Microbibliography: Regenerative Neuropeptide Signaling

15 October 2024

Stephen J Smith

Authors’ antecedent neuropeptide publications

1. Smith, S.J. and M. von Zastrow, *A Molecular Landscape of Mouse Hippocampal Neuromodulation.* Frontiers in Neural Circuits, 2022. **16**.

2. Liu, Y.H., et al. *Biologically-plausible backpropagation through arbitrary timespans via local neuromodulators*. in *36th Conference on Neural Information Processing Systems (NeurIPS 2022).* 2022. New Orleans.

3. Smith, S.J., *Transcriptomic evidence for dense peptidergic networks within forebrains of four widely divergent tetrapods.* Curr Opin Neurobiol, 2021. **71**: p. 100-109.

4. Liu, Y.H., et al., *Cell-type-specific neuromodulation guides synaptic credit assignment in a spiking neural network.* Proc Natl Acad Sci U S A, 2021. **118**(51).

5. Smith, S.J., et al., *New light on cortical neuropeptides and synaptic network plasticity.* Curr Opin Neurobiol, 2020. **63**: p. 176-188.

6. Smith, S.J., et al., *Single-cell transcriptomic evidence for dense intracortical neuropeptide networks.* Elife, 2019. **8**.

Neuropeptide generalities

8. Yanez-Guerra, L.A., D. Thiel, and G. Jekely, *Premetazoan Origin of Neuropeptide Signaling.* Mol Biol Evol, 2022. **39**(4).

11. Wan, K.Y. and G. Jekely, *Origins of eukaryotic excitability.* Philos Trans R Soc Lond B Biol Sci, 2021. **376**(1820): p. 20190758.

13. Jekely, G., *The chemical brain hypothesis for the origin of nervous systems.* Philos Trans R Soc Lond B Biol Sci, 2021. **376**(1821): p. 20190761.

14. Arendt, D., *Elementary nervous systems.* Philos Trans R Soc Lond B Biol Sci, 2021. **376**(1821): p. 20200347.

17. Jekely, G., et al., *The long and the short of it - a perspective on peptidergic regulation of circuits and behaviour.* J Exp Biol, 2018. **221**(Pt 3).

19. Jekely, G., *Global view of the evolution and diversity of metazoan neuropeptide signaling.* Proc Natl Acad Sci U S A, 2013. **110**(21): p. 8702-7.

20. Rice, M.E., *Seeing a Tree Within the Forest: Selective Detection and Function of Somatodendritic Cholecystokinin Release From Dopamine Neurons in the Ventral Tegmental Area.* Biological Psychiatry, 2023. **93**(2): p. 110-112.

Somatodendritic neuropeptide secretion

21. Martinez Damonte, V., et al., *Somatodendritic Release of Cholecystokinin Potentiates GABAergic Synapses Onto Ventral Tegmental Area Dopamine Cells.* Biol Psychiatry, 2023. **93**(2): p. 197-208.

22. Tao, L., et al., *Parallel Processing of Two Mechanosensory Modalities by a Single Neuron in C. elegans.* Dev Cell, 2019. **51**(5): p. 617-631 e3.

25. Ludwig, M. and J. Stern, *Multiple signalling modalities mediated by dendritic exocytosis of oxytocin and vasopressin.* Philos Trans R Soc Lond B Biol Sci, 2015. **370**(1672).

26. Crosby, K.M., et al., *Postsynaptic Depolarization Enhances GABA Drive to Dorsomedial Hypothalamic Neurons through Somatodendritic Cholecystokinin Release.* J Neurosci, 2015. **35**(38): p. 13160-70.

28. Ludwig, M. and G. Leng, *Dendritic peptide release and peptide-dependent behaviours.* Nat Rev Neurosci, 2006. **7**(2): p. 126-36.

Range of neuropeptide action

29. Chini, B., M. Verhage, and V. Grinevich, *The Action Radius of Oxytocin Release in the Mammalian CNS: From Single Vesicles to Behavior.* Trends Pharmacol Sci, 2017. **38**(11): p. 982-991.

32. Leng, G. and M. Ludwig, *Neurotransmitters and peptides: whispered secrets and public announcements.* J Physiol, 2008. **586**(23): p. 5625-32.

Cholecystokinin impacts

34. Asim, M., et al., *Cholecystokinin neurotransmission in the central nervous system: Insights into its role in health and disease.* BioFactors, 2024.

35. Zhang, Z., et al., *Cholecystokinin Signaling can Rescue Cognition and Synaptic Plasticity in the APP/PS1 Mouse Model of Alzheimer's Disease.* Mol Neurobiol, 2023.

36. Zhang, X., et al., *Cholecystokinin B receptor antagonists for the treatment of depression via blocking long-term potentiation in the basolateral amygdala.* Mol Psychiatry, 2023. **28**(8): p. 3459-3474.

37. Su, J., et al., *Entorhinohippocampal cholecystokinin modulates spatial learning by facilitating neuroplasticity of hippocampal CA3-CA1 synapses.* Cell Rep, 2023. **42**(12): p. 113467.

38. Lau, S.H., et al., *The potential role of the cholecystokinin system in declarative memory.* Neurochem Int, 2023. **162**: p. 105440.

2022. **79**(3): p. 188.

42. Ma, Y. and W.J. Giardino, *Neural circuit mechanisms of the cholecystokinin (CCK) neuropeptide system in addiction.* Addict Neurosci, 2022. **3**.

46. Chen, X., et al., *Cholecystokinin release triggered by NMDA receptors produces LTP and sound-sound associative memory.* Proc Natl Acad Sci U S A, 2019. **116**(13): p. 6397-6406.

47. Rehfeld, J.F., *Cholecystokinin-From Local Gut Hormone to Ubiquitous Messenger.* Front Endocrinol (Lausanne), 2017. **8**: p. 47.

48. Rehfeld, J.F., *Cholecystokinin expression in tumors: biogenetic and diagnostic implications.* Future Oncol, 2016. **12**(18): p. 2135-47.

50. Oikonomou, E., M. Buchfelder, and E.F. Adams, *Cholecystokinin (CCK) and CCK receptor expression by human gliomas: Evidence for an autocrine/paracrine stimulatory loop.* Neuropeptides, 2008. **42**(3): p. 255-65.