

Lipidomic analysis of models of neurodegenerative diseases to uncover the function of ABCA7 utilising multiomic data integration

I am incredibly grateful to COST and CA19105 - Pan-European Network in Lipidomics and EpiLipidomics for funding my STSM and the opportunity to visit to Prof. Jens Pahnke's lab at the Section of Neuropathology Research, Rikshospitalet in Oslo, Norway.

Thanks to my STSM, we have deepened our collaboration by focusing on the integration of data from our analyses - lipidomics and data from the analyses of the host laboratory, which is proteomics and transcriptomics. We were able to “data mine” potentially affected genes and corresponding enzymes from the lipidomics data, which we then validated in the proteomics data and tested various advanced approaches to visualize these data. Thanks to the intense collaboration through STSM, we are now writing a joint paper and have also submitted a grant application to the JPND together with colleagues from Germany, Israel and many others.

Finally, I must also mention that it was really amazing for me to travel around Norway a bit in my free time, enjoy Norway's biggest national holiday (Constitution Day on May 17), see bears and reindeer with my own eyes, or enjoy a floating sauna right on the fjord. Many thanks to COST, EpiLipidNET and Prof. Jens Pahnke and his great team, who allowed me to broaden my scientific horizons and gain valuable experience.

