

Anatomy and Network Activity of Tuberoinfundibular Dopamine (TIDA) Neurons

Kristi “Renee” Neal

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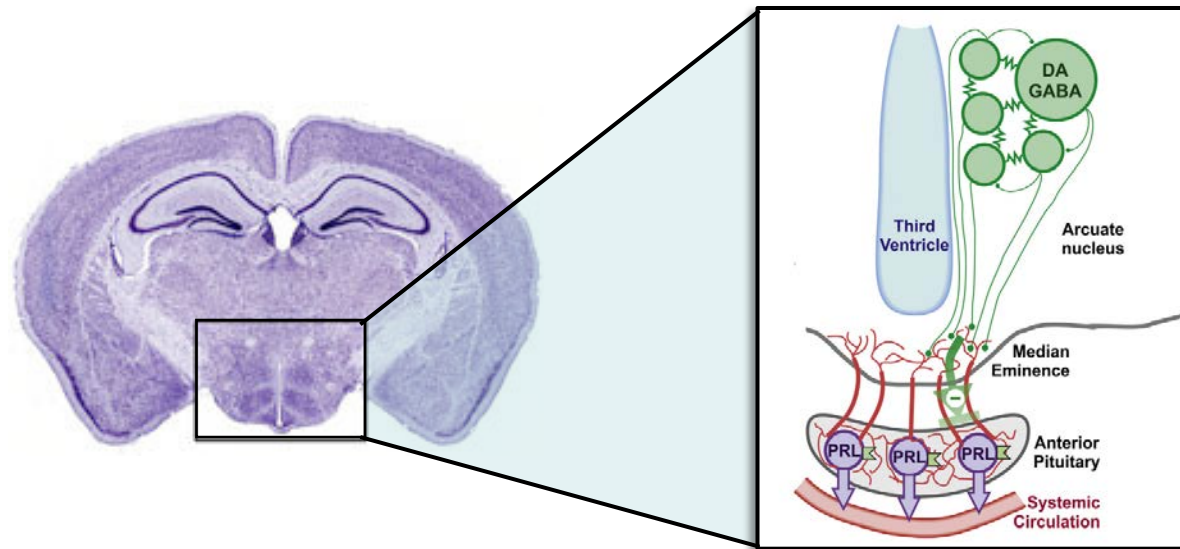


About Me



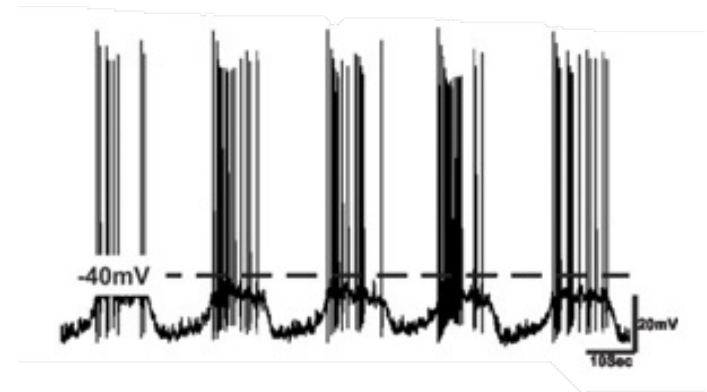
What are TIDA neurons?

- Located in the Arcuate Hypothalamic Nucleus (ARH)
- Regulate the inhibition of prolactin release



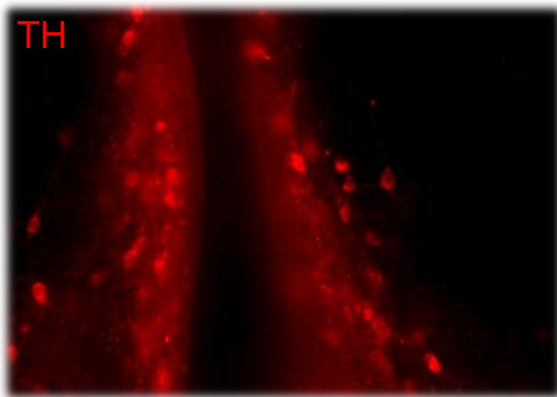
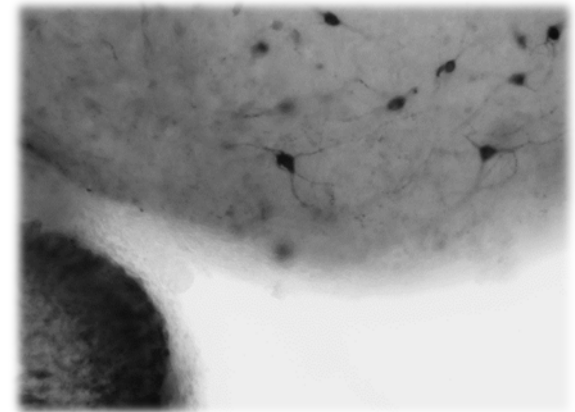
Methodology

- Electrophysiology
 - Very distinct oscillating current
- Live Animals
 - Colchicine injections

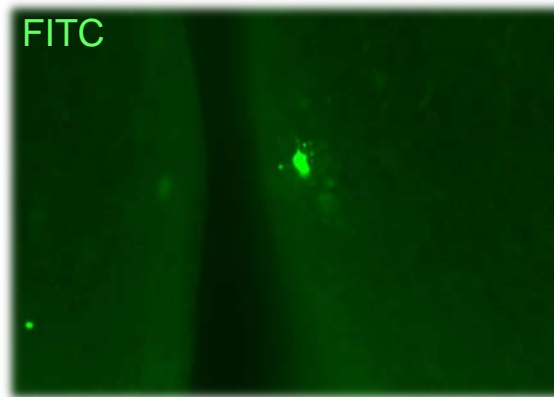


Methodology

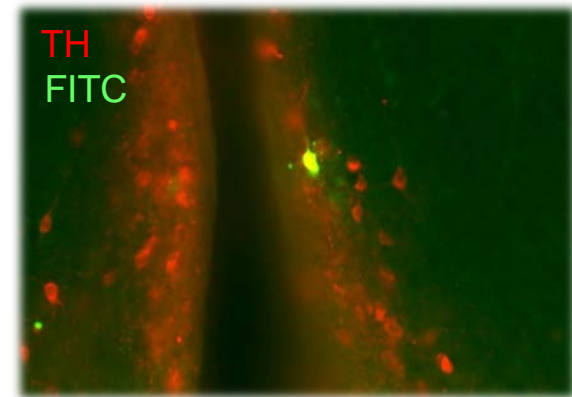
- Immunohistochemistry
 - Antibodies with fluorescent markers
 - Benzene derivatives



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Why is this important?

- While we may be doing basic research...
 - Prolactin release/inhibition pathway
 - Side effect of SSRI drugs
 - Dopaminergic neurons not affected by Parkinson's Disease

Acknowledgments

- Arash Hellysaz
- Stefanos Stagkourakis

- Dr. Christian Broberger, MD, PhD

References

- Lyons, D. J., A. Hellysaz, and C. Broberger. "Prolactin Regulates Tuberoinfundibular Dopamine Neuron Discharge Pattern: Novel Feedback Control Mechanisms in the Lactotrophic Axis." *Journal of Neuroscience* 32.23 (2012): 8074-083. Web.
- Lyons, D.J., Broberger, C. TIDAL WAVES: Network mechanisms in the neuroendocrine control of prolactin release. *Front. Neuroendocrinol.* (2014), <http://dx.doi.org/10.1016/j.yfrne.2014.02.001>

Thank you!

Questions?