

Plant Biotechnology: Green For Good III

15 - 18 June 2015
Olomouc, Czech Republic



Monday, 15th of June 2015

12:00 – 20:00 *Registration (foyer of the 2nd floor)*

13:00 – 15:30 *Meeting of the Scientific Board of the Centre of the Region Haná for Biotechnological and Agricultural Research, Faculty of Science, Palacký University (large meeting room on the 6th floor, 6.014)*

Session 1: Opening session: Genetic modifications & genome structure

Chairman – Ivo Frébort (auditorium, 2.001)

16:00 – 16:30 Welcome speech by organizers

16:30 – 17:30 Plant Biotechnology: New opportunities to engineer secondary metabolism for effects and signalling

John Pickett (Rothamsted Research, UK)

17:30 – 18:30 Towards understanding the structure and function of forage crop genomes

Bruno Studer (ETH Zürich, Switzerland)

18:30 – 22:00 Welcome party (*foyer of 6th floor + Terrace*)

Tuesday, 16th of June 2015

8:30 – 12:30 *Registration*

Session 2: Metabolic regulation and methods of analysis

Chairman – Jaroslav Doležel (auditorium, 2.001)

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| 09:00 – 09:30 | Characterization of flooding tolerance mechanisms in soybean using proteomic techniques
Setsuko Komatsu (National Institute of Crop Science, Japan) |
| 09:30 – 09:50 | Tissue- and cell-specific analysis of phytohormones
Ondřej Novák (Institute of Experimental Botany, ASCR, Czech Republic) |
| 09:50 – 10:10 | Volatile compounds emitted by Gram-negative and Gram-positive bacteria and fungi promote growth and starch accumulation through cytokinin regulated processes
Javier Pozueta Romero (Institute of Agrobiotechnology, Spain) |
| 10:10 – 10:30 | First insights into barley nuclear proteome
Ivo Chamrád (Palacký University, Czech Republic) |
| 10:30 – 11:00 | <i>Coffee Break (foyer of 2nd floor)</i> |

Session 3: Plant- pathogen interactions & genetic modifications

Chairman – Petr Tarkowski (auditorium, 2.001)

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| 11:00 – 11:30 | <i>Rhodococcus fascians</i> , a plant growth promoting bacterium gone astray
Danny Vereecke (Ghent University, Belgium) |
| 11:30 – 11:50 | Do fungi produce phytohormones as an evolutionary relict or to conquer the plant tissue?
Petr Galuszka (Palacký University, Czech Republic) |

11:50 – 12:10	Visually labelled and selectable marker-free plants towards public acceptance of GMO's Helga Zelenyánszki (Eötvös Loránd University, Budapest, Hungary)
12:10 – 12:30	“Shaving” procedure optimization for identification of <i>Botrytis fabae</i> conidial surface proteins Dmitry Loginov (Palacký University, Czech Republic)
12:30 – 14:00	<i>Lunch (foyer of 2nd floor)</i>
14:00 – 16:00	<i>Poster session and coffee break (foyer of 2nd and 3rd floor)</i>

Session 4: Stress response and cell signaling

Chairman – Pavel Pospíšil (auditorium, 2.001)

16:00 – 16:30	Disclosing the roles of secondary metabolites in the antioxidant defense network of plants facing severe excess light stress Massimiliano Tattini (Institute for Plant Protection, Italy)
16:30 – 16:50	Exploring structures of protein complexes using single particle electron microscopy Roman Kouřil (Palacký University, Czech Republic)
16:50 – 17:10	Medicago mitogen-activated protein kinase kinase SIMKK overexpression in Arabidopsis: Salt stress-induced subcellular relocation and enhanced salt sensitivity Miroslav Ovečka (Palacký University, Czech Republic)
17:10 – 17:30	Several active and inactive signals among jasmonates in plant stress responses C. Wasternack (Leibniz Institute of Plant Biochemistry, Germany)

Wednesday, 17th of June 2015

Session 5: Cereal biotechnology & genome structure

Chairman – Ondřej Plíhal (auditorium, 2.001)

09:00 – 09:30	Novel dwarfing alleles In wheat: building on the green revolution Peter Hedden (Rothamsted Research, UK)
09:30 – 09:50	Genomics for improvement of cereal crops: New tools and new opportunities Jaroslav Doležal (Institute of Experimental Botany, ASCR, Czech Republic)
09:50 – 10:10	Genetic pool of the wild relatives of wheat: Is there a dark side? Szabolcs Makai (Centre of Agricultural Research, HAS, Hungary)
10:10 – 10:30	Characterization of new alleles influencing flowering time introgressed to bread wheat from <i>T. millitinae</i> Zuzana Ivaničová (Institute of Experimental Botany, ASCR, Czech Republic)
10:30 – 11:00	<i>Coffee Break (foyer of 2nd floor)</i>

Session 6: Stress response and cell signaling

Chairman – Jozef Šamaj (auditorium, 2.001)

11:00 – 11:30	An exciting new biostimulant and insect repellent phenolic molecule from the brown seaweed <i>Ecklonia maxima</i> Johannes van Staden (University of KwaZulu-Natal, South Africa)
11:30 – 11:50	Proteomic and biochemical analyses show that Arabidopsis ANP2 and ANP3 are involved in plant tolerance to oxidative stress Tomáš Takáč (Palacký University, Czech Republic)
12:00 – 13:30	<i>Lunch (foyer of 2nd floor)</i>
13:30 – 14:30	EFB, CRH, presentations (auditorium, 2.001)
14:30 – 16:30	<i>Poster session and coffee break (foyer of 2nd and 3rd floor)</i>
16:30	<i>Departure to Fort Krelov</i>
17:00 – 22:00	<i>Visiting the fort (guided tour, entertaining program, informal meetings, social dinner); EFB meeting (launching Plant Biotechnology section)</i>

Thursday, 18th of June 2015

Session 7: Metabolic regulation and methods of analysis

Chairman – Karel Doležal (auditorium, 2.001)

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| 09:00 – 09:30 | Playing with cytokinins to improve the agronomical traits of barley (<i>Hordeum vulgare</i> L.)
Veronique Bergougnoux-Fojtík (Palacký University, Czech Republic) |
| 09:30 – 09:50 | Electrical and jasmonate signaling regulate digestive enzyme activity and photosynthesis in the carnivorous plants
Andrej Pavlovič (Palacký University, Czech Republic) |
| 09:50 – 10:10 | Use of image-based automated phenotyping in development of plant growth regulators and stress-response studies
Lukáš Spíchal (Palacký University, Czech Republic) |
| 10:10 – 10:30 | Metabolic pathways indispensable for de novo organogenesis in Arabidopsis
Yoshihisa Ikeda (Palacký University, Czech Republic) |
| 10:30 – 11:00 | <i>Coffee Break (foyer of 2nd floor)</i> |

Session 8: Stress response and cell signaling

Chairman – Petr Ilík (auditorium, 2.001)

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| 11:00 – 11:30 | Function of lipid antioxidants during oxidative stress in plants
Jerzy Kruk (Jagiellonian University, Poland) |
| 11:30 – 11:50 | Plant cytoskeleton as target for agrobiotechnological applications
Georgios Komis (Palacký University, Czech Republic) |
| 11:50 – 12:10 | Singlet oxygen formation in plants under abiotic stress
Pavel Pospíšil (Palacký University, Czech Republic), |
| 12:10 – 12:40 | Chlorophyll fluorescence excitation efficiency - Diagnostic value and consequences for photosynthesis
Wolfgang Bilger (Christian-Albrechts-University, Germany) |
| 12:40 – 14:00 | <i>Lunch (foyer of 2nd floor)</i> |
| 14:00 – 16:00 | <i>Poster session and coffee break (foyer of 2nd and 3rd floor)</i> |

Session 9: Metabolic regulation and methods of analysis

Chairman – Marek Šebela (auditorium, 2.001)

16:00 – 16:30	Analytical tools to monitor <i>Penicillium chrysogenum</i> large-scale fermentation - from intact cell mass spectrometry to proteome profiling Martina Marchetti-Deschmann (Vienna University of Technology, Austria)
16:30 – 16:50	Site-directed mutagenesis of two nucleoside N-ribohydrolases from maize David Kopečný (Palacký University, Czech Republic)
16:50 – 17:10	The use of tomato aminoaldehyde dehydrogenase 1 for the detection of aldehydes in fruit distillates Marek Šebela (Palacký University, Czech Republic)
17:10 – 17:30	Closing remarks