



**Joint 7th Conference of the Polish Society for Experimental Plant Biology
and the Intercollegiate Faculty of Biotechnology UG & MUG**

8 – 11 September 2015, Gdańsk

Venue: Faculty of Social Sciences of the University of Gdańsk, Bażyńskiego 4, Gdańsk Oliwa

CONFERENCE PROGRAMME

Tuesday 8 September

16:00 - 20:00 Registration and Poster Set Up

20:00 - **Welcome Reception**

Wednesday 9 September

08:00 - 09:00 Registration

09:00 - 10:00 Opening Ceremony

09:00 - 09:10 Welcome Speeches

Ewa Łojkowska

President of Polish Society of Experimental Plant Biology, Chair of Organizing Committee and Members of Honorary Committee

09:10 - 10:00 Keynote Lecture: Exploring *Arabidopsis* natural variation

Maarten Koornneef

Max Planck Institute for Plant Breeding Research, Cologne, DE

10:00 - 13:30 SESSION 1: Natural Variation and Phenomics

*Chairs: Anna Ihnatowicz
Maarten Koornneef*

10:00 - 10:30 Invited Speaker: The versatile use of genome elimination in developing novel genetic mapping resources in *Arabidopsis*

Joost JB Keurentjes

Wageningen University, Wageningen, NL

10:30 - 11:00 Invited Speaker: The genotype-phenotype map in *Arabidopsis thaliana*

Arthur Korte

Gregor Mendel Institute, Vienna, AT

11:00 - 11:30 *Coffee Break*

11:30 - 12:00 Invited Speaker: High-throughput phenotyping to decode the complexity of growth response to the environment in *Arabidopsis*

Olivier Loudet

Institut Jean-Pierre Bourgin, Versailles, FR

12:00 - 12:30 Invited Speaker: Species migration in plants is associated to quantitative genetic changes in the circadian clock

Seth Davis

University of York, York, UK

12:30 - 12:45 Selected talk: Brassinosteroid metabolism and its disturbances as a source of semi-dwarf barley mutants

Damian Gruszka

University of Silesia, Katowice, PL

12:45 - 13:00 Selected talk: The distribution of coumarins and furanocoumarins in *Citrus* species closely matches *Citrus* phylogeny and reflects the organization of biosynthetic pathways

Alain Hehn

Université de Lorraine – INRA, Nancy, FR

13:00 - 13:15 Selected talk: Towards the genetic architecture of scopolin and scopoletin biosynthesis in *Arabidopsis thaliana*

Joanna Siwińska

Intercollegiate Faculty of Biotechnology UG&MUG, Gdańsk, PL





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13:15 - 13:30 Selected talk: ROS production and scavenging in stress resistant *Eutrema salsugineum* plants **Maria Pilarska**
Franciszek Górski Institute of Plant Physiology
Polish Academy of Sciences, Krakow, PL

13:30 - 14:30 *Lunch Provided*

14:30 - 17:15 SESSION 2: System and Synthetic Biology

*Chairs: Ewa Łojkowska
Alessio Mengoni*

14:30 - 15:00 Invited Speaker: Gene stacking and metabolic engineering in plants **Dominique Loque**
Cell Wall Engineering, Berkeley, CA, US

15:00 - 15:30 Invited Speaker: Genome evolution and sociomicrobiology in the alfalfa nitrogen fixing microsymbiont *Sinorhizobium meliloti* **Alessio Mengoni**
University of Florence, Florence, IT

15:30 - 16:00 Invited Speaker: Designing new flax plants by metabolic engineering **Anna Kulma**
University of Wrocław, PL

16:00 - 16:30 *Coffee Break*

16:30 - 16:45 Selected talk: Global control of eukaryotic gene expression depends on chromatin remodeling by SWI/SNF complexes **Tomasz Sarnowski**
Institute of Biochemistry and Biophysics
Polish Academy of Sciences, Warsaw, PL

16:45 - 17:00 Selected talk: EcoFactory, a multipromoter explorer expression system for *Escherichia coli* **Marcin Osuch**
Adam Mickiewicz University, Poznań, PL

17:00 - 17:15 Selected talk: Chloramphenicol acetyltransferase - new selectable marker for stable nuclear transformation of the red alga *Cyanidioschyzon merolae* **Anna Drożak**
University of Warsaw, Warsaw, PL

17:15 - 18:30 POSTER SESSION I (odd numbers)

18:30 - 20:00 General Assembly of PSEPB (for PSEPB Members only)

Thursday 10 September

09:00 - 13:00 SESSION 3: Plant Development and Gene Regulation

*Chairs: Małgorzata Gaj
Artur Jarmołowski*

09:00 - 09:30 Invited Speaker: MicroRNA functions in *Arabidopsis* embryos **Michael Nodine**
Gregor Mendel Institute, Vienna, AT

09:30 - 10:00 Invited Speaker: BABY BOOM induces somatic embryogenesis in a dose- and context-dependent manner via the LAFL pathway **Kim Boutilier**
Wageningen University and Research Centre
Bioscience, Wageningen, NL

10:00 - 10:30 Invited Speaker: The Epitranscriptome: Modifying the message **Gordon Simpson**
Dundee University at The James Hutton
Institute, UK

10:30 - 11:00 Invited Speaker: Functional specialization amongst canonical plant poly(A) polymerases – An overlooked layer in plant gene expression control? **Michael Lenhard**
University of Potsdam, DE

11:00 - 11:30 *Coffee Break*

11:30 - 11:45 Selected talk: The miRNAs are involved in the plant cell dedifferentiation **Konrad Deteńko**
Nicolaus Copernicus University, Toruń, PL

11:45 - 12:00 Selected talk: Auxin related miRNAs are involved in somatic embryogenesis induction in *Arabidopsis* **Anna Maria Wójcik**
University of Silesia, Katowice, PL

12:00 - 12:15 Selected talk: The role of phytochromes in storage material mobilization during light-induced tomato seed germination **Aleksandra Eckstein**
Jagiellonian University, Krakow, PL

12:15 - 12:30 Selected talk: Competition between Spliceosome, Microprocessor and Polyadenylation Machinery in the biogenesis of miRNAs located within the first intron of host genes in *Arabidopsis thaliana* **Katarzyna Knop**
Adam Mickiewicz University, Poznań, PL

12:30 - 12:45 Selected talk: Spatial regulation of cytoplasmic snRNPs assembly during larch microsporogenesis **Malwina Hyjek**
Nicolaus Copernicus University, Toruń, PL



The MOBI4Health project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 316094 and from the Ministry of Science and Higher Education





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12:45 - 13:00 Selected talk: SWP73A and SWP73B subunits of Arabidopsis SWI/SNF chromatin remodeling complexes play distinct roles during development
Sebastian Sacharowski
Institute of Biochemistry and Biophysics
Polish Academy of Sciences, Warsaw, PL

13:00 - 14:00 *Lunch Provided*

14:00 - 17:30 SESSION 4: Plant-Microbe Interactions

*Chairs: Andrzej Kononowicz
Violetta Macioszek
Jadwiga Śliwka*

14:00 - 14:30 Invited Speaker: Signalling in plant immunity
Dierk Scheel
Leibniz Institute of Plant Biochemistry, Halle, DE

14:30 - 15:00 Invited Speaker: Pathogenomics of *Verticillium* wilt diseases
Bart Thomma
Wageningen University, Wageningen, NL

15:00 - 15:30 Invited Speaker: Foundations of quantitative disease resistance in *Cereals* and *Brassicac*s
Christopher Ridout
John Innes Centre, Norwich, UK

15:30 - 16:00 Invited Speaker: A hidden pathogen with uncommon properties – reviewing the state-of-the-art of *Verticillium longisporum* on oilseed rape
Andreas von Tiedemann
Georg-August-University Göttingen, Göttingen, DE

16:00 - 16:30 *Coffee Break*

16:30 - 16:45 Selected talk: Elucidation of mechanisms underlying virulence function of *Pseudomonas syringae* HopQ1 effector in plant cells
Rafał Hoser
Institute of Biochemistry and Biophysics
Polish Academy of Sciences, Warsaw, PL

16:45 - 17:00 Selected talk: Screening of potato plants (*Solanum tuberosum* L.) and water samples for the presence of pectinolytic bacteria originating from potato fields in Poland
Agata Motyka
Intercollegiate Faculty of Biotechnology
UG&MUG, Gdańsk, PL

17:00 - 17:15 Selected talk: Effect of ectomycorrhizal symbiosis with two different strains of *Paxillus involutus* on the features of *Populus x canescens* seedlings
Agnieszka Szuba
Institute of Dendrology Polish Academy of Sciences, Kórnik, PL

17:15 - 17:30 Selected talk: Are the *Phytophthora infestans* population, R gene or effector expression changes responsible for the potato resistance decline within single vegetation season?
Marta Brylińska
Plant Breeding and Acclimatization Institute – National Research Institute, Młochów, PL

17:30 - 18:30 POSTER SESSION II (even numbers)

20:00 - 00:00 **Networking @ Baltic Party (fee required)**

Friday 11 September

09:00 - 13:00 SESSION 5: Plant Responses to Abiotic Stress

*Chairs: Iwona Ciereszko
Stanisław Karpiński*

09:00 - 09:30 Invited Speaker: Multifunctional roles of sugars during plant stress responses
Wim Van den Ende
Institute of Botany and Microbiology, KU Leuven, BE

09:30 - 10:00 Invited Speaker: Role of the antenna complex LHCII in remodelling of the membranes of the photosynthetic apparatus of plants
Wiesław Gruszecki
Maria Curie-Skłodowska University, Lublin, PL

10:00 - 10:30 Invited Speaker: Reactive oxygen species as a central hub in sensing and response of seeds to environmental cues
Christophe Bailly
Universite Pierre & Marrie Curie, FR

10:30 - 11:00 Invited Speaker: Ribosome assembly and protein translation in light-dependent germination of dormant *Arabidopsis* seeds
Krystyna Oracz
Warsaw University of Life Sciences, PL

11:00 - 11:30 *Coffee Break*

11:30 - 11:45 Selected talk: Methylome-transcriptome relationships during drought stress in model and crop monocots
Miroslaw Kwaśniewski
University of Silesia, Katowice, PL

11:45 - 12:00 Selected talk: New *Arabidopsis thaliana* microRNAs and their genes expression regulation in response to selected abiotic stresses
Maria Barciszewska-Pacak
Adam Mickiewicz University, Poznań, PL



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12:00 - 12:15	<u>Selected talk</u> : Hydrogen peroxide and nitric oxide production during the cell cycle of <i>Chlamydomonas reinhardtii</i>	Wojciech Pokora University of Gdańsk, Gdańsk, PL
12:15 - 12:30	<u>Selected talk</u> : Lichen response to CO ₂ abiotic stress - ionic liquid bioindicator of air pollution	Grażyna Białek-Byłka Poznań University of Technology, Poznań, PL
12:30 - 12:45	<u>Selected talk</u> : Early signaling events in soybean seedlings subjected to short term cadmium stress	Jagna Chmielowska-Bąk Adam Mickiewicz University, Poznań, PL
12:45 - 13:00	<u>Selected talk</u> : The relevance of multiple steps of plant mitochondrial biogenesis in temperature stress and recovery	Michał Rurek Adam Mickiewicz University, Poznań, PL
13:00 - 14:00	<i>Lunch Provided</i>	

14:00 - 16:00	SESSION 6: Social and Commercial Aspects of Contemporary Biotechnology	<i>Chairs: Krzysztof Bielawski Robert Czajkowski</i>
14:00 - 14:30	<u>Invited Speaker</u> : Don't be afraid of carnivorous plants, since they might help to cure you	Frederic Bourgaud Université de Lorraine UMR 1121, FR
14:30 - 15:00	<u>Invited Speaker</u> : Treatment of acute and chronic inflammation by novel natural plant extracts with high biological activity	Krzysztof Lemke Biovico, Gdynia, PL
15:00 - 15:15	<u>Invited Speaker</u> : Plant naphthoquinone derivatives as MAPK/ERK kinase inhibitors – potential application in breast cancer treatment	Anna Kawiak Intercollegiate Faculty of Biotechnology UG&MUG, Gdansk, PL
15:15 - 15:30	<u>Invited Speaker</u> : <i>lv vitro</i> cultured carnivorous plants as a source of secondary metabolites with high antibacterial potential in combination with silver nanoparticles	Marta Krychowiak Intercollegiate Faculty of Biotechnology UG&MUG, Gdansk, PL
15:30 - 15:45	<u>Invited Speaker</u> : The use of microalgae for the production of active compounds	Marcelina Jaros Svanvid, Gdańsk, PL
15:45 - 16:00	Closing ceremony	



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