

During data acquisition Version 7

Lukas Snoek, Tinka Beemsterboer

Abstract

This protocol lists all the steps necessary to run your MRI experiment/data acquisition safely and in a way that yields high-quality data. Moreover, if you use the centre's QC/preprocessing service, it lists the steps necessary to make sure we can convert the data into BIDS and run them through the QC/preprocessing pipelines.

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Guidelines

Please make sure you're aware of the centre's user policy during scanning

- There should be an ERO (Emergency Response Officer, in Dutch: BHV, bedrijfshulpverlener) of REC L present in building L. Tinka Beemsterboer monitors this using your Calpendo bookings.
- The MR Operator specified for the booking should have a valid scan certificate of the Spinoza REC.
- All personnel who regularly assist during scanning should have a valid safety certificate.
- The MR Operator is responsible for screening participants and decides whether the participant may enter the MR room.
- The MR Operator is responsible to provide information to the participant about the MRI procedure.
- The MR Operator is responsible for handling the console, inside MR room and at the MR computer.
- The MR Operator stays at the console or in the scanner room at all time when another person is in the scanner room.
- The MR Operator decides whether a person is allowed to enter the scanner room.
- The MR Operator places PPU (peripheral pulse sensor) and Resp devices.
- The MR Operator sends data files from the scanner (like PPU and Resp data and MR data) to fmriProject or sFTP folder. No USB sticks are allowed in the MR computer, we want to avoid viruses.
- If the MR Operator or researcher notice something irregular on the scan of the participant it is possible to let this send to a radiologist. The participant should not be notified about this, the GP contacts the participant if it is an abnormality with clinical relevance (according to the radiologist and GP). More information about the procedure will be provided to the researchers starting a project and taking the MR Operator course.
- The researcher is responsible for a working paradigm / experiment and for giving instructions to the participant about the task and usage of response buttons.
- The researcher is responsible for handling additional stimulus equipment (except PPU and

Resp). Most Spinoza REC staff (scan assistants) can help with the Eyetracker.

- The researcher should have a valid certificate, provided by the Spinoza REC-L, for using additional stimulus equipment.
- The researcher stays at the Spinoza Center until his or her last participant left the building.

Before start

Book your scanning hours at spinozarec.calpendo.com.

Please try to make a feasible planning. One thing to take into account the group of participants; for example, participants belonging to clinical populations are harder to find and to schedule than students.

There are a number of 'booking rules' to assure an efficient usage of the scanner for all users. If there are urgent reasons to deviate from these rules, place the booking and send an email to Tinka Beemsterboer mentioning the booking and the reason to deviate from the booking rules. Tinka decides to approve or deny the booking.

Please try to make the MRI-bookings as follows (note that you only have to satisfy one of the conditions):

- A booking should be at least 5 hours
- **or** 'connecting' to another booking
- **or** starting at 9h or 18h (Mon-Fri)
- **or** finishing at 18h (mon-Fri).

Moreover, please take note of the following:

- **Weekends:** try to book slots consecutive to other bookings. Placing the first booking has no restraints concerning time.
- **Weekends and evening (after 18h):** For scanslots during the weekends or evening we always have to book a SCA because an ERO needs to be present at all time during test sessions. Please try to book your weekend and evening slots well in advance. If you do book it last minute, please send an email or text message to Tinka Beemsterboer.

- **Scanning Assistant:** When you don't have a scan certificate yet, you have to request a ScA for your scanslot. Make sure to choose “scanassistant” for “MROperator”. Once a ScA is found, the booking will be approved. Make sure to book this well in advance. If you do book it last minute, please send an email or text message to Tinka Beemsterboer.

Protocol

Make sure you're aware of the user policy

Step 1.

The user policy can be found in this protocol's "Guidelines" section.