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Ubiquitin & Friends Symposium 2022 April 28–29, 2022

Van Swieten Hall of the Medical University of Vienna

Vienna, Austria

More info: www.protein-degradation.org/symposium













Ce-M-M-Research Center for Mole of the Austrian Academy



Program

THURSDAY, 28 APRIL 2022

- 08:00-09:00 Registration and poster setup
- 09:00-09:15 Introduction by the organizers

SESSION 1	Proteomics and Molecular Tools (chair: Sascha Martens)	
09:15-09:45	Ilaria Piazza, Max-Delbrück-Center for Molecular Medicine, Berlin Protein structures in context with proteome-wide biophysics	
09:45-10:00	Tycho Mevissen, HHMI and Harvard Medical School, Boston Cell-free Trim-Away reveals the mechanism of TRIM21-mediated targeted protein degradation	
10:00-10:30	Kathrin Lang, ETH Zürich Genetic code expansion tools for deciphering the ubiquitin code	
10:30-11:00	Coffee break	
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SESSION 2	Protein Quality Control (chair: Tim Clausen)	
11:00-11:30	Susan Shao, Harvard Medical School Mechanisms of client selection during protein quality control	
11:30-11:45	Natalia Szenkier, Weizmann Institute, Rehovot A cysteine tweezer, oxidative switch, regulates proteasome disassembly	
11:45-12:30	Flash talks 1 – odd poster numbers	
12:30-13:50	Lunch with poster session 1 (odd numbers)	
13:50-14:00	Group photo	
14:00-14:30	Liz Miller, MRC Laboratory of Molecular Biology, Cambridge Translational tuning in response to protein folding and secretion defects	
14:30-14:45	Lisa Merklinger, Technical University of Denmark, Lyngby Phospholipids alter activity and stability of the mitochondrial membrane-bound ubiquitin ligase MARCH5	
SESSION 3	Cellular Homeostasis (chair: Elif Karagöz)	
11.15 15.15	Francesco Licausi University of Oxford	

14:45-15:15 Francesco Licausi, University of Oxford A conserved O₂ sensing mechanism for eukaryotes based on the Ndegron pathway for proteolysis

- 15:15-15:30 Sebastian Guzman Perez, Jagiellonian University, Cracow How an ancient Ubiquitin-like protein delivers sulfur to tRNAs and protects the proteome
- 15:30-16:00 Coffee break
- 16:00-16:30 Michael Rape, UC Berkeley Controlling the cell's powerhouse: the reductive stress response
- 16:30-16:45 Itika Saha, Max Planck Institute of Biochemistry, Martinsried The AAA+ chaperone VCP disaggregates Tau fibrils and generates aggregate seeds
- 16:45-17:15 Flash talks 2 even poster numbers
- 17:15-19:00 Wine Reception sponsored by <u>Proxygen</u> with poster session 2 (even numbers)
- 19:15 Conference dinner (Stiegl Ambulanz)



Friday, 29 APRIL 2022

	Protain Degradation Thorspoutice (chair: Goorg Winter)	
3E33IOIN 4	rotein Degradation merapeutics (chair. Georg winter)	
09:00-09:30	Eric Fischer , Dana-Farber Cancer Institute, Harvard Hijacking the Ubiquitin System for Protein Degradation Therapeutics	
09:30-09:45	Francesca Morreale, IMP, Vienna BacPROTACs mediate targeted protein degradation in bacteria	
09:45-10:15	Mikolaj Slabicki, Dana-Farber Cancer Institute, Harvard Drug-induced polymerization	
10:15-10:30	Bryony Kennedy , Queen's University, Belfast The inhibition of the E3 ligase HUWE1 using small molecule inhibitors in multiple myeloma	
10:30-11:00	Coffee break	

SESSION 5	Autophagy	(chair: Yasin Dagdas)
11:00-11:30	Nobuo Noda, Hokkaido University, Sa Regulation of autophagic membrane o system	pporo dynamics by Atg8 lipidation
11:30-11:45	Marion Clavel, GMI, Vienna Cellular cleanup by the autophagy pat survival during infection by multiple vi	hway promotes organismal ruses
11:45-12:00	Jia Xuan Leong, ZMBP University of Ti Battle between bacterial effector and	ibingen olant autophagy

12:00-13:00 Lunch break

SESSION 6	DNA Repair	(chair: Joanna Loizou)
13:00-13:30	Helen Walden, University of Glasgow Structural basis of FANCD2 deubiquitin	nation by USP1-UAF1
13:30-13:45	Tamara Sijacki, MRC Laboratory of Mol Phosphorylation primes FANCD2-FAN DNA crosslink repair	lecular Biology, Cambridge CI for ubiquitination to activate
13:45-14:15	Jesper Svejstrup , University of Copenh The Last Resort Pathway for Contendin Obstructing DNA Damage	agen Ig with Transcription-
14:15	Award ceremony and closing remarks	

POSTERS

	PRESENTER
P01	Aleksandra Anisimova
	Deciphering the role of post-transcriptional regulation in stress response
P02	Svitlana Antonenko
	Deubiquitination of Bcr-Abl by USP1 as a progression factor of chronic myeloid
	leukemia
P03	Michal Arie
	Capturing stable p97 conformations associated with elevated Ufd1/Npl4 co-factor
	recruitment
P04	Martin Attwood
	Defining the cellular ZUP1 complex in genome stability
P05	Andrea Bertran-Mostazo
	Disentangling the mechanism of action of novel allosteric small-molecules that
	target the Fbxw/E3 ligase
P06	Roger Castano
D07	Drugging the FDXw7 E3 ligase with computational and tragment-based approaches
P07	Anne Conibear
	Exploring structural and functional enects of postiransiational modifications of
DUS	Brivanka Dabato
FUO	Structural characterization of the targeted protein degradation system
DUO	Evmorfia V. Dalietou
1 00	Structural Basis of E3 ligase KLHL12 Antagonist and Co-factor Recruitment
P10	Aniruddha Das
	Heterotypic Assembly Mechanism Regulates CHIP E3 Ligase Activity
P11	Jennifer Day
	Elucidating the Function of the APC/C in Cortical Neurons
P12	Luca Ferrari
	Tau degradation by the autophagy machinery
P13	Maximilian Fottner
	A modular toolbox to generate complex polymeric ubiquitin architectures using
	orthogonal sortase enzymes
P14	Judith Görlich
	Crosstalk between Enzymatic and Non-enzymatic Posttranslational Modifications:
	Analyzing the Interplay of Site-Specific Glycation and Ubiquitylation of α-Synuclein
P15	Retracted poster
P16	Retracted poster
P17	Susanne Huhmann
	Tailor-made ubiquitin chains for targeting the UPS or autophagy
P18	Hannah Kiely-Collins
-	Developing a Piperlongumine PROTAC for Targeted TRPV2 Degradation
P19	Roksolana Kobylinska
	Proximity labeling proteomics to discover novel autophagy players

POSTERS

P20	Imke Lemmer
	Nfe2l1 shapes the skeletal muscle ubiquitome to regulate fiber type and metabolic
	fitness
P21	Chantal B. Lucini
	It takes two to tango: the role of the E3 ubiquitin ligase Rsp5 in TDP-43 aggregation and
	degradation
P22	Miquel Muñoz-Ordoño
	Mapping transcriptional condensate composition using proximity labeling
P23	Mohit Misra
	Structural and functional insights into the membrane binding domain of SidE family of
P24	R.H. Amanda Ng
	identifying CRBN-dependent molecular glue degraders with novel targets via
D 05	
P25	Victor Sanchez de Medina Hernandez
D 26	Sara Scinicariallo
F20	Identification of novel regulators controlling Tristetraprolin stability
D27	Ionathan Schmid-Burgk
1 21	Studying proteome dynamics using barcoded gene tagging
P28	Gerhard Seisenbacher
•	Peroxiredoxins as a post-translational modification in cytoplasmic protein quality control
P29	Barbara Sousa
	Targeting disease-related proteins: The design of serine hydrolases degraders
P30	Milica Vunjak
	Regulation of immune responses through the lens of proteostasis
P31	Vera Wanka
	Activity-based Ubl probes for studying DUB- and SENP-activity in living cells
P32	Nienke Willemsen
	Proteasome dysfunction disrupts adipogenesis and induces inflammation via ATF3
P33	Nikola Winter
	N-degron pathways in plants
P34	Nathalie Woerz
	Targeting bacterial effector proteins with activity-based probes
P35	Yalcin Israfil
	The role of the ubiquitin-autophagy adaptor Cue5 in toxicity and aggregation of TDP-43
P36	Michaela M. Zrelski

Protein quality control mechanisms in plectin-related muscular dystrophy

Organizer

Consortium of the SFB F79



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