

Single cell profiling of neuropeptides by mass spectrometry

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Analysis of cell-specific expression or cell-specific post-translational modifications of neuropeptides can contribute essentially to a better understanding of the complex functions of neuronal circuits. MALDI-TOF mass spectrometry is the method of choice to study such intercellular communication capabilities at the single neuron level. In the talk, examples of methods that are used for cell identification, dissection, and subsequent mass spectrometric analysis of peptidergic neurons are presented; with a focus on insect neurons.