

## **Abstract for symposium at Nordic Meeting in Neuropsychology 2024**

**Title:** Neurocognitive Landscape of Healthy Aging and Brain-Related Diseases

**Chair:** Maryam Ziaei, Associate Professor at Norwegian University of Science and Technology (NTNU), Norway.

**Presenters:**

- Maryam Ziaei, Associate Professor, NTNU, Norway
- Alireza Salami, Associate Professor, Umea University and Karolinska Institute, Sweden.
- Thanh Doan, Group leader, NTNU and resident physician, St. Olav's hospital , Norway.

**Brief description of symposium:**

Aging increases individuals' vulnerability to mood disorders and cognitive decline. Thus, it has become increasingly important to identify cognitive and neural markers that underlie healthy aging. This identification can help us pinpoint risk and protective factors against mood disorders and cognitive decline later in life, ultimately reducing a significant burden on caregivers and medical systems. Various aspects of aging have been under investigation over the past decades including social-emotional and cognitive domains. While these two domains have been studied separately, there is still overlap between these systems while studying neuro mechanisms of aging. In this symposium, our aim is to present cutting-edge research on these major topics related to both cognitive and emotional functioning in healthy aging and mention consequences of brain-related diseases on these aspects. Firstly, we will explore the neurocognitive mechanisms that underlie higher-order cognitive functions, such as memory. Secondly, we will examine emotional functioning in the aged population and its contribution to healthy aging. Subsequently, we will discuss disturbances of the brain networks and the role of neuromodulators in brain-related diseases. The overarching goal is to provide an overview of the current literature to unravel how aging impacts on brain health, cognitive function, and emotional balance.