6th International Plant Proteomics Organization Conference May 15 to 18, 2025 Banff Springs Hotel, Banff, AB, Canada

AGENDA

Thursday, May 15, 2025

13:00	REGISTRATION OPENS - Riverview Lounge
15.00	All Posters are to be mounted – New Brunswick Room
	All Sessions will take place in Alberta Room
16:00	WELCOME
	Conference Chairs: Jennifer Geddes-McAlister, R. Glen Uhrig
16:15 – 18:30	Session 1 – Proteomics for Climate Resiliency
	Chair: Devang Mehta, KU Leuven
	Co-Chair: Boyan Liu, University of Guelph
16:15	KEYNOTE
	Harvey Millar, The University of Western Australia, AUS
	Proteomics for Climate Resiliency: Developing and adapting proteomic data
	for wider decision making in a changing world
16:45	Christoph Rampitsch, Agriculture and Agrifood Canada, CAN
	Peptidomics in Rusted Wheat. Endogenous rust peptides identified from short
	open reading frames by de novo sequencing
17:05	Devang Mehta, KU Leuven, BEL
	Closing gaps in plant chronobiology: from genome to proteome and from
	molecules to future geographies.
17:25	Natalia Bykova, Agriculture and Agrifood Canada, CAN
	Crosstalk between the cellular redox state, NO, ROS, and phytohormones
	integrates major physiological processes upon abiotic stress impact on seed
	dormancy control in wheat
17:40	Lauren Grubb, University of Alberta, CAN
	Defining a role for REVEILLE genes in the plant response to drought and salt
	stress using quantitative proteomics
17:55	Myah Crosby, University of Guelph, CAN
	Starch Phosphorylases Regulated by Glutathionylation
18:15 - 20:00	WELCOME RECEPTION
	New Brunswick Room with Exhibitors & Posters

Friday,	May 16, 2025	
07:30	LATE REGISTRATION – Riverview Lounge	
00.00 40.00	BREAKFAST - New Brunswick Room with Exhibits & Poste	ers
08:30 - 10:00	Session 2 - Artificial Intelligence in Plant Proteomics	
	Chair: Jennifer Geddes-McAlister, University of Guelph	
00.00	Co-Chair: Lauren Grubb, University of Alberta	
08:30	KEYNOTE	
	Sachin Rustgi, Clemson University, USA	
	Screening Wheat and Peanut Genotypes with Reduced In	nmunogenicity Using
	Protein Profiling	
09:00	Marie Brunet, University of Sherbrooke, CAN	
	Learning translation: deep-learning guided proteomics in	plants
09:20	Mathieu Lavallée-Adam, University of Ottawa, CAN	
	Enhancing mass spectrometry-based proteomics data ac	quisition using
	artificial intelligence	
09:40	Zhiyong Wang, Carnegie Institution for Science, USA	
	Crosstalk between phosphorylation and O-glycosylation i	regulates
	metabolism, growth, and immunity	
10:00-10:30	COFFEE BREAK	Sponsored
	New Brunswick Room with Exhibits & Posters	Ву
10:30 - 12:30	Session 3 – Proteomics in Unconventional Plants	
	Chair: Ting-Ying Wu, Academia Sinica	
	Co-Chair: Qiaomu Li, University of Alberta	
10:30	KEYNOTE	
	Michelle Colgrave, Edith Cowan University, AUS	
	Novel foods, the science behind evaluating health attribu	ites, allergenicity
	and food safety	
11:00	Ting-Ying Wu, Academia Sinica, TW	
	The Landscape of Protein Phosphorylation Dynamics und	er Heat Stress in
	Marchantia	
11:20	Ramesh Katam, Florida A & M University, USA	
	Root proteomics and protein interaction studies showed	shift in biosynthetic
	pathways to different salt stress levels in Pistachio	
11:35	Niels Maywald, University of Guelph, CAN	
	Next-Generation Intercropping: Synergistic Nitrogen Fixa	tion for Sustainable
	Agriculture	
11:50	Haleema Tariq, McGill University, CAN	
	Paenibacillus polymyxa alters the metabolic and proteon	nic profile of
	Cannabis sativa	
12:05	Jacqueline Thomson, University of Guelph	
	Mechanistic analysis of tall fescue (Shedonorus arundina	ceus) and its fungal
1	endophyte, Epichloë coenophiala	

Friday,	May 16, 2025, cont.		
12:30-13:45	THERMO FISHER SPONSORED LUNCH SEMINAR – Alberta Room		
	12:30 TO 13:30		
	Craig P. Dufresne - Thermo Fisher Scientific		
	R. Glen Uhrig - University of Alberta		
13:45 – 15:30	<u>Session 4 – Advancing Proteomics Technologies in Plants</u>		
	Chair: R. Glen Uhrig, University of Alberta		
40.45	Co-Chair: Mohana Talasila, University of Alberta		
13:45	KEYNOTE		
	Aleksandra Skirycz, Michigan State University, USA		
	From interaction to function, what can we learn about metabolites from		
	knowing their protein partners?		
14:15	Sixue Chen, The University of Mississippi, USA		
	Systems biology of C3 to CAM Transition, toward Improving Crop WUE		
14:35	Bryan Hau, The University of Western Australia, AUS		
	Identification and characterisation of the molecular drivers of malting		
14.50	performance in Hordeum vulgare		
14:50	Vibha Srivastava, University of Arkansas, Division of Agriculture, USA		
15:05	Phosphoproteomics for unraveling novel targets of SnRK1 kinase in rice		
15.05	Monique van Schie , Wageningen University, NL Location, location, location: exploration of the subcellular proteome of plants		
15:30 - 16:00	COFFEE BREAK		
15.50 - 16.00	New Brunswick Room with Exhibits & Posters Sponsored By		
16:00	LIGHTNING TALKS		
	 Poster 111 - Sujani Rathnayake, University of Guelph 		
	 Poster 104 – Utpal Bose, Edith Cowan University 		
	- Poster 105 – Mohana Talasila, University of Alberta		
	 Poster 100 – Qiaomu Li, University of Alberta 		
	 Poster 109 – Boyan Liu, University of Guelph 		
	- Poster 121 – Genc Haljiti, Bavarian Centre for Biomolecular Mass		
	Spectrometry		
	- Poster 122 – Francis Bourassa, University of Sherbrooke		
16:30	POSTER SESSION		
	Presenters of even-numbered posters should be at their posters between 16:30 – 17:30 and presenters of odd-numbered posters should be at their posters between 17:30 – 18:30 pm		
18:30	FREE TIME		

Saturday, May 17, 2025		
07:30 – 09:00	BREAKFAST & InPPO General Meeting (All Welcome) Host: Chrisoph Rampitsch Alberta Room	
09:00 - 10:30	<u>Session 5 – Agricultural Proteomics (Session I)</u> Chair: Justin Walley, Iowa State University Co-Chair Jiaxi Lu, University of Guelph	
09:00	KEYNOTE Georgia Tanou , Hellenic Agricultural Organization – DIMRA, GRC Deciphering the Molecular Basis of Cold Stress Response in Kiwifruit: A Multi- Omics Perspective	
09:30	Olivia Wilkins , University of Manitoba, CAN A single nucleus atlas of development altering stress	
09:50	Nasim Alijanimamaghani, University of Guelph, CAN Impact of 15ADON and 15ADON/3NX Fusarium graminearum Chemotypes on Wheat and Corn Proteomes in Ontario, Canada	
10:05	Guido Giordano , Technical University of Munich, DE Progress on the Crop Proteome Atlas (Year 3): a focus on barley germination and malting	
10:30-11:00	COFFEE BREAK New Brunswick Room, with Exhibits & Posters	
11:00	<u>Session 5 – Agricultural Proteomics (Session II)</u> Chair: Justin Walley, Iowa State University Co-Chair Jiaxi Lu, University of Guelph	
11:00	Justin Walley, Iowa State University, USA Regulatory architecture of disease resistance in maize revealed by multi-omic systems genetics	
11:20	Industry Sponsored Jennifer Geddes-McAlister, University of Guelph, CAN Temporal wheat proteome remodeling by deoxynivalenol reveals novel detoxification signatures and strategies across cultivar	
11:40	Hui Cao , The University of Western Australia, AUS Dissecting 70 years of wheat breeding through proteome-wide association study	
11:55	Ankita Sehrawat, Maitreyi College, University of Delhi, India Exploring the role of Nitric Oxide (NO) priming in stress tolerance and analyzing biotechnological use of NO in increasing secondary metabolites production	

Saturday, May 17, 2025, cont.		
12:15 – 13:30	LUNCH BREAK – Early Career Researcher Session (All Welcome & Lunch Provided)	
	Chair: Guido Giordano, Technical University Munich	
	Alberta Room	
13:30	FREE TIME	
18:30	RECEPTION	
	Mt. Stephen Hall	
19:00	DINNER & DANCING, Award Presentation	
	Mt. Stephen Hall	



Sunday	, May 18, 2025
07:30 – 08:30	
07:30 - 08:30	BREAKFAST New Brunswick Room with Exhibits & Posters
08:30 - 10:15	
08:30 - 10:15	Session 6 - The Modified Plant Proteome
	Chair: Christoph Rampitsch, Agriculture and Agrifood Canada
08.20	Co-Chair: Sujani Rathnayake, University of Guelph
08:30	KEYNOTE
	Ive de Smet, VIB-UGENT, Centre for Plant Systems Biology, BE
	Leveraging temperature-mediated phosphoproteomes to identify conserved
_	signaling modules in plants
09:00	Pitter Huesgen, University of Freiburg, DE
	Tracing protease activities in plant immunity
09:20	Juergen Eirich, University of Muenster, DE
	Posttranslational Modifications and Their Role in Plant Acclimation to Light
09:40	Tagnon Missihoun, University of Québec Trois-Rivières, CAN
	Abscisic acid and Aldehyde dehydrogenases influence protein carbonylation
	in Arabidopsis thaliana
09:55	Mark Roosjen, Wageningen University, NL
	Pushing the limits - fast signaling in plants
10:10	Chris White-Gloria, University of Calgary
	Phospho-proteomics uncovers vast range of substrates for chloroplastic
	protein phosphatase SLP1
10:25 – 10:50	COFFEE BREAK
	New Brunswick Room, with Exhibitors & Posters
10:50 – 12:30	Session 7 – Plant Interactomes
	Chair: Shouling Xu, Carnegie Institution at Stanford
	Co-Chair: Niels Maywald, University of Guelph
10:50	KEYNOTE
	Pengcheng Wang, Institute of Advanced Biotechnology, CN
	Chloroplast phosphonetworks in Arabidopsis
11:20	Shouling Xu, Carnegie Institution at Stanford, USA
	Mapping Architecture of Protein complexes in Arabidopsis using XL-MS
11:40	Kishor Ingole, University of Cambridge, UK
	Unravelling the Cell-type specific SUMOylome of Arabidopsis roots by mass
	spectrometry (MS)
12:00	Kyle Bender, University of Zurich, CH
	Quantitative proteomics of plant receptor kinase signaling
12:15	Linfei Guo, Wageningen University, NL
	Proteomic analysis of growth-stress interaction
12:30	WRAP-UP & CLOSING
	Conference Chairs: Jennifer Geddes-McAlister, R. Glen Uhrig