

Virtual DANDRITE Lecture

Tuesday 26 January 2020

11.00 – 12.00

Online via Zoom

Please find Zoom link via the Outlook calendar invitation. If you have not received this, please write an e-mail to Kathrine: kh@dandrite.au.dk



Masaki Ueno

Professor at the Department of System Pathology for Neurological Disorders,
Brain Research Institute,
Niigata University,
Japan

Rewiring of neural circuits in CNS injuries

Injuries in the central nervous system (CNS) such as stroke or trauma severely damage the neural circuits and their functions. The brain and spinal cord have limited capacity to regenerate the circuits, and none of effective therapies have been established to reconstruct their connections. It has been known, however, that the neurons have the ability to locally rewire the connections and alter the functional outputs after the injuries. These plastic changes will have potential to improve the neural functions. In this talk, I would like to introduce several examples of our study that motor and autonomic circuits are dynamically reorganized and influence the recovery process after the injury. This suggest that functional recovery can be achieved by controlling the circuit rewiring to make proper connections. The studies will pave the way to develop novel strategies to restore neural connections and functions.