Phenotypes BrainLaus

**Brain morphology**
- Brain volume measures in 134 cortical and subcortical regions
- Linear and non-linear models of ageing for 134 cortical and subcortical regional volumes
- Brain tissue property measures (myelin, iron, tissue water) in 134 cortical and subcortical regions
- Brain water diffusion indices (FA, MD) in 134 cortical and subcortical regions

**Interview**
- Montgomery Asberg Depression Rating Scale (MADRS)
- Social recognition & social network questionnaires (in ca 400 individuals)

**Additional information**
Structural imaging: We use quantitative structural MRI protocol comprising a multi-parameter mapping protocol of three whole-head 3D multi-echo fast low angle shot (FLASH) datasets with T1-, PD-, and MT-weighting at 1 mm isotropic resolution as previously described (Draganski et al., 2011), allowing optimal delineation of iron-rich basal ganglia nuclei, voxel-based quantification of R2*, R1 and MT and measures of grey matter volume/cortical thickness.
Diffusion-weighted imaging (DWI): We use a DWI protocol of whole brain single-shot echo-planar imaging (EPI) at 2mm isotropic resolution. A total of 118 measurements are made over 3 shells with isotropic angular sampling (13 at b=0; 15 at b=650 s/mm²; 30 at b=1000 s/mm²; and 60 at b=2000 s/mm²).

**COMPLEMENTARY INFORMATION ON ASSESSMENTS OF COLAUS|PSYCOLAUS** [here](#)