List of papers for Croissant Meeting 2025

1. Yang et al. (2025) Integrator dynamics in the cortico-basal ganglia loop for flexible motor timing. Nature in press
2. Zheng et al. (2025) Neural mechanism of the sexually dimorphic winner effect in mice. Neuron 113: 4217-4231
3. Ährlund-Richter et al. (2025) Distinct roles of prefrontal subregion feedback to the primary visual cortex across behavioral states. Neuron in press
4. Jia et al. (2025) Social Exclusion Amplifies Behavioral Responses to Physical Pain via Insular Neuromodulation. bioRxiv preprint
5. Finkelstein et al. (2025) Connectivity underlying motor cortex activity during goal-directed behaviour. Nature in press
6. Bech et al. (2025) Retrosplenial cortex enables context-dependent goal-directed sensorimotor transformation. bioRxiv preprint
7. Jiang et al. (2025) Neural basis of cooperative behavior in biological and artificial intelligence systems. Science in press
8. Ye et al. (2025) Ultra-high-density Neuropixels probes improve detection and identification in neuronal recordings. Neuron in press
9. Tose et al. (2025) WAChRs are excitatory opsins sensitive to indoor lighting. bioRxiv preprint
10. Salay et al. (2025) A circuit that integrates drive state and social contact to gate mating. Nature in press
11. Hakim et al. (2025) Spectral envelopes of rhythmic facial movements predict intention and motor cortical representations. bioRxiv preprint
12. Yuan et al. (2025) Optimized deep brain stimulation for anterior cingulate cortex inhibition produces antidepressant-like effects in mice. Neuron in press
13. Hintiryan et al. (2025) Neural networks of the mouse visceromotor cortex. Nature in press
14. Semelidou et al. (2025) Stimulus encoding shapes tactile perception and underlies alterations in autism. bioRxiv preprint
15. Li et al. (2025) Dynamic redistribution of AMPA receptors toward memory-related neuronal ensembles in mice barrel cortex during sensory learning. Neuron in press

16. Liu et al. (2025) A hypothalamic circuit underlying the dynamic control of social homeostasis. Nature 640: 1000-1010
17. Santiago et al. (2025) Activity-dependent development of the body's touch receptors. Neuron 113: 1758-1773
18. Zhang et al. (2025) Inter-brain neural dynamics in biological and artificial intelligence systems. Nature in press
19. Park et al. (2025) Bilateral integration in somatosensory cortex is controlled by behavioral relevance. Nature Neuroscience 28: 1300–1310
20. Noda et al. (2025) Homeostasis of a representational map in the neocortex. Nature Neuroscience in press
21. Furlanis et al. (2025) An enhancer-AAV toolbox to target and manipulate distinct interneuron subtypes. Neuron 113: 1525-1547
22. Ramot et al. (2025) Motor learning refines thalamic influence on motor cortex. Nature in press
23. Ding et al. (2025) Single-neuron projectome reveals organization of somatosensory ascending pathways in the mouse brain. Neuron in press
24. Hasnain et al. (2025) Separating cognitive and motor processes in the behaving mouse. Nature Neuroscience 28: 640–653
25. Wright et al. (2025) Distinct synaptic plasticity rules operate across dendritic compartments in vivo during learning. Science 388: 322-328
26. Mohar et al. (2025) DELTA: a method for brain-wide measurement of synaptic protein turnover reveals localized plasticity during learning. Nature Neuroscience in press
27. Kim et al. (2025) EPSILON: a method for pulse-chase labeling to probe synaptic AMPAR exocytosis during memory formation. Nature Neuroscience in press
28. Zhu et al. (2025) Hedonic eating is controlled by dopamine neurons that oppose GLP-1R satiety. Science 387: 1376
29. Shymkiv et al. (2025) Slow cortical dynamics generate context processing and novelty detection. Neuron 113: 847-857
30. Qian et al. (2025) Prospective contingency explains behavior and dopamine signals during associative learning. Nature Neuroscience in press
31. Inácio et al. (2025) Brain-wide presynaptic networks of functionally distinct cortical neurons. Nature in press
32. Gonzales et al. (2025) Touch-evoked traveling waves establish a translaminar spacetime code. Science Advance 11: eadr4038

33. Gerhardt et al. (2025) Three-dimensional architecture and linearized mapping of vibrissa follicle afferents. Nature Communications 16: 499.
34. Severson et al. (2017) Active Touch and Self-Motion Encoding by Merkel Cell-Associated Afferents. Neuron 94: 666-676
35. Furuta et al. (2020) The Cellular and Mechanical Basis for Response Characteristics of Identified Primary Afferents in the Rat Vibrissal System. Current Biology 30: 815-826.
36. Johnson et al. (2025) Dopaminergic signaling to ventral striatum neurons initiates sniffing behavior. Nature Communications 16: 336.