

## **The Nuclear Medicine Technology Certification Board: *Growing with the Profession to Meet the Needs of the Future***

**I**t is an honor for the Nuclear Medicine Technology Certification Board (NMTCB) to be a part of this issue of the *Journal of Nuclear Medicine Technology* commemorating the silver anniversary of the Technologist Section of the Society of Nuclear Medicine. The NMTCB was the inspiration of some very forward thinking members of the Technologist Section and together we have made tremendous progress toward the recognition of nuclear medicine technology as a profession.

Several years ago Patricia Weigand, then editor of *JNMT*, entitled a piece for the journal, "The Technologist: The Sum of the Parts." These essential parts include education and training, experience, knowledge and skills, scope of practice, and professional development. One component is the mechanism of proving competence through the certification examination administered by the NMTCB.

About the same time that the Technologist Section was getting underway as the professional organization representing the field, discussions were held to study the feasibility of a separate examination for nuclear medicine technology. Then the

American Registry for Radiologic Technologists (ARRT) and the American Society of Clinical Pathologists (ASCP) offered exams in the field. Taking both exams enabled a technologist to practice

in both imaging (in vivo) and nonimaging (in vitro) areas. The ASCP nuclear medicine technology exam merged with the NMTCB exam in 1983.

However, members of the Technologist Section wanted a separate examination that covered all aspects of the field. They felt a new type of exam would offer more professional recognition, especially if it was developed by practitioners in the field.

At a meeting held on June 10, 1976 in Dallas, the National Council of the Technologist Section resolved to create a new exam and appointed a task force to explore the process of implementing the concept. In January 1977 the National Council approved the proposal presented by the task force. With seed money from the Society of Nuclear Medicine board of trustees, the NMTCB was incorporated. The National Council elected the first members of the Board of Directors:

**Violet C. Custer**

**Joan L. Herbst, CNMT**

**Barbara K. Horton, CNMT**

**James J. Kellner, CNMT**

**James K. Langan, CNMT**

**Anthony Mazzola**

**Mark I. Muilenburg, CNMT**

**Susan L. Schlegel, CNMT**

**Susan C. Weiss, CNMT.**

In March, Donald R. Bernier, CNMT, James J. Conway, MD, and Frances N. Kontzen, CNMT, were added to the board.

The first examination was administered on September 15, 1978, only nineteen months later. There were 652 examinees for the first test. The exam was given once each year until 1985 when June and September administrations were introduced. Currently, the exam is given to more than 1,000 participants annually.

The NMTCB exam was to be a departure from norm-referenced testing. The task force felt strongly that a credible competency exam could only be accomplished by criterion-referenced testing. A criterion-referenced examination is designed so that a test score is a measure of the candidate's competency, not simply a comparison to how other candidates scored in the exam. An NMTCB examinee's scores are interpreted against a predetermined standard of competency. Finally, each question is designed to measure the application of fundamental knowledge and skills about procedures and equipment used in the field. The advantages of criterion-referenced testing persuaded the board of directors to adopt this method to meet the goals of

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the Technologist Section.

Periodic task validation surveys have been conducted by the board (1977, 1983, 1987, 1991) to keep the exam relevant to current practice. Most recently, in 1994, the board completed a practice trends analysis that provides the nuclear medicine community with a snapshot of what is current practice in today's health care environment.

The smooth day-to-day operations of the board are credited to the executive director and office staff. The NMTCB has been extremely fortunate to have had three out-

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standing executive directors in its 18-year history—Barbara Horton, CNMT, Dennis Park and, currently, James Greene, PhD.

The chairman of the board is the spokesperson for the board and the liaison with other professional organizations. The current chair is Nancy Sawyer. Past chairs are:

**Mark I. Muilenburg, CNMT**  
**James J. Kellner, CNMT**  
**John J. Kozar, CNMT**  
**Sheila Rosenfeld, CNMT**  
**George W. Alexander, Jr., CNMT**  
**Nancy M. Blosser, CNMT**  
**Helen M. Drew, CNMT**  
**Karen L. Blondeau, CNMT**  
**Jacqueline A. Bridges, CNMT**  
**Martha W. Pickett, CNMT**  
**Mark H. Crosthwaite, CNMT.**

Just as the original board members must have been excited about the prospect of giving the first exam, so too are the current board members excited about administering the first computer adaptive test (CAT).

Under the guidance of American College Testing, who has provided psychometric and testing services since the first exam, the 1996 exam administration will be CAT. It is appropriate that the testing process has changed and developed along with field

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of nuclear medicine technology. The new exam process will open doors of opportunity for our profession. The exam will be administered more times each year. Examinees will have results in a shorter time. Computer images can be digitized and become a part of the testing process. CAT can also be a vehicle for continuing education projects.

As nuclear medicine technology moves into its next 25 years, the NMTCB is ready to meet its ever-evolving needs. The Technologist Section can be proud of the accomplishments of the NMTCB and those of the more than 17,000 CNMTs certified by the organization. The mission statement, written by the founders of the NMTCB, continues to direct the board:

The Nuclear Medicine Technology Certification Board was founded in 1977 to establish and maintain a voluntary program for certification of nuclear medicine technologists by nuclear medicine technologists. The board endeavors to promote quality patient care and to serve the public, the profession and employers by establishing and developing standards and procedures for individuals to enter, continue and advance in nuclear medicine technology. The standards include education requirements, practical experience and successful completion of an appropriate competency-based examination. The board certifies that these individuals have developed the requisite body of skills and are individuals who meet these criteria. The work of the board is accomplished with technologists, scientists and physicians representing the profession.

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**SUGGESTED READING**

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2. Drew H. NMTCB: ten years of services to the nuclear medicine profession. *J Nucl Med Technol* 1988;16:155-156.