**BILKENT UNIVERSITY**

**NATIONAL MAGNETIC RESONANCE RESEARCH CENTER**

**(UMRAM)**

**MRI SAFETY RULES**

**(Latest update: )**

**AIM**

This guide specifies the rules to be applied for Magnetic Resonance Imaging (MRI) experiments at Bilkent University – National Magnetic Resonance Research Center (UMRAM). In order to provide a safe working environment, researchers conducting MRI studies at UMRAM are obliged to comply with the rules specified in this document.

**MRI Safety Committee**

The committee members overseeing the MRI safety practices and their contact information are listed below. The committee’s responsibilities include updating the usage rules and organizing the MR safety trainings as required.

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| **Committee Members** | **E-mail** |
| Chairman: Meltem Karataş | meltem.karatas@umram.bilkent.edu.tr  |
| Hüseyin Boyacı | hboyacı@bilkent.edu.tr  |
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**RULES**

**1. MRI Safety Training**

1.1. At least one person from each research group conducting MRI experiments must receive training on "MRI safety" and provide a certificate.

1.2. MRI safety training is to be repeated in regular intervals. Each researcher should rejoin the scheduled trainings on an annual basis.

1.3. Only a researcher with the required MRI safety training can schedule an appointment for MRI experiments.

**2. MRI Studies / Experiments**

2.1. Appointments are required for all experiments performed on the MRI scanner; the name of the study should be mentioned in appointment records.

2.2. Whenever necessary, the approval of the relevant ethics committee must be obtained for all MRI experiments.

2.3. The MRI experiments must be performed as specified in aforementioned ethical approval.

2.4. In case of a medical emergency during MRI experiments, the scan should be terminated immediately, and the experimenter should call 112 for help. If the ethical approval for the study contains instructions on emergency procedures, these should be followed accordingly.

2.5. All the rules mentioned in the safety training are to be followed during the entry of experimenters and/or human volunteers to the MRI scanner room.

2.6. All human subjects (volunteers) admitted to the MRI experiments should be given adequate information on the scanner and experimental procedures (sounds, etc.), and they should be given earplugs if needed.

2.7. It is mandatory to comply with the hygiene rules specified in the training.

**3. MRI Scanner Errors / Unexpected Events**

3.1. In the event of an emergency malfunction of the MRI scanner, the procedures specified in the relevant training should be applied.

3.2. It is obligatory to report unexpected events or malfunctions of the MRI scanner that arise during the experiments to the “technical staff”. Research teams must not interfere with scanner errors if they do not have the relevant expertise.

3.2. In case of fire or another emergency, only MR compatible devices as specified in the training can be brought to the scanner room. MR compatible fire extinguishers for the scanner room are indicated with relevant signs and large texts.

**4. Responsible Use of MRI Scanner**

4.1. MRI scanner is used by several research teams and as such, it is essential to conduct experiments responsibly. With this understanding, it is the responsibility of the researchers to ascertain the correct use of MRI scanner and all its accessories.

4.2. It is the responsibility of the research group to store the connections and accessories of the MRI properly after the experiment.