

08:45 – 09:15 Registration, Coffee and Poster mounting
09:15 – 09:30 Welcome & Opening (Christiaan de Kock)

Session 1: "Development", Chair Fritjof Helmchen

09:30 – 10:15 **Gordon Fishell (Keynote)**

"The integration of interneurons into brain circuits: a conversation involving pedigree and communications"

10:15 – 10:45 **Heiko Luhmann**

"Role of spontaneous activity in early cortical development"

10:45 – 11:15 Coffee break & posters

Session 2: "Inhibition", Chair Jochen Staiger

11:15 – 12:00 **Adam Kepecs (Keynote)**

"Behavioral role and impact of a VIP-mediated interneuron circuit"

12:00 – 12:30 **Carl Petersen**

"Neocortical cell-type-specific sensorimotor processing during goal-directed behavior"

12:30 – 13:00 **Koen Vervaeke**

"Shining light on neural inhibition in the somatosensory cortex during tactile sensation"

13:00 – 14:15 Lunch (restaurant section F, top floor)

Session 3: "Linking circuits to behavior", Chair Christiaan de Kock

14:15 – 15:00 **Anthony Holtmaat**

"Mechanism for functional and structural plasticity"

15:00 – 15:30 **Cornelius Schwarz**

"Linking the barrel column. What is the functional basis of learned associations?"

15:30 – 16:00 **Fritjof Helmchen**

"Neural correlates of tactile discrimination based on whisker touch"

16:00 – 16:15 Junior 1: **Naoya Takahashi** (Larkum lab)

"Dendritic dynamics in sensory perception"

16:15 – 16:30 Junior 2: **Christian Ebbesen** (Brecht lab)

"Vibrissa motor cortex activity suppresses contralateral whisker movement"

16:30 – 17:00 Coffee break & posters

Session 4: – "From sparse to dense connectomics", Chair Randy Bruno

17:00 – 17:45 **Moritz Helmstaedter (Keynote)**

"High-resolution connectomics"

17:45 – 18:15 **Dirk Feldmeyer**

"Excitatory and inhibitory connections in the barrel cortex - new vistas"

18:15 – 18:45 **Marcel Oberlaender**

"Cortical Drive by Deep Layer Networks"

18:45 – 19:00 Junior 3: **Nora Jamann** (Engelhardt lab)

"Plasticity of the axon initial segment in the mouse barrel cortex"

19:00 – 19:15 Junior 4: **Zeinab Fazlali** (Arabzadeh lab)

"Correlation between Cortical State and Locus Coeruleus Activity: Implications for Sensory Coding in Rat Barrel Cortex"

PLENARY BARBEQUE

(to join, advance registration for both meeting and BBQ is mandatory)

Barrel Cortex Function Amsterdam 2016
20th of May, Day 2

Session 5: "Cortical processing and behavior", chair Dirk Feldmeyer

09:00 – 09:45 Michael Stryker (Keynote)

"A neural circuit that regulates cortical responsiveness and plasticity."

09:45 – 10:15 **James Poulet**

"Sensorimotor transformation in the mouse forepaw system"

10:15 – 10:45 **Michael Brecht**

"Sex, Touch & Tickle"

10:45 – 11:15 Coffee break & Posters

Session 6: "Active somatosensation", chair Heiko Luhmann

11:15 – 12:00 David Kleinfeld (Keynote)

"Cortical-trigeminal loops in the control of vibrissa movement"

12:00 – 12:30 **Christiaan de Kock**

"Cortical representation of naïve active touch"

12:30 – 13:00 **Randy Bruno**

"The many layers of neocortex"

13:00 – 14:00 Lunch (restaurant section F, top floor)

Session 7: chair Marcel Oberlaender

14:00 – 14:15 Junior 5: **Hemanth Mohan** (de Kock lab)

"Encoding of free whisking and object touch in the posterior parietal cortex of rodents"

14:15 – 14:30 Junior 6: **Teresa Guillamon Vivancos** (Jennifer Luebke lab)

"Contribution of Distinct Progenitor Lineages to Neuronal Diversity in Layer 4 of the Mouse Barrel Cortex"

14:30 – 14:45 Junior 7: **Alexander van der Bourg** (Helmchen lab)

"Laminar and columnar refinement of sensory coding in developing mouse barrel cortex"

14:45 – 15:00 Junior 8: **Guanxiao Qi** (Feldmeyer lab)

"Inter-columnar synaptic transmission in thalamo-recipient layers 4 and 6A of rat barrel cortex"

15:00 – 15:15 Short break (no catering)

Session 8: "Inhibition-Disinhibition-Excitation", chair Michael Brecht

15:15 – 16:00 Josh Huang (Keynote)

"Genetic dissection of cortical circuits: chandeliers light up pyramids"

16:00 – 16:30 **Miguel Maravall**

"Exploring tactile temporal integration and sequence discrimination."

16:30 – 17:00 **Jochen Staiger**

"The ins and outs of cortical VIP neurons"

17:00 concluding remarks (Christiaan de Kock)