List of papers for Croissant Meeting 2024

1. Huey et al. (2025) The auditory midbrain mediates tactile vibration sensing. Cell in press
2. Watson et al. (2025) Human hippocampal CA3 uses specific functional connectivity rules for efficient associative memory. Cell in press
3. Enriquez-Traba et al. (2025) Dissociable control of motivation and reinforcement by distinct ventral striatal dopamine receptors. Nature Neuroscience in press
4. Zhang et al. (2024) Stochastic neuropeptide signals compete to calibrate the rate of satiation. Nature in press
5. Kim et al. (2025) A combinatorial neural code for long-term motor memory. Nature in press
6. Couderc et al. (2024) Dopamine transmission in the anterior insula shapes the neural coding of anxiety. bioRxiv preprint
7. Petty & Bruno (2024) Attentional modulation of secondary somatosensory and visual thalamus of mice. eLife revised preprint
8. Li et al. (2024) Mechanisms of memory-supporting neuronal dynamics in hippocampal area CA3. Cell in press
9. Cai et al. (2024) Dopamine dynamics are dispensable for movement but promote reward responses. Nature in press
10. Jung et al. (2024) Dopamine-mediated formation of a memory module in the nucleus accumbens for goal-directed navigation. Nature Neuroscience in press
11. Sawada et al. (2024) Prefrontal synaptic regulation of homeostatic sleep pressure revealed through synaptic chemogenetics. Science 385:1459-1465
12. Hocbaum et al. (2024) Thyroid hormone remodels cortex to coordinate body-wide metabolism and exploration. Cell in press
13. Chari et al. (2024) A failure to discriminate social from non-social touch at the circuit level may underlie social avoidance in autism. bioRxiv preprint
14. Turecek & Ginty (2024) Coding of self and environment by Pacinian neurons in freely moving animals. Neuron in press
15. Furutachi et al. (2024) Cooperative thalamocortical circuit mechanism for sensory prediction errors. Nature in press

16. Nicholas & Yttri (2024) Motor cortex is responsible for motoric dynamics in striatum and the execution of both skilled and unskilled actions. Neuron in press
17. Golden et al. (2023) Estrogenic control of reward prediction errors and reinforcement learning. bioRxiv preprint
18. Jamali et al. (2024) Semantic encoding during language comprehension at single-cell resolution. Nature 631: 610–616
19. Bonnavion et al. (2024) Striatal projection neurons coexpressing dopamine D1 and D2 receptors modulate the motor function of D1- and D2-SPNs. Nature Neuroscience in press
20. Long et al. (2024) Constraints on the subsecond modulation of striatal dynamics by physiological dopamine signaling. Nature Neuroscience in press
21. Cazettes et al. (2024) Facial expressions in mice reveal latent cognitive variables and their neural correlates. bioRxiv preprint
22. Oude Lohuis et al. (2024) Triple dissociation of visual, auditory and motor processing in mouse primary visual cortex. Nature Neuroscience 27: 758–771
23. de Jong et al. (2024) State and rate-of-change encoding in parallel mesoaccumbal dopamine pathways. Nature Neuroscience 27: 309–318
24. Amo et al. (2024) Glutamate inputs send prediction error of reward, but not negative value of aversive stimuli, to dopamine neurons. Neuron 112:1001-1019
25. Jin et al. (2024) A body–brain circuit that regulates body inflammatory responses. Nature in press
26. Zhang et al. (2024) Cortical regulation of helping behaviour towards others in pain. Nature 626:136–144.
27. Tang et al. (2024) Dynamic behaviour restructuring mediates dopamine-dependent credit assignment. Nature 626:583–592.
28. Nguyen et al. (2024) Cortical reactivations predict future sensory responses. Nature 625:110–118.
29. Domingues et al. (2024) Dynamic representation of appetitive and aversive stimuli in nucleus accumbens shell D1- and D2-medium spiny neurons. bioRxiv preprint

30. Molas et al. (2024) Dopamine control of social novelty preference is constrained by an interpeduncular-tegmentum circuit. Nature Communications 15, 2891.
31. Sias et al. (2024) Dopamine projections to the basolateral amygdala drive the encoding of identity-specific reward memories. Nature Neuroscience 27, 728-736.
32. Pan-Vazquez et al. (2024) Pre-existing visual responses in a projection-defined dopamine population explain individual learning trajectories. bioRxiv preprint
33. Chakarabarti et al. (2024) Touch sensation requires the mechanically gated ion channel ELKIN1. Science 383: 992-998.
34. Juen et al. (2024) A neural substrate for short-term taste memories. Neuron 112: 277-287.
35. Wong et al. (2024) Synapse-specific burst coding sustained by local axonal translation. Neuron 112: 264-276.
36. Mocellin et al. (2024) A septal-ventral tegmental area circuit drives exploratory behavior. Neuron in press
37. Zolnik et al. Layer 6b controls brain state via apical dendrites and the higher-order thalamocortical system. Neuron in press
38. Blanco-Hernández et al. (2024) Sensory and behavioral modulation of thalamic head-direction cells. Nature Neuroscience 27: 28–33
39. Ye et al. Brain-wide topographic coordination of traveling spiral waves. bioRxiv preprint
40. Eshel et al. Striatal dopamine integrates cost, benefit, and motivation. Neuron in press
41. Yokose et al. Visuotactile integration facilitates mirror-induced self-directed behavior through activation of hippocampal neuronal ensembles in mice. Neuron in press