



IMPRS

Exploration of Ecological
Interactions with Molecular
and Chemical Techniques

15th IMPRS Symposium

February 18-19, 2016

Altes Schloss, Dornburg



Program

Thursday, February 18th, 2016

- 08:00 *Departure, central bus stop (opposite Jena Paradies train station)*
- 08:45 **Welcome and Announcements**
Prof. Jonathan Gershenzon, spokesperson of the IMPRS
- 09:00 **Plenary Lecture 1:**
Prof. Bernd Schmid, University of Zurich
TBA
Chair: Nora Adam
- 10:00 *Coffee break*
- 1st talk session: *Nicotiana* genomics and ecology**
Chair: **Verena Jeschke**
- 10:20 Comparative *Nicotiana* genomics shed lights on the evolution of ecologically important traits
Thomas Brockmöller (ITB)
- 10:40 Finding the best match: comparing preferences of *Nicotiana attenuata* and its pollinators
Julia Bing (ITB)
- 11:00 Interspecific interactions on the same host plant shifts the sex ratio of *Tupiocoris notatus* (Hemiptera: Miridae) populations
Nora Adam (ITB)
- 11:20 Regulation of leaf photosynthesis and gas exchange in response to wounding and perception of *Manduca sexta* herbivore elicitors
Ivan D. Meza Canales (ITB)
- 11:40 *Lunch*
- 12:40 **Poster talks 1 – odd numbers (1 slide and 1 min/poster)**
Chair: Henrique Valim
- 13:00 Poster session 1 – odd numbers
- 14:40 *Coffee break*
- 2nd talk session: Biochemistry of plant-herbivore-pathogen interactions**
Chair: **Julia Bing**
- 15:00 Toxicity of glucosinolate-derived isothiocyanates to generalist-feeding caterpillars
Verena Jeschke (GER)

- 15:20 Trees, insects and pathogens: How a multiple attack influences the host's defense and its attackers
Franziska Eberl (GER)
- 15:40 Catechin and proanthocyanidins are a general chemical defense in poplar against fungal pathogens of different lifestyles
Chhana Ullah (GER)
- IMPRS Matters**
- 16:00 Election of PhD representatives
Peter Grossmann & Florencia Campetella
- 16:30 IMPRS Announcements
Claudia Voelckel
- 17:00 End Day 1, Return to Jena

Friday, February 19th, 2016

- 08:15 *Departure, central bus stop (opposite Jena Paradies train station)*
- 09:00 **Plenary Lecture 2:**
Prof. Mattias Larsson, Swedish University of Agricultural Sciences (SLU)
TBA
Chair: Sarah Koerte
- 10:00 *Coffee break*
- 3rd talk session: Odor perception in insects**
Chair: Theresa Hölscher
- 10:20 Revealing the valence of single olfactory sensory neurons in *Drosophila melanogaster*
Tom Retzke (HAN)
- 10:40 To go or not to go? Olfactory processing of odor features: Good vs. Bad
Ahmed A. M. Mohamed (HAN)
- 11:00 Attractiveness of *Ips typographus* to its ectosymbiont *Endoconidiophora polonica*: Chemical, electrophysiological and *in vitro* choice studies
Dineshkumar Kandasamy (GER)
- Final talk:**
- 11:20 Nutrients and sex drive the motility of benthic diatoms and influence the structure of biofilms
Karen Grace Bondoc (FSU)
- 11:40 Lunch

12:40 **Poster talks 2 – odd numbers (1 slide and 1 min/poster)**

Chair: André Busch

13:00 Poster session 2 – odd numbers

14:40 *Coffee break and group photo*

Awards and final remarks

15:30 Jonathan Gershenzon

16:00 End Day 2, Return to Jena

Posters

1. Smelling the world: olfactory responses in kissing bugs
Florencia Campetella (HAN)
2. One for all, all for one? The influence of SNMPs and OBPs on a receptor's ligand specificity
Sarah Körte (HAN)
3. Desert ants consider landmark ambiguity
Roman Huber (HAN)
4. Identification of biosynthetic function of genes in plants and their consequences in insects – A metabolite profiling approach driven by automatic compound identification
Sven Heiling (ITB)
5. Plant trichome metabolites involved in constitutive defenses against herbivore and fungal pathogens
Van Thi Luu (ITB)
6. How does variation in the core circadian clock mechanism alter life history strategies in *Nicotiana attenuata*?
Henrique Valim (ITB)
7. Native root-associated bacteria protect their host plant from a fungal sudden-wilt disease via synergistic mechanism
Rakesh Santhanam (ITB)
8. How fast is the sequestration of dietary glucosinolates in *Phyllotreta armoraciae*?
Theresa Sporer (HEC)

9. Putative cellulolytic enzymes in *Gastrophysa viridula* and their biological relevance
André Busch (HEC)
10. Can herbivore-induced plant volatiles prime defenses in black poplar?
Sandra Lackner (GER)
11. The influence of pea aphid host race and facultative symbionts on legume chemistry
Aleksa Stanisic (GER)
12. Can phloem associated defense mechanisms help explain the diversity of host races in the pea aphid?
Maria Paulmann (GER)
13. Thomas Fabisch (GER)
14. The calcium sensor protein CML9 – A defense regulator in plants?
Monika Heyer (BOL)
15. Living on a poisonous diet: conjugation of 3-NPA with amino acids in the gut of *S. littoralis*
Alexey Novoselov (BOL)
16. Prey induced phytohormones and gene expression in carnivorous *Nepenthes*
Ayufu Yilamujiang (BOL)
17. More than just red! Investigating flower color polymorphism of *Papaver rhoeas*
Bettina Dudek (SCH)
18. Genomic predictors of bacterial physiology
Peter Großmann (FSU)
19. Public goods of *Bacillus subtilis* – how public are they really?
Theresa Hölscher (FSU)