SUNDAY, JANUARY 21
Arrival and Registration

MONDAY, JANUARY 22
Welcome and Keynote Address (Joint)
Ning Zheng, University of Washington, USA
Targeting Ubiquitin Ligases: From Hormones to Metabolites

Mechanisms of the Ubiquitin System (Joint)
Brenda A. Schulman, Max Planck Institute of Biochemistry, Germany
Structural Mechanisms of Dynamic Multiprotein E3 Ligases
Michael Rape, University of California, Berkeley, USA
Novel Cullin-RING E3 Ligase Mechanisms Discovered through Deciphering Pathways Underlying Cellular Differentiation
Henry M. Colecraft, Columbia University, USA
Developing Targeted Deubiquitination: Opportunities for Therapeutic Protein Stabilization
Jin Wang, Baylor College of Medicine, USA
Short Talk: Unexpected Discoveries Through Developing BTK PROTACs
Ana Marcu, Genentech Inc., USA
Short Talk: Developing Discovery Proteomics Technologies to Elucidate HLA Neoantigen Presentation

Workshop (Q3)
Sebastian Kenny, University of Washington, USA
De novo Design of Virus-Inspired ‘Molecular Glues’ to Efficiently Degrade Target Proteins
Hai-Tsang Huang, Broad Institute, USA
Profiling E3 Substrate Ubiquitylation by Ubiquitin-specific Proximity Labeling
Justin Reitsma, AbbVie, Inc., USA
Degradation Speedometer: Quantitative Measurement of Degradation Rate of Targeted Protein Degradation
Jessie Kroonen, UMC Utrecht, Netherlands
Employing Membrane-bound E3 Ligases for Targeted Degradation of Cell Surface Proteins using SureTACs Technology
Hui Myeong Wang, Postech, South Korea
Encoded Display of Chemical Libraries on Nanoparticles for Rapid Discovery of Potent Protein Ligands
Shourya S. Roy Burman, Dana-Farber Cancer Institute, USA
Continuous Evolution of Compact Protein Degradation Tags Regulated by Selective Cereblon Molecular Glues
Lori Emert-Sedlak, University of Pittsburgh School of Medicine, USA
Targeted Degradation of HIV-1 Nef Efficiently Restores Cell-surface CD4 and MHC-I Expression and Blocks HIV-1 Replication

Juliane Elisabeth Müller, Julius-Maximilians-Universität Würzburg, Germany
Targeted Protein Degradation Reveals a Scaffolding Function of Aurora-A Kinase

Chemical Biology of Protein Degradation (Q3)
Alessio Ciulli, University of Dundee, School of Life Sciences, UK
How PROTAC Degraders Work and Why the Ternary Complex Matters
Nathanael Gray, Stanford University, USA
Transcription Factor Chemical Induced Proximity – Reprogramming Cellular Function
James E. Bradner, Novartis, USA
The Chemical Biology of Targeted Protein Degradation
Ashley Julio, UCLA, USA
Short Talk: Pervasive Aggregation and Degradation of Host and Viral Proteins in Response to Cysteine-Reactive Electrophilic Compounds
Brian B. Liu, Harvard University, USA
Short Talk: Chemical Facsimile of KBTBD4 Cancer Mutations Promotes Corepressor Degradation

Emerging Proximity Biology for Target Degradation (Q4)
Leon O. Murphy, Casma Therapeutics, USA
Drugging the Autophagy-Lysosomal Pathway
Cristina Mayor-Ruiz, IRB Barcelona, Spain
Chasing Molecular Glue Degraders
Ryan Potts, Amgen, USA
RNATACs: Targeted mRNA Degradation
William J. Gibson, Dana Farber Cancer Institute, USA
Short Talk: Bidirectional Molecules that Induce Nuclear Localization and Targeted Transcriptional Regulation
Ziwen Jiang, University of California, San Francisco, USA
Short Talk: Autophagy Receptor-inspired Antibody-fusion Proteins for Targeted Intracellular Degradation

Poster Session 1

TUESDAY, JANUARY 23
Strategies and Targets for Therapeutics in the Ubiquitin Proteasome System (Q3)
Russell A. DeBose-Boyd, University of Texas Southwestern Medical Center, USA
Proteostatic Control of the Cholesterol Biosynthetic Pathway
Raymond J. Deshaies, Amgen, Inc., USA
Cutting-Edge Developments in Targeted Protein Degradation
Nicolas H. Thomä, Friedrich Miescher Institute for Biomedical Research, Switzerland
Mechanisms of Transcriptional Regulation by E3 Ligases and Harnessing for Targeted Protein Degradation

* Session Chair † Invited but not yet accepted  Program current as of January 14, 2024. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.
Tanja Mittag, St. Jude Children's Research Hospital, USA
Malleable Higher-Order Structures in Substrate Receptor SPOP Function and Pathophysiology

Liron Bar-Peled, Massachusetts General Hospital/Harvard Medical School, USA
Short Talk: DrugMap: A Quantitative Pan-Cancer Analysis of Cysteine Ligandability

Stabilizing Protein-Protein Interactions with Molecular Glues (Q4)
Michelle R. Arkin, University of California, San Francisco, USA
Modulating 14-3-3 Interactome

Jan Smith, Revolution Medicines, Inc., USA
Targeting the Oncogenic State of RAS Mutants with Tricomplex Inhibitors

Goutham Narla, University of Michigan Medical School, USA
From Mutations to Molecules: Lessons Learned from Protein Phosphatase 2A

Lindsey Ingerman James, University of North Carolina at Chapel Hill, USA
Recruitment of FBXO22 for Targeted Degradation of NSD2

Ella Livnah, Weizmann Institute of Science, Israel
Short Talk: Rationally Designed Bifunctional Ligands Induce Intracellular Precipitation of Symmetric Protein Targets

Career Roundtable (Joint)
Mishtu Dey, Cell Press, USA

Novel Opportunities in the Ubiquitin System (Q3)
Sara Buhrlage, Dana-Farber Cancer Institute, USA
Harnessing DUBs for Protein Stability Therapeutics

Helen Walden, University of Glasgow, UK
Targeting USP1-UAF1 in DNA Repair

Ivan Dikic, Goethe University Medical School, Germany
Novel Ubiquitin Modifications Deployed by Pathogenic Bacteria

Zacharias Thiel, Novartis Biomedical Research, Switzerland
Short Talk: Identification of New Entry Points for Autophagy-Mediated Targeted Protein and Organelle Degradation using an Induced-Proximity Screen

Predicting and Discovering Ternary Complexes (Q4)
Jesus Izaguirre, Stealth Startup, USA
Towards Rational Design of Selective Protein Degraders

Sharon A. Townson, Monte Rosa Therapeutics, USA
Teaching CRBN New Tricks

Heidi Greulich, Broad Institute of MIT and Harvard, USA
Activation of the SLFN12 RNase by Velcrin-Induced PDE3A-SLFN12 Complex Formation

Praman Chatterjee, Duke University, USA
Short Talk: Design of Programmable Peptide-Guided Proteome Editors via Generative Language Models

Oral PROTAC® Degrader Molecules Selectively Clear Pathologic Proteins Underlying Neurodegenerative Diseases

Angela Cacace, Arvinas Inc, USA
Oral PROTAC® Degrader Molecules Selectively Clear Pathologic Proteins Underlying Neurodegenerative Diseases

Weicheng Li, UCSF, USA
Short Talk: Intracellular Ubiquitination of a Synthetic Small Molecule Inhibits the UPS

Controlling Post-Translational Modifications by Induced Proximity (Q4)
Daniel K. Nomura, University of California, Berkeley, USA
Reimagining Druggability Using Chemoproteomic Platforms

Amit Choudhary, Harvard Medical School, USA
Protein Editing using Small Molecules

Gopal P. Sapkota, University of Dundee, UK
Targeted Ubiquitination and Dephosphorylation of Proteins Through Proximity-Induction

Endri Karaj, Broad Institute of MIT and Harvard, USA
Short Talk: Development of Haptenizing Chimeras from Known Drugs for Cancer Immunotherapy

Lionel Chia, Foghorn Therapeutics, USA
Short Talk: Hijacking the Transcriptional Activation Potential of BAF for Novel Therapeutic Opportunities

Workshop: New Screening and Profiling Technologies (Q4)
Kyle Seamon, Revolution Medicines, USA
Induction of Complexes Between Cyclophilin A and GTP-Bound RAS(ON) Enable Covalent Modification of KRAS(G12D) for Inhibition of G12D-Mutant Cancer Growth

Violeta L. Marin, AbbVie, Inc., USA
CRISPR Screen Reveals BRD2/4 Molecular Glue Degrader Via Recruitment of DCAF16

* Session Chair † Invited but not yet accepted     Program current as of January 14, 2024. Meal formats are based on meeting venue.
For the most up-to-date details, visit https://www.keystonesymposia.org.
Madelon M. Maurice, University Medical Center Utrecht, Netherlands
*Employing Membrane-bound E3 Ligases for Targeted Degradation of Cell Surface Proteins using SureTACs Technology*

Erik Ehinger, La Jolla Institute for Immunology, USA
*Improving Anti-tumor Responses by Degrading Proteins that Impose T Cell Exhaustion*

Development and Discovery of Molecular Glues (Joint)

Eric S. Fischer, Dana-Farber Cancer Institute, USA
*New Mechanism for Protein Degradation Therapeutics*

Mary E. Matyskiela, Neomorph Inc., USA
*Expanding the Target Space of Molecular Glue Degraders*

Keriann Marie Backus, David Geffen School of Medicine at UCLA, USA
*Global Proteome Rewiring by Fragment Electrophiles*

Varun J. Shah, Goethe University, Germany
*Short Talk: Discovery of Novel Molecular Glue Degraders*

Michael A. Erb, The Scripps Research, USA
*Short Talk: Systematic Remodeling of Protein-Ligand Surfaces for Prospective Molecular Glue Discovery*

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q3)

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q4)

THURSDAY, JANUARY 25

Departure