

# Daniel Münch

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## POSITIONS

**UNIVERSITY OF KONSTANZ** | PostDoc  
March 2014 | Constance, Germany  
(Parental leave from 08/15 till 10/15)

## PUBLICATIONS

### PEER REVIEWED

2016

- Münch, D., and Galizia C.G.: **DoOR 2.0 - Comprehensive Mapping of *Drosophila melanogaster* Odorant Responses**. Scientific Reports. doi:10.1038/srep21841

2014

- Strauch, M.\*, Lüdke, A.\*, Münch, D.\*, Laudes, T., Galizia, C.G., Martinelli, E., Lavra, L., Paolese, R., Olivieri, A., Catini, A., Caouano, R. and Di Natale, C.: **More Than Apples and Oranges - Detecting Cancer with a Fruit Fly's Antenna**. Scientific Reports. doi:10.1038/srep03576 - \*(shared first-authorship)

2013

- Strauch, M., Müthing, C., Broeg, M.P., Szyszka, P., Münch, D., Laudes, T., Deussen, O., Galizia, C.G. and Merhof, D.: **The Looks of an Odour - Visualising Neural Odour Response Patterns in Real Time**. BMC Bioinformatics 14, no. Suppl 19: S6. doi:10.1186/1471-2105-14-S19-S6
- Münch, D., Schmeichel, B., Silbering, A.F. and Galizia C.G.: **Weaker Ligands Can Dominate an Odor Blend Due to Syntopic Interactions**. Chemical Senses 38, no. 4. doi:10.1093/chemse/bjs138

2010

- Galizia, C.G., Münch, D., Strauch, M., Nissler, A., and Ma, S.: **Integrating Heterogeneous Odor Response Data into a Common Response Model: A DoOR to the Complete Olfactome**. Chemical Senses 35, no. 7: 551-63. doi:10.1093/chemse/bjq042

### OTHER

2011

- Münch, D., Galizia, C.G., 2011. **DoOR: The Database of Odorant Responses**. Chemosense 13, 1-6.

## EDUCATION

### UNIVERSITY OF KONSTANZ

DR. RER. NAT.

Feb 2014 | Constance, Germany  
(family care duties from 2012-2014)  
Title: Odor representations in *Drosophila* receptor neurons analyzed by *in vivo* calcium imaging | Galizia lab

### FREIE UNIVERSITÄT BERLIN

DIPLOMA IN BIOLOGY

Jan 2008 | Berlin, Germany  
Title: Intracellular stainings and 3D structural analysis of olfactory projection neurons in the bee brain | Menzel lab

## TEACHING EXPERIENCE

### 3<sup>RD</sup> IBRO SCHOOL ON INSECT NEUROSCIENCE

2014 | University of Dar es Salaam, Tanzania  
One week of teaching olfactory coding & calcium imaging at the 3<sup>rd</sup> IBRO school on insect neuroscience and *Drosophila* neurogenetics, organized by *TReND in Africa*.

### SUPERVISION OF A BACHELOR'S THESIS

2008

### SUPERVISION OF A MASTER'S THESIS

2009

### ADVANCED COURSE IN NEUROBIOLOGY

2008, 2009, 2011, 2013 & 2015  
6 weeks, 1-2 students

### ANIMAL PHYSIOLOGY COURSE

2009, 2010, 2011, 2014 & 2015  
2 weeks, including lecture and hands-on

### R INTRODUCTORY LECTURE

2012 - 2015

## SKILLS

experienced:

calcium imaging • confocal microscopy  
GC/MS • single neuron staining  
intracellular recording • *Drosophila*  
honeybee • R •  $\LaTeX$  • Linux • Amira  
Inkscape • HTML • CSS

basic knowledge:

ImageJ • PHP • MySQL

## ORAL PRESENTATIONS

- Olfactory signaling on the *Drosophila* antenna - Response profiles and individual response dynamics. 2015 | ESITO XIV - European Symposium for Insect Taste and Olfaction, Villasimius, Italy
- Odor coding in *Drosophila* ORNs. 2014 | Cold Spring Harbor Laboratory, NY, Turner Lab
- Early mixture processing in *Drosophila* olfaction. 2013 | ESITO XIII - European Symposium for Insect Taste and Olfaction, Villasimius, Italy

## POSTER PRESENTATIONS

- Odor responses of *Drosophila* receptor neurons – Response profiles, mixtures and individual response dynamics. 11th Meeting of the German Neuroscience Society, March 18.–21.2015, Göttingen
- Olfactory signaling on the *Drosophila* antenna – response profiles, mixtures and individual response dynamics. Annual meeting of the Society for Neuroscience 2014, 15. – 19. Nov 2014, Washington DC
- Olfactory signaling on the *Drosophila* antenna – response profiles, mixtures and individual response dynamics. 9th FENS Forum of Neuroscience, 05. – 09. July 2014, Milan
- Dominance of weaker ligands in a complex odor mixture. Fourth Annual Meeting of the SPP Active Groups, June 13-14 2013, Jena
- Dominance of weaker ligands in a complex odor mixture. 10th Göttingen meeting of the German Neuroscience Society, March 13-16, 2013, Göttingen
- Mixture interactions in the periphery of the olfactory system – What does banana smell like? 105th Annual Meeting of the German Zoological Society, September 21-24, 2012, Konstanz
- New data for the Database of Odorant responses – DoOR. 105th Annual Meeting of the German Zoological Society, September 21-24, 2012, Konstanz
- Response profiles of three olfactory receptors – The open DoOR towards the *Drosophila* olfactome widens. Annual meeting of the Society for Neuroscience 2011, 12. – 16. Nov 2011, Washington DC
- Response profiles of the *Drosophila* olfactory receptors Or42b and Or69a – knocking on the DoOR. Ninth Göttingen meeting of the German Neuroscience Society, 23. – 27. März 2011
- Mixture interactions on the antenna of *Drosophila melanogaster*. 8th Meeting of the German Neuroscience Society, March 25.–29.2009, Göttingen
- A DoOR to the complete olfactome: a common response model for the integration of heterogeneous odor-response data. 8th Meeting of the German Neuroscience Society, March 25.–29.2009, Göttingen

## REFEREE

Scientific Reports • J. Agric. Food Chem.

## FURTHER EDUCATION

**SAFETY ASPECTS IN GENETIC ENGINEERING FOR PROJECT LEADERS (ACCORDING TO THE GENE TECHNOLOGY ACT - § 15 GENTSV)**  
2015 | University of Konstanz, Germany

**INTRODUCTION INTO THE TRACE DSQ GC/MS SYSTEM**  
2008 | Axel Semrau GmbH & Co, Sprockhövel, Germany

## OTHER ACTIVITIES

Volunteer for *TReND in Africa* (project leader IT).

## LINKS

ResearchGate:// [Daniel\\_Muench](#)  
GoogleScholar:// [xS3v340AAAAJ](#)  
Github:// [Dahaniel](#)  
Twitter:// [@Dahaniel](#)  
PersonalPage:// [muench.bio](#)

## LANGUAGES

German	native
English	fluent
French	basic

## OTHER INTERESTS

photography • graphic design • web design