

Research MRI Safety Committee Standard

GENERAL SCANNER USAGE

Category: Magnetic Resonance Imaging (MRI) Safety

Procedure #: MR.SOP.12

Applies to: Investigators, study personnel, Medical College of Wisconsin (MCW) staff

PURPOSE:

The Research MRI Safety Committee at the Medical College of Wisconsin (MCW) is responsible in part for monitoring the safe use of the MCW MRI scanners. The purpose of this document is to describe the established procedures for Principal Investigators and others to gain access to those scanners.

DEFINITIONS:

<u>Accompanying parents, spouses, or others</u>: Individuals who, after thorough safety screening, would be allowed to enter the magnetic environment to provide company and or comfort for the research subject.

<u>Equipment</u>: Machines that may be used for MRI studies to monitor physiological processes or provide the stimulus or physical task for the study.

<u>Magnetic Environment</u>: The area where the magnetic field is greater than 5 gauss resulting in the potential for objects to become missiles or projectiles as they are attracted into the magnetic field of the scanner. Individuals who may have cardiac pacemakers or other implants and devices may be at risk to enter the magnetic environment. The magnetic field is always present and is three dimensional around the scanner.

<u>MRI</u>: Magnetic Resonance Imaging which uses a strong static or main magnetic field, radio frequency pulses and time varying magnetic fields or gradients to produce anatomic images, spectroscopy, angiography, and functional data (fMRI).

<u>MRI Safety Training</u>: The required procedure that must be completed prior to working within the magnetic environment.

<u>Materials</u>: Pads, cushions or other objects that are not mechanical in nature but are used with or near the research subject during the MRI procedure.

<u>Principal Investigator</u>: A Principal Investigator (PI) is the individual who is ultimately responsible for the procedures, study team personnel and research subjects involved in the study. The PI has an IRB- or IACUC-approved protocol and utilizes one or more of the MRI scanners at MCW for research purposes.

<u>Research Study Personnel</u>: Study personnel are individuals including a student, staff member or laboratory assistant for whom the PI of the study is responsible, and who are at the MR scanner site during the study or may be recruiting subjects for the study.