CHARACTERIZATION AND RESCUE OF NEURONAL DYSFUNCTION

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Session 3  Disorders and diseases of the motor system

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Exploiting the motor cortex for pain relief

The primary motor cortex M1 is traditionally viewed as the seat of motor control over voluntary movements. More recently, several new roles are emerging for the M1. Motor cortex stimulation is linked to analgesia in humans with chronic pain, but there is a large variability in efficacy across studies, and underlying mechanisms are unclear. In this talk, I will discuss recent and new insights gained from detailed circuit mapping and manipulations in the rodent M1. Our work uncovers layer-specific regulation of sensory and affective dimensions of neuropathic pain, which paves the way for improving therapies targeting the M1 cortex.