

## ANN Spring Meeting 2018

### Program

#### Tuesday 27.03

- 12:30-14:20 **Reception** (Shuttle bus 2 times from Grünstadt train station)  
14:20-14:30 **Welcome Remark**  
14:30-17:45 **Session 1 Learning and Molecular studies**  
18:00-19:00 **Dinner**  
19:00-20:00 **Plenary Lecture** by Jim Truman  
A Journey through Insect Neurobiology: Moths, Hoppers, Flies and Beyond.  
20:00-22:00 **Poster**  
21:30- **Beer+Wine**

#### Wednesday 28.03

- 09:00 **Breakfast**  
09:00-12:15 **Session 2 Sensory systems: olfaction, vision and hearing:**  
12:15-13:15 **Lunch**  
13:15-15:40 **Session 3 Motor systems and navigation**  
15:40-18:00 **Free time**  
18:00-19:00 **Dinner**  
19:00-22:00 **Poster → Beer+Wine**  
21:00 **Small meeting for future plan**  
22:00- **Party**

#### Thursday 29.03

- 09:00 **Breakfast**  
09:00-11:50 **Session 4 Anatomy, Circadian clocks, Honey bee division of labor,  
"play-like"-behavior:**  
11:50-12:15 **Broad discussion for future meeting**  
12:15-12:20 **Closing remark**  
12:20-13:20 **Lunch (+ceremony of Félix Dujardin Award)**  
**Departure** (Shuttle bus 2 times to Grünstadt train station)

## TALKS

- 14 min presentation, 8 min discussion = 22 min total.
- Please bring your own laptop computer (projector and laser pointer are provided).
- Please connect your computer during discussion of the previous speaker.

### Session 1: Learning and Molecular studies:

- 1 Michael Schleyer (Leibniz Institute for Neurobiology, Gerber Lab)  
**Characterisation of an optogenetically activated dopaminergic reward signal**
- 2 Büsra Coban (University of Göttingen, Fiala Lab)  
**Structural Plasticity of the Mushroom Body-related Dopaminergic Neurons in Dependence of the Nutritional Value of Food**
- 3 Mira Becker (University of Würzburg, Strube-Bloss/ Rössler Lab)  
**Learning of olfactory-visual compounds during PER experiments in honeybees**
- 4 Dennis Pauls (University of Würzburg, Wegener Lab)  
**Feedback signaling from mushroom body Kenyon cells to DANs during larval associative conditioning**

### BREAK

- 5 Kumar Aavula (Technical University of Kaiserslautern, Pielage Lab)  
**The pseudo-kinase Madm coordinates synapse development and maintenance via mTOR signaling in Drosophila**
- 6 Federico Tenedini (University Medical Center Hamburg-Eppendorf (UKE), Soba Lab)  
**The Role of Tao Kinase in Synaptic Connectivity**
- 7 Rafael Krämer (University of Münster, Rumpf Lab)  
**Coupling of membrane targeting and developmental degradation of transmembrane receptors via Rab11 in Drosophila c4da neurons**
- 8 Anna Ziegler (DZNE Bonn, Tavosanis Lab)  
**Role of lipid synthesis in dendrite differentiation**

### Plenary Lecture

Jim Truman (University of Washington)

**A Journey through Insect Neurobiology: Moths, Hoppers, Flies and Beyond.**

### Session 2: Sensory systems: olfaction, vision and hearing:

- 9 Mohammed Khallaf Ali (Max Planck Institute for Chemical Ecology, Hansson Lab)  
**Finding a partner: Sexual communication in Drosophila**
- 10 Sudeshna Das (Max Planck Institute for Chemical Ecology, Sachse Lab)  
**Interaction of food odors and sex pheromone in Drosophila melanogaster**

11 Katrin Schröder (University of kassel, Stengl Lab)  
**Long-term tip recordings and pharmacological analysis of the spontaneous activity of pheromone-sensitive olfactory receptor neurons of the hawkmoth *Manduca sexta***

12 Stefan Dippel (University of Marburg, Schachtner Lab)  
**Morphological and transcriptomic analysis of a beetle chemosensory system reveals a gnathal olfactory center**

**BREAK**

13 Ronny Rosner (Newcastle University, Read Lab)  
**Neurons sensitive to binocular disparities in the praying mantis**

14 Jan Scherberich (University of Frankfurt, Nowotny Lab)  
**Neuronal characteristics in the auditory system of katydids**

15 Bart Geurten (University of Göttingen, Göpfert Lab)  
**Sharing Transducers**

16 Matthes Kenning (University of Greifswald, Harzsch Lab)  
**Sensing from both ends?**

**Session 3: Motor systems and navigation:**

17 Bettina Schnell (Research Center Caesar, Schnell Lab)  
**A Descending Neuron Controlling Steering Maneuvers of Flying *Drosophila***

18 Etienne Campione (University of Freiburg, Straw Lab)  
**Visuo-motor responses to rotation and translation in freely flying *Drosophila melanogaster***

19 Felix Clotten (University of Cologne, Wellmann Lab)  
**Descending control of the swimmeret system**

**BREAK**

20 Sarah Pfeffer (University of Ulm, Wolf Lab)  
**Locomotion and navigation in *Cataglyphis* desert ants**

21 Robin Grob (University of Würzburg, Rössler Lab)  
**Setting Your Compass - Behavioral and Neuronal Effects of Skylight Manipulation during the Learning Walks of *Cataglyphis* Ants**

22 Frederick Zittrell (University of Marburg, Homberg Lab)  
**Receptive fields of polarization-sensitive neurons of the central complex in the desert locust**

**Session 4: Anatomy, Circadian clocks, Honey bee division of labor, "play-like"-behavior:**

23 Max Farnworth (University of Göttingen, Bucher Lab)  
**Brain Evo-Devo: Comparing the *Tribolium* and *Drosophila* Central Complex**

- 24 Philip O. M. Steinhoff (University of Greifswald, Uhl Lab)  
**Anatomy and plasticity of higher-order neuropils in a jumping spider**
- 25 Enrico Bertolini (University of Würzburg, Förster Lab)  
**The circadian clock of holarctic drosophilids is not self-sustained**
- 26 Mareike Selcho (University of Würzburg, Wegener Lab)  
**Central and peripheral clocks are coupled by a neuropeptide pathway in *Drosophila***

**BREAK**

- 27 Paul Siefert (University of Frankfurt, Grünewald Lab)  
**Effects of clothianidin and thiacloprid on brood care of the honey bee (*Apis mellifera*)**
- 28 Markus Thamm (University of Würzburg, Scheiner Lab)  
**Tyramine and age-dependent task allocation in honeybees**
- 29 Wolf Hütteroth (University of Leipzig, Hütteroth Lab)  
**Voluntary passive movement**

## POSTERS

- DIN A0 Size Upright (portrait). 841 mm wide x 1189 mm high.
- All the posters will be presented throughout the meeting. Please hang your poster before the end of the first dinner. Remove it either during party or in the morning of the last day.

### Room 1

- 30 Stella Nolte (Aarhus University, von Philipsborn Lab)  
**GABAergic inhibition shapes *Drosophila* courtship singing**
- 31 Nina Deisig (iEES Paris, UMR 1392, Joly-Jacquin Lab)  
**Modulatory effects of pheromones on aversive olfactory learning and memory in moths**
- 32 Dusica Brisevac (Max Planck Institute for Evolutionary Biology, Kaiser Lab)  
**Identifying a mechanosensory pathway in charge of setting the circalunar clock**
- 33 Tobias Weber (Technical University of Kaiserslautern, Pielage Lab)  
**Investigation of domain-specific requirements of Ankyrin2 for synapse organization and stability using an in-vivo structure function approach**
- 34 Florian Bilz (University of Göttingen, Fiala Lab)  
**Optical Analysis of Synaptic Plasticity Underlying Associative Learning in *Drosophila melanogaster***
- 35 Clare Hancock (University of Göttingen, Fiala Lab)  
**Calcium Imaging of Olfactory Representations in Mushroom Body Output Neurons**
- 36 Sebastian Rumpf (University of Münster, Rumpf Lab)  
**Non-canonical translation initiation of ecdysone target mRNAs during dendrite pruning**
- 37 Svende Herzmann (University of Münster, Rumpf Lab)  
**Microtubule disassembly during dendrite pruning in *Drosophila melanogaster***
- 38 Peter Deppisch (University of Würzburg, Förster Lab)  
**The role of CRYPTOCHROME in high- and low-latitude *Drosophila* species**
- 39 Koustubh Vaze (University of Würzburg, Förster Lab)  
**Circadian activity and molecular rhythms under T-cycle entrainment in *D. melanogaster***

### Room 2

- 40 Giovanni Marchetti (DZNE, Tavosanis Lab)  
**TGF-beta signaling regulates fate specification in developing brain**
- 41 Sheng Huang (Freie Universität Berlin, Sigris Lab)  
**Presynaptic Active Zone Plasticity Encodes Sleep Drive and Frequency in *Drosophila***
- 42 Atefeh Pooryasin (Freie Universität Berlin, Sigris Lab)  
**Functional role of synaptic proteins in olfactory processing**
- 43 Zeeshan Mushtaq (Technical University of Kaiserslautern, Pielage Lab)  
**Microtubule-dependent control of synapse organization and stability**

- 44 Erica Ehrhardt (University of Cologne, Ito Lab)  
**The role of wing motoneurons of *Drosophila melanogaster* in tethered flight and courtship song**
- 45 Sayan Sospelisa (University of Freiburg, Straw Lab)  
**Object responses in *Drosophila melanogaster* tethered flight**
- 46 Katja Hellekes (University of Freiburg, Straw Lab)  
**Influence of neuropeptides on visuo-motor control of freely flying *Drosophila* in a virtual reality setup**
- 47 Tilman Triphan (University of Leipzig, Triphan Lab)  
**Into the void – Protocerebral bridge neurons involved in gap crossing**
- 48 Radostina Lyutova (University of Würzburg, Wegener Lab)  
New insights into the functional connectivity of *Drosophila* larval mushroom body Kenyon cells  
**by artificial optogenetic activation**
- 49 Jiangtian Chen (University of Würzburg, Wegener Lab)  
**Using the maggot to identify core functions of the brain-gut allatostatin A peptides in *Drosophila***

### **Room 3**

- 50 Naoko Toshima (Leibniz Institute for Neurobiology (LIN), Gerber Lab)  
**Appetitive and aversive learning of amino acids in *Drosophila* larvae**
- 51 Seran Sayin (Technical University of Munich, Kadow Lab)  
**Specific octopaminergic neurons arbitrate between perseverance and reward in hungry *Drosophila***
- 52 Jean-Francois De Backer (Technical University of Munich, Kadow Lab)  
**Specific octopaminergic neurons arbitrate between perseverance and reward in hungry *Drosophila***
- 53 Alexander Chockley (University of Cologne, Büschges Lab)  
**Subsets of femoral chordotonal organ neurons in *Drosophila***
- 54 Anna Haberkorn (University of Cologne, Büschges Lab)  
**Identification of Force Feedback Signals Controlling the Thoraco-Coxal Joint in an Insect**
- 55 Sander Liessem (University of Cologne, Büschges Lab)  
**Revealing the Peptide Inventory of Neurons Belonging to an Insect Locomotor System**
- 56 Marcel Blaeser (University of Köln, Predel Lab)  
**Evolution of Neuropeptides in Insects over the last 300 myr**
- 57 Denise Weber (University of Leipzig, Thum Lab, MASTER\_STUDENT)  
**Salt Learning in *Drosophila* Larvae**

- 58 Astrid Rohwedder (University of Leipzig, Thum Lab)  
**Brainbase- a Larval Standard Brain resource**
- 59 Ronja Hensgen (University of Marburg, Homberg Lab)  
**Temporal dynamics of E-vector responses in neurons of the central complex of the desert locust *Schistocerca gregaria***
- 60 Björn Trebels (University of Marburg, Schachtner Lab)  
**Postmetamorphic plasticity of the mushroom bodies**

#### **Room 4**

- 61 Ana Depetris-Chauvin (Max Planck Institute for Chemical Ecology, Hansson Lab)  
**A neuroethological approach to odor valence in flies**
- 62 Kristina Corthals (University of Göttingen, Göpfert Lab)  
**Behavioural Adaption to Light Deprivation**
- 63 Bibi Nusreen Imambocus (University Medical Center Hamburg-Eppendorf (UKE), Soba Lab)  
**Neuropeptidergic control of internal state dependent action selection**
- 64 Chun Hu (University Medical Center Hamburg-Eppendorf (UKE), Soba Lab)  
**Tao kinase limits dendrite arborization by specifically controlling the number of developmental dynamic microtubules**
- 65 Reinhold Hustert (University of Göttingen, Hustert Lab)  
**Respiratory rhythms of isolated insect ganglia**
- 66 Thordis Arnold (University of Kassel, Stengl Lab)  
**The function of myoinhibitory peptides expressed in the circadian clock of the Madeira cockroach *Rhyarobia maderae***
- 67 Julia Balsam (University of Leipzig, Stevenson Lab)  
**„Personality“ in Arthropods? Early social experience in crickets produces long term changes in behaviour**
- 68 Tim Hermanns (University of Mainz, Strauss Lab)  
**Serotonin Modulates a Depression-like State in *Drosophila* Responsive to Lithium Treatment**
- 69 Jan-Lukas Oepen (University of Mainz, Strauss Lab)  
**Impact of dopaminergic dysregulation and visual overstimulation during development on attention dependant reaction time during stationary flight of *Drosophila melanogaster***
- 70 Anjana Venkataramanan (University of Mainz, Strauss Lab)  
**Working of a Visual Short-term Orientation Memory In *Drosophila melanogaster***
- 71 Torben Stemme (University of Ulm, Wolf Lab)  
**Neuroanatomy of Chelicerata – bringing the understudied into the spotlight**