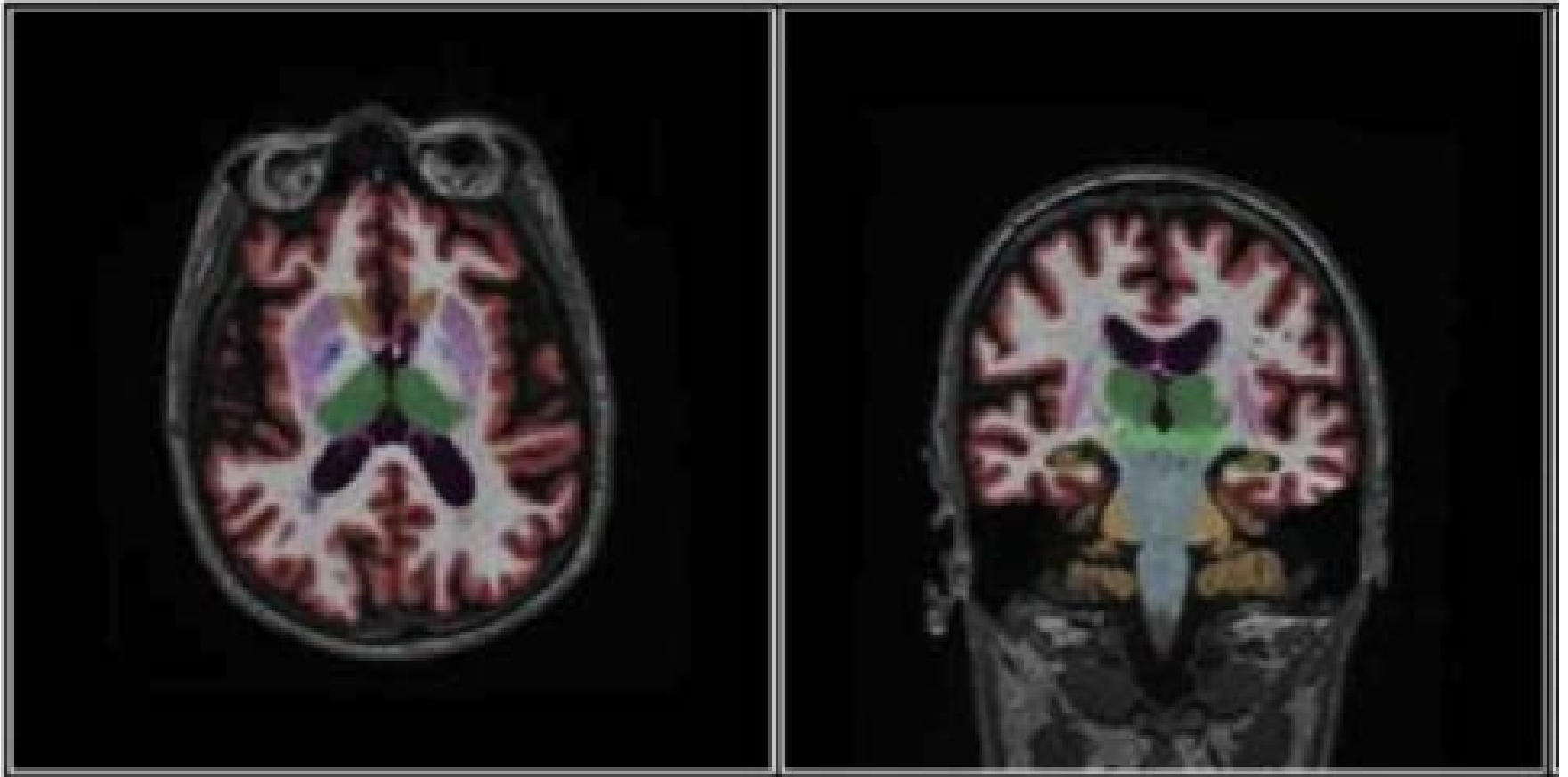# Example from:
Amyloid Profile Continued Support with Brain Phantom Development
Paul Kinahan, Larry Pierce, David Haynor, John Sunderland

Sections through a T1w MRI patient image after processing by NeuroQuant. This patient was from the UW database and illustrates anatomical characteristics of Alzheimer's disease (e.g. enlarged sulci etc.). The colors code different segmented regions. – We will use a healthy normal for initial Stiatal Brain DRO phantom.

DAT Scan DRO Brain Phantom Development

Proposed Timeline and Deliverables

3-Month

- Design phase of striatal Brain DRO – Defining concentrations/contrasts using pooled information from DAT scan literature.

6-Month

- Implement prototype brain DRO - On-site UW testing using various commercial DAT scan analysis software.
- Monte Carlo simulation - Create a realistic noisy DRO projection data set.

12-Month

- Test prototype Striatal Brain DRO - External testing of Striatal Brain DRO using a different DAT scan analysis software analyzed at different sites.
- DICOM data - Realistic noisy DRO projection data set and reconstructec statistically realistic noisy DRO images.