Kanal’s MR Medical Director and MR Safety Officer Training Course

“The MR safety part of your brain is about to be disassembled and reassembled and reorganized.”

Los Angeles, CA - March 24 - 27  |  Las Vegas, NV - June 2 - 5  |  New York, NY - Aug 18 - 21

Offers up to 24 hours of CME/CE/MPCEC Credit

Since June of 2014 when Dr. Kanal first created and launched his new comprehensive MR safety course and began teaching others the Kanal Method for implant safety analysis, roughly 5,000 physicians, technologists, physicists, nurses, administrators, industry representatives and others have now participated in one of Dr. Kanal’s MRMD/MRSO MR Safety Training Courses - in just over four years! The unprecedented popularity of this course and analytical method of risk assessment has literally changed the entire MR industry and how it approaches MR safety practices and decision making throughout the world. This Course is specifically designed to provide the education necessary to comfortably undertake the responsibilities of being an MR Medical Director/Physician or MR Safety Officer.

With the recent reconsideration by the Center for Medicaid/Medicare Services (CMS) and opening of reimbursement for some MR scans performed on various labeled and not-conditionally-safe labeled Cardiovascular Implantable Electrical Devices (CIEDs), there will inevitably be increases in the volume of requests to accept non-conditionally labeled CIED patients for MR studies. The newly updated course curriculum now also includes a focused analysis of the safety issues associated with MR scanning of various anatomic regions of interest in patients in whom there may be implanted various types of CIEDs, and what can be done to minimize the associated risks of such examinations.
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 most recently, the 2013 update). As an educator, 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.
The new standard for device/implant MR Safety assessment: MagnetVision™

Just recently added to our 2018 curriculum and beyond is MagnetVision™. As highlighted in the featured cover story of the RSNA, November, 2017 issue of Radiology Today, Dr. Kanal ushered in the 2018 year with the introduction of his latest MR safety app. With a tag line of, “Making the invisible… visible™”, the app is a powerful teaching and reasoning tool that is designed to help the MR practitioner or MR safety professional visually assess, graphically process, and even generally quantify the anticipated risks of an implant patient prior to their undergoing an MR imaging examination on a given MR imaging platform and hardware suite. The app permits the user to model an implant patient’s body habitus, select or create the implant(s) or device(s) or foreign body/bodies found in that patient, and “implant” it three dimensionally within the patient model or avatar created by the app. The app will then model the exposure levels of that patient and their implanted device(s) to the various energy fields used in the MR imaging process on the specific MR imaging system make/model/hardware selected by the user for simulation. The app calculates anticipated exposure levels of the implanted device(s) to the various energies to which it will be exposed before, during, and after the patient is positioned for the requested MR imaging examination. This real time 3D graphical as well as 2D graphs as well as text-based output and reports can be readily utilized to help MR professionals assess general MR safety risks for requested MR examinations on such device patients before they are actually placed into actual MR scanners and exposed to real transmitted static and time varying electrical and magnetic energy fields.

Highly detailed reports generated by the app can be printed or saved as .pdf files for teaching or record keeping purposes, complete with real time date and time stamping documentation.

2019 brings with it the release of MagnetVision™, Version 2.0 and its associated new functionality, enhanced customizable graphic output capabilities, all new force product spatial distribution displays, and improved efficiency and enhanced ease of use.
The American College of Radiology Guidance Document on MR Safe Practices has solidly established itself as the standard of care for how one should safely practice in the MR environment. In addition to near universal acceptance throughout the radiologic community, it has been repeatedly established in innumerable legal actions as the standard against which our actions in this regard are judged. The ACR’s Guidance Document on MR Safe Practices calls for each MR site to name an MR Medical Director and/or MR Safety Officer who would serve as the ultimate authority and resource for all questions and decisions related to MR safety. The recently published international consensus document, “Recommended Responsibilities for Management of Magnetic Resonance Safety” calls for establishing and naming a Magnetic Resonance Medical Director, Magnetic Resonance Safety Officer, and a Magnetic Resonance Safety Expert to oversee safety in MR environments. In this regard, there is a significant shortage of individuals in the world today who have sufficient background in, and knowledge of, the subject matter to feel comfortable being named as the MR Medical Directors or MR Safety Officers for their MR imaging centers and sites. This course is specifically targeted to support those whose job it is - or will be - to fulfill these requirements of MR Medical Director or MR Safety Officer. For those considering becoming MR Safety Experts, this course is not intended to teach or review the quantification algorithms required of this title/position. It does, however, provide an exceedingly comprehensive introduction to and overview of all matters pertaining to MR safety, while simultaneously highlighting that which a reasonably trained MRMD and MRSO should be expected to know - and not know.

This Course is Conceptually Divided into Three Unique Parts

1. Teaching and reviewing the basic principles underlying the potential areas of safety concern involved in the MR imaging process and magnetic resonance environment. This includes defining the roles and responsibilities of the MR Medical Director, the MR Safety Officer, and the MR Safety Expert and how they interact with those of the referring physician, radiologist, and MR technologist. It also incorporates a review of several new recommendations and/or requirements for MR safety, including those by the Joint Commission, ACR, and the recommendations of the recently (2016) published international consensus document entitled, “Recommended responsibilities for management of MR safety”.

2. Defining and standardizing the thought process algorithms for assessing whether a patient/device/implant/foreign object can safely undergo MR imaging; reviewing the benefit-risk assessment process and establishing protocols and guidelines as to how to formalize the benefit-risk ratio assessment for each patient. Applying these algorithms and this reasoning approach to multiple real and created clinical cases and situations is an integral aspect of this part of the course.

3. Medicolegal aspects of MR safety: Learning from the mistakes of others. In this section, numerous real legal cases in which MR safety-related medical malpractice was alleged will be reviewed and analyzed. The objective will always be to learn how to decrease the likelihood of similar issues arising with your patients in your own MR practice.

Topics to be Covered Include, Among Others:

- Static Magnetic Fields
- RF Magnetic Fields
- Gradient Magnetic Fields
- Safety of Gadolinium-Based Contrast Agents, including state-of-the-art review of the current status regarding residual/retained gadolinium
- Cryogen Safety Considerations
- Implant Safety: Clinical Application and Decision Making
- Focused Discussion on Cardiovascular Implanted Electrical Devices (CIEDs)
- Pregnancy and MRI
- Legal Considerations: Overview, in Depth Case Histories and Review
- ACR Guidance Document
- Implant Safety: Kanal's MR Safety Implant Risk Assessment app: decision tree review and utilization
- Implant Safety: MagnetVision™ and standardization of the processes for evaluating device/implant risk assessment
All lectures will be given by Dr. Kanal unless otherwise noted.

**Day 1** (4.0 Hours)
Schedule times and contents are subject to change

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td>Registration Desk Opens</td>
</tr>
<tr>
<td>2:50</td>
<td>Opening Announcements - Matt Wilson</td>
</tr>
<tr>
<td>3:00</td>
<td>Introduction, MRMD, MRSO, MRSE</td>
</tr>
<tr>
<td>5:00</td>
<td>Static Magnetic Fields Part I, II</td>
</tr>
<tr>
<td>7:00</td>
<td>End of Session</td>
</tr>
</tbody>
</table>

**Day 2** (8.0 Hours)
Schedule times and contents are subject to change

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30</td>
<td>Registration Desk Opens - Coffee, Tea &amp; Pastries</td>
</tr>
<tr>
<td>7:20</td>
<td>Opening Announcements - Matt Wilson</td>
</tr>
<tr>
<td>7:30</td>
<td>Static Magnetic Fields Part III</td>
</tr>
<tr>
<td>8:30</td>
<td>Static Magnetic Fields Part IV</td>
</tr>
<tr>
<td>9:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>10:00</td>
<td>Static Magnetic Fields Part V</td>
</tr>
<tr>
<td>11:00</td>
<td>RF Magnetic Fields Part I</td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch on Your Own</td>
</tr>
<tr>
<td>1:15</td>
<td>RF Magnetic Fields Part II</td>
</tr>
<tr>
<td>2:15</td>
<td>RF Magnetic Fields Part III</td>
</tr>
<tr>
<td>3:15</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>3:45</td>
<td>RF Magnetic Fields Part IV</td>
</tr>
<tr>
<td>4:45</td>
<td>Gradient Magnetic Fields</td>
</tr>
<tr>
<td>5:45</td>
<td>End of Session</td>
</tr>
</tbody>
</table>

(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.

**Day 3** (8.0 Hours)
Schedule times and contents are subject to change

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30</td>
<td>Registration Desk Opens - Coffee, Tea &amp; Pastries</td>
</tr>
<tr>
<td>7:20</td>
<td>Opening Announcements - Matt Wilson</td>
</tr>
<tr>
<td>7:30</td>
<td>Safety of Gadolinium-Based Contrast Agents Part I</td>
</tr>
<tr>
<td>8:30</td>
<td>Safety of Gadolinium-Based Contrast Agents Part II</td>
</tr>
<tr>
<td>9:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>10:00</td>
<td>Safety of Gadolinium-Based Contrast Agents Part III</td>
</tr>
<tr>
<td>11:00</td>
<td>Cryogen Safety Considerations</td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch on Your Own</td>
</tr>
<tr>
<td>1:15</td>
<td>Implant Safety: Clinical Application and Decision Making Part I</td>
</tr>
<tr>
<td>2:15</td>
<td>Implant Safety: Kanal’s MR Safety Implant Risk Assessment app: Decision tree review and utilization</td>
</tr>
<tr>
<td>3:15</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>3:45</td>
<td>Implant Safety: Clinical Application and Decision Making Part II</td>
</tr>
<tr>
<td>4:45</td>
<td>Review of Submitted Questions</td>
</tr>
<tr>
<td>5:45</td>
<td>Dinner on Your Own</td>
</tr>
<tr>
<td>7:00</td>
<td>Kanal’s MR Safety Implant Risk Assessment app #1 and the MR Safety App version 2: Kanal’s MagnetVision™ in depth tutorials and review</td>
</tr>
<tr>
<td>8:00</td>
<td>Poolside Chat™ - Emanuel Kanal, MD</td>
</tr>
</tbody>
</table>

**Day 4** (4.0 Hours)
Schedule times and contents are subject to change

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30</td>
<td>Registration Desk Opens - Coffee, Tea &amp; Pastries</td>
</tr>
<tr>
<td>7:20</td>
<td>Opening Announcements - Matt Wilson</td>
</tr>
<tr>
<td>7:30</td>
<td>Product labeling and off-label imaging: The FDA does not approve uses of drugs/devices</td>
</tr>
<tr>
<td>8:30</td>
<td>Legal Considerations: Part I</td>
</tr>
<tr>
<td>9:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>10:00</td>
<td>Legal Considerations: Part II</td>
</tr>
<tr>
<td>11:00</td>
<td>Legal Considerations: Part III</td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch on Your Own - End of Session</td>
</tr>
</tbody>
</table>
One of the most valuable aspects of this course is its unique Poolside Chat™. In this session the attendees gather after hours in an informal format and are encouraged to ask any and all questions that they may have regarding MR Safety issues. These are then publicly discussed, analyzed, and addressed in a manner that not only answers the questions posed, but provides and teaches the attendee a logical framework as to how to reason their way to answer such questions in clinically realistic situations. Discussion, debate, and reasoned progression through available options are key factors of this session. The Poolside Chat™ is routinely evaluated as one of the most valuable and unique aspects of this course.
In the center of it all! Our LAX hotel is conveniently located just minutes to beaches and all major destinations in the Los Angeles area. Complimentary airport shuttle service is provided every 15-20 minutes. Shopping and a variety of restaurants including Flemings, Il Fornaio and Houston’s are located minutes from the hotel. Manhattan Beach is only 15 minutes from the hotel where restaurants, shopping and unique art galleries are located. Information on various city tours or transportation to theme parks are available through concierge.

**Room Reservations - 5711 West Century Blvd, Los Angeles, CA**

We have been given special reduced sleeping room rates at the The Hilton Los Angeles Airport of $149.00 per night plus tax. Please contact the hotel by dialing toll free 310-410-4000 and refer to Group Code: Kanal’s MR Safety Course Symposium or copy the following link into a web browser: https://book.passkey.com/e/49786267 . Please call or email us if you have any questions.

**IMPORTANT NOTE:** The meeting will be held in the International B Conference room, Cutoff Date is March 17, 2019 or when our reserved room block sells out (whichever comes first).

**Cancellation Policy**

All cancellation requests must be in writing.

1. Cancellations received on or before: 02/24/19 will receive a full refund.
2. Those received after 02/24/19 but through 03/10/19 are subject to a 25% service charge.
3. No credit or refunds are available on or after 03/11/19. **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 Fees**

Please Note: - Early Fee is payment received on or before 02/24/19
- Standard Fee is payment received after 02/24/19 through 03/10/19
- Late Fee is payment received on or after 03/11/19

**Kanal’s MR Medical Director / MR Safety Officer Training Course**

**Physicians and Industry Representatives:**
- Early Fee $1500  Standard Fee $1550  Late Fee $1600

**Physicists and Other Health Care Professionals:**
- Early Fee $1125  Standard Fee $1175  Late Fee $1225

**Technologists:**
- Early Fee $750  Standard Fee $800  Late Fee $850

*NOTE:* Kanal’s MR Medical Director and MR Safety Officer Training Course is completely independent from the ABMRS and its MRMD, MRSO, and MRSE certification examinations. We have specifically scheduled courses at dates and venues so that the attendee could, if they so desire, take the ABMRS examinations immediately following the completion of these courses. For further information regarding the American Board of MR Safety or to register for any of its certifying examinations, please visit www.abmrs.org.

Please call or email us if you have any questions: (888) 683-4930 or registration@nwforums.com
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. There is truly something for everyone in this city of lights, glamour and fun. Parking at the hotel is free.

Room Reservations - 3900 S Las Vegas Blvd, Las Vegas, NV 89119

We have been given special reduced sleeping room rates at the The Luxor Hotel and Casino of Room rate of $76 per night for Sunday and $59 per night for Monday through Wednesday plus tax/resort fees. Please contact the hotel by dialing toll free 800-926-4737 or 702-262-4450 and refer to Group Code: Imaging 2019 at Luxor or copy the following link into a web browser: https://book.passkey.com/go/SNOR0619LX. Please call or email us if you have any questions. **IMPORTANT NOTE:** The meeting will be held in the Egyptian Ballroom, **Cutoff Date is may 3rd, 2019 or when our reserved room block sells out (whichever comes first).**

Cancellation Policy

All cancellation requests must be in writing.

1. Cancellations received on or before: 05/03/19 will receive a full refund.
2. Those received after 05/03/19 but through 05/19/19 are subject to a 25% service charge.
3. No credit or refunds are available on or after 05/20/19. **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 Fees

Please Note: - **Early Fee** is payment received on or before 05/03/19
- **Standard Fee** is payment received after 05/03/19 through 05/19/19
- **Late Fee** is payment received on or after 05/20/19

**Kanal’s MR Medical Director / MR Safety Officer Training Course**

Physicians and Industry Representatives:
Early Fee $1500   Standard Fee $1550   Late Fee $1600

Physicists and Other Health Care Professionals:
Early Fee $1125   Standard Fee $1175   Late Fee $1225

Technologists:
Early Fee $750   Standard Fee $800   Late Fee $850

*NOTE:* Kanal’s MR Medical Director and MR Safety Officer Training Course is completely independent from the ABMRS and its MRMD, MRSO, and MRSE certification examinations. We have specifically scheduled courses at dates and venues so that the attendee could, if they so desire, take the ABMRS examinations immediately following the completion of these courses. For further information regarding the American Board of MR Safety or to register for any of its certifying examinations, please visit www.abmrs.org.

Please call or email us if you have any questions: (888) 683-4930 or registration@nwforums.com
There is no city quite like New York City, and no hotel quite like New York Marriott Marquis. Set in the heart of Times Square on West 46th Street and Broadway, our iconic hotel lets you experience all the magic of New York from the moment you arrive. Feel the energy all around you, both within the hotel and as soon as you step outside. Inside our towering hotel, you’ll find some of New York City’s largest hotel rooms and suites, multiple restaurants - including the only revolving restaurant in the city and our new outdoor lounge -100,000 square feet of meeting and event space and a knowledgeable staff to help you navigate this expansive and ever-changing city. Whether visiting for a family vacation, romantic getaway or attending a conference, the New York Marriott Marquis is truly the perfect hotel for your stay in New York City.

**Room Reservations/Shuttle - 1535 Broadway, New York, New York 10036**

We have been given special reduced sleeping room rates at the New York Marriott Marquis of $259.00 per night plus tax. Please contact the hotel by dialing 212-398-1900 and ask for the group code “TBD” or copy the following link into a web browser: [https://book.passkey.com/go/northwestimaging2019](https://book.passkey.com/go/northwestimaging2019) Please call or email us if you have any questions.

**IMPORTANT NOTE:** The meeting will be held in the Astor Ballroom **Cutoff Date is Friday July 26th, 2019 or when our reserved room block sells out (whichever comes first)**

**Cancellation Policy**

All cancellation requests must be in writing.

1. Cancellations received on or before: 07/12/19 will receive a full refund.
2. Those received after 07/12/19 but through 7/26/19 are subject to a 25% service charge.
3. No credit or refunds are available on or after 7/27/19. **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 Fees**

Please Note: - **Early Fee** is payment received on or before 07/12/19  
- **Standard Fee** is payment received after 07/12/19 through 7/26/19  
- **Late Fee** is payment received on or after 7/27/19

**Kanal's MR Medical Director / MR Safety Officer Training Course**

- **Physicians and Industry Representatives:**
  - Early Fee: $1500  
  - Standard Fee: $1550  
  - Late Fee: $1600

- **Physicists and Other Health Care Professionals:**
  - Early Fee: $1125  
  - Standard Fee: $1175  
  - Late Fee: $1225

- **Technologists:**
  - Early Fee: $750  
  - Standard Fee: $800  
  - Late Fee: $850

**NOTE:** Kanal’s MR Medical Director and MR Safety Officer Training Course is completely independent from the ABMRS and its MRMD, MRSO, and MRSE certification examinations. We have specifically scheduled courses at dates and venues so that the attendee could, if they so desire, take the ABMRS examinations immediately following the completion of these courses. For further information regarding the American Board of MR Safety or to register for any of its certifying examinations, please visit [www.abmrs.org](http://www.abmrs.org).

Please call or email us if you have any questions: (888) 683-4930 or registration@nwforums.com
Comments From Past Attendees of Kanal’s MR Safety Training Courses

“Without a doubt the best meeting I’ve ever been to!”
“I have traveled a tremendous amount all over the world and attended a lot of meetings with world experts. However, you have set the standard once again.”
“A tsunami of information.”
“Perfect mixture of information, related stories, and humor.”
“The best source of information of any conference I have ever attended for over 30 years.”
“It’s truly amazing that someone could make 22+ hours of MRI safety lectures engaging. I would attend again.”
“This was by far the best conference that I have ever attended! I never dreamed that I could learn so much in 4 days.”
“Thought provoking, engaging, educational, overall incredible.”
“The most information in a conference - ever”
“The excitement and enthusiasm is contagious”
“If you are MRI technologists, you need this!”
“Awesome! Incredible amount of information in just a few days!”
“It was the most incredible course, ever. Each and every second was educational... I could listen to Manny give instructions on how to make a peanut butter and jelly sandwich and enjoy every minute of it.”
“Dr. Kanal is by far one of the best speakers I’ve ever heard - if not the best”
“So much I didn't know after 20 years of experience”
“This was, without a doubt, THE BEST conference I have ever been to... I do not know any other human being that can talk physics and MRI for almost 4 days, and not even once make it drab.”
“Outstanding! Priceless information! Ground breaking!”
“Necessary for entire MR community.”
“I'm so glad I came! Mind blown - in a very good way! My wheels are churning... all the improvements I want to make now!”
“Eye opening, reassuring, and ridiculously informative!”
“An amazing amount of information”
“Game changer!”
“Awesome - SO glad I attended!”
“A new way to think…”
“Far exceeded my expectations”
“I've never been able to concentrate on anything for this many hours before.”
“Dr. Kanal’s passion for patient care, MR expertise, and ability to transfer that knowledge is amazing”
“High energy “infotainment””
“Mind blowing experience! The amount of information received to help myself and my department make decisions is immeasurable.”
“Absolutely amazing. Extremely engaging, thoughtful, and educational.”
“I am in awe of the information that I learned. I have no words others than “PHENOMENAL”. “It’s AMAZING how available he makes himself to everyone with time and attention - EXCEPTIONAL.”
“Incredibly informative for the consulting physicist.”
“Engaging, relevant, held my attention for all the hours, made me love the work I do more.”
“All time favorite course.”
“Great course with career changing information”
“Best thing I could have ever done for my professional career.”
“This symposium has stepped up my MRI game and my whole team will benefit!”
“This was exhausting and amazing - I would do it again in a heartbeat!”
“All radiologists, technologists, and managers should be required to attend…”
“Paradigm altering. My entire thought process towards MRI safety has altered.”
“Dynamic, clear, concise”
“A force of nature! “
“Blows one's mind!”
Elise Gough, RT(R)(MR)(CT)MRSO(MRSC™)
MR Imaging Specialist, RadNet

“I’m using your MR safety training every day.

We have 8 magnets, 3 different field strengths, and I have the call center call me with any and all implants and foreign bodies. So averaging 120 patients per day, I’m usually looking into about 12-14% of our daily patient load.

I am Researching implants, then deciding which magnet based on surgical metal in the field of view, or conditions of the implant and notifying scheduling. Alerts and MR safety notes go into each patient’s file describing the implant, and the conditions under which the tech must scan. The tech then completes the circle of care by documenting how they scanned the patient, with the ultimate goal of releasing the patient and their implant in the same condition which they arrived.

I tell you all this not to boast but because I would not have the confidence, nor would I have the trust of my Radiologists without YOU, the ABMRS and getting certified in 2015.

My MRMD (thank Heaven!!) and I have changed how the sites are run, constantly educating the MR techs, MR Aides, and call center staff. I thought you should know the profound affect my MR safety training has had and is still having on our little group!”

Frank Atoria R.T. (R) (MR) MRSO (MRSC™)
Advanced Medical Imaging of Old Bridge & Toms River - New Jersey

“I run a one man show on a GE 1.5T magnet with 3 P.D. techs for some evenings and Saturdays. For 2015, we scanned approximately 3900 exams...

Since November (I was at the Orlando seminar) I have embarked on rewriting the P & P manual for MR, we have a video camera (for Zone 3 surveillance) on order, there are plans to build a partition between Zones 2 and 3, both needed because of the physical layout of the office. Once spring comes, we will have the Cryo vent pipe professionally inspected (for the first time since installation - 16 years ago. Administration had no idea it was our responsibility.)

I have put together (so far) two fairly nice Powerpoint presentations, one relating to Emergency Responders and one for the office staff. In January I had 2 in-house seminars for our local fire department with just under 50 firefighters in attendance including the Chief and Deputy Chief at both sessions. I had an in-depth meeting with the Township OEM coordinator, which he greatly appreciated and he promised to distribute my E.R. Powerpoint videos. Today I will be visiting the Township Police Department and giving a talk there and handing out more E.R. PP videos.

I have implemented yearly re-screening and re-education of all staff, nontechnical as well as technical. Everyone has been classified as Level 1 or Level 2 (or non-MR) personnel. I have an on going education/interesting facts program going on.

All this is going on not only at my office but at our two sister sites which I have under my auspices. I have also recently been "lent out" to our affiliated Medical Center to rewrite their yearly MR Safety in-service.

It’s been a busy time and I love it and my job more than ever. I’ve been in MR for 30 years now and I feel just as fresh now as I did back then.

Thank you for everything you do.”

Anonymous
Each time I attend your course (two full MRSO and one refresher), I come away a better technologist than I was when I arrived. The key is allowing the reorganization to happen and pushing past the comfort of ‘this is how I was taught’ or ‘this is how we have always done it’ and accepting the challenge of new ways of thinking and processing information.”
Comments From Past Attendees of Kanal’s MRSO Courses

Joel Randal BA, RT(R) CT, MR, MRSO
Lead MRI Technologist - Sewickley Valley Hospital

“I was fortunate to be able to attend the MRSO training class in October and have been working hard at applying what I learned at that conference to the benefit of our patients. The MRSO course was very helpful to me. It gave me the methodology on how to approach these kinds of situations and the confidence in assessing each situation in the MRI environment. It is always a great reward to know that this training and knowledge related directly to providing care for one of our patients. Thank you for helping to lead the way.”

Sina Alacano, (ARRT) (R) (M) (MR) (MRSO)
Reno Diagnostic Centers.

"I wanted to give you an update as to what has happened since my MRSO credentialing and the various tasks, issues, challenges and changes that have occurred since I have returned home… It’s been a very busy time for me since Orlando; however, I know that everything, I am about to tell you, has been a positive stroke for everyone involved.

I work at a very busy and advanced out-patient facility. For our area we are leading the community in MRI technology… We average approximately 30 patients per scanner, daily… Upon my recognition as an MRSO, my Medical Director and other management had a meeting with me. This is where I was able to demonstrate my new found knowledge. I had a job description written up, a list of policies and procedures we needed to implement, new idea’s to increase business, thoughts on how to increase workflow and throughput, MRSO goals, etc. Oh, and my Medical Director LOVED the Decision Tree, Dr. Kanal.

All of my idea’s were well received. Here is a list of many new guidelines, directives, policies/procedures we have implemented.

1. Schedulers now send email to “MRI Screening Implant Work group” when scheduling patient so that a patient’s implant/device can be researched and approved. This equates to less reschedules, less stress for scanning techs due to less surprises, increased throughput - less cold table time.
2. Non MR Personnel Training Video, test and class workshop.
3. Level 1 MRI safety video (Dr. Shellock) with test. Classroom workshop as well.
5. Signage and Labeling of ancillary equipment.
6. Zone signage.
7. Monitoring of education with MRI safety for Level 1 and Level 2 Personnel.
8. Another technologist to attend MRSO safety course in Las Vegas in 2016.
9. Medical Director has made decision that a radiologist will be attending a class in 2016 as well...
10. Dedicated time for myself and other senior tech (she is going to Las Vegas) to research and approve implants/devices...

Our Medical Director and management has been very supportive. They have marketed my MRSO knowledge throughout the community. I have put together a proposal for a raise with a list of justifications and metrics. Management loves numbers...

For the most part, the entire company has been very receptive, of all the new MRI safety information, I have taught them and continue to help them grow in their professional careers.

Our company has benefited, in many ways, but the most impressive to them has been the increase in volume and throughput due to no surprises with patient and implants. Over 90% of our patients that have implants are pre-screened and pre-approved which has decreased cold table time.

One other very big concept, that my Medical Director, was very open to was that we now do patients with active devices/implants (Medtronic SCS, pain pumps, cardiac event monitors), no pacemakers yet. He is willing to learn MRI safety and the trust he has, in me, has been somewhat overwhelming. We have meetings and he is willing to listen and learn. He makes medical decisions when I need help and is very team oriented...

Dr. Kanal, I am sure I have already forgotten some of the information you taught me; however, the information that I was able to retain... has been invaluable. The education, that you so generously taught me, has enhanced my professional career and has definitely made a positive impact within the company I work with.”

This CME/CE activity is designed for Radiologists and/or other Physicians, Technologists/Radiographers, Physicists, Healthcare Risk Managers, MR Research personnel, and any other present and/or future MR Medical Directors or MR Safety Officers.
“Unbelievable how much I did not know!”
“Jaw dropping. Dr. Kanal held my attention the entire time, including (the) poolside (chat) until 11 pm”
“I have never been to a better presentation”
“Never stayed awake for an entire conference before!”
“Motivating”
“Informative; almost impossible to “zone out””
“Firehose drinking that morphs into understanding”
“Most “neurostimulation” I ever got from a CME!”
“This was my first experience with Dr. Kanal and he “blew my socks off” with his expertise and superb communications style!”
“ Incredible!”
“Best speaker I’ve ever heard!”
“Dr. Kanal’s passion for MR safety is infectious.”
“Overwhelmingly informative”
“The most knowledgeable professional I’ve worked with or learned from, ever.”
“New thinking and approach to MR safety”
“Shocking that there was so much that I did not know after 21 years in MRI”
“Overwhelming amount of great information”
“Simply amazing”
Changing the way I look at our patients”
“Stellar”
“He’s one of a kind - thank you!”
“I’ve been through many a “snore fest” - but his sessions were interesting, intense, and thought provoking”
“One of the best conferences I’ve attended”
“Dr. Kanal is a machine. He might actually be a cyborg!”
“Extremely dynamic speaker”
“Allows us to think through problems”
“Mind explosion!”
“Life changing!”
“Packed full of eye opening information”
“Perfect balance of quality information and entertainment made it easy to follow and memorable”
“Enormous amount of information. Thank you for changing the way I analyze MRI safety.”
“Excellent. Well worth my time and money. Novel way to think after 23 years doing MRI exams.”
“Should be mandatory for all doctors and technologists”
“Amazing learning experience”
“Your course was by far the most valuable to me in my years of radiology”
“His attitude is very superconductive!”
“Amazingly refreshing”
“Fantastic! I have been a tech for 30 years. This session made me feel the wonder and excitement for our profession all over again!”
“Phenomenal”
“Very entertaining, never runs out of energy, brilliant speaker”
“The whole course was exquisite! I have learned so much, and also feel capable of explaining things to my colleagues who were unable to attend”
“Logical, methodical, understandable”
“Dr. Kanal is an extraordinarily gifted communicator”
“Couldn’t be better”
“Without a doubt, this is the best course I have ever attended.”
“Manny always exceeds my expectations”
“Extremely informative”
“Engaging and charismatic”
“Amazing even the second time around!”
“I wish all my techs could attend.”
“I have never had so much information presented in such a way to keep me so interested.”
“It should be called, “MR safety de-mystified!”
“Incredibly interesting and informative!”
“Excellent, informative, interactive, entertaining, educational. His passion shows - it is contagious. He is incredible…Amazing
“A passionate instructor equals a passionate student. His enthusiasm is contagious!”
“10++++”
“If you are considering the Kanal safety officer course, stop thinking about it and just do it! You will not regret it!”
“My head is swimming!”
“Overwhelming!”
“It was like drinking from a fire hydrant. I highly recommend it!”
“It’s Manny… need I say more?”
“Everyone involved in patient care in MRI should participate”
“10 - there aren't words sufficient to explain this!”
“By far the best meeting I have ever attended… Wow!”
“Excellent, passionate, fun!”
“Off the scale - just listen to him!”
“Terrific - cannot get enough”
“Excellent course - far better and engaging that I was expecting!”
“Intense but awesome. Dr. Kanal is incredible. You are captivated by his enthusiasm and knowledge.”
“Will change my practice - I learned more than I was aware was out there.”
“Holy cow!”
“Dr. Emanuel Kanal is the Yoda Jedi Master. Period. End of story.”
“Dr. Kanal has the ability to make the invisible - visible.”
“Dr. Kanal has the unique ability to impart information in a way that keeps us interested and thinking for ourselves.”
“Captivating… entertaining… mind blowing”
“Excellent course - far exceeded expectations”
“Shock and Awe. Shock: How little I knew. Awe: How my MR Techs have done such a superb job for 20+ years.”
“Best individual speaker conference I have been to in 27+ years.”
“…never is all my years have I seen this - so much info here!”
“Wonderful experience; highly recommended to other MRI personnel.”
“Awesome!! Dr. Kanal exceeded my expectations!”
“Magnificent!”
“Everything I expected and more!”
“...far exceeded my expectations. I’m looking, forward to sharing with my staff and administrators.”
“I would highly encourage every manager and or safety officer to make it a priority to attend one of these meetings.”
“On a 1 to 10? 15 - Best I’ve ever seen!”
“Most dynamic and engaging speaker I have experienced in a radiology setting!”
“Excellent as always - enlightening and entertaining. Incredibly invaluable education.”

“I think I love him…”
### Registration Form (Please Print - This form may be copied)

<table>
<thead>
<tr>
<th>Please check conference that applies:</th>
<th>Please check fee that applies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Kanal MR Safety: Los Angeles</td>
<td>March 24 - 27</td>
</tr>
<tr>
<td></td>
<td>The Hilton Los Angeles Airport</td>
</tr>
<tr>
<td></td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>☐ Kanal MR Safety: Las Vegas</td>
<td>June 2 - 5</td>
</tr>
<tr>
<td></td>
<td>Luxor Hotel and Casino</td>
</tr>
<tr>
<td></td>
<td>Las Vegas, NV</td>
</tr>
<tr>
<td>☐ Kanal MR Safety: New York</td>
<td>August 18 - 21</td>
</tr>
<tr>
<td></td>
<td>New York Marriott Marquis</td>
</tr>
<tr>
<td></td>
<td>New York, NY</td>
</tr>
</tbody>
</table>

### Registration is also available Online at: www.nwforums.com

*Note — Registration is confirmed and processed only when payment is received.*

<table>
<thead>
<tr>
<th>Name (print)</th>
<th>_____________________________________________________________________________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email Address (print)</td>
<td>______________________________________________________________________________________________</td>
</tr>
</tbody>
</table>

*Note: Email address is required for confirmation purposes.*

<table>
<thead>
<tr>
<th>Facility</th>
<th>_____________________________________________________________________________________________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>The address below is (circle one):</th>
<th>Work</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street</td>
<td>_____________________________________________________________________________________________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City</th>
<th>_____________________________________________________________________________________________________</th>
<th>State</th>
<th>____________</th>
<th>Zip code</th>
<th>____________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Day Phone (______)</th>
<th>(circle one)</th>
<th>Work</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment enclosed or amount charged to credit card</th>
<th>$ ____________________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Charge to:</th>
<th>☐ VISA</th>
<th>☐ MasterCard</th>
<th>☐ American Express</th>
<th>☐ Discover</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Card Number</th>
<th>Exp. Date</th>
<th>____________</th>
<th>____________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3-Digit Credit Card Security Code (found on back of card)</th>
<th>____________________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name on Card (print)</th>
<th>______________________________________________________________________________________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Card Holder Signature (required)</th>
<th>______________________________________________________________________________________________</th>
</tr>
</thead>
</table>

### Make checks payable / send registration form to:

**Northwest Imaging Forums, Inc.**
P.O. Box 25909
Eugene, Oregon 97402

### Please contact us to register or with questions:

**Phone:** (888) 683-4930 Toll Free
(541) 683-4930 Direct

**Fax:** (541) 683-8499

**E-mail:** registration@nwforums.com

**Web site:** www.nwforums.com

Please check conference that applies:  
Please check fee that applies:
Note: If you cannot attend, please pass this brochure to an interested colleague.

Kanal’s MR Medical Director
and MR Safety Officer
Magnetic Resonance Safety Training Course