



ISPMF 2014

Scientific Programme

17-19 June 2014

Berlin-Dahlem

June 17

11:00-13:45	Registration and Poster Mounting Lunch can be taken in the JKI Canteen (not included in registration fee)
13:45-14:00	Welcome and Conference Opening Joachim Schiemann, Julius Kuehn Institute, Germany Julian Ma, St George's, University of London, UK
14:00-14:40	Key Note 1 Immunogenic and immunomodulatory glycoproteins of helminth parasites, and the potential of plants as recombinant production platform C.H. Hokke, Leiden University Medical Center, The Netherlands
Session 1: Glycosylation of plant-derived recombinant proteins Chair: Arjen Shots	
14:40-15:00	Expression of Schistosome-derived Omega-1 with diantennary glycans carrying Lewis X motifs in Nicotiana benthamiana plants L. Westerhof, Wageningen University, The Netherlands
15:00-15:20	Expression and glycomodification of therapeutic proteins using heterologous biosystems K. Ko, Chung-Ang University, Korea
15:20-15:40	Interaction of plant-derived anti-HIV mAb with human receptors S. Stelter, St George's, University of London, UK
15:40-16:00	Production of plant-derived recombinant proteins with engineered human-like n-glycans: a review A. Castilho, University of Natural Resources and Life Sciences, Austria
16:00-16:30	Coffee Break

Session 2: Downstream processing Chair: Stefan Schillberg	
16:30-16:50	Assessing the quantity and quality of Plant-made Pharmaceuticals by Surface Plasmon Resonance M. Sack, RWTH Aachen University, Germany
16:50-17:10	Protein quality control – from protein recognition and degradation to conditional protein expression N. Dissmeyer, Leibniz Institute of Plant Biochemistry, Germany
17:10-17:30	Production of ELPylated haemagglutinin in plants HT. Phan, IPK Gatersleben, Germany
17:30-17:50	Spider silk proteins from plants: Multimerization strategies and characterization tools N. Weichert, IPK Gatersleben, Germany
17:50-18:10	Hydrophobin as a fusion partner to produce a soluble influenza vaccine in plants N. Jacquet, Institut des Sciences de la Vie, Université catholique de Louvain, Belgium
18:30-19:45	Reception at the JKI building (separate registration)
20:00-22:00	Guided Walk through the Botanical Garden (separate registration)

June 18

09:00-09:40	<p>Key Note 2 Plant-made idiotype vaccines for non-Hodgkin's lymphoma: techno-economic feasibility study V. Klimyuk, Icon Genetics GmbH, Germany</p>
<p>Session 3: Virus-mediated transient expression systems Chair: Inge Broer</p>	
09:40-10:00	<p>HPV pseudovirion production in plants I. Hitzeroth, University of Cape Town, South Africa</p>
10:00-10:20	<p>Exploiting Virus Superinfection Exclusion for the Production of Recombinant Polyclonal Antibodies in Plants D. Orzáez, IBMCP-CSIC, Spain</p>
10:20-10:40	<p>Plant virus nanoparticles: toxicity and teratogenicity evaluation using in vitro and in vivo models C. Lico, ENEA Casaccia Research Center, Italy</p>
<p>Session 4: Seed expression systems Chair: Kirsi-Marja Oksman-Caldentey</p>	
10:40-11:00	<p>Seeds for delivery of edible vaccine L. Rossi, University of Milan, Italy</p>
11:00-11:30	<p>Coffee Break</p>
11:30-11:50	<p>Bulking up antibody production, translation from a model plant to crops V. Virdi, Ghent University, Belgium</p>
11:50-12:10	<p>Molecular farming in plant seeds: a comparative analysis I. Broer, University of Rostock, Germany</p>
12:10-12:30	<p>Comparison of VHH-Fc antibody production in <i>Arabidopsis thaliana</i>, <i>Nicotiana benthamiana</i> and <i>Pichia pastoris</i> A. Depicker, Ghent University, Belgium</p>

<p style="text-align: center;">Session 5: Moss expression systems Chair: Kirsi-Marja Oksman-Caldentey</p>	
12:30-12:50	Gene targeting for precision glyco-engineering: Production of biopharmaceuticals devoid of plant-typical glycosylation in moss bioreactors R. Reski, University of Freiburg, Freiburg
12:50-13:10	Moss-aGal: preclinical results of the first moss-made biopharmaceutical A. Schaaf, Greenovation Biotech GmbH, Germany
13:10-14:20	Lunch Break
<p style="text-align: center;">Session 6: PlantEngine - Plant Molecular Farming with small molecules Chair: Heribert Warzecha</p>	
14:20-14:30	Introduction of the COST Action PlantEngine Heribert Warzecha, TU Darmstadt, Germany
14:30-15:10	Key Note 3 Metabolic engineering of diterpenoids in plants Alain Tissier, Leibniz Institute of Plant Biochemistry, Germany
15:10-15:30	Production of cosmetic ingredients by cell cultures of Nordic berry species R. Puupponen-Pimiä, VTT Technical Research Centre of Finland, Finland
15:30-15:50	GoldenBraid2.0: A comprehensive DNA assembly framework for multigene engineering in Molecular Farming and Plant Metabolic Engineering M. Vazquez-Vilar, Universidad Politécnica de Valencia, Spain
15:50-16:10	Metabolic engineering of rosmarinic acid and icetaxanes diterpenoids biosynthetic pathways in <i>Nicotiana tabacum</i> L. Bassolino, CRA-FSO, Italy
16:10-16:30	From bench to application: ANTHOPLUS – ANTHOCyanin production Platform Using plant Suspension cultures as green factories (ERA-IB) S. Martens, TransMIT Project Division for Plant Metabolites and Chemicals (PlantMetaChem), Germany

16:30-17:30	Coffee Break and Poster Session
16:35-17:00	<i>Odd numbers</i>
17:00-17:25	<i>Even numbers</i>
Session 7: Plant cell production systems Chair: Dirk Bosch	
17:30-17:50	The model legume <i>Medicago truncatula</i> expression system: Towards high-yield production of recombinant proteins in cell suspension cultures R. Abranches, Instituto de Tecnologia Quimica e Biologica, Portugal
17:50-18:10	The challenge of proteolysis in plant molecular farming: tobacco BY-2 cells as a case study A. Schiermeyer, Fraunhofer IME, Germany
18:10-18:30	Plant-cell packs: a new tool for molecular farming T. Rademacher, Fraunhofer IME, Germany
19:00-22:00	Barbecue Party at the JKI building

June 19

09:00-10:30	ISPMF Meeting
10:30-11:00	Coffee Break
11:00-11:40	Key Note 4 Plant-derived Non-Hodgkins lymphoma vaccine: results of clinical evaluation J.E. Butler-Ransohoff, Bayer HealthCare AG, Germany
Session 8: Plant-derived recombinant proteins for medical applications Chair: Julian Ma	
11:40-12:00	Generation of an anti-HIV microbicide cocktail plant A.Y.H. Teh, St. George's Univeristy of London, UK
12:00-12:20	Polymeric IgG-dengue fusion proteins as vaccine candidates M. Kim, St George's University of London, UK
12:20-12:40	Production of an active anti-CD20-hIL-2 immunocytokine in <i>N. benthamiana</i> M. Donini, ENEA, Italy
12:40-13:40	Lunch Break

Session 9: Different topics Chair: Joachim Schiemann	
13:40-14:20	Key Note 5 Metabolic Engineering for Omega-6 and Omega-3 oils on oilseeds Maurice M Moloney, CSIRO, Australia
14:20-14:40	Plant roots as a useful vaccine production system using E.coli LTB as a model antigen J.D. Hamill, Deakin University, Australia
14:40-15:00	Technoeconomics of transient production of high-yield horseradish peroxidase in <i>Nicotiana benthamiana</i> E.P. Rybicki, University of Cape Town, South Africa
15:00-15:10	Final Remarks and Closure Joachim Schiemann, Julius Kuehn Institute, Germany Julian Ma, St George's University of London, UK