

INFORMATION LEAFLET MRI RESEARCH



Spinoza Centre for Neuroimaging

In this leaflet you will find information about participating in MRI-research in the Spinoza Centre. It is vital that you are aware – prior to the scanning procedure - of all aspects of the research. Please read the information below carefully.

What is an MRI scanner?

An MRI scanner is a machine designed to produce images of the brain. In the case of fMRI (functional MRI) a special technique is used with which it is possible to see activity in the brain. In order to obtain these images MRI uses strong magnetic fields. MRI does not use radioactivity or any form of X-ray.

The scanner tends to be rather noisy, which is why you will be provided with earplugs and a headphone.



Screening for MRI research

A screening will take place prior to your scan. Please keep in mind the following:

Metal objects

An MRI scanner is in essence a strong magnet, which means you will not be able to participate if you carry any metal inside your body. Think implanted pacemakers, medicine pumps, aneurism clips, artificial heart valves, cochlear implants and piercings that cannot be removed.

Please inform us if you have ever had a serious accident where fragments of metal have ever entered your eyes or if you work with metal.

Orthodontic braces and retainers do not pose a safety threat but may distort certain MRI signals and you may be excluded on that count. Tattoos are safe, provided metal-free ink was used.

You will be asked to fill out a screening questionnaire prior to the scan. For your own safety it is vital that you answer the questions truthfully.

Claustrophobia

While in the MRI scanner, your head and upper body will be lying in a relatively narrow cylinder. For most people this is not a problem, but if you are suffering from mild claustrophobia, please inform the researcher conducting the study. If you are suffering from severe claustrophobia, it is not recommended to participate in an MRI research for purely scientific purposes.

Pregnancy

As we are currently insufficiently aware of how these strong magnetic fields affect the development of an embryo, we have to exclude pregnant women from participating in MRI research.

Unexpected findings on your scan

There is a small chance that the scan shows indications of some form of brain damage, such as a tumour. Should the scan result warrant it, we shall forward the MRI scan of your head to a radiologist to check this finding. If the radiologist confirms a finding that may have consequences for your health but is treatable, this information will be passed on to you and to your general practitioner by the researcher. In rare cases, a finding that is not clinically relevant might also be communicated. To this end we require the contact information of your general practitioner. Should you not agree with the forwarding of this information to your general practitioner we regret that you cannot take part in the project. We therefore ask you to provide the name and city of residence of your general practitioner. Please note that the technician / researcher is unable to detect all forms of brain damage and that not every form of brain damage will show up on the MRI scan of your head.

Informed consent

Once you have been informed about the study you will be asked to sign a consent form, giving your formal consent to undergo the research study.

What to expect during the scan?

The researcher will explain the research to you prior to the scan. You will be informed about the background and purpose of the research. Depending on the type of research it may be necessary to add extra equipment, for instance to register your eye movements, heart rate and/or respiration. Also, some additional examination may be necessary before or after the MRI scan. You will be informed about this prior to the scan.

What is expected of me?

Please be there well before your scheduled scanning appointment (half an hour). MRI is expensive and time-consuming so please be on time! Should you be unable to be there for whatever reason, please inform the researchers as soon as possible, so that another participant may take your slot.

A typical experiment lasts approximately 45-60 minutes. It is vital that you remain still during the scanning procedure, as deviations of just a few millimetres may suffice to render the data useless. Try and relax when you're in the scanner; the researcher will try to make you as comfortable as possible, for instance by putting cushions under your knees and elbows. If lying down is painful, e.g. as a result of back problems, you may find lying still on your back increasingly uncomfortable. If you have doubts, please inform the researcher of the project you wish to participate in.

Confidentiality

All acquired data is strictly confidential and will be processed anonymously. Your data will not be available for third parties without your explicit consent and will only be available in anonymous, encoded form. The decoding key will only be accessible to the researchers and will not be shared with third parties.

Voluntariness

If you decide to withdraw from this experiment, this decision will not affect you in any way, nor will a decision to withdraw from the experiment while it is ongoing affect you in any way. There is also the possibility, up to 24 hours after the experiment, to withdraw your consent to use your data. In short, you can cease your cooperation at any time, without having to state any reasons. Should you wish to cease cooperation, or withdraw your consent within 24 hours after the experiment, your data will be removed from our files and destroyed.

Compensation

You will receive an agreed upon financial compensation for participating in MRI research.

How do I prepare for an MRI scan?

As the MRI scanner makes use of a strong magnetic field you should wear clothing that does not have metal zips, buttons or buckles. Do not wear a bra with underwiring, and avoid heavy use of eye make-up or hair products. Tattoos and tattooed eyeliner are okay, provided they have been done with metal-free ink.

Please wear or bring comfortable metal-free clothes: please note that your shirt should cover the top half of your body completely and that your sleeves should cover at least part of your upper arms.

Please do not wear mascara (it may contain metal particles) and remove piercings. Typical jeans have copper buttons and zipper and are generally safe to wear. It is probably best to leave your jewellery at home.

Please make sure you wear or bring socks to wear during your scan to prevent skin-to-skin contact. Please restrict the intake of alcoholic beverages the evening before your scan. Ideally you will eat a proper meal some two hours prior to the experiment.

How to reach the MRI scanning centre?

You can find the Spinoza Centre at Meibergdreef 75, Amsterdam, next to the AMC hospital.



By metro or train from Amsterdam Central Station

Take metro line 54 (direction Gein). Exit the metro at stop Holendrecht/AMC and leave the platform at the Oudenrijnlaan/AMC exit. If you arrive by train, exit at Amsterdam Holendrecht and leave the platform at the 'woonwijk Holendrecht/AMC' exit. There are two routes to the Spinoza Centre: an outside route (black in above image) and a covered route (green in above image) through the hospital in case of bad weather.

For the outside route, turn right after you exit the platform and follow the bike lane and the yellow signs indicating N.I.N. until you see a wooden bridge to your right. Cross the bridge and go left for about 50 meters, then turn right and cross the road at the pedestrian crossing. Head straight over the parking lot until you reach the grey 'IWO-tentamentalen' building, where you turn right and then left. Continue for another 50 meters and take the second road to your left. On your right you will find the Spinoza Centre, a white and brown building surrounded by grass. The intercom is located to the right of the sliding doors.

For the route through the hospital, also turn right after you exit the platform and follow the covered walkway to the hospital. Enter the hospital through the main entrance on your left and walk straight on to the main square, which you cross (the AKO bookshop is on your right). Look for a blue sign indicating 'parkeergarage P2'. Follow these signs until you reach the parking garage. From here on follow the route described in the *Route from P2* section.

By car

From the A2 or A9 follow the signs to the AMC hospital. At the first set of traffic lights (next to the Sizzling Wok) go straight ahead. At the next intersection, turn right onto Meibergdreef and follow it until you reach a roundabout. Take the third exit to arrive at parking garage P2. Also see the blue route on the image above.

Route from P2

Exit the garage at ground level and turn right. Follow the bike path past the garage until the road forks. Go left and then immediately right. Follow the grassy road until you reach the Spinoza Centre, a white and brown building surrounded by grass. The intercom is located to the right of the sliding doors. Also see the red route in the image above.

Contact

If you are having trouble finding the Spinoza Centre or if you are delayed, please call the Spinoza Centre. For appointments at the 3T MRI scanner, contact the researcher at 020 566 1664. For appointments at the 7T MRI scanner, contact the researcher at 020 566 1673.

For any other questions, please contact the researcher that provided you with this information leaflet.