



PROMEMO / DANDRITE Topical Seminar

Monday 26 August 2019 at 14:30-15:30

Eduard Biermann Auditorium, bldg. 1252 Lakeside Lecture Theaters (Søauditorierne), Aarhus University

<u>Lilian Kisiswa</u>



Senior Research Fellow

Department of Physiology Yong Loo Lin School of Medicine National University of Singapore

Deciphering proteins involved in neuronal survival and the growth of neurites in developing nervous system

Neurons are among the most morphologically complex cells in the vertebrates and this complexity is critical for collecting, processing and disseminating information. Decoding the formation of this morphological complexity has been a leading question in developmental neuroscience. We recently discovered that receptors belonging to the TNF superfamily of receptors have either detrimental or beneficial effects in developing nervous system depending on the cells they are expressed on and the location of the expression. To date, 30 receptors have been described to belong to the TNF superfamily with many expressed in both the central and peripheral nervous system. Some of these receptors are capable of functioning as ligands in a reverse signalling mechanism, increasing their functional complexity. While some regulate neuronal survival, others play critical role in the growth and elaboration of axon and dendrites. In this talk, I will share our findings on the effects of two members, TNFR1 and p75^{NTR}, in neuronal survival and neurite complexity in both central and peripheral nervous system.

Host: Anders Nykjaer, PROMEMO/DANDRITE, Dept. of Biomedicine, Aarhus University