

Talks by rising stars of neuroscience

Transcriptional controls over projection neuron fate diversity Esther Klinger - Jabaudon Lab (University of Geneva)

The cerebral cortex is the most evolved structure of the brain and the site for higher cognitive functions. It consists of 6 layers, each composed of specific types of neurons. Interconnectivity between cortical areas is critical for sensory integration and sensorimotor transformation. Inter-areal cortical projection neurons are located in all cortical layers and form a heterogeneous population, which send their axon across cortical areas, both within and across hemispheres. How this diversity emerges during development remains largely unknown. Here, we address this question by linking the connectome and transcriptome of developing cortical projection neurons and show distinct maturation paces in neurons with distinct projections, which correlates with the sequential development of sensory and motor functions during postnatal period.

Event link:

https://www.crowdcast.io/e/wwneurise/