12\textsuperscript{th} IMPRS Symposium

April 18-19, 2013
Abbe Centre, Beutenberg Campus

Program
Thursday, April 18, 2013

09:00  Welcome and Announcements
       Prof. David Heckel, spokesperson of the IMPRS

09:10  Plenary Lecture:
       Prof. J. Ruther, Regensburg University
       Black wasps meet the Red Queen – pheromone communication in Nasonia
       Chair: Alexander Haverkamp

10:10  Coffee break (Catering Abbe Center)

Session I
Chair: Youngsung Joo

10:40  Andrea Barthel
       Hemocyte-mediated immune response: Consequences of a specialized
       lifestyle

11:00  Amol Fatangare
       Application of 2-[18F]fluoro-2-Deoxy-D-glucose (18FDG) in in vivo
       plant imaging

11:20  Poster Talks I – odd numbers 1-43 (1 slide and 1 min/poster)
       Chair: Purva Kulkarni

11:40  Poster Session I – odd numbers 1-43

13:00  Lunch (Catering Abbe Center)

14:00  Internal Meeting of PhD students (without supervisors, postdocs etc.)

14:30  Session II
Chair: Franziska Dolke

14:30  Glen D’Souza
       Loose to gain: Adaptive fitness benefits drive prevalent loss of biosynthetic
       genes in bacteria

14:50  Anne-Christin Warskulat
       Nudicaulins of Papaver nudicaule flowers: structure & biosynthesis

15:10  Katrin Groh
       The hermit crab’s nose – antennal transcriptomics

15:30  Hassan Salem
       Symbiont-mediated vitamin supplementation in firebugs

15:50  Coffee Break (Catering Abbe Center)

16:20  Poster Talks II – even numbers 2-44
       Chair: Anne-Kathrin Dietel

16:30  Poster Session II – even numbers 2-44

18:00  End of poster session
Friday, April 19, 2013

9:00   Plenary Lecture:
     Prof. Ute Hentschel Humeida, Würzburg University
tba
     Chair: Shraddha Shitut

10:00  Coffee break

Session III
     Chair: Karen Grace Bondoc

10:30  Johannes Frenkel
     The first diatom pheromone

10:50  Andrea Clavijo McCormick
     Volatile mediated recruitment of natural enemies in poplar trees

11:10  Poster Talks III – even numbers 46-90 (1 slide and 1 min/poster)
     Chair: Spoorthi Poreddy

11:30  Poster Session III – even numbers 46-90

12:50  Lunch (Catering Abbe Center)

Session IV
     Chair: Fabio Miazzi

13:50  Anja Strauß
     Beetle juice strategy: ABC transporter acts as a gatekeeper while
     unifying sequestration and active defense

14:10  Michael Stitz
     The key to flower opening: Jasmonate signaling and floral
     development in *Nicotiana attenuata*

14:30  Jan Jirschitzka
     Identification of the penultimate enzymes in the biosynthesis of
     cocaine and other tropane alkaloids in *Erythroxylum coca* and other
     *Erythroxylum* species

14:50  Katrin Friedemann
     Evolution of attachment structures in Acercaria

15:10  Coffee Break (Catering Abbe Center)

15:40  Poster Talks IV – odd numbers 45-91
     Chair: Ayufu Yilamujiang

16:00  Poster Session IV – odd numbers 45-91

17:30  Final remarks Prof. Heckel and Prof. Oelmüller, Cafeteria MPI-CE
     *Get-together with beer, juice and salty snacks*
Poster Presentations

1. **Effect of the genetic variation on the insect diversity in the natural population of Nicotiana attenuata**  
   Alhammoud, Nour

2. **Bacterial community associated with hindgut-wall and novel structures, of the forest cockchafer (Melolontha hippocastani).**  
   Arias Cordero, Erika

3. **Pheromone-plant interaction in Heliothis virescens**  
   Badeke, Elisa

4. **Chlorophyll degradation in the insect gut**  
   Badgaa, Amarsanaa

5. **Mapping the olfactory output in Drosophila**  
   Baschwitz, Amelie

6. **Bon appetit! How does Hylobius abietis cope with terpenes in their diet?**  
   Berasategui, Aileen

7. **An extracellular superoxide dismutase supports antifungal resistance of Phaedon cochleariae (Insecta:Coleoptera)**  
   Bodemann, René

8. **Who has the benefit? Galling aphid infestation alters foliar phenolic levels in poplar**  
   Boeckler, Andreas

9. **Complex interactions during biofilm formation by benthic diatoms**  
   Bondoc, Karen Grace

10. **Cytokinins regulate optimal defense patterns in plants**  
    Brütting, Christoph

11. **Screening the desert for food: Olfactory-driven foraging in Cataglyphis**  
    Bühlmann, Cornelia

12. **Detoxification of maize chemical defenses by lepidopteran herbivores**  
    Christoff Wouters, Felipe

13. **Plasmids as minimal endosymbionts – Unravelling the causes for genome erosion**  
    Dietel, Anne-Kathrin

14. **The role of Nicotiana attenuata WRKY9 transcription factor in plant defense against herbivory**  
    Dinh, Truong Son

15. **Small molecule signaling in plant-parasitic nematodes**  
    Dolke, Franziska

16. **Divergence in olfactory host plant preference in D. mojavensis in response to cactus host use**  
    Dweck, Hany

17. **Olfactory modulations in starved and fed fly Drosophila**  
    Farhan, Abu
21 Burkholderia bacteria as insect endosymbionts: The fully equipped bacterial partners of Lagria hirta tenebrionid beetles. Flórez Patino, Laura Victoria

22 Systemic root jasmonic acid synthesis and perception regulate nicotine production and transport and account for plant performance against folivores. Fragoso, Variluska

26 Identification of cellular cost-benefit trade-offs in biofilm formation on various surfaces Großmann, Peter

27 Leaf herbivory elicits distinct asynchronous shifts in the root transcriptome of Nicotiana attenuata Gulati, Jyotasana

28 Induced defense compounds in corn: Methylation of DIMBOA-Glc Handrick, Vinzenz

29 The behavioral correlates of flower perception in the hawkmoth Manduca sexta Haverkamp, Alexander

30 MS-based dereplication and classification of 17-hydroxygeranyllinalool diterpene glycoside profiles of 24 Solanaceous plant species Heiling, Sven

31 Aldehyde dehydrogenases are key elements in the ectomycorrhizal cross talk Henke, Catarina

32 Phenylphenalenone-type compounds and its role as phytoalexins in the pathosystem Musa - M. fijiensis Hidalgo, William

33 Searching for apomixis candidate genes in Poa pratensis Hilpert, Stephanie

34 The role of latex secondary metabolites in root herbivore defense Huber, Meret

35 Computational methods for analyzing small molecule mass spectrometry data Hufsky, Franziska

37 The biosynthesis of nitrogen-containing volatiles in poplar Irmisch, Sandra

38 Defenses in Gracilaria vermiculophylla Jacquemoud, Dominique

39 Detoxification and the metabolic effects of isothiocyanates in insect herbivores Jeschke, Verena

40 How do plants shut down jasmonate signalling? Jimenez-Aleman, Guillermo Hugo

42 Timing for defense: Different responses in Nicotiana attenuata induced by herbivory at different times. Joo, Youngsung
Do cerato-platanin-like proteins facilitate fungal attachment to insect vectors? A case study with Ceratocystis polonica and Ips typographus
Kandasamy, Dineshkumar

Detoxification processes in Bt resistant insects by ABC-transporters
Karpinski, Anne

Nucleases which impair experimental RNAi in Lepidoptera.
Khan, Sher Afzal

Detoxification of gossypol, a cotton secondary metabolite, by Heliothine moths
Krempl, Corinna

Computational methods for analyzing imaging mass spectrometry data
Kulkarni, Purva

Manduca sexta larvae co-opt host Nicotiana attenuata’s defense metabolite nicotine to deter its predator
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 Adaptive regulation of digestive serine proteases in Helicoverpa armigera
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Nurture vs. nature: Maternal and environmental effects on symbiont-mediated antimicrobial defense in a solitary digger wasp
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Genes and the environment: Epigenetics in Manduca sexta
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An indiscriminant MS/MS approach unravels natural diversity patterns in defense responses of Nicotiana attenuata populations
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Transcriptome survey on the alternative splicing landscape in Nicotiana attenuata
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Host plant-driven sensory specialization in the Pandanus specialist Drosophila erecta
Linz, Jeanine

Evidence of aggregation pheromone in euedaphic soil animal Folsomia candida (Collembola)
Liu, Jing

The role of cytokinins in systemic responses after herbivory
Meza Canales, Ivan David

Investigating the role of Calmodulin in the odor response termination in Drosophila melanogaster
Miazzi, Fabio

Growth and defense - Ca^{2+} signaling in unstable continuum: Piriformopsora indica-derived trisaccharide induces intracellular calcium elevation, promotes growth and confers resistance in Arabidopsis
Michal Johnson, Joy

Evolution of insect olfactory receptors
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