

**Speaker:** Jadwiga Bienkowska

**Title:** ExpertMIX stratification of molecular profiles and clinical phenotypes

**Abstract:**

The disease course and disease severity in patients with relapsing multiple sclerosis (MS) is highly heterogeneous. We developed a new method to investigate patient heterogeneity in the joint space of molecular and clinical disease severity profiles. We applied this method to a cohort of a cohort of 106 patients with secondary progressive MS (SPMS). We identified two subgroups characterized by differential expression of lymphocytic pathways and different molecular signatures correlating with the clinical phenotype: MS Severity Score. Preliminary analysis of RRMS patient cohort also identified 2 molecular subgroups characterized by differential expression of similar lymphocytic pathways. The two RRMS sub-groups are characterized by different disease progression over two years.