. Thomä, Friedrich Miescher Institute for Biomedical Research, Switzerland
The Zinc Finger Degrome

Hadir Marei, Genentech, Roche, USA
Short Talk: Leveraging E3 Ubiquitin Ligases as Cell Surface Degraders

Poster Session 1

TUESDAY, JANUARY 25
Strategies for Therapeutic Targeting of the Ubiquitin Proteasome System (Joint)
Brenda A. Schulman, Max Planck Institute of Biochemistry, Germany
Sara Buhrlage, Dana-Farber Cancer Institute, USA
Approaches to Identify New DUB Inhibitors

Mikko Taipale, University of Toronto, Canada
Functional Proteomics by Induced Proximity

Eva d’Hennezel, Novartis Institutes of Biomedical Research, USA
Strategies for Therapeutic Targeting of the UPS (cont)

Simone Bonazzi, Novartis Institutes of Biomedical Research, USA
Strategies for Therapeutic Targeting of the UPS (cont)

Ingrid E. Wertz, Bristol Myers Squibb, USA
Identification, Development, and Characterization of Inhibitors for Deubiquitinating Enzymes

Mandeep Kaur Mann, University of Toronto, Canada
Short Talk: Discovery of First-in-class USP5 Inhibitors

Ashley Philip Dudey†, University of East Anglia, UK
Short Talk: Developing Novel WWP1 and WWP2 Ubiquitin Ligase Ligands and Inhibitors

Poster Session 2

Workshop: Emerging Themes in Ubiquitin Biology (J5)
Eric J. Bennett, University of California, San Diego, USA

* Session Chair † Invited but not yet accepted  Program current as of December 23, 2021. Meal formats are based on meeting venue.
For the most up-to-date details, visit https://www.keystonesymposia.org.
Thang V. Nguyen, University of Missouri, School of Medicine, USA
USP15 Antagonizes CRL4CRBN-mediated Ubiquitylation of Glutamine Synthetase and Neo-substrates

Darren M. O'Hara, Almac Discovery, UK
Discovery of a Novel USP19 Inhibitor with Muscle Sparing Activity in vivo

Jason Q. Tang, University of Toronto, Canada
Expanding the Druggable Space for USPs by Targeting Accessory Domains

Sammy Villa, University of California, USA
The OTUD6 Deubiquitinase Associates with 40S Ribosomes to Regulate Translation and Responses to Stressors in Drosophila

Jonathan W. Bushman, Harvard Medical School, USA
Proteomics-Based Identification of DUB Substrates Using Selective Inhibitors

Alexa Nadine Wilson, Dalhousie University, Canada
Stressed Out: How a Herpesvirus E3 Ubiquitin Ligase Targets the Cellular Stress Response

Ivan Mwebaza, Case Western Reserve University, USA
Mycobacterium Tuberculosis Derived Mannosylated Lipoarabinomannan Upregulates E3 Ligases that Mediate Degradation of Proximal TCR Signaling Kinases in Human CD4+ T Cells Leading to Suboptimal Activation

Sonya Neal, University of California, San Diego, USA
The Role of Rhomboid Pseudoprotease Dfm1 in ERADicating Misfolded Membrane Proteins

Olivia Rissland, University of Colorado School of Medicine, USA
Short Talk: Clearance of Maternal Proteins during Early Embryogenesis

Susan Shao, Harvard Medical School, USA
Mechanisms of Ribosome-Associated Protein Degradation

WEDNESDAY, JANUARY 26

Novel Approaches to the Development and Discovery of Molecular Glues (J6)

Anita K. Gandhi, Bristol-Myers Squibb, USA
Emerging CELMoDs in Hematological Malignancies

Daniel K. Nomura, University of California, Berkeley, USA
Reimagining Druggability using Chemoproteomic Platforms

Georg E. Winter, CeMM Research Center for Molecular Medicine, Austria
Chemical Genomics Approaches to Targeted Protein Degradation

Ekaterina Vinogradova, Rockefeller University, USA
Covalent Small-Molecule Protein Degraders

Carles Galdeano, University of Barcelona, Spain
Short Talk: Expanding the Toolbox of E3 Ligases with Structure-based Approaches

Fatemeh Keramatnia, St. Jude Children's Research Hospital, USA
Short Talk: Targeting GSPT1 by a Novel Cereblon E3 Ligase Modulator for the Treatment of Acute Lymphoblastic Leukemia

New Paradigms in Protein Ubiquitylation (J5)

*Susan Shao, Harvard Medical School, USA
Short Talk: Selective Destabilization of Polypeptides Synthesized from Glutamine Synthetase and Neo-substrates

Heran Darwin, New York University School of Medicine, USA
Proteasomal Regulation of Mycobacterial Virulence

Katerina Artavanis-Tsakonas, University of Cambridge, UK
How Parasites Interfere with and Manipulate the Host Ubiquitin-Proteasome System

Emily Troemel, University of California, San Diego, USA
Ubiquitin Signaling within the Intracellular Pathogen Response Pathway

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Methodologies and Technologies for the Investigation of Protein Degradation (J6)
Steven P. Gygi, Harvard Medical School, USA  
Reimagining Fragment Based Multiplexed Chemical Proteomics for Cell Based Screening of Large Electrophile Libraries

Rajesh Chopra, Apple Tree Partners, USA  
Phenotypic Screens for Identifying Modulators of E3 Ligase Function

Speaker to be Announced

Lewis A. Macdonald, University of Edinburgh, UK  
Short Talk: Auxin-inducible Protein Degradation in CRISPR-engineered Mice

Ubiquitin System Dysregulation in Disease (J5)  
*Sonya Neal, University of California, San Diego, USA  
Michael Rape, University of California, Berkeley, USA  
The Role of Heterotypic Ubiquitin Chains in Protein Quality Control

J. Wade Harper, Harvard Medical School, USA  
Systematic Analysis of Ubiquitin System Dysfunction in Mitochondrial Disorders

James A. Olzmann, University of California, Berkeley, USA  
Lipid Droplet Proteome Dynamics and lipotoxicity

Achim Werner, NIDCR, National Institutes of Health, USA  
Short Talk: Ubiquitin-dependent Restriction of CDC42 Signaling Specifies Embryonic Patterning

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (J6)

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (J5)

THURSDAY, JANUARY 27

Departure