

## List of papers for Croissant Meeting 2022

1. Voelcker et al. (2022) Transformation of primary sensory cortical representations from layer 4 to layer 2. [Nature Communications 13: 5484](#)
2. Wang et al. (2022) Tuning instability of non-columnar neurons in the salt-and-pepper whisker map in somatosensory cortex. [Nature Communications 13: 6611](#)
3. Guzulaitis et al. (2022) Neural basis of anticipation and premature impulsive action in the frontal cortex. [Nature Neuroscience in press](#)
4. Ma et al. (2022) Locomotion activates PKA through dopamine and adenosine in striatal neurons. [Nature in press](#)
5. Scheggia et al. (2022) Reciprocal cortico-amygdala connections regulate prosocial and selfish choices in mice. [Nature Neuroscience 25:1505–1518](#)
6. Willmore et al. (2022) Behavioural and dopaminergic signatures of resilience. [Nature in press](#)
7. Grove et al. (2022) Dopamine subsystems that track internal states. [Nature 608:374-380](#).
8. Matteucci et al. (2022) Cortical sensory processing across motivational states during goal-directed behavior. [Neuron in press](#)
9. Yang et al. (2021) Pain modulates dopamine neurons via a spinal–parabrachial–mesencephalic circuit. [Nature Neuroscience 24: 1402–1413](#)
10. Takatoh et al. (2022) The whisking oscillator circuit. [Nature in press](#)
11. Buetfering et al. (2022) Behaviorally relevant decision coding in primary somatosensory cortex neurons. [Nature Neuroscience 25:1225–1236](#)
12. Jia et al. (2022) Multi-regional module-based signal transmission in mouse visual cortex. [Neuron 110: 1585-1598](#)
13. Tsai et al. (2022) Trans-Seq maps a selective mammalian retinotectal synapse instructed by Nephronectin. [Nature Neuroscience 25: 659–674](#).
14. Javadzadeh & Hofer (2022) Dynamic causal communication channels between neocortical areas. [Neuron in press](#)
15. McElvain et al. (2021) Specific populations of basal ganglia output neurons target distinct brain stem areas while collateralizing throughout the diencephalon. [Neuron 10: 1721-1738](#).
16. Hedrick et al. (2022) Learning binds new inputs into functional synaptic clusters via spinogenesis. [Nature Neuroscience 25: 726–737](#)
17. Zhang et al. (2022) Targeting thalamic circuits rescues motor and mood deficits in PD mice. [Nature in press](#)

18. Veerakumar et al. (2022) Molecularly defined circuits for cardiovascular and cardiopulmonary control. [Nature in press](#)
19. Engerhard et al. (2022) Opponent control of behavior by dorsomedial striatal pathways depends on task demands and internal state. [Nature Neuroscience 25: 345–357](#)
20. Cook et al. (2022) Secondary auditory cortex mediates a sensorimotor mechanism for action timing. [Nature Neuroscience 25: 330–344](#)
21. Currie et al. (2022) Movement-specific signaling is differentially distributed across motor cortex layer 5 projection neuron classes. [Cell Reports 39: 110801](#)
22. Iram et al. (2022) Young CSF restores oligodendrogenesis and memory in aged mice via Fgf17. [Nature in press](#)
23. Liu et al. (2022) Molecular and neural basis of pleasant touch sensation. [Science 376: 483-491](#)
24. Lafourcade et al. (2022) Differential dendritic integration of long-range inputs in association cortex via subcellular changes in synaptic AMPA-to-NMDA receptor ratio. [Neuron 110: 1532-1546](#)
25. Otor et al. (2022) Dynamic compartmental computations in tuft dendrites of layer 5 neurons during motor behavior. [Science 376: 267-275](#)
26. Li et al. (2022) Frontal neurons driving competitive behaviour and ecology of social groups. [Nature 603: 661–666](#)
27. Padilla-Coreano et al. (2022) Cortical ensembles orchestrate social competition through hypothalamic outputs. [Nature 603: 667–671](#)
28. Yu et al. (2022) Social touch-like tactile stimulation activates a tachykinin 1-oxytocin pathway to promote social interactions. [Neuron 110:1051-1067](#)
29. Liu et al. (2022) An action potential initiation mechanism in distal axons for the control of dopamine release. [Science 375:1378-1385](#)
30. Xu et al. (2022) Cortical processing of flexible and context-dependent sensorimotor sequences. [Nature in press](#)
31. Inagaki et al. (2022) A midbrain-thalamus-cortex circuit reorganizes cortical dynamics to initiate movement. [Cell in press](#)
32. Krüttner et al. (2022) Absence of familiarity triggers hallmarks of autism in mouse model through aberrant tail-of-striatum and prelimbic cortex signaling. [Neuron in press](#)
33. Garner and Keller (2022) A cortical circuit for audio-visual predictions. [Nature Neuroscience 25: 98–105](#)

34. Ichiki et al. (2022) Sensory representation and detection mechanisms of gut osmolality change. Nature 602: 468–474
35. Valero et al. (2022) Probing subthreshold dynamics of hippocampal neurons by pulsed optogenetics. Science 375: 570-574
36. Zhang et al. (2021) Dynamics of a disinhibitory prefrontal microcircuit in controlling social competition. Neuron 110: 516-531
37. Won et al. (2021) Opto-vTrap, an optogenetic trap for reversible inhibition of vesicular release, synaptic transmission, and behavior. Neuron 110: 423-435
38. Courtin et al. (2022) A neuronal mechanism for motivational control of behavior. Science 375: eabg7277
39. Condylis et al. (2022) Dense functional and molecular readout of a circuit hub in sensory cortex. Science 375: eabl5981
40. Lee et al. (2021) FosGFP expression does not capture a sensory learning-related engram in superficial layers of mouse barrel cortex. PNAS 118: e2112212118