

Featured Speaker

Emanuel Kanal, MD, FACR, FISMRM, MRMD, MRSE, AANG

Director, Magnetic Resonance Services  
Professor of Radiology and Neuroradiology  
University of Pittsburgh Medical Center

Dr. Kanal has been involved in researching and teaching the world about magnetic resonance (MR) safety issues for more than 30 years, since the introduction of MRI as a clinical diagnostic tool. Having chaired the first magnetic resonance safety committee ever created, he also chaired numerous other MR safety committees and has been continually involved in and/or leading MR safety initiatives ever since. These include, among others, having chaired the MR Safety Committee for the American College of Radiology from its inception in 2001 until the summer of 2012, being awarded fellowship in the American College of Radiology as well as the International Society of Magnetic Resonance in Medicine, and being named a Special Government Employee to the Food and Drug Administration on MR safety issues for both the Division of Medical Imaging and Hematology Products/Drug Safety group (of the office of Surveillance and Epidemiology) regarding magnetic resonance contrast agents as well as the FDA Center for Devices and Radiological Health regarding all matters relating to magnetic resonance safety. Dr. Kanal has served as a consultant for MR safety issues with innumerable industry and pharmacy representatives, from MR system manufacturers to implant manufacturers to MR pharmaceutical firms to manufacturers of devices designed to be used in and around MR suites. He has been involved in an advisory/consultant role and/or as an expert witness in hundreds of legal cases including those involving/alleging radiofrequency thermal issues or burns from MR imaging examinations, projectile effect events/injuries related to the interactions between the magnetic field of the MR scanner and metallic objects in the MR environment, those alleging auditory injury/tinnitus, and cases involving nephrogenic systemic fibrosis and/or other gadolinium based contrast agent related adverse events, among others. Dr. Kanal is the lead author of the American College of Radiology’s Guidance Document on MR Safe Practices in all four of its published versions and updates (2002, 2004, 2007, and 2013). Dr. Kanal has taught more people about MR safety issues than any other physician in the world today, and has provided several hundred visiting professorships and invited societal lectures and conferences on this topic over the past three decades.

Accreditation

**Program Description / Statement of Need:** This MRMD/MRSO MR Safety Refresher/ Update Training Course will provide an in depth concentrated review of static magnetic fields (translation, torque, Lenz) and RF thermal issues updated with Dr. Kanal’s more recent and more concise four-mechanism approach to RF-related thermal injuries, a focus on induced e-field pathways and how and where they can extend beyond the RF-irradiated volume, gradient safety issues and the relationship of dB/dt concerns specifically to implanted wires and abandoned leads, a focus on the latest information regarding gadolinium based contrast agent safety and retained gadolinium, anthropogenic gadolinium, gadoliniumtoxicity.com, and “gadolinium deposition disease”. There will also be extensive and detailed new sections dedicated to learning how to utilize the new MR safety apps to help three dimensionally understand and apply implant scanning safety considerations and clinical problem solving. These new MR safety apps can help standardize our approach to MR safety assessment of implant patients. Since a focus on these apps is an integral objective of this refresher/update course, the apps will be made available, at no additional cost, to all registrants of this course who wish to receive them.

**Target Audience:** The content of this CME Symposium is intended for healthcare professionals including Radiologists and other Physicians, Technologists, Physicists, Radiologic and Imaging Nurses, Radiology Administrators, Facility Managers, Researchers, Risk Managers, and others.

**Focus of Symposium:** This will be a 16-hour high power review and update course that is designed specifically to meet the needs of those who have already achieved MRMD, MRSO, and MRSE certification and/or those who have already previously attended taken any of Dr. Kanal’s full MR safety courses at any time since they were first offered in 2014. Note that this course is not designed as an introductory course, but rather is intended to supplement prior MR safety accomplishments, knowledge, and experience with newer material that is incorporated in the full course curricula given in 2018 but may not have been available or covered in earlier MRMD/MRSO Safety Training Courses to date.

**Accreditation and CME Credit Statements:** This CME activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the Institute for Medical Studies (IMS) and Medical Imaging CME Consultants. The Institute for Medical Studies is accredited by the ACCME to provide continuing medical education for physicians. The Institute for Medical Studies designates this live activity for a maximum of 16 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Nurses may claim** credit for activities approved for AMA PRA Category 1 Credits™ in most states, for up to 50% of the nursing requirement for recertification. This activity is designated for up to 16.0 *AMA PRA Category 1 Credits*™.

  
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*Note: If you cannot attend please pass this brochure to an interested colleague.*



# KANALS First Ever



## MRMD/MRSO MR Safety Refresher/ Update Training Course

**March 19<sup>th</sup> - 20<sup>th</sup>, 2018**

**LUXOR HOTEL & CASINO**

**Offers up to 16 hours of CME/CE/MPCEC Credit**

**More than 4,000** radiologists, technologists, physicists, administrators, and industry representatives have attended one of Dr. Kanal’s MRMD/MRSO MR Safety Training Courses since he first custom-created and offered them in June of 2014. Just as each MR site ensures ongoing safety training for its MR personnel, MRMD, MRSO, and MRSE professionals would also benefit from continued and ongoing education in all matters pertaining to safety in magnetic resonance environments. It is specifically to satisfy this MR safety continued educational objective that this course was created and custom designed.

Presented by:

**Emanuel Kanal, MD, FACR, FISMRM, MRMD, MRSE, AANG**

and:

**Northwest Imaging Forums, Inc.**





