

AMERICAN BOARD OF MAGNETIC RESONANCE SAFETY

PRESS RELEASE

BS'D

Announcing the creation of the American Board of Magnetic Resonance Safety (ABMRS)

For Release: Monday, January 12, 2015

Executive Summary:

For the first time in the 30 years since the initial clinical introduction of magnetic resonance technology, an organization is formed specifically to credential professionals in MR safety. The American Board of Magnetic Resonance Safety (ABMRS) has been formed, with its charter being to certify, via formally administered tests, the individuals whose charge it is to ensure the safety of magnetic resonance clinical and research environments. Certification categories will include the positions/titles of Magnetic Resonance Medical Director/Physician (MRMD), Magnetic Resonance Safety Officer (MRSO), and Magnetic Resonance Safety Expert (MRSE).

History:

For several years there have been numerous attempts to increase standardization of MR safety practices and knowledge across the international MR community (e.g. the American College of Radiology's four separate publications of the Guidance Document for MR Safe Practices). The ACR, as well as other groups and organizations, have called for MR sites to name MR Medical Directors and/or MR Safety Officers for each magnetic resonance site. A major obstacle to meeting this mandate, however, has been a significant dearth of individuals with the requisite knowledge and background to undertake the responsibilities that would accompany such titles/positions. Since MRI providers were initially called upon to fill these roles, the number of MRI accidents in the US has climbed at a rate that exceeded the rate of growth of MR examinations.

Today:

There are now courses and educational opportunities available for MRI professionals to gain the knowledge, competence, confidence, and decision-making skills required to undertake these MR safety related responsibilities. However, at the completion of these courses, there is nothing objective for them to be able to document or certify to others their MR safety educational achievement or their new-found MR safety educational and decision-making abilities. Conversely, there may be others who have undertaken these titles and roles/responsibilities who may not have the requisite knowledge, background, and understanding of the subject matter to appropriately execute the responsibilities associated with these MR safety-related positions.

To this end, the American Board of MR Safety (ABMRS) has now been convened. Its charge and objective is to create and standardize testing and certification for MR safety competence. This will include testing and certification for those charged with overseeing the safety of the clinical and research MR environments, namely, the MR Safety Physician (for the radiologist and/or Medical Director; the MRMD), the MR Safety Officer (MRSO), and the MR Safety Expert (MRSE).

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PRESS RELEASE

Structure:

The ABMRS Board of Directors is composed of the following members:

US/Voting Members of the Board:

Officers:

Chair:

Emanuel Kanal, MD

General MR safety, radiologist/risk-benefit assessment, additional expertise in MR contrast agent safety. Director of MR Services at the University of Pittsburgh Medical Center.

Vice Chair:

Max Amurao, PhD

Medical physicist. Director of Radiation Safety for Clinical Programs at Columbia University / New York Presbyterian Hospitals.

Secretary/Treasurer:

Tobias Gilk, M Arch

Architect, special /experience in MR safety and equipment siting / implementations. Sr. Vice President of RADIOLOGY-Planning and Founder of Gilk Radiology Consulting.

Bill Faulkner, RT(R)(MR)(CT):

MR Technologist, MR Education and Operations Consultant. CEO, William Faulkner & Associates, LLC.

John Nyenhuis, PhD:

General MR safety, special expertise in gradient dB/dt safety issues. Professor at Purdue University.

Joe Schaefer, PhD:

General MR safety, special expertise in RF safety issues. Principal Engineer GE Healthcare MR Systems (Retired), Visiting Professor, Department of Electrical and Computer Engineering, Duke University, Durham, NC.

Terry Woods, PhD:

General MR safety, Food and Drug Administration (FDA).

International (non-voting) members:

David Grainger:

Senior Device Specialist at Medicines and Healthcare Products Regulatory Agency (MHRA), United Kingdom. Lead MRI Clinical Scientist for the Northern Ireland Regional Medical Physics Service, Chair of the MR-SIG for the Institute of Physics and Engineering in Medicine (IPEM), UK.

Cormac McGrath, PhD:

Donald McRobbie, PhD:

Co-Author [MRI: From Picture to Proton](#), Medical Physicist, special expertise in MR safety, Australia.

Siegfried Trattng, MD:

Director of the MR Center of Excellence at Medical University of Vienna, developer of Austrian MR safety standards; representative to the Intersocietal Committee/European Work Group on MR Safety.

TBD:

Representative of the American Association of Physicists in Medicine (AAPM).

TBD:

Representative of the American College of Radiology (ACR).

TBD:

Representative of the International Society for Magnetic Resonance in Medicine (ISMRM).

Other US and international societies and organizations have also been invited to participate, and their incorporation into the ABMRS Board of Directors is still pending.

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PRESS RELEASE

Testing Process:

This represents the first certification process specifically focusing on MR Safety for the professionals overseeing the safe operation of each MR site. Certification will entail taking and passing a standardized test to demonstrate the ability to identify MR safety risks, analyze their relative significance and threat levels, and take steps to significantly mitigate or remove these MR safety risks from that patient/study. Upon successful completion of this test, the individual will be certified as either an MR Physician, MRSC™ (MR Safety Certified™), MR Safety Officer, MRSC™, or MR Safety Expert MRSC™. The testing objective is to evaluate the MR safety knowledge and decision making skills and competence of individuals who will be facing *real world* MR safety situations that they are likely to encounter in actual clinical and research MR environments. The tests will therefore focus on both basic science knowledge as well as testing and confirming the ability to apply that basic science and clinical medical knowledge to MR safety situations that may likely be encountered in the MR imaging environment.

The first tests for MRMDs and MRSOs are scheduled to be completed and ready for implementation by the end of the second quarter of 2015, with the MRSE test scheduled to be ready for implementation by the fourth quarter of 2015.

International Alignment:

Despite its name, the objectives of the ABMRS are also firmly rooted in attempting to establish, to the degree feasible and practical, international standardization on such a testing and certification process. To that end, the ABMRS has established and continues to establish formal liaisons with MR safety experts, societies, organizations, and regulatory agencies from around the world to ensure an international consensus throughout the professional MR Safety certification process.

Together with MR Site accreditation, the formation of the ABMRS now completes the logical extension of creating a system to certify not only the hardware, software, and siting of an MR scanner, but also the individuals who are formally organized for and charged with ensuring the safety of those who will be exposed to clinical and research magnetic resonance facilities.

For further information contact:

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