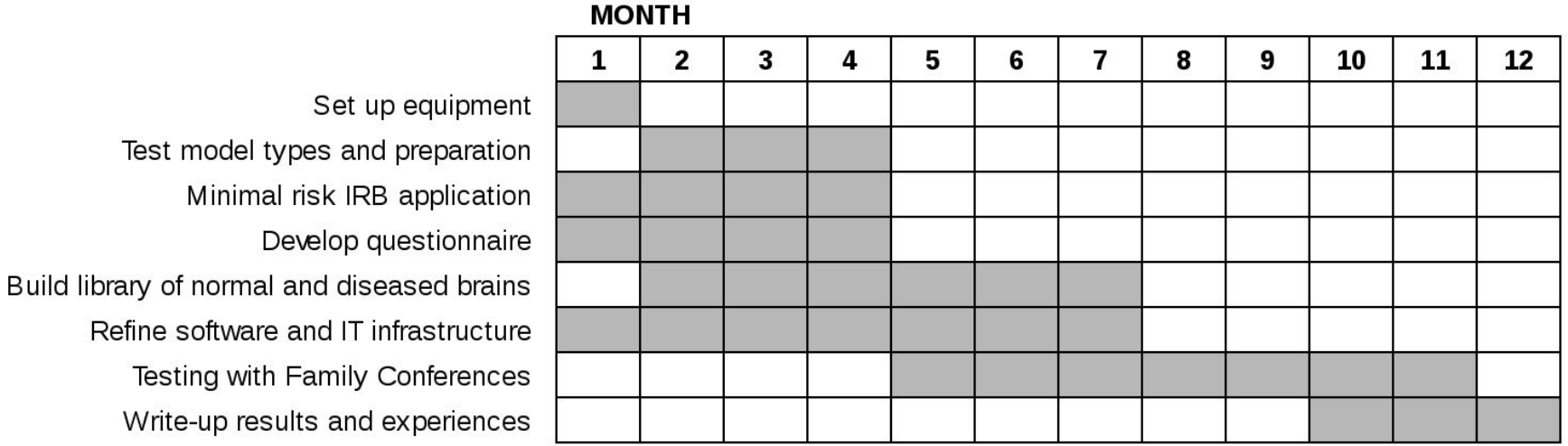
Visuals for the Amazon Catalyst application:

Using 3D printed brains to improve communication with patients who have neurodegenerative disease

First part: Gantt-like chart for the proposed timeline

Second part: Example Images of the 3D printed brains

Proposed Timeline:



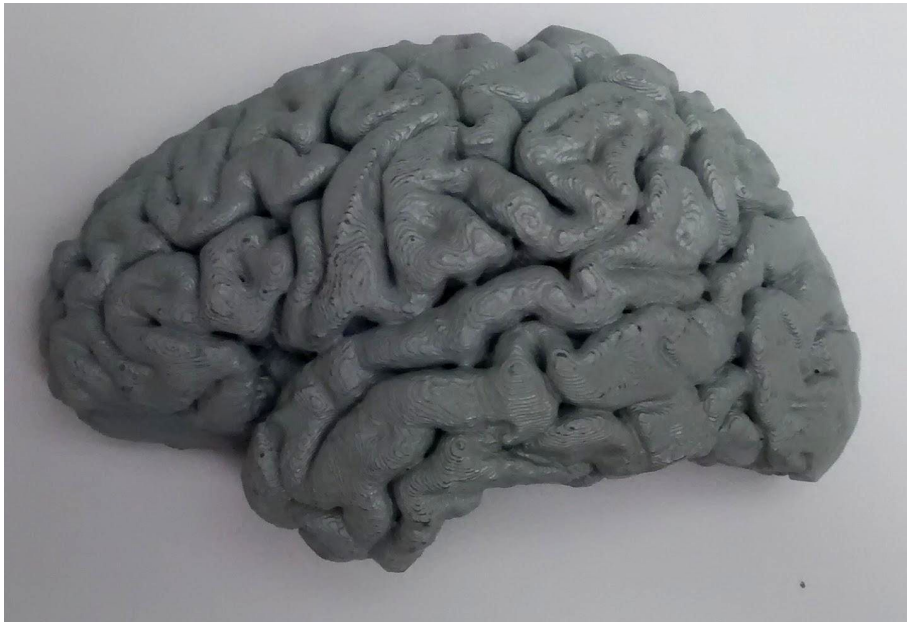
A “Gantt-like” chart (not a complete, formal Gantt chart). The main hard-dependency is that the IRB application needs to be approved and the questionnaire needs to be completed before testing with the family conferences. In our experience with previous projects, minimal risk IRB applications can be drafted and approved within four months.

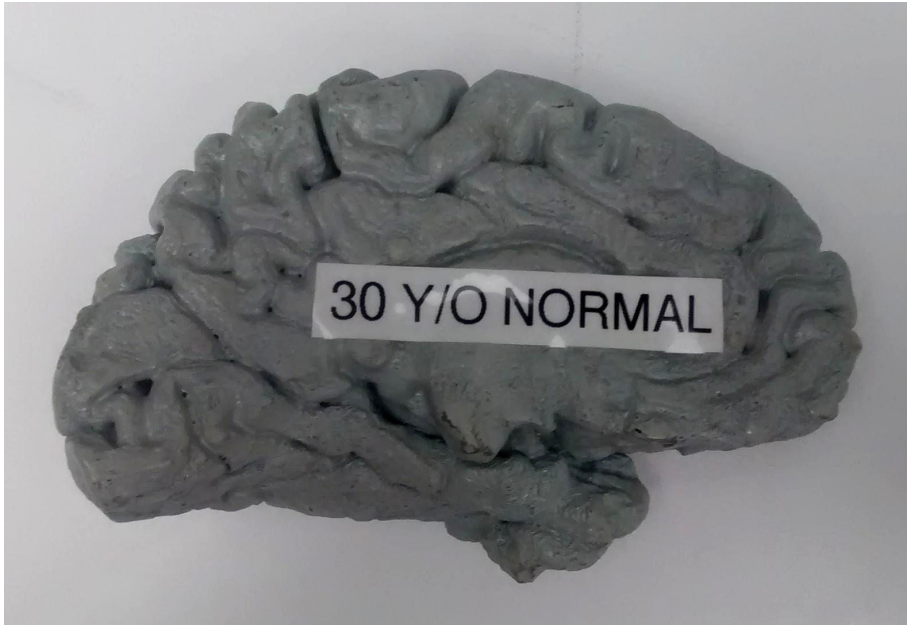
Images of example 3D printed brains from MRI scans - %75 scale

1) A normal ~30 year old brain (actually from the applicant: DJP)

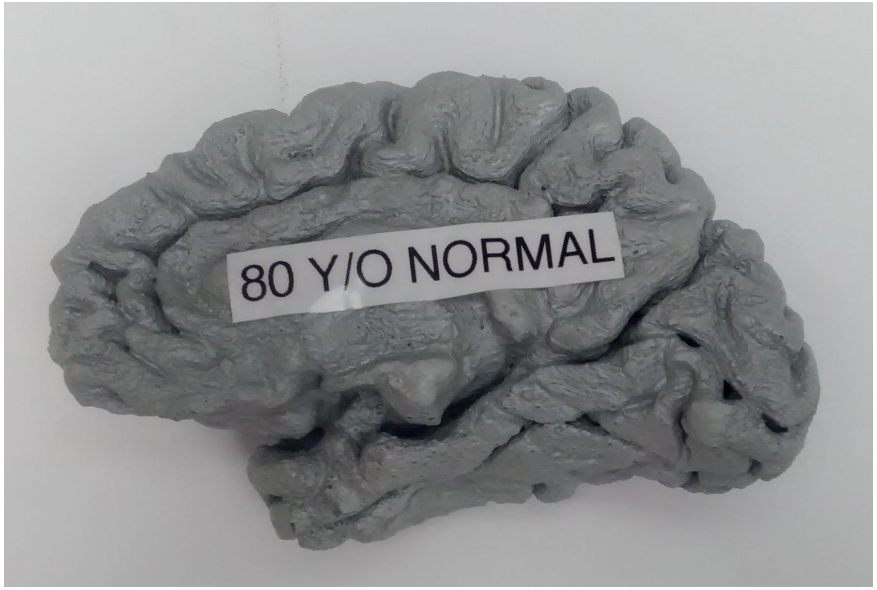
2) A ~80 year old brain from someone without any significant cognitive problems

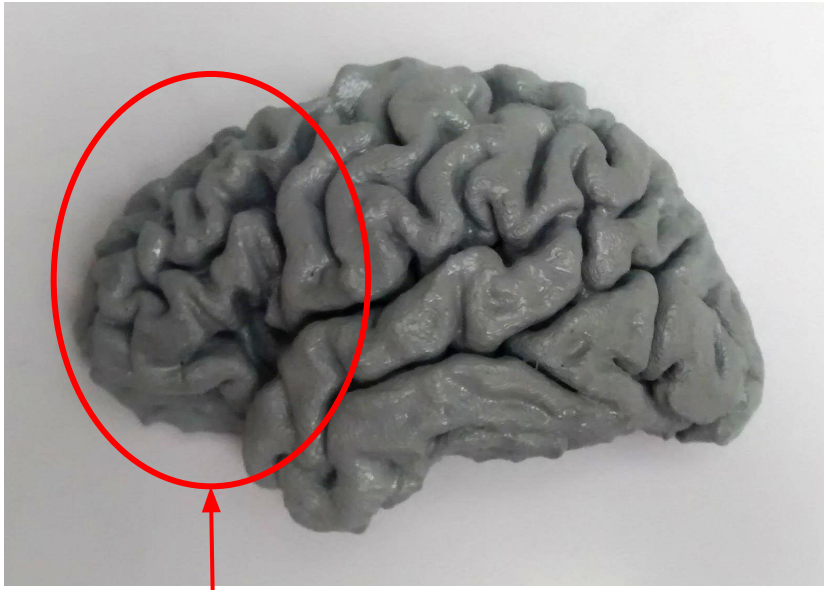
3) A ~60 year old brain from someone with Frontotemporal Lobar Degeneration (FTLD), which is also sometimes called Frontotemporal Dementia.




30 Y/O NORMAL

Sulci are deeper in the older brain





Significant atrophy in the frontal lobe