



DBG's Eduard Strasburger Workshop

Co- and posttranslational control in chloroplasts

Monday, 18.11.2024 - Wednesday, 20.11.2024

Heereman'scher Hof, Königsstraße 47, 48143 Münster

Professional School of the University of Münster

Program

Monday, 18th November 2024

Mon 18: Heereman'scher Hof (14:00 – 16:00)

14:00	<i>Registration</i>
16:00	<i>Welcome</i>

Mon 18: Protein Structure and Evolution (16:00 - 19:10)

Session chair: Markus Schwarzländer

		speaker
16:10	Stages of phase-separation during biogenesis of a bacterial microcompartment	HAYER-HARTL, Manajit (Max Planck Institute of Biochemistry)
16:50	The evolution of assembly complexity in Rubisco	HOCHBERG, Georg (Philipps-University of Marburg)
17:30	<i>Coffee Break</i>	
17:50	Unveiling the Multifaceted Machinery of N-terminal Protein Modifications in Plant Plastids	GIGLIONE, Carmela (CNRS, Université Paris Saclay)
18:30	Identification, characterization and function of the unique N-terminal modifiers of the large subunit of plant Rubisco	MEINNEL, Thierry (CNRS, Université Paris Saclay)
18:50	Dual lysine and N-terminal acetyltransferases as modifiers of Rubisco and CBB enzymes	MÜHLENBECK, Jens (University of Münster)

Poster Session: Posters and Dinner 1 (19:10 - 22:10)

presenter

[01] A microRNA regulating targets massively up-regulated in response to stress in drought tolerant <i>A. sagittata</i>	KHAN, Abdul Saboor (University of Cologne)
[02] Towards fluorescent protein-based biosensing of thylakoid lumen pH	HOANG, Minh (University of Münster)
[03] The function of N-terminal acetylation of plastid precursor proteins	MÖLLENBECK, Pia (Ruhr-University of Bochum)
[04] Molecular determinants of protein halflife in chloroplasts	WINCKLER, Lioba (University of Osnabrück)
[05] Plant Rubisco maturation requires a specific aminopeptidase	XIE, Dong (CNRS, Université Paris Saclay)
[06] A dynamin-like protein FZL shapes thylakoid membranes and maintains their integrity against enhanced proton motive force	OGAWA, Yu (University of Münster)
[07] How do plants overcome the excess sugars-driven repression of photosynthesis in <i>suc2</i> mutant leaves?	NAGANAWA KINOSHITA, Satoru (University of Münster)
[08] Exploring the role of PSAG and PSAH in the modulation of PSI-LHCI composition and macromolecular organization in <i>Chlamydomonas reinhardtii</i>	MOSEBACH, Laura (University of Münster)
[09] Proximity-based labelling of the HDA14 interactome	STICHWEH, Yannik (University of Münster)
[10] Developing functional and structural imaging of proton motive force determinants	CISLAGHI, Ana Paula (University of Münster)

Poster Session: Posters and Dinner 2 (19:10 - 22:10)

presenter

[11] The role of Arabidopsis HISTONE DEACETYLASE 14 in Lysine acetylation of chloroplast proteins	KOTNIK, Florian (University of Münster)
[12] Searching for new concepts of N-Degron Pathway Mediated Proteostasis	DISSMEYER, Nico (University of Osnabrück)
[13] Investigating the function of Arabidopsis HISTONE DEACETYLASE 14 in chloroplasts	MARKITON, Claudia (University of Münster)
[14] Light changes promote distinct responses of plastid protein acetylation marks	EIRICH, Jürgen (University of Münster)
[15] Acetylated HY5 Mediates Chloroplast Gene Expression for Improved High Light Stress Defense in <i>Arabidopsis thaliana</i>	SHEN, Jie (University of Münster)
[16] Challenging the role of plastid co-translational N-terminal modifications upon stress responses	WANG, Yuwei (Humboldt-University Berlin)
[17] Occupancy of lysine acetylation in Arabidopsis proteome via chemical labelling and mass spectrometry measurements	MUSSENBROCK, Jonas (University of Münster)
[18] Characterization of a chloroplast Acetyltransferase in <i>Arabidopsis thaliana</i>	STENKAMP, Marie (University of Münster)

Tuesday, 19 November 2024

Tue 19: Environmental Acclimation & Photosynthesis 1 (09:00 - 18:30)

Session Chair: Bernhard Grimm

speaker

09:00	News on cyclic electron flow in plants	LEISTER, Dario (LMU Munich)
09:40	Diving into the unknowns of LHCII PTMs: the forgotten dark side of photosynthesis	CUTOLO, Edoardo Andrea (University of Verona)
10:00	Regulative phosphorylation of plastocyanin and cytochrome b6f subunit IV: Insights into photosynthetic electron transfer and STT7 kinase feedback control	MILRAD, Yuval (University of Münster)
10:20	Effect of photosynthetic cyclic electron transfer on the chloroplast redox proteome	JOHNSON, Matt (University of Sheffield)
11:00	<i>Coffee Break</i>	

Tue 19: Environmental Acclimation & Photosynthesis 2 (11:30 - 14:30)

Session Chair: Jürgen Eirich

speaker

11:30	Chloroplast acetyltransferases in regulation of photosynthesis	MULO, Paula (University of Turku)
12:10	The plastidial protein acetyltransferase GNAT1 forms a complex with GNAT2, yet their interaction is dispensable for state transitions	BRÜNJE, Annika (University of Münster)
12:30	The Lhcb8 antenna protein reshapes the functional architecture of the photosystem II supercomplex in <i>Arabidopsis thaliana</i>	CAFERRI, Roberto (University of Verona)
12:50	Functional interaction of STN7/8 and pCK2 in photosynthetic acclimation	DEMMIG, Tim (Ruhr-University Bochum)
13:10	<i>Lunch</i>	

Tue 19: Environmental Acclimation & Photosynthesis 3 (14:30 – 16:50)

Session Chair: Nico Dissmeyer

speaker

14:30	Regulation of Rubisco activity by light in tomato	AMARAL, Joana (Lancaster University)
15:10	Plastid NAD-dependent Malate Dehydrogenase: Cysteine oxidation as a regulatory switch of a multitasking protein?	COSSE, Maike (Christian-Albrechts-University Kiel)
15:30	Posttranslational control for Chlorophyll and Heme synthesis	GRIMM, Bernhard (Humboldt-University Berlin)
16:10	<i>Coffee Break and Conference Picture</i>	

Tue 19: Environmental Acclimation & Photosynthesis 4 (16:50 – 17:50)

Session Chair: Carmela Giglione

speaker

16:50	Establishing fluorescent protein-based biosensing of NADPH:NADP ⁺ dynamics in living plants	NIEMEIER, Jan-Ole Peer (University of Münster)
17:10	Photosynthesis-triggered pH and NAD(P) redox signatures across plant cell compartments revealed by advanced illumination-imaging	ZHENG, Ke (University of Münster)
17:30	Cold-Triggered Phase Separation Forms a Chloroplast Compartment Modulating RNA Processing	SCHMITZ-LINNEWEBER, Christian (Humboldt-University Berlin)
17:50	The Clp chaperone-protease is a central regulator of chloroplast proteostasis; the search for substrate selection and regulation	VAN WIJK, Klaas J. (Cornell University)

Dinner: Conference Dinner (19:30 - 23:30)

Restaurant "LUX", Domplatz 10 in 48143 Münster (www.das-lux.de)

Wednesday, 20 November 2024

Wed 20: Protein Import, Translation & Quality Control 1 (09:00 - 11:00)

Session chair: Iris Finkemeier

speaker

09:00	Protein import into chloroplasts and its regulation by the ubiquitin-proteasome system	JARVIS, Paul (University of Oxford)
09:40	STIC2 selectively binds ribosome-nascent chain complexes in the cotranslational sorting of Arabidopsis thylakoid proteins	OSTERHOFF, Lena (Ruhr University Bochum)
10:00	tRNA sequencing uncovers a blend of ancestral and acquired characteristics in chloroplast tRNAs	GOŁĘBIEWSKA, Kinga (Warsaw University of Life Sciences)
10:20	Protein Mistranslation in Endosymbiotic Organelles of Plant Cells	KUNZ, Hans-Henning (LMU Munich)
10:40	<i>Coffee Break</i>	

Wed 20: Protein Import, Translation & Quality Control 2 (11:00 - 12:20)

Session chair: Thierry Meinel

speaker

11:00	DIA-HUNTER: Increased plant N-terminome coverage by library-free data independent mass spectrometry	HUESGEN, Pitter (University of Freiburg)
11:20	How a Tiny ATP Synthase Hairpin Loop Affects Dark Adaption in Plants and Algae	LEBOK, Lando (University of Münster)
11:40	Light-dependent regulation of post-translational modifications in chloroplasts of Arabidopsis	FINKEMEIER, Iris (University of Münster)

Wed 20: Heereman'scher Hof (12:20 - 14:00)

12:20	<i>Farewell</i>
12:30	<i>Lunch and Departure</i>

Many thanks to all supporters of this workshop:

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