

Papers for Croissant Meeting 2017

1. Economo et al. (2017) Distinct descending motor cortex pathways and their roles in movement. *BiorXiv preprint* doi:
2. Rodriguez et al. (2017) A craniofacial-specific monosynaptic circuit enables heightened affective pain. [Nature Neuroscience 20:1734–1743](#).
3. Jun et al. (2017) Fully integrated silicon probes for high-density recording of neural activity. *Nature* 551: 232–236.
4. Inagaki et al. Discrete attractor dynamics underlying selective persistent activity in frontal cortex. [BioRxiv preprint](#)
5. Wiber et al. (2017) Laminar organization of encoding and memory reactivation in the parietal cortex. [Neuron 95:1406-1419](#).
6. Paul et al. (2017) Transcriptional architecture of synaptic communication delineates GABAergic neuron identity. [Cell in press](#).
7. Wang et al. (2017) Deconstruction of corticospinal circuits for goal-directed motor skills. [Cell in press](#).
8. Leinweber et al. (2017) A sensorimotor circuit in mouse cortex for visual flow predictions. [Neuron 95, 1420–1432](#).
9. Allen et al. (2017) Thirst-associated preoptic neurons encode an aversive motivational drive. [Science 357:1149-1155](#).
10. Adesnik (2017) Synaptic mechanisms of feature coding in the visual cortex of awake mice. [Neuron in press](#).
11. Douglass et al. (2017) Central amygdala circuits modulate food consumption through a positive-valence mechanism. [Nature Neuroscience in press](#).
12. Castro-Alamancos & Favero (2016) Whisker-related afferents in superior colliculus. *J Neurophysiol* 115: 2265–2279.
13. Mandelblat-Cerf et al. (2017) Bidirectional anticipation of future osmotic challenges by vasopressin neurons. [Neuron 93: 57-65](#).
14. Ishii et al. (2017) A labeled-line neural circuit for pheromone-mediated sexual behaviors in mice. [Neuron 95: 123-137](#).
15. Namburi et al. (2015) A circuit mechanism for differentiating positive and negative associations. [Nature 520: 675-678](#).
16. Hass & Glickfeld (2016) High-fidelity optical excitation of cortico-cortical projections at physiological frequencies. [J Neurophysiol 116: 2056-2066](#).

17. Guo et al. (2017) A corticothalamic circuit for dynamic switching between feature detection and discrimination. *Neuron* 95: 180-194.
18. Livneh et al. (2017) Homeostatic circuits selectively gate food cue responses in insular cortex. *Nature* 546: 611-616.
19. Burgos-Robles et al. (2017) Amygdala inputs to prefrontal cortex guide behavior amid conflicting cues of reward and punishment. *Nature Neuroscience* 20:824-835.
20. Hun et al. A single-cell anatomical blueprint for intracortical information transfer from primary visual cortex. *BioRxiv preprint*
21. Allen et al. (2017) Global representations of goal-directed behavior in distinct cell types of mouse neocortex. *Neuron* 94: 891-907.
22. Makino et al. (2017) Transformation of cortex-wide emergent properties during motor learning. *Neuron* 94: 880-890.
23. Chen et al. (2017) A map of anticipatory activity in mouse motor cortex. *Neuron* 94: 866-879.
24. Schmitt et al. (2017) Thalamic amplification of cortical connectivity sustains attentional control. *Nature* in press, doi:10.1038/nature22073
25. Guo et al. (2017) Maintenance of persistent activity in a frontal thalamocortical loop. *Nature* in press, doi:10.1038/nature22324
26. Severson et al. (2017) Active touch and self-motion encoding by Merkel cell-associated afferents. *Neuron* in press, DOI: <http://dx.doi.org/10.1016/j.neuron.2017.03.045>
27. Fiser et al. (2016) Experience-dependent spatial expectations in mouse visual cortex. *Nature Neuroscience* 19: 1658-1664.
28. Roth et al. (2016) Thalamic nuclei convey diverse contextual information to layer 1 of visual cortex. *Nature Neuroscience* 19: 299-307.
29. Mathis et al. (2017) Somatosensory cortex plays an essential role in forelimb motor adaptation in mice. *Neuron* 93: 1493–1503.
30. Giovannucci et al. (2017) Cerebellar granule cells acquire a widespread predictive feedback signal during motor learning. *Nature Neuroscience* in press, doi:10.1038/nn.4531
31. Wagner et al. (2017) Cerebellar granule cells encode the expectation of reward. *Nature* in press, doi:10.1038/nature21726
32. Moore et al. (2017) Dynamics of cortical dendritic membrane potential and spikes in freely behaving rats. *Science* in press, doi: 10.1126/science.aaj1497

33. Hasegawa et al. (2017) Selective suppression of local circuits during movement preparation in the mouse motor cortex. [Cell Reports 18: 2676–2686](#).
34. Yu et al. (2017) Molecular and neural basis of contagious itch behavior in mice. [Science 355, 1072-1076](#).
35. Muñoz et al. (2017) Layer-specific modulation of neocortical dendritic inhibition during active wakefulness. [Science 355, 954-959](#).
36. Otis et al. (2017) Prefrontal cortex output circuits guide reward seeking through divergent cue encoding. [Nature in press, doi:10.1038/nature21376](#)
37. Prsa et al. (2017) Rapid integration of artificial sensory feedback during operant conditioning of motor cortex neurons. [Neuron 93, 929–939](#).
38. Kurnikova et al. (2017) Coordination of orofacial motor actions into exploratory behavior by rat. [Current Biology 27, 1–9](#).
39. Arcourt et al. (2017) Touch receptor-derived sensory information alleviates acute pain signaling and fine-tunes nociceptive reflex coordination. [Neuron 93, 179–193](#).
40. Carus-Cadavieco et al. (2017) Gamma oscillations organize top-down signalling to hypothalamus and enable food seeking. [Nature in press, doi:10.1038/nature21066](#)
41. Edwards et al. (2017) Circuit specificity in the inhibitory architecture of the VTA regulates cocaine-induced behavior. [Nature Neuroscience in press, doi:10.1038/nn.4482](#)
42. McHenry et al. (2017) Hormonal gain control of a medial preoptic area social reward circuit. [Nature Neuroscience in press, doi:10.1038/nn.4487](#)
43. [Garcia-Junco-Clemente et al. \(2017\)](#) An inhibitory pull–push circuit in frontal cortex. [Nature Neuroscience in press, doi:10.1038/nn.4483](#)
44. Gan et al. (2017) Phase-locked inhibition, but not excitation, underlies hippocampal ripple oscillations in awake mice in vivo. [Neuron 93: 308–314](#).
45. Pignatelli et al. (2017) Synaptic plasticity onto dopamine neurons shapes fear learning. [Neuron 93: 425-440](#).
46. Engel et al. (2016) Selective modulation of cortical state during spatial attention. [Science 354:1140-1144](#).

47. Takahashi et al. (2016) Active cortical dendrites modulate perception. [Science 354:1587-1590](#).
48. Sreenivasan et al. (2016) Movement initiation signals in mouse whisker motor cortex. [Neuron 92:1368-1382](#).