SNM Board of Directors
September 29, 2007
1:00 – 6:00pm

Hyatt Regency
Reston, VA
Fall 2007 SNM Board of Directors Meeting

Finance Committee, Saturday, September 29, 2007 (8:00am - 12:00pm)
Board of Directors, Saturday, September 29, 2007 (1:00pm - 6:00pm)
Reston Hyatt Regency – Reston, VA

AGENDA

Lunch: 12:00 pm
Commencement: 1:00 pm

A. Welcome and Call to Order, Alexander J.B. McEwan, MD, President

1. Establishment of a Quorum, Richard B. Noto, MD, Secretary/Treasurer
2. Approval of Agenda and Standing Rules, Alexander J.B. McEwan, MD
   a. ACTION: Approval of Agenda
   b. ACTION: Approval of Standing Rules
3. Approval of Prior Meeting Minutes, Richard B. Noto, MD
   a. ACTION: Approval of May 31, 2007 Minutes
   b. Minutes of the May 31, 2007 Board of Directors Meeting
   c. ACTION: Approval June 2, 2007 Minutes
   d. Minutes of the June 1, 2007 Board of Directors Meeting
   e. ACTION: Approval of July 13, 2007 Conference Call Minutes
   f. Minutes of the July 13, 2007 Board of Directors Meeting
   g. ACTION: Approval August 27, 2007 Minutes
   h. Minutes of the August 27, 2007 Board of Directors Meeting

4. Conflict of Interest Statement

B. President’s Report

1. Report from the President, Alexander J.B. McEwan, MD

C. SNMTS President’s Report

1. Report from the SNMTS President, David Gilmore, BS, CNMT, RT(R)(N)

D. Secretary/Treasurer’s Report

1. Report from the Secretary/Treasurer, Richard B. Noto, MD

E. ERF Report

1. Updated on ERF, Peter T. Kirchner, MD

F. Agenda Topics

1. FY 2007-2008 Budget, Paul Murphy, PhD, Finance Committee Chair
   a. ACTION: Approval of FY 2007-2008 Budget
b. **ACTION:** Approve Vince Pistilli, CFO and Mike Nelson, COO as authorized signatories on the Operating Account and Annual Meeting bank accounts at BB&T

2. NAS Report Study Showing Need to Restore Federal Nuclear Medicine Research Funding

3. IMT Discussion, *Peter Cempellin*

4. MWM and Annual Meeting Governance Schedule, *David Gilmore, MS, CNMT, NCT, RT(R)(N)*

5. Nuclear Medicine Residency Curriculum
   a. **ACTION:** Approval of Nuclear Medicine Residency Curriculum

6. American Medical Association (AMA)
   a. **ACTION:** Approve 5-year AMA Recertification

7. CME Mission Statement
   a. **ACTION:** Approval of CME Mission Statement.

8. Awards Task Force, *Robert W. Atcher, PhD*
   a. **ACTION:** Approve 2008 SNM Proposed Awards

9. Procedure Guidelines/Standards and Consensus Statements Published in the JNM

10. Awards Committee, *Mathew L. Thakur, PhD, Chair*
    a. **ACTION:** Approve 2008 Aebersold Award recipient

    a. **ACTION:** Approval of 2014 and 2015 Annual Meeting Site

12. Informational Items
    a. SNM Chosen “Most Influential” by *RT Image* Magazine
    b. CMSS – Need for Specialty Curricula Based on Core Competencies – White Paper

G. **New Business**

H. **Adjourn (6:00 pm)**

I. **Informational Reports**
   A. ACNP/SNM Joint Government Relations Committee
   B. Awards, Committee on
   C. Chapters, Committee on
   D. Continuing Education, Committee on
   E. Councils, Committee on
   F. Coding and Reimbursement Subcommittee
   G. Education, Committee on
   H. Ethics, Committee on
   I. Membership, Committee on
   J. MIRD Committee
   K. Nominations, Committee on
   L. Phantom Quality Assurance Committee
   M. Pharmacopoeia, Committee on
   N. Practice Standards Committee
   O. Procedure Guidelines, Committee on
P. Public Relations Committee
Q. Publications Committee
R. Radiopharmaceuticals, Committee on
S. Scientific Program Committee
T. Healthcare Practice, Committee on
U. Standard Validation Task Force
V. Young Professionals Committee
Welcome and Call to Order
Establishment of Quorum
Agenda and Standing Rules
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approval of Meeting Agenda

SUBMITTED BY: Alexander J. B. McEwan, MD, SNM President

PROPOSED RESOLUTION: Resolved, that the meeting agenda for the September 29, 2007 Board of Director’s Meeting be adopted.

FINANCIAL IMPACT: N/A

BACKGROUND: Robert’s Rules of Order (current issue) provide that it is customary to adapt an agenda for each session in organizations that meet less than quarterly. An Agenda requires a two-thirds vote (or unanimous consent) in order to be changed.

ACTION: ADOPTED ___ DEFEATED ___ OTHER ___
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approval of Board of Directors Standing Rules

SUBMITTED BY: Alexander J. B. McEwan, MD, SNM President

PROPOSED RESOLUTION: Resolved, that the standing rules of the Board of Directors stated below be adopted for this meeting:

- Raise hand to be recognized
- Those that have not yet spoken will get priority
- Limit discussion on any one topic to thirty (30) minutes unless voted on by the Board with majority vote approving to extend discussion.

FINANCIAL IMPACT: N/A

BACKGROUND: N/A

ACTION: ADOPTED ___ DEFEATED ___ OTHER ___

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Prior Meeting Minutes
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approval of May 31, 2007 Board of Director’s Minutes

SUBMITTED BY: Richard B. Noto, MD
Secretary/Treasurer

PROPOSED RESOLUTION: Resolved, that the minutes from the Board of Director’s Meeting of May 31, 2007 be adopted.

FINANCIAL IMPACT: N/A

BACKGROUND: N/A

SUPPORT MATERIAL: May 31, 2007, Board of Director’s Meeting Minutes.

ACTION: ADOPTED ___ DEFEATED ___ OTHER ___
SNM Members in Attendance:
Martin P. Sandler, MD; Alexander JB McEwan, MD; Robert W. Atcher, PhD, MBA; Terence Beven, MD; Peter S. Conti, MD, PhD; Michael M. Graham, MD, PhD; D. Scott Holbrook, BS, CNMT, PET, FSNMSTS; David Gilmore, CNMT, RT(R), RT(N); Mark Wallenmeyer, CNMT, RT(R), RT(N); Author J. Hall, CNMT, FSNMSTS, Frances K. Keech, MBA, RT(N), FSNMSTS; Dominique Delbeke, MD, PhD; George Zubal, MD; Warren R. Janowitz, MD, JD; Mathew L. Thakur, PhD; Leonie L. Gordon, MD; Paul H. Murphy, PhD; Conrad E. Nagle, Robert F. Carretta, MD, Gary L. Dillehay, MD; Frederic H. Fahey, DSc

SNM Staff in Attendance:
Virginia Pappas, CAE; Michael Nelson, CAE; Pandora C. Rivera, Victoria N. Wenzel, Rebecca Maxey, Susan Alexander, Naomi Lynn Barnes, Hugh Cannon, Marybeth Howlett, Joanna Spahr, Jane Day, Cecilia Noblett

Welcome and Call to Order:
With quorum established the SNM President, Martin P. Sandler, MD, called the meeting to order at 7:41pm and gave opening remarks, welcoming everyone.

Approval of the Robert Standing Rules:
A motion was made to approve the Standing Rules of the Board of Directors.

- Raise hand to be recognized.
- Those that have not yet spoken will get priority.
- Limit discussion on any one topic to thirty (30) minutes unless voted on by the Board with majority vote approving to extend discussion.

It was moved, seconded and voted to approve the Standing Rules of the Board of Directors.

Approval of the Agenda:
The agenda was reviewed.

It was moved, seconded and voted to approve the meeting agenda for the SNM Board of Directors meeting at the SNM 54th Annual Meeting on Thursday, May 31, 2007.
Approval of Meeting Minutes:
The minutes from the SNM Spring Board meeting on April 15, 2007 were reviewed.

It was moved, seconded and voted to approve the meeting minutes for the SNM Board of Directors meeting held April 15, 2007.

ORAL REPORTS
SNM President’s Report:
Dr. Sandler provided an overview of activities in the following topics:
- Government Relations and Outreach
- Education and Professional Development
- International Activities
- SNM Strategic Plan

Dr. Sandler ended his report by stating, “remember this “No member will be left behind”. He stated the had been productive and positive with strong leadership here on the board and in the corporate office.

Dr. Sandler introduced the new SNM Chief Finance Officer, Vincent Pistelli, CAE.

SNM Secretary/Treasurer’s Report:
Terence Beven, MD, gave the report of the Secretary/Treasurer which he stated that there has been no change in the projections since the April Board meeting.

Dr. Sandler introduced Michael M. Graham, MD, PhD as the newly elected SNM Vice President-Elect.

SNM President-Elect’s Report:
Alexander J.B. McEwan, MD gave the report of the President-Elect, which he stated he has focused on several areas including the Biomarkers Consortium, NIH discussions regarding the Clinical Trials, Standard Validation Task Force project and the Radioimmunotherapy program.

SNMTS President’s Report:
D. Scott Holbrook, BS, CNMT, PET, RT(R)(N) gave the report of the SNMTS President which he provided the BOD with an overview of the Scope of Practice and the BS Entry level issue. . It was stated that the Society would look into reducing the days allocated to the SNM Annual meeting as well as changing the NCOR meeting to start before the SNMTS Executive Board.

It was moved, seconded, and voted that the SNM and SNMTS incoming Presidents’ will discuss shortening the time spent at the annual meeting and come up with a formal plan to fix the schedule and report back to the SNM Board at the September BOD meeting.
**Education and Research Foundation:**
Frances K. Keech, MBA, RT(N), FSNMTS, provided the board with an overview and progress of the Education and Research Foundation. The board was also advised of a new consultant that will work with both SNM and ERF going forward.

**Discussion/Action Items**

**SNM Committee Appointments**
Dr. McEwan provided a brief update on the appointments and committee chairs/members for the upcoming year.

A motion was made to approve the SNM Appointments as for the Board Year 2007-2008 as documented in the committee member list.

*It was moved, seconded and voted to approve committee composition for the board year 2007-2008 as documented in the committee member list.*

**SNM Procedures**
Dr. McEwan provided the board with suggested changes to the SNM Procedures and requested board approval.

A motion was made that the SNM Board of Directors adopt the changes to the SNM Bylaws Procedures document (revised version September 2002); with suggested changes:

- Deletion of Committees: Commercial Affairs and Annual Meeting outlined in section “Committees of the Board of Directors” under 2: Number of Committees; remove “Policy and” in the committee name of HCPP (Health Care Policy and Practice).
- Add the following: the chairperson of the Committee on Awards shall be the immediate Past President under “Committee of the Board of Directors” under 3: Membership Composition of the committees of the Board of Directors.

A motion was made to divide the current motion.

*The motion moved, seconded and approved to divide the current motion on the table.*
*The current motion shall be divided as follows:*

1. Deletion of Committees: Commercial Affairs and Annual Meeting outlined in section “Committees of the Board of Directors” under 2: Number of Committees; remove “Policy and” in the committee name of HCPP (Health Care Policy and Practice).
2. Add the following: the chairperson of the Committee on Awards shall be the immediate Past President under “Committee of the Board of Directors” under 3: Membership Composition of the committees of the Board of Directors.
The original motion was divided and reintroduced as separate motions.

*A motion was made to recommend that the SNM Bylaws Committee delete the following committees from the SNM Bylaws Procedures: Commercial Affairs and Annual Meeting outlined in section “Committees of the Board of Directors” under 2: Number of Committees; remove “Policy and” in the committee name of HCPP (Health Care Policy and Practice).*

*The motion was moved, seconded and approved to recommend that the SNM Bylaws Committee remove Annual Meeting, Commercial Committee names, and changing the Committee on Health Care Policy and Practice to Committee on Health Care Practice on the Standing Committee list of the SNM Procedures document.*

A motion was made to add the following: the chairperson of the Committee on Awards shall be the immediate Past President under “Committee of the Board of Directors” under 3: Membership Composition of the committees of the Board of Directors.

*The motion was moved, seconded and approved that the Chairperson of the Committee on Awards shall be the SNM Immediate Past President.*

A motion was made to extend the discussion regarding the SNM Bylaws Procedure changes for an additional 30 minutes.

*A motion was moved, seconded to extend the conversation of the procedural changes to an additional 30 minutes.*

The board discussed the recommended change regarding the period of time an SNM Immediate Past President must wait before being re-elected; currently five (5) years.

A motion was made to change the Immediate Past President re-election time period currently state in the SNM Bylaws Procedures from five (5) years to three (3) years.

There was a friendly amendment to the motion: Re-word the motion to state “the Immediate Past President shall not be eligible to be nominated for a position for a period of three (3) years.

*It was moved, seconded and approved that the Immediate Past President shall not be eligible to be nominated for a position for a period of 3 years.*
Public Relations Committee:
Alexander J.B. McEwan, MD, gave a report on public relations and the recent developments with this committee and the Society.

EANM: ESR White Paper on Multimodality Imaging:
Dr. McEwan provided information on EANM white paper on multimodality imaging. It is being provided as information at this time but will be reviewed and discussed by the board at a later meeting.

SNM Awards:
Martin P. Sandler, MD, presented a list of new grants and awards to help support the growing field of molecular imaging and will be added to the current portfolio of grants and awards for the boards’ approval.

The board discussed the new awards specifically the costs, funding options and programs. The board agrees to proceeding with approving this motion in an effort to get this started in which the board will look at the missing awards that can be added later.

A motion was seconded and approved to SNM and SNMTS Grants and Awards for 2008 as distributed.

MOC Part IV Task Force:
Conrad E. Nagle, MD, Chair of the task force presented to the board an update on the MOC Part IV Task Force and their progress. A plan for Maintenance of Certification that would help the membership with assistance to comply with the MOC requirement changes. It was recommended that Dr. Nagle will continue this discussion at the Board meeting tomorrow and will have Henry Royal, MD give an detailed overview.

Publications Committee:
Conrad E. Nagle, MD, presented a new mission statement for the Journal of Nuclear Medicine and asked the BOD members to approve the statement.

It was moved, seconded and voted to approve the JNM Mission Statement as follows:

The Journal of Nuclear Medicine advances the knowledge and practice of molecular imaging and therapy and nuclear medicine to improve patient care through publication of original basic science and clinical research. JNM is a monthly, peer-reviewed journal published both in print and online by SNM, an international, multidisciplinary professional organization for molecular imaging and therapy and nuclear medicine professionals.

General Program Chair:
Leonie L. Gordon, MD, provided the board with the site selection for years 2014 and 2015 and 2018. In her report she provided the possible locations and any possible dates and issues that could arise with each location.
It was moved, seconded and approved that the 2014 sites be either St. Louis and Denver.

It was moved, seconded and approved that the 2015 sites be either Baltimore or Philadelphia.

It was moved, seconded and approved that the 2018 site location be in Toronto.

Committee on Awards:
Mathew L. Thakur, PhD, provided the board with the list of approved list that the Committee on Awards has approved for the upcoming year of 2007.

It was moved, seconded and approved the 2007 Awards list as distributed.

Rebranding:
Virginia M. Pappas, CAE, Chief Executive Officer, provided the board with the Rebranding and stated that SNM received positive feedback of the rebranding so far at the meeting.

Adjournment:
Dr. Sandler adjourned the meeting at 11:22pm.
ACTION ITEM: Approval of June 1, 2007 Board of Director’s Minutes

SUBMITTED BY: Richard B. Noto, MD
Secretary/Treasurer

PROPOSED RESOLUTION: Resolved, that the minutes from the Board of Director’s Meeting of June 1, 2007 be adopted.

FINANCIAL IMPACT: N/A

BACKGROUND: N/A

SUPPORT MATERIAL: June 1, 2007, Board of Director’s Meeting Minutes.

ACTION: ADOPTED ___ DEFEATED ___ OTHER ___

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SNM Guests in Attendance:
Martin G. Pomper, MD, PhD; Henry F. VanBrocklin, PhD; Carolyn J. Anderson, PhD; Henry D. Royal, MD; Alan H. Maurer, MD; Hayden Williams, MD; Henrich Schelbert, MD

SNM Staff in Attendance:
Virginia Pappas, CAE; Michael Nelson, CAE; Pandora C. Rivera, Victoria N. Wenzel, Rebecca Maxey, Susan Alexander, Naomi Lynn Barnes, Hugh Cannon, Marybeth Howlett, Joanna Spahr, Jane Day, Cecilia Noblett

Welcome and Call to Order:
With quorum established the SNM President, Martin P. Sandler, MD, called the meeting to order at 7:04pm and gave opening remarks, welcoming everyone.

Approval of the Agenda:
A motion was made to approve the meeting Agenda for the June 1, 2007 meeting.

The motion was moved, seconded and voted to approve the agenda as amended for the June 1, 2007 meeting as distributed.

Approval of Standing Rules:
A motion was made to approve the Standing Rules of the Board of Directors.

- Raise hand to be recognized.
- Those that have not yet spoken will get priority.
- Limit discussion on any one topic to thirty (30) minutes unless voted on by the Board with majority vote approving to extend discussion.
The motion was moved, seconded and vote to approve the Standing Rules of the Board of Directors.

ORAL REPORTS

Finance Committee Report
The Finance Committee Chair, Paul H. Murphy, PhD, discussed four action items, which came out of other committees. The MiCoE will present two and the Scientific Program Committee Chair will present the other two.

MOC Part IV Task Force
The Chair of the MOC Part IV Task Force, Conrad E. Nagle, MD, presented the status of their work on the project plan concept and asked the Board's approval to proceed with the plan as described at the meeting. The Board agree in which the Task Force will formally bring a draft project plan and budget to the September meeting for approval.

It was moved, seconded and voted to endorse the plan to comply with the MOC Part IV requirement in developing a project base curriculum to offer the membership assistance.

Publications Committee
The Publications Committee Chair, Conrad E. Nagle, MD, asked the board to extend the term of the JNM Editor for an additional 2 years.

It was moved, seconded and voted to extend the JNM Editor term for 2 years ending in December 2010 with his term being consecutive starting with his current term.

Practice Standards Committee
The Practice Standards Committee Chair, Leonie L. Gordon, MD, discussed two documents: FDG PET Oncology Guideline and Consensus Recommendations for Gastric Emptying Scintigraphy.

After discussion, the Board agreed to table the FDG PET Oncology Guideline until Dr. Gordon can work out some issues with Dr. Fletcher. Once final, the guideline will be presented to the Exec Committee or BOD for approval by conference call over the summer.

Dr. Gordon presented the Consensus Recommendations for Gastric Emptying Scintigraphy for approval by the BOD.

It was moved, seconded and voted to approve the manuscript “Consensus Recommendations for Gastric Emptying Scintigraphy,” jointly developed by the SNM and the American Neurogastroenterology and Motility Society. The Committee further recommends that the consensus document be published in an upcoming issue of JNM. Dr. Gordon further discussed the committee’s plans for development of practice standards and presented a motion outlining the three areas of priority.
It was moved, seconded and voted that the SNM BOD begin work on developing practice standards for the following three areas:

- **Gastric Emptying Scintigraphy** (conjointly with the GI Council and the American Motility Society)
- **Hybrid Cardiac Imaging** (conjointly with the ACR, ASNC and ACC)
- **Radioimmunotherapy for lymphoma** (conjointly with ASTRO, ASCO and ASH)

**Committee on Procedure Guideline**
Leonie L. Gordon, MD, presented the board with an update from the last board meeting and an motion to approve the Procedure Guideline for the Use of Radiopharmaceuticals v3.3.

It was moved, seconded and voted to approve the Procedure Guideline for the Use of Radiopharmaceuticals v3.3.

Dr. Sandler called for a brief recess at 8:12pm and reconvened at 8:22pm.

**Molecular Imaging Center of Excellence Report**
Dr. Pomper gave the report of the Molecular Imaging Center of Excellence where he presented the Board with two actions related to membership for MICoE. The first action is the approval of 90-day free trial membership and the second is complementary one-year membership for MICoE and SNM for selected task force members.

It was moved, seconded and voted that interested practitioners may join the Molecular Imaging Center of Excellence—and SNM—for a free 90-day trial membership. After 90 days, individuals will have to join the SNM as a member to continue membership in the Center. The trial membership may not be renewed.

It was moved, seconded and voted that invited members and special invitees may receive a one-year complementary membership in the Molecular Imaging Center of Excellence—and SNM. After one year, individuals will have to join the SNM as a member to continue membership in the Center. The complementary membership may not be extended.

Dr. Sandler thanked the MI Center leaders for their contribution and hard work.

**Scientific Program Committee**
The Scientific Program Committee Chair, Frederic H. Fahey, DSc, presented the board with a request to change the policy for stipends to councils for the Mid-Winter meeting.

It was moved, seconded and voted that the Policy on Stipends at SNM Mid-Winter Symposium will be changed to establish the payment of stipends as follows: Funds in the amount of $7500 will be set aside for council stipends each year for the next three...
years beginning with the 2008 SNM Mid-Winter Education Symposium. The Committee on Councils will determine how these funds shall be dispensed among councils participating in the Mid-Winter Educational Symposium. This policy will be re-evaluated after 3 years.

**Committee on Councils**

The Committee on Councils Chair, Henry F. VanBrooklin, PhD, presented a proposal for an internship program to help support government members coming to the mid-winter and annual meeting. The councils do not have the funding to support this program, which has a total cost of $1,500. It was suggested to have a call for nomination for this internship program in 2009 to take place after the June meeting.

*It was moved, seconded and voted that* each SNM Council and Center of Excellence may have one intern serving a 2-year term as a non-voting member of its Board of Directors.

**SNMTS President’s Report**

**Scope of Practice & Strategic Plan**

The SNMTS President, D. Scott Holbrook, BS, CNMT, PET, FSNMTS, provided the board with the list of recently elected officers and the Scope of Practice and Strategic Plan documents developed and discussed at the NCOR and SNMTS Executive Board meetings.

*It was moved, seconded and voted to approve the SNMTS Scope of Practice.*

*It was moved, seconded and voted to approve the SNMTS Strategic Plan.*

**Entry Level Curriculum**

Mr. Holbrook presented the board with a request to approve the proposed Professional Curriculum as the educational foundation for the Nuclear Medicine Technologists entering the field of Nuclear Medicine Technology.

*It was moved, seconded and voted to approve that the Professional Curriculum to meet the professional portion of the NMT curriculum with the understanding that the final professional curriculum will be distributed, with supporting materials, for approval at the June 2008 Executive Board meeting.*

**New Business**

**Outgoing SNM Board Members**

Dr. Sandler presented each outgoing board member, Peter S. Conti, MD, PhD; D. Scott Holbrook, BS, CNMT, PET, FSNMTS; Terence Beven, MD; George Zubal, MD and Dominique Delbeke, MD, PhD; with a gift for their outstanding dedication and contribution towards the SNM Board of Directors.
The President-Elect, Alexander J.B. McEwan, MD, thanked the SNM President for all is hard effort and skills that he brought to the Society with great passion and is humbled to follow in his lead.

Dr. Sandler said his goodbyes and gave the board and the SNM staff his appreciation during this board year.

*Adjournment*

The board went into executive session at 9:23pm.
**RESOLUTION FORM**
SNM Board of Directors
September 29, 2007

**ACTION ITEM:** Approval of July 13, 2007 Board of Director's Conference Call Minutes

**SUBMITTED BY:** Richard B. Noto, MD
Secretary/Treasurer

**PROPOSED RESOLUTION:** Resolved, that the minutes from the Board of Director’s Conference Call of July 13, 2007 be adopted.

**FINANCIAL IMPACT:** N/A

**BACKGROUND:** N/A

**SUPPORT MATERIAL:** July 13, 2007, Board of Director’s Conference Call Minutes.

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Minutes
SNM Board of Directors
Conference Call
Friday, July 13, 2007

SNM Members in Attendance: Michael M. Graham, MD, PhD; Peter Herscovitch, MD; Richard B. Noto, MD; Mathew L. Thakur, PhD; Bennett S. Greenspan, MD; Leonie L. Gordon, MD; Paul H. Murphy, PhD; Alexander J.B. McEwan, MD; Author J. Hall, CNMT, FSNMTS; David Gilmore, CNMT, RT(R), RT(N); Martin P. Sandler, MD; Peter S. Conti, MD, PhD; Robert W. Atcher, PhD, MBA

SNM Members Not in Attendance: Mark Wallenmeyer, MBA, CNMT, RT(R), RT(N); Warren R. Janowitz, MD, JD; France K. Keech, MBA, RT(N), FSNMTS; Robert F. Carretta, MD; Conrad E. Nagle, MD

SNM Staff in Attendance:
Virginia M. Pappas, CAE; Michael S. Nelson, CAE

Welcome and Call to Order:
Meeting began at 10:10 called to order Sandy McEwan.

Introduction and Overview:
Dr. McEwan reported that there would be monthly calls of the SNM BOD throughout the year in an effort to keep the BOD members updated on ongoing activities. He planned to focus his efforts on bridging the gap between campaign deliverables and day-to-day SNM efforts to support membership. ERF coordination and fundraising capacity activities along with a restructuring of the Committees were also priorities.

Ms. Pappas mentioned that September Board meeting and discussed the possibility of combining the Finance and Board meetings. A fully developed schedule will be sent to the members in the next week.

Discussion/Action Items:

ERF Oversight Committee Meeting
Dr. McEwan provided historical perspective on ERF/SNM alliance. A meeting is scheduled July 17, 2006 in Reston to discuss strategic issues and Development Office staffing. A report of the meeting will be provided during the August BOD call.

Committee Restructure Task Force
Dr. McEwan provided an overview of the task force charge and member composition. The goal of the task force is to make recommendation that would eliminate redundancies
in committee efforts, and organize the committee structure. A report of the task force will be provided at the BOD meeting in September.

**AMI/SMI**
Ms. Pappas provided an overview of discussions between AMI & SMI on collaborations, specifically the meeting in Nice, France on September 10-13, 2008. In the interval, we have received notice that SNM should participate in the scientific efforts, but probably not share on revenues and expenses. SNM leadership will be setting up a leadership discussion among the groups at the Providence meeting in September. Some discussion ensured regarding possible encroachments by the Nice meeting as perceived by EANM. Dr. McEwan will discuss with EANM leadership.

*It was moved, seconded and voted to endorse the collaboration with AMI/SMI on the Nice, France meeting.*

The vote was unanimous.

**Institute for Molecular Technologies (IMT)**
Ms. Pappas provided an overview of discussions initiated by IMT about the possibility of IMT merging into SNM. SNM was asked to present a proposal to Ron Nutt and Linda Vento (IMT). IMT BOD members reviewed the proposal and voted to bring some aspects of IMT to SNM. Some components will remain with AMI, specifically the Registry. Functionally, the IMT structure could easily be absorbed within the SNM and the IMT activities, budget, annual plans would have to be ratified by the SNM Board. This move would complement SNM’s efforts with industry and address some of the fragmentation concerns raised by industry. The PET Center could benefit.

*It was moved, seconded and voted to support the proposal to have SNM pursue the IMT merger.*

It was unanimously approved.

The PET registry should be pursued and if at all possible, the SNM would be a more visible and involved group associated with the PET registry.

**Radiation Dose Assessment Resource Group (RADAR)**
Ms. Pappas provided a history on Dr. Stabin’s request to have SNM establish a committee. The group is currently only seeking support ($10,000) for meetings, which can be incorporated into the next budget. This will be a separate committee and would be in addition to MIRD charges. Some discussion ensued about how effective the MIRD committee is and does this proposal duplicate existing effort.

*It was moved, seconded and voted that the issue be tabled and the proposal be referred to the Restructuring Task Force to evaluate how to make most effective use of this proposal in terms of organizational structure.*
It was suggested that George Sgourous be contacted concerning this proposal.

*Recommendations of the use of FDG (fluorine-18), PET in Oncology*

Dr. McEwan asked the BOD members to review the revised document entitled, “Recommendations of the use of FDG (fluorine-18), PET in Oncology” from the joint SNM/ASCO PET/CT panel. It will be published in the next issue of the JNM.

*It was moved, seconded and voted to approved the recommendations from the joint SNM/ASCO PET/CT Panel entitled, “Recommendations of the use of FDG (fluorine-18), PET in Oncology”.*

*Annual Meeting*

Ms. Pappas provided an overview of registration numbers for the meeting. The financial reports are still pending. Dr. Archer reported on the Capitol Hill visits, with over 200 attendees. In response to our efforts, some positive legislation (funding research) has been introduced and we are currently engaged in follow-up. He noted that potential for IMT to supplement SNM legislative efforts would truly benefit our government affairs initiatives.

Some discussion ensured about locations and the costs associated with accommodations. In order to grow the attendance, it was suggested to find out about perceptions of the meeting content and location. Ms. Pappas will follow up on this.

*Developing Strategies for Imminently Emerging Technologies: An Action Planning Retreat*

Dr. McEwan presented an overview of the workshop. Some excellent efforts resulted from the event and a white paper is being prepared that will be available by the September Board meeting.

*Chief Executive Officer’s Report*

Ms. Pappas reported that a monthly packet from the headquarters office would be sent to update the Board on ongoing efforts. She asked for input on the items.

*Adjournment:*

The call concluded at 11:20 a.m.
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approval of August 27, 2007 Board of Director's Conference Call Minutes

SUBMITTED BY: Richard B. Noto, MD
Secretary/Treasurer

PROPOSED RESOLUTION: Resolved, that the minutes from the Board of Director's Conference Call of August 27, 2007 be adopted.

FINANCIAL IMPACT: N/A

BACKGROUND: N/A

SUPPORT MATERIAL: August 27, 2007, Board of Director's Conference Call Minutes.

ACTION: ADOPTED ___ DEFEATED ___ OTHER ___

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SNM Board of Directors
Conference Call
August 27, 2007

SNM Members in Attendance: Alexander J.B. McEwan, MD; Michael M. Graham, MD, PhD; Peter Herscovitch, MD; Richard B. Noto, MD; Mathew L. Thakur, PhD; Bennett S. Greenspan, MD; Leonie L. Gordon, MD; Paul H. Murphy, PhD; Author J. Hall, CNMT, FSNMTS; David Gilmore, CNMT, RT(R), RT(N); Martin P. Sandler, MD; Peter S. Conti, MD, PhD; Mark Wallenmeyer, MBA, CNMT, RT(R), RT(N); Warren R. Janowitz, MD, JD; France K. Keech, MBA, RT(N), FSNMTS; Robert F. Carretta, MD; Conrad E. Nagle, MD

SNM Staff in Attendance:
Virginia M. Pappas, CAE; Nikki Wenzel

I. Welcome and Call to Order:
The conference call was called to order at 3:08pm by Dr. Alexander McEwan.

II. Director of Development Update
Virginia Pappas announced that SNM and ERF interviewed a candidate that both SNM and ERF felt would fit the position. Theresa Pinkham has experience in fundraising at both the membership and corporate level. Theresa has met with Virginia, Mike and Vince at SNM and has spoke with Sue Weiss and met with Paul Kirchner from ERF. Virginia hopes to offer her the position later today.

III. ERF/SNM Oversight Meeting
The ERF/SNM Oversight Meeting was held earlier this month to discuss various concerns between ERF and SNM. The consultant present at the meeting helped the group to develop very specific criteria that will help SNM and ERF to move forward. The key initiatives from the meeting include develop ways to:
   1. work together
   2. align objectives
   3. create fundraising strategy (Hal Anger Estate)

On behalf of ERF, Dr. Carretta felt that it was a good meeting and that the overall outcome was positive. Dr. Conti expressed concern in implementing the changes into the ERF and SNM relationship. It is essential to create a position in which the SNM and ERF board is comfortable moving forward as a combined organization. The changes outlined during this meeting will be discussed over the next several months. ERF and SNM would like positive forward momentum by the Mid-Winter Meeting. In addition, the technologists on the ERF Board are having a conference call to discuss the presentation that will be done by ERF members at the Chapter meetings, encouraging member donations.

Mark Wallenmeyer asked to review the vision statement, in that, it was voted to remove “primary” and “primary” had not yet been removed. SNM will remove “primary” and redistribute the new document.

Based on the August budget, ERF has set aside $400,000 for SNM. SNM will submit a budget proposal to ERF outlining specific needs. Included in this years ERF Budget will be more money for awards. The SNM and SNMTS have been discussing various award opportunities. The final award budget proposal will be approved by the SNM during the SNM Board of Directors meeting in September.
The ERF and SNM would like to plan a joint meeting. As soon as both boards are available to meet face to face a meeting will be scheduled.

**IV. Committee Restructuring Task Force**

Dr. McEwan created a Committee Restructuring Task Force, Chair – Robert Henkin, to review the structure of the current SNM Committees. The committee has small working groups that are analyzing the effectiveness of each committee. They will be making a report to the SNM Board of Directors during the Fall Board meeting.

**V. IMT Update**

Virginia Pappas has had several conversations with corporate circle members and Siemens and GE, members on IMT board. The IMT board voted in June to move certain activities over to SNM (advocacy and lobby and some PET Utilization). This has been the only clear message from IMT, there is a lot of confusion on how this change will take place. Currently, everything is on hold pending company support.

**VI. SMI/AMI**

There has been any positive feedback from partnering with SMI/AMI (RSNA/SNM/AMI/SMI), however, there has also been financial problems; registration is low, corporate giving is low, the collaboration with AMI/SMI is getting difficult. SNM is being blamed for some of the short falls.

First response to the letter indicated that there was interest in collaborating in Neice next year. SNM’s goal is to meet separately, possible in Providence during the 2007 AMI/SMI meeting.

**VII. Nuclear Medicine Scientist Curriculum**

The Nuclear Medicine Scientist Curriculum is attached for information purposed and because it is important for the board to review. Dr. George Zubal’s report is an update from the BOD resolution that was passed during the last meeting. At this time, there is no action needed from the board.

The committee was charged to with developing guidelines for curriculum for both scientists and physicians. There is a large need for basic scientists training in facilities. SNM should look at getting this reviewed for certification (ABSNM). Virginia informed the BOD that ABSNM introduced a Molecular Imaging Science sub-specialty exam in 2007 and had one applicant who successfully passed. It was suggested that a representative from ABSNM be involved in the curriculum process. George Zubal, current ABSNM board member is also a member of the MI Education Task Force. It is important to remember that this serves as a starting point. The goal is not to turn residence into scientists, but for scientists to use this as training guidelines.

The ABNM has reviewed the curriculum and Henry Royal has been involved in the discussion. ABNM will probably submit comments.

The committee would like to send the curriculum to the RRC in early October, so it is important to have Board approval during the September BOD meeting. It was suggested to send the curriculum to selected program directors for review. All comments from program directors should be submitted prior to the Fall BOD meeting. These comments will help strengthen the support at RRC of the new curriculum. V. Pappas will work with Lynn Barnes to sent to Program Directors.

There is money in Molecular Imaging Campaign budget to create some online tools for this - $25,000

**ACTION:** Review the curriculum as a board, send to 12 program directors, send letter of gratitude to the task force for their hardwork.
VIII. NIH Letter
SNM is submitting a letter to NIH regarding the review process for grants. A draft of the letter was attached to the agenda for BOD review. Please send all comments concerning the letter to Nikki Wenzel in the SNM office at nwenzel@snm.org prior to August 30, 2007. If the comments submitted by SNM are chosen, a representative from SNM will be asked to present the comments/suggestions at a regional meeting.

IX. Nuclear Medicine Tomorrow
The Nuclear Medicine Tomorrow program will be held in April. The BOD needs to decided whether this is something SNM would like to be associated with. The BOD agreed that as long as no financial expenses were incurred, that SNM would like to participate. Dr. McEwan will be speaker as well as Dr. Thakur.

A motion was made to endorse the Nuclear Medicine Tomorrow Meeting.

It was moved, seconded and voted to endorse the Nuclear Medicine Tomorrow Meeting.

X. September Board Meeting
The September BOD meeting will be held September 29-30 in Reston, VA. Current agenda items include: budget, ERF, philosophical PET paper with ramifications of funding in terms of action going forward, FDA in molecular imaging campaign, results of GR retreat and AMI/SMI. If anyone has any additional items they would like on the agenda, please submit them to V. Pappas as soon as possible. All SNM business will be completed on Saturday, leaving the Sunday morning meeting for strategic planning.

XI. Hot Topics
V. Pappas asked that all BOD members review the Hot Topics included in the agenda.

XII. New Business
There was no new business to discuss.

XIII. Adjournment
A motion was made to adjourn the conference call.

It was moved, seconded and voted to adjourn the SNM Board of Directors Conference Call at 4:00pm (ET).
SNM President Report

Alexander J.B. McEwan, MD
SNMTS President Report

David Gilmore, MS, CNMT, NCT, RT(R)(N)
SNM Secretary/Treasurer’s Report

Richard B. Noto, MD
Agenda Topics
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approval of FY 2007-2008 Budget.

SUBMITTED BY: Paul H. Murphy, PhD, Chair
Finance Committee

PROPOSED RESOLUTION: Resolved, that the FY 2007-2008 budget be adopted.

FINANCIAL IMPACT: N/A

BACKGROUND: N/A


ACTION: ADOPTED ___ DEFEATED ___ OTHER ___
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approval of Vince Pistilli, CFO and Mike Nelson, COO as authorized signatories on the Operating Account and Annual Meeting bank accounts at BB&T

SUBMITTED BY: Paul H. Murphy, PhD, Chair Finance Committee

PROPOSED RESOLUTION: Resolved, that Vince Pistilli, CFO and Mike Nelson, COO be authorized as signatories on the Operating Account and Annual Meeting bank accounts at BB&T.

FINANCIAL IMPACT: N/A

BACKGROUND: N/A

SUPPORT MATERIAL: N/A

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NAS Study Showing Need to Restore Federal Nuclear Medicine
Free Executive Summary

Advancing Nuclear Medicine Through Innovation

Committee on State of the Science of Nuclear Medicine, National Research Council

This free executive summary is provided by the National Academies as part of our mission to educate the world on issues of science, engineering, and health. If you are interested in reading the full book, please visit us online at http://www.nap.edu/catalog/11985.html. You may browse and search the full, authoritative version for free; you may also purchase a print or electronic version of the book. If you have questions or just want more information about the books published by the National Academies Press, please contact our customer service department toll-free at 888-624-8373.

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Summary

The history of nuclear medicine over the past 50 years reflects the strong link between government investments in science and technology and advances in health care in the United States and worldwide. As a result of these investments, new nuclear medicine procedures have been developed that can diagnose diseases non-invasively, providing information that cannot be acquired with other imaging technologies; and deliver targeted treatments. Nearly 20 million nuclear medicine procedures using radiopharmaceuticals and imaging instruments are carried out annually in the United States alone. Overall usage of nuclear medicine procedures is expanding rapidly, especially as new imaging technologies, such as positron emission tomography/computed tomography (PET/CT) and single photon emission computed tomography/computed tomography (SPECT/CT), continue to improve the accuracy of detection, localization, and characterization of disease, and as automation and miniaturization of cyclotrons and advances in radiochemistry make production of radiotracers more practical and versatile.

Recent advances in the life sciences (e.g., molecular biology, genetics, and proteomics) have stimulated development of better strategies for detecting and treating disease based on an individual’s unique profile, an approach that is called “personalized medicine.” The growth of personalized medicine will be aided by research that provides a better understanding of normal and pathological processes; greater knowledge of the mechanisms

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1 Proteomics is the study of the structure and function of proteins, including the way they interact with each other in cells.
by which individual diseases arise; superior identification of disease sub-
types; and better prediction of an individual patient’s responses to treat-
ment. However, the process of advancing patient care is complex and slow. 
Expanded use of nuclear medicine techniques has the potential to accelerate, 
simplify, and reduce the costs of developing and delivering improved health 
care and could facilitate the implementation of personalized medicine. 

Current clinical applications of nuclear medicine include the ability to:

- diagnose diseases such as cancer, neurological disorders (e.g., Al-
zheimer’s and Parkinson’s diseases), and cardiovascular disease in their 
initial stages, permitting earlier initiation of treatment as well as reduced 
morbidity and mortality;
- non-invasively assess therapeutic response, reducing patients’ ex-
posure to the toxicity of ineffective treatments and allowing alternative 
treatments to be started earlier; and
- provide molecularly targeted treatment of cancer and certain endo-
crine disorders (e.g., thyroid disease and neuroendocrine tumors).

Emerging opportunities in nuclear medicine include the ability to:

- understand the relationship between brain chemistry and behavior 
(e.g., addictive behavior, eating disorders, depression);
- assess the atherosclerotic cardiovascular system;
- understand the metabolism and pharmacology of new drugs;
- assess the efficacy of new drugs and other forms of treatments, 
spreading their introduction into clinical practice;
- employ targeted radionuclide therapeutics to individualize treat-
ment for cancer patients by tailoring the properties of the targeting vehicle 
and the radionuclide;
- develop new technology platforms (e.g., integrated microfluidic 
chips and other automated screening technologies) that would accelerate 
and lower the cost of discovering and validating new molecular imaging 
probes, biomarkers, and radiotherapeutic agents;
- develop higher resolution, more sensitive imaging instruments to 
detect and quantify disease faster and more accurately;
- further develop and exploit hybrid imaging instruments, such as 
positron emission tomography/magnetic resonance imaging (PET/MRI), to 
improve disease diagnosis and treatment; and
- improve radionuclide production, chemistry, and automation to 
lower the cost and increase the availability of radiopharmaceuticals by in-
venting a new miniaturized particle accelerator and associated technologies
to produce short-lived radionuclides for local use in research and clinical programs.

In spite of these exciting possibilities, deteriorating infrastructure and loss of federal research support are jeopardizing the advancement of nuclear medicine. It is critical to revitalize the field to realize its potential.

**CHARGE TO THE COMMITTEE**

The National Academies were asked by the Department of Energy (DOE) and the National Institutes of Health (NIH) to review the state of the science of nuclear medicine in response to discussions between the DOE and the Office of Management and Budget about the future scientific areas of research for the DOE's Medical Applications and Sciences Program. In response to this request, the National Academies formed the Committee on the State of the Science of Nuclear Medicine. The committee's mandate was to review the current state of the science in nuclear medicine; identify future opportunities in nuclear medicine research; and identify ways to reduce the barriers that impede both basic and translational research (Sidebar 1.1). Although the committee is aware that funds will be required to implement the recommendations made in this report, providing funding recommendations is beyond the scope of the committee’s charge. This report reflects the consensus views and judgments of the committee members, based in part on consultation with experts from academia, major medical societies, relevant governmental agencies, and industry representatives.

**FINDINGS AND RECOMMENDATIONS**

Advances on the horizon in nuclear medicine could substantially accelerate, simplify, and reduce the cost of delivering and improving health care. To realize this promise, we need to focus research on the following: (1) the development of new radionuclide production facilities and technologies; (2) the synthesis of new radiotracers to improve understanding of how specific organs function; (3) the development of imaging instruments, enabling technologies, and multimodality imaging devices, such as PET/CT and PET/MRI, to improve disease diagnosis; (4) the development and use of targeted radionuclide therapeutics that will allow cancer treatments to be tailored for individual patients; (5) the use of nuclear medicine imaging as a tool in the discovery and development of new drugs; and (6) the translation of research from bench to bedside, including investment in training of clinician scientists in nuclear medicine techniques. Specific research opportunities are discussed in Chapters 3, 4, 6, and 7 of the report. Achieving
these research goals will require collaboration among academic institutions, industry, and federal agencies.

**FINDING 1: Loss of Federal Commitment for Nuclear Medicine Research.**

**FINDING 1A:** The Medical Applications and Sciences Program\(^2\) under the DOE's Office of Biological and Environmental Research (DOE-OBER) (and precursor agencies, Atomic Energy Commission and Energy Research and Development Administration) has provided a platform for the conceptualization, discovery, development, and translation of basic science in chemistry and nuclear and particle physics for several decades (examples include FDG-PET,\(^3\) technetium-99m SPECT, targeted radionuclide therapy). In fiscal year (FY) 2006, Congress reduced funding of the program by 85 percent (Figure S.1).

The committee finds that as a result of this reduction in funding, there has been a substantial loss of support for the physical sciences and engineering basic to nuclear medicine. There is now no specific programmatic long-term commitment by any federal agency for maintaining high-technology infrastructure (e.g., accelerators, research reactors) or centers for instrumentation and chemistry research and training, which are at the heart of nuclear medicine research and development (Chapters 6 and 7).

\(^2\)DOE-OBER Medical Applications and Measurement Sciences Program provided federal support for basic scientific studies in nuclear medicine.

\(^3\)FDG is 2-deoxy-2-[18F]fluoro-D-glucose, also called fluorodeoxyglucose.
SUMMARY

FINDING 1B: The DOE-Nuclear Energy (NE) Isotope Program is not meeting the needs of the research community because the effort is not adequately coordinated with NIH activities or with the DOE-OBER (Chapter 5).

FINDING 1C: Public Law 101-101, which requires full-cost recovery for DOE-supplied isotopes, whether for clinical use or research, has restricted research isotope production and radiopharmaceutical research. The lack of new commercially available radiotracers over the past decade may be due in part to this legislation (Chapter 5).

RECOMMENDATION 1: Enhance the federal commitment to nuclear medicine research. Given the somewhat different orientations of the DOE and the NIH toward nuclear medicine research, the two agencies should find some cooperative mechanism to support radionuclide production and distribution; basic research in radionuclide production, nuclear imaging, radiopharmaceutical/radiotracer and therapy development; and the transfer of these technologies into routine clinical use (Chapter 6).

Implementation Action 1A: Reinstating support for the DOE-OBER nuclear medicine research program should be considered.

Implementation Action 1B: A national nuclear medicine research program should be coordinated by the DOE and the NIH with the former emphasizing the general development of technology and the latter disease-specific applications. In committing itself to the stewardship of technology development (radiopharmaceuticals and imaging instrumentation), the DOE would reclaim a leadership role in this field.

Implementation Action 1C: In developing their strategic plan, the agencies should avail themselves of advice from a broad range of authorities in academia, the national laboratories, and industry; these authorities should include experts in physics, engineering, computer science, chemistry, radiopharmaceutical science, commercial development, regulatory affairs, clinical trials, and radiation biology.

FINDING 2: Cumbersome Regulatory Requirements.

There are three primary impediments to the efficient entry of promising new radiopharmaceutical tracer compounds into clinical feasibility studies: (1) complex U.S. Food and Drug Administration (FDA) toxicologic and other regulatory requirements (i.e., lack of regulatory pathways specifically for both diagnostic and therapeutic radiopharmaceuticals that take into account the unique properties of these agents); (2) lack of specific guidelines
from the FDA for good manufacturing practice for PET radiodiagnostics and other radiopharmaceuticals; and (3) lack of a consensus for standardized image acquisition in nuclear medicine imaging procedures and harmonization of protocols appropriate for multi-institutional clinical trials (Chapters 3, 4, and 6).

RECOMMENDATION 2: Clarify and simplify regulatory requirements, including those for (A) toxicology and (B) current good manufacturing practices (cGMP) facilities (Chapters 3 and 4).

Implementation Action 2A, Toxicology: The FDA should clarify and issue final guidelines for performing pre-investigational new drug evaluation for radiopharmaceuticals, particularly with regard to the recently added requirement for studies to determine late radiation effects for targeted radiotherapeutics.

Implementation Action 2B, cGMP: The FDA should issue final guidelines on cGMP for radiopharmaceuticals. These guidelines should be graded commensurate with the properties, applications, and potential risks of the radiopharmaceuticals, instead of regulating minimal-risk compounds with the same degree of stringency as de novo compounds and new drugs that have pharmacologic effects.

Implementation Action 2C: To develop prototypes of standardized imaging protocols for multi-institutional clinical trials, members of the imaging community should meet with representatives of federal agencies (e.g., DOE, NIH, FDA) to discuss standardization, validation, and pathways for establishing surrogate markers of clinical response.

FINDING 3: Inadequate Domestic Supply of Medical Radionuclides for Research.

There is no domestic source for most of the medical radionuclides used in day-to-day nuclear medicine practice. Furthermore, the lack of a dedicated domestic accelerator and reactor facilities for year-round uninterrupted production of medical radionuclides for research is discouraging the development and evaluation of new radiopharmaceuticals. The parasitic use\(^4\) of high-energy physics machines has failed to meet the needs of the medical research community with regard to radionuclide type, quantity, timeliness of production, and affordability (Chapters 4, 5, and 6).

\(^4\)Accelerators that have been made available for the production of radionuclides, although the machines are in operation for other purposes.
SUMMARY

RECOMMENDATION 3: Improve domestic medical radionuclide production. To alleviate the shortage of accelerator- and nuclear reactor-produced medical radionuclides available for research, a dedicated accelerator and an appropriate upgrade to an existing research nuclear reactor should be considered (Chapters 4 and 5).

This recommendation is consistent with other studies that have reviewed medical radionuclide supply in the United States and have come to the same conclusions (IOM 1995, Wagner et al. 1999, Reba et al. 2000).

FINDING 4: Shortage of Trained Nuclear Medicine Scientists.

FINDING 4A: There is a critical shortage of clinical and research personnel in all nuclear medicine disciplines (chemists, radiopharmacists, physicists, engineers, clinician-scientists, and technologists) with an impending “generation gap” of leadership in the field. Training, particularly of radiopharmaceutical chemists, has not kept up with current demands at universities, medical institutions, and industry, a problem that is exacerbated by a shortage of university faculty in nuclear chemistry and radiochemistry (NRC 2007). There is a pressing need for additional training programs with the proper infrastructure to support interdisciplinary science, more doctoral students, and post-doctoral fellowship opportunities (Chapter 8).

RECOMMENDATION 4A: Train nuclear medicine scientists. To address the shortage of nuclear medicine scientists, engineers, and research physicians, the NIH and the DOE, in conjunction with specialty societies, should consider convening expert panels to identify the most critical national needs for training and determine how best to develop appropriate curricula to train the next generation of scientists and provide for their support (Chapter 8).

FINDING 4B: With the current decline in the number of U.S. students going into chemistry, the restriction of training grants to U.S. citizens and permanent residents as required by the Public Health Service Act is a substantial impediment to recruitment of new talent into the field (Chapter 8).

RECOMMENDATION 4B: Provide additional, innovative training grants. To address the needs documented in this report, specialized instruction of chemists from overseas could be accomplished in some innovative fashion (particularly in DOE-supported programs) by linking training to research. This might take the form of subsidies for course development and delivery as well as tuition subventions. By directly linking training to specific re-
search efforts, such subventions would differ from conventional NIH/DOE training grants (Chapter 8).

FINDING 5: Need for Technology Development and Transfer.

FINDING 5A: There is an urgent need for the further development of highly specific technology and of targeted radiopharmaceuticals for disease diagnosis and treatment. Improvements in detector technology, image reconstruction algorithms, and advanced data processing techniques, as well as development of lower cost radionuclide production technologies (e.g., a versatile, compact, short-lived radionuclide production source), are among the research areas that should be explored for effective translation into the clinic. Such technology development frequently needs long incubation periods and cannot be carried out in standard 3- to 5-year funding cycles (Chapters 6 and 7).

FINDING 5B: Transfer of technological discoveries from the laboratory to the clinic is critical for advancing nuclear medicine. Historically, federally funded research and development has driven the development of instrumentation and radiotracers that form the backbone of nuclear medicine practice worldwide. These discoveries have largely been due to the proximity of scientific disciplines in nuclear science and technology. Capitalizing on this multi-disciplinary mix has served nuclear medicine well in the past and could do so in the future (Chapter 7).

RECOMMENDATION 5: Encourage interdisciplinary collaboration. The DOE-OBER should continue to encourage collaborations between basic chemistry, physics, computer science, and imaging laboratories, as well as multi-disciplinary centers focused on nuclear medicine technology development and application, to stimulate the flow of new ideas for the development and translation of next-generation radiopharmaceuticals and imaging instrumentation. The role of industry should be considered and mechanisms developed that would hasten the technology development process (Chapters 6 and 7).

LOOKING AHEAD

Groundbreaking work in genomics, proteomics, and molecular biology is rapidly increasing our understanding of disease processes and disease management. As a result, we now have the opportunity to develop highly personalized medicine, in which each patient and disease can be individually characterized at the molecular level to identify the treatment strategies that will be most effective. Nuclear medicine techniques that image biochemi-
SUMMARY

cal function in vivo can facilitate the development and implementation of such tailored treatment. However, while history highlights the payoff and public benefit from government investments in science and technology for nuclear medicine, the competitive edge that the United States has held for the past 50 years is seriously challenged. Three major impediments have been identified:

1. There is no short- or long-term programmatic commitment by any agency to funding chemistry, physics, and engineering research and associated high-technology infrastructure (accelerators, instrumentation, and imaging physics), which are at the heart of nuclear medicine technology research and development.

2. There is no domestic supplier for most of the radionuclides used in day to day nuclear medicine practice in the United States and no accelerator dedicated to research on medical radionuclides needed to advance targeted molecular therapy in the future.

3. Training for nuclear medicine scientists, particularly for radiopharmaceutical chemists, has not kept up with current demands in universities and industry, a problem that is exacerbated by a shortage of university faculty in nuclear and radiochemistry.

Thus, although the scientific opportunities have never been greater or more exciting, the infrastructure on which future innovations in nuclear medicine depend hangs in the balance. If the promise of the field is to be fulfilled, a federally supported infrastructure for basic and translational research in nuclear medicine should be considered.
Advancing Nuclear Medicine Through Innovation

Committee on State of the Science of Nuclear Medicine

Nuclear and Radiation Studies Board
Division of Earth and Life Studies

Board on Health Sciences Policy
Institute of Medicine

NATIONAL RESEARCH COUNCIL AND
INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

THE NATIONAL ACADEMIES PRESS
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The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Ralph J. Cicerone is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. Charles M. Vest is president of the National Academy of Engineering.

The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. Dr. Harvey V. Fineberg is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy’s purposes of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Ralph J. Cicerone and Dr. Charles M. Vest are chair and vice chair, respectively, of the National Research Council.
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This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise in accordance with procedures approved by the National Research Council’s Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards of objectivity, evidence, and responsiveness to the study charge. The content of the review comments and draft manuscript remain confidential to protect the integrity of the deliberative process. We wish to thank the following individuals for their participation in the review of this report:

Simon Cherry, University of California, Davis  
Chaitanya Divgi, University of Pennsylvania, Philadelphia  
Ora Israel, Rambam Medical Center, Haifa, Israel  
Jeanne Link, University of Washington, Seattle  
Michael Phelps, University of California, Los Angeles  
Theodore Phillips, University of California, San Francisco  
Donald Podoloff, M.D. Anderson Cancer Center, Houston, Texas  
Richard Reba, Georgetown University, Washington, D.C.  
Kirby Vosburgh, Center for Integration of Medicine and Innovative Technologies, Cambridge, Massachusetts  
Michael Welch, Washington University, St. Louis, Missouri
Chris Whipple, ENVIRON International Corporation, Emeryville, California
Paul Ziemer, Purdue University, West Lafayette, Indiana

Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the report’s conclusions or recommendations, nor did they see the final draft of the report before its release. The review of this report was overseen by Floyd Bloom, Professor Emeritus, The Scripps Research Institute, and John Ahearne, Manager of the Ethics Program, Sigma Xi, The Scientific Research Society. Appointed by the National Research Council. They were responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the authoring committee and the National Research Council.
Preface

It has been an honor and a privilege to chair the committee on the state of science in nuclear medicine. As a diagnostic radiologist, a clinician-scientist, and the chairperson of a large academic radiology department, I have been exposed to the many advances in nuclear medicine and have observed their clinical benefits up close. Participating in this review, however, has allowed me to step back and appreciate the magnitude of the progress that has been achieved, and the crucial role that government funding has played in it. Investments in chemistry, physics, engineering, and training are responsible for the state-of-the-art radiopharmaceuticals and imaging instruments that we now rely on to improve our understanding of human physiology through non-invasive disease detection and treatment monitoring.

These advances have already had a major impact on all branches of imaging and medicine, yet, they pale in comparison to those on the horizon. Nuclear medicine offers a unique, non-invasive view into intracellular processes and enzyme trafficking, receptors and gene expression, and forms the theoretical and applied foundation for molecular medicine. The contributions of nuclear medicine are creating the possibility of a future of personalized medicine, in which treatments and medications will be based on an individual’s unique genetic profile and response to disease processes.

Although the progress in nuclear medicine research in the United States has been spectacular, potential obstacles to its continuation have been noted in previous reports, including a critical shortage of chemists and other personnel trained in nuclear medicine, and an inadequate supply of
radionuclides for research and development. In addition, uncertainty has arisen about how, and to what degree, the government should continue to fund nuclear medicine research. For years, the basic chemistry and physics research behind the growth of the field has been supported by the Medical Applications and Sciences Program of the Department of Energy (DOE) Office of Biological and Environmental Research. However, the uniqueness of this program relative to the nuclear medicine research funded by the National Institutes of Health (NIH) has long been under debate. The DOE and the NIH commissioned this study on the state of the science in nuclear medicine because of the uncertainty surrounding the support of the Medical Applications and Sciences Program. Specifically, the sponsoring agencies asked that the National Academies assess areas of need in nuclear medicine research, examine the program and make recommendations to improve its impact on nuclear medicine research and isotope production.

In response to this request, the National Research Council of the National Academies appointed a committee of 14 experts to carry out this study. The committee gathered information from members of the public, experts on nuclear medicine, scientific and medical societies, and federal agencies. In composing its report, the committee decided to describe the needs in nuclear medicine research primarily in terms of future opportunities in the field. Thus the report, in my view, is an exciting, forward-looking document that makes clear the potential of the field for further advancing medicine, and suggests practical steps to facilitate progress. I hope and believe that it will have a positive impact on the future of nuclear medicine.

Hedvig Hricak, Chair
Acknowledgments

The committee is grateful to the speakers and panelists (listed in Appendix A) who participated in the information-gathering sessions for the study. In addition, the committee wishes to thank Belinda Seto, Peter Preusch, and Dan Sullivan at the National Institutes of Health (NIH); and Mike Viola, John Pantaleo, Prem Srivastava, and Peter Kirschner at the Department of Energy (DOE) for contributing their time, efforts, and insights to the study.

I would like to personally thank my fellow committee members for their dedication to carrying out a thorough study and writing a useful report. They all cared deeply about the topic, and their probing questions and lively discussions ensured that we covered a wide range of issues and considered them from multiple angles.

Studies such as this are often long on information and short on time, and the committee would like to thank the many National Research Council staff members whose help was essential in producing this report. Among these, the committee particularly wishes to acknowledge Kevin Crowley, Director of the Nuclear and Radiation Studies Board, for providing guidance on the study process and keeping the committee focused on its charge; Shaunteé Whetstone and James Yates for their administrative support; Toni Greenleaf for making sure that we stayed on budget; and Rick Jostes for his technical contributions to the report. I would especially like to thank the
ACKNOWLEDGMENTS

Study Director, Naoko Ishibe, for her devotion to the project, and particularly for her superb work in coordinating the writing of the report. Finally, I am grateful to the DOE and NIH for sponsoring this study.

Hedvig Hricak, Chair
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SNM Applauds NAS Study Showing Need to Restore Federal Nuclear Medicine Research Funding

Society Urges Congress To Restore Department of Energy Funding for Research of Life-Saving Diagnostic and Treatment Procedures

RESTON, Va.—Based on the results of a recent National Academy of Sciences report, federal funding for basic molecular imaging/nuclear medicine research should be restored to the U.S. Department of Energy, says SNM, the world’s largest society for molecular imaging and nuclear medicine professionals.

Funded by the Department of Energy and the National Institutes of Health, the 13-month $700,000 report was prompted by a $23 million cut in funding from DOE’s fiscal year 2006 budget, which effectively eliminated all money for basic nuclear medicine and molecular imaging research. The DOE has funded basic molecular imaging/nuclear medicine research since biomedical research was initially included in the Atomic Energy Act of 1954. “Advancing Nuclear Medicine Through Innovation” recommends that the federal government “enhance” its commitment to nuclear medicine research since “expanded use of nuclear medicine techniques has the potential to accelerate, simplify and reduce the costs of developing and delivering improved health care and could facilitate the implementation of personalized medicine.”

“The loss of funding for nuclear medicine research in the U.S. Department of Energy budget has been a tremendous blow to—most importantly—our current and future patients and our field,” said SNM President Alexander J. McEwan, who represents 16,000 physicians, technologists and scientists. “The NAS study confirms the importance of basic nuclear medicine research, and the society—with this report in hand—intends to convince Congress to continue its funding,” said McEwan. “This is an exceptionally critical period for patients and medical imaging,” said McEwan, “as SNM fights to reinstate research funding so future life-saving diagnostic and treatment procedures won’t be lost.” SNM is also advocating against the federal Deficit Reduction Act that limits patients’ access to medical imaging by cutting reimbursement for many services that Medicare patients receive in physician offices and independent imaging centers, he added.

If funding is not restored in the 2008 fiscal year, it will be detrimental to researchers and their labs. This is the only federal government research money dedicated to basic nuclear medicine research, and there are no plans to move this research to another federal agency,” explained Peter S. Conti, chair of SNM’s Government Relations Committee. “Our country needs to invest in the basic scientific research necessary to develop future breakthroughs in nuclear medicine imaging and therapy that will allow for earlier detection and treatment of cancer and other serious illnesses,” he added. If funds are not restored, Conti said, the devastating loss of money for research on diagnosing and treating diseases will be followed by a loss of funds to support the training of students and postdoctoral fellows to fill an expanding role of nuclear medicine in patient care.

Briefly, the NAS report

- calls for an enhanced federal commitment to nuclear medicine research,
- recommends that regulatory requirements—for toxicology and current good manufacturing practices facilities—be clarified and simplified,
- notes that domestic medical radionuclide production should be improved,
- suggests that DOE and NIH consider convening expert panels to identify critical national needs for training nuclear medicine scientists and
- encourages interdisciplinary collaboration.

“DOE-supported high-risk/high-reward nuclear medicine research has been directed at the fundamental and technological aspects of biomedical imaging and radiotherapy that make technological breakthroughs possible,” said SNM President-Elect Robert W. Atcher, University of New Mexico/Los Alamos National Laboratory professor of
pharmacy in the College of Pharmacy at the University of New Mexico and a former DOE grant recipient. Atcher’s ongoing research project—to explore the use of radioactive isotopes to kill cancer cells and reduce the radiation dose to normal tissues—was “zeroed out” in 2006 with the loss of $400,000 in federal funds. “We are potentially losing the ability to treat some very resistant cancers with this new technology because we don’t have the funding to continue the research on our idea. We needed at least two more years of funding to demonstrate the biologic effectiveness of our approach before the National Institutes of Health would consider funding the work,” he explained.

Molecular imaging/nuclear medicine is a multidisciplinary science and medical specialty that uses radiopharmaceutical agents and radiation-detection instruments for the diagnosis and treatment of disease and for biomedical research. Annually, more than 20 million men, women, and children need noninvasive molecular/nuclear medicine procedures. These safe, cost-effective procedures include: positron emission tomography (PET) scans to diagnose and monitor treatment of cancer, cardiac stress tests to analyze heart function, bone scans for orthopedic injuries, and lung scans for blood clots. Patients also undergo procedures to diagnose liver and gall bladder abnormal function and to diagnose and treat hyperthyroidism and thyroid cancer.

More information will be posted on SNM’s Web site at http://www.snm.org

# # #

About SNM—Advancing Molecular Imaging and Therapy

SNM is an international scientific and professional organization of more than 16,000 members dedicated to promoting the science, technology and practical applications of molecular imaging and nuclear medicine to diagnose, manage and treat diseases in women, men and children. Founded more than 50 years ago, SNM continues to provide essential resources for health care practitioners and patients; publish the most prominent peer-reviewed journal in the field (the Journal of Nuclear Medicine); host the premier annual meeting for medical imaging; sponsor research grants, fellowships and awards; and train physicians, technologists, scientists, physicists, chemists and radiopharmacists in state-of-the-art imaging procedures and advances. SNM members have introduced—and continue to explore—biological and technological innovations in medicine that noninvasively investigate the molecular basis of diseases, benefiting countless generations of patients. SNM is based in Reston, Va.; additional information can be found online at http://www.snm.org.
IMT Discussion
MWM Annual Meeting Governance Schedule
Nuclear Medicine Residency Curriculum
ACTION ITEM: Approve Nuclear Medicine Residency Curriculum.

SUBMITTED BY: Carolyn Anderson, PhD
MI Education Task Force Chair

PROPOSED RESOLUTION: Resolved, that the Nuclear Medicine Residency Curriculum be approved.

FINANCIAL IMPACT: N/A

BACKGROUND: The MI Education Task Force, chaired by Carolyn Anderson, PhD, has been working diligently on recommendations for revisions to the nuclear medicine residency curriculum that includes increased emphasis on basic science topics such as molecular and cell biology and molecular imaging agents that will prepare residents for future molecular imaging advances. The first step of a multi-year process will be a formal submission to the Residency Review Committee (RRC) and the American Board of Nuclear Medicine (ABNM) in October that would outline suggested revisions to the curriculum. The Curriculum has been reviewed by randomly selected Program Directors (a full report and revised curriculum will be submitted during the meeting.)

SUPPORT MATERIAL: Nuclear Medicine Residency Curriculum.

ACTION: ADOPTED ___ DEFEATED ___ OTHER ___
American Medical Association (AMA) 
5-year Approval
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approve Five-Year Review Process for representation in the American Medical Association House of Delegates

SUBMITTED BY: Alexander J. B. McEwan, MD
SNM President

PROPOSED RESOLUTION: Resolved, that the Five-Year Review Process for Representation in the American Medical Association House of Delegates be approved.

FINANCIAL IMPACT: N/A

BACKGROUND: N/A

SUPPORT MATERIAL: N/A

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September 13, 2007

Albert Blumberg, MD, Chair
AMA-Specialty and Service Society
515 North State Street
Chicago, IL 60610

Dear Dr. Blumberg:

As Chief Executive Officer of the Society of Nuclear Medicine (SNM), I am submitting the following information in compliance with the Five-Year Review process for representation in the American Medical Association House of Delegates. This application is submitted in compliance with Report A of the Council of Long Range Planning and Development as amended and adopted by the AMA House of Delegates at its Interim Meeting in 1987, Annual Meeting in 1994, and Annual Meeting in 2000.

(1) The SNM does not discriminate in membership on the basis of race, religion, national origin, sex, or handicap.

(2) The SNM is a multidisciplinary professional medical organization dedicated to the advancement of excellence in the education, research, and clinical practice of nuclear medicine. To achieve this objective, the Society shall: (a) Establish and maintain an organization of physicians, scientists, technologists, and other allied health professionals, with a common interest in the scientific and clinical disciplines concerned with the diagnostic, therapeutic, and investigational use of radionuclides; (b) Disseminate information concerning nuclear medicine through meetings, publications and other mechanisms; (c) Strive to better the welfare of mankind by maintaining and advancing the highest possible standards of education, research, and clinical practice in nuclear medicine; (d) Address in a timely manner regulatory and government relations that may significantly affect the quality of education, research, and clinical practice in nuclear medicine.

(3) SNM has a membership of 4,856 physicians that meet the required guidelines regarding membership. A database file of these members has been supplied to AMA’s Survey and Data Resources Group in the prescribed format for analysis. We are confident that a review of the database information provided will confirm that SNM easily meets the mandated guidelines.

(4) SNM was founded in 1954 and has been in existence for 53 years.

(5) The 4,020 physicians contained within the attached SNM membership file comprise the majority of the voting Full Member category (as noted in the attached Bylaws, Article III, Section 1.A.).
(6) SNM has a voluntary membership. Currently there are 4,856 Full-Member physicians out of a total full membership of 4,399 (91%). As per the attached SNM bylaws, Full Membership shall be granted to physicians or scientists possessing an advanced degree who have presented credentials indicating their professional activity; either medical, paramedical, investigational or educational in the scientific or clinical disciplines concerned with the diagnostic, therapeutic or investigational use of radionuclide. Individuals meeting this criterion may join the Society as Full Members with the right to vote and to be elected an Officer of the Society.

(7) SNM is an active organization within the field of nuclear medicine. The organization holds an annual meeting of its membership and is actively involved with comparable organizations devoted to the field of medicine and related initiatives. Please see Article IV, Sections 1, 2, and 3 of the attached bylaws. In addition, the organization has periodic continuing education meetings throughout the year.

(8) SNM has a reasonably equitable distribution of membership through the United States. SNM has 14 local chapters to support the organizational efforts: Central Chapter, Eastern Great Lakes, Greater New York, Mideastern, Missouri Valley, New England, Northern California, Pacific Northwest, Pacific Southwest, Pittsburgh, Southeastern, Southern California, Southwest Chapter.

(9) SNM is proud of its association with the AMA, and SNM provides liaisons to the AMA. SNM encourages SNM members to join the AMA, as the primary professional association addressing the overarching needs of the medical community. SNM collaborates with the AMA on membership acquisition by sharing of membership lists and information on membership within other medical organizations is included within SNM demographic information databases.

(10) SNM is primarily an American organization. While it does have some international members, the organization is chapter-based, and all chapters are located within the continental United States.

Responsibilities of National Medical Specialty Organizations (adherence to Section 8.70 of the AMA Bylaws) have been reviewed and SNM is in full compliance with those provisions. Some illustrations of that compliance include:

(A) SNM fully supports and cooperates with the AMA in initiatives to increase AMA membership. SNM takes every opportunity to highlight the relationship between the AMA and SNM, and encourages membership within the AMA by providing its membership list to the AMA for membership acquisition purposes. The activities and efforts of the AMA are consistently communicated to the SNM membership through use if the SNM newsletter publications, the SNM website, and communications to the SNM membership.

(B) SNM enjoys having representation to the AMA House of Delegates and keeps the SNM delegate fully informed on the policy position of the SNM so that the delegate can properly represent the organization in the AMA House of Delegates.
(C) SNM requires its delegate to report on the actions taken by the AMA House of Delegates at each SNM Board of Directors meeting. This activity takes place at least three times per year.

(D) SNM further disseminates information to its overall membership on the actions taken by the AMA House of Delegates at each meeting through the posting of minutes from that meeting, inclusion of AMA information on the SNM website, with newsletters, and electronic communications to the membership.

(E) SNM has included the Full Membership roster and Bylaws as supporting material for the AMA Five-Year Review Process.

Please let us know if you should have any questions or require any additional information.

Sincerely,

Virginia Pappas, CAE
Chief Executive Officer

Attachments:  SNM Bylaws
              SNM Full Member Roster
CME Mission Statement
RESOLUTION FORM  
SNM Board of Directors  
September 29, 2007  

ACTION ITEM: Approval of Revised SNM CME Mission Statement  

SUBMITTED BY: Arnold Strashun, MD, Chair - Continuing Education Committee  
Frances Keech, Board Liaison  

PROPOSED RESOLUTION: Be it resolved that SNM Approved the Revised Continuing Education Mission Statement  

FINANCIAL IMPACT: $0  

BACKGROUND: (See attachment for proposed revised CME mission statement). In accordance with the update ACCME Accreditation Criteria and sound educational practice the SNM reviews its CME mission statement periodically to ensure that the mission includes the purpose, content areas, target audience, type of activities provided, and expected result of the program. To that end the Continuing Education Committee has reviewed the existing mission statement and submits the proposed revised CME Mission Statement for approval by the SNM Board of Directors.  

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</table>
The mission of the SNM is to be the recognized world leader in providing knowledge that advances and promotes the field of nuclear medicine and improves health care by advancing molecular imaging and therapy. The primary educational mission of SNM is to provide its members with the highest quality life long learning opportunities that promote positive change in performance, competence or patient outcomes. Through its educational committees, the SNM will develop high quality, professional education materials and programs, which provide avenues for the exchange of information related to patient care and outcomes, research, and socioeconomic issues.

**Goals**
The mission will be met through adherence to the following goals:

- Maintain organizational structure and resources, which allow SNM to fulfill its commitment to continuing education (CE).
- Collaborate with all SNM components on educational issues and projects in order to maintain a comprehensive approach to the CE needs of SNM membership.
- Conduct general scientific and specialty meetings that present the latest nuclear medicine research and clinical findings for nuclear medicine, radiology and referring physicians and other health care professionals responsible for patient care.
- Develop and produce enduring educational materials using emerging technologies for use by nuclear medicine, radiology and referring physicians, residents, pharmacists, scientists and technologists.
- Collaborate with other physician organizations which utilize nuclear medicine procedures in the evaluation of their patient populations.

**Target Audience & Specific Goals**
Nuclear medicine professionals involved in the practice of nuclear medicine, molecular imaging and therapy:

- **Physicians:** Enhance physicians’ awareness of scientific and clinical information related to diagnostic, therapeutic, and investigational nuclear medicine/molecular imaging.
- **Physicists:** Enhance and assess knowledge required to explain and optimally utilize the complex physical aspects of clinical and investigational nuclear medicine/molecular imaging.
- **Technologists:** Enrich technologists’ knowledge and provide quality updated skills related to nuclear medicine.
- **Pharmacists:** Enhance the quality of practice by refining and updating knowledge related to nuclear pharmacy.

**Scope**
All areas and aspects of nuclear medicine practice and research that impact nuclear medicine/molecular imaging.
Activities

- Increase educational programs through alliances with organizations and institutions in the field of nuclear medicine, molecular imaging and therapy.
- Engage in educational joint sponsorship with SNM Chapters and like organizations that share a common mission or education objective.
- Identify educational programs addressing issues identified by members and activity participants through needs assessments, evaluation surveys, peer discussions and data provided from SNM education and practice management committees.
- Determine delivery formats for programs and activities that focus on cutting edge topics.
- Review existing materials including evidence based medicine for content.
- Develop and maintain self-assessment materials necessary for maintenance of certification for all professionals in nuclear medicine, molecular imaging and therapy.

Expected Results

- For practitioners involved in nuclear medicine: enhance the knowledge and skills that contribute to lifelong learning and advance performance, competence or patient outcomes.
- For customers (referring physicians and patients): enhance their understanding of the benefits of nuclear medicine and the available resources.
<table>
<thead>
<tr>
<th>Current SNM/SNMTS Awards</th>
<th>Current Cost</th>
<th>Increased Cost</th>
<th>First Total Proposed for 2008</th>
<th>Awards Task Force Call 8/24/07</th>
<th>Final Total Proposed for 2008</th>
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<td>Alavi-Mandell Publication Award 16* @ $150</td>
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*# varies. Number awarded in 2007

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Total Current, New SNM, New SNMTS $535,850 $432,850
Proposed SNM/SNMTS Grants and Awards for 2008

NAMED ENDOWMENTS

Alavi-Mandell Awards
These awards recognize nuclear medicine resident trainees or PhD scientist trainees who are senior-authors of articles published in The Journal of Nuclear Medicine. The awards honor the memory of the fathers of Dr. Abass Alavi and Dr. Gerald Mandell who created the fund.
Amount: $150
# of Awards: Varies
Deadline: At time of manuscript submission
Award Date: Varies
Eligibility: Awardees as described above must have been trainees at the time the research, which resulted in the published article in The Journal of Nuclear Medicine, was carried out.

Paul Cole Scholarships-TECHNOLOGISTS
The scholarships honor the memory of a champion of student education, Paul Cole, who died in 1986 when he was serving as President of the SNM Technologist Section.
Amount: $1,000
Deadline: Received by October 15
Award Date: No later than February
Eligibility: Students who are enrolled in or accepted for enrollment in associate, baccalaureate or certificate programs in nuclear medicine technology.

Mallinckrodt Seed Grant
This one-year grant is designed to assist researchers in conducting pilot research projects that have potential for future support from foundations, corporations or government agencies.
Amount: $25,000
# of Grants: One
Deadline: Received by February 1
Award Date: July
Eligibility: Applicants can be from any country, must hold a full-time faculty position in an educational institution, have completed all advanced training and not have served as a principle investigator on grants totaling $50,000 or more in a single calendar year.
Mark Tetalman Memorial Award
Established by the family and friends of Dr. Tetalman, this award honors the work of a young investigator who is pursuing a career in nuclear medicine. It is named in memory of a highly respected and productive clinician and researcher, Mark Tetalman, M.D., whose career was cut tragically short.

Amount: $5,000
# of Awards: One – awarded every other year
Deadline: Received by November 15
Award Date: June
Eligibility: Applicants must be 36 years old or younger as of July 1 of the application year and must have obtained certification in Nuclear Medicine or Nuclear Radiology or have completed a PhD program within the last seven years.

RESEARCH AWARDS

SNM Pilot Research Grants-Includes Mitzi and William Blahd Pilot Research Grant*
These grants support testing of innovative ideas in clinical/basic research while grantees seek major grant support. The grants fund essential materials outside the areas of salaries, major equipment purchases, and overhead or travel.

Amount: Recommended award level for 2008 = $25,000 each ($8,000 in 2007)
Deadline: Received by February 1
Award Date: July
Eligibility: Basic and clinical scientists, in the early stages of their careers, employed by academic and research-oriented organizations.

*top award is designated Mitzi and William Blahd grantee (Endowed Award)

SNM Molecular Imaging Research Grants for Junior Medical Faculty (new)
The objective of this program is to provide salary support for junior faculty members in Nuclear Medicine or Radiology to enable them to engage in Molecular Imaging research.

Amount: $50,000 per year for 2 years ($50,000 year 1; $100,000 total year 2 and following)
# of Awards: 1
Deadline: To be determined
Award Date: To be determined
Eligibility: Applicants must have MD degree (or equivalent) and have completed a nuclear medicine or radiology residency and be ABNM/ABR BC/BE. Applicants must be practicing in an academic/research setting as a faculty member in a department of radiology, or nuclear medicine (or equivalent) in the U.S. Applicants must be within 5 years of their initial faculty appointment with an academic rank of instructor or assistant professor (or equivalent). Applicants must provide a detailed proposal of the proposed research activity. Applicants must not have received grant/contract amounts totaling $50,000 or more in a single calendar year as the principal investigator.
Postdoctoral Molecular Imaging Scholar Program (new)
The postdoctoral program would support a 2-year research endeavor that promotes integration of molecular imaging into the career of the trainee. Funds awarded directly to scholar.
Amount: $30,000 per year for 2 years ($60,000 total year 1, $120,000 total year 2 and following)
# of Awards: 2
Deadline: To be determined
Award Date: To be determined
Eligibility: MD, MD/PhD, and PhD

TECHNOLOGIST AWARDS

SNMTS Outstanding Educator Award
The purpose of this award is to recognize a SNMTS member who has significantly contributed to providing knowledge which advances and promotes the field of nuclear medicine technology through outstanding work in education.
Amount: $750
# of Awards: One annually
Deadline: February 15
Award Date: SNM Annual Meeting
Eligibility: Eligible candidates also include teachers and educators in the non-traditional sense such as industry and clinical professionals.

SNMTS Outstanding Technologist Award
The purpose of this award is to recognize a SNMTS member who has demonstrated outstanding service and dedication to the field of nuclear medicine technology.
Amount: $750
# of Awards: One annually
Deadline: February 15, 2007
Award Date: SNM Annual Meeting
Eligibility: SNMTS members. Nominees must be involved with the Society at the local, regional, and/or national level and have at least five years of experience in nuclear medicine technology.

SNMTS Best Paper
This award recognizes the best paper published in the Journal of Nuclear Medicine Technology (JNMT) in the past year.
Amount: $500
# of Awards: One
Deadline: Upon submission.
Award Date: Winners are notified prior to the SNM Annual Meeting.
Eligibility: Nuclear medicine technologists

TRAINEE AWARDS

SNM Student Fellowships
These fellowships support students' full-time participation in clinical and basic research activities in Nuclear Medicine.
Amount: $10,000 maximum
Deadline: November
Award Date: When the research funds are needed, no sooner than February
Eligibility: Students in medical school, pharmacy school, or graduate school; undergraduates demonstrating outstanding competence in nuclear medicine research.

**Predoctoral Molecular Imaging Scholar Program (new)**
The predoctoral program would support a 1-year research scholar in an established molecular imaging lab that will apply molecular imaging approach to investigate biological pathways in disease models. The objective is to encourage the integration of imaging approaches in the research on molecular pathways of disease. Funds would be awarded to institution for use by the training program to support an “SNM Scholar.”

**Amount:** $20,000 up to 2 years ($40,000 total year 1 and $80,000 year 2 and following)

**# of Awards:** 2

**Deadline:** To be determined

**Award Date:** To be determined

**Eligibility:** Advanced to candidacy in PhD

**Grant Development Award (new)**
To support registration, travel and accommodations for young faculty (within 2 years of graduation) to attend intensive workshops on grant writing. The purpose is to assist participants in preparing quality grant applications to NIH or other equivalent institution, specifically related to molecular imaging research.

**Amount:** $2,500 stipend

**# of awards:** 2

**Deadline:** To be determined

**Award Date:** To be determined

**Eligibility:** Residents and Nuclear Medicine Fellows

### TRAVEL AWARDS

**SNM Travel Awards (new)**
To support the attendance of students and postdoctoral or clinical trainees to present molecular imaging abstracts at the SNM Annual Meeting. Selection of recipients will be based upon the abstract grade, ranking as well as the contents of the travel award application.

**Amount:** $1,500

**# of Awards:** 25

**Deadline:** To be determined

**Award Date:** May, 2008

**Eligibility:** Applicants must be students or trainees.
SNMTS Travel Awards
To support registration, travel and accommodations towards attendance of a first time presenting Nuclear Medicine technologist to the SNM Annual meeting in order to present their submitted molecular imaging abstract(s) at the SNM Annual Meeting. Selection of recipients will be based upon the abstract ranking.

Amount: $1500.00  
# of Awards: 25  
Deadline: 30 days after notification of abstract acceptance or denial  
Award Date: May 31, 2008  
Eligibility: Applicants must be certified Nuclear Medicine technologists who are members of the SNMTS with a submitted abstract to the SNM Annual meeting.

SNMTS Bachelors Degree Completion
This award supports a student who is pursuing a bachelor’s degree completion program related to his or her nuclear medicine career.

Amount: $5,000  
# of Scholarships: Five, may be renewed for one academic year  
Deadline: Received by October 1  
Award Date: February 15  
Eligibility: Students with a certificate or associate’s degree in nuclear medicine technology who are currently enrolled in a bachelor’s level program to advance their career in nuclear medicine.

SNMTS Advanced Practitioner Program
This scholarship supports a student who is pursuing an advanced practitioner program in nuclear medicine.

Amount: $5,000  
# of Scholarships: Two  
Deadline: Received by October 1  
Award Date: February  
Eligibility: Students who enrolled in an advanced practitioner program to advance their career within the field of nuclear medicine.

SNMTS Student Travel
To support registration, travel and accommodations towards attendance of a Nuclear Medicine technology student who will present a molecular imaging abstract(s) at the SNM Annual Meeting. Selection of recipients will be based upon the abstract ranking.

Amount: $1500.00  
# of Awards: 12  
Deadline: 30 days after notification of abstract acceptance or denial  
Award Date: May 31, 2008  
Eligibility: Applicants must be currently enrolled in a Nuclear Medicine technology program and have an abstract that was accepted for presentation at the SNM Annual meeting.
SNMTS Clinical Advancement
This scholarship supports technologists who are pursuing clinical advancement through didactic educational programs. These programs must be college credit eligible but completion of this course does not need to result in a degree.

Amount: $500

# of Scholarships: Fifty

Deadline: Received by October 1

Award Date: February

Eligibility: Students who are accepted into or enrolled in clinical advancement courses e.g. CT, DEXA, physics, statistics
Procedure Guidelines/Standards and Consensus in the Journal
Executive Summary: Publication of Procedure Guidelines

Procedure guidelines can currently be accessed in the following ways:

- All procedure guidelines are published on-demand in binder format—a big seller.
- In addition, all current guidelines are available online on the SNM Web site at www.snm.org, then click on left navigation bar click Practice Management, then click Procedure Guidelines.
- In addition, in the past new guidelines have been published in JNM.

History

At the 2007 Midwinter Meeting, the Procedure Guidelines Committee brought a request to the Publications Committee that revised procedure guidelines also be published in JNM because, they felt:

- It would get the guidelines into Pub Med with wider distribution, availability and recognition.
- By making such revisions a citable reference, it would motivate committee members to update guidelines.

JNM Editor-in-Chief Heinrich Schelbert pointed out that procedure guidelines get very few citations, and since they are published as full articles, they pull down the journal’s impact factor. In addition, they use article space that could be utilized for scientific articles, slowing down the submission-to-publication rate.

The Publications Committee offered three primary options to the Procedure Guidelines Committee:

- Publish revised guidelines in JNMT, which would get them into Pub Med and make them a citable reference
- Publish them in a supplement
- Publish them in abstracted format in Newsline, then link to or reference the full version on the JNM site

Although the ideas were well received at that meeting, the Procedure Guidelines Committee was not happy with the offered alternatives.

At the 2007 Annual Meeting, JNMT Editor Fran Neagley attended the Procedure Guidelines Committee meeting to repeat the offer of publishing procedure guidelines in JNMT. She reported briefly to the Publications Committee that her suggestion had been received favorably and she would move to implement; the Publications Committee agreed. The Publications Committee—and Dr. Schelbert—now agreed that all new and revised procedure guidelines would be published in JNMT.

Recently, Dr. Alan Maurer submitted an article to JNM which, although titled “Consensus Recommendation,” Dr. Schelbert described as “a meticulously detailed description of procedural aspects of gastric emptying that indeed amount to ‘Procedural Guidelines’.” After consulting with the Publications Committee chair to ensure consensus, Dr. Schelbert rejected the article for publication: “While the value of publishing procedure guidelines in JNM is recognized as a service to the SNM membership, the concerns regarding such publications are related to space and page limitations, and especially its potentially negative effect on the impact factor. Different from what one would anticipate, procedure guidelines are rarely cited if at all.”

At the same time, Dr. Schelbert (1) offered to publish a 2-page summary of the article in Newsline and link that to the full article on the JNM site and (2) suggested JNMT as an excellent alternative for publication of the full article. Dr. Schelbert explained: “This compromise solution would be of advantage for both; the consensus recommendations would receive even greater exposure and the authors would receive two instead of one citation. Further, it would free up space for publication of 2 to 3 original research papers (instead of the current 14,000 word document) in JNM which to some extent might offset the low-impact consensus statement.”

Message from SNM Publications Committee Chair:

I believe procedure guidelines should be in JNMT rather than JNM. The impact factor is very important in maintaining and raising the scientific prestige of the journal—especially as SNM transitions to molecular imaging, we need as much scientific recognition as possible of the superiority of JNM. It makes no sense to risk it if guidelines can be published in JNMT.

In addition, as I understand it, the GI article is not exclusive to JNM; it will also be published by the GI journal.

I hope that the Board would not overrule the decision of the editor-in-chief and the chair of the SNM Publications Committee, who were tasked with doing and are trying to do the right things for SNM in re watching over JNM. This has been a thoughtful, well-considered decision with input from many SNM members.
Awards Committee
RESOLUTION FORM
Board of Directors
September 29, 2007

ACTION ITEM: Approval of 2008 Aebersold Award Recipient

SUBMITTED BY: Mathew Thakur, PhD
Chair, SNM Committee on Awards

PROPOSED RESOLUTION: Resolved, that the 2008 Aebersold Award be presented to Ronald G. Blasberg, MD

FINANCIAL IMPACT: N/A

BACKGROUND: The SNM Awards Committee reviewed seven nominees for the 2008 Aebersold Award and voted to award Dr. Ronald Blasberg, Department of Radiology, and Molecular Pharmacology & Chemistry Program, Memorial Sloan-Kettering Cancer Center (see abbreviated CV)

The Paul C. Aebersold Award honors outstanding achievement in basic science applied to nuclear medicine.

ACTION: ADOPTED ___  DEFEATED ___  OTHER ___
MEMORIAL SLOAN-KETTERING CANCER CENTER

Curriculum Vitae and Bibliography Format

Name: Ronald George Blasberg

Date of Birth: April 24, 1939

Place of Birth: Paterson, New Jersey

Nationality: USA

Office Address: Department of Neurology, Room K-923
1275 York Avenue
Tel. #: (212) 639-7337
Tel. #: (212) 639-7337
E-mail: blasberg@neuro1.mskcc.org
Fax #: (212) 717-3063

Home Address: 44 Willowmere Avenue
Riverside, CT 06878
Licensed Physician: Year: 1967 Place of Issue: New York

Board Certification: Year: 1975 Name: Neurology

Education:

College: Colgate University
June 1961, B.A., New York

Dates Attended, Degree, and Place
June 1967, M.D., New York

Medical School and/or Graduate School
Albert Einstein College of Medicine

Dates of Appointment, Degree, and Place
June 1967, M.D., New York

Postdoctoral Training:

Internship and Residencies
Dates of Appointment, Field of Research, and Place

1967 - 1968 Intern, Internal Medicine
New York Hospital
1968 - 1969  Resident, Neurology
            Presbyterian Hospital, Neurological Institute, New York

1972 - 1974  Resident, Neurology
            University of California, San Francisco

Research Fellowships

Dates of Appointment, Field of Research, and Place

1963 - 1965  Neurochemistry, Research Fellow
            New York State Research Institute for Neurochemistry and Drug Addiction

1969 - 1972  Clinical Associate
            National Cancer Institute, National Institute of Health

Positions and Appointments:

1974-1983  Senior Investigator, Membrane Transport Section, Laboratory of Chemical
            Pharmacology, DTP, DCT, NCI, NIH

1983-1987  Senior Investigator, Nuclear Medicine Department, CC, NIH

1986-1991  Associate Editor, Journal of Cerebral Blood Flow & Metabolism

1987-1990  Senior Investigator, PET Section, Nuclear Medicine Department, CC, NIH

1990-Present  Attending Neurologist and Member, Memorial Hospital for Cancer and Allied
              Diseases, Memorial Sloan-Kettering Cancer Center, New York, New York

1997 - Present  Professor of Neurology, Department of Neurology and Neuroscience, Cornell
                University Medical College and Attending Neurologist, New York Hospital,
                New York, New York

1999 - Present  Laboratory Head, Blasberg Laboratory, Department of Neurology, Memorial Sloan-
                Kettering Cancer Center

2001 -2005  Member, Molecular Pharmacology & Chemistry Program, Sloan-Kettering
            Institute, Memorial Sloan-Kettering Cancer Center, New York, New York

2004 - Present  Attending, Department of Radiology, Memorial Sloan-Kettering Cancer Center,
                New York, New York

2001 -2005  Editor-in-chief, Molecular Imaging (new journal), Ann Arbor, Michigan

2004 - Present  Senior Editor (Imaging) Clinical Cancer Research, New Brunswick, New Jersey

Scientific and Medical Societies:

Phi Beta Kappa
American Academy of Neurology
American Medical Association
International Society of Cerebral Blood Flow and Metabolism
Society of Nuclear Medicine
American Neurological Association

Honors and Awards:

Honorary Doctoral Degree, Medical Sciences
University of Copenhagen, Copenhagen, Denmark  2005

Committees

Institutional Review Board  1994 - Present
Committee on Radiation  1999 - Present
PET Execution Committee  1994 - Present

Number of Publications - 178
Annual Meeting Site Selection
RESOLUTION FORM
SNM Board of Directors
September 29, 2007

ACTION ITEM: Approval of 2014 SNM Annual Meeting be either St. Louis or Denver

SUBMITTED BY: Leonie L. Gordon, MD
SNM General Program, Chair

PROPOSED RESOLUTION: Resolved, that the 2014 SNM Annual Meeting be held in St. Louis or Denver

FINANCIAL IMPACT: N/A

BACKGROUND: N/A

SUPPORT MATERIAL: N/A

ACTION: ADOPTED ___ DEFEATED ___ OTHER ___

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RESOLUTION FORM  
SNM Board of Directors  
September 29, 2007

**ACTION ITEM:** Approval of 2015 SNM Annual Meeting be held in either Baltimore or Philadelphia.

**SUBMITTED BY:** Leonie L. Gordon, MD  
SNM General Program, Chair

**PROPOSED RESOLUTION:** Resolved, that the 2015 SNM Annual Meeting be held in Baltimore or Philadelphia.

**FINANCIAL IMPACT:** N/A

**BACKGROUND:** N/A

**SUPPORT MATERIAL:** N/A

**ACTION:** ADOPTED ___  DEFEATED ___  OTHER ___

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Informational Items
SNM Chosen “Most Influential”
1. Society of Nuclear Medicine

Leading a revolution

By planning strategically, SNM continues to grow and adapt to meet the changing needs of patients, healthcare, its members and the profession. For more than 50 years, SNM and its 16,000 physician, technologist and scientist members have been well known for excellence in the nuclear medicine profession.

Their work has expanded into the rapidly emerging – potentially revolutionizing – field of molecular imaging. Nuclear medicine imaging has always contributed functional assessment to the anatomical definition of the presence or absence of disease. The new tools made available through molecular imaging and PET have great potential to contribute to the personalized medicine revolution – and SNM is leading the way.

Validating the Field

Molecular imaging may revolutionize patient care by integrating information about location, structure, function and biology – leading to a package of non-invasive, in vivo imaging tools with enormous potential for improving patient care and outcomes. It will provide an essential key to the future of high-quality personalized medicine, which involves diagnosing, treating and monitoring patients based on their individual makeup.

SNM is assisting in translating multimodality breakthroughs from the lab into practical tools for physicians, thus expanding treatment options for patients. The society is reaching out to experts in related fields and facilitating the movement of molecularly guided discoveries from bench to bedside.

SNM’s "Bench to Bedside" campaign has raised nearly $4 million in its first year to develop educational tools for radiologists, primary-care physicians and patients; to support advocacy for molecular imaging; and to train the current imaging workforce.

The society is addressing the technological, regulatory, financial, business development and evidence-based requirements to successfully integrate molecular imaging into medical care and the evolving field of personalized medicine by proving that it makes a difference to patients.

SNM is also working with national groups to develop meaningful clinical studies data so that these new imaging tests can be introduced as fast as possible into clinical practice, and also to

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**Top Techs**

This year, RT Image is honoring technologists who have gone above and beyond the call of duty and are making great strides in their profession. The following individuals have demonstrated the integrity, drive and ambition to deserve the title, "Top Tech."

- **Nancy Adams, BSRS, RT(R):** Representing her home state of Mississippi, Adams recently presented to the United Kingdom Radiologic Congress on the aftermath of Hurricane Katrina and her work with the Disaster Mortuary Operational Response Team. Also, Adams bears the distinction of being named the ASRT Foundation's first International Speakers Exchange Grant recipient.

- **Phil Ballinger, PhD, RT(R), FASRT:** Ballinger, in his capacity as an educator and previous editor of Merrill's Atlas, has impacted the imaging community, both in the United States and abroad. Today, Ballinger serves as both a goodwill ambassador and a mentor to students.

- **Jorge Casañas, MEd, RT(R)(CV) (QM)(ARRT):** An imaging services supervisor and an adjunct faculty member at Miami Dade College-Medical Center Campus, Casañas is known by students for his congenial attitude and strong work ethic.

- **Tammy Coryell, RT(R)(M):** A mammography specialist with Mammography Impact Consultants, and a clinical educator for BioLucent Inc., Coryell certainly has her work cut out for her. But, when you factor in her day job as a mammography technologist at St. John's Breast Center in Springfield, Mo., Coryell makes it her mission to stay on the cutting edge of breast cancer detection.

- **David Gilmore, MS, CNMT, NCT, RT (R)(N):** The president of the Society of Nuclear Medicine’s Technologist Section, Gilmore tirelessly lobbies for state and national licensure for all technologists.
ensure that current PET indications can be expanded.

This will lead to the practical clinical use of imaging biomarkers, offering tremendous potential for accelerating the development of pharmaceuticals and therapeutic devices, and ensuring that the best treatment is given to the right patient at the right time. And, SNM’s Clinical Trials Group is facilitating the development of imaging biomarkers and new probes.

Driving Research and Education

SNM’s Molecular Imaging Center of Excellence, the driving force for research, education, advocacy and innovation in the field of molecular imaging, has successfully completed a number of activities, positioning SNM as a central resource.

Center members have developed standard definitions and terminology; created a new Web site to provide online information, education and training in molecular imaging; established a dialogue with funding agencies; hosted an expert/industry summit; initiated outreach to referring physicians, patient groups, federal agencies, regulators and the public; and launched proactive lobbying for reimbursement, research funding and related issues.

The society is recognized, and strongly represented, as a vital and influential leader and innovator in advancing molecular imaging and therapy and supporting nuclear medicine. During a year-long rebranding process, SNM reviewed all of the elements of its brand and considered options and suggestions to strengthen and broaden its image, creating a unified organizational identity with the development of the Molecular Imaging Center of Excellence, the redesign of its main Web site and logo.

By all these actions – and continuing to collaborate with those in related professional and patient associations – SNM is leading the molecular imaging revolution.

— Alexander J. McEwan, MD, is president of the Society of Nuclear Medicine.

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2. Newt Gingrich

Building an intelligent health system

As the founder of the Center for Health Transformation (CHT),

- Paul Laudicina, MA, RT(R), BCFE, DABFE, FACFE: A driving force in educating and mentoring technologists, Laudicina has touched the lives of many medical imaging professionals. Although retired, Laudicina continues to teach part-time, as well as work in forensic radiography.
- Sal Martino, EdD, RT(R): Going above and beyond his duties as the executive vice president of the ASRT, Martino has achieved high acclaim in the imaging community through his work with the Society of Radiographers (UK), the American College of Radiology and other national and international associations.
- Nancy Swanson, CNMT, RT(N) (PET): A PET specialist at the University of Texas M. D. Anderson Cancer Center, Swanson regularly drafts protocols for nuclear medicine and PET procedures. She also impacts future generations by lecturing and developing programs to educate students in PET and CT.

— RT Image

RT Image’s Most Notables

Although they did not make our Top 25 list this year, below are a few other people and organizations to look for next year.

- Ronald Adler, PhD, MD: A musculoskeletal radiologist at the Hospital for Special Surgery in New York City, Adler bears the distinction of being rated a No.1 physician by New York Magazine.
- Eric Bailey: As the CEO and co-founder of Neurologica Corp., Bailey is a man on a mission. His agenda: to promote the universal accessibility of CT screening and create advanced imaging tools to detect Alzheimer’s disease at an early, treatable stage.
- Philip Costello, MD, FACR: A professor and chairman of the department of radiology at the Medical University of South Carolina, Costello is widely regarded as a pioneer in CT and key player in the computer-aided detection and metabolic imaging fields.
- Danielle M. McGuire, AIA: An associate with Nacht and Lewis Architects Inc., McGuire specializes in the design of radiology spaces – ensuring that they are built properly and efficiently.
- Steven Renard: President and CEO of
former Speaker [of the House] Newt Gingrich is having a monumental impact on creating what the center calls “a 21st century intelligent health system.”

Through our center, Newt has brought together an unparalleled collaboration of high-impact leaders from both the public and private sector, who are working together to replace the current paper-based, bureaucratic system with a new system of health – one that is centered on the individual, IT-rich and focuses on early detection, prevention and wellness. The increased creation and adoption of diagnostic tools, such as diagnostic imaging, are key to the future being advocated and created by the center.

The mission of the CHT is to support a movement that will accelerate the adoption of transformational health solutions and policies that create better health with more choices at lower cost. With Newt Gingrich, the center acts as a catalyst to accelerate transformational change by sharing those solutions, technologies and policies with a wide array of policy-makers, opinion leaders and decision-makers.

With cancer, Alzheimer’s, diabetes and health information technology as four of our key projects, the center advocates the creation and adoption of diagnostic tools to help advance personalized medicine and targeted treatments for various conditions, recognizing that patients who begin therapy earlier have better outcomes.

When it comes to getting the message out, there are few as compelling as Newt Gingrich. Along with the hundreds of health speeches he gives each year, he and the rest of our center team are featured regularly in the news media. They are making the case for health transformation in Congressional testimony, in training and educational briefings for key public- and private-sector decision-makers and through CHT Press, the center’s new publishing arm.

While many ask if Newt plans to run for office, he consistently asserts that his focus is not on running for office, but on getting America and our leaders to adopt 21st century transformational solutions for a better future, with a primary emphasis on health transformation.

Both Newt and CHT are committed to the fact that, whatever the future holds, we will continue to serve as a key catalyst for the creation of a 21st century intelligent health system that saves lives and saves money for every American.

— Nancy Desmond is president and CEO of the Center for Health Transformation and co-author with Newt Gingrich of The Art of Transformation.

3. Breast MRI
New advances, new options

In 2007, the number of breast MRI examinations continued to skyrocket, propelled by studies performed within the past year that substantiate the clinical indications for the examination. For instance, MRI screening of the contralateral breast in women with recently diagnosed unilateral breast cancer was evaluated at 25 clinical sites in the United States and Canada in a study conducted by the American College of Radiology Imaging Network (ACRIN).

Mammographically occult breast cancer was found in 3.1 percent (30 of 969 women). These findings are consistent with those of five previous smaller studies from 1997-2003, which, on average, found cancer in 5.1 percent (40 of 792 women) contralateral breasts.

In another study, 195 genetically high-risk women, defined as BRCA1/BRCA2 carriers or with at least a 20 percent probability of carrying a BRCA1/BRCA2 mutation, were screened with mammography, MRI and ultrasound at six facilities throughout the United States. The cancer yield was 3.5 percent percent for MRI, 1.2 percent for mammography and 0.6 percent for ultrasound in this trial conducted by the International Breast MRI Consortium and supported by ACRIN.

These results are consistent with those from nine previous high-risk screening studies performed in North America and Europe from 2000-2007, which found an average 3.9 percent detection rate for mammographically occult tumors.

On the basis of such high-risk screening studies, the American Cancer Society (ACS), in early 2007, published “Guidelines for Breast Screening with MRI as an Adjunct to Mammography.” Screening MRI is recommended for women with an approximately 20 percent to 25 percent or greater lifetime risk of breast cancer, including women with a strong family history of breast or ovarian cancer and women treated for Hodgkin’s disease. Approximately 1 to 1.5 million women in the United States fall into these extremely high-risk categories.

ACS concluded that available data are currently insufficient to recommend for or against MRI screening for women with a personal history of breast cancer, carcinoma in situ, atypical hyperplasia and extremely dense breasts on mammography. Further studies are needed to determine the detection rates, false positive biopsy rates and cost-effectiveness of MRI screening of such women who may have a less than 20 percent lifetime risk of breast cancer.

Although breast MRI has an increasingly better defined list of screening and diagnostic indications, it is important to realize that clinical results will depend on the technical quality and the level of interpretive expertise. With this in mind, the ACR will initiate a voluntary breast MRI accreditation program by the end of 2007.

— Stephen A. Feig, MD, FCR, is chair of the American College of Radiology Breast Imaging Communications Committee.
4. Arl Van Moore Jr., MD, FACR
Radiology’s frontman

As chair of the American College of Radiology (ACR) – one of the largest medical specialty organizations in the world – Arl Van Moore Jr., MD, FACR, is among the nation’s foremost respected leaders in the field of radiology and an important resource for the entire medical community.

Dr. Moore is the central figure in the ACR’s efforts to ensure appropriate reimbursement for imaging and radiation oncology services based on medical fact and quality patient care. He tirelessly argues before Congress and other bodies regarding the value of appropriate medical imaging performed by a highly trained radiologist.

Furthermore, he emphasizes the need to protect patients’ access to care as private-payers, Medicare and state agencies frequently revise their imaging policies. In his role as chair of the ACR’s board of chancellors, Dr. Moore delivers outstanding leadership to a host of issues, ranging from quality and safety to the development of the new ACR Education Center – a national, cutting-edge training facility for radiologists, which opens in early 2008.

As former chair of the ACR Task Force on International Teleradiology and primary author of the “ACR Whitepaper on International Teleradiology,” Dr. Moore serves as a leading authority on patient safety and quality-of-care issues associated with this ever-increasing practice within the radiology community.

Dr. Moore is also chair of the ACR Task Force on Disaster Preparedness and primary author of the primer, “Disaster Preparedness for Radiology Professionals.” He is a leading expert in efforts to enable the radiology community, first-responders and the rest of medicine to proceed effectively in the event of a nuclear accident or terrorist attack.

In private practice, Dr. Moore is an active interventional radiologist and president of Charlotte Radiology, one of the largest radiology groups in the South. Additionally, he is medical director at the Carolinas Medical Center School of Radiologic Technology.

Dr. Moore is also an interventional radiology CAQ examiner for the American Board of Radiology and a clinical assistant professor at the Duke University Medical Center department of radiology. He will be a key figure in radiology for many years to come.
5. Claudia Henschke, MD, PhD
Innovation in lung cancer detection

At a recent conference at the Center for Disease Control and Prevention (CDC), the topic was spiral CT screening for lung cancer. The bulwark of the center’s efforts on lung cancer have focused on tobacco control, but Dr. Claudia Henschke's landmark paper on lung cancer screening appearing last October in the New England Journal of Medicine has caused many, including the CDC, to reconsider this thorny topic. The story of how this paper came to be reveals much about the determination and drive of Dr. Henschke.

In 1999, the main thrust of innovation for finding early lung cancer was directed at employing new molecular diagnostic approaches, so that there was considerable skepticism about the robustness of Dr. Henschke’s first screening paper in the Lancet, suggesting that spiral CT could be effective in consistently finding early lung cancer.

Furthermore, when the seed money allowing this initial research dried up, Dr. Henschke developed an innovative Web-based study management system with a collaborator, Dr. Anthony Reeves. This tool enabled the economical, but massive, growth of collaborators, allowing for the 2006 New England Journal report, which included more than 31,000 study participants.

Along the way, Dr. Henschke, with a large and loyal band of collaborators, redefined the approach to diagnostic work-up in the screening setting and redefined the surgical approach for screen-detected cancer. They pioneered the use of image processing to detect nodule growth as a tool to reduce over-treatment in the clinical management of screen-detected cancers.
The flow of innovative tools to meet specific management needs has not stopped as new biopsy catheter-guidance devices and other tools are moving forward. This work has had such impact, that Senators Feinstein and Brownback, in a joint resolution called the National Cancer Act of 2007, have proposed that the CDC initiate demonstration projects to follow up on the research findings of Dr. Henschke’s group.

While lung cancer screening remains an evolving field, the breathtaking pace of progress in this field has been unquestionably driven by a very resourceful radiologist from Cornell.

— James L. Mulshine, MD, is professor of internal medicine and associate provost for research at Rush University Medical Center.

6. St. Jude Children’s Research Hospital

Giving children hope

Radiological Sciences is a major clinical and research department at St. Jude Children’s Research Hospital in Memphis, Tenn., which is focused on improving the diagnosis and care of children with cancer and related catastrophic diseases. Diagnostic imaging is the department’s largest division, incorporating routine and cross-sectional imaging modalities in radiography, MR and nuclear medicine.

Faculty members are responsible for clinical investigations that have focused on advancing diagnostic techniques and measures of tumor response, as well as the treatment-related changes in major programmatic areas, including neuroimaging and bone integrity. Recently, molecular imaging research has been initiated with the installation of a dedicated cyclotron facility and nuclear chemistry.

An active translational imaging research effort includes quantitative and functional neuroimaging, as well as technical development and clinical investigation related to vascular imaging in both neuro-oncology and sickle cell disease. In the fall, the department will move into new quarters, nearly tripling its space to provide both expansion and modernization to optimize diagnostic imaging and radiation oncology with enhanced technologies and a dedicated staff.

St. Jude is internationally recognized for its pioneering work in finding cures and saving children with cancer and other catastrophic diseases.

Founded by the late entertainer Danny Thomas, St. Jude freely shares its discoveries with scientific and medical communities around the world. No family ever pays for treatments not covered by insurance, and families without insurance are never asked to pay. St. Jude is financially supported by ALSAC, its fundraising organization.

— Larry Kun, MD, is chair of the St. Jude Children’s Research Hospital department of radiological sciences.
7. Linda K. Holden, MS, RT(R)(QM)(RDMS)
The Liaison

American Society of Radiologic Technologists (ASRT) President-elect Linda K. Holden, MS, RT(R)(QM), RDMS, is the sonography program director and a radiography faculty member at the Laramie County Community College in Cheyenne, Wyo. But, according to Christine Lung, director of government relations for the ASRT, "She is a [also] wonderful person."

Lung has worked with Holden for several years on the passage of the Consistency, Accuracy, Responsibility and Excellence in Medical Imaging and Radiation Therapy (CARE) bill. "[Holden] is a strong advocate for federal minimum standards," Lung says. "She served on ASRT's Committee for R.T. Advocacy before being elected to the ASRT Board. Linda has [also] consistently participated in the R.T. in D.C. advocacy event."

And it was Holden who finally convinced Rep. Barbara Cubin, R-Wyo., who has been in office since 1994, to sign on as a co-sponsor of the CARE bill this year during the annual R.T. in D.C. event.

Holden was also instrumental in gaining CARE bill support from Sen. Mike Enzi, R-Wyo., who is chairman of the Committee on Health, Education, Labor and Pensions. "Linda and Sen. Enzi are both from Wyoming," Lung says. "[So] she felt comfortable going to him and asking to co-sponsor the bill."

Today, Holden is one of the main constituent contacts for Sen. Enzi. According to Lung, "When we need that personal constituent touch, we go to Linda."

"In addition to being a great advocate for the RT profession," Lung says, "Linda is a great educator. She has a very friendly and collegial rapport with her students. She is truly an influential person within the profession."

— Michelle Stephens is the corporate writer for the ASRT.
8. American Board of Imaging Informatics
Certifying the IIP

The American Board of Imaging Informatics Inc. (ABII) is the nonprofit organization that sponsors the Imaging Informatics Professional Certification Program and awards the Certified Imaging Informatics Professional (CIIP) designation to qualified candidates.

Founded by the Society for Imaging Informatics in Medicine (SIIM) and the American Registry of Radiologic Technologists (ARRT), ABII offers a national certification program that defines the standard for demonstrated knowledge and competence in medical imaging informatics.

Initial exam development and design began in 2003, and it has been supported through the process over the last four years by the founding organizations. Collaboration between the two organizations allowed each to contribute its unique expertise and resources. SIIM brings a wealth of content-specific expertise, while the ARRT has extensive experience in the policies and procedures of certification.

The ABII seven-member board of trustees consists of three members nominated by SIIM, three members nominated by the ARRT and a public member who is not employed in the field of imaging informatics. ABII’s mission is to enhance patient care, professionalism and provide a measure of competence for those practicing in the field of imaging informatics.

The IIP certification program has been developed to be consistent with the standards of the National Commission for Certifying Agencies (NCCA). The program will be submitted for accreditation to the NCCA.

Anyone interested in learning more about ABII and certification should visit www.abii.org or contact ABII at 651-994-6410.

— Chuck Socia, RT(R)(CT)(QM)/CIIP, is with the American Board of Imaging Informatics.
9. Wendie Berg, MD, PhD
Ultrasound meets breast imaging

One of the most important contributions to women’s health that radiologists can make is the early detection of breast cancers when they are small, early-stage and more successfully treatable.

For many years before the American College of Radiology Imaging Network (ACRIN) 6666 multicenter trial opened for patient participation, Dr. Wendie A. Berg, MD, PhD, understood the need for a large study that would investigate the role of supplemental ultrasound for a special group of women for whom mammography had some limitations in detecting breast cancer: women with dense, fibroglandular breasts who were at high risk of developing breast cancer.

The problem these women have with mammography is contrast. A cancer appears as a white splotch, and fibroglandular tissue looks white on mammograms, making it harder to see the cancer.

Dr. Berg marshaled the evidence supporting a trial that included bilateral screening ultrasound performed and interpreted separately from mammography, developed a protocol and sought approval from ACRIN and the National Cancer Institute for the study and gratefully accepted generous funding from the Avon Foundation.

Recruiting 21 teams of expert breast imagers from the United States, Canada and Argentina as principal investigators of this study, Dr. Berg oversaw the enrollment of 2,809 women whose risk of breast cancer and breast density met the study's eligibility criteria.

The study, now closed to accrual, called for three annual rounds of mammography and bilateral breast sonography. During the long gestational period of this excellent research endeavor – and during the study itself – Wendie has distinguished herself as an outstanding thinker, leader and scientist.

— Ellen B. Mendelson, MD, FACR, is co-investigator of ACRIN 6666.
10. Carmine Valente, PhD, CAE
Ultrasound’s advocate

The American Institute of Ultrasound in Medicine (AIUM) operates at the forefront of the ultrasound community under the leadership of a dedicated and diverse group of volunteers. The constant element in this equation is the guidance provided by AIUM CEO, Carmine Valente, PhD, CAE.

Dr. Valente received his public health training from Johns Hopkins University and his doctorate from the University of Maryland. He is also designated a certified association executive by the American Society of Association Executives.

"For the past 10 years, I have had the honor and privilege of serving as the CEO of the AIUM. As a multidisciplinary medical association of [more than] 7,000 physicians, scientists and sonographers, we have had access to the collective knowledge and expertise of our volunteer officers, leaders, dedicated staff and members to promote and advance the field of medical ultrasound," Dr. Valente says.

This is an exciting time for the AIUM. Most recently, the AIUM has campaigned for the approval of the use of contrast-enhanced ultrasound (CEUS) in the United States. The lack of CEUS potentially hinders the delivery of optimal diagnostic imaging, resulting in an adverse impact on patient care.

Perhaps one of the most important efforts of the AIUM is the work of its Bioeffects Committee, charged with evaluating research on the biological effects of ultrasound. The government, manufacturers and other world ultrasound bodies look to the AIUM on matters related to the safety of clinical ultrasound.

Dr. Valente has been a key element in facilitating and coordinating these and other important activities that continue to grow both the AIUM and interest in the ultrasound arena.

— Joshua Copel, MD, is president of the AIUM.
11. Edward “Ned” Patz Jr., MD
Thinking outside the box

Edward “Ned” Patz Jr., MD, has clearly established himself as one of the most influential radiologists in the country. Over the past decade, Dr. Patz has proven to be an innovative, productive and influential visionary in the field of tumor diagnostics, particularly focusing on the early detection of lung cancer. His observations, writings and teachings have significantly impacted the current practice of medicine.

Dr. Patz has an amazing ability to think “outside the box.” He has created a true paradigm shift in diagnostics, stressing that imaging should provide a spectrum of noninvasive information, accurately reflecting the underlying biology. No one has a better appreciation of this novel approach and of the necessities of molecular diagnostics in clinical medicine than Dr. Patz.

His initial research efforts were focused on PET imaging, and he was among the first in the world to apply this technique to the analysis of solitary pulmonary nodules. His work was rapidly integrated into worldwide clinical practice.

Dr. Patz’s unique understanding of tumor biology led him to explore alternative diagnostic strategies, which resulted in a number of pioneering contributions in early detection strategies, and in the development of tumor-specific imaging probes and biomarkers. It is this latter work that holds enormous promise for the future.

Dr. Patz is a unique and creative individual. His contributions to diagnostic imaging and translational medicine are outstanding. He will, undoubtedly, continue to contribute to significant advances in diagnostic radiology and molecular diagnostics.

— Carl Ravin, MD, is professor and chairman of the department of radiology at Duke University Medical Center.
12. Memorial Sloan-Kettering Cancer Center  
Cancer’s greatest foe

Advances in imaging technology – and in the ways we apply it – are having a major impact on cancer care. We are able to detect cancer at increasingly smaller sizes. Imaging findings frequently provide crucial information for treatment selection, treatment planning and assessment of response. And imaging is increasingly being used to guide minimally invasive procedures, changing the nature of surgical practice.

Furthermore, imaging is accelerating our understanding of the biology of cancer and hastening the development of new drugs.

Testifying to the increasing importance of imaging in cancer care, Memorial Sloan-Kettering Cancer Center’s (MSKCC) department of radiology has grown dramatically in recent years. The number of faculty members has doubled, while the total staff has grown to more than 550 members.

Going forward, MSKCC’s Breast and Imaging Center, which is currently under construction, will be able to accommodate an increasing number of breast cancer patients, while also expanding services for cancer screening and diagnostic services. The facility will offer patients minimally invasive treatment options – high-frequency ultrasound, for example – that work together to optimize care.

The future of cancer care lies in minimally invasive, image-guided approaches to diagnosis and treatment. Ultimately, we want to be able to diagnose, treat and follow patients without ever having to cut into the skin.

— Hedvig Hricak, MD, PhD, is chairman of Memorial Sloan-Kettering Cancer Center’s department of radiology.

13. American College of Radiology  
Imaging’s mission control

The American College of Radiology (ACR) is proud to serve a leadership role in radiology. As medical imaging and radiation oncology procedures replace more invasive techniques, the ACR will meet the challenges presented by advancing technology and a shifting medical landscape.
The ACR spearheaded the introduction of the Access to Medicare Imaging Act of 2007, which seeks a two-year delay to Deficit Reduction Act imaging cuts, pending a study of their effect on care. The ACR was instrumental in convincing the Centers for Medicare and Medicaid Services (CMS) and many private insurers to scrap plans for an additional 25 percent reduction on contiguous imaging payments.

And, we will continue to oppose congressional efforts to impose further cuts. The ACR worked with CIGNA to get the insurer to reprocess previously denied computer-aided detection mammography claims – months before a settlement obligating them to pay these codes became effective.

The ACR is a leader in radiology research. The American College of Radiology Imaging Network (ACRIN®) “MRI of the Contralateral Breast Trial” may very well change clinical practice by showing that breast MRI, in addition to mammography, detected more cancers in the opposite breast of newly diagnosed patients. This could reduce unnecessary surgeries and chemotherapy.

The ACR recently launched the National Carotid Artery Stent Registry, the first of six voluntary registries comprising the National Radiology Data Registry, whose evidence-based benchmarks will aid quality improvement in imaging facilities nationwide, potentially increase CMS reimbursement and guide future research.

And in January 2008, the association will launch the ACR Education Center. This “mini-university” will offer hands-on refresher courses and new techniques, including simulation, for practicing physicians and house multimedia facilities for interaction between doctors and educational material.

— Arl Van Moore Jr., MD, FACR, is chair of the ACR board of chancellors.

14. University of Michigan Health System
Multifaceted to serve the field

As one of the nation’s top academic medical centers, the University of Michigan Health System (UMHS) cares for some of the most severely ill patients across the spectrum of human disease, and performs advanced research and training in many fields.

Accordingly, the 130 physicians and hundreds of nurses, technologists and staff of the U-M department of radiology have developed a broad range of specialty imaging programs using the latest imaging technology, from 64-slice CT and 3-Tesla MRI to PET/CT, SPECT/CT, biplane digital fluoroscopy and color Doppler ultrasound.

The department’s major subspecialties are abdominal, angiography-interventional, breast imaging, cardiothoracic, cross-sectional interventional, emergency, interventional neuroradiology, MRI, musculoskeletal, general neuroradiology, nuclear medicine,
pediatric radiology and ultrasound.

The department’s main base is a rapidly growing imaging department, serving the main UMHS medical center complex, including University Hospital, C.S. Mott Children’s Hospital, Women’s Hospital, the Taubman Outpatient Center, the Cardiovascular Center and the Comprehensive Cancer Center. The department also operates four satellite locations in surrounding communities, and staffs the VA Ann Arbor Healthcare System.

In addition to dedicated research, MRI and PET equipment at the main complex, the department has animal-imaging facilities where molecular and structural imaging techniques are being developed. Several advances have already been spun off to industry, including companies begun by UMHS physicians.

The department’s educational programs are equally extensive. Forty-four radiology residents and 30 fellows are in training at any one time, as are dozens of technologists-in-training studying at two community colleges.

The department also annually sponsors eight major CME courses that are taught by physicians and technologists. For staff technologists, a system of career ladders in various subspecialties allows for continuous growth and training.

— N. Reed Dunnick, MD, is the Fred Jenner Hodges Professor and chair of the department of radiology at the University of Michigan.

15. Richard G. Barr, MD, PhD

Early detection with elasticity imaging

Richard Barr, MD, PhD, is conducting research to help lower the number of breast biopsies by employing elasticity imaging in a clinical setting.

Dr. Barr is a professor of radiology at the Northeastern Ohio Universities Colleges of Medicine and Pharmacy in Rootstown, Ohio, and a radiologist in Southwoods X-Ray and MRI in Youngstown. He reported his findings at the annual meeting of the Radiological Society of North America in November.

Dr. Barr and his colleagues used the Siemens Antares ultrasound

http://www.rt-image.com/content=8104J05C485EBA864096987644A0A0441

9/18/2007
system in their work. Siemens Medical Systems was the first to obtain clearance from the U.S. FDA to do elasticity imaging.

Elasticity imaging is a modified ultrasound examination, in which the stiffness of a mass is gauged (malignant breast tissue stiffens). Two simultaneous images are taken, one in a normal state and one in a slightly compressed state. The images are then compared using proprietary software.

Early detection of malignancies is vital to successful treatment, but the process is just as important for patients who have masses determined to be benign. By showing that tumors are likely to be benign and placed in a "we'll just watch it" category, the process could reduce the number of biopsies performed. More than 75 percent of biopsies are negative, so the number of unnecessary procedures could drop.

According to Barr, the learning curve for doing elastograms is about 30 minutes. He adds that the process could be used on other soft-tissue cancers, such as liver, thyroid and prostate cancers.

— Jim Szatkowski is the public relations coordinator for Northeastern Ohio Universities Colleges of Medicine and Pharmacy.

16. American College of Cardiology
Taking it to heart

As the radiology field continues to seek out best practices, it’s fortunate that they have an ally in the American College of Cardiology (ACC). In June, the ACC partnered with the American Society of Echocardiography (ASE) – in conjunction with a variety of other cardiovascular organizations – to develop “ Appropriateness Criteria” for two cardiac ultrasound practices, transthoracic (TTE) and transesophageal (TEE) echocardiography.

The ACC developed the criteria to help guide doctors in determining the proper times to utilize TTE and TEE. According to the ACC, in general, use of TTE/TEE for the initial evaluation of structure and function was viewed positively, while routine repeat testing and general screening uses in certain clinical scenarios were viewed less positively.

“For the very first time, we are formally addressing the appropriate use of one of the earliest and most commonly used imaging technologies. Although the concept of proper use of technology is not new, providing physicians with the tools to assess our own practice patterns is a critically important and new undertaking. It gives real meaning to our efforts to promote quality in cardiovascular care,” says Pamela S. Douglas, MD, MACC, FASE, chair of the TTE/TEE Appropriateness Criteria Writing Group and a past president of the ACC.

In addition, be on the lookout for the ACC to make its voice heard in the radiology community in 2008. With the advent of advanced imaging technology with cardiac implications, such as Toshiba America Medical Systems’ 256-slice CT scanner, the ACC will likely take center stage once again.

— RT Image Staff
17. Kerry Link, MD
A visionary in cardiac imaging

A classically trained cardiovascular radiologist, Kerry Link, MD, joined the faculty at Wake Forest University School of Medicine in 1987. He worked primarily in coronary angiography, pediatric heart catheterizations and cardiac MRI.

In 1995, Dr. Link won the Fulbright Fellowship in Medicine for his work in coronary artery flow measurements and studied coronary artery physiology at the Royal Brompton Cardiac MRI Center in London.

A visionary clinician and educator in cardiac imaging, Dr. Link recognized the tremendous importance of imaging – not just in clinical diagnosis, but also in clinical and basic science research. He mustered the resources to put in place a dedicated imaging research facility that has grown into the world-renowned Center for Biomolecular Imaging at Wake Forest University Health Sciences.

Dedicated in 2003, the center comprises more than a dozen MRI, PET, PET/CT, multislice CT, ultrasound and optical scanners. Also encompassing biomarker development, including nanotechnology, the center has worked on more than 70 funded imaging grants from more than 20 medical and basic science departments, resulting in more than 150 publications.

Dr. Link serves as director, overseeing all institutional clinical, animal and molecular imaging research. He also has served or is currently serving as principal or co-investigator on more than two dozen grant-funded research projects.

Although he spends the bulk of his time with the Center for Biomolecular Imaging, Dr. Link continues to be actively involved in clinical cardiac imaging and teaching. He believes imaging is poised to help medicine transition from a traditionally reactive, symptom-based approach to disease to a more proactive, preventive or early interventional approach.

Dr. Link also was invited to give the Oral Presentation at the 2006 annual scientific meeting of the Radiological Society of North America.

— Jonnie Rohrer is the senior public relations manager at Wake Forest University School of Medicine.
18. Midwestern State University’s MSRS Program
Raising the bar for education

The exceptional faculty and staff at Wichita Falls, Texas-based Midwestern State University (MWSU) leads a Master of Science in Radiologic Sciences (MSRS) program designed to prepare master’s candidates in the field of radiologic technology. This hybrid distance program opens the door for busy radiologic technology professionals to continue their education. The program prepares its graduate students to be leaders in the field of education, research and administration within radiologic technology.

The graduate faculty is dedicated to the success of the hybrid distance learning program. To this end, they tirelessly give up many weekends to make themselves available to the graduate student classes.

In addition to their extremely heavy undergraduate teaching workloads, the incredibly dedicated faculty members sacrifice several weekends a semester to ensure the ongoing success of this program. The MWSU MSRS program focuses on "raising the bar" within the field of radiologic technology.

Students are encouraged to publish papers and to contribute to the body of knowledge within the field. MWSU faculty also supports the radiologist assistant program, which is also set up as a hybrid distance learning program. The students are the faculty’s biggest fans and supporters.

The faculty includes Nadia Bugg, PhD, Donna Wright, PhD, Jeff Killion, PhD, and James Johnston, PhD. All of these educators go above and beyond the call of duty to make sure students are prepared to be successful contributors within the field.

In addition to their full-time roles as educators, they hold leadership roles within the radiologic technology community, and have encouraged all of us to continue to "raise the bar" as educators, administrators, and researchers within our field.

MWSU recently enjoyed the distinction of being awarded No. 1 in the "Top Value" category among public institutions based upon a variety of factors by Consumers Digest.

This excellent university, along with its dedicated and involved faculty, deserves recognition for the role they play in contributing to the ongoing excellence within the field of radiologic technology.

— John Colang is an alumnus of the MSRS program at Midwestern State University.
19. R. Gilbert Jost, MD
Tech-savvy leadership

As president of the Radiological Society of North America (RSNA) board of directors, R. Gilbert Jost, MD, is recognized globally for using IT to improve diagnostic radiology practice.

In addition, Jost also holds the titles of Elizabeth Mallinckrodt Professor of Radiology, chair of the department of radiology at Washington University School of Medicine, director of the Mallinckrodt Institute of Radiology and radiologist-in-chief at Barnes-Jewish Hospital in St. Louis. Additionally, Jost is a fellow of the American College of Radiology and has the distinction of being named an inaugural fellow of the Society for Computer Applications in Radiology (now the Society for Imaging Informatics in Medicine.)

Jost leads the charge in many radiologic pursuits. He was an early participant in the Integrating the Healthcare Enterprise (IHE) Planning Committee and the IHE Strategic Committee. He was also very influential in the adoption of the DICOM standard and an early promoter of the IHE movement, which has since gained increasing acceptance throughout the world as a methodology that allows medical computer systems from different manufacturers to communicate with one another.

In addition, Jost is a firm believer in advancing research and education through the synergy of science, technology, ingenuity and patient care. He remains committed to the application of digital information systems to enhance radiology practice.

"These are exciting times, and times of great change for our specialty," Jost says. "The challenge is to stay abreast of the changes and help to keep radiologists at the forefront of the rapid developments in the field of medical imaging."

— Gary J. Becker, MD, is chairman of RSNA's board of directors for 2007.
20. The Children’s Hospital of Philadelphia  
Always on the cutting edge

The radiology department at The Children’s Hospital of Philadelphia showcases a new facility and the arrival of two cutting-edge diagnostic tools this year as one of the world’s largest and most advanced centers for pediatric imaging and diagnosis.

The doors to radiology’s new facility opened within Children’s Hospital’s new West Tower in March, offering expanded services and amenities. This includes a state-of-the-art sedation suite with 21 private rooms, seven ultrasound suites, four fluoroscopy suites, two 64-slice CT suites, a PET/CT center, three interventional radiology suites, five nuclear medicine suites, two diagnostic X-ray suites, a new reading room, a larger waiting area comprising private registration booths and changing booths, family counseling rooms and a child play area.

Children’s Hospital’s first PET/CT center opened in March and is the only facility in Northeastern United States that has a PET/CT scanner dedicated solely to children. Children’s Hospital can now offer better detection of a variety of cancers, treatment response, neurological disorders and non-urinary tract focal infection/inflammation. The PET/CT center will also provide many research opportunities focusing on imaging biochemical activity.

Children’s Hospital also unveiled its new magnetoencephalography (MEG) facility this year. The hospital is one of a few pediatric institutions with MEG, which measures brain waves and produces maps and movies of brain function and abnormalities. Physicians and researchers at Children’s Hospital have begun to use MEG to characterize and localize the brain origins of autism and epilepsy, among other disorders.

— Diego Jaramillo, MD, MPH, is radiologist-in-chief at The Children’s Hospital of Philadelphia.
21. Shehnaz Pancholi
Telemedicine’s first lady

As the CEO and founder of Teleradiology America (TA) and Pediatric Radiology of America (PRA), Ms. Shehnaz Pancholi draws upon her extensive experience in the teleradiology domain. Prior to launching SRS, she was instrumental in the success of American Teleradiology Network (ATN). At ATN, as director/vice president of sales, Ms. Pancholi was instrumental in starting and training the sales team.

Under her leadership, the revenues grew 500 percent within two years. She also was pivotal in building the credentialing and licensing team, which accelerated the start of clients’ services after the initial sales closing.

After the acquisition of ATN by Nighthawk Radiology Services, Ms. Pancholi realized the need to create a teleradiology company that not only addressed the adult domain, but the enormously large and untapped field of pediatric teleradiology. Currently, she oversees the only teleradiology company that caters to both the pediatric and adult markets.

She has assembled a robust faculty that is dedicated to the growth of the company. The radiologists that join the team are not only employees of SRS, but also become owners of the company, in that they all become stockowners. Ms. Pancholi understands the need for both the management and physicians to take pride in the continued growth of their company.

At the helm of TA/PRA, she stands out as the only female CEO in the growing teleradiology domain. As an immigrant to the United States, she is achieving the “American Dream.” Her successful track record and her expertise will ensure her place as a visionary in the domain of teleradiology.

— Rashid Taher, MD, is strategic advisor and a member of the board of directors for Teleradiology America.
22. Peter Kingma

Bearing international acclaim

At a global, multimodality medical imaging company, it is easy to lose sight of the big picture and focus too narrowly on one's own product line.

What makes Peter Kingma so influential is that he never loses sight of the big picture: delivering the best possible healthcare to patients by giving physicians technology that improves quality and reduces their costs.

From that standpoint, Peter truly has a multimodality mindset. But it doesn't end there; his 22-year career at Siemens Medical Solutions started in South Africa and, since then, he has had tremendous international success. So his thinking is not only multimodality, but also multinational.

This approach affects his team, and I've seen that firsthand. Working for the division's global headquarters in Germany, Peter steered the CT business as the technology was just transitioning into a multislice environment. He ushered in the age of volumetric imaging that we see today.

Leaving his CT comfort zone, Peter established a Siemens business in Australia and New Zealand. He built these businesses from the ground up, and today they are enjoying a great deal of success.

Following that, we brought him back to the United States, where he led the U.S. sales force for our molecular imaging division.

Peter returned to CT this year, and he will drive the U.S. business moving forward. The Somatom Definition Dual Source scanner has already set a new standard in cardiac imaging. He will push the envelope even further as the scanner leverages its two X-ray tubes to provide dual-energy images that were never before possible on a CT scanner.

But, no one is better positioned to lead this business than my multitalented colleague and close friend, Peter Kingma.

— Markus B. Lussier is vice president of global sales and marketing at Siemens Medical Solutions' Molecular Imaging Division.
23. Barry B. Goldberg, MD
The father of ultrasound

Click here to view an exclusive Webcast with Dr. Goldberg as he discusses the latest innovations in ultrasound.

Radiologist. Medical advisor. Author. Founder. Director. Honoree. President, past-president or chairman (or all of the above) of so many prestigious radiology organizations, including the World Federation of Ultrasound, the American Institute of Ultrasound in Medicine and the Thomas Jefferson University Hospital. The list of the affiliations and credentials alone of Barry B. Goldberg, MD, could easily fill this space — and several more pages to boot.

But a quick look at his CV should easily tell you how he earned the nickname, the “Father of Ultrasound.”

With his current position as director of the department of radiology, division of diagnostic ultrasound and radiologic imaging, and professor of radiology at Philadelphia-based Jefferson Medical College — a post he has held for 30 years — he has continued work begun in the 1960s in developing ultrasound education programs for physicians and technologists, as well as throughout the world.

Among his many research projects over the years, Dr. Goldberg has been a key force in developing improved Doppler ultrasound measurement techniques, improving 3-D ultrasound imaging, evaluating new techniques for more accurate noninvasive measurement of bloodflow and evaluating ultrasound guided needles to increase the accuracy of ultrasound aspiration and biopsy techniques.

In 1998, at the annual scientific assembly of the Radiological Society of North America (RSNA), when Dr. Goldberg received the Outstanding Researcher Award, then RSNA President David B. Fraser, MD, called him “the embodiment of the physician-scientist, who not only has done key innovative work in his field, but has provided leadership and training to generations of ultrasound specialists worldwide.”

— Jacqueline Kozloski is the director of public relations at Thomas Jefferson University and Hospital.
24. The Blogosphere
Radiology enters the 'Blogosphere'

Recently, there has been no escaping the mention of blogs in the media. Blogging has emerged as a social phenomenon, which has impacted politics, business and communication.

Blogging software has enabled people with limited knowledge of the Internet to publish their thoughts online and participate in a global conversation; whereas the Blogosphere has hyperaccelerated the spread of information. Blogging might well become an important means of information transfer in radiology, also.

As radiology is an image-based science, a blog is a satisfying endeavor in that you can share your experiences with others instantaneously. In this context, I would like to submit my experience with an easy method for building a Web site known as "blogging," or maintaining a Web log.

As a radiologist, I use my blog to post interesting cases from my routine practice along with any interesting abstracts I come across during my day-to-day work.

The success of this project can be measured by the fact that in the last three years of "rad-blogging," more than 100,500 visitors came to the site from all over the world, with thousands of queries from patients, colleagues and many interested students.

Rad-blogging might well become a new easy method of information exchange and opinion-building in radiology.

— Sumer K. Sethi, MD, is a consultant radiologist with VIMHANS and CEO of Teleradiology Providers.
25. Steve H. Rusckowski
The people's CEO

In November 2006, Steve Rusckowski was appointed CEO of Philips Medical Systems – a position that Steve is well suited for, due to his extensive experience in the healthcare industry.

Steve has been involved in many facets of healthcare – especially radiology and diagnostics – throughout his more than 20 years in the industry. He possesses a long track record of running successful growth businesses, shaping strategy and managing businesses that enhance healthcare during his time at Agilent Technologies, Hewlett-Packard and Procter and Gamble.

In addition, Steve is also a board member of several organizations that aim to advance radiology and the healthcare field, including Project HOPE, the New England Healthcare Institute, Massachusetts High Technology Council and more. All this experience, knowledge and keen understanding of the various constituencies and key perspectives in the healthcare marketplace position Steve as a dynamic leader for not only Philips' future, but also how healthcare is impacted globally.

As Steve builds and strengthens strategic initiatives to continue propelling Philips forward, he has implemented a people-focused approach by introducing cross-discipline plans to partner with customers for their valuable clinical perspectives, trigger innovation based on human insight and engage and empower employees.

Steve has an ambitious vision to further his commitment to customers, including strengthening Philips’ presence and position in emerging markets; increasing Philips’ mid- to low-price product presence; increasing the speed of product innovation and focus on improving customer satisfaction.

And, be on the lookout for Steve to energize Philips toward continually developing advanced systems, designed around clinicians that focus on the care cycle and aim to improve the entire healthcare delivery system.

— Brent Shafer is CEO of global sales and service for North America at Philips Medical Systems.
CMSS
Curricula Based on Core Competencies
White Paper
July 27, 2007

Virginia Pappas, CAE
Executive Director
Society of Nuclear Medicine
1850 Samuel Morse Drive
Reston, VA 20190-5316

Dear Ms. Pappas:

We are pleased to send three copies of the article, The Need for Specialty Curricula Based on Core Competencies: A White Paper of the Conjoint Committee on Continuing Medical Education. The article was authored by some members of the Conjoint Committee on Continuing Medical Education. This Committee has met over the past five years.

We believe it to be helpful and important, and something your organization and its CME efforts can benefit from and should embrace.

We anticipate that the President and the CME Director would also receive a copy and we would appreciate your assistance in this regard. Additional copies may be obtained through the CMSS office.

Sincerely,

Bruce E. Spivey, MD, MS, MEd
Deputy Executive Vice President

Enclosures (3)
The Need for Specialty Curricula Based on Core Competencies: A White Paper of the Conjoint Committee on Continuing Medical Education

Marcia J. Jackson, PhD; Harry A. Gallis, MD; Stuart C. Gilman, MD, MPH; Michael Grossman, MD, MACP; Gerald B. Holzman, MD, FACOG; Damon Marquis, MA, MS; Sandra K. Trusky, CMSS

Introduction: At present there is no curriculum to guide physician lifelong learning in a prescribed, deliberate manner. The Conjoint Committee on Continuing Medical Education, a group representing 16 major stakeholder organizations in continuing medical education, recommends that each specialty society and corresponding board reach consensus on the competencies expected of physicians in that specialty. Experts in a specialty will define content-based core competencies in the areas of patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. These competencies, when cross-referenced with expertise, comprise a framework for specialty curricula and board maintenance of certification programs. The American Academy of Ophthalmology and the American Board of Ophthalmology already have implemented this recommendation. Their work is reported as a model for further development. A competency-based curriculum framework offers a foundation for continuing medical education in diverse practice settings and provider organizations.

Key Words: Competency, scope of specialty practice, curriculum, core curriculum, curriculum framework, curriculum development, quality care, patient safety, education, medical, continuing.

Background

Introduction

Representatives of 16 major stakeholder organizations in continuing medical education (CME) have met voluntarily for the past five years as the Conjoint Committee on Continuing Medical Education (CC-CME) to explore, agree on, and propose changes to the existing CME system. The CC-CME goal is to improve the quality and effectiveness of continuing medical education, thereby supporting the CME profession and improving healthcare quality.

The following is one recommendation of the CC-CME:

Specific core curricula should be developed to achieve, maintain, and improve physician competencies as described in the ACGME/ABMS/AOA core competencies. All specialties and subspecialties should reach consensus on the knowledge, skills, performance, and attitudes expected of their specialty.

- Each specialty and subspecialty should develop core curricula with systematic review for maintaining currency. Specialty societies and boards should collaborate to identify and develop core curricula applicable across specialties.
- Knowledge, skills, and attitudes prescribed by the specialty or subspecialty should be described in terms of the competencies so that appropriate needs assessment, curriculum, and outcomes assessment can be accomplished.

This white paper provides a framework for the implementation of the above recommendation.

Competency

A competency is generally considered the knowledge, skill, or attitude that enables one to effectively perform in his or her practice setting and meet the standards of the profession. Six general areas of competencies have been adopted by the Accreditation Council for Graduate Medical Education...
(ACGME) and the American Board of Medical Specialties (ABMS) as essential for the physician: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. The ACGME’s Residency Review and Institutional Review Committees have incorporated these general competencies into their requirements (www.acgme.org), and all ABMS member boards have adopted these competencies as the model for recertifying their specialists through the Maintenance of Certification (MOC) program (www.abms.org). The six general competencies are now embedded in the new common program requirements that go into effect July 1, 2007, and will apply to all ACGME accredited programs.

Scope of Specialty Practice

Each society and board should create a specialty curriculum and corresponding MOC program based on a defined scope of practice for that specialty area. The scope of practice should identify the content encompassed by the specialty area as well as the specific competencies associated with that content and expected to be demonstrated by the physician specialist in that area. An individual physician’s practice environment (eg, geographical location, patient demographics, and clinical emphasis) further modifies the scope of practice for him or her. The overall professionally identified scope of practice must be comprehensive, realistic, and adaptable in order to meet the unique needs of individual practicing clinicians.

Curriculum

The concept of curriculum is rarely used in the context of continuing medical education, and there is little literature on the topic. There are many definitions of curriculum, but all generally refer to (1) a set of education activities, courses, or interventions, (2) offered in a logical order, (3) that create an integrated course of study in a given topic area, and (4) may culminate in a degree or certificate. In the traditional classroom setting, the definition assumes that the groups of learners engaged in the curriculum have a predetermined and defined range of differences as they move through the activities to conclude with the degree or certificate in hand.

The undergraduate and graduate medical education curriculum comprises a structure for learning, encompasses an increasingly specialized and advanced array of learning activities, and generally evaluates knowledge throughout and at the conclusion of the curriculum. Everything changes on completion of graduate medical education. The physician is immediately responsible for self-directed learning that lasts throughout his or her lifetime of practice. Although educational opportunities abound, there is no curriculum to guide learning in a prescribed, deliberate manner. A linear curriculum, even if an attempt were made to define and develop one, is not relevant to most physicians, since (1) careers become more individually defined and idiosyncratic, and (2) there cannot be a clear end point defining “completion” of such a curriculum. It is likely that a physician in practice is an expert in one area and a beginning learner in another and that these relative strengths and weaknesses shift over time. Once the scope of practice is delineated, the specialty society and related board will have the opportunity and responsibility to create a true, complete curriculum to assist their members in continuously acquiring the necessary knowledge and skills that will benefit the members and ultimately translate into better-quality care for patients.

Specialty societies are not the sole custodians of curriculum development. All CME providers have a stake in developing and presenting education that supports the continued competence of the physicians they serve. A competency-based curriculum framework, developed by boards and societies, creates a foundation for CME in all practice settings delivered by all types of provider organizations.

Core Curriculum

When experts in an area of medical practice agree that certain competencies within the six broad categories must be maintained or acquired by all who are certified to practice in that area, these competencies are considered the core competencies for that clinical area. This core, which might change over time, could be envisioned as the center of a diagram that is incorporated within the competencies for all specialists regardless of their areas of specific expertise and clinical practice as depicted in FIGURE 1, developed by the Alliance for Academic Internal Medicine. Learning activities to support these competencies comprise the core curriculum. Many competencies associated with professionalism and with systems-based practice are the same for all physicians. The medical profession will benefit if these particular core competencies can be widely agreed on and incorporated in the core curricula of each specialty.
self-selected curriculum, with education activities that might be provided by the society or any relevant CME organization.

Linking the Curriculum Framework to the Society: Curriculum Development

Just as self-assessment measures can be linked with each cell in the curriculum framework, so too can education activities be linked with each cell. These activities, which would be competency based, might be delivered directly through a Web-based link or indirectly by referring the user to a live program or other type of in-person activity. The framework becomes the linchpin interlinking the individual physician with a competency-based curriculum that relates to his or her scope of practice and relative level of expertise.

Case Study in Competency-Based Curriculum Development

The American Academy of Ophthalmology (ABO) recognized the need for a clinically relevant knowledge base for use in the Maintenance of Certification process and the American Academy of Ophthalmology (AAO) responded to the request of the ABO to develop it according to ABO guidelines. AAO in 2002 embarked on the ambitious venture of defining a competency-based curriculum for the practicing ophthalmologist. An initial and critical first step was to craft a memorandum of understanding with the American Board of Ophthalmology (ABO) that clearly defined the respective roles of the academy and the board: the AAO would define a curriculum that the profession agreed on, and the board would use this curriculum as the foundation to test diplomates as one element in the MOC-Evidence of Cognitive Expertise process.

The AAO formed 10 working panels: 9 panels represented subspecialty areas in ophthalmology; the 10th panel represented comprehensive or general ophthalmology. Each panel had 8 to 10 volunteer members who collectively formed a balance between ophthalmologists in academic and private practice as well as geographical representation. At the outset, half of the panel members were time-limited certificate holders, with the intent over time to make all panel members those with time-limited certificates. The AAO solicited broadly for nominees to each panel and made the final selection of members from among all the nominated names.

Each panel was charged to develop a list of topics and related competencies for their area of ophthalmic practice. The panels then ranked each topic using a Likert scale that ranged from “not clinically relevant” to “most clinically relevant.” The AAO agreed that only the topics rated as most clinically relevant would be selected for further development in this initial version, which resulted in a final list of approximately 800 topics that spanned all areas of ophthalmology. The panels used two questions to guide this selection: “What does the competent practitioner need to know 10 years after completing initial certification?” and “What is the information that a competent ophthalmologist should know in practice without having to look it up from a reference source?” The comprehensive ophthalmology panel reviewed all the topics that had been generated by the subspecialty panels, eliminated those not critical for the comprehensive ophthalmologist, and then condensed it even further. The panels next selected topics that every competent ophthalmologist should know by virtue of being an ophthalmologist; this was designated as core content.

The topics were sent to the ABO on initial completion by the AAO panels. The ABO then took these topics to their appointed review groups for feedback and suggested changes. This iterative process took approximately one year to complete before both the AAO and the ABO were satisfied with the content parameters.

The AAO used these topics to create a Web-based practicing ophthalmologist’s curriculum (POC), and the ABO has used it to construct the test questions to be used on its PORT (Periodic Ophthalmic Review Test) and DOCK (Demonstration of Ophthalmic Knowledge) examinations. The plan is to revise the POC, which was completed in mid-2005, on a two-year cycle, eliminating content that is no longer relevant and interjecting new content as necessary.

The AAO has the following observations about this process:

- The collaboration of a society and its corresponding board benefits the specialty. The ABO provided feedback to the AAO not only on the most relevant topics but also on the content within each clinical area.
- A memorandum of understanding, or similar agreement, that clearly outlines roles and responsibilities of the society and the board is a critical element.
- Engaging subspecialty societies in the process contributes to a broad development base and consensus in the specialty area.
- Keeping the panels focused on the task and the criteria is a continuing challenge due to changing leadership and competing priorities.
- Having the entire initiative led by a highly respected leader with experience both in the society and on the board is an important element of success.
- This will require substantial staff, financial resources, and time to implement such an initiative. In this example, AAO provided most of the effort and financial support but involved leaders throughout the process who were known and respected by the society and the board.

Conclusion

Delineating essential competencies for each area of specialty practice creates the framework for physicians in that specialty to guide and assess their own learning. Such a framework also provides a foundation for the education activities planned by all CME provider organizations. While there is no intent to be prescriptive, the Conjoint Committee on Continuing Medical Education urges every specialty society, board, and subspecialty to commit the necessary resources and develop a curriculum based on core competencies.
New Business
Adjournment (6:00pm)
Committee Reports
Committee on Awards
Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):

- **July 9, 2007**—Committee held conference call to discuss the top two candidates for the 2008 Aebersold Award, Ronald G. Blasberg, MD and Michael R. Kilbourn, PhD. This call was followed by an electronic ballot sent to all Committee members. The result of the vote was that Blasberg received 10 votes, Kilbourn 6 votes and there was one tie vote.

The Committee Chair has put forward a resolution to the SNM Board to approve Ronald G. Blasberg, MD as the recipient of the 2008 Aebersold Award.

- **July 11, 2007**—Chair reviewed and approved no-cost extension request from 2006 Pilot Research Grantee, Steven Burrell, MD, Queen Elizabeth II Health Sciences Centre, Halifax, Nova Scotia for the project “Cardiac 123I-Meta Iodo Benzyl Guanidine Imaging as a Means of Predicting Automatic Implantable Cardioverter Defibrillator Events.”

- **August 14, 2007**—Chair reviewed and approved no-cost extension request from 2005 Pilot Research Grantee, Gary Ulaner, MD, PhD, University of Southern California for the project “PET and Bioluminescent Imaging of Telomerase Promoter Activity to Evaluate in vivo Chemotherapy Response.”

- **September, 2007**—Final reports from 2006 Pilot Research Grantees distributed to Committee for review.

Questions/Concerns to be addressed by the SNM Board of Directors:
Committee on Continuing Education
The Continuing Education Committee reviews and monitor activities sponsored by SNM ensuring they are in compliance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education (ACCME), the Criteria for Quality and Interpretive Guidelines of the American Council on Pharmacy Education (ACPE), and the Guidelines of the Commission on the Accreditation of Medical Physics Education Program.

In accordance with the updated ACCME accreditation Criteria and sound educational practice the Committee revised the Continuing Education Mission Statement to ensure that the mission includes the purpose, content areas, target audience, type of activities provided, and expected results of education activities. The committee also revised the planning and development process for JNM CE articles and post-tests.

The committee is planning a strategic planning meeting to implement the ACCME updated criteria for accreditation; identify topics for JNM CE articles and integrate ACCME updated accreditation criteria into MOC Phase IV.

In November 2007, a progress report will be submitted to the ACCME as part of SNM's 2006 Accreditation decision. SNM will receive notification of the ACCME's decision in March 2008. This report provides the ACCME with specific information on how SNM is making necessary improvements to “Partial” and “Noncompliance” findings that were identified in SNM's accreditation decision.

The following is a synopsis of directly sponsored and jointly sponsored activities that were reviewed and approved for credit May – September 2007:

- Reviewed 4 directly sponsored activities and 4 jointly sponsored activities for CME credit for physicians.
- Reviewed 6 JNM articles for CME credit.
- Reviewed 4 activities and 6 JNM articles for ACPE credit.
- Revised the planning and development process for JNM CE articles

For the 2008 fiscal year, SNM will jointly sponsor conferences with SNM chapters. The committee chair, as well as staff, continues to serve as a resource for questions about CME and ACPE accreditation and SNM policies regarding the assignment of CME and CPE credit.

The committee continues to work closely with the Committee on Education to evaluate educational activities sponsored and jointly sponsored by the Society for CME and ACPE credit.

Questions/Concerns to be addressed by the SNM Board of Directors:
Approval of SNM’s revised Continuing Education Mission Statement
Committee on Education
COMMITTEE ON EDUCATION
SNM BOARD OF DIRECTORS
Saturday, September 29, 2007

Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):

The Committee on Education Monitor Team has held monthly conference calls to discuss status updates on all education activities as well as issues arising over the previous month that require recommendations or decisions. As a result of these discussions the following changes have already been made to continue improvement of SNM’s overall education program:

- Addition of case-based CT Workshops
- Re-organization of the education Web pages to make them more user friendly
- Developing a process for continuing the SNM Teaching File cases online
- Developing a process for expanding education activities that offer SAM credits and documentation of CT case reading for credentialing purposes. The plan is to hold categoricals and CE sessions at the Annual Meeting that qualify for SAM credits and to then convert them into enduring materials.
- Developing a comprehensive process for physicians to meet requirements for Maintenance of Certification, including Performance in Practice.

Success to date:

- Launched over 100 Online Lectures covering the areas of Oncology, Cardiology, Molecular Imaging, Basic Science, and Neurology
- Launched 3 Online Lecture series for technologists in the areas of PET and PET/CT, CT and Advanced Cardiac Imaging
- Launched 26 LLSAP modules
- Launched 1 set of Diagnostic CT cases and 2 sets of PET/CT cases
- Planned 3 case-based CT Workshops, one in conjunction with ACNP at the Mid-Winter Meeting
- Planned 3 live workshops for technologists

The Committee on Education is currently organizing an education strategic planning meeting in conjunction with the Continuing Education Committee to be held in November 2007.
Phantom Quality Assurance Committee
Committee on Quality Assurance

SNM BOARD OF DIRECTORS
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Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):

- Created, tested and sent 2006 SPECT Test Phantom to all VAs and received program results back from 98% of facilities. The phantom was designed to evaluate both planar and SPECT imaging capabilities of nuclear medicine scintillation cameras, as well as demonstrate the contrast differences between planar and SPECT imaging in addition to evaluating lesion detectability.

- Completed the analysis and performance reports of the 2006 SPECT Test Phantom results. Sent analysis, certificates and reports to all VAs.

- Developed and shipped the 2007 Lung Perfusion Phantom. This phantom has been designed to test the participant's ability to acquire planar lung perfusion images, identify perfusion defects, and determine the probability of pulmonary embolus when given various lung ventilation image and chest radiograph combinations. The 2007 Phantom was shipped to all VA hospitals on Sept 17, 2007.

- Currently developing the 2008 Thyroid Imaging Phantom.

Questions/Concerns to be addressed by the SNM Board of Directors:
Practice Standards Committee
Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):

- Worked with the Cardiovascular Council to create two credentialing statements:
  - Conjoint Statement of the SNM and American College of Nuclear Physicians on Credentialing and Delineation of Privileges for Cardiovascular CT
  - Conjoint Statement of the SNM and American College of Nuclear Physicians on Credentialing and Delineation of Privileges for Cardiac PET
- Continuing to work with AMA Physician Consortium Group on developing physician specialty measures
  - Held Nuclear Medicine Workgroup Meeting in Chicago on August 22, 2007. Developed 4 accountability measures and 1 quality improvement measure among the workgroup.
- Leading efforts in creating clinical practice guideline for the SNM

Questions/Concerns to be addressed by the SNM Board of Directors:
Committee on Procedure Guidelines
Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):


- The Board of Directors approved the following new and revised guidelines in 2007:
  - Procedure Guideline for Scintigraphy for Differentiated Papillary and Follicular Thyroid Cancer v3.0
  - Procedure Guideline for Thyroid Uptake Measurement v3.0
  - Procedure Guideline for Thyroid Scintigraphy v3.0
  - Procedure Guideline for Diuretic Renography in Children v3.0
  - Procedure Guideline for the Use of Radiopharmaceuticals v4.0
  - Consensus Recommendations for Gastric Emptying Scintigraphy (A Joint Report of The Society of Nuclear Medicine and The American Neurogastroenterology and Motility Society)

Questions/Concerns to be addressed by the SNM Board of Directors:
Publications Committee
Brief summary of committee activities/successes:

(PLEASE BOLD ANY ACTION ITEMS THE COMMITTEE IS WORKING ON THROUGHOUT YOUR NARRATIVE):

The committee has had some major successes in recent months.

JNM

- Journal statistics are excellent. As of February:
  - the submission rate has increased to its highest level in 7 years—perhaps the highest ever.
  - the acceptance rate for all articles (including CE, etc.) dropped to 40% in 2005 and stayed there in 2006. For unsolicited articles, it has now dropped to 28.9%.
  - All turnaround times (receipt to acceptance, receipt to first decision, acceptance to production, acceptance to publication, and receipt to publication) continue to decrease. The receipt-to-publication turnaround time now stands at 5.3 months, which is excellent. That will decrease even further with publish-ahead-of-print, which debuted in June.
  - From 2003 to 2006, turnaround time from receipt to reviewer assignment dropped 68%, from 17d to 5.5d.
  - The average time to complete review is 24 days.
  - Distribution by section: clinical is highest – 45%; then PET, then therapy, then molecular imaging at 29%.

- Accomplishments in the past year include:
  - Debuted publish-ahead-of-print program
  - Completed of online archives
  - Completed PET/CT supplement in Jan 2007
  - Debuted new cover
  - Implemented CME credit for manuscript reviewers
  - Molecular imaging initiatives including:
    - a Newsline column for the MI COE
    - literature briefs on molecular imaging
    - a new series of review articles scheduled over the coming year, one per issue, 4 printed pages each, topics/authors have been suggested by the MICOE
    - a supplement on molecular imaging, which Sam Gambhir has agreed to guest edit, ETA Jan 2008.
  - Awards presented at Annual Meeting—6 total, 3 clinical and 3 basic science

Books:

- The Clinician’s Guide to Nuclear Medicine Oncology: Practical Molecular Imaging and Radionuclide Therapies book released on May 1 and is still selling well.
- MIRD Decay Schemes book revised and in production.
- New patient pamphlets are being completed one by one (2 done, 2 to be reviewed)
Scientific Program Committee
The three most pressing issues or concerns that affect the Scientific Program Committee:

1. Development of scientific and educational program for the 2008 annual meeting and midwinter meetings
2. Maintaining excellent programs with limited resources
3. Maintaining excellent communication with other entities within the SNM developing educational programs

Brief summary of committee activities/successes:
In June, we held a very successful Annual Meeting in Washington, DC. The attendance was good and the scientific and educational programs were outstanding. This included the implementation of a new scientific component referred to as InfoSNM featuring the use of computers and information technology in nuclear medicine and molecular imaging. This program was very well received.

We also developed an outstanding program for the 2007 MidWinter Meeting in San Antonio, which was held in conjunction with the ACNP. The meeting was incredibly successful with the largest attendance to date.

We are now starting to plan the 2008 Annual Meeting to be held in June in New Orleans, LA including the development of a series of categorical seminars and continuing education sessions as well as the review of abstracts for the scientific oral and poster sessions. We have reviewed our abstracts categories and have modified them to better match the current practice and science within our field. This year, we are introducing a third basic science summary that will highlight the science presented at the meeting in the context of molecular imaging.

Annual Meeting
1. Held a very successful meeting in Washington, DC.
2. Attended the preview meeting in New Orleans in August
3. Planning the 2008 Annual Meeting
4. Incorporating Molecular Imaging presence – CE sessions, abstracts, flagging activities
5. Introducing a third basic science summary session in Molecular Imaging
6. Have modified our current categories for scientific abstracts.

Abstracts
1. Triage meeting was held January 21, 2008

Mid Winter Meeting
1. Held the most successful Mid-Winter Meeting to date in San Antonio in conjunction with the ACNP for the first time.

Questions/Concerns to be addressed by the SNM Board of Directors:
None at this time.
Committee on Healthcare Practice
Committee on Health Care Policy & Practice  
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Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):

- Lead efforts to determine a proper reimbursement methodology for radiopharmaceuticals. Working with CMS and other organizations to develop lasting formula.
- Continuing to monitor the impact of the 2005 DRA imaging provisions on the nuclear medicine community.
- Continuing to monitor Pay for Performance within CMS and Capitol Hill.
- Continuing to serve as a resource to the BOD for issues requiring analysis and policy recommendations.

Questions/Concerns to be addressed by the SNM Board of Directors:
Young Professionals Committee
Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):

The Young Professionals Committee has had a very successful past 6 months. Their successes include:

- The first Robert Lull Leadership CE session, sponsored by the Robert Lull Foundation
- The First Annual YPC Knowledge Bowl, which was a game show format sponsored by Hermes and featured 20 interactive case discussions
- The 4th Annual YPC Luncheon, focusing on current practice issues
- Awarded 6 YPC Poster Awards
- Updated and organized a list of all SNM members meeting the criteria of young professionals
- Sent out 2 newsletters, entitled "Hot Spot" to all young professionals

Activities in progress and planned for 2008:

- Hold a strategic planning meeting in November 2007
- Begin planning activities for the 2008 Annual Meeting
- Assuming responsibility for the Cases of the Day at the 2008 Annual Meeting

The Young Professionals Committee is also working toward obtaining approval for council status. The young professionals council will reach out to all young professionals, including scientists, pharmacists, and technologists. The Standard Operating Procedures have already been drafted and the executive committee is currently obtaining sufficient names to petition for council status at the 2008 Mid-Winter Meeting.
Coding and Reimbursement
Committee on Coding & Reimbursement

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Brief summary of committee activities/successes (please bold any action items the committee is working on throughout your narrative):

• Held three highly successful coding and reimbursement seminars
• Produced online educational materials for the nuclear medicine community
• Worked with CMS and other associations in maintaining the National Oncologic PET Registry (NOPR)
• Managed the NM APC Task Force Committee
• Developed a proposed method for radiopharmaceutical reimbursement and shared it with CMS and other organizations
• Attended CPT, PERC and RUC meetings and discussed appropriate coding for the nuclear medicine community
• Monitored the 2005 Deficit Reduction Act Imaging Cuts, Pay-for Performance Issue and other issues, such as the sustainable growth rate (SGR)
• Presented at the September 2007 APC Panel Meeting
• Commented on the Hospital Outpatient Perspective Payment System (HOPPS) and Medicare Physician Fee Schedule (MPFS) Proposed Rules for 2008
• Created and conducted successful nationwide Radiopharmaceutical Survey
• Worked with CMS HCPCS workgroup regarding radiopharmaceutical coding

Questions/Concerns to be addressed by the SNM Board of Directors: