

Medicine/Psychiatry/CHeBA

Neurolmaging Lab (NiL)@CHeBA

DESCRIPTION of YOUR TECHNOLOGIES

NeuroImaging Lab (NiL) at Centre for Healthy Brain Ageing (CHeBA), School of Psychiatry, UNSW Medicine is one of the leading labs in neuroimaging research in Australia, especially in neuroimaging of ageing brain.

https://cheba.unsw.edu.au/group/neuroimaging

SPECIALISTS IN Neurolmaging

NiL hosts post-doc fellows, PhD and Masters students.

NiL's strength is NeuroImaging in ageing brain. We study structural and functional MRI. We also study amyloid PET imaging.

COMPETITIVE ADVANTAGES OF YOUR TECHNOLOGIES

An example is our software:

- A fully automated pipeline open and free to all neuroscience researchers and clinicians for research purposes.
- This pipeline provides an uniform and automated method of WMLs quantitation, with data on lesion severity, topography and mapping to fibre tracts.
- · Parallel-computing enabled.
- Including a longitudinal module.
- Easy to use.

SELECTED RECENT PROJECTS and TRACK RECORD

Insert any contract research or industry related working experience here

https://cheba.unsw.edu.au/group/neuroimaging-pipeline

THE TOOLS OF OUR TRADE

Neuroimaging analysis of both functional and structural MRI, including many modalities such as T1-weighted, FLAIR, ASL, DTI, SWI and resting-state fMRI.

We have recently developed a neuroimaging software for analysing cerebral white matter lesions, including white matter hyperintensity, lacunes, dilated perivascular space. It is a fully automated software pipeline, designed for easy use. It is now freely available online:

https://cheba.unsw.edu.au/group/neuroimaging-pipeline

OUR EXPERTS

Neuropsychiatrists/Geriatricians/Neuroscie ntists

Professors Perminder Sachdev & Henry Brodaty

Dr. Adith Mohan

Dr. Matthew Paradise

Dr. Rebecca Koncz

Neuroscientists/biomedical Engineers

Associate Prof. Wei Wen

Dr. Jiyang Jiyang

Neuroscientist/Biostatistician

Dr. Anbupalam Thalamuthu

