

## List of papers for Croissant Meeting 2018

1. Economo et al. (2018) Distinct descending motor cortex pathways and their roles in movement. Nature 563: 79–84.
2. LeGates et al. (2018) Reward behaviour is regulated by the strength of hippocampus-nucleus accumbens synapses. Nature in press
3. Gao et al. (2018) A cortico-cerebellar loop for motor planning. Nature 563:113–116.
4. Jo et al. (2018) Dopamine neurons reflect the uncertainty in fear generalization. Neuron in press
5. Ranganathan et al. (2018) Active dendritic integration and mixed neocortical network representations during an adaptive sensing behavior. Nature Neuroscience 21:1583–1590.
6. Coddington and Dudman (2018) The timing of action determines reward prediction signals in identified midbrain dopamine neurons. Nature Neuroscience in press
7. Meyer et al. (2018) A head-mounted camera system integrates detailed behavioral monitoring with multichannel electrophysiology in freely moving mice. Neuron 100: 46-60.
8. Hong et al. (2018) Sensation, movement and learning in the absence of barrel cortex. Nature 561: 542–546.
9. Khateb et al. (2017) Feedforward motor information enhances somatosensory responses and sharpens angular tuning of rat S1 barrel cortex. eLife 6: e21843.
10. Gilad et al. (2018) Behavioral strategy determines frontal or posterior location of short-term memory in neocortex. Neuron in press
11. Ayaz et al (2018) Layer-specific integration of locomotion and concurrent wall touching in mouse barrel cortex. bioRxiv preprint
12. Vilarchao et al. (2018) Supra-barrel distribution of directional tuning for global motion in the mouse somatosensory cortex. Cell Reports 22:3534-3547
13. Vickers et al. (2018) Parvalbumin-interneuron output synapses show spike-timing-dependent plasticity that contributes to auditory map remodeling. Neuron in press

14. Saunders et al. (2018) Dopamine neurons create Pavlovian conditioned stimuli with circuit-defined motivational properties. Nature Neuroscience 21:1072-1083.
15. Sun et al. (2018) A genetically encoded fluorescent sensor enables rapid and specific detection of dopamine in flies, fish, and mice. Cell 74:481–496.
16. Choi et al. (2018) Interregional synaptic maps among engram cells underlie memory formation. Science 360:430-435
17. El-Boustani et al. (2018) Locally coordinated synaptic plasticity of visual cortex neurons in vivo. Science 360:1349-1354
18. Lien & Scanziani (2018) Cortical direction selectivity emerges at convergence of thalamic synapses. Nature in press doi:10.1038/s41586-018-0148-5
19. Minamisawa et al. (2018) A non-canonical feedback circuit for rapid interactions between somatosensory cortices. Cell Reports 23:2718–2731
20. Salay et al. (2018) A midline thalamic circuit determines reactions to visual threat. Nature 557:183–189
21. Jouhanneau et al. (2018) Single synaptic inputs drive high-precision action potentials in parvalbumin expressing GABA-ergic cortical neurons in vivo. Nature Communications 9: 1540
22. Allsop et al. (2018) Corticoamygdala transfer of socially derived information gates observational learning. Cell in press.
23. González-Rueda et al. (2018) Activity-dependent downscaling of subthreshold synaptic inputs during slow-wave-sleep-like activity in vivo. Neuron 97: 1244–1252.
24. Rojas-Piloni et al. (2017) Relationships between structure, in vivo function and long-range axonal target of cortical pyramidal tract neurons. Nature Communications 8:870.
25. Adam et al. (2018) All-optical electrophysiology reveals brain-state dependent changes in hippocampal subthreshold dynamics and excitability. bioRxiv preprint doi: <https://doi.org/10.1101/281618>
26. Kohl et al. (2018) Functional circuit architecture underlying parental behaviour. Nature in press doi:10.1038/s41586-018-0027-0
27. Fang et al. (2018) A hypothalamic midbrain pathway essential for driving maternal behaviors. Neuron 98: 192–207.

28. Vélez-Fort et al. (2018) A circuit for integration of head- and visual-motion signals in layer 6 of mouse primary visual cortex. *Neuron* doi: [10.1016/j.neuron.2018.02.023](https://doi.org/10.1016/j.neuron.2018.02.023). [Epub ahead of print]
29. Han et al. (2018) The logic of single-cell projections from visual cortex. *Nature* doi: [10.1038/nature26159](https://doi.org/10.1038/nature26159). [Epub ahead of print]
30. Augustine et al. (2018) Hierarchical neural architecture underlying thirst regulation. *Nature in press*
31. Urban-Ciecko et al. (2018) Precisely timed nicotinic activation drives SST inhibition in neocortical circuits. *Neuron* 97: 611-625.
32. Liu et al. (2018) Dopamine secretion is mediated by sparse active zone-like release sites. *Cell* 172:706-718.
33. Leib et al. (2017) The forebrain thirst circuit drives drinking through negative reinforcement. *Neuron* 96: 1272-1281.
34. Chen et al. (2018) Near-infrared deep brain stimulation via upconversion nanoparticle-mediated optogenetics. *Science* 359: 679–684.
35. Le Merre et al. (2018) Reward-based learning drives rapid sensory signals in medial prefrontal cortex and dorsal hippocampus necessary for goal-directed behavior. *Neuron* 97: 83-91.
36. Pastuzyn et al. (2018) The neuronal gene *Arc* encodes a repurposed retrotransposon Gag protein that mediates intercellular RNA transfer. *Cell* 172: 275-288.
37. Isett et al. (2018) Slip-based coding of local shape and texture in mouse S1. *Neuron* 97: 418-433.
38. Gobbo et al. (2017) Activity-dependent expression of channelrhodopsin at neuronal synapses. *Nature Communications* 8: 1629.