

Materials List for:

# How to Measure Cortical Folding from MR Images: a Step-by-Step Tutorial to Compute Local Gyrfication Index

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## Materials

Name	Company	Catalog Number	Comments
<b>Material:</b> a Unix or Mac workstation with a processor of 2GHz or faster and a minimum of 4GB of RAM, with <i>FreeSurfer</i> installed ( <a href="http://surfer.nmr.mgh.harvard.edu/fswiki">http://surfer.nmr.mgh.harvard.edu/fswiki</a> , preferably the latest version, but no older than version 4.0.3). In order to compute the local Gyrfication Index, MATLAB is also required ( <a href="http://www.mathworks.com/">http://www.mathworks.com/</a> ) along with the Image Processing Toolbox.			
<b>Data:</b> A sample of good quality (high-resolution, high contrast) cerebral MRI T1-weighted dataset. Your group of subjects must be preferably matched for age and gender. Given the normal inter-individual variability in cerebral morphology, the number of subjects in each group should be sufficient to identify an existing group difference (the more - the better). A reasonable minimum sample size would be around 20 subjects per group (although you can probably go for less if the intensity of changes is large and if your groups are tightly matched for gender and age).			
FreeSurfer	Martinos Center for Biomedical Imaging, MGH		Version newer than 4.0.3
Matlab	Mathworks		Image Processing Toolbox