

Motor Control Science Club, January 20, 2025, 4:00 PM CEST
The lecture is open to everybody

Pain & Itch: The good, the bad & the ugly

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Pain and itch protect us from potential injury and diseases from our immediate surroundings. However, pain and itch lose their protective purpose in chronic disorders such as peripheral neuropathy and psoriasis. Moreover, patients with these chronic disorders often suffer from stress and anxiety, which in turn can make the pain and itch worse. In my talk, I will elaborate on two stories. First, I will talk about a novel circuitry between the brainstem and thalamus, that is instrumental in driving the defensive behaviors and aversiveness associated with pain. Second, we find a novel circuit mechanism for how the aversiveness associated with the itch is encoded in the brain. We employed fluorescent gene-carrying viral vectors to interrogate the anatomy, optogenetic/ chemogenetic tools to manipulate the activity, and record from the circuits of interest. Together, we shed light on the molecular, cellular, and circuit mechanisms that underlie the emotional distress caused by chronic pain and itch.

Live @
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