WORKING GROUPS SUPPORTED BY JPND



HD-READy

High-Dimensional Research in Alzheimer's Disease

Genetics and brain imaging are two important "-omics" technologies in research on neurodegenerative diseases, and have undergone tremendous technological development in recent years. In coming years, combining imaging and genetics into joint analysis holds great promise to further understand neurodegenerative disease.

However, analytical methodology that addresses such ultra-high-dimensional data is lacking. By bringing together several large longitudinal cohort studies with imaging genetics data, this working group aims to tackle issues related to such ultra-high-dimensional omics-data. This work aims to develop a meta-analytical approach, which is easy to use, will work on anonymized data and is statistically state-of-the-art. A secondary aim is to provide recommendations regarding infrastructure that is required to facilitate such high-dimensional analyses.

This Working Group brings together 23 collaborators from 15 population-based longitudinal cohort studies from 6 EU and 2 non-EU countries (USA and Singapore). Furthermore, an international Advisory Reference Group will be formed, which consists of key members from other large consortia. Results from this Working Group will open the way for future research on ND using emerging technologies.

Start Date: October 2014

Duration: 6 months

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