

# Monkey MRI: Guide

Support Unit For functional Magnetic Resonance Imaging (fMRI Unit)

## 1. MRI scanning

1.1. We basically provide T1 and T2\* 3D structural imaging for monkeys.

## 2. Basic Information about 3D structural MRI

2.1. MRI system : Agilent Technologies 4T MRI

2.2. RF coil: NOVA Medical 4 channel arrayed receiver coil and Birdcage quadrature transmit coil

2.3. Pulse sequence: 3D MPRAGE

2.4. FOV (Field Of View): 128x128x128mm<sup>3</sup>

2.5. Resolution : 0.5x0.5x0.5mm<sup>3</sup> (256<sup>3</sup> matrix)

2.6. Required time: less than 1 hour from beginning to end (including shimming and scout scanning).

\*If you have any special requests (e.g. scanning parameters and kinds of scanning), please discuss with us before application. For a big monkey, please confirm whether your monkey can be fixed inside our stereotactic frame. If you have any questions regarding scanning and data processing, please contact using this email address [mriu@riken.jp](mailto:mriu@riken.jp).

## 3. Reservation of an experiment (MRI room)

3.1. Our calendar: <http://www.cbm.brain.riken.go.jp/~mri/cgi-bin/cal/webcal.cgi>

3.2. Please contact to a member of fMRI unit to confirm their availability for the experiment.

3.3. Please tell us the number of monkeys, the number of images, and your schedule. We put the schedule on the calendar.

3.4. Please make your reservation is between 09:30-18:00 on week day.

## 4. Fees

4.1. We charge usage a fee for every half hour. Usually it takes 1.5-2.0 hours(3-4 time units) to scan a monkey.

4.2. Billable time is from entering MRI room to leaving MRI room.

4.3. Amount of charged for the current fiscal year (FY2013) is 16250 yen/30 min.

4.4. When the experiment is aborted due to monkey's status (the anesthetic wears off, etc..) or other reasons related to the user, the usage fee will be charged as usual.

## 5. Cancellation

5.1. There is no cancellation charge.

5.2. If you are unable to do the experiment (e.g. because of the monkey's condition), please tell us immediately.

## 6. On the day of an experiment

6.1. Please fill an application form (provided by the support unit) and bring it to us on the day of the experiment or after the experiment.

6.2. Please bring the monkey to MRI room AFTER it has been anesthetized.

6.3. Upon arriving at the MRI room, please remove any metal you are wearing or have in your pockets.

6.4. Fix the monkey on monkey's bed and placing the bed on the patient table requires multiple experimenters.

6.5. Please place the MRI markers asymmetrically so you will be able to discriminate left and right in image.

6.6. We monitor monkey's respiration during scanning. At least one person from your lab should continually observe monkey's respiration data, to ensure the monkey's well being.

6.7. Please be ready for prompt action in the event there is a change in monkey's condition.

6.8. After the scanning, please disinfect MRI patient table and fixing instruments using alcohol.

## 7. MRI data

7.1. We can provide the raw data and processed data (reconstructed image).

7.2. Our standard data format is ANALYZE format and NIFTI format. If you need the data in other formats, please ask us.

7.3. If you need a marker in the reconstructed image, we will place the marker on left side of the monkey.

7.4. The data can be provided by copying to USB memory stick or downloading from our web server.

## 8. fMRI Unit Information

8.1. Our website: <http://www.cbm.brain.riken.jp/~fmri/indexj.html>

8.2. Office: BSI East Building 203 room

### 8.3. Contact Information

Kang Cheng            kcheng@riken.jp

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Takeshi Asamizuya    asamizuya@brain.riken.jp

Chisato Suzuki        chisatos@brain.riken.jp

mriu@riken.jp (ML consisting of Ken, Takeshi and Chisato)

MRI room : B11/12 048-467-9656 (Ex.7040)

Preparation room : B08/09 (Ex.7024)