

# PROGRAMME

From Until  
**Day 1** Sunday, Sept 29<sup>th</sup>

18:30	18:45	Welcome address Kvido Strisovsky & Jan Konvalinka
18:45	19:45	<b>Opening keynote lecture</b> <b>Discussion leader (DL): Kvido Strisovsky</b> <b>Matthew Freeman</b> Rhomboids and proteolysis at membrane interfaces
19:45	22:30	<b>Welcome dinner</b>

**Day 2** Monday, Sept 30<sup>th</sup>

<b>1. Proteases in protein quality control and homeostasis</b> <b>DL: Jan Konvalinka, Klaudia Brix</b>		
9:00	9:30	<b>Michael Groll</b> Structural impacts of proteasome mutants in autoinflammatory syndromes
9:30	9:45	Galia Blum Cathepsin regulates metabolism and inflammation in cardiovascular disease conditions.
9:45	10:15	<b>Charles Craik</b> CHIP links protein homeostasis and caspase signaling by binding latent C-termini.
10:15	10:30	Klara Grantz Saskova The yeast proteases Ddi1 and Wss1 are both involved in the DNA replication stress response.
10:30	11:00	Coffee break
<b>2. Proteases in immunity and cell death</b> <b>DL: Guy Salvesen, Boris Turk</b>		
11:00	11:30	<b>Bob Lazarus</b> An allosteric anti-tryptase antibody for the treatment of mast cell-mediated severe asthma
11:30	12:00	<b>Chris Overall</b> How to increase protease activity in disease: A pharmacological molecular corrector for mutant MALT1 in immunodeficiency
12:00	12:15	Tangsheng Yi KLK5 in airway inflammation and epithelial barrier dysregulation
12:15	12:30	Hans Brandstetter Structures of the two-chain state of plant legumains relate to its physiological functions.
12:30	12:45	Mohammed Lamkanfi Modulation of Nlrp3 inflammasome activation
12:45	14:00	Lunch
<b>3. Technological platforms and tools</b> <b>DL: Steven Verhelst, Manu Platt</b>		
14:00	14:30	<b>Yifat Merbl</b> Proteasome footprinting: MAPPING the degradation landscape in cancer
14:30	15:00	<b>Alessio Ciulli</b> Inducing protein degradation with small molecules: How PROTACs work
15:00	15:15	Oded Kleifeld Identification of proteolysis signatures utilizing a new carboxy terminal peptides enrichment proteomic methodology
15:15	15:30	Olga Vasiljeva Monitoring protease activity <i>in situ</i> and <i>in vivo</i> using Probody Therapeutics as sensing probes
15:30	16:00	Flash talks
16:00	18:00	Poster session I

**Day 3** Tuesday, Oct 1<sup>st</sup>

<b>4. Proteases in cancer related processes</b> <b>DL: Bonnie Sloane, Aleks Sedo</b>		
9:00	9:30	<b>Irit Sagi</b> ECM proteolysis in pancreas cancers: from molecular mechanisms to drug discovery
9:30	10:00	<b>Marie Kveiborg</b> A disintegrin and metalloprotease functions and regulatory mechanisms in cancer progression
10:00	10:15	Thomas Reinheckel Cathepsin D deficiency in mammary epithelium transiently stalls breast cancer by interference with mTORC1 signaling.
10:15	10:30	Parigiani Maria Alejandra Pivotal role of Cathepsin L in the maintenance of cell identity and cell cycle in epithelial breast cancer cells
10:30	11:00	Coffee break
<b>5. Membrane-associated proteolysis</b> <b>DL: Radislav Sedláček, Vincent Dive</b>		
11:00	11:30	<b>Stefan Lichtenthaler</b> BACE1 in neurobiology and Alzheimer's disease
11:30	12:00	<b>Rama Khokha</b> Dissecting proteolysis in cancer stroma through multimodal OMICS
12:00	12:15	Bartsch Joerg W. Untangling the protease web: ADAM8 affects breast cancer progression by regulating ADAM17 and MMP-9 activities in the tumor microenvironment
12:15	12:30	Amy Weeks Mapping proteolysis at the surface of living cells
12:30	14:00	Lunch
<b>6. Intramembrane proteases</b> <b>DL: Harald Steiner, Joanne Lemieux</b>		
14:00	14:30	<b>Marius Lemberg</b> Role of intramembrane proteases in the control of cellular protein homeostasis
14:30	15:00	<b>Lucia Chavez Gutierrez</b> Structural metastability of Presenilin: implications for Alzheimer's disease and drug discovery
15:00	15:15	Guanghai Yang Structural basis of substrates recognition by human $\gamma$ -secretase
15:15	15:30	Bernd Schroeder The role of the intramembrane proteases SPPL2a/b in metabolic regulation
15:30	16:00	Coffee break

<b>7. Protease/pseudoprotease interfaces</b> <b>DL: Kvido Strisovsky</b>		
16:00	16:30	<b>Colin Adrain</b> iRhom pseudoproteases and regulation of energy balance
16:30	17:00	<b>Sonya Neal</b> Rhomboid pseudoprotease Dfm1 is required for ERAD dislocation of integral membrane proteins.
17:00	17:15	Jakub Began Rhomboid protease licenses membrane protein quality control as adaptor of FtsH AAA protease independently of its protease activity.
17:15	17:30	Regina Fluhrer SPPL2c – A formerly orphan aspartyl intramembrane protease regulates protein transport during spermatogenesis.
17:30	18:30	<b>IPS Member Business Meeting / Election</b>

**Day 4** Wednesday, Oct 2<sup>nd</sup>

<b>8. Proteases in parasite and virus biology</b> <b>DL: Jeanne Hardy, Jan Dvořák</b>		
9:00	9:30	<b>Jim McKerrow</b> Parasite proteases: function, evolution, and inhibition
9:30	10:00	<b>Mike Blackman</b> Breaking out: proteases in egress of the malaria parasite from its host red blood cell
10:00	10:15	Mottram Jeremy Cysteine peptidases of <i>Leishmania</i> essential for life cycle progression
10:15	10:30	Dan Sojka Late digestive peptidase isoenzymes in ticks
10:30	11:00	Coffee break
<b>9. Protease inhibition and silencing as regulatory or therapeutic mechanisms</b> <b>DL: Dieter Bromme, Alex Wlodawer</b>		
11:00	11:30	<b>Ingrid Wertz</b> Targeting deubiquitinases for therapeutic benefit
11:30	12:00	<b>Nabil Seidah</b> The protease and non-protease activities of the proprotein convertase PCSK7: triglyceride metabolism and beyond
12:00	12:15	Sivaraman Jarayanan Structural basis for the function of ScpC, a virulence protease from <i>Streptococcus pyogenes</i>
12:15	12:30	Henry Mok DENV-captured plasmin enhances mosquito midgut infection and is inhibited by an endogenous Kazal-type inhibitor AaTI.
12:30	14:00	Lunch
14:00	20:00	Free afternoon
20:00	20:30	Flash talks
20:30	22:30	Poster session II

**Day 5** Thursday, Oct 3<sup>rd</sup>

<b>10. Chemical biology approaches to proteases</b> <b>DL: Benedikt Kessler, Oliver Schilling</b>		
9:00	9:30	<b>Edward Tate</b> Proteomic protease probes
9:30	10:00	<b>Edgar Deu</b> The proteolytic activities of <i>Plasmodium</i> dipeptidyl aminopeptidases and DNA-damage inducible protein 1 play different roles in erythrocyte invasion by the malaria parasite.
10:00	10:15	Marcin Drag Engineered unnatural ubiquitin for optimal detection of deubiquitinating enzymes (DUBs)
10:15	10:30	Andrew Griswold CHOPS - A chemical strategy for protease substrate profiling
10:30	11:00	Coffee break
<b>11. Emerging topics</b> <b>DL: Manjunatha Kini, Ulrich auf dem Keller</b>		
11:00	11:30	<b>Matt Bogyo</b> Design of selective activity-based probes for proteases using phage display
11:30	12:00	<b>Jan Potempa</b> Molecular Koch's postulates applied to bacterial pathogenicity of Alzheimer's disease
12:00	12:15	Anthony O'Donoghue Point-of-care quantitation of protease activity in biofluids
12:15	12:30	Hans-Ulrich Demuth Glutamyl cyclase is regulating the proteolytic activity of <i>Porphyromonas gingivalis</i> proteases – novel upstream target to treat periodontitis.
12:30	14:00	Lunch
<b>Lifetime achievement lecture</b> <b>DL: Jan Konvalinka</b>		
14:00	15:00	<b>Judith Clements</b> From mice to me – KLKs on steroids: insights into the roles of the KLK peptidases in hormone-dependent cancers
<b>Closing keynote lecture</b> <b>DL: Kvido Strisovsky</b>		
15:00	16:00	<b>Seamus Martin</b> Proteases at the nexus between cell death and inflammation
19:00	21:00	Gala dinner with IPS Young Investigator Award, Poster Awards, Travel Awards and announcement and presentation of the venue for 2021
21:00	23:00	Music

**Departures** Friday, Oct 4<sup>th</sup>

6:00	11:00	departure of buses back to Prague at 6 AM, 8 AM, 9 AM
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