Institute Symposium 2011

Location (Talks): HS 3, FSU Campus, Carl-Zeiss-Str. 3, 07743 Jena
Location (Poster Session): FSU UHG Foyer, Fürstengraben 1

Thursday, September 22, 2011

09:00        Bill S. Hansson
            Welcome and Opening Remarks

09:10-10:50  Session 1
10:50        Coffee Break
11:20-13:00  Session 2
13:00        Lunch

Poster Session in the Foyer of the FSU Main Building,
Fürstengraben 1
14:30-16:00  Poster Session (even numbers)
16:00-17:30  Poster Session (odd numbers)

Friday, September 23, 2011

09:00-10:40  Session 3
10:40        Coffee Break
11:10-12:50  Session 4
12:50        Lunch
14:00-15:40  Session 5

15:40-16:30  Conclusion and refreshments
Talks and Sessions
Sessions will be randomly drawn; order of sessions below does not match session number!

Compounds & Responses (Chair: Raimund Nagel)
Matthias Erb, “The root of all evil? Plant-insect interactions below ground”
Sabrina Köhler, “Winged pharmacists: Beewolves use antibiotic producing endosymbionts to protect their offspring”
Marco Kai, “Bacterial compounds screened by mass spectrometry”
Christian Paetz, “NMR as a versatile method in chemical ecology”
Martin Strube-Bloss, “Interfering with neural circuits in the insect olfactory system”

Ecology & Economy (Chair: Nicole Joußen)
Michael Stitz, “Metabolic manipulation of jasmonate budgets as a convincing mean to elucidate plant signaling processes”
Danny Kessler, “The floral dilemma”
Sang-Gyu Kim, “Ecological Roles of the Circadian Clock in Nicotiana attenuata”
Michael Thoma, “Adding another dimension – temporal aspects of behavioral odor responses in Drosophila melanogaster”
Samay Pande, “Less is more: the advantage of cost spreading”

Molecular Genetics & Applied Genomics (Chair: Axel Mithöfer)
Sabine Hänniger, “A genomic approach to isolation barriers in Spodoptera frugiperda host strains”
Silvia Schmidt, “Hybrid incompatibility and its role in speciation “
Yannick Pauchet, “Cell-wall-degrading enzymes of phytophagous beetles”
Anja Strauß, “Sequestration of plant glucosides by leaf beetle larvae: The ABC in the transporter network”
Rene Bodemann, “Disarming leaf beetle larvae. RNAi mediated silencing of keystone compounds of the defense system”
Talks and Sessions (continued):

**Plant-Insect Interactions & Defense** (Chair: Gustavo Bonaventure)
Stefan Meldau, “New stories from old hormones: Cytokinins mediate plant responses to herbivores”
Jyothilakshmi Vadassery, “Integrating calcium signaling to herbivore induced plant defense”
Sybille Unsicker, “Black poplar defense responses to herbivore attack”
Grit Kunert, “Not peas in a pod: Maintenance of pea aphid host races on different legume species and its chemical and ecological basis”
Franziska Beran, “Specializing on spice: *Phyllotreta* flea beetles aggregate on their mustard hosts using both plant and insect cues”

**Variation, Adaptation & Detoxification** (Chair: Irene Ibba)
Hany Dweck, “Intra- and interspecific variation in the olfactory system of *Drosophila mojavensis* cluster in response to cactus host utilization”
Sofia Lavista Llanos, “Obligatory commensalism drives *Drosophila sechellia* adaptation to a toxic host”
Daniel Giddings Vassao, “Tracing glucosinolate metabolism and detoxification in herbivores”
Heiko Vogel, “The burying beetle *Nicrophorus* & yummy carcasses”
Mohammed Shabab, “OPDA-isomerization by a GST in the insect gut; potential for biotechnological applications?”
Posters

1. Tohir Bozorov (ITB), Do small RNAs orchestrate defense responses to insect herbivory
2. Dorothea Meldau (ITB), Bacterial body odors make plants happy
3. Youngjoo Oh (ITB), JAZh regulates JA-related direct and indirect plant defense responses against herbivory in *Nicotiana attenuata*
4. Arne Weinhold (ITB), Friendly fire – Why antimicrobial plants should be tested with beneficial bacteria and in field experiments
5. Melkamu Woldmariam (ITB), The MYC2 - MYC2-like transcriptional factors in plant defense regulation
6. Andreas Boeckler (GER), Salicinoids in *Populus nigra* L. and their response to herbivory
7. Sandra Irmisch (GER), Seven terpene synthases produce the major compounds of the gypsy moth feeding-induced volatile blend of *Populus trichocarpa*
8. Jan Jirschitzka (GER), Methylleagone Reductase: The Penultimate Step in Cocaine Biosynthesis
9. Raimund Nagel (GER), Measurement of isoprenyl diphosphate synthase activity in plant crude extracts by HPLC-MS/MS
10. Namita Wadke (GER), Virulence of the bark beetle associated fungus, *Ceratocystis polonica*, in Norway spruce (*Picea abies*) is associated with oxidative metabolism of host defenses
11. Amarsanaa Badgaa (BOL), Fate of Chlorophyll in the Insect Gut
12. Rita Büchler (BOL), Structure and Mechanism of Iron Translocation by a Dps Protein from *Microbacterium arborescens*
13. Marcia González-Teuber (BOL), Symbiotic ants as an indirect defence against phytopathogens
14. Marittta Kunert & Sindy Frick (BOL), Chemical defense: Terpenoid biosynthesis in leaf beetle larvae
15. Erika Arias Cordero (BOL), Gut microbiota of the forest cockchafer (*Melolontha hipposcastani*)
16. Anne-Kathrin Dietel (KOST), Metabolic costs of plasmids as model endosymbionts
17. Holger Merker (KOST), Your dip, my dish: evolution of mutual cross-feeding from amino acid overflow metabolism
18. Elisabeth Eilers (HAN), Picky larvae – below ground host plant discrimination in *Melolontha melolontha* larvae
19. Christian Klinner (HAN), Flies smelling like a moth – *Manduca sexta* odorant receptors in *Drosophila*
21. Vardanush Sargsyan (HAN), Phosphorylation via PKC regulates the function of the *Drosophila* odorant coreceptor
22. Regina Steiber (HAN); Functional Characterization of *Drosophila* Larvae Specific Odorant Receptors
24. Andrea Barthel (HEC), Immune defense response in a generalist and specialist Heliointine moth
25. Lisa M. Knolhoff (HEC), Genetic and molecular components of a host range expansion in *Plutella xylostella*
26. Hanna Heidel-Fischer (HEC), To eat or not to eat: Host plant range differences in two closely related moth species
27. Suyog Kuwar (HEC), Adaptive evolution and regulation of digestive serine protease superfamily in *Helicoverpa armigera*
28. Melanie Marr (HEC), Speciation in progress? Strain-specific sexual communication in *Spodoptera frugiperda*
29. Hassan Salem (KAL), Symbiont Swap: Specificity of the Pyrrhocorid-*Coriobacterium* Symbiosis
30. Sailendharan Sudakaran (KAL), Composition and evolutionary history of the bacterial community in the mid-gut of firebugs (Hemiptera, Pyrrhocoridae)
31. Jingjing Fang (NMR), Cell-specific detection of secoisolariciresinol diglucoside in flaxseed (*Linum usitatissimum*)
32. Anne-Christin Warskulat (NMR), Biosynthesis of nudicaulins in *Papaver nudicaule*
33. Aleš Svatůs (MS), Automatic interpretation of electrospray-formed tandem mass spectra: Could it be ever done?
34. Mayuri Napagoda (MS), Identification of Sex Dependent Lipids in *Drosophila* Fruit flies