

Program - Talks

For more information on venues and transport information, please visit:
<http://www.chromera.org/konferenz/ise-symposium-2024>

Monday, 9 September 2024

18:30 – 21:00 Informal get-together and registration (Medicover, Bochum City Center)

Tuesday, 10 September 2024

08:30 – 09:30 Registration (Hall 3, Convention Centre, RUB Campus)

09:30 – 09:40 **Danja Schünemann**, Ruhr University Bochum – Opening note

09:40 – 10:15 **Thomas Mock**, University of East Anglia – Opening lecture
Diatom genome evolution in real time

10:15 – 10:45 Coffee break

Session 1 Chair: **Christian Schmitz-Linneweber**

10:45 – 11:15 **Michael Schroda**, RPTU Kaiserslautern-Landau
Thylakoid membrane biogenesis and maintenance requires ESCRT-III family member VIPP1

11:15 – 11:45 **Ingrid Lafontaine**, Sorbonne University
Searching alpha-solenoid proteins involved in organellar gene expression

11:45 – 12:05 **Nikolay Manavski**, LMU München
Targeted inhibition of organellar translation

12:05 – 13:30 Lunch break

Session 2 Chair: **Margarete Baier**

13:30 – 13:50 **Thomas Pfannschmidt**, Leibniz-University Hannover
The plastid-encoded RNA polymerase of chloroplasts

13:50 – 14:10 **Yury Bykov**, RPTU Kaiserslautern
A systematic bi-genomic split-GFP assay illuminates the mitochondrial matrix proteome and protein targeting routes

14:10 – 14:30 **Serena Schwenkert**, LMU Munich
Chloroplast envelope metabolite channels in lipid remodelling and photosynthetic efficiency under cold stress

14:30 – 14:45 **Maria Lozano Quiles**, HHU Düsseldorf
FRIENDLY RECORDING of plastid volume in *Marchantia*

14:45 – 15:00 **Parth Raval**, HHU Düsseldorf
Evolutionary refinement of organelle import fidelity in plants

15:00 – 16:45 Poster session with coffee

Session 3 Chair: **Eva Nowack**

16:45 - 17:15 **Richard Dorrell**, Sorbonne University
Characterising the dark matter of the diatom chloroplast proteome

ISE Symposium 2024
10-12 September 2024, Ruhr University Bochum

- 17:15 – 17:35 **Kristina Kühn**, Martin-Luther-Universität Halle-Wittenberg
Elucidating the roles of two mitochondrial RNA polymerases from mitochondrial genome-wide transcription start site mapping
- 17:35 - 17:55 **Galina Prokopchuk**, Biology Centre CAS and University of South Bohemia
Composition and diversity of mitochondrial ribosome in the diatome *Phaeodactylum tricorutum*
- 18:30** **Dinner at Q-West (RUB Campus)**

Wednesday, 11 September 2024

Session 4: Chair: Sacha Baginsky

- 9:00 – 9:30 **Miroslav Oborník**, Biology Centre CAS and University of South Bohemia
Endosymbiotic contribution of cryptophytes and stramenopiles to the myzozoan plastid ancestor
- 9:30 – 10:00 **Eva Nowack**, HHU Düsseldorf
Evolution of a nucleus-encoded endosymbiont division machinery in the trypanosomatid *Angomonas deanei*
- 10:00 – 10:20 **Kenneth Dumack**, University of Cologne
From vertical to horizontal: Sexual transmission of endosymbionts in protists

10:20 – 11:00 **Coffee break**

Session 5: Chair: Ansgar Gruber

- 11:00 – 11:20 **Felix Grewe**, Field Museum Chicago
Unraveling Lichen Genomics: Insights into symbioses and asexuality
- 11:20 – 11:40 **Jörn Petersen**, Leibniz-Institut DSMZ
Microbial Dark Matter in Culture – Metagenomics of non-axenic Protists and Cyanobacteria
- 11:40 – 12:00 **Michael Hammond**, Biology Centre CAS
LOPIT procedure resolves spatial protein distribution and gives functional insight on neglected euglenozoan protists *Euglena longa* and *Paradiplonema papillatum*
- 12:00 - 12:15 **Lawrence Rudy Cadena**, HHU Düsseldorf
Spatial proteomics of *Paulinella chromatophora* with the focus of endosymbiont derived organelle biogenesis
- 12:15 – 12:30 **Taniya Mary Binny**, HHU Düsseldorf
Elucidating the transport processes across the symbiotic interface in the cercozoan amoeba *P. chromatophora*

12:30 – 13:30 **Lunch break**

13:30 – 15:00 **Walk through the Botanic Garden**

Session 6: Chair: Kristina Kühn

- 15.00 – 15:20 **Oren Ostersetzer**, Hebrew University of Jerusalem
Evolutionary Aspects of Mitochondrial Gene Expression and Their Physiological Consequences in the Adaptation of Land Plants

ISE Symposium 2024
10-12 September 2024, Ruhr University Bochum

- 15:20 – 15:40 **Megan Sørensen**, HHU Düsseldorf
The evolution of coordinated light responses during the endosymbiont to organelle transition
- 15:40 – 16:00 **Aleš Horák**, Biology Centre CAS and University of South Bohemia
The molecular interactions between host and symbionts in diplomonids
- 16:00 – 16:15 **Mick Van Vlierberghe**, University of Liège
Underestimated genomic footprint of kleptoplasty in complex algae evolution?
- 16:15 – 16:30 **Ron Mizrahi**, Hebrew University of Jerusalem
Evolutionary Role of Mitochondrial Gene Expression in Land Plant Adaptation

16:30 – 17:10 Coffee break

Session 7: Chair: Serena Schwenkert

- 17:10 - 17:40 **Ute Armbruster**, HHU Düsseldorf
The assembly of photosystem II- About some of the many hands that make light work
- 17:40 - 18:10 **Felix Willmund**, Philipps-Universität Marburg
A truncated version of the chloroplast trigger factor chaperone is important for ribosome biogenesis
- 18:10 – 18:30 **Ansgar Gruber**, Biology Centre CAS and University of South Bohemia
Nitrogen storage and metabolism in *Chromera velia*
- 18:30 -18:45 **Lena Osterhoff**, Ruhr University Bochum
STIC2 is associated with ribosome-nascent chain complexes and involved in cotranslational sorting of thylakoid proteins

19:00 ISE member meeting

Thursday, 12 September 2024

Session 8: Chair: Ute Armbruster

- 9:00 – 9:30 **Sacha Baginsky**, Ruhr University Bochum
On the influence of chloroplast precursor protein turnover on proteome assembly
- 9:30 – 9:50 **Pawel Brzezowski**, Jagiellonian University in Cracow
Singlet oxygen-induced signalling depends on the metabolic status of the *Chlamydomonas reinhardtii* cell, potential role of aconitase and an interplay of the metabolites
- 9:50 – 10:10 **Margarete Baier**, Freie Universität Berlin
Control of thylakoid ascorbate peroxidase over plastid and nuclear gene expression

10:10 – 10:40 Coffee break

- 10:40 – 11:00 **Christian Schmitz-Linneweber**, Humboldt University Berlin
Temperature acclimation of chloroplast RNA metabolism
- 11:00 – 11:20 **Peter Kroth**, Universität Konstanz
Aureochromes - specific light receptors in Stramenopiles

11:20 Prices and good bye

Program - Poster

1 Annika Bischoff, Ruhr University Bochum

The role of chloroplast SRP54 domains and its C-terminal tail region in post- and cotranslational protein transport *in vivo*

2 Jürgen Soll, LMU Munich

Chloroplast Biogenesis

3 Peter Kmet', University of South Bohemia

Comparative Analysis of Cocoon and Mucus Structures in *Keroplatus sp.*

4 Natascha Kuenzel, HHU Düsseldorf

As thick as thieves – Endosymbiont and host glycosomes in *Angomonas deanei*

5 Daniela Ewe, Czech Academy of Sciences Centre Algatech

Photomachines – photosynthetic cell redesign for high yields of secondary metabolites

6 Xenia Safronov, Ruhr University Bochum

Studies on potential component of the TOC-/TIC-interactome with crucial role in embryogenesis of *Arabidopsis thaliana*

7 Dominique Sebastian Stolle, Ruhr University Bochum

The Role of 26S Proteasome Impairment in Chloroplast Biogenesis

8 Tim Demmig, Ruhr University Bochum

Functional interaction of STN7/8 and pCK2 in photosynthetic acclimation

9 Pia Moellenbeck, Ruhr University Bochum

The function of N-terminal acetylation of plastid precursor proteins

10 Roei Matan, Hebrew University of Jerusalem

Organellar Maturases in early land plants - a window into the evolution of the spliceosome

11 Ella Kobaivanov, Hebrew University of Jerusalem

Restorer of Fertility Like 1 (RFL1) Protein in Plant Mitochondrial Gene Expression and RNA Metabolism

12 Marketa Kittel, Hebrew University of Jerusalem

Synthetic PPR Proteins as Novel Tools for Regulating Mitochondrial Gene Expression

13 Noa Carmi, Hebrew University of Jerusalem

Heat Stress Impact on OXPHOS Biogenesis in Angiosperm Mitochondria

14 Marta Vohnoutová, University of South Bohemia and Biology Centre CAS

Multi-class prediction of intracellular locations of proteins in organisms with complex plastids

15 Louis Graf, Sorbonne Université

Exploring the ecological functions of the globally distributed oceanic chrysophyte algae