KITP Conference: Olfaction  
(Jul 7-10, 2015)  
Coordinators: Sandeep R. Datta, Anne-Marie M. Oswald

**Tuesday, Jul 07, 2015**

**Odor-Guided Behaviors, Chair: Anne-Marie Oswald (U Pitt)**

8:50am Lars Bildsten (KITP) 
Welcome

9:00am Lucia Jacobs (UC Berkeley) 
The PROUST hypothesis: the evolution of the olfactory and vomeronasal systems and their complementary functions in tracking odors across space and time

9:45am David Gire (U Washington) 
Mice develop efficient strategies for foraging and navigation using turbulent odor plumes

10:30am Morning Break

11:00am Ellisa Hallem (UCLA) 
Olfactory circuit modulation in free-living and parasitic nematodes
11:45am Dimitri Chklovskii (Simons Ctr) 
Similarity matching: a new framework for neural computation

12:30pm Lunch Break

**Odor-Guided Behaviors “cont.”, Chair: Lucia Jacobs (UC Berkeley)**

2:00pm Ian Davison (Boston U) 
Mating-dependent plasticity in the female accessory olfactory bulb

2:45pm Gloria Choi (MIT) 
Oxytocin mediates entrainment of sensory stimuli to social cues of opposing valence

3:30pm Afternoon Break

4:00pm Lisa Stowers (Scripps) 
A sensory rational for the unpredictable nature of female behavior

**POSTER SESSION**

5:30pm RECEPTION

6:00pm SPECIAL EVENTS DINNER

8:00pm SHUTTLE TO BWSCI

**Wednesday, Jul 08, 2015**

**Early Odor Processing, Chair: Bob Datta (Harvard)**

9:00am Hitoshi Sakano (U Fukui) 
Neural Map Formation in the Mouse Olfactory System

9:45am Tim Holy (Washington U) 
Ligogenetics: where do we stand on exhaustive functional typology of sensory neurons?

10:30am Morning Break

11:00am Gilad Barnea (Brown U) 
trans-Tango: Transsynaptic Mapping and Manipulation of Neural Circuits
11:45am Stavros Lomvardas (Columbia U) 
TBD

12:30pm Lunch Break

**Early Odor Processing "cont.", Chair: Tim Holy (Washington U)**

2:00pm Joel Mainland (Monell Institute) 
The role of a single receptor in human odor perception.

2:45pm Chakra Chennubhotla (U Pitt) 
Designing a computational similarity metric for categorizing odors

3:30pm Afternoon Break
4:00pm Ron Yu (Stowers Institute) Specific receptors and lousy sensors
4:45pm Vikas Bhandawat (Duke U) Independently controlled behavioral primitives underlie behavioral response to odors
5:30pm SHUTTLE TO BWSCI

Thursday, Jul 09, 2015

Higher-Order Odor Processing, Chair: Kevin Franks (Duke U)

9:00am John Bekkers (ANU) Functional calcium imaging of spontaneous and odor-evoked activity in the piriform cortex in vivo
9:45am Glenn Turner (CSH) Olfactory Signaling in Mushroom Body Output Neurons: Neural Coding as a Circuit Converges
10:30am Morning Break

11:00am Alex Fleischmann (Coll. de France) Neural identity and odor coding in the piriform cortex
11:45am Anne-Marie Oswald (U Pitt) Spatial Profiles of Inhibition in piriform cortex
12:30pm Lunch Break

Higher-Order Odor Processing "cont.", Chair: David Gire (U Washington)

2:00pm Kevin Franks (Duke U) Piriform cortex is necessary and sufficient to normalize its own output
2:45pm Brent Doiron (U Pitt) Assembly formation in the face of spontaneous cortical dynamics
3:30pm Afternoon Break

4:00pm Bob Datta (Harvard) New Behavioral Methods for Olfaction
4:45pm TBD
5:30pm RECEPTION
6:00pm SPECIAL EVENTS DINNER
8:00pm SHUTTLE TO BWSCI

Friday, Jul 10, 2015

Descending Control of Odor Processing, Chair: Venkatesh Murthy (Harvard)

9:00am Andreas Schaefer (MRC, UK) Inhibition in the mouse OB
9:45am Dinu Florin Albeau (CSH) An interglomerular circuit gates glomerular output and implements gain control in the mouse olfactory bulb
10:30am Morning Break

11:00am Stephen Shea (CSH) "Top-down" and neuromodulatory influences on granule cell activity
11:45am Hermann Riecke (Northwestern) Cortical control of network structure and odor discrimination
12:30pm Lunch Break

Descending Control of Odor Processing "cont.", Chair: Bob Datta (Harvard)

2:00pm TBD
2:45pm Charles Stevens (Salk Institute) What the fly's nose tells the fly's brain

CONFERENCE END

3:45pm SHUTTLE TO BWSCI