Connectivity for APOE3/E4 Experiments

Procedures:

1. Import tracking parameters (saved as trackE3E4 in folder E3E4v1)
2. Load atlas as seeds
3. Perform tracktography for the whole brain
4. Regions -> Check All
5. Uncheck “whole brain”
6. Tracts -> Connectivity matrix (a popup window will appear)
   1. Select “pass region” and click Recalculate
   2. Click “Save matrix…”; name: NXXXXXcon.mat
   3. Click “Save connectogram…”; name: NXXXXXcon.txt
   4. Click network measures
   5. Click “Save network properties”; name: NXXXXXnetprops.txt

Tracking Parameters:

|  |  |
| --- | --- |
| Termination Index | fa |
| Threshold (0=random) | 0.08000 |
| Angular Threshold (0=random) | 60 |
| Step Size(mm)(0=random) | 0.03 |
| Smoothing (1=random) | 0.01 |
| Min Length(mm) | 0.0 |
| Max Length(mm) | 300.0 |
| Seed Orientation | Random |
| Seed Position | Subvoxel |
| Randomize Seeding | On |
| Check Ending | Off |
| Direction Interpolation | Trilinear |
| Tracking Algorithm | RK4 |
| Terminate If | 2000000 |
|  | Tracts |
| Thread Count | 12 |
| Output Format | trk.gz |