Innovating therapies for glial cells related diseases – Thérapies innovantes pour les maladies des cellules gliales

Watch the **Replay** here : https://www.youtube.com/watch?v=8w0exvc-kVo

The diseases of the nervous system including tumors are among the most dreadful diseases in humans. While the final outcome of these diseases is almost invariably due to neuronal dysfunction and death, glial cells often appear to be at the origin or to largely participate to the neuron unsettling. So designing therapies directly targeting glial cells is highly relevant for the large majority of diseases of the central and peripheral nervous system (CNS/PNS).

As glial cells provide an undeniable and significant support to neuron function and survival, an exciting novel way to tackle nervous system diseases is to design therapies that will modify, improve or sustain this support in order to prevent neuronal cell dysfunction or death. In this webinar, we will illustrate this strategy using various technological approaches and treatments in diverse types of glial-cells related pathologies of the CNS and PNS.

Caroline Sevin

Service de Neurologie Pédiatrique, GHU Paris-Sud – Hôpital de Bicêtre

Title : **Gene therapy for leukodystrophies : beyond targeting the oligodendrocyte**

Short bio: Caroline is a neurologist and pediatrician at Bicêtre Hospital and a member of the « gene therapy » team led by Nathalie Cartier at the Brain Institute. She develops gene therapies for some leukodystrophies and is vice-president of the scientific council of the European Leukodystrophy Association. She is one of the managers of the reference center for rare leukodystrophies and leukoencephalitis.

Piotr Topilko

Institut Mondor de Recherche Biomédicale (IMRB), Créteil

Title: **Are MEK inhibitors the best option for curing neurofibromas in neurofibromatosis type 1 ?**

Short bio: Piotr is an internationally recognized expert in the field of Schwann cell biology and Neurofibromatosis type 1 (NF1). He leads outstanding research on Schwann cells, neural crest-derived boundary cap (BC) cells and NF1. He identified BCs as cells at the origin of neurofibromas in NF1. His team recently set up NF1 mouse models, which has led to substantial progress in the understanding of development of neurofibromas, including their malignant transformation and are used for drug screening studies.

Nicolas Tricaud

Institut des Neurosciences de Montpellier, Montpellier

Title: **Gene therapy for demyelinating peripheral neuropathies : targeting Schwann cells in a local approach**

Short bio: Nicolas is team leader at the Institut des Neurosciences de Montpellier. Before, he has been working at the Swiss Federal Polytechnic School in Switzerland and at the Memorial Sloan Kettering Institute in New York city in the USA. He is an expert in the biology of myelin and peripheral nerves. Winner of the ERC consolidator grant in 2012, he develops therapeutic approaches for diseases of the nerve and for neurodegenerative diseases linked to myelin in the brain and spinal cord.