



BME PARIS
BioMedical Engineering
MASTER'S PROGRAM

Restoring neurological functions after spinal cord injury

Open Your Mind Seminar

Friday, Oct 25 2024
1.30 pm – 3.00 pm

Amphitheater BÉZIER
Arts et Métiers Institute of Technology
155 boulevard de l'Hôpital, 75013 Paris

Neuromodulatory interventions for promoting functional recovery after spinal cord injury. From bench to bedside

Spinal cord injury (SCI) is a life-altering condition that disrupts communication between the brain and the body, often leading to permanent motor, sensory, and autonomic dysfunctions. The complexity of SCI presents a significant challenge for medical treatment, but new advances in neurotechnology offer unprecedented possibilities for recovery. At .NeuroRestore, we combine advanced technologies such as electrical stimulation, neurorehabilitation involving robotic interfaces, and innovative 3D imaging of the whole central nervous system to address these challenges. Through clinical studies and cutting-edge preclinical research, we have demonstrated significant progress in promoting recovery of lost functions, including voluntary movement and improved quality of life for patients with SCI. In this presentation, I will highlight recent breakthroughs, discuss the scientific principles behind our therapeutic interventions, and showcase real-world applications that hold promise for revolutionizing SCI treatment. This talk will provide an insight into the future of neurological recovery, where the convergence of science and technology aims to offer new hope to those affected by spinal cord injuries.

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