Neurons are frequently classified into distinct groups, or ‘cell types’, on the basis of structural, physiological, or genetic attributes. Constraining the definition and diversity of neuronal cell types likely requires a different, more integrated approach - e.g., assaying the cellular and network attributes of individual neurons and determining the degree to which those attributes co-vary across large populations of neurons.

In this seminar I’ll describe (1) the intrinsic electrophysiological and/or morphological properties of GABAergic interneurons categorized into specific, transcriptomically-defined clusters and (2) the degree to which those properties are distinguishable in cells mapped two different transcriptomically-defined clusters. I’ll also describe high-throughput mapping of local synaptic connectivity between excitatory and inhibitory neurons and a path towards constraining the transcriptomic signatures of the pre- and/or postsynaptic cells in such experiments.

Join us for coffee and cookies at 12:15 in LSC 1416
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