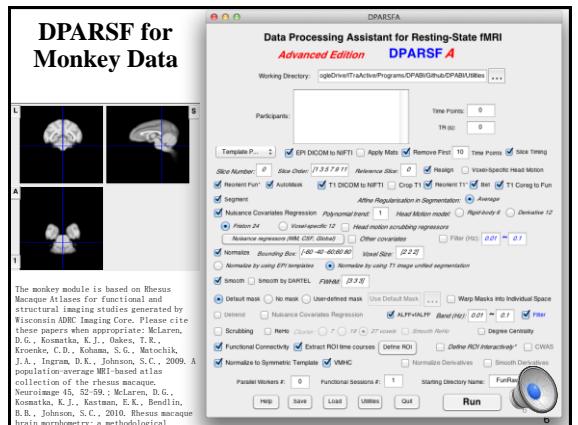
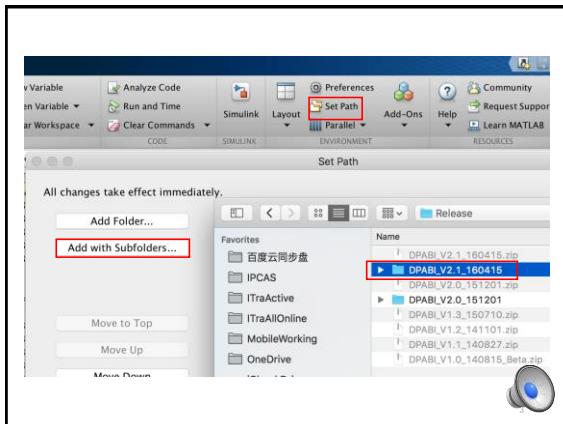
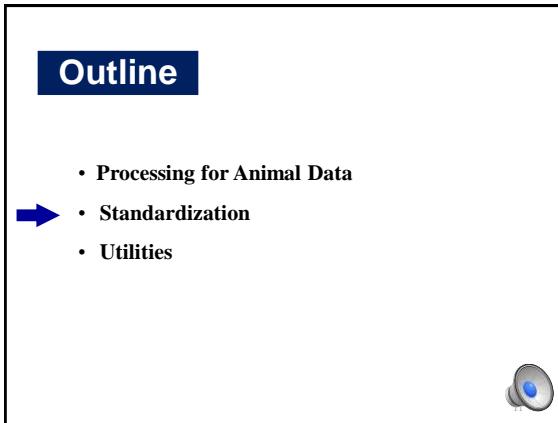
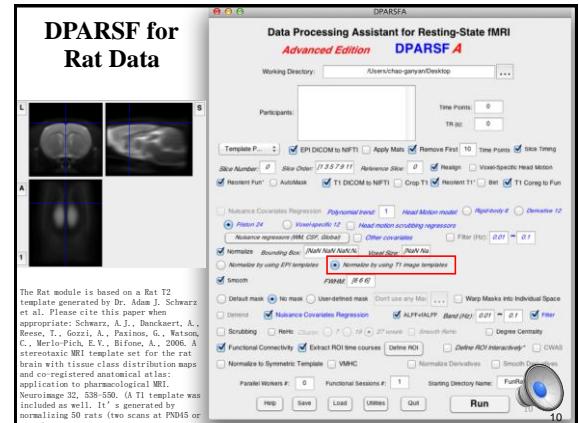
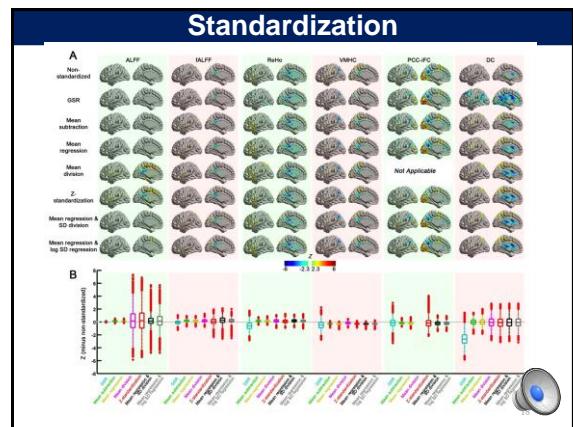
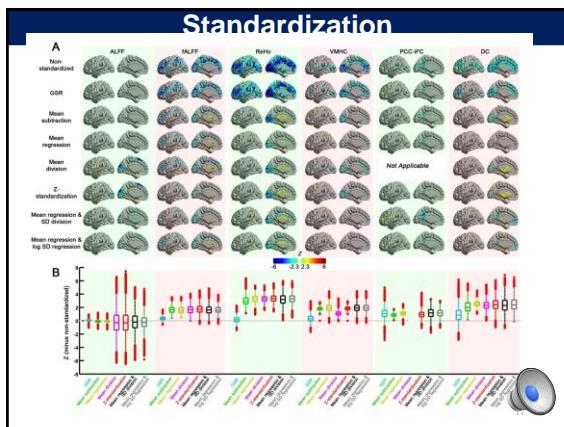
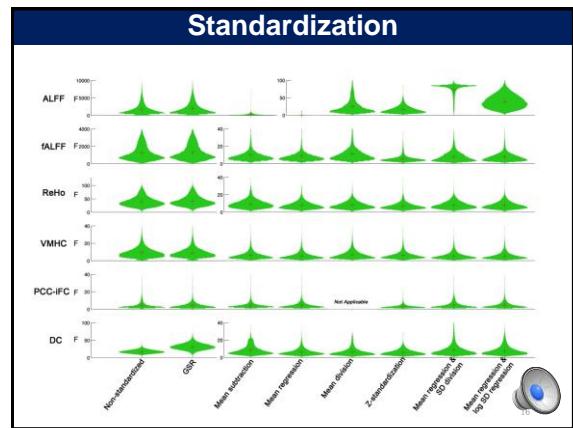
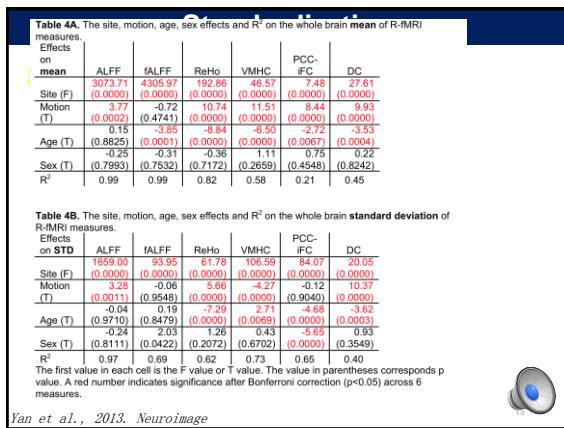
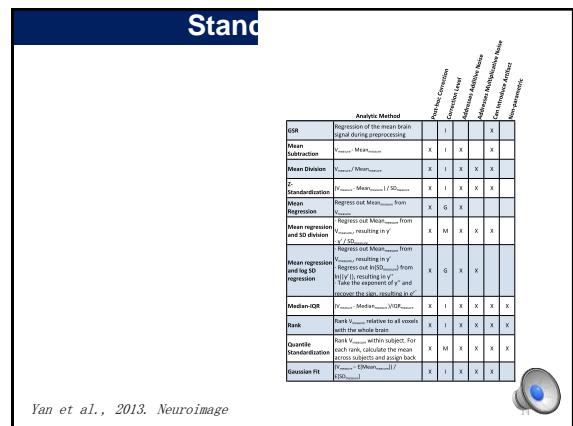


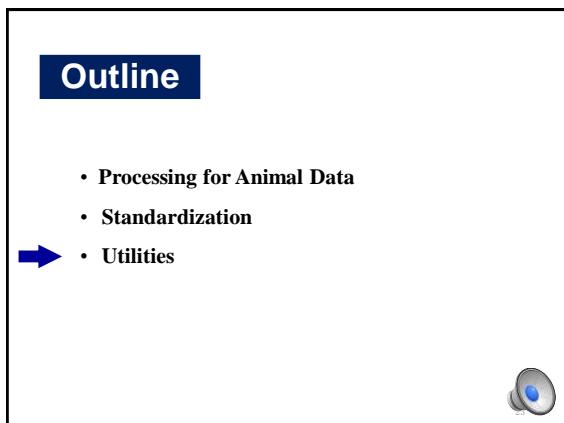
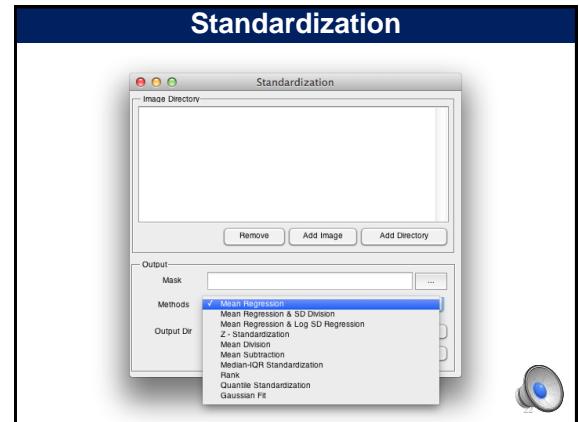
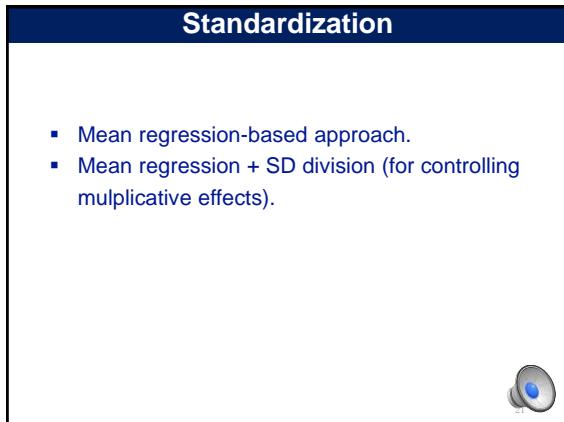
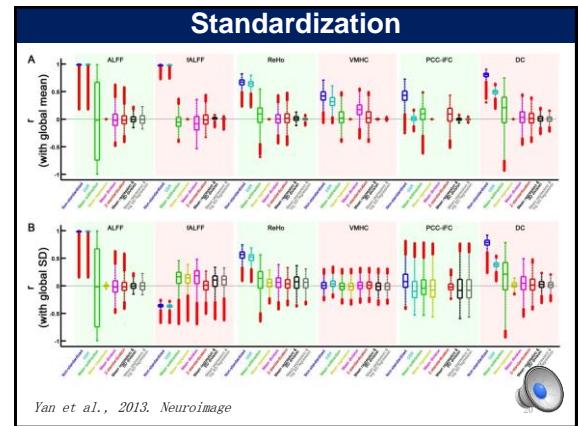
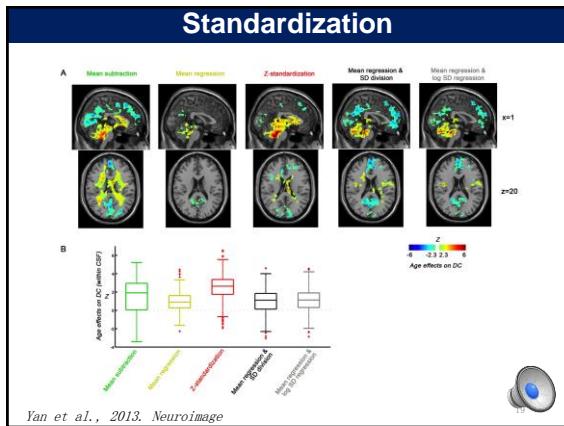
Outline

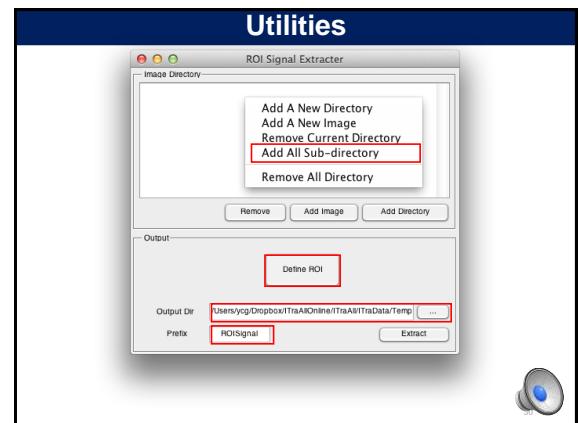
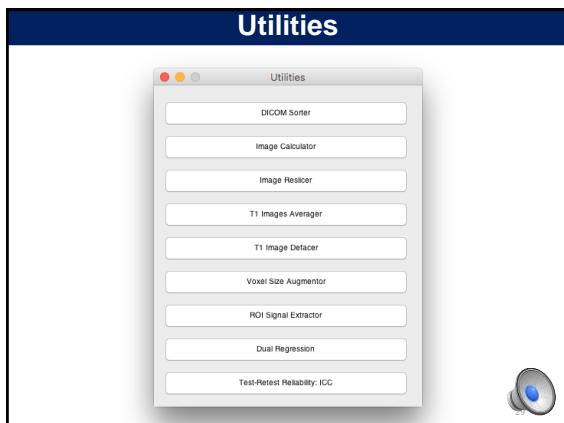
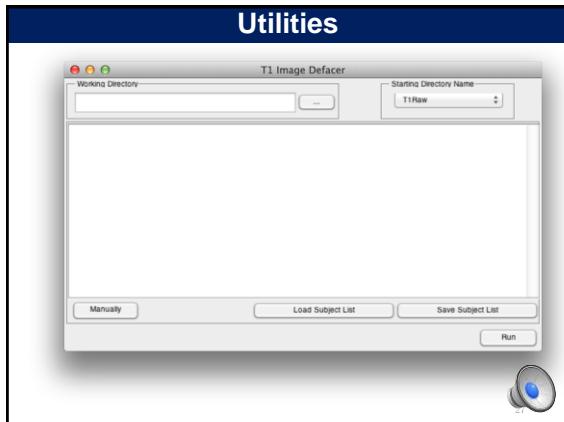
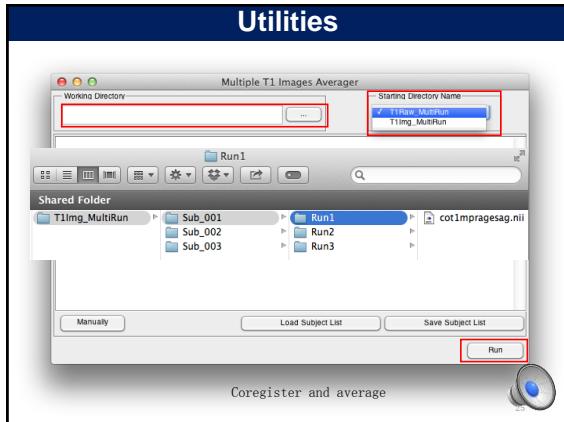
- Processing for Animal Data
 - Standardization
 - Utilities

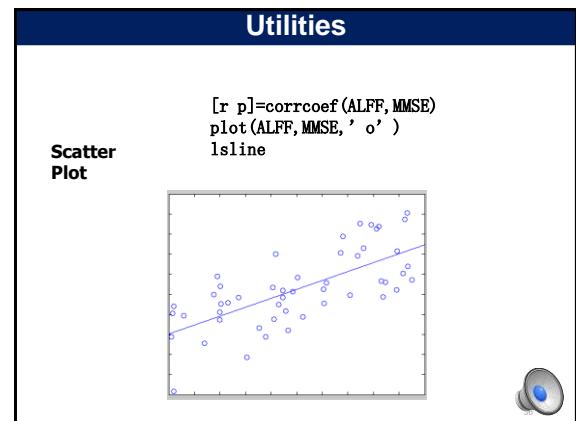
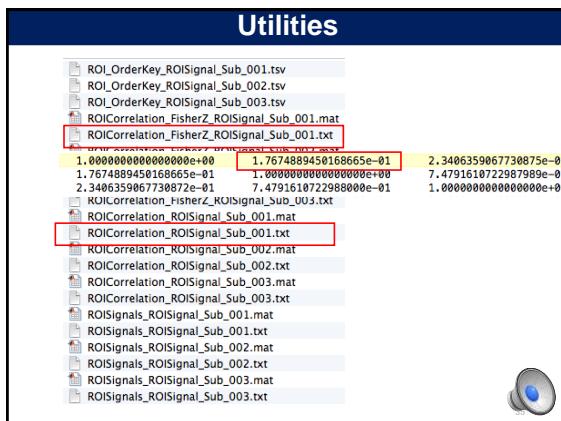
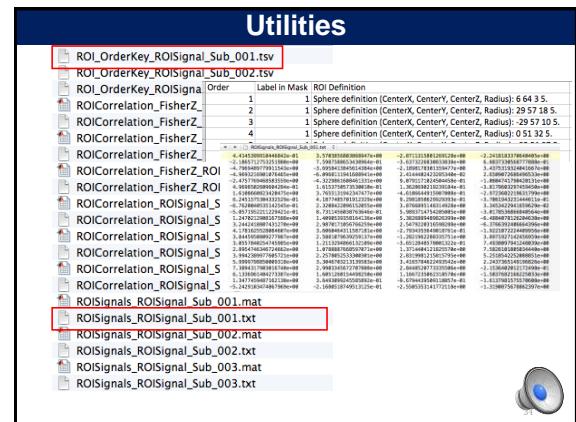
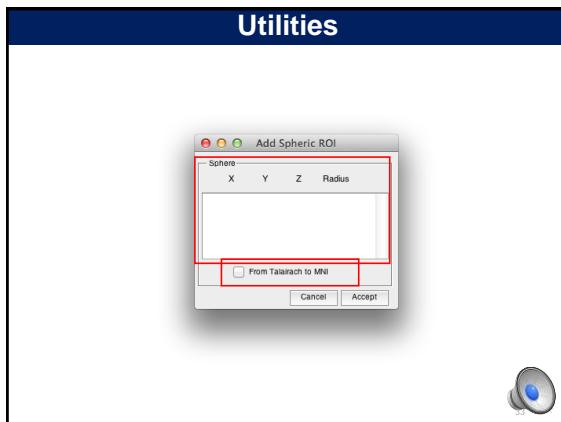
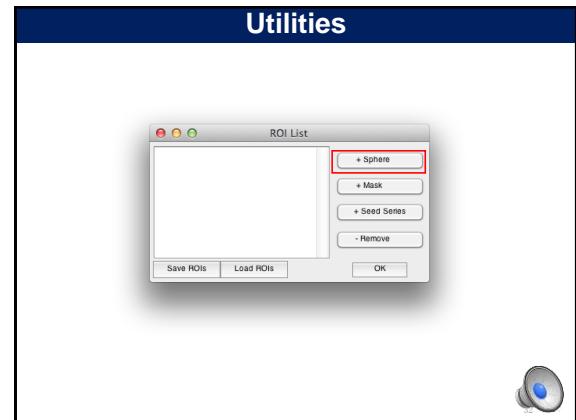
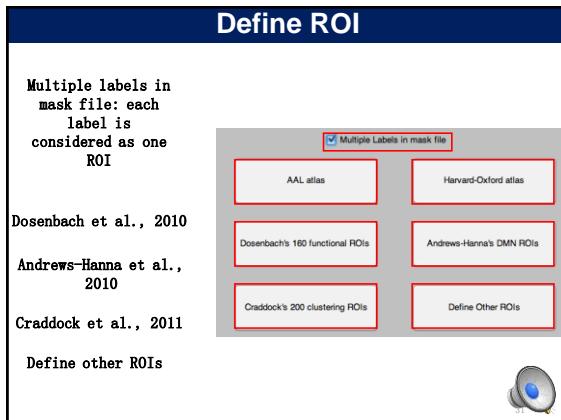












The screenshot shows the 'Utilities' window of the 'Image Reslicer' application. The window title is 'Image Reslicer'. Inside, there's a sub-menu titled 'Image Directory' with the following options:

- Add A New Directory
- Add A New Image
- Remove Current Directory
- Add All Sub-directory** (highlighted with a red box)
- Remove All Directory

Below this menu are three buttons: 'Remove', 'Add Image', and 'Add Directory'. The 'Output' section contains the following controls:

- Voxel Size: A text input field containing '[3 3 3]' with a red box around it.
- Interpolation: A dropdown menu currently set to 'Nearest' with a red box around it.
- Reference: A checkbox with a red box around it, followed by the text 'Keep the original space' and a '...' button.
- Output Dir: A text input field containing '/Users/yycg/IraAll/IraData/DPARSP_Updating/Statistic...' with a red box around it.
- Prefix: A text input field containing 'Reslice' with a red box around it.
- Reslice: A button labeled 'Reslice' with a red box around it.

A small speaker icon is located in the bottom right corner of the window.

The screenshot shows the 'Image Calculator' application window. The title bar reads 'Image Calculator'. The main interface is divided into two main sections: 'Getters' on the left and 'Processors' on the right. The 'Getters' section contains several lines of code, some of which are highlighted with red boxes. The 'Processors' section is currently empty. Below these sections are 'Remove' and 'Add' buttons. At the bottom, there are three input fields: 'Expression' containing `g1=g2.'1`, 'Output Dir' containing `./`, and 'Prefix' containing `g1-g2`. To the right of the 'Expression' field is a 'Help' button, and to the right of the 'Output Dir' field is a '...' button. A 'Compute' button is located to the right of the 'Prefix' field. The status bar at the bottom right shows the version 'v0.3'.

Image Calculator

Example expressions:

- (a) `g1-1` Subtract 1 from each image in group 1
- (b) `g1-g2` Subtract each image in group 2 from each corresponding image in group 1
- (c) `i1-i2` Subtract image 2 from image 1
- (d) `i1>100` Make a binary mask image at threshold of 100
- (e) `g1.*T4D((i1>2.3),100)` Make a mask (threshold at 2.3 on i1) and then apply to each image in group 1 (group 1 has 100 images)
- (f) `mean(g1)` Calculate the mean image of group 1
- (g) `(i1-mean(g1))/std(g1)` Calculate the z value of i1 related to group 1
- (h) `corr(g1,g2,"temporal")` Calculate the temporal correlation between two groups, i.e. one correlation coefficient between two "time courses" for each voxel.
- (i) `corr(g1,g2,"spatial")` Calculate the spatial correlation between two groups - i.e. one correlation coefficient between two images for each "time point".

Reading and Writing functions	
Reading:	
[Data Header] = y_Read('brodmann.nii');	
Data = 181*217*181 double	
Header = Structure	
Processing:	y_ReadRPI y_ReadAll
BA20Data = (Data==20);	
Writing:	
y_Write(BA20Data, Header, 'BA20.img');	

The image is a collage of several screenshots and logos. At the top center is a large blue banner with the text 'Further Help' in white. Below it is a screenshot of a course page titled 'The R-fMRI Course V2.1' featuring a portrait of a man and contact information. To the right is a screenshot of a wiki page titled 'The R-fMRI Wiki' with a blue header. Below these are two more screenshots: one for 'Configurations for DIARMA_2012' and another for 'R-fMRI Journal Club'. At the bottom left is a link to the course website: 'http://rfmri.org/Course'. On the right side are two circular logos: one for 'The R-fMRI Journal Club' with a brain icon, and another for 'Official Account: RFMRI' with a blue and white circular design.

Preprints of the R-fMRI Network

Preprints of the R-fMRI Network (PRN) is a preprint, open-access, free-submission, open-discussion, community funded Preprints of R-fMRI related research. The goal of PRN is to supplement the peer reviewed journal publication system – by more rapidly communicating the latest research achievements across the global.

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[SOFTWARE TOOL ARTICLE](#)

[REVISED](#) PRN: a preprint service for catalyzing R-fMRI and neuroscience related studies [v2; ref status: indexed, http://f1000r.es/5qy]

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数据分析与深度培训

 静息态功能磁共振成像深度数据分析
DEEP BRAIN

功能磁共振成像越来越成为一种主流的科研手段,然而功能磁共振的数据分析却是一项具有高挑战性的任务。海量的原始数据,繁多的分析步骤,复杂的分析方法都让研究者们无所适从。恰当的分析方法可以从普通的数据中挖掘出富有创新性的结果,而不恰当的分析则可能让精心收集的数据黯然失色。深度大陆公司联合中国科学院 The R-fMRI Lab 的专业脑功能成像研究团队推出一站式功能磁共振数据分析解决方案,助您从容应对功能磁共振数据带来的挑战。

 静息态功能磁共振成像数据处理深度特训
DEEP BRAIN

从您见到这条消息开始,您便将有机会与中国科学院 The R-fMRI Lab 的静息态功能磁共振专家团队共同探索大脑的奥秘!深度项目特训期间,您将会亲身体验:

- 数据处理 专家指导下高效学习静息态功能磁共振成像数据处理
- 问卷设计 与国际知名专家讨论形成研究思路
- 文论撰写 系统的 SCI 文论写作训练

<http://deepbrain.com>

The R-fMRI Lab



WeChat Official Account: RFMRILab



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F. Xavier
Child Mind Institute
Michael P. Milham

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Thanks for your attention!

