

INVITATION

Conférence donnée dans le cadre de la procédure de promotion

Prof. Michael C. Schmid

DepNMS, FacSciMed, University of Fribourg, Fribourg CH

michael.schmid@unifr.ch

Jeudi, 24 novembre 2022, à 09h15

Auditoire 1.100, PER09 – Chemin du Musée 5, 1700 Fribourg

<https://www.unifr.ch/map/fr/plans/perolles.html>

Faculté des Sciences et de Médecine de l'Université de Fribourg

The visual brain in health and disease

Seeing is essential for most aspects of everyday life. It is thus not surprising that the brain dedicates much of its resources to visual analysis. This begins with sensory registration in the eyes and culminates with perceptual selection in cortical centers. In this talk, I will give an overview of my laboratory's aims to help understand and improve vision in health and disease. To achieve our goals, we take a translational approach and conduct experiments in non-human primates (NHP) and humans. The first part of my presentation will cover how cortical neurons select from multiple visual objects. I will show that stimulation of association cortex can improve visual detection. The second part of the talk will focus on perceptual deficits in developmental dyslexia. In this context, I will outline how primate optogenetics helps identify brain circuit dysfunction related to dyslexia. The presentation will conclude with a report on our first steps in developing a cortical prosthesis to treat blindness.

Fribourg, le 17 novembre 2022

Prof. Ulrich Ultes-Nitsche, Doyen et
Président de la Commission de promotion