**FreeSurfer Recon-All Class Syllabus**

Winter 2017

**Schedule:**

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| --- | --- | --- | --- |
| **Class** | **Covers** | **Time** | **For Further Practice** |
| Introduction | * Freesurfer overview * Installation * MRI T1w data * Pipeline overview (recon-all) | TBD | 1. Install Freesurfer! 2. Download the bin 3. Process Monica’s brain (or your own!) |
| Data Preprocessing | Autorecon1:   * Motion Correction (ish) * Talaraich registration * NU correction * Skull stripping | TBD |  |
| Segmenting the Brain | Autorecon2:   * WM/GM surface generation * Subcortical segmentation * TKMedit GUI | TBD |  |
| Parcellating the Cortex | Autorecon3:   * Surfaces and Atlases * Freeview GUI * Extracting Data | TBD |  |
| TRACULA and FS 6.0 New Cool Stuff | * TRACULA for DTI analysis * Hippocampus segmentation * Using T2w Scans to Improve * PETSurfer (and PVC) | TBD |  |

**Helpful Links**

Wiki Landing Page: <https://surfer.nmr.mgh.harvard.edu/fswiki/FreeSurferWiki>

Installation: <https://surfer.nmr.mgh.harvard.edu/fswiki/DownloadAndInstall>

5.3 Table: <https://surfer.nmr.mgh.harvard.edu/fswiki/ReconAllTableStableV5.3>

Recon-All Page: <https://surfer.nmr.mgh.harvard.edu/fswiki/recon-all>