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Education

2006 PhD in Medical Science, Karolinska Institutet, Sweden
2007-2010 Postdoctoral Fellow at the Picower Institute for Learning and Memory (MIT, USA)

Research Interests

The research of my laboratory is focused on defining the structure and function of brain circuits that control motivated behaviors. We use and develop new technologies to map the identity, connectivity, and activity of genetically-defined neuron subtypes in transgenic mice – as well as manipulate activity with high precision using optogenetic strategies - during complex behavioral paradigms.

Funding

Swedish Research Council, Karolinska Institutet, Swedish Brain Foundation.

Recent Publications

- 1) Åhrlund-Richter, S., Xuan, Y., van Lunteren, J.A., Kim, H., Ortiz, C., Pollak Dorocic, I., Meletis, K., and Carlén, M. (2019). A whole-brain atlas of monosynaptic input targeting four different cell types in the medial prefrontal cortex of the mouse. *Nature Neuroscience*. 22, 657–668.
- 2) Lazaridis, I., Tzortzi, O., Weglage, M., Martin, A., Xuan, Y., Parent, M., Johansson, Y., Fuzik, J., Fürth, D., Fenno, L.E., et al. (2019). A hypothalamus-habenula circuit controls aversion. *Molecular Psychiatry*.
- 3) Fürth, D., Vaissière, T., Tzortzi, O., Xuan, Y., Martin, A., Lazaridis, I., Spigolon, G., Fisone, G., Tomer, R., Deisseroth, K., et al. (2018). An interactive framework for whole-brain maps at cellular resolution. *Nature Neuroscience*. 21, 139–149.
- 4) Pollak Dorocic, I., Fürth, D., Xuan, Y., Johansson, Y., Pozzi, L., Silberberg, G., Carlén, M., and Meletis, K. (2014). A whole-brain atlas of inputs to serotonergic neurons of the dorsal and median raphe nuclei. *Neuron* 83, 663–678.
- 5) Szydlowski, S.N., Pollak Dorocic, I., Planert, H., Carlén, M., Meletis, K., and Silberberg, G. (2013). Target selectivity of feedforward inhibition by striatal fast-spiking interneurons. *Journal of Neuroscience*. 33, 1678–1683.

