

# Enhanced Functional Recovery From Spinal Or Motor Cortex Lesion In Non-human Primates Based On Anti-Nogo-A Antibody Treatment Or Cellular Therapy

Adult macaque monkeys were subjected to a spinal hemisection or unilateral primary motor cortex lesion, generating strong deficit of manual dexterity with the ipsilesional hand or the contralesional hand, respectively. In the two lesion models, the administration of anti-Nogo-A antibody lead to an enhanced functional recovery of manual dexterity, as compared to monkeys which received a control antibody. A comparable enhancement of functional recovery was observed after motor cortex lesion when the monkeys were subjected to an autologous transplantation of adult neural progenitor cells. With both treatments, the enhancement corresponded to an improvement of about 30% of the motor performance, representing a substantial benefit in the ability to control sophisticated finger movements.

## ABOUT THE SPEAKER

Professor Eric M. Rouiller is a Professor of Neurophysiology from the Division of Physiology, Department of Medicine, University of Fribourg, Switzerland. His major research interest is in the area of Neurosciences; Auditory System (Hearing) and Motor System (Control of fine voluntary movements).

**PROFESSOR  
ERIC M. ROUILLER**  
Department of Physiology  
University of Fribourg  
Switzerland

**Thursday 30 November 2017  
10.00 am – 11.00 am  
Seminar Room  
MD10, Level 2, Anatomy Museum**