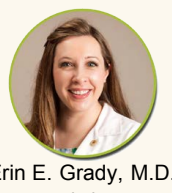
TRACERS Newsletter

Official publication of the American Board of Nuclear Medicine
A member of the American Board of Medical Specialties

Issue 2
2017



Erin E. Grady, M.D.
Chair

Chair Message

In my last letter to you, I mentioned that the ABNM wants to give you value. In this letter, I want to give you a rough idea of where your money goes when you pay your Maintenance of Certification (MOC) dues.....**Read more**

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MOC Committee Chair

CertLink™ How and Why

Hopefully all ABNM Diplomates have heard about CertLink by now, but if you have not, in short it is....**Read more**

JNM The Journal of Nuclear Medicine

Editorial: Nuclear Medicine Training in the United States

George M. Segall, Erin E. Grady, Joanna R. Fair, Munir V. Ghesani and Leonie Gordon

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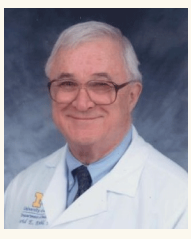
November 1, 2017 vol. 58 no. 11 1733-1734

The American Board of Nuclear Medicine (ABNM) also endorses combined, multispecialty training that maintains ....**Read more**

SNMMI SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING



In Memoriam: Nuclear Medicine Pioneer
David E.Kuhl, M.D.

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SNMMI Newsline J Nucl Med 2017 web citation

David E. Kuhl, MD, a nuclear medicine pioneer who developed early prototypes of what was to become positron emission tomography (PET), died in Ann Arbor, Michigan, on May 28, 2017, at the age of 87....**Read more**

Diplomate Corner

Click on the links above to view/login to your ABNM Profile or to catch up on the latest Frequently Asked Questions regarding CertLink.

Upcoming Events

- **October 16- January 1, 2018 – CertLink**
- **Enrollment CLICK HERE TO ENROLL NOW**
- **January 8-13, 2018 – In-Training Examination Administered in USA/Canada**
- **April 1, 2018 – Application Period Begins for Certification and Maintenance of Certification Examination**
- **October 1-6, 2018 – Certification and Maintenance of Certification Examination.**

Leonie Gordon, M.D.
Associate Executive Director

Message from the Associate Executive Director

I am beginning my tenure as Associate Executive Director and am very excited. There are many opportunities as well as many issues facing our board. These include....**Read more**

2017 In-Training Examination(ITE)

Total Number of Examinees	Residents in the United States	Residents in Canada	Non Trainees
114	92	17	5

Number of Nuclear Medicine Training Programs Participating in ITE Examination

Total Programs	United States	Canada
42	36	6

The ABNM has made your MOC Profile simpler! You can now self-attest for MOC Parts 2 & 4. In order to self-attest you will need to perform the following steps:

MOC Part 2 – Lifelong Learning and Self-Assessment

- Login to your **ABNM profile**
- In the left navigation bar, click on MOC - Part 2
- Select Agree in the box to self–attest to MOC Part 2
- Even if you agree, you may still enter in credits earned by clicking on Add Credits in the left navigation bar
- As a reminder, a minimum 5-year average of 25 CME AMA Category 1 credits per year which are needed. This includes 17.5 credits related to Nuclear Medicine and 8 self-assessment (SAM) credits.

MOC Part 4 – Improvement in Medical Practice

- Login to your **ABNM profile**
- In the left navigation bar, click on MOC - Part 4
- Select Agree in the box to self–attest to MOC Part 4
- As a reminder, the ABNM requires diplomates to complete one qualifying activity each year. The qualifying activities can be found by clicking **here**.

The American Board of Nuclear Medicine
A Member Board of the American Board of Medical Specialities
ABMS MOC™ American Board of Nuclear Medicine Certification Matters

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Telephone: (314) 367-2225 E-mail: abnm@abnm.org Website: www.abnm.org

The ABNM welcomes comments from diplomates and residents regarding issues raised in this Tracers or any other issues affecting the practice of nuclear medicine or certification processes. Please email your comments to:

George M. Segall, M.D.
Executive Director
American Board of Nuclear Medicine
abnm@abnm.org

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From the Desk of the Chair

Erin E. Grady, M.D., FACNM, *Chair, ABNM*

Dear colleagues,

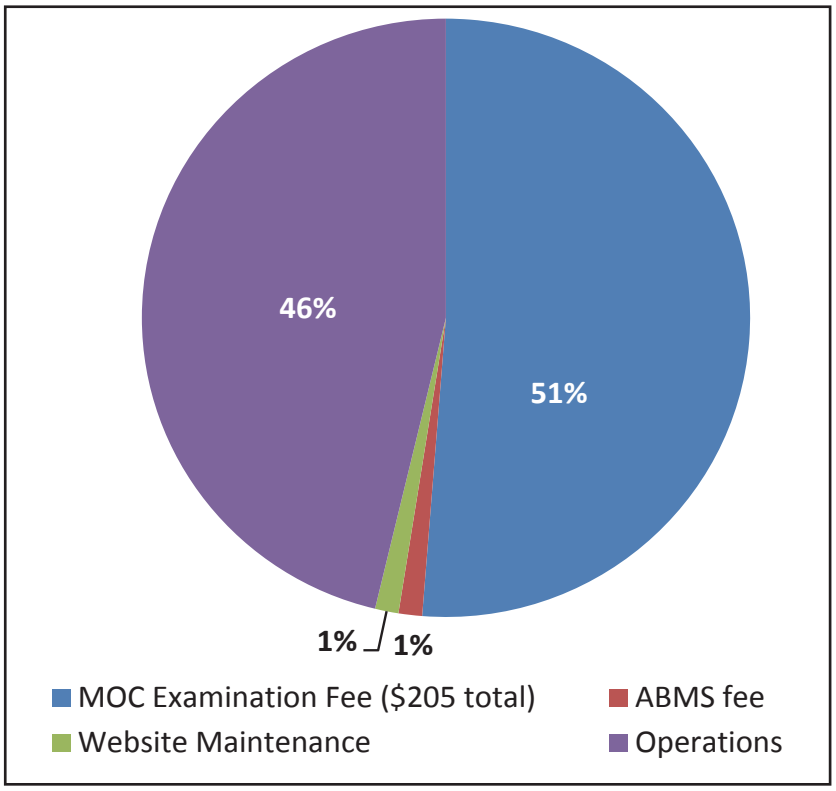
In my last letter to you, I mentioned that the ABNM wants to give you value. In this letter, I want to give you a rough idea of where your money goes when you pay your Maintenance of Certification (MOC) dues. This should help you understand the value of supporting the ABNM through payment of your ABNM MOC Annual Dues.

As one of the 24 boards recognized by the American Board of Medical Specialties (ABMS), ABNM is tasked with "serving 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." There has been some negative press regarding specialty boards and their finances in the recent past[1] which would suggest that some boards are making big profits from their tests. Let me be the first to assure you that this is not the case for the ABNM. The ABNM is a 501(c)(3) nonprofit organization and the yearly revenue obtained is fairly modest given the small size of our specialty. It may be helpful to know that the members of the board of directors and officers of the ABNM are not paid. We are all volunteer members. The only paid individuals are the ABNM office staff, which includes, the Executive Director, the Associate Executive Director and four stellar employees who are located in St. Louis, Missouri.

As you may recall from a fairly recent article by our distinguished former Associate Executive Director, Dr. Tony Parker[2], the Board does more than just write tests. To be honest, when I first joined the board, I was surprised about all of the different tasks a specialty board performs. Of course, a great portion of our work involves testing (the In-Training Exam (ITE), Certification Exam, Maintenance of Certification (MOC) Exam and now CertLink™) and question writing (or as we call it "item writing") and discussion. We manage a question (or item) database, utilize the services of PearsonVue to bring the exams to you and print the ITE and mail it to the different training programs. We also have a psychometrician consultant who ensures that the examinations are statistically valid. We now have additional cost for the software developed by the ABMS for CertLink™. As you can see in the pie chart below, about half of your $400 goes to the exam work that we do. It is important to realize that this money doesn't fully cover the costs of the exams depending on the changing numbers of people sitting for the exam. I should note that there is an exam fee which will soon be going away. The exam fee was originally $2050, but when paid equally over 10 years it becomes $205.

The next largest piece of the pie is the "operations" piece. This includes payroll for the ABNM office staff and in person meetings which are vital to the Board's success. In addition, this includes requests for verification of board certifications (*e.g.* from state boards and medical credentialers), audit of CME attestation, addressing the notifications from the Disciplinary Action Notification System (DANS), Federation of State Medical Licensing Board (FSMB) and the ABMS.

A couple of small slices of the pie are left: our ABMS fee which is very important. I believe Dr. Parker said this best, "In addition to providing a forum for the boards to share and learn from each other, the ABMS represents its members' interests to payers and regulators. Although we are a small board, we have a seat at the table, where we can make sure our special interests are heard. The ABMS evaluates each board's activities to provide additional credibility, especially to other organizations and licensing bodies that agreed upon standards are followed." The last slice is that of our website maintenance; this is our important direct link to you. Remember we need you to log on to the website to verify your information once a year; this is the best way to maintain your MOC profile.



Please make sure to take a look at the CertLink™ Frequently Asked Questions (FAQ's) in this issue. We want to ensure that you have all the information. Registration for the CertLink™ pilot soft launch is now open! CertLink™ promises to be very exciting and we hope you will participate in the pilot January 2018 or the full roll out which is slated for April 2018. If the FAQ's are in any way unclear, please let us know so we can address them; you can also email your additional questions to CertLink@abnm.org. The ABNM also has a dedicated page for CertLink™ on the ABNM website (www.abnm.org). Be sure to visit our website to find out how you can get involved today!

Very sincerely,

Erin Grady, MD

Erin Grady, MD, CCD, FACNM

References:

1. Drolet BC, Tandon VJ. Fees for Certification and Finances of Medical Specialty Boards. *JAMA.* 2017;318:477–479.
2. Parker JA. Value of ABNM Certification and MOC to Diplomates and the Public. *J Nucl Med.* 2016;57:10N,13N.

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Message from the Executive Director

Simplifying MOC

George M. Segall, M.D., *Executive Director, ABNM*

The ABNM is working to make MOC simpler, more efficient, and more valuable for diplomates. We recognize that busy diplomates need a process that is easy to understand and doesn't take a lot of time, so the ABNM has redesigned the My Profile page of the ABNM website. Diplomates only need to log onto their profile once a year to update their information, which should only take a few minutes. The first step is to click Edit Contact Info if your contact information has changed. Enter your new primary work address and home address, phone number, and email address. The next step is to pay your annual MOC dues by clicking Invoices. The annual dues are currently $400. You may also pay past due amounts without interest penalty. Credit card payments are accepted. Click on Edit MOC Setting if you plan to start or stop participating in MOC. You can also choose whether or not to receive frequent email reminders.

Part 1 – Professional Status. Your professional status must be updated annually. If all of the information is current, you only need to click SAVE at the bottom. Otherwise, you must state whether or not you are an Authorized User of radioactive materials, update your medical license information (state or jurisdiction, number, and expiration date), and answer a few questions about your type of practice.

Part 2 – Life Long Learning and Self-Assessment. Twenty-five hours of AMA Category 1 CME credit are required on average each year over five years. Of those credits, 17.5 hours should be related to Nuclear Medicine, and 8 hours should include self-assessment. New this year is an option that allows you to click a button attesting that you have met the requirements. The ABNM will audit a small percent of diplomates each year, so be sure to save your information. If you have registered with the CMEgateway (https://www.cmegateway.org) your credits earned from many Nuclear Medicine and Radiology organizations (such as the SNMMI, RSNA, ACR, ARRS, and AAPM) will be automatically downloaded to your profile. A significant advantages to using CMEgateway is that your CME credits are not subject to audit since they have already been verified.

Part 3 – Cognitive Expertise. The ABNM is launching a pilot program called CertLink™ in January 2018, which is being offered as an alternative to the MOC examination for diplomates whose certificates expire in 2018-2021. Diplomates will receive 9 new multiple-choice questions plus up to four repeat questions each quarter. It is hoped that diplomates will find CertLink a convenient and valuable method to maintain and update their knowledge. More information is available at https://www.abnm.org/index.php/certlinktm/.

Diplomates who do not want to participate in CertLink may opt to take the MOC exam before their current certificate expires. The MOC exam has approximately 120 multiple-choice questions, and is taken at PearsonVue testing centers over 3.5 hours. The pass rate has historically been about 97%. The ABNM expects diplomates who have kept up with CME will pass the examination without having to specifically study for it, but provides links to approximately 50 key articles for diplomates who want to enhance their knowledge in specific topic areas. Approximately one-third of the

content for the MOC exam is based on the key articles, which can be accessed at https://abnm_wordpress_uploads.s3.amazonaws.com/wordpress/wp-content/uploads/ABNM_Study_Guide_Key_Articles.pdf.

Part 4 – Improvement in Medical Practice. The ABNM recognizes that many diplomates are engaged in quality improvement activities as part of their routine practice. The ABNM recognizes 16 activities that meet the annual requirement, such as participation in a peer-review process. The list is available at https://abnm_wordpress_uploads.s3.amazonaws.com/wordpress/wp-content/uploads/2016-1_MOC_Committee.pdf. New this year is an option that allows you to click a button attesting that you have met the requirements. The ABNM will audit a small percent of diplomates each year, so it is important to keep records. The ABNM is also pleased to announce the first annual practice survey as another method to satisfy the requirement. The first survey concerns lung scans for pulmonary embolism, and is available at https://goo.gl/forms/vLBoUlf2l92B68Sb2. The survey has six practice-based questions that are answered on the basis of the past 10 lung scans performed in your practice. The survey may be completed as an individual or a group. The brief survey is based on the SNMMI procedure standard for lung scintigraphy. Diplomates who complete the survey will receive a summary of the answers submitted by other participants so that they can compare their practice to others. Another advantage to completing the survey is that diplomates do not have save records for an audit.

Please log on to My Profile and update your information if you have not already done so this year. The ABNM hopes that you will find it easier and faster to update your information as a result of the changes that have been made this year.

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Message from the Associate Executive Director

Leonie Gordon, M.D., *Associate Executive Director, ABNM*

I am beginning my tenure as Associate Executive Director and am very excited. There are many opportunities as well as many issues facing our board. These include transitions and changes in the MOC process and creating the CertLink™ platform with ABMS which will deliver a question weekly to diplomates as a potential option to the secure part 3 MOC examinations.

There is a large effort from ABNM to educate our diplomates on these positive changes to the MOC process and communicate more effectively with you. The ABNM website is being updated so that it will be easier for you to revise your contact information, which is an annual MOC requirement. It will be easier for use to manage your MOC requirements and be able to attest to completion of various parts of MOC.

In the world of certification, there are constant changes and improvements being made. ABNM strives to make these changes efficiently and communicate them to our diplomates. We will start using frequent email blasts and continue to publish Tracers, our electronic newsletter. Hopefully this does not overwhelm you. We hope that you have noticed an improvement in our communications to you- from our friendly office staff answering your calls and questions, to our staffed booth at SNMMI annual meeting, as well as the electronic communications, emails and Tracers announcing important updates and changes.

I plan to work hard to disseminate information that will help you understand the mission of ABNM and the positive changes the board makes to improve the value of ABNM certification. We are constantly reviewing our communication strategy and hope to provide you with more frequent, yet concise, relevant, and to the point electronic communications. Some of the emails will describe CertLink™, the collaborative project that the ABNM is developing with ABMS. This will allow eligible diplomates , who select to participate in the pilot to receive, on average, one question per week in different categories which access current knowledge in our field. We plan to continue sending Tracers biannually.

Some of you may choose not to receive ABNM emails /newsletters. If you do op-out, you will miss critical information about ABNM, MOC, etc. We hope that you will continue to log into your password protected portal at www.abnm.org and update your contact information to make sure it is current.

Lastly, I would like to hear from you about how ABNM can best communicate with you, our diplomates. The only way we can make practical improvements is to have our members communicate readily and openly with the Board.

For general questions or comments, please email abnm@abnm.org. For questions regarding CertLink™, please email certlink@abnm.org.

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Message from the MOC Committee Chair

CertLink™ How and Why

Daniel A Pryma, M.D., *MOC Committee Chair*

Hopefully all ABNM Diplomates have heard about CertLink™ by now, but if you have not, in short it is a pilot program sponsored by the American Board of Medical Specialties (ABMS). Its purpose is to potentially replace the Maintenance of Certification (MOC) exam currently required every 10 years for ABNM Diplomates as part of the four part MOC program. While the implementation of MOC has been very controversial, I think all physicians would agree in principle that it is of utmost importance that practicing doctors remain up to date in their skills and knowledge base. While an every-10-years exam does ensure that a physician is up to date at the time of the exam, there are three major problems with this approach:

1. A physician could, in theory, do no learning for 9 years and 50 weeks after their certification or MOC exam then spend two weeks studying frantically for the exam. While this might achieve a passing result, it is certainly not in the spirit of lifelong learning and much of the information covered in that frantic period of studying will be forgotten within hours or days of completing the exam. This physician's patients would not benefit from a practitioner who is truly up to date with the current standard of care despite successful completion of the MOC process.

2. While the MOC exam is a psychometrically valid way to test a physician's knowledge, the examinee leaves the exam with little understanding of what s/he did not know. Even though the final score reports give some feedback on content area performance, this is rarely specific enough to inform future learning to bridge gaps in knowledge.

3. The stakes are high for the MOC exam, with a failing result potentially having significant consequences on a physician's standing and employment. While passing rates for the ABNM MOC exam have been consistently high, this knowledge does little to minimize the stress caused by the process.

The CertLink pilot is designed to address each of these weaknesses with the current program. Participants in the pilot will log into a web-based system to answer questions. On average, there is one question per week, but a great deal of flexibility as to when the questions can be completed (questions are scored on a quarterly basis, so in total 13 questions will be attempted each quarter but they could be completed weekly, all on the first or last day of the quarter or anything in between as best fits any individual's schedule). Questions are timed and most questions allow 2-3 minutes, though some questions might involve large images sets or calculations and will allow for additional time. No question will require more than 5 minutes. Prior to starting the question, the diplomate will be aware of how long that question allows so a choice can be made as to whether to attempt it at that point or wait until later.

Once a question is answered, the diplomate will be shown the correct answer along with an explanation of why that answer is correct, why the other options are incorrect as well as at least one reference should further reading on the subject be desired. Therefore, diplomates are given immediate feedback to reinforce what they know as well as to help learn what is not known. Furthermore, incorrectly answered questions may be re-tested in a subsequent quarter (either the same question or a clone testing the same concept); a correct answer the second time around, evidence of lifelong learning, will negate the prior incorrect response. Finally, because CertLink is a multi-year process and diplomates get real-time feedback on performance, participants can adapt and respond to any difficulties. In order to pass and remain current in ABNM Board Certification, each diplomate must successfully complete the process. However, the process is designed so that physicians can control their own fate through learning and participation throughout the continuous process. No one needs to be in the agonizing position of having to take a challenging high stakes exam and waiting several weeks for results with wide-ranging implications.

The CertLink pilot will be rolled out in two parts and diplomates will receive specific information on the details along with a list of frequently asked questions. For those currently participating in MOC, there is no additional fee for participating in CertLink. Diplomates must be current with annual MOC dues, and pay a one-time $615 examination fee, which is the same fee paid by diplomates who took the 2017 MOC examination. There will be no examination fee starting January 2019. Diplomates will only have to pay the annual MOC fee, which is currently $400. Diplomates who have never participated in MOC can participate in CertLink for an annual fee of $400. Diplomates who find value in the process can opt to satisfy the other requirements to become active in MOC. Those diplomates who never previously participated in MOC who wish to continue to participate in CertLink after January 2019 for re-certification, must pay a one-time examination fee of $1845 in addition to annual dues. A few words on the fee structure for MOC: during the CertLink pilot, the ABNM will need to add CertLink while still maintaining the current MOC exam. The pilot requires an entirely new platform and question bank with the addition of question explanations. The directors of the ABNM are all volunteers and have been assisted in the CertLink question writing by volunteers from the ACNM. However, the process has real and significant costs. Furthermore, the ABNM is a small board with relatively few diplomates. For comparison, the American Board of Internal Medicine certifies more new diplomates each year than the ABNM has over its entire history. Therefore, the ABNM has a smaller pool of participants across whom to share the costs of the process.

For more information on CertLink please see the dedicated site https://www.abnm.org/index.php/certlinktm/.

The ABNM is very excited about this pilot and strongly expects that it will be of value in diplomates' lifelong learning process. Please consider enrolling and encouraging friends and colleagues to do the same.

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Editorial: Nuclear Medicine Training in the United States

George M. Segall, Erin E. Grady, Joanna R. Fair, Munir V. Ghesani and Leonie Gordon
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American Board of Nuclear Medicine, St. Louis, Missouri

In the October issue of *The Journal of Nuclear Medicine,* the authors of the "Hot Topics" paper, "Nuclear Medicine Training: What Now?" suggested a path forward for training in nuclear medicine that "matches the needs of the evolving clinical specialty" by "combined, multispecialty training." (1). The American Board of Nuclear Medicine (ABNM) also endorses combined, multispecialty training that maintains high standards for nuclear medicine education, prepares physicians for practice in a changing environment, and advances the specialty.

The ABNM has actively supported training leading to certification in nuclear medicine plus certification by the American Board of Radiology (ABR) in diagnostic radiology. The ABNM and the Society of Nuclear Medicine and Molecular Imaging (SNMMI) issued a joint policy statement in 2012 supporting all training pathways leading to dual certification (2). These pathways currently include the traditional 12-mo nuclear radiology or nuclear medicine fellowship after diagnostic radiology residency, the 16-mo nuclear medicine/nuclear radiology pathway during 4 y of diagnostic radiology residency, and the 5-y combined pathway within separate nuclear medicine and diagnostic radiology programs accredited by the Accreditation Council for Graduate Medical Education (ACGME). Support for these pathways is not meant to promote the "chaos of multiple training and certification pathways" but rather to facilitate institutions developing practical dual training pathways given local considerations, with robust training and subsequent certification in nuclear medicine and diagnostic radiology.

After the joint ABNM and SNMMI statement in 2012, the ABNM took action to promote the development of dual training programs within 4 y of diagnostic radiology residency training. The changes made by the ABNM include the following:

- Defining 16 mo of training in practical terms.
- Removing the requirement for a minimum of 6 mo of continuous nuclear medicine training.
- Giving training-program directors more discretion in allowing elective time.
- Permitting contemporaneous nuclear medicine training with other fellowship training.
- Recognizing non–ACGME-accredited nuclear medicine fellowship training in institutions with ACGME-accredited nuclear medicine residency or nuclear radiology fellowship programs.
- Recognizing nuclear radiology training when ACGME nuclear medicine program requirements are met.

The ABNM recognizes that it is a challenge for physicians to become proficient in nuclear medicine and diagnostic radiology in 16 and 32 mo, respectively. Recognizing also that the knowledge and skills required to advance the specialty of nuclear medicine and molecular imaging might require more than 4 y of training, the ABNM also supports 5-y combined training programs with nuclear medicine and diagnostic radiology residency programs that are separately accredited by the ACGME. The ABNM gives institutions broad leeway in determining how much nuclear medicine and diagnostic radiology training is required, so long as the minimum time of nuclear medicine training is 16 mo. The ABNM has already approved combined training programs at several institutions, including 3 institutions that have a number issued by the National Residency Matching Program that allows applicants to simultaneously apply for the separately accredited nuclear medicine and diagnostic radiology residency programs (Stanford University, University of California at Davis, and Johns Hopkins University). The ACGME will also issue an Accreditation Data System program number, which acknowledges the board-approved combined program with separately accredited components. More details are available in Tracers, the newsletter sent to all ABNM diplomates (3).

The ABNM also makes it possible for radiologists trained outside the United States and Canada to qualify for the ABNM certification examination through the ABR alternate pathway, when it includes at least 16 mo of nuclear medicine training at institutions with

ACGME-accredited nuclear medicine or nuclear radiology programs.

In June 2017, the ABNM sent a letter to all nuclear medicine and nuclear radiology program directors, describing in detail the dual training pathways diagnostic radiologists may follow to become ABNM-certified. The letter is available on the ABNM website (4).

Recognizing that maintenance of certification is more difficult for physicians certified by more than one American Board of Medical Specialties member board, the ABNM has taken steps to reduce the required time and effort by giving credit for the continuing medical education (maintenance of certification, part 2) and improvement-in-medical-practice activities (maintenance of certification, part 4) recognized by other member boards. The ABNM has also adopted diplomate self-attestation with random auditing in place of routinely requiring documentation of these activities (5).

The authors state that the nuclear medicine and diagnostic radiology communities are the imaging-world equivalent of the Dr. Seuss characters called the Zax, who, "marching straight ahead, came face to face" and "refused to budge, stopping the forward progress for both of them." This characterization discounts changes both boards have made to promote dual training, continuing to build on a foundation that includes 47% of ABNM diplomates certified between 2001 and 2016 who are also certified by the ABR.

The challenge for the specialty of nuclear medicine is to attract highly qualified medical students into the field. The number of nuclear medicine residency training programs has decreased from 56 in 2007–2008 to 42 in 2017–2018, with 80 residents currently in training. The number of nuclear radiology programs has decreased from 22 to 18 during the same period, with 12 trainees this year (6). In 2016, 42 physicians were newly certified by the ABNM, and 2 physicians were certified by the ABR in nuclear radiology. The SNMMI and the American College of Radiology have recognized the problem and have started efforts to reach out and educate young professionals about opportunities in the rapidly growing fields of nuclear medicine and nuclear radiology.

Nuclear medicine and molecular imaging have seen tremendous growth and have become more complex with the introduction of many new diagnostic and therapeutic techniques in clinical practice. The ABNM believes, therefore, that a training pathway with only 4 mo of nuclear medicine will not advance the specialty. On the other hand, 3 y of nuclear medicine residency training leading only to ABNM certification may not provide diplomates with adequate employment opportunities. The ABNM, therefore, supports pathways leading to certification in nuclear medicine and diagnostic radiology that provide multiple options for entry, as well as matching training with future professional goals.

The ABNM also recognizes the historical contributions to nuclear medicine made by physicians in other specialties and plans to maintain practical training pathways that allow these physicians to continue to enrich and expand the specialty. In the past 16 y, 12% (133/1,116) of ABNM diplomates have been certified by non-ABR or American Board of Medical Specialties member boards, but that percentage has fallen to 4% in recent years. Time will tell how important these pathways will continue to be.

The authors state the "need for cross-fertilization in highly specialized areas of the practice such as nuclear cardiology and radionuclide therapy/theranostics." They envision a training pathway for combined radiation oncology and nuclear medicine. Others also recognize the need for combined multispecialty training. In the opening plenary session of the 2017 SNMMI annual meeting, Johannes Czernin, professor of molecular and medical pharmacology at the University of California, Los Angeles, and editor-in-chief of T*he Journal of Nuclear Medicine*, gave a presentation titled, "Imaging with a Purpose: The Future of Nuclear Medicine, Molecular Imaging, and Therapy." He stated it was necessary to "recruit the best medical students and residents" and called on the ABNM to recreate a feasible and reasonable pathway for internal medicine trainees (joint program). He stated that nuclear medicine should solidify its independence by keeping itself equidistant from medicine, endocrinology, oncology, neurology, urology, radiology, and radiation oncology. The ABNM is reevaluating the combined residency training program in internal medicine and nuclear medicine that has been inactive for over a decade. It will also explore other combined multispecialty training pathways that may be needed for the future.

The authors rhetorically ask whether nuclear medicine physicians will get stuck in their own tracks when facing their radiology (and cardiology and radiation oncology) colleagues, refusing to budge while the rest of medicine builds roads around, over, and through them. The actions of the ABNM show that cooperation rather than confrontation is ABNM policy. As a nuclear medicine leader, the ABNM will continue to work with all stakeholders, including the ABR and other American Board of Medical Specialties member boards, the SNMMI, and the ACGME, to ensure that future physicians will have the education and training needed for nuclear medicine to thrive for the benefit of patients and physicians.

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In Memoriam: Nuclear Medicine Pioneer David E. Kuhl, MD

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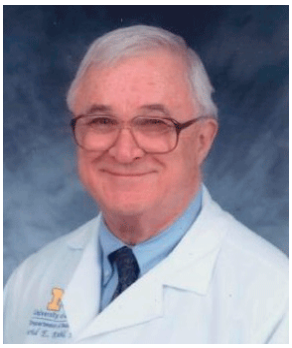

David E. Kuhl, MD, a nuclear medicine pioneer who developed early prototypes of what was to become positron emission tomography (PET), died in Ann Arbor, Michigan, on May 28, 2017, at the age of 87.

Kuhl was a founding member of the Society of Nuclear Medicine (now SNMMI), as well as the American Board of Nuclear Medicine. He also organized the Residency Review Committee for Nuclear Medicine and served as its chairman.

Kuhl earned his MD from the University of Pennsylvania School of Medicine in 1955 and completed his residency at the university's hospital in 1962. It was during his time at Penn that he developed a new method of tomographic imaging.

In his long career, he served on the faculties of three universities: the University of Pennsylvania (1958-76), the University of California Los Angeles (1976-86) and the University of Michigan (1986-2011). Kuhl was director of the Division of Nuclear Medicine and director of the Center for Positron Emission Tomography at the University of Michigan, which has established the David E. Kuhl Collegiate Professorship in his honor.

Kuhl focused his research on neurochemical and metabolic processes within the brain using PET radiotracers, paving the way for better understanding of degenerative brain diseases and targeted drug treatments. His discoveries and clinical translations helped lead to the routine clinical use of PET imaging in neurology, cardiology and oncology. The Kuhl-Lassen Award, named in honor of Kuhl and Niels Lassen, both pioneers in functional brain imaging, is the highest award of SNMMI's Brain Imaging Council. It is given annually to recognize a scientist who has made outstanding contributions to the discipline.

Kuhl's many honors include the Japan Prize from the Science and Technology Foundation of Japan (2009), the Ernst Jung Prize for Medicine from the Ernst Jung Foundation (1981), the Charles F. Kettering prize from the General Motors Cancer Research Foundation (2001), and the Benedict Cassen Prize for research leading to a major advance in nuclear medicine science from the National Institutes of Health (1996).

Link to Dr. Kuhl's obituary.