BrainVoyager MRI Course 2008

Dear Members of the Clinical Neuroscience Network Bern

For those who are interested in participating in a Brain Voyager MRI course organized by A. Federspiel (Dept. of Psychiatric Neurophysiology, UPD Waldau) please send an email to A. Federspiel (federspiel@puk.unibe.ch) until May 5, 2008 for registration or further information. The course includes a theoretical (approx. 1h) as well as a practical part.

The course will be 4 x 3 hours and the covered topics are listed below

Kind regards

A. Federspiel
Thursday, June, 12 14:00 – 17:00 (Cortical Based Alignment)
- Beyond Talairach Normalisation: Cortical Based Alignment
- Curvature estimation
- Distortion correction
- Morphing to Standard Sphere
- Spatial smoothing
- Group Alignment to Target Sphere
- Group Alignment to Group Average

Thursday, June, 19 14:00 – 17:00 (Diffusion Tensor Imaging)
- Pre-processing of DTI Data
- Co-registration of DTI Data
- Normalisation of DTI Data
- DWI Data analysis
- Tensor visualisation
- Fiber Tracking in ROIs

Thursday, June, 26 14:00 – 17:00 (Advanced Statistical Testing)
- Linear Regression analysis with one predictor
- Multivariate Linear Regression analysis with more than one predictor
- Analysis of Covariance (ANCOVA)
- Fixed-Effects GLM
- Random-Effects GLM
- Non-Parametric Testing
- Multiple Comparisons

Thursday, July, 3 14:00 – 17:00 (Cortical Thickness)
- Inhomogeneity correction
- Advanced Segmentation Tools
- Individual Cortical Thickness
- Cortical Thickness for Group analysis
- Cortical Thickness in Volume of Interest
- Advanced statistical Testing with Cortical Thickness measure