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.

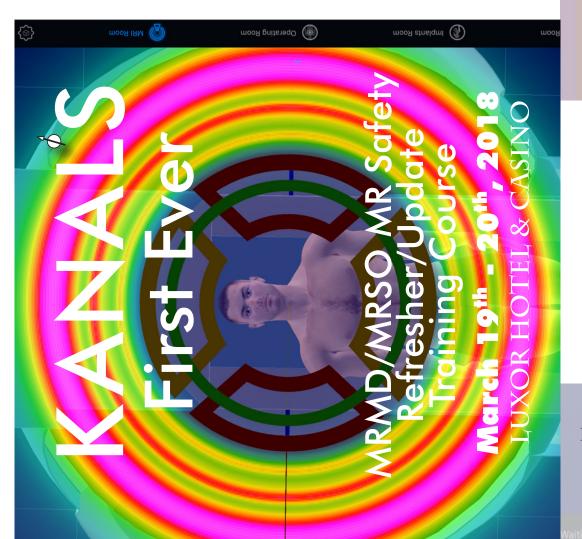
Target Audience: The content of this CME Symposium is intended for healthcare professionals including Radiologists and other Physicians, Technologists, Physicists, Radiologic and Imaging Nurses, Radiology Administrators, Facility Managers, Researchers, Risk Managers, and others.

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 CreditsTM. 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 TM 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* TM.







March 19th - 20th, 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.

Accreditation - Continued

This MRI program has been submitted for approval of 16 hours of category A CE technologist credit as designated by The Society for MR Radiographers & Technologists (SMRT) RCEEM. ARRT regulations state that an individual may not repeat a live activity for credit if it was reported in the same or any subsequent biennium. To receive the maximum amount of credit hours, you must attend all the sessions. Verification of attendance policies will be in place for each lecture.

This meeting has applied to CAMPEP for approval of 16 MPCEC (Medical Physics Continuing Education Credit) hours.

Faculty and Planner Disclosures: As an accredited provider of continuing medical education, it is the policy of The Institute for Medical Studies (IMS) to ensure balance, independence, objectivity, and scientific rigor in all of its live activities. In accordance with this policy, faculty and planners must disclose any financial relationships with commercial interests germane to program content.

Additionally, in the event a conflict of interest (COI) does exist, it is the policy of IMS to ensure that the COI is resolved in order to ensure the integrity of the CME activity. Planner has nothing to disclose.

Luxor Hotel and Casino

We will meet in the fabulous LUXOR Hotel & Casino, the thirty story glass "Pyramid" on the famous Las Vegas strip. Located just 2.5 miles from McCarran International Airport, this elegant, 4,300 room hotel is the perfect setting for both business and pleasure. With eight restaurants, showroom entertainment, a 120,000 square foot casino and many attractions such as The Titanic Show & Museum, there is much to see and do. Across the street are the spectacular MGM Grand and Excalibur Hotels, offering yet more entertainment and fun. Las Vegas offers all its visitors unparalleled 24 hour excitement

Room Reservations: We have been given special reduced sleeping room rates at the Luxor Hotel and Casino of \$110.00 per night plus tax/resort fees. You may reserve your room using the following link: https://aws.passkey.com/go/SKAN0518LX or you can contact the hotel by dialing toll free 800-926-4737 or 702-262-4450 and refer to (Group Code: KANAL'S First Ever MRMD/MRSO MR Safety Refresher/Update Training Course). Cutoff date is February 19th, 2018 or until room block becomes full. Please call or email us if you have any questions. IMPORTANT LUXOR NOTE: The meeting will be held in the Egyptian Ballroom Ground level in the West Tower

16.0 Hours Advanced Update - All lectures will be given by Dr. Kanal -

Monday - March 19th, 2018

Day 1 (8.0 Hours)

Schedule times and contents are subject to change

6:30	Registration Desk Opens - Coffee, Tea & Pastries	S
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Opening Announcements - Matt Wilson

Static fields: Translation: The role of Bo, dB/dx, 7:30 saturated (ferromagnetic) versus unsaturated (paramagnetic) materials, spatial safety considerations **Coffee Break**

Static fields: Torque/Rotation: The role of Bo, spatial safety considerations. Static fields: Lenz's forces: The role of dB/dx, rate of motion, size of conductor, orientation of implant/conductor

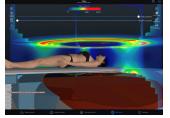
Lunch on Your Own 12:00

RF (B1) fields and thermal safety considerations, Part I 1:15

RF (B1) fields and thermal safety considerations, Part II 3:45

Imaging gradient magnetic fields (dB/dt) and neuro-excitation, acoustic noise safety considerations

End of Session 5:45



Tuesday - March 20th, 2018

Day 2 (8.0 Hours)

Schedule times and contents are subject to change

6:30	Registration	Desk Opens	- Coffee,	Tea & Pastries
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Opening Announcements - Matt Wilson 7:20

7:30 GBCA Safety: Retained Gadolinium, "Gadolinium Deposition Disease", www.gadoliniumtoxicity.com

9:30 Anthropogenic Gadolinium

10:00 **Coffee Break**

Cryogen Safety review

Pregnancy Safety Review 11:15

12:00

Lunch on Your Own

1:15 Evaluating MR Safety of Implants; Decision Tree Diagram; MRSIRA

App. Using your checklist

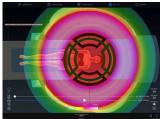
Introduction to MagnetVision™: Overview 2:30

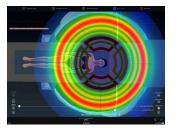
Coffee Break

MagnetVision™: Details and Clinical Examples

5:30 Summary

End of Session 5:45





(Faculty, topics & format subject to change)

Presentations will be given in the traditional classroom lecture format using slides. Each presenter will allow time to field questions from the audience. The handout will provide "take away" self-review material. Permission for the use of copyrighted materials will be obtained if needed.

Cancellation Policy

All cancellation requests must be in writing.

- 1. Cancellations received on or before 02/12/2018 will receive a full refund.
- Those received after 02/12/2018 but through 03/12/2018 are subject to a 25%
- No credit or refunds are available on or after 03/13/2018. No exceptions will be made.

In the event that any situation beyond the control of NWIF makes it impossible to conduct the meeting as advertised, each paid attendee will receive a voucher to attend a future NWIF meeting.

Registration Form (Please Print - this form may be copied)

Please Note: - Early Fee is payment received on or before 02/12/2018

- Standard Fee is payment received after 02/12/18 through 03/12/18
- Late Fee is payment received on or after 03/13/2018

• Physicians: Early Fee \$1000 Standard Fee \$1050 Late Fee \$1100 • Physicist: Early Fee \$750 Standard Fee \$800 Late Fee \$850 • Technologist: Early Fee \$500 Standard Fee \$550 Late Fee \$600

Registration Form (Please Print - this form may be copied) Registration is also available online at: www.nwforums.com

Note — Registration is confirmed and processed only when payment is received. Note: Email address is required for confirmation purposes. Email Address (Print) Facility _____ The address below is Work Home (Circle One) Payment enclosed or amount charged to credit card. \$ Charge to: USA MasterCard Damerican Express Discover Card Number_____ Exp. Date _____ 3 Digit Credit Card Security Code (found on back of card)

Checks payable / send registration form to:



(541) 683-4930

Northwest Imaging Forums, Inc.

P.O. Box 25909

IMAGING FORUMS, INC. Eugene, Oregon 97402

Kanal Adv-18

9am - 5pm M–F Eastern Time

Please contact us to register or with questions:

Phone: (888) 683-4930 Toll Free 9am - 5pm M–F Eastern Time

Name on Card (print)

Card holder Signature (required)

Fax: (541) 683-8499 24 Hours a Day

E-mail: registration@nwforums.com Web site: www.nwforums.com

Direct