

Barrels Conference 2018

Day 1, Thursday, 24th May, 2018	
08:30 – 09:00	Registration
09:00	Opening Remarks (Jochen Staiger)
09:00 – 11:00	<i>Session 1: Whisker-based perception (Chair: Jochen Staiger)</i>
09:05 – 09:40	Randy Bruno - Sensation, Movement & Learning in the Absence of Barrel Cortex
09:45 – 10:20	Jianging Yu - Behavior-relevant inhibition in somatosensory cortex during active touch
10:25 – 11:00	Cornelius Schwarz - Local codes in tactile perception
11:00 – 11:45	<i>Posters and Coffee break</i>
11:45 – 12:45	PLENARY LECTURE 1 Massimo Scanziani - A primary Visual Cortex for the Processing of Collicular Information
12:45 - 14:15	Lunch break
14:15 – 16:15	<i>Session 2: Cortex outside the barrel universe (Chair: Oliver Schlüter)</i>
14:20 – 14:55	Siegrid Löwel - Promoting plasticity in the visual cortex: How to keep the brain young?
15:00 – 15:40	Joshua Trachtenberg - Branch-specific dendritic integration during critical periods of cortical plasticity
15:45 – 16:20	Nathalie Rochefort - Neuronal circuits plasticity during learning of a visually-guided task in the mouse primary visual cortex
16:20 - 17:20	<i>Posters and Coffee break</i>
17:20 - 19:20	<i>Short talk Session (Chair: Dirk Feldmeyer)</i>
17:20 - 17:35	Francois Pausin - A corticothalamic circuit for refining tactile encoding
17:35–17:50	Sebastian Bitzenhofer - Layer-specific networks in the developing prefrontal cortex
17:50–18:05	Guanxiao Qi - A reappraisal of the morpho-functional diversity of fast-spiking interneurons in layer 4 of rat barrel cortex
18:05 - 18:20	Hind Baba Aïssa - Cerebello-cortical coupling via the medial posterior thalamus: role in whisker-dependent texture discrimination.
18:20–18:35	Asli Ayaz - Layer-specific integration of locomotion and concurrent wall touching in mouse barrel cortex
18:35 –18:50	Mototaka Suzuki - Wakefulness enhances dendro-somatic coupling of cortical layer 5 pyramidal neurons
18:50–19:05	Waja Wegner - In vivo STED microscopy of PDS95 and Gephyrin in the visual cortex of the living mouse
19:05 –19:20	Clarissa Whitmire - Thalamic state modulation of tactile encoding in the thalamocortical circuit
19:30	BBQ Dinner & Posters

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Day 2, Friday, 25th May, 2018

09:00 - 09:45	SPECIAL LECTURE Alison Barth - High-throughput anatomical approaches to experience-dependent rewiring of the cortical column
09:45- 11:30	Session 3: Cell types and their functions in cortical circuits (Chair: Livia de Hoz)
09:45 -10:20	Solange Brown - Diversity of cortical neurons: Lessons from layer 6
10:20 - 10:55	Thomas Klausberger - Prefrontal circuits for decision making
10:55 - 11:30	Jean-Sebastien Jouhanneau - Single synaptic inputs drive spiking in PV neurons in vivo
11:30 - 12:00	Posters and Coffee
12:00 - 13:00	PLENARY LECTURE 2 Kenneth Harris - High-dimensional geometry of the cortical population code revealed by 10,000-neuron recordings
13:00 - 14:30	Lunch break
14:30 - 16:30	Session 4: Sensory information processing beyond primary cortices (Chair: Christiaan de Kock)
14:30 - 15:00	Christiaan de Kock - Functional architecture of rat posterior parietal cortex during tactile sensorimotor behavior
15:00 - 15:30	Fritjof Helmchen - Role of posterior association areas in mouse neocortex for sensory discrimination
15:30 - 16:00	Rebecca Mease - Synchrony and spike time encoding in the higher-order whisker thalamus
16:00 - 16:30	Michael Brecht - Sexual touch, puberty and sex-hormone action in the somatosensory cortex
16:30	Concluding remarks and awards (Christiaan de Kock)