



Society of Nuclear Medicine

CENTRAL



CHAPTER IN THE NEWS

October 2000

This morning when I left the house, I could feel that the fall season was around the corner. It used to be that the Central Chapter of the SNM had a meeting in September. It was a good time to see the colleagues. I was at the meeting of the Board

Report from the Chapter President

of Governors when the motion not to have the Chapter's fall meeting was passed. In retrospect, we probably should have formulated an addition or alternative to that motion in that with no fall meeting, the Chapter operates in the "virtual" mode for a year. Maybe we ought to debate the issue of the fall meeting either by e-mail or at the midwinter meeting or at the annual meeting.

I think that the SNM and the Chapter have debated quite extensively the issue of the legal relationship between the SNM and the Chapter. With the new resolutions passed at the annual meeting, which are available to any Chapter member (e-mail to Ms. Renae Henkin), we now will be in better grounds to employ the advantages and avoid the disadvantages of the bond between the SNM and the Chapter. I personally feel that the motions that were adopted in St. Louis relating to this topic have left us in a better position than before. » p 9



Jesus A. Bianco, MD

This year has been eventful around the Chapter and the national organization. At the annual meeting in St. Louis, more focus was placed on defining the relationship between the chapters and SNM, Inc. It was reaffirmed that the chapters

Report from the Technologist Section President

are and should remain separate and legal entities from the national organization. In keeping with this idea, the CCSNM-TS is taking steps to properly align ourselves with CCSNM, Inc., and SNM, Inc.; likewise, the national organization is assessing the SNM bylaws for changes necessary to reflect the

independent status of affiliate chapters. The SNM-TS Chapter President's Committee also met in St. Louis. Discussion ranged from concerns about declining membership to brainstorming about how to improve services and information important to our profession. Items discussed in some detail included student recruitment, the focus of the Task Force on Chapters, and the national licensure bill for medical imaging professionals. » p 9



Jennifer L. Bryniarski, CNMT

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Alliance for Quality Medical Imaging is Formed and Proposes Federal Minimum Standards for Technologists

Sue Weiss, CNMT, FSNMTS, The Children's Memorial Medical Center, Chicago, IL

A coalition of groups representing medical imaging and radiation therapy professionals has formed to pursue federal minimum standards for the provision of safe, high-quality radiologic care. Accurate radiation therapy procedures and competent, compassionate patient care provided by educated professionals are values espoused by the group. The Alliance provides its members with a forum to identify, investigate, and take action on the issues that affect the professionals they represent. Each member organization is strengthened through the power of the Alliance's unified action.

The Alliance for Quality Medical Imaging and Radiation Therapy is a coalition of health care organizations dedicated to the provision of safe, high-quality radiologic care. They believe the personnel who perform medical imaging examinations and plan and deliver radiation therapy treatments should be required to demonstrate competence in their area of practice. Competency can be demonstrated through graduation from an accredited educational program, certification by a national examining organization, or licensure by the state.

The disciplines and specialties represented by the Alliance include radiography, nuclear medicine, magnetic resonance imaging, computed tomography, sonography, mammography, radiation therapy, and medical dosimetry. In addition, they represent managers, educators, and researchers in the radiologic sciences.

The Alliance's goals are three. One is to ensure the quality of patient care by pursuing standards for the certification and education of medical imaging and radiation therapy professionals. The second is to educate patients about medical imaging and radiation therapy procedures and the personnel who perform them. The third is to encourage lawmakers at the state and federal level to recognize the vital role that qualified per-

sonnel have in the safe, accurate delivery of radiologic procedures and the provision of quality patient care.

One method of achieving these goals is through the establishment of federal minimum standards for personnel who perform medical imaging examinations and radiation therapy procedures. In 1981, Congress passed the Consumer-Patient Radiation Health and Safety Act, providing the states with standards for the certification and education of radiologic personnel and a model licensure bill. Compliance with the Act, however, was made voluntary. As a result, only 35 states have implemented licensure laws regulating radiologic technologists and radiation therapists, and only 24 states license nuclear medicine technologists.

To ensure patient safety and exam quality, the Alliance is attempting to introduce federal legislation that will require states to comply with the Consumer-Patient Radiation Health and Safety Act or risk losing the opportunity to participate in Medicaid waiver programs. Also supporting this legislative effort are the Conference of Radiation Control Program Directors, the Association of Vascular and Interventional Radiographers, the Society for Radiation Oncology Administrators, Help Hospitalized Veterans, Help Disabled War Veterans, and the Cancer Research Foundation of America.

Recognizing that future success in the legislative arena will depend upon collaboration with other organizations dedicated to quality radiologic care, in July 1998 the ASRT and the Society of Nuclear Medicine-Technologist Section founded the Alliance for Quality Medical Imaging and Radiation Therapy. Membership in the Alliance is open to any organization in medical imaging or radiation therapy that shares the goal of ensuring quality patient care through the establishment of minimum personnel criteria.

The Alliance provides professional associations in the radiologic sciences with a forum to identify and address issues of common interest. More importantly, creation of the Alliance sends a message to the public and to lawmakers that the professional associations representing medical imaging and radiation therapy personnel are united and are ready to act on the beliefs they value.

The Alliance will continue to pursue the establishment of federal minimum standards for radiologic personnel. During the 106th Congress, it plans to introduce a bill in Congress that would add an enforcement mechanism to the Consumer-Patient Radiation Health and Safety Act of 1981. In addition, the Alliance will work at the state level to urge local legislators to draft licensure laws that adopt the standards provided by the federal government.

The Alliance for Quality Medical Imaging and Radiation Therapy supports the establishment of minimum standards by the federal government for personnel who perform medical imaging exams and deliver radiation therapy treatments. By ensuring a minimum level of education, knowledge, and skill for radiologic personnel, federal minimum standards will

- ❖ Ensure that quality information is presented for diagnosis and that quality radiation therapy treatments are delivered, leading to accurate diagnosis, treatment, and cure.

- ❖ Reduce health care costs by lowering the number of examinations that must be repeated due to improper positioning or poor technique. Repeated radiologic examinations cost the U.S. health care system millions of dollars annually.

- ❖ Improve the safety of radiologic procedures. Administered properly, radiation is an invaluable tool in the diagnosis, treatment, and management of disease. But most radiologic procedures also carry a potential health risk, and radiation can be harmful if misadministered.

- ❖ Offer a method for radiologic technologists to demonstrate continued competency in their profession.
- ❖ Reflect the professional nature of radiologic technologists.
- ❖ Demonstrate the radiologic technologist's ability to provide the highest level of patient care.

Founding Members of the Alliance

- American Society of Radiologic Technologists
- Society of Nuclear Medicine—Technologist Section

Alliance Charter Members

- American Association of Physicists in Medicine
- American College of Medical Physics
- American Registry of Radiologic Technologists
- Association of Educators in Radiologic Sciences
- Association of Vascular and Interventional Radiographers
- Joint Review Committee on Education in Nuclear Medicine Technology
- Joint Review Committee on Education in Radiologic Technology
- Nuclear Medicine Technology Certification Board
- Section for Magnetic Resonance Technologists of ISMRM
- Society for Radiation Oncology Administrators

SNM-TS Joins MIRODA Alliance

Sue Weiss, CNMT, FSNM-TS, The Children's Memorial Medical Center, Chicago, IL

SNM-TS has agreed to participate in the Medical Imaging and Radiation Oncology Data Alliance. MIRODA is a coalition of eight accreditation, certification, and professional organizations in the radiologic sciences. The Alliance was established in 1998 to create a central source of information about the men and women who work in medical imaging and radiation oncology. MIRODA's mission is to make it faster and easier for researchers to access the information they need about radiologic science practitioners. The goals of MIRODA are to

- ❖ Define the universe of the profession to include demographic profiles of the professionals and professions within the community.
- ❖ Correlate the relationship of education, certification, years of practice, and career paths.
- ❖ Identify practice trends and patterns such as multiskilling, new technologies, licensure mandates, practice accreditation, scopes, and standards of practice.
- ❖ Collect information for research.
- ❖ Distribute and display data in a single resource.

The data will be available to researchers sometime next spring. A research proposal will be required as an application to use the database. Database searches will be provided by a MIRODA-approved third party to ensure confidentiality of individual data. A summary of the research findings will be submitted to MIRODA for its own use and publication for the community. Watch for details later this year.

The organizations participating in MIRODA are the American Registry of Radiologic Technologists (ARRT), American Society of Radiologic Technologists (ASRT), Association of Educators in Radiological Sciences (AERS), Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), Joint Review Committee on Education in Radiologic Technology (JRCERT), Medical Dosimetrist Certification Board (MDCB), Nuclear Medicine Technology Certification Board (NMTCB), and Society of Nuclear Medicine—Technologist Section (SNM-TS).

Find out more about MIRODA and SNM-TS participation in the organization by visiting MIRODA's website at <http://www.miroda.org>.

Future Meeting—2002

Innovations in Nuclear Medicine Imaging, Therapy, and Instrumentation

We already have made significant plans for our spring meeting in the year 2002 and more details will be given on the website and in the next newsletter.

Proposed Location: Northwestern University, Chicago, IL

Dates: April 11–14, 2002

Program Chairs: *Mark Groch, Ph.D.* (312) 926-4506, DOCNUC@aol.com
Monica Geyer, CNMT (312) 926-0422, mgeyer@nmh.org

Topics:

- Oncology—Diagnostic and Therapeutic
- Positron Emission Tomography
- Future Advances in Nuclear Medicine

Editors' Desk



Michael K. O'Connor, Ph.D.

This is our first year with no scientific meeting in the fall. While we had another very successful series of roadshows, these do not serve to update members on activities within the chapter. Hence we have increased the number of issues of the newsletter to three in order to keep people up to date with what is happening. One issue that is looming large on our horizon is finance. In order to run a chapter like ours, we require a minimum income in order

to pay our executive officer and meet our operation expenses. At present our only sources of income are our Spring meeting and our Roadshows. This year our expenses exceeded our income ! The best way to turn this around is for members to support the chapter meetings. If members decide not to attend the chapter meetings then it begs the question - what are we here for and what purpose do we serve. As the largest

chapter in the SNM we can draw on an enormous range of talented people to provide timely up-to-date talks on almost any aspect of nuclear medicine. We are willing to change the format, location, times if it will help people get to the meetings. The one thing we cannot do is fight apathy. If people have no interest in their profession and make no effort to keep up-to-date with current developments, then the end result will be the demise of chapters such as ours. Not only do people lose the educational aspect that the chapters offer, but also the professional component that helps fight the battles when other groups lay claim to our practice areas. It's your life - think about it !!!



Sue Weiss, CNMT, FSNMTS

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COMMENTARY

Notes from the Society of Nuclear Medicine Annual Meeting, St. Louis

Bob Zimmermann, Ph.D., Joint Program in Nuclear Medicine, Harvard Medical School
Brigham & Women's Hospital, Department of Radiology, Boston, MA

Editor's note: *For the last 5 years, Bob Zimmerman has written an informative review of his own personal experiences at the SNM Annual Meetings. As a medical physicist, Bob's reviews have focused primarily on the instrumentation and technical aspects of the meetings. To see his original report complete with web links, check out the Harvard Medical School web page at <http://www.med.harvard.edu/JPNM/physics/>.*

St. Louis is a nice place to have a meeting, if you can adjust to the fact that this is not quite a big league city. The dearth of hotels in the downtown area is very surprising. Always reluctant to use the high-priced convention hotels, my search for a suitable place for my wife and me to stay was turning up only hotels in very undesirable locations until I thought: bed and breakfast! A little Internet searching turned up three promising candidates. We finally settled on one a short walk from Union Station and the train/subway into downtown St. Louis. That's right, St. Louis now has a subway and it is clean, reliable and pleasurable to take. And it easily connects to Forest Park—the Museum Center of St. Louis. The weather in St. Louis is known to be very warm and humid in June, but this year we were blessed with extremely pleasant weather, making the daily walk from Lafayette Square (the

location of our bed and breakfast) and Union Station very pleasant.

The bed and breakfast, Lehmann House, turned out even better than expected as the Lafayette Square association was holding their annual house and garden weekend—perfect for my wife to enjoy until I could get free of some meetings.

It was hard for me to appreciate why the meeting now starts on a Sunday, moving the seminars to Saturday and committee meetings to Friday. I suppose someone liked it, but I have not met that person, yet.

The first order of my business was to sniff around at the Friday evening Board of Directors meeting to see what was going to happen regarding a controversial “strategic alliance” that the SNM and GE announced in May. Apparently this was not important enough to make it onto the Board of Directors agenda. Did you know that the Board meets in private at a posh dinner meeting?

So, I figure, all the action must be happening at the House of Delegates meeting on Saturday. Better be there. Friends who are members of the House told me that there had been no items in their premeeting packet indicating this alliance business was to be discussed. Sure enough, it was NOT on the agenda. But in the new business section of the meeting, Michael O'Connor put it on the floor and a 45-minute discus-

sion ensued. There was general agreement that the Board had erred in making the alliance with GE and GE had exploited the alliance. There was less agreement on what to do about it. The root of the problem seems to lie in a vote taken at last year's House of Delegates meeting wherein the House instructed the Board to "make alliances." The House has now decided that it should formulate guidelines or make a "how to make alliances" kit for the Board to follow. The House also asked the Board to revoke the existing alliance with GE until the alliance kit could be completed. This could happen as early as the midwinter meeting. It would behoove all chapters and anyone else who worries about the SNM selling out to big, powerful, dominant companies to keep an eye out on this process.

A poster in the GE booth showed how GE will exploit any special relationship they think that they might enjoy with SNM. All this politicking was a distraction from the meeting and, more importantly, on Friday and Saturday, a distraction from the city of St. Louis. We did get to partake of the Lafayette Park festival and Forest Park: the Missouri History Museum, The Jewel Box (a small flower conservatory), and the St. Louis Zoo (certainly one of the better U.S. zoos).

Sunday was the start of the scientific sessions and the equipment exhibition, the real meat of the SNM for most people. The World Federation of Nuclear Med. and Biology meeting will be held jointly with ALASBIMN September 29–October 4, 2002, in Santiago, Chile. It promises to be a great meeting. This group met in St. Louis to coordinate with the international group that is assisting with the meeting.

SUNDAY, JUNE 4

My notes on the scientific sessions will be significantly shortened from previous write-ups for two reasons: I lost my notes about the third day of the meeting and my wife sort of pulled me away from a number of sessions I otherwise might have attended. So I am mostly going from pure memory, a very dangerous thing for me.

The opening plenary session was memorable mostly because two basic scientists were honored. Mathew Thakur received the Georg de Hevesy award for his many contributions to radiochemistry and radiopharmaceutical developments. Ronald Jaszczak was awarded the Paul C. Abersold award for contributions to basic science applications.

Incidentally, the SNM included in our registration packet a FREE CD-ROM with searchable copies of all abstracts presented at the meeting. I like it!

SESSION 10: INSTRUMENTATION & DATA ANALYSIS TRACK: COMPUTER & INSTRUMENTATION YOUNG INVESTIGATOR SYMPOSIUM

64. PERFORMANCE CHARACTERISTICS AND EVALUATION OF THE TIERPET, A HIGH RESOLUTION ANIMAL PET SYSTEM.

S. Weber*, A. Bauer, H. R. Herzog, F. Kehren, K. Ziemons, H. H. Coenen, K. Zilles, H. Halling, Forschungszentrum Jülich, Jülich, Germany.

There was certainly a lot of interest at this meeting in imaging of small animals. The Jülich TierPET was a good example of this. The group reported on NEMA-like measurements on their YAP crystal scanner. Resolution of 2-2.3 mm with scatter fractions of 12 to 15.4% were reported. (http://ime-web.ime.kfa-juelich.de/ime_www/pet/tierPET/engl.html)

65. INPUT FUNCTION DERIVATION FROM BRAIN H215O PET IMAGE USING INDEPENDENT COMPONENT ANALYSIS.

J. Y. Ahn*, J. S. Lee, S. K. Kim, K. W. Kang, D. S. Lee, J. K. Chung, S. A. Shin, M. C. Lee, College of Medicine, Seoul National Univ. Seoul, South Korea; College of Natural Sci. Ewha Womans Univ. Seoul, South Korea.

I was pretty lost on this paper, not being at all familiar with ICA—Independent Component Analysis. The object is to get the input function on H₂¹⁵O brain perfusion studies. They tested it on 5 dogs and feel that it is better than factor analysis for this purpose.

66. ESTIMATING THE UNCERTAINTY IN THE LOCATION OF A LOCAL MAXIMUM IN A PET IMAGE.

L. D. Nickerson*, C. C. Martin, J. L. Lancaster, J. H. Gao, P. T. Fox, University of Texas Health Science Center, San Antonio, TX.

Based on the derivation of Huesman for ROI variance calculations and using only sinogram data the method presented here allows the variance of the maximum pixel location to be calculated. Agreement with directly measured variance on pixel location was excellent.

67. IMPROVED QUANTITATIVE IMAGING FOR 111In-PROSTASCINT USING CT/SPECT AND DUAL-ENERGY RECONSTRUCTION.

K. H. Wong*, H. R. Tang, A. J. Da Silva, M. C. Wu, K. Iwata, B. H. Hasegawa, University of California at San Francisco, San Francisco, CA.

11% accuracy was achieved in a phantom. A single "effective attenuation map" was within 10% of the dual map method and much faster to compute.

68. AN INNOVATIVE HIGH EFFICIENCY AND HIGH RESOLUTION PROBE FOR PROSTATE IMAGING.

L. Zhang*, N. H. Clinthorne, S. J. Wilderman, C. Hua, T. J. Kragh, W. L. Rogers, University of Michigan, Ann Arbor, MI.

This was a simulated study based on Compton camera technology. One part of the camera is in the form of a transrectal probe and used Si detector 1x4x1 cm³ with 1 mm crystals. The other detector(s) is a dual 40x40x2 cm³ planar detectors with. Phantom results were encouraging over 140-511 keV. Resolution was about 2.5 mm.

69. REGIONAL LEFT VENTRICULAR FUNCTION AND PERFUSION FROM GATED SPECT 201TI SCANS: A 4D MODEL USING SPHERICAL HARMONICS.

P. M. Mansour*, M. F. Smith, V. Dilsizian, S. L. Bacharach, The National Institutes of Health, Bethesda, MD.

A simulation study. Authors attempted to draw as much regional wall thickening, perfusion, and maximum regional width as possible from noisy, low-resolution data. Their 4D model reduces variation in values compared to 2D model without hurting accuracy.

70. LESION DETECTABILITY OF MAP RECONSTRUCTION USING COMPUTER OBSERVER: A THEORETICAL STUDY.

J. Qi*, R. H. Huesman, Lawrence Berkeley National Lab, Berkeley, CA.

Theoretical results for PET systems indicate that detectability is better for MAP compared to FBP because of noise modeling. Lesion detectability in PET also profits from attenuation correction.

SESSIONS 11 AND 12 : INSTRUMENTATION & DATA ANALYSIS TRACK: SMALL ANIMAL IMAGING AND INSTRUMENTATION IN EMISSION TOMOGRAPHY

This promised to be a very interesting session but I missed the whole afternoon because The American Board of Science in Nuclear Medicine (<http://www.absnm.org/>) held its meeting in direct competition with the scientific program on Sunday afternoon, one of the many indications that not everybody had adjusted to the change in the starting day for the meeting. The ABSNM offers certification to physicists, chemists, and other scientists in nuclear medicine. I have been serving on the board for two terms and have now rotated off, so there will be a new representative from the Computer and Instrumentation Council. One less chore at the next SNM.

MONDAY, JUNE 5

The Siemens Physicist Breakfast was held from 6:30–8:00 am. It was pretty good as these things go. Vilim Simcic told us about Duet, the next generation of coincidence camera based on the e.cam. It has 1" thick Bicron StarBrite crystals, higher counting rates, and better performance than cameras with thinner detectors. To be released soon at a store near you. Mark Groch showed a few measurements he was able to take at Northwestern before the meeting. Conclusion was that it is a pretty good coincidence camera.

The always-entertaining, ever-optimistic Ron Nutt convinced us that the best use of the limited but ever-increasing supply of LSO was to make high-end PET scanners. Gone is the idea of completing and bringing to market a LSO/NaI scanner for hybrid PET and SPECT applications. And YSO does not rate a mention. The syngo computer platform that cuts across all Siemens medical imaging platforms was expounded on by some suits from Germany. e.soft is the nuclear medi-

cine contribution to this corporate effort. Platform is NT all the way. Cardiac software is the first clinical e.soft application with more to follow. I wish it was UNIX or even Linux. Dennis Nelson described the software package he had developed for image fusion MIM and MIM2. Definitely worth a try. See the website: <http://www.nuclear.uhrad.com/software.htm>.

The Academic Council meeting took up my lunch hour. There is still great concern about the quality and number of nuclear medicine residents coming into programs. The number of training programs is still dropping. Mike Graham is starting an organization for nuclear medicine program directors. The Academic Council has a web page now: http://www.snm.org/about/new_councils1.html. Note the links to our Harvard Passport project. Comments are welcome. There was a PACS presentation in the continuing ed program. You can catch the essence at: <http://www.med.harvard.edu/JPNM/Lectures/SNM00/PACS.html>. The President's Reception was held at the Missouri Athletic Club and was very nice. Those Missouri athletes have a great place.

TUESDAY, JUNE 6

ADAC Physicist breakfast was 7:00–8:00 am but ran over. It was a very exciting presentation, especially the one by Roger Lecomte who described his recent work with LSO and GSO. GSO has certainly captured ADAC's thoughts recently and they are building prototypes (with Penn). Lecomte's presentation included a fascinating discussion of the light centers in GSO and the various times to produce the scintillation and how dependent it is on material effects. You can find more at: <http://www.usherb.ca/bleu/anglais/industrial/biotechnology/lecomte.html>. Joel Karp from Penn told us about some of the simulation results and prototype construction. It certainly looks promising. It's hard to get a sense of the time scale to start production but it looks like clinical work for the masses will be 2–3 years away.

WEDNESDAY, JUNE 7

Missed the Wagner Highlights Lecture but the last time I checked it was available by streaming video from the SNM website: www.snm.org. I have not looked at it but if it is like most streaming video, I'll be hard put to watch it all.

POSTERS

802. OPTIMIZATION OF CLINICAL PET-FDG ACQUISITIONS ON THE ADAC C-PET SCANNER: A STUDY BASED ON A WHOLE-BODY PHANTOM AND PATIENTS DATA.

O. de Dreuille*, C. Lartzien, H. Foehrenbach, P. Maszelin, D. Brasse, J. F. Gaillard, HIA Val de Grace, Paris, France; Service Hospitalier Frederic Joliot-Commisariat à L'Energie Atomique (CEA), Orsay, France.

Authors found that max NEC was 12.8 kcps in a realistic phantom. Injected should be in the range 1.4–3.4 MBq/kg and images taken at 90 min.

803. OPTIMIZING GEOMETRY FOR HYBRID PET: DUAL-, TRIPLE-, AND FOUR-HEAD CAMERAS.

R. Z. Stodilka*, S. J. Glick, Univ. Massachusetts Med. Sch., Worcester, MA.

Sensitivity was studied using computer simulations of up to 4 heads. No collimation was used. 4 heads were the best, of course, but 3 heads approached the sensitivity of 4 heads with certain radial positions.

806. DIGIRAD 2020TC SEGMENTED CAMERA—CALIBRATION METHODS.

N. E. Hartsough*, R. Yao, B. Pi, Digirad Corporation, San Diego, CA.

The calibration method for uniformity and energy were described in this poster. More at <http://www.digirad.com/default.htm>.

807. PERFORMANCE AND CLINICAL TRIALS OF A MULTI-PINHOLE NONROTATIONAL CARDIAC SPECT SYSTEM.

D. L. Kirch*, J. E. Koss, P. P. Steele, T. K. Johnson, Nuclear Cardiology Research, Englewood, CO; Univ. of Colorado Hlth. Sci. Center, Denver, CO.

Three seven-pinhole cameras surround the patient. No rotation is required. Energy information is acquired for correction of simultaneous Tc/Tl imaging. Provides an inexpensive SPECT system, say the authors.

808. ACCURACY OF ¹³¹I TUMOR QUANTIFICATION IN RADIOIMMUNOTHERAPY (RIT) USING SPECT IMAGING WITH AN ULTRA HIGH ENERGY COLLIMATOR.

Y. K. Dewaraja*, M. Ljungberg, K. F. Koral, University of Michigan, Ann Arbor, MI; University of Lund, Lund, Sweden. The authors found the UHE collimator much better for quantitation.

809. USE OF A PRE-STUDY INFORMATION DENSITY SCAN TO IMPROVE TRANSMISSION MAP ACQUISITION FOR ATTENUATION CORRECTION.

L. Shao*, J. Ye, M. K. Durbin, ADAC Laboratories, Milpitas, CA.

Authors found that statistics could be optimized by doing a prescan to determine heart count rates then adjusting emission and transmission scans accordingly.

810. PERFORMANCE EVALUATION OF THREE DIFFERENT SCINTILLATOR ARRAYS FOR BREAST IMAGING WITH POSITION SENSITIVE PMT.

J. H. Kim*, Y. Choi, K. C. Im, S. K. Woo, Y. S. Choe, K.-H. Lee, S. E. Kim, B.-T. Kim, Samsung Med. Ctr., Sungkyunkwan Univ., Seoul, South Korea.

The conclusions were that CsI(Tl) was better than NaI(Tl) and CsI(Na). This is different than the published abstract where NaI was favored.

811. CARDIAC IMAGING WITH GAMMA CAMERA COINCIDENCE (HYBRID) PET.

M. F. Smith*, B. P. Brown, D. R. Driver, V. Dilsizian, F. V. Schraml, J. M. Carson, S. L. Bacharach, NIH & National Naval Medical Center, Bethesda, MD.

Coincidence camera was not very accurate in absolute quantitation due to dead time correction inadequacies. Relative quantitation in the heart was OK.

818. RELATIONSHIP BETWEEN CAMERA PHYSICAL CHARACTERISTICS AND CLINICAL PERFORMANCE OF PATIENT STUDIES: AN EVALUATION OF TWO DEDICATED PET SYSTEMS.

F. Benard*, R. Smith, A. A. Alavi, J. Verreault, R. Hustinx, A. Matthies, Centre Univ. de Sante de l'Estrie, Sherbrooke, PQ, Canada; Univ. of Pennsylvania, Philadelphia, PA; Centre Hosp. Univ. de Liege, Liège, Belgium.

The authors were genuinely surprised that C-PET compared very favorably in clinical imaging tests compared to a 2D HR+ high-end machine. They say they would get C-PET in spite of the better numbers for the more expensive machine. Was this clinical test capable of discriminating between machines? I suspect not.

819. EVALUATION OF SPECT IMAGING SYSTEMS BASED ON ACTIVITY ESTIMATION IN SMALL BRAIN STRUCTURES.

H. Jadvar*, S. C. Moore, M. F. Kijewski, S. Mueller, A. Bonab, R. E. Zimmerman, A. J. Fischman, University of Southern California, Los Angeles, CA; Harvard Medical School, Boston, MA.

It was found that dual-head fan-beam collimators easily beat out dual-HR collimators and were slightly superior to the Ceraspect dedicated brain imager.

823. DESIGN OF A PINHOLE COLLIMATOR FOR HIGH RESOLUTION ^{99m}Tc IMAGING.

E. C. Frey*, B. A. Chalker, B. M. W. Tsui, Univ. North Carolina, Chapel Hill.

A Monte Carlo study that looked at optimizing the material and the shape of the pinhole. W and Au are best and a pinhole keel thickness of 0.5 mm was found to be optimum.

864. MULTIDIMENSIONAL ANALYSIS AND VISUALIZATION SOFTWARE FOR DYNAMIC SPECT.

N. Roeber*, T. Moeller, A. M. Celler, T. Strothotte, T. Farncombe, Vancouver Hospital and Health Sciences Centre, Vancouver, BC, Canada; Simon Fraser Univ., Burnaby, BC, Canada; Univ. of Magdeburg, Magdeburg, Germany. Tools for dynamic SPECT were created in IDL.

869. QUALITY CONTROL FOR SPECT ATTENUATION CORRECTION.

A. M. Celler*, L. Hook, D. W. Currie, R. D. Steuart, D. M. Lyster, Vancouver Hospital and Health Sciences Centre, Vancouver, BC, Canada.

This looked useful. I was sorry I could not take it home.

870. THE IMPORTANCE OF THE TRANSMISSION RECONSTRUCTION ALGORITHM IN ATTENUATION-CORRECTED TOMOGRAPHY: A PHANTOM STUDY.

E. P. Ficaro*, J. A. Fessler, University of Michigan, Ann Arbor, MI.

In a phantom study it was found that an iterative penalized likelihood reconstruction gave lower transmission crosstalk ratios over the 6-month life of the source than did FBP reconstruction.

872. THE INFLUENCE OF SCATTER COMPENSATION ON ATTENUATION-COMPENSATED ^{99m}Tc SESTAMIBI SPECT CARDIAC SLICES.

P. H. Pretorius*, M. V. Narayanan, S. T. Dahlberg, J. A. Leppo, M. A. King, University of Massachusetts Medical School, Worcester, MA.

Scatter correction resulted in improved uniformity over the heart.

878. EVALUATION OF FOURIER REBINNING METHOD FOR DUAL-HEAD HYBRID PET CAMERA.

J. Ye*, E. Gualtieri, L. Shao, D. Coles, B. Khanvali, J. Koster, ADAC Laboratories, Milpitas, CA.

Fourier rebinning was good for contrast and resolution and reduces object shape distortion. When will it be clinical?

885. INFLUENCE OF THE RECONSTRUCTION TECHNIQUE (OSEM AND FBP) ON THE MAGNITUDE OF RING ARTIFACTS IN SPECT.

L. K. Leong*, R. L. Kruger, M. K. O'Connor, Mayo Clinic, Rochester, MN.

It still needs the same good uniformity. The algorithm does not make any difference.

886. FULLY 3D BINNING AND FOURIER-SPACE REBINNING OF PET DATA ACQUIRED WITH ROTATING PLANAR DETECTORS.

D. J. Kadrmas*, E. V. Di Bella, University of Utah, Salt Lake City, UT.

I suspect this was an important paper. Authors found that angular bin size can cause unusual sensitivity functions. They went on to implement a version of FORE more suitable to large-area coincidence detectors.

894. THE APPLICATION OF DYNAMIC SPECT IMAGING (DSPECT) TO RENAL IMAGING.

T. H. Farncombe*, A. Celler, R. Harrop, D. Lyster, D. Noll, J. Maeght, Vancouver General Hospital, Vancouver, BC, Canada; Simon Fraser University, Burnaby, BC, Canada; Universite Paul Sabatier, Toulouse, France.

Regional time activity curves were obtained from SPECT study. Sounds like it could be useful.

896. COMPARISON OF TWO CORRECTION METHODS FOR ¹⁸F FDG COLLIMATED SPECT IMAGING.

K. Knešaurek*, Mount Sinai Medical Center, New York, NY. Restoration (resolution recovery?) was found to significantly improve the F-18 images. Scatter correction was little help.

1052. RADIOPHARMACEUTICAL PACKAGE INSERT DOSIMETRY TABLES: JUST HOW ACCURATE ARE THE DATA?

J. C. Hung*, K. L. Classic, T. L. Mays, Mayo Clinic, Rochester, MN.

Package inserts are rarely updated with refined dose calculations as new information becomes available. It is off by as much as a factor of 2.

816. LOCALIZATION OF RECURRENT COLORECTAL CANCER USING FDG: CORRELATION BETWEEN PET AND INTRAOPERATIVE BETA AND GAMMA PROBES.

E. E. Zervos*, L. R. DePalatis, D. Desai, D. Soble, J. Frye, E. W. Martin, Ohio State Univ., Wendt-Bristol Radiology/PET, Columbus, OH.

Both types of probes worked about the same.

BOOKS

Sorenson and Phelps's 2nd edition of *Physics in Nuclear Medicine* remains my favorite book for resident teaching. I understand there will be a 3rd edition soon. Meanwhile Gopal Saha has a 2nd edition of *Physics and Radiobiology of Nuclear Medicine* on its way to bookstores in October. It may be worth a look.

TECHNICAL EXHIBITORS

Bicron: Bicron StarBrite crystals are a slotted crystal specially made for each application. Siemens is using them in the new Duet coincidence camera. The slots control light distribution in the thick crystals and help maintain spatial resolution across the energy spectrum. Bicron was not handing out technical data on this.

Digirad: (www.digirad.com): Digirad has dropped the CZT detector for the time being. It's too expensive, I guess. Their current camera is a small CsI(Tl) matrix with one-on-one Si photodiodes, about 3-mm intrinsic resolution with 15% energy resolution, and 20-cm square FOV. It may have some utility. Is SPECT in a spinning chair for one of them?

GE Medical Systems: GE featured Hawkeye, the x-ray tube on a SPECT gantry to do registered CT and SPECT. They also featured a number of strategic alliances, one of which was with the SNM. Hmmm. It sounds to me like they are exploiting the SNM to the detriment of other vendors.

Siemens Medical Systems: For Duet, see above. They were taking orders for the CT/PET system. It consists of a HR with a spiral CT with gantries on a common axis. It caused a lot

President's Report (cont.)

¶1 In regard to a website that I promised to consider during my term, discussed in my short talk in St. Louis, I think that we must wait and continue sampling the experts in this area and survey the needs of the membership. I do not feel that we have at this time the elements needed to structure a website that is comprehensive, representative, and uniquely educational. A website has to be planned carefully. There has to be a clear idea of the best way to achieve the purposes of the site to get the viewership wanting relevant educational information of high quality and meeting specific needs. Image downloading, simple menus, and handouts should be tailored for all constituencies: physicians, technologists, physicists, radio chemists, administrators, and other health professionals.

As your president luckily organizing the Itasca, Illinois, meeting with Ms. Liza Hazen and Ms. Renae Henkin, it is fair to say that I am very pleased with the program for the spring meeting. Certainly, in keeping with the growth of Nuclear Medicine, we have allotted PET oncology and cardiovascular nuclear medicine heavy representation at the meeting.

Likely, by the time of the meeting, the various aspects of the I-131 and the Y-90 anti-B cell monoclonal antibody therapy for patients with non-Hodgkin's lymphoma will be the standard of care, and at Itasca we have the true believers discussing the particulars of immunotherapy. QC of SPECT imaging, marketing basics, politics of reimbursement, and the newest nuclear medicine instrumentation complete the final touches of the pouring of the frosting on the cake for the formal sessions at the Itasca meeting. We also look forward to one or perhaps two Track 2 sessions for the members of the "dedicated group" and for financially supporting the Chapter.

Finally, let me ask for the participation of the whole membership to help us increase the attendance at the spring meeting so that the overall mission of the Chapter is realized with solid financial status.

Technologist Section President's Report (cont.)

¶1 Representative Lazio, from New York, has agreed to introduce the national licensure bill—Consumer Assurance of Radiologic Excellence (CARE), in the House. Fourteen members of the House of Representatives have agreed to cosponsor the CARE bill. Although the introduction of the bill did not take place prior to the July 4th recess, plans are still set to introduce it when Congress reconvenes. The purpose of the bill is to establish nationwide minimum standards for competency of radiologic personnel. The SNM-TS would like to encourage everyone to contact their representative and urge them to support the CARE Act by signing as cosponsors and voting for the bill.

Great news! The ARRT board has agreed to extend MRI eligibility requirements to include NMTCB certification. Applicants may now be registered in radiography or radiation therapy by the ARRT, or in nuclear medicine technology by the ARRT or NMTCB, and must maintain registration in radiography, nuclear medicine technology, or radiation therapy at all times to be eligible for certification and registration in MRI. The option is currently available from 1/1/2001 to 12/31/2003. The board will re-evaluate whether to keep this option as the end date approaches.

The time has come to start thinking about spring as well. The CCSNM-TS is currently accepting nominations for its executive officers and bylaws committee. I would like to encourage those interested to consider running on the ballot. This is a great way to become more involved in the Chapter and national organization. For more information, please contact Ridge Conant, Nominating Committee Chair, (216) 778-5453, or the CCSNM office at (630) 686-6187.

Mark your calendars and plan on attending the Central Chapter's Annual Spring Meeting on March 16–18, 2001 in Itasca, Illinois. "New Vistas in Nuclear Medicine" will feature the latest and greatest in nuclear medicine technology. Information about Chapter events is available on our website, www.ccsnm.org; also, the SNM website, www.snm.org, is a good resource for information regarding the national licensure bill, reimbursement issues, and upcoming meetings.

In closing, I would like to wish everyone a safe and happy holiday season! See you in the spring!

TECHNICAL EXHIBITORS—CONT.

of interest. It also featured the corporate computer platform syngo with nuclear medicine application e.soft.

SOFT Medical (www.softmedical.com): A new (to me) PACS vendor playing in the nuclear medicine field. It seems reasonably comprehensive. I did not see a user list.

Segami: This computer vendor had a lot of action, it seemed. In addition to selling direct, IS², Digirad, and GammaMedica (probes) were using this computer on their own systems.

Daxor (www.daxor.com): This is the first time I have seen this company at SNM. They make a system for blood volume determinations—pre-loaded syringe with I-131 albumin, small sample changer/counting system, and computer for rapid calculation.

Diagnostic Technologies (division of US Surgical Corp.): They were selling the Navigator GPS surgical probe for lymph node mapping. I wish there were NEMA specs for surgical probes.

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