# Meeting's report for ELLEN WANG

## Honour's student

### 18-10-2021

# 1. Agenda for today's meeting

- Present revised research on lacunes
- Struggling to load FSL eyes
- Struggling to view data

## 2. Work already completed

• Further lacune research

# 3. Meeting Minutes from previous week

- forAudrey.tar.gz is the file sent to Audrey last year.
- Within these folders, there are FLAIR transformed, skull and csf removed images.
- Each of these folders are a different imaging modality, which allows participants to move their heads in the scanning process.
- FLAIR transformed to T1 because FLAIR has a bigger slice gap, spatial correspondence maintained in this way.
- 432 patients and 35 have identificed lacunes.
- Note that CSF is basically water, soft tissue is grey matter and white matter.
- T1softTiss with Lacunes is the folder with the skull and CSF removed.
- Lacune T1 space Jiyang Corrected are the lacune mask's corrected according to Melinda's masks.
- Each volume in T1 and FLAIR are the same. This is because each voxel corresponds to the same voxel in FLAIR.
- Will need R and Python to open these masks, and transform NIFTI to usable files.
- NIFTI files are formatted into image header (dimension, spatial resolution, matrix of orientation of image) and matrix (3D matrix, greyscale values)
- The tool required is: fsleyes (install) as part of the fsl package.
- Command: fsleyes \_\_\_\_.gz
- There are spreadsheets of the data which break down the area of the brain and slice and lacune.
- R neuroimaging by John Muschelli
- Recommendation to use established packages as this conversion is not that straightforward.

### 4. Planned work after this meeting

- Attempt to use install and use fsleyes
- Work on viewing and loading the data
- Jiyang: is unavailable from the 4th 8th of October.
- We still haven't heard back from Cheba