

List of papers for Croissant Meeting 2020

1. Lee et al. (2020) Cell-type-specific asynchronous modulation of PKA by dopamine in learning. [Nature in press](#)
2. Doron et al. (2020) Perirhinal input to neocortical layer 1 controls learning. [Science 370: eaaz3136](#)
3. Gallero-Salas et al. (2021) Sensory and behavioral components of neocortical signal flow in discrimination tasks with short-term memory. [Neuron 109: 1–14](#)
4. Rossi et al. (2020) Spatial connectivity matches direction selectivity in visual cortex. [Nature in press](#)
5. Musall et al. (2019) Single-trial neural dynamics are dominated by richly varied movements. [Nature Neuroscience 22:1677–1686](#)
6. Robinson et al. (2020) Targeted activation of hippocampal place cells drives memory-guided spatial behavior. [Cell 183: 1–14](#)
7. Kim et al. (2020) Behavioral and neural bases of tactile shape discrimination learning in head-fixed mice. [Neuron in press](#)
8. Esmaeili et al. (2020) Divergent sensory processing converges in frontal cortex for a planned motor response. [bioRxiv preprint, DOI: /10.1101/2020.10.06.326678](#)
9. Kennedy et al. (2020) Stimulus-specific hypothalamic encoding of a persistent defensive state. [Nature in press](#)
10. Vesuna et al. (2020) Deep posteromedial cortical rhythm in dissociation. [Nature in press](#)
11. Banerjee et al. (2020) Value-guided remapping of sensory cortex by lateral orbitofrontal cortex. [Nature in press](#)
12. Qian et al. (2020) Reversing a model of Parkinson's disease with in situ converted nigral neurons. [Nature 582: 550–556.](#)
13. Suzuki et al. (2020) A synthetic synaptic organizer protein restores glutamatergic neuronal circuits. [Science 369: eabb4853](#)
14. Ottenheimer et al. (2020) A quantitative reward prediction error signal in the ventral pallidum. [Nature Neuroscience in press](#)
15. Hörnberg et al. (2020) Rescue of oxytocin response and social behaviour in a mouse model of autism. [Nature in press](#)
16. Tang et al. (2020) Social touch promotes interfemale communication via activation of parvocellular oxytocin neurons. [Nature Neuroscience in press](#)

17. Morrens et al. (2020) Cue-evoked dopamine promotes conditioned responding during learning. [Neuron106:142-153.](#)
18. Huang et al. (2020) BRICseq bridges brain-wide interregional connectivity to neural activity and gene expression in single animals. Cell in press DOI:<https://doi.org/10.1016/j.cell.2020.05.029>
19. El-Boustani et al. (2020) Anatomically and functionally distinct thalamocortical inputs to primary and secondary mouse whisker somatosensory cortices. [Nature Communications 11, 3342.](#)
20. Zell et al. (2020) VTA glutamate neuron activity drives positive reinforcement absent dopamine co-release. [Neuron in press](#)
21. Clemens et al. (2020) The lateral septum mediates kinship behavior in the rat. [Nature Communications 11, 3161](#)
22. Cross-hemispheric gamma synchrony between prefrontal parvalbumin interneurons supports behavioral adaptation during rule shift learning. [Nature Neuroscience in press](#)
23. Anpilov et al. (2020) Wireless optogenetic stimulation of oxytocin neurons in a semi-natural setup dynamically elevates both pro-social and agonistic behaviors. [Neuron in press](#)
24. Guru et al. (2020) Ramping activity in midbrain dopamine neurons signifies the use of a cognitive map. bioRxiv preprint, <https://doi.org/10.1101/2020.05.21.108886>
25. Barbano et al. (2020) VTA glutamatergic neurons mediate innate defensive behaviors. [Neuron in press](#)
26. Hughes et al. (2020) Ventral tegmental dopamine neurons control the impulse vector during motivated behavior. [Current Biology in press](#)
27. Prevost-Soliet et al. (2020) Dopamine neurons of the VTA encode active conspecific interaction and promote social learning through social reward prediction error. bioRxiv preprint, doi: <https://doi.org/10.1101/2020.05.27.118851>
28. Kim et al. (2020) Extraction of distinct neuronal cell types from within a genetically continuous population. [Neuron in press.](#)
29. Gong et al. (2020) An ultra-sensitive step-function opsin for minimally invasive optogenetic stimulation in mice and macaques. [Neuron in press.](#)
30. Tan et al. (2020) The gut–brain axis mediates sugar preference. [Nature 580: 511–516.](#)
31. Li & Jasanoff (2020) Local and global consequences of reward-evoked striatal dopamine release. [Nature 580: 239-244.](#)
32. Lepack et al. (2020) Dopaminylation of histone H3 in ventral tegmental area regulates cocaine seeking. [Science 368: 197-201.](#)

33. Dolensek et al. (2020) Facial expressions of emotion states and their neuronal correlates in mice. [Science 368: 89-94.](#)
34. Iino et al. (2020) Dopamine D2 receptors in discrimination learning and spine enlargement. [Nature in press](#)
35. Mercer Lindsay et al. (2019) Orofacial movements involve parallel corticobulbar projections from motor cortex to trigeminal premotor nuclei. [Neuron 104:765-780.](#)
36. Condylis et al. (2020) Context-dependent sensory processing across primary and secondary somatosensory cortex [Neuron in press](#)
37. Chen et al. (2020) Dysfunction of cortical GABAergic neurons leads to sensory hyper-reactivity in a Shank3 mouse model of ASD. [Nature Neuroscience in press](#)
38. Milne et al. (2020) Pinnipeds orient and control their whiskers: a study on Pacific walrus, California sea lion and Harbor seal. J Comp Physiol A <https://doi.org/10.1007/s00359-020-01408-8>
39. Sangiamo et al. (2020) Ultrasonic signals associated with different types of social behavior of mice. [Nature Neuroscience in press](#)
40. Livneh et al. (2020) Estimation of current and future physiological states in insular cortex. [Neuron in press](#)
41. Egger et al. (2020) Cortical output is gated by horizontally projecting neurons in the deep layers. [Neuron in press](#)
42. Heymann et al. (2020) Synergy of distinct dopamine projection populations in behavioral reinforcement. [Neuron In press](#)
43. Lak et al. (2020) Dopaminergic and prefrontal basis of learning from sensory confidence and reward value. [Neuron in press](#)