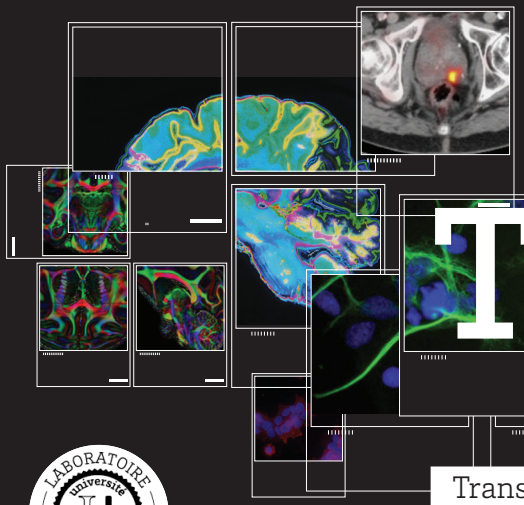

23rd June, 2017
16:00-17:00
Conference room Broussin-Delorme
Pellegrin Hospital

TRAIL

Translational Research and
Advanced Imaging Laboratory

Retinal imaging in neuroimmunology- Current research and clinical applications

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Friedemann PAUL, professor of neurology, is head of clinical and experimental Neuroimmunology research group at Charité Hospital since 2010 and head of the NeuroCure Clinical Research Center since 2011. The Clinical Neuroimmunology Group is focused upon the improvement of the therapeutic and diagnostic possibilities for neuroimmunological diseases, especially for multiple sclerosis. They are working on this with a translational approach; this means that we try to transfer new developments and findings from basic research directly into clinical work.

«Retinal imaging in neuroimmunology - current research and clinical applications»

Imaging of the retina with the help of high resolution spectral domain optical coherence tomography (OCT) has leveraged both clinical and preclinical investigations of inflammatory and autoimmune processes that affect retinal tissue. In the past 10 years, our understanding of the pathophysiology of retinal damage and how this relates to global disease burden and clinical disability in neuroimmunological diseases such as optic neuritis, multiple sclerosis, neuromyelitis optica, Susac syndrome and others has substantially increased. Consequently, OCT is increasingly used to assess patients with autoimmune conditions of the central nervous system in clinical routine and also implemented as outcome tool in clinical trials investigating the visual system. In preclinical research, OCT retinal imaging is used in animal models to deepen our understanding of the pathophysiologic mechanisms prevailing in these conditions. The presentation will review both preclinical data and clinical applications of retinal imaging techniques and will discuss future research questions.