



## Institute Symposium 2015

Location: Lecture hall, Abbe Center Beutenberg Campus, Hans-Knöll-Str. 1, 07745 Jena

### Wednesday, September 23, 2015

- 09:00 – 09:30      **Opening remarks + review of the year 2014/15** (*David Heckel*)
- 09:35 – 09:50      **Session 1** (chair: *Heiko Vogel, Dept. of Entomology*)  
Comparative analyses of membrane proteins in different larval tissues from sequestering poplar leaf beetle  
(*Antje Burse, Dept. of Bioorganic Chemistry*)
- 09:50 – 10:05      Who is manipulating whom? - The relationship between aphids and plants  
(*Grit Kunert, Dept. of Biochemistry*)
- 10:05 – 10:20      Mating at home - a cryptic reproductive isolation barrier in *Drosophila sechellia*?  
(*Sofia Lavista-Llanos, Dept. of Evolutionary Neuroethology*)
- 10:20 – 10:35      Sexual abstinence in *Spodoptera frugiperda*  
(*Silvia Kost, Dept. of Entomology*)
- 10:35 – 11:05      *Coffee break*
- 11:05 – 11:20      **Session 2** (chair: *Meredith Schuman, Dept. of Molecular Ecology*)  
Variation in plant jasmonate production shapes the interaction of native herbivores  
(*Nora Adam, Dept. of Molecular Ecology*)
- 11:20 – 11:35      Nudicaulin biosynthesis in *Papaver nudicaule* petals  
(*Anne Warskulat, Biosynthesis/NMR Research Group*)
- 11:35 – 11:50      Biosynthesis of isoxazolin-5-one glucosides in Chrysomelina  
(*Tobias Becker, Dept. of Bioorganic Chemistry*)
- 11:50 – 12:05      Regulation of the MEP pathway in a dynamic environment  
(*Louwrence Wright, Dept. of Biochemistry*)
- 12:05 – 13:30      *Lunch break* (at your own expense)
- 13:30 – 14:15      **Weinbau im Zeichen des Klimawandels: Sorten, Säure, Schaderreger**  
(*Prof. Dr. Annette Reineke, Dept. of Phytomedicine, University of Geisenheim*)  
(chair: *David Heckel*)
- 14:20 – 14:35      **Session 3** (chair: *Anton Shekhov, Dept. of Biochemistry*)  
A molecular mechanism for distance odor source finding in *Drosophila*  
(*Merid Getahun, Dept. of Evolutionary Neuroethology*)
- 14:35 – 14:50      Bt receptor identification in *Heliothis virescens*  
(*Anne Bretschneider, Dept. of Entomology*)
- 14:50 – 15:05      Smoke – more than a germination cue?  
(*Ming Wang, Dept. of Molecular Ecology*)
- 15:05 – 15:30      **Poster talks, session 1 (odd numbers)** (13 speakers)
- 15:30 – 16:00      *Coffee break*
- 16:00 – 17:30      **Poster session 1 (odd numbers)** (in Abbe Center foyer)

## **Thursday, September 24, 2015**

- 09:00 – 09:45 Entomopathogenic fungi as endophytes in crop plants and their potential for control of pests and diseases: Grapevine and tomatoes as case studies (Prof. Dr. Annette Reineke, Dept. of Phytomedicine, University of Geisenheim) (chair: David Heckel)
- 09:50 – 10:05 **Session 4** (chair: Jaime Martinez-Harms, Dept. of Evolutionary Neuroethology)  
How a plant pathogen can become an insect mutualist: mixed transmission mode and egg defense in the Burkholderia-Lagriinae symbiosis (Laura Flórez, Max Planck Research Group Insect Symbiosis)
- 10:05 – 10:20 Herbivore-induced GABA accumulation in plants - a calcium-mediated systemic defense? (Sandra Scholz, Dept. of Bioorganic Chemistry)
- 10:20 – 10:35 Flavan-3-ols and condensed tannins are a general chemical defense in poplar against fungal infection (Chhana Ullah, Dept. of Biochemistry)
- 10:35 – 11:00 **Poster talks, session 2 (even numbers)** (13 speakers)
- 11:00 – 11:30 Coffee break
- 11:30 – 13:00 **Poster session 2 (even numbers)** (in Abbe Center foyer)
- 13:00 – 14:00 Lunch break (at your own expense)
- 14:00 – 14:15 **Session 5** (chair: Stefan Pentzold, Dept. of Bioorganic Chemistry)  
What can flowers tell us about the olfaction of moths? (Jaime Martinez-Harms, Dept. of Evolutionary Neuroethology)
- 14:15 – 14:30 How the rice weevil breaks down the pectin network: enzymatic synergism and sub-functionalization (Roy Kirsch, Dept. of Entomology)
- 14:30 – 14:45 Relating structure and function in the *Drosophila* antennal lobe (Veit Grabe, Research Group Olfactory Coding)
- 14:45 – 15:00 Glucosinolate detoxification by desulfation in the cabbage stem flea beetle, *Psylliodes chrysocephala* (Seung-Joon Ahn, Research Group Sequestration and Detoxification in Insects)
- 15:00 – 15:30 Coffee break
- 15:30 – 15:45 Network-dependent costs of metabolite production and the selective advantages to lose the respective biosynthetic genes (Silvio Waschina, Research Group Experimental Ecology and Evolution)
- 15:45 – 16:00 Native bacterial consortia protect their host plant *Nicotiana attenuata* from fungal sudden wilt disease via synergistic mechanism (Rakesh Santhanam, Dept. of Molecular Ecology)
- 16:00 – 16:15 High-lateral and mass resolution imaging of plants, insects, and bacteria (Filip Kaftan, Mass Spectrometry Research Group)
- 16:15 – 16:30 **Conclusions** (David Heckel)