



AMERICAN SOCIETY OF NEUROIMAGING NEWSLETTER

President's Address

Rohit Bakshi, MD, FAAN



The American Society of Neuroimaging (ASN) has enjoyed a successful and productive year that should make all of us proud. As ASN continues to grow, we have taken new initiatives to continue membership expansion and to form new committees to address issues of training and practice needs.

This year has seen the organization's largest membership increase in the past five years as we welcomed over 100 new members and saw a growth

of activity, including a budget surplus. I am grateful for the hard work of the Membership Committee, chaired by Reeta Achari, MD. The Membership Committee will be implementing a new membership initiative for 2005-2006 where members who wish to pay dues 1-2 years in advance will be offered a discount. Please see page 5 for more information.

Laszlo Mechtler, MD, has taken the chairmanship of the newly formed Fellowship/Training Committee to develop guidelines for fellowship and training programs in neuroimaging, including curricula, training procedures, sites and faculty. The committee will also develop a process for ASN certification of these programs and develop a business plan for funding of these fellowships.

Under the leadership of Joseph Masdeu, MD, PhD, the Certification Committee is continuing to pursue an exciting new pathway for credentialing MRI neuroimagers through the United Council for Neurologic Subspecialties (UCNS). The ASN is working to reach common ground with UCNS about key issues related to eligibility for MRI certification including non-concurrent training and fellowship requirements. We will continue to update the membership about this evolving process.

Another important development has been the increased role of the ASN in promoting neuroimaging practice opportunities. We have formed a new committee on Practice Issues, chaired by Frank Hussey, MD, to develop a proactive strategy to ensure access for qualified physicians to perform neuroimaging. There has been a substantial effort at both the state and federal levels by the American College of Radiology (ACR) to thwart competition by arguing against self-referral and citing rising health care costs. In response, the ASN has joined the Coalition for Patient Centered Imaging (CPCI), a thriving 23-member organization that was formed to address the radiology monopoly threat. The CPCI is a major imag-

ing lobbying and advocacy support group that includes the following powerful organizations: The American College of Cardiology, American Medical Association, American Academy of Family Physicians, American Academy of Neurology, American Academy of Ophthalmology, American Association of Orthopaedic Surgeons, American Association of Neurological Surgeons, American College of Emergency Physicians, American College of Obstetricians and Gynecologists, American College of Physicians, American College of Surgeons, American Gastroenterological Association and American Urological Association. The common goal shared by CPCI is to ensure patient access to high quality imaging by physicians, regardless of specialty. The ASN has also developed a position statement on neuroimaging practice. Please visit

http://www.asnweb.org/clientuploads/pdfs/ASN_Positon_Statement.pdf to view the statement and see more information on pages 7 and 11.

Camilo Gomez, MD, our Vice President and Chair of the Program Committee is hard at work organizing our next Annual Meeting, to be held on March 2-5, 2006 in San Diego, California. The program promises to continue the ASN tradition of high quality annual meetings, offering educational and scientific activities in a relaxed and collegial setting. Please see pages 12 and 13 for a preliminary program of courses.

Another exciting development has been the increase in Neuroimaging courses at the American Academy of Neurology Annual Meeting. I am pleased to announce that five neuroimaging courses have been accepted into the 2006 program. Please see page 3 for further information.

Please visit <http://www.asnweb.org/clientuploads/pdfs/ASNOverview.pdf> to download a PowerPoint presentation that has been developed for use by our members in the course of their teachings and lectures to promote the ASN.

I thank Scott Burgin, MD, for taking on the role of Chair of the Corporate Relations Committee. With Dr. Burgin's leadership we will continue to forge partnerships with the pharmaceutical and device industries, imaging entrepreneurs, and equipment manufacturers to continue the mission of the ASN.

I thank each of you for being a member and encourage your participation in the upcoming meeting and active involvement with the impending issues surrounding ASN. If you have any questions or suggestions, please do not hesitate to contact the Executive Office at 952.545.6291 or asn@llmsi.com.

Thank you again for a great year and I look forward to seeing you in San Diego! ♦

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*Mark your
Calendars!*

29th Annual Meeting

March 2-5, 2006

Loews Coronado Bay Resort

San Diego, California



28th Annual Meeting *Highlights*

March 3-6, 2005

Walt Disney Hilton Resort-Orlando, FL

Thank you to the following Exhibitors and Sponsors for their support of our meeting:

EXHIBITORS

Terumo Cardiovascular Systems
Lippincott Williams-Wilkins
Compumedics DWL Americas
MD Imaging
W.B. Saunders/Mosby
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MRI Management, Inc.
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Comments from meeting attendees were very positive overall. Some examples include:

- I will look into new MRI software
- I am a better neuroimager
- I will try to apply new methods

Faculty were also highly praised in the evaluations. Many of the attendees used words such as excellent, thought-provoking, and outstanding to describe the quality of the speakers. A sample of other comments includes:

- “Very compelling, excellent”
- “Presenter was very knowledgeable — gave excellent examples & explanations & practical tips. Fabulous!”
- “Excellent as always.”
- “A great teacher and person - always excellent.”

A special thank-you to all of our course directors, faculty, exhibitors and sponsors for helping to make the 2005 Annual Meeting a tremendous success! ◆

Increased Neuroimaging Content at American Academy of Neurology Meeting

ASN is pleased to report the increase in neuroimaging content at the American Academy of Neurology (AAN) meeting. This year we have scored an unprecedented victory in this regard, with five dedicated neuroimaging courses that have been accepted for 2006. The courses are as follows:

1. Sunday April 2, 9a to 5p, 2FC.003, Update on MRI: Techniques and Neurological Applications (expanded to a full day course): Director: Rohit Bakshi, MD, FAAN
2. Monday April 3, 645a to 830a, 3BS.007, Neuroimaging in Clinical Trials of Parkinson's Disease (new course): Director: Morgan
3. Monday April 3, 215p to 6p, 3PC.002, Update on Endovascular Treatment of Cerebrovascular Diseases (new course): Director: Adnan Qureshi, MD
4. Friday April 7, 9a to 1245p, 7AC.002, Update in Neuroimaging (new course): Director: John Chawluk, MD
5. Saturday April 8, 9a to 1245p, 8AC.002, Spinal neuroimaging: clinical-radiological correlation (new course): Director: Laszlo Mechtler, MD

The AAN meeting will be exciting for all neuroimagers. Special thanks to Joseph Masdeu, MD, PhD and John Chawluk, MD for helping to convince the AAN of the importance of neuroimaging training.

Congratulations to 2005 Examinees!

We congratulate the following examinees for successfully passing the ASN certification examinations:

MRI/CT Examination

Muhammad Akhtar, MD
Parveen Athar, MD
Cecile Becker, MD
Craig Berteau, MD
John Bertelson, MD
Daniel Branco, MD
Guy Buckle, MD
Gregory Condon, MD
Peter Edenhoffer, MD
Walter Evans, MD
Georges Ghacibeh, MD
Kevin Hargrave, MD
Yong He, MD
Charles Kelly, MD
David Lardizabel, MD
Carlos Leon-Barth, MD
Eric Lindzen, MD, PhD
Eduardo Locatelli, MD
Sweta Majmundar, MD

A. LeBron Paige, MD
Hemant Pandey, MD, MBBS
Ruby Parveen, MD
Ajitesh Rai, MD, DM
Jean Raphael Schneider, MD
Hashem Shaltoni, MD
Lirim Tonuzi, MD
Lawrence Verhoef, MD
Wei Wang, MD
Peter Widdes-Walsh, MD

Neurosonology Examination

Carotid and TCD
Thomas Clark, DO
Leonard DaSilva, MD
Peter Edenhoffer, MD
Carmelo Graffagnino, MD
Colin Iosso, MD
Farouk Khan, MD

David Lardizabel, MD
Vivien Lee, MD
Bernardo Liberato, MD
Bhuvana Mandalapu, MD
Manuel Marrufo, MD
Louise McCullough, MD, PhD
Kumar Rajamani, MD
Steven Shook, MD
Tanya Warwick, MD

TCD Only
Jayanta Roy, MD, DM

Cartoid Only
Leo Germin, MD
Zubair Shaikh, MD

Congratulations to 2005 Award Recipients!

**McKinney Award for Best Abstract,
based on research in Neurosonology,
submitted by a Student,
Resident, or Fellow**
Jayanta Roy, MD, DM
University of Calgary
Calgary, Alberta, Canada



*Dr. Camilo Gomez awards Dr. Jayanta Roy
with the 2005 McKinney Award*

**Resident Travel Awards
for highest rated abstracts**
Max Nedelmann, MD
Johannes Gutenberg University
Mainz, Germany



*Dr. Camilo Gomez awards Dr. Max Nedelmann
with one of the 2005 Resident Travel Awards*

Not pictured: Jesse Corry, MD, Medical College of Wisconsin, Milwaukee, WI

John and Sophia Prockop Memorial Lectureship
Andrei Alexandrov, MD, RVT
University of Texas Houston
Houston, TX



*Dr. Leon Prockop congratulates the 2005 John and Sophia
Memorial Lectureship Awardee Andrei Alexandrov, MD, RVT*

**Zeenat Qureshi Award for Best Abstract,
based on research in diagnostic
angiography or endovascular procedures,
submitted by a Student, Resident,
or Fellow**

Ismail Khatri, MD

The University of Medicine & Dentistry of New Jersey
Newark, NJ



*Dr. Camilo Gomez awards Dr. Ismail Khatri
with the 2005 Qureshi Award*

2005 Annual Meeting Awardees



*Left to right: Max Nedelmann, MD, Jayanta Roy, MD, Camilo Gomez, MD
(ASN Vice President and Program Chair), Ismail Khatri, MD
and Andrei Alexandrov, MD, RVT*

New Membership and Dues Initiatives Launched for 2006

The Membership Committee, chaired by Reeta Achari, MD, has developed exciting new initiatives for the next membership year. The Board approved the following membership and dues initiatives which will take effect for the 2005-2006 membership year.

The first initiative offers members the opportunity to save money by paying their dues in advance two or three years. Members will receive a 5% discount for each year that is paid in advance, up to two years. The current year's dues will be paid at full price, and the 5% discount applies to the 2nd and 3rd year.

The second initiative offers current members who help recruit five new Active, Associate, or Corporate members to join the ASN a 20% discount off the registration fee at the annual meeting. Members should instruct the new members to acknowledge the member who recruited them on the space provided in the membership application.

Also being offered for this year's Annual Meeting is a 10% discount off the mandatory registration fee for non-member meeting attendees who sign up to become members of ASN. New members must fill out the application form and pay their first year of dues at the same time they are registering for the Annual Meeting.

Another exciting initiative is the creation of the ASN mentorship program. The mentorship program has been designed to allow ASN members to sponsor a resident or fellow by their paying their dues. Recognition of the mentors will include posting their names on the website, newsletter, in the annual meeting onsite program, and during the Presidential Address at the Business Meeting, and providing "Mentor" ribbons on their nametags at the Annual Meeting. This will provide a great opportunity for younger members to become more involved in the Society.

Neuroimaging Seminars Update

Jack Greenberg, MD

Ten years have elapsed since the late Ilydio Polachini, MD and I began conducting seminars in neuroimaging for neurologists. These have been supported by a number of companies who have had an interest in developing neurologist interpreters in MR and CT. These companies have included Medical Resources, MRI Centers of New England, MRI Central of Texas and TexScan. ASN has been responsible for the CME accreditation. Most often, it is a weekend course of 16 credit hours of lecturing on all facets of imaging including stroke, neoplasm, infection, MS, spine, pediatric disorders, epilepsy, trauma etc.

Other lecturers have included Drs. Rohit Bakshi, Laszlo Mechtler, and neuroradiologists Bob Quencer, MD and Mauricio Castillo, MD.

In 2005, several groups of private neurologists sponsored seminars and invited all the neurologists in their area to attend. This includes Sam Hunter, MD and his group in Nashville and Dr. Bob Bashuk's group in Atlanta. They each attracted about 20 local neurologists. The most recent seminar was in Orlando, Florida where Medical Resources sponsored a weekend course which attracted almost 40 neurolo-

gists from all over the state of Florida and other states as well. Individual dinner meetings have been held almost monthly, primarily in Florida but also in Chicago, again sponsored by Medical Resources. We have had a number of meetings in Boston (MRI Centers of New England) where 45 neurologists attended, including 20 residents from the training programs in that area.

We not only review hundreds of cases but also explain the workings of the ASN and encourage membership in the latter plus the neuroimaging section of the AAN. We advise the attendees how to get into imaging and also try to help them prepare for the certification exam given at the annual ASN meeting.

It has been a great privilege and honor for me to be involved in this endeavor and to see the growth of neuroimaging among neurologists who certainly have the background to master the subject.

I am interested in hearing from neurologists who would like to help organize such seminars in their community. Please feel free to contact me at jgreenb293@aol.com.

First Annual Vascular Neurology Review Course at New Jersey a Tremendous Success

Adnan Qureshi, MD

Vascular neurology has evolved into a well defined and important sub-speciality in the field of neurology. In February 2002, the Accreditation Council for Graduate Medical Education (ACGME) announced the program requirements for residency education in vascular neurology. Subsequently, at the March 2003 meeting of the American Board of Medical Specialties (ABMS), the Assembly approved the issuance of subspecialty certificates in vascular neurology by the American Board of Psychiatry and Neurology (ABPN). The first examination was conducted on May 9-13, 2005. The four-hour examination consisted of 200 multiple choice questions administered in a nationwide network of computer test centers.

In anticipation of the developing need, the Cerebrovascular Program of the Department of Neurology and Neurosciences and Zeenat Qureshi Stroke Research Center conducted an educational symposium entitled "First Annual Vascular Neurology Review Course" at the University of Medicine and Dentistry of New Jersey on May 3-5, 2005. The symposium was a three-day event held in Newark. The course was directed by Drs. Qureshi and Pullicino and coordinated by Ms. Amy Lallier. An outstanding faculty from all over the United States including Drs. Boulos, Cadavid, Ezzeddine, Fechtner, Greenberg, Hobson, Kirmani, Liebeskind, Malkoff, Mayer, and Razumovsky participated in the educational forum. The course was officially endorsed by the American Society of Neuroimaging and Neurocritical Care Society. The review course was a great success and attracted visiting physicians including chairmen, directors of stroke programs, faculty, residents and fellows from all over the United States and abroad. Sponsorship for the course was provided by ESP Pharma, Genentech, and Novo Nordisk.

The course was accredited for 24 CMEs and provided an up-to-date review of major concepts on:

- o Incidence and risk factors for stroke
- o Neuropathology of stroke
- o Arterial disease syndromes with imaging correlates
- o Venous disease syndromes with imaging correlates
- o Carotid artery disease

- o Unusual stroke syndromes
- o Cardioembolic stroke
- o Small vessel diseases and intracranial atherosclerosis
- o Computed tomographic and magnetic resonance angiography
- o Carotid Doppler ultrasound
- o Transcranial Doppler ultrasound
- o Stroke in the young population
- o Intracranial aneurysms and arteriovenous malformations
- o Intracerebral hemorrhage
- o Subarachnoid hemorrhage
- o Hypoxic ischemic encephalopathy
- o Antiplatelet and anticoagulant therapy in ischemic stroke
- o Thrombolytic treatment for ischemic stroke
- o Stroke units
- o Stroke rehabilitation
- o High impact clinical trials

The Cerebrovascular Program and Zeenat Qureshi Stroke Research Center intend to conduct a similar course next year and make special efforts to encourage attendance of trainees and allied medical professionals in addition to practicing physicians. Update on activities of the Cerebrovascular Program and Zeenat Qureshi Stroke Research Center are available at <http://www.umdj.edu/cbvweb/>

Making Sense by Not Making Mistakes

Jeffrey W. Clarke, MPA, Corporate Director of Neuroimaging, Medical Resources Inc.

Through a consortium of efforts, every day more neurologists are enlightened that they may share in the proceeds of MRIs. There are two common MRI arrangements. The first uses the "personal services" exemption. This model allows neurologists to provide the professional component of MRIs and receive compensation for these services. The second uses a derivative of the "in-office ancillary services" exemption. This model permits neurologists to supply the technical component of MRIs through ownership, block leasing, and the like.

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Making Sense by Not Making Mistakes

Regardless of the model, MRI arrangements need to make business and legal sense and there should not be mistakes in their structure. The purpose of this caveat is not to deter you but to make these arrangements work. Yes, there are business risks. Yes, Federal and State laws have rules and regulations. However, this does not say neurologists cannot appropriately make money on MRIs. Follow the rules and avoid the common pitfalls. Below are four common mistakes:

- 1) Failing to comply with State and Federal healthcare law: Anti-Kickback violations are up to \$25,000 per violation, exclusion from Medicare programs, and jail terms of up to five years. Stark violations are up to \$25,000 per violation and exclusion from Medicare programs. Start with a reputable MRI vendor. An independent healthcare attorney should review any MRI arrangement.
- 2) Failing to consider recent OIG opinions: Over the past few years healthcare regulation has been fairly stable. Yet, in advisory opinion 04-17 (December 2004) the Office of Inspector General changed the rules. The OIG's opinion is that "turn-key" arrangements might violate the Federal Anti-Kickback law. New and existing "technical component MRI arrangements" should meet the OIG's specific parameters. Thus, these MRI arrangements should have an independent healthcare attorney's review.
- 3) The MRI deal that sounds too good to be true: The concept of "fair value" is important in healthcare law. If Medicare pays \$90 to read a MRI and you are offered \$150, then be careful. This may be considered an inducement for referrals. The same concept applies to consulting agreements, block leases, turn-key deals, etc. If you are not asked to have reasonable financial risk or to provide significant services, then it is a deal that is too good to be true.
- 4) Agreeing to an MRI deal that is financially unsuitable: Depending on the MRI arrangement and vendor there can be significant variations in the management fees, costs, financial terms and legal risks. Do not rush to sign an agreement. There are alternatives. Ask for competing offers, references and financial projections before you sign a contract.

In summary, MRI arrangements can be a viable way to enhance the quality of care and the financial stability of neurologists' practices. Careful consideration should be given to each arrangement. Entering into some MRI arrangements can create significant financial and legal risks. Working with a reputable MRI vendor and obtaining an independent healthcare attorney's review can avoid common pitfalls. MRI arrangements need to make sense and there should not be mistakes.

Jeffrey W. Clarke is the Corporate Director of Neuroimaging for Medical Resources. The company operates about 50 diagnostic imaging facilities in nine states. Medical Resources currently has contracted with approximately 70 neurologists to provide MRI interpretations for their facilities. Mr. Clarke can be reached at 888-674-1996.

Practice Issues Committee Update

Frank Hussey, MD

With the help of a recent survey sent to neurologists from the AAN, we hope to compile a more complete database of practicing neuroimagers. Our numbers are growing rapidly and it is important to monitor successes along with problems as we move forward.

Radiologists have continued to oppose the involvement of other specialists in imaging. They spend large amounts of money on lobbyists at the national and state levels. Articles have appeared in well-known newspapers that have pushed their contention that "self referral" and therefore "in-practice imaging" is responsible for the increased utilization of medical imaging by the public.

Countering their efforts is a very strong organization called Coalition for Patient Centered Imaging (CPCI). After the American Medical Association (AMA) House of Delegates unanimously passed a resolution against the attempts by radiologists to monopolize imaging, a large number of medical specialties came together to focus on excellence in medical imaging. They pointed out the knowledge and expertise that clinical specialists bring to imaging. This is crucial for the proper interpretation of CT, MRI and ultrasound.

The CPCI was founded to oppose radiology special interests. The Coalition has been effective, but must remain wary of continuing efforts by radiologists. The immediate goal of CPCI is to preserve a patient's right to choose a quality interpreter of their imaging studies.

Our committee has helped neurologists continue interpreting CT, MRI and ultrasound to better serve our patients. We stand ready to do more.

View From the Top

Garth James, President and CEO, MRI Management, Inc.

There is an initiative that has caused a heated debate on a state and federal level. Radiologists and their lobbyists have been applying political pressure to restrict the ownership of medical imaging equipment and interpretation of medical images to the exclusion of all other medical specialties.

The American Medical Association and the radiologist's own national organization, the American College of Radiology, recognize that any "qualified" physician may interpret medical images. Yet, the unrelenting push to gain a monopoly on this aspect of medicine continues.

It is not so much that the initiative is being pushed, but it is the supposed "facts" upon which their argument is based that is suspect. In brief, the argument goes something like this:

The increased cost of medical imaging is due to the over-utilization of imaging modalities by non-radiologists, who either own their own equipment or interpret their own images for fees that would otherwise be realized by radiologists.

If radiologists were the only medical professionals who could own medical imaging equipment and interpret medical images, utilization costs would be contained.

If true, that would be a solid argument. The fact is that there have been dramatic increases in the utilization of medical imaging. However, the cause for the increased utilization is unsupported by statistical fact and the argument is left wanting.

Could this increase in utilization simply be a function of the demographic progression of the "baby boomers" into an age group which consumes more medical resources? Could it be that clinical physicians are more familiar with the proper use of PET, MRI and other advanced diagnostic tools and are shifting from older modalities to newer ones that better serve their patients?

The number of radiological interpretations is proportional to a radiologist's income. To create a monopoly for radiologists as the best way to reduce the growth of medical diagnostic utilization is counterintuitive.

Medical Imaging Solutions

Frank Hussey, MD

Medical Imaging Solutions (MIS) is a company dedicated to putting imaging into large group practices. It also has been working with physician groups, helping them to become large enough to have imaging as part of an efficient, patient oriented, successful neurological practice. One of its most recent centers is the Alabama Neurological Institute in Birmingham, where MIS helped the neurologists obtain a 3 Tesla state-of-the-art MRI that is a great example of technologically advanced patient-centered care.

Federal and state laws are clear when it comes to in-practice imaging but less clear on leasing arrangements. For group practices which qualify under Stark II, Medicare's Anti-Kickback legislation contains a "Safe Harbor" for certain leasing arrange-

ments. This would appear to open the door for groups to enter into leasing arrangements with imaging facilities, subject to the Safe Harbor's restrictions concerning fair market rate and that the lease periods be for a fixed interval of time.

However, the regulations themselves do not provide a "bright line" describing how it is determined whether a lease rate is fair market rate or a prohibited kick-back. Similarly, some imaging centers aggressively market "per click" leasing arrangements whose compliance with the fixed interval requirement is unclear.

These "scans for sale" arrangements carry the risk of running afoul of the Anti-Kickback law. The penalties for violation can include fines up to \$25,000 for each patient inappropriately referred and

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Medical Imaging Solutions

the potential loss of the physician's license. Put simply, these consequences are too drastic for most physicians to consider entering into leasing arrangements for diagnostic imaging.

Recent events have heightened physician's concerns in this area. In July, a whistle-blower lawsuit was filed in Federal court in Boca Raton accusing two MRI centers of using lease deals with referring physicians as a "cover for unlawful kickbacks."

The safest way for a physician group to invest in diagnostic imaging is to own the center itself. As long as the group practice is a valid group under the Stark II regulations, ownership does not create fee splitting issues. However, most physician groups are occupied with the practice of medicine, and have neither the time nor the experience to establish their own imaging centers.

Medical Imaging Solutions is a company formed to assist physician groups in planning, procuring, and opening their own imaging facilities. Its three principals have over 40 years combined experience with establishing out-patient imaging centers ranging from small single modality centers to ten-thousand square foot multi-modality centers. Together, they have established seventeen successful MR and CT centers and have over 15 new centers in different stages of development. MIS is particularly interested in working with academic practice groups so that residents in neurology and fellows can be trained.

MIS principals meet with an interested physician group to analyze referral patterns. Based upon the needs of the group and referral patterns, appropriately configured state-of-the-art diagnostic imaging equipment can be proposed and acquired through an MIS procurement contract. As MIS and its affiliates purchase between two and three MR and CT scanners each year, it has pre-negotiated discounts with major equipment providers which substantially exceed the discounts which would be available to an individual group negotiating on its own.

Once the equipment is selected, MIS personnel work with the physicians on every step of the creation of the imaging center including working with architects on the design, construction oversight, coordinating installation with the equipment manufacturer, obtaining equipment financing, interviewing and hiring prospective employees, and implementing billing solutions. After opening, MIS will continue to work with the group's center, evaluating employees, the efficiency of its billing and collections (in-house or third party), controlling costs and implementing filmless teleradiology services.

Medical Imaging Solutions: It succeeds when the physicians succeed.

DENT Fellowship Job Description

Vernice E. Bates, MD

INTRODUCTION

These are policies and procedures to be followed by the Neuroimaging Fellows. Adherence to these policies is essential to successful completion of the program. Compliance will also ensure the smooth operation of the Imaging Division of the Dent Neurologic Institute and provide the proper environment for optimal fellowship training. If you have any questions or suggested revisions to these policies, please address them to the Fellowship Director.

SCHEDULE

The Imaging Division is physically located in two outpatient centers. These will be referred to as the Dent Tower and Orchard Park offices. These are outpatient-imaging facilities. They contain state of the art MRI scanners at both locations and a state of the art CT scanner at one location. CT and MRI studies from both locations are transmitted electronically to the Dent Tower location where all reads occur. All reads are done digitally with hard copy film being used principally from outside sources. Two separate read stations have been developed at the Tower location. One CT read station exists also at the Tower location. All images from both locations are read at the Tower location. Carotid ultrasound and Transcranial Doppler is available at both locations. On occasion the fellow may rotate to the Orchard Park office for clinical or neuroimaging rotations. Fellows rotate on a weekly basis through the above-described read stations. An imaging week runs Monday through Friday. Responsibilities on a read week include the following:

Being physically present within the Tower location from 7:30 a.m. to 6 p.m. on weekdays. In addition, some scanning is done on Saturday mornings.

Interpreting all neuro MRI and neuro CT scans and generating a preliminary report to the referring physician. In the first few months the attending will review all cases before the preliminary report is sent out. In all cases, the preliminary report is sent out the same day as the scan.

For emergency scans, depending on findings, a preliminary result may be faxed or phoned to referring physicians. Good relations, excellent service, and courtesy toward these referring physicians are a key to center viability.

Interpreting all neuro MRI (head and spine) and neuro CT (head) scans. In the first few months (typically until Labor Day

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DENT Fellowship Job Description

weekend) the fellow will review the scan and present the findings to the attending during a formal read session. The attending will then dictate the report. The fellow should maintain a personal logbook of cases seen and evaluated and aid in maintaining a Dent teaching file.

Correcting/proof reading all MRI and CT transcribed reports. Corrections must be made promptly, crosschecked with the written preliminary result, and returned to the secretary for approval by the appropriate attending. Typed, reviewed reports will be sent out within 24 hours of the scan.

Identifying and compiling interesting cases for the Dent Neurologic Institute teaching file. The teaching file is a primary instrument for education of neuroimaging fellows and visiting neuroimaging preceptors. It has resulted from the efforts of several prior neuroimaging fellows and attendings. It is anticipated that the current neuroimaging fellows will add significantly to the variety and educational benefits of this teaching file. The interesting cases also may be prepared for the weekly Friday morning imaging conference.

Preparation and planning for the weekly (Friday morning) neuroimaging conference. The conference begins after Labor Day and will be run by the fellowship director for the first four weeks with assistance by the fellow. For the remainder of the academic year, the fellows will run the conference with assistance by the imaging attendings.

Present a five to ten minute didactic talk at the Friday morning imaging conference on a neuroimaging topic of your choice. It is expected that each fellow will give six talks during the year. The format is flexible but will typically be power point presentations or hard copy of films. The most desirable topics are those relating to state of the art MRI methods and their clinical applications.

Provide supervision and teaching for rotating students, residents, and visiting neuroimaging preceptors.

A weekly journal club is held on Tuesday morning. Presentations at this journal club are done on a rotating basis by the neuroimaging fellows.

Assist the MRI and CT technicians with protocol planning, sedation orders, and occasional IV contrast injections.

IMAGING NIGHT CALL

At present there is no imaging night call. Depending on the imaging schedule, the fellow may spend some evenings and/or Saturday mornings in the imaging areas.

MRI/CT SCANNING: IMAGING OBJECTIVES

Knowledge of the physics and clinical aspects of neuro MRI and neuro CT is the primary focus of this fellowship program. In addition, there is exposure to neurosonology including carotid Doppler and TCD. There is an introductory didactic neuroimaging lecture series provided for residents, fellows, and preceptors during July and August. These summer lectures will culminate with a written exam to be given in early September.

Fellows are expected to obtain sufficient and appropriate clinical information on all patients prior to a MRI study. The majority of the relative data will have been obtained by the technicians and secretaries and should be reviewed by the fellow assist where necessary. Occasionally, this will require briefly speaking with a referring attending or speaking with or examining the patient prior to a study. In addition, Dent patient clinical records are available online and may be reviewed to aid in interpretation of the study. You may need to call for other test results, such as results of previous imaging reports, request films, or results of other diagnostic testing such as CSF results or pathology. The fellows as trained neurologists are a great assistance in efficient operation of the Imaging Division. The neuroimaging fellow is expected to familiarize himself with the imaging protocols. There is a booklet of listed of protocols in the MRI units. Protocols are of necessity added to or refined on a regular basis. The fellow may be asked to adjust appropriate protocols to address the differential diagnosis in a given patient. The fellow will work closely with the technologist to ensure the proper execution of MRI/CT protocols on individual patients. The study is tailored to the study requested and clinical indication. On occasion, the fellow will need to be able to administer IV contrast or order sedation. In addition, weeknight and weekend routine MRI or CT may be implemented at our institute.

By the conclusion of a neuroimaging fellowship year, the fellow is expected to be competent in all aspects of clinical neuro MRI (head and spine) and neuro CT (head), neurovascular MRA and CTA, and carotid ultrasound and TCD. The fellow should feel confident and competent to be able to set up and run a neuroimaging center.

For more information, please contact Mary E. Smith at 716-250-2002 or msmith@dentinstitute.com ◆

American Society of Neuroimaging Neuroimaging Position Statement

May 2, 2005

http://www.asnweb.org/clientuploads/pdfs/ASN_Positon_Statement.pdf

- Due to new innovations and new applications as well as the aging population the demand for imaging has been growing.

- These technologies open new frontiers for diagnosis and therapy, replace older invasive technologies, and dramatically improve patient care.

- Clinician-imagers have specialized expertise in the anatomy and function of specific organ systems and know the clinical relevance of imaging findings. This helps to ensure both the proper utilization and interpretation of images.

- By knowing the patient and natural disease progression, clinician-imagers are uniquely qualified to recommend the appropriate imaging studies and carry out their correct interpretation.

- Clinician-imagers not only interpret images, but are also directly involved in patient care. This results in improved continuity and quality of care.

- Self-referral is an established health care model that increases access to care and quality of care. It is standard medical practice and helps specialists and primary care physicians take care of their patients.

- Medical testing, such as imaging by the patient's physician, does not increase health care costs.

- Making an exception to medical practice by giving an imaging monopoly to radiologists will increase health care costs.

- With the imminent shortage of all physicians as well as the current shortage of subspecialty radiologists, there is a need to have more qualified physicians interpreting imaging studies.

Volunteers Needed for ASN Committees

We invite you to become actively involved with the Society
by serving on one of our committees.

Please visit our website at
<http://www.asnweb.org/index.php?submenu=AboutASN&src=gendocs&link=Committees>
for further information on the Committees and contact the Executive Office at
asn@llmsi.com or 952-545-6291 if you are interested.

We look forward to your participation!

29th Annual Meeting Preliminary Program

Loews Coronado - San Diego

THURSDAY, MARCH 2, 2006

8:00 am – 2:00 pm	ASN Committee Meetings
2:00 – 5:00 pm	ASN Board Meeting
3:00 – 7:30 pm	Registration Opens
5:30 – 7:30 pm	Welcome/Poster Stand-By Reception
7:30 – 9:30 pm	An Evening with the Experts: An Overview of What's Hot in Neuroimaging (Open Case Presentations and Discussions) <i>Director: Reeta Achari, MD</i>

FRIDAY, MARCH 3, 2006

6:00 am – 5:00 pm	Registration
7:00 am – 8:30 am	Breakfast Seminar: MRI Physics <i>Director: Michael Moseley, PhD</i>
7:00 am – 8:30 am	Breakfast Seminar: Cerebrovascular Hemodynamics <i>Director: Charles Tegeler, MD</i>
8:30 am – 4:00 pm	Exhibits and Posters
9:00 am – 1:00 pm	MRI Course (Part I) <i>Co-Directors: Laszlo Mechtler, MD; Mircea Morariu, MD</i>
9:00 am – 1:00 pm	Basic Neurosonology Course <i>Director: Alexander Razumovsky, PhD</i>
2:00 pm – 5:30 pm	Imaging of Multiple Sclerosis Symposium <i>Director: Rohit Bakshi, MD, FAAN</i>
5:30-7:00 pm	Networking Reception
7:00 pm – 10:00 pm	Neurosonology Hands-On Workshop <i>Director: Andrei Alexandrov, MD, RVT</i>
7:00 pm – 10:00 pm	MRI Hands-On Workshop <i>Director: Geoffrey Hartwig, MD</i>

29th Annual Meeting Preliminary Program

continued

SATURDAY, MARCH 4, 2006

6:30 am – 4:00 pm	Registration
7:00 am – 8:30 am	Breakfast Seminar: Perfusion Imaging in Acute Stroke Therapy <i>Director: Walter Koroshetz, MD</i>
7:00 pm – 8:30 am	Breakfast Seminar: Clinical Implications of Emboli Monitoring <i>Director: Alexander Razumovsky, PhD</i>
8:30 am – 11:30 am	Exhibits and Posters
9:00 am – 6:00 pm	MRI Course (Part II) <i>Co-Directors: Laszlo Mechtler, MD; Mircea Morariu, MD</i>
9:00 am – 1:00 pm	Neurosonology Case Interpretation Course <i>Director: Charles Tegeler, MD</i>
1:15 pm – 2:45 pm	Presidential Address and Awards Luncheon
3:00 pm – 5:00 pm	Current Assessment of Cerebral Circulation Across Imaging Modalities <i>Director: Lawrence Wechsler, MD</i>
6:30 pm – 9:30 pm	Angiography and Interventional Neuroimaging Course <i>Director: Adnan Qureshi, MD</i>

SUNDAY, MARCH 5, 2006

7:00 am – 11:00 am	Registration
6:30 am – 9:30 am	Breakfast Seminar: MRI Practice Issues <i>Director: Mircea Morariu, MD</i>
7:30 am – 9:30 am	Breakfast Seminar: Ultrasonography Practice Issues <i>Director: Michael Kushner, MD</i>
10:00 am – 12:30 pm	Integrated Neuroimaging Symposium <i>Director: Reeta Achari, MD</i>
7:00 am – 12:15 pm	Neurosonology Certification Examination
2:15 pm – 6:15 pm	MRI/CT Certification Examination