

## **EADC RRFS Exchange Program 2025 – Short Report**

Home EADC site: Memory Clinic, Department of Neurology, Second Faculty of Medicine, Charles University and Motol University Hospital, Prague, Czech Republic

Host site: Neurochemistry Research Group, Translational Metabolic Laboratory, Department of Neurology, Radboud University Medical Center, Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, The Netherlands

Exchange period: October 16 – November 15, 2025

As part of the EADC RRFS Exchange Program, I completed a four-week research stay at the Neurochemistry research group at Radboud University Medical Center, Nijmegen, The Netherlands, hosted by Prof. Marcel Verbeek.

The primary aim of the exchange was methodological training in immunohistochemistry (IHC) on human formalin-fixed paraffin-embedded (FFPE) brain tissue, as part of a pilot research project focused on the expression of the longevity-associated protein Klotho in cerebral amyloid angiopathy (CAA), CAA with concomitant Alzheimer's disease (CAA+AD), and control tissue. During the stay, I received hands-on training in key aspects of the IHC workflow, including tissue handling, antigen retrieval, antibody optimization, the use of appropriate controls, and interpretation of staining patterns in neuropathological tissue. This training significantly strengthened my practical skills and understanding of histopathological approaches relevant to neurodegenerative disease research.

Beyond the technical training, the exchange was highly valuable for network building and integration into an international research environment, fostering long-term scientific connections within the EADC network. In parallel, the stay provided exposure to ongoing research activities within the neurochemistry group. Overall, the exchange substantially contributed to my doctoral training and laid the groundwork for future collaboration between Radboudumc and our Prague cohort.

Alzbeta Katonova, 22.12.2025