



TRACERS

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Alphabet Soup

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What Are, and Should Be, the Roles and Interrelationships of Our Professional Organizations, and How Do They Impact Education in Nuclear Medicine?



SNM

Advancing Molecular Imaging and Therapy

What Are, and Should Be, the Roles and Interrelationships of Our Professional Organizations, and How Do They Impact Education in Nuclear Medicine?

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The logo for the Society of Nuclear Medicine (SNM) is displayed in large, bold, white capital letters.

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Disclosure

- No relevant disclosures

Professional Organizations of Importance for Education in Nuclear Medicine

- Objectives:
- Identify how the different professional organizations impact education in Nuclear Medicine and how they are interrelated.

The logo for the Society of Nuclear Medicine (SNM) features the letters 'SNM' in a bold, white, sans-serif font. The background of the logo is a blue gradient with a stylized DNA double helix on the left and a series of white lines radiating from the right, suggesting a molecular or imaging theme.

Advancing Molecular Imaging and Therapy

Professional Societies in Nuclear Medicine

- Nuclear Medicine -
- Society of Nuclear Medicine and Molecular Imaging (SNMMI) www.snmmi.org
- American College of Nuclear Medicine (ACNM) www.acnmonline.org
- American Society of Nuclear Cardiology (ASNC) www.asnc.org
- World Molecular Imaging Society (WMIS) www.wmis.org

Professional Societies in Nuclear Medicine

- SNMMI - nonprofit professional organization that promotes the science, technology and practical application of NM and MI
- Core values:
 - Excellence in pt care
 - Ethical behavior and integrity
 - Respect for all people and ideas
 - Fostering inquiry and reflection
 - Visionary leadership
 - Excellence, professionalism and collaboration
 - Life-long education

The logo for the Society of Nuclear Medicine (SNM) is displayed in large, bold, white capital letters against a blue background. The background features a stylized DNA double helix on the left and a line graph with peaks and valleys in the center, all in shades of blue and cyan.

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Professional Societies in NM

- SNMMI - 19,000 members, 2900 physicians
- Education
- Annual Meeting
- Mid-Winter Meeting
- Online lectures
- Webinars
- Case studies
- Journals: JNM, Molecular Imaging

Professional Societies in NM

- SNMMI
- Continuing education
- NM Review course
- Self-Assessment modules
- Online lectures
- MOC – SAMs, Practice Performance projects
- CE Center
- CME Gateway
- Journals

Professional Societies in NM

- ACNM - Founded 1972
- merged in 2009 with ACNP (founded in 1974)
- Annual Meeting – clinical material, leadership, mentoring
- Clinical Nuclear Medicine Journal
- SNMMI resources:
- SNMMI Learning Center
- MOC, CE Center, PET PROS

Professional Societies in NM

- ASNC
- Education in clinical nuclear cardiology
- Basic science
- Board review
- Advocacy

The logo for the Society of Nuclear Medicine (SNM) is displayed in white, bold, sans-serif font against a blue background. The letters 'S', 'N', and 'M' are large and prominent.

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Professional Societies in NM

- WMIS
- Mostly research in molecular imaging
- Three year educational curriculum in molecular imaging

Professional Societies in Radiology

- Radiology, w/reference to Nuclear Medicine
- American College of Radiology (ACR) www.acr.org
- Radiological Society of North America (RSNA)
www.rsna.org
- Association of University Radiologists (AUR)
www.aur@rsna.org
- American Roentgen Ray Society (ARRS)
www.arrs.org

Professional Societies in Radiology

- American College of Radiology (ACR)
- Mission: to serve patients and society by maximizing the value of radiology, radiation oncology, interventional radiology, nuclear medicine and medical physics by advancing the science of radiology, improving the quality of patient care, positively influencing the socio-economics of the practice of radiology, providing continuing education for radiology and allied health professions and conducting research for the future of radiology.

The logo for the Society of Nuclear Medicine (SNM) features the letters 'SNM' in a bold, white, sans-serif font. The background of the slide is blue with a gradient, featuring a stylized DNA double helix on the left and faint white lines representing a waveform or data plot. The text 'Advancing Molecular Imaging and Therapy' is positioned below the 'SNM' logo.

SNM

Advancing Molecular Imaging and Therapy

Professional Societies in Radiology - ACR

- 5 Pillars:
- Advocacy
- Clinical Research
- Economics
- Education
- Quality and Safety

Professional Societies in Radiology - ACR

- ACR meetings and courses
- Education Center
- ACR Catalog – Books and journals
- elearning
- MOC
- AIRP
- RLI
- JACR

Professional Societies in Radiology - ACR

- ACR Quality and Safety
- Accreditation
- Appropriateness criteria
- Practice guidelines and technical standards
- Quality measurement
- National Radiology Data registry
- Radiology safety
- RADPEER (Peer Review)

Professional Societies in Radiology - ACR

- ACR - 34,000 members
- NM Commission – under Quality and Safety
- Education
- Guidelines and standards
- Molecular imaging
- Enhance communication, develop and support Nuclear Medicine expertise

Professional Societies in Radiology - RSNA

- RSNA 53,000 members
- International society
- Mostly educational in radiology
- Annual meeting – largest radiology forum
- Journals: Radiology, Radiographics
- Quality: Quality Improvement, PQI Projects, Practice Resources and Guidelines

Professional Societies in Radiology - RSNA

- Mission: Promote excellence in patient care & health delivery through education, research & technological innovation.
- Vision: Aspire to be the premier association dedicated to patient care through science & education in radiology.

Professional Societies in Radiology - AUR

- Association of University Radiologists (AUR)
- Only Radiology organization devoted to teaching and education in radiology
- Purpose: to encourage excellence in radiological lab and clinical investigation, teaching and clinical practice; to stimulate an interest in academic radiology as a medical career; to advance radiology as a medical science, and to represent academic radiology at a national level.

Professional Societies in Radiology - AUR

- Mission: The AUR is committed to advancing the interests of academic radiology, enhancing careers in academic radiology and advancing radiological science, research and education.
- Annual meeting
- Journal – Academic Radiology

Professional Societies in Radiology - ARRS

- American Roentgen Ray Society (ARRS)
- Mission:
- Advance medicine through the science of radiology and its allied sciences
- Enable creation and exchange of knowledge and information in the field through the AJR, meetings and other means

Professional Societies in Radiology - ARRS

- ARRS
- Meetings and Symposia
- Publications and Books
- Journal – American Journal of Roentgenology (AJR)
- Online learning
- Practice Quality Improvement
- CME
- MOC

Professional Organizations in NM - Certification

- Certification of trainees
- American Board of Medical Specialties (ABMS)
www.abms.org
- American Board of Nuclear Medicine (ABNM)
www.abnm.org
- American Board of Radiology (ABR) www.theabr.org

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Advancing Molecular Imaging and Therapy

Professional Organizations in NM - Certification

- ABMS
- Membership: 24 member boards
- Non-profit professional organization

Professional Organizations Certification - ABMS

- Mission
- Sets goals and standards related to the certification of medical specialists including initial specialty, subspecialty certification and maintenance of certification.
- Provides information to the public, governments, the profession and its Members concerning issues involving certification of physicians in the United States and internationally.

Professional Organizations Certification - ABMS

- Goals
- Boards work together to establish common standards for physicians to achieve and maintain board certification. The boards were founded by their respective specialties to protect the public by assessing and certifying doctors who meet specific educational, training and professional requirements.

Professional Organizations Certification - ABMS

- ABMS and specialty boards are accountable to the public and the medical profession by
 - Helping patients – by providing information about the board certification process and who is board certified
 - Supporting physicians by creating programs that assist doctors to stay current in their field and improve their practice
 - Collaborating with healthcare leaders to foster initiatives for the promotion and monitoring of healthcare quality
 - Transforming healthcare by increasing awareness of the importance of board certification and lifelong learning in assuring quality care

Professional Organizations Certification - ABNM

- American Board of Nuclear Medicine (ABNM)
- Independent, non-profit organization
- One of 24 medical specialty boards of ABMS
- The American Board of Nuclear Medicine is the primary certifying organization for nuclear medicine in the United States. The ABNM serves the public through assurance of high quality patient care by establishing standards of training, initial certification, and continuing competence of physicians providing nuclear medicine diagnostic and therapeutic services.

Professional Organizations Certification - ABNM

- ABNM
- Works toward standards for physicians to achieve and maintain board certification
- Accountable to the public and the medical profession
- Protects the public by assessing and certifying doctors who meet specific educational, training and professional requirements

Professional Organizations Certification - ABR

- ABR
- Mission: to serve patients, the public, and the medical profession by certifying that its diplomates have acquired, demonstrated, and maintained a requisite standard of knowledge, skill, understanding, and performance essential to the safe and competent practice of diagnostic radiology, interventional radiology, radiation oncology, and medical physics.

Professional Organizations in NM - ABR

- Vision:
- By 2020, the ABR will have advanced safety and quality in healthcare by setting the definitive professional standards for diagnostic radiology, interventional radiology, radiation oncology, and medical physics.
- ABR is ending the oral certifying exam and transitioning to a new computer based exam, incorporating both physics and clinical material, known as Core and Certifying examinations.

Professional Organizations in NM – ABR

- ABR
- Initial certification
- Maintenance of certification:
 - 1. Professional standing
 - 2. Lifelong learning and self assessment
 - 3. Cognitive expertise
 - 4. Practice Quality Improvement (PQI)

Professional Organizations in NM - Accreditation

- Training programs
- Accreditation Council for Graduate Medical Education (ACGME)
- Residency Review Committees (RRC)
- NM RRC
- Diagnostic Radiology RRC

Professional Organizations Accreditation-ACGME

- Accreditation Council for Graduate Medical Education (ACGME)
- Private, nonprofit, established 1981
- Mission: We improve healthcare by assessing and advancing the quality of resident education through accreditation.
- Vision: exemplary accreditation

Professional Organizations - Certification and Accreditation

Certification is a process to provide assurance to the public that a certified medical specialist has successfully completed an approved educational program and an evaluation.

- *The ABMS certifies individuals.*

Accreditation is a voluntary process of evaluation and peer review performed by a non-governmental agency.

- *The ACGME accredits residency programs.*

Professional Organizations Accreditation - ACGME

- Accredits training programs
- Includes:
 - Setting standards for graduate medical education
 - Collecting case log data, monitoring duty hours
 - Conducting resident surveys
 - Follow up on resident concerns and complaints

Professional Organizations Accreditation- ACGME

- Importance of accreditation:
- eligibility for state medical license
- Eligibility to sit for ABMS Board certifying exam
- Sponsoring institution and programs receive money to provide education
- Mark of high quality

Professional Organizations Accreditation NM RRC

- NM RRC
- 7 members
- Appointed by SNM, ABNM and AMA
- Appointment is for 6 years
- Resident member appointed for 2 years

Professional Organizations Accreditation R RRC

- Radiology RRC
- 10 members plus a resident member
- Meets 3 times per year

Professional Organizations - Technologists

- **Certification:**
 - Nuclear Medicine Technology Certification Board (NMTCB)
 - American Registry of Radiologic Technologists (ARRT)
- **Accreditation:**
 - Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT)

Professional Organizations - Physicists

- **Certification:**
 - ABR
 - American Board of Medical Physics (ABMP)
 - American Board of Science in NM (ABSNM)

- **Accreditation:**
 - Commission on Accreditation of Medical Physics Educational Programs (CAMPEP) - Graduate Programs and Residencies

Other Organizations of Importance in Education in Nuclear Medicine

- Nuclear Regulatory Commission (NRC) www.nrc.gov
- Accreditation Council for Continuing Medical Education (ACCME) www.accme.org
- Council of Medical Specialty Societies (CMSS) www.cmss.org
- National Council on Radiation Protection & Measurements (NCRP) www.ncrponline.org
- Conference of Radiation Control Program Directors (CRCPD) www.crcpd.org
- American Medical Association (AMA) www.ama-assn.org

Other Organizations of Importance in NM

- Regulatory Agency – NRC
- Advisory with authority – ACCME, CMSS
- Advisory Organization - NCRP

Other Organizations of Importance in NM

- Specialty societies
 - ACCME *
 - CMSS*
 - NCRP
 - AMA
-
- * Specialty societies of specialty societies

Other Organizations of Importance in NM

- NRC – regulatory agency
- Created by Congress in 1974 as an independent agency to ensure the safe use of radioactive materials for beneficial civilian purposes while protecting people and the environment.
- It regulates through licensing, inspection and enforcement of its requirements.

Other Organizations of Importance in NM

- NRC
- Importance: Extremely high. NRC regulations must be followed to practice NM.
- NRC states/Agreement states – practices in NRC states must follow NRC regs; practices in Agreement states must follow state regs, which must be at least as strict as NRC regs (they can be more restrictive, but not less)

Other Organizations of Importance in NM

- NRC
- Main regulations in NM: 10 CFR 20, 10 CFR 35
- Part 20 – Standards for Protection Against Radiation
- Requirements for: occupational dose limits, dose limits to the public, requirements for surveys, monitoring, storage, records keeping, reports.

Other Organizations of Importance in NM

- NRC
- Part 35 - Medical Use of Byproduct Material
- Requirements for: written directives, instrument calibration, syringe labeling, records, reports;
- Training of physicians: imaging and localization studies (35.290), studies that require a written directive (therapy, I-131 WB imaging – 35.392, 35-394)

Other Organizations in Nuclear Medicine

- NRC
- Sets requirements for Authorized User status
- ABR must comply with these requirements to certify Radiology exam candidates as Authorized users

Other Organizations of Importance in NM

- ACCME – not for profit corporation
- Mission: identification, development, and promotion of standards for quality continuing medical education (CME) utilized by physicians in their maintenance of competence and incorporation of new knowledge to improve quality medical care for patients and their communities.

Other Organizations of Importance in NM

- ACCME
- Produces standards for commercial support to ensure independence in continuing medical education (CME) activities

Other Organizations of Importance in NM

- ACCME
- Compliance with their guidelines is required to be accredited to offer CME
- Importance: This is the main accrediting body for CME. It accredits societies and hospitals that provide CME
- SNMMI offers CME at its meetings through compliance with ACCME guidelines

Other Organizations of Importance in NM

- Council of Medical Specialty Societies (CMSS) – Founded in 1965
- Created to provide an independent forum for the discussion by medical specialists of issues of national interest and mutual concern.

Other Organizations of Importance in NM

- CMSS –
- Mission: to provide a respected and influential voice for medical specialty societies and their members by working with the societies and other medical organizations to formulate, articulate and promote adoption of policies that will improve the United States' healthcare system and health of the public.

Other Organizations of Importance in NM

- CMSS
- Produced a voluntary code of conduct for medical specialty societies in their interactions with commercial companies

Other Organizations of Importance in NM

- CMSS
- Code for Interactions with Companies –
- Societies are counted on to be authoritative, independent voices in science and medicine. Public confidence is critical, and the public relies on us to minimize actual or perceived conflicts of interest.
- Every Society must be sure its interactions with companies meet high ethical standards.

Other Organizations of Importance in NM

- National Council on Radiation Protection and Measurements (NCRP)
- Advisory – publishes guidance documents
- Mission – radiation protection
- The NCRP seeks to formulate and widely disseminate information, guidance and recommendations on radiation protection and measurements which represent the consensus of leading scientific thinking. The Council is always on the alert for areas in which the development and publication of NCRP materials can make an important contribution to the public interest.

Other Organizations of Importance in NM

- NCRP
- Private corporation – nongovernmental, not-for-profit, public service organization
- Has status as an educational and scientific body which is tax-exempt
- Functions as an advisory body

Other Organizations of Importance in NM

- NCRP
- Mission: To support radiation protection by providing independent scientific analysis, information, and recommendations that represent the consensus of leading scientists.
- Recommendations by the NCRP provide the scientific basis for radiation protection efforts throughout the US.

Other Organizations of Importance in NM

- CRCPD
- Mission: “to promote consistency in addressing and resolving radiation protection issues, to encourage high standards of quality in radiation protection programs, and to provide leadership in radiation safety and education.”

Other Organizations of Importance in NM

- AMA
- Specialty society of physicians
- Mission: To promote the art and science of medicine and the betterment of public health.
- Core values:
 - Leadership
 - Excellence
 - Integrity and ethical behavior

Other Organizations of Importance in NM

- AMA
- Importance:
- Membership in the AMA allows the SNMMI and ACNM to participate in the CPT and RUC committees, which recommend reimbursement rates for NM exams.
- CPT- Current Procedural Terminology
- RUC – Relative value scale Update Committee