Message From the Chair

I hope that you and your families are healthy and that you are weathering the disruptions due to the COVID-19 pandemic. Like many of you, I had my first contact with nuclear medicine in the summer after my first year of medical school at Washington University School of Medicine in Saint Louis, Missouri. I had no idea that I would be in radiological sciences for the rest of my life. I hope that you and your families are healthy and that you are weathering the pandemic. Like many of you, I had my first contact with nuclear medicine in the summer after my first year of medical school at Washington University School of Medicine in Saint Louis, Missouri. I had no idea that I would be in radiological sciences for the rest of my life.

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Message from the Chair

Jonathan E. McConathy, MD, PhD - Chair, American Board of Nuclear Medicine

Dear ABNM Diplomates:

I hope that you and your families are healthy and that you are weathering the disruptions due to the COVID-19 pandemic. Like many of you, the ABNM is conducting business remotely, and our Winter 2021 meeting will occur through video conference rather than our traditional in-person gathering. We will continue to work with individual programs and trainees to deal with circumstances affecting training and certification due to the pandemic. I would like to use this letter to update you on recent and ongoing activities of the Board.

We are currently reviewing the results from the CertLink® longitudinal examination pilot program for Maintenance of Certification (MOC). This review includes the statistical aspects of all responses as well as identifying questions that did not perform well. Feedback from the community has been very helpful in refining the content of CertLink® as well as improving individual questions. We expect to complete this analysis, provide results to individual diplomates, and issue guidance to diplomates regarding the ABNM’s long-term approach to MOC in early 2021.

The Board is considering changes to the therapy requirements for ABNM certification in recognition of the exciting growth and evolution of this aspect of nuclear medicine. These therapy requirements were last changed in 2014. We are in the process of contacting Nuclear Medicine Program Directors to get their input on the proposed new requirements to ensure that they are attainable for trainees while continuing to maintain high standards for certification. Although not finalized, we plan to provide greater flexibility in the number of radioiodine therapies required and increase the number of parenteral therapies required. We believe these changes will make the training requirements reflect the current practice of nuclear medicine and the expected increase in FDA-approved targeted radionuclide therapies in the future.

The Board is continuing to have an open nomination process for selection of new members. We concluded accepting nominations at the end of August 2020 for a single opening on the Board in 2021. The new Board member will be announced by October 1st of this year. We believe this process increases the transparency of selection of new Board members and helps the Board better reflect the diversity of our Diplomates. Because we receive many nominations from well-qualified individuals, we have many excellent candidates who are not selected. For this reason, we encourage past nominees who are not selected this year to participate in future calls for new ABNM members.

Although this year has not gone as expected, it has been an honor and privilege to serve as the Chair of the ABNM. Working with the Board members, the Executive Directors and the ABNM staff has been a pleasure. There are many exciting developments in Nuclear Medicine that bode well for the health of the field including the recent approval of [18F]FDOPA for movement disorders and [18F]fluoroestradiol (FES) for imaging estrogen receptors in breast cancer, late phase trials of prostate specific membrane antigen (PSMA) ligands for imaging and therapy of prostate cancer, and increasing numbers of trainees taking the ABNM Certifying Examination with approximately 68 candidates this fall, increased by about 20% compared to a few years ago. The ABNM remains committed to supporting our trainees and diplomates to provide high quality nuclear medicine studies and therapies to our patients.

Sincerely,

Jonathan E. McConathy, MD, PhD
Executive Director’s Message

The Changing Profile of ABNM Diplomates

George M. Segall, MD - Executive Director, American Board of Nuclear Medicine

The ABNM was incorporated on July 28, 1971 as a conjoint board sponsored by the American Board of Internal Medicine, the American Board of Pathology, the American Board of Radiology, and the Society of Nuclear Medicine. The ABNM became a primary certifying Board in 1985 with the support of the original sponsors.

From 1972-1976 physicians could be certified in Nuclear Medicine based on experience and/or training. 2801 physicians were certified in the first 5 years before the eligibility criteria were standardized in 1977. During this time, 57% of physicians were also certified by the American Board of Radiology (ABR), 13% by the American Board of Internal Medicine (ABIM), and 12% by the American Board of Pathology (ABP).

Figure 1 shows the certification trends of ABNM diplomates averaged over 3 years for each decade since 1980. The percentage of ABNM diplomates certified by the ABR has remained high and has been increasing, while the percentage of ABNM diplomates certified by other specialty boards has been decreasing.

Figure 2 shows the educational pathways leading to ABNM certification for applicants taking the certification examination from 2017 – 2019. The majority of applicants (54%) had a total of 12 months of Nuclear Medicine training in addition to the 4 months required by the ABR for certification in Diagnostic Radiology.

Twenty-seven percent had no other post-graduate training in the United States other than Nuclear Medicine. Only 6% percent of applicants were certified by another specialty board other than the ABR, in keeping with trends over the past decade.

The impact of theranostics and the increasing importance of targeted radionuclide therapies on the profiles of future ABNM physicians remain to be seen. The ABNM and the ABIM still approve an integrated training pathway leading to dual certification in Nuclear Medicine and Internal Medicine. The pathway has been inactive for many years, but may see a renaissance by physicians interested in Nuclear Medicine and Medical Oncology.

Advances in radiopharmaceutical science and imaging technology are driving the growth of Nuclear Medicine. The need for high certification standards is very important because of the many different educational pathways, and the ABNM is committed to maintaining the highest standards.
Throughout the COVID-19 epidemic, the American Board of Nuclear Medicine’s (ABNM) primary concern is for the health and well-being of our community. We realize that many of our diplomates and trainees have had to navigate and respond to the ever-changing Coronavirus Disease landscape making it more challenging to keep up with many demands. As a result, we made the following modifications to help residents and diplomates stay current with requirements during this difficult time.

Residents in Nuclear Medicine ACGME training programs:

ABNM recognized that the current policy on leave may not allow sufficient time for unplanned leave due to COVID-19, which may include 14 days of home quarantine. ABNM modified its leave policy to allow a one-time exemption for this year: “An additional 2 weeks of leave (10 working days) will be permitted in 2020 for all COVID-19 related reasons, including home quarantine.”

ABNM also recognized that cancellation/deferral of non-urgent medical procedures will reduce the number of diagnostic nuclear medicine studies performed in adults and children and will also likely reduce the number of oral radioiodine therapies for hyperthyroidism and thyroid cancer.

ABNM has made a one-time modification of the case experience requirements in 2020 for all COVID-19 related reasons. (www.abnm.org/COVID19-Residency_Ltr_20200325).

CertLink requirements:

ABNM extended the end of the first quarter of CertLink from March 31 to June 30, 2020 to give diplomates more time to answer the questions released in January 2020. CertLink participants will not receive additional questions during this time (even those who have already completed their assignment) and will not receive extra questions when new questions become available on July 1. The net effect will be a reduction in the total number of questions in 2020 by one quarter. This action will not have any impact on your CertLink performance, as shown on your dashboard.

Certification/Maintenance of Certification (MOC) examination:

The ABNM is moving forward with the October Certification and MOC Exam. Our testing center partner, Pearson VUE, is taking extra precautions to create the safest possible environment for candidates, including requiring face masks. We encourage eligible candidates to register early once they receive their letters of admission to register for their exam as soon as they are notified of their eligibility by ABNM. We expanded examination time availability to 2 weeks during 2020.

ABNM appreciates the extraordinary efforts made by our specialty and we recognize the associated enhanced health risks and potential for disruptions in both training and certification. We hope these modifications will help.

Leonie Gordon
Associate Executive Director
Maintaining updated profiles of our ABNM diplomates is key to being able to provide seamless communication and keep our diplomates up to date about the changes and improvements in our specialty and their certification status. At ABNM, we accomplish this by meticulously maintaining a comprehensive database for our diplomates. With this database we strive to keep updated profiles of all our diplomates consisting of their current contact information, diplomate status consisting of initial certification date and certification expiration date as well as maintenance of certification status. Using this database, we are able to provide to our diplomates information regarding their MOC status which includes their professional standing, NRC authorized user status, medical licensure status, current work experience, practice setting and percentage breakdown of their applicable subspecialty practice. Our diplomates can also update their lifelong learning and assessment with their CME activities in this portal. This section provides a convenient and efficient site to help our diplomates keep tabs on their yearly or 5-year goals of SAM credits and Nuclear Medicine specific CME activities.

I put our portal to test by timing myself while I updated my profile and information. After I signed into my ABNM account through the link: [http://www.abnm.org](http://www.abnm.org), the entire updating process took less than 5 minutes. This included an ABNM clinical practice survey I responded to titled: 2017: Lung Scintigraphy for Diagnosis of Pulmonary Embolism.

I invite and encourage all our diplomates to update their profiles on our site today. It is quick, painless and will enable our board to communicate key information and updates to all our valuable diplomates quickly and effectively, especially in the current rapidly changing environment. We always welcome ideas and suggestions from our diplomates to further enhance our communication.

Sincerely,

Esma A. Akin, M.D., F.A.C.R.
I have been at Washington University (WU) since I began there as an undergraduate in 1962. Although I did not become interested in nuclear medicine until I was in medical school, I had my first contact with nuclear science in the summer after my sophomore year, when I worked in the WU Radiochemistry Building, a truly historic facility that included a cyclotron installed in the 1940s for the production of short-lived radioisotopes for medical use (also was used to produce plutonium for the Manhattan Project). I worked that summer for Dr. Arthur Wahl, a professor of chemistry, a former graduate student of Glenn Seaborg at UC Berkeley and a co-discoverer of plutonium. My job that summer was unrelated chemistry laboratory work; only several years later did I realize its significance to my career choice.

During the preclinical years in medical school, I was tilting towards hematology, which I found so intriguing during our pathophysiology course. My decision to pursue a career in nuclear instead was entirely serendipitous. In 1967, at the end of my sophomore year, I needed to select a 6-week elective to finish off the year. Most of my classmates opted to work in a basic science laboratory, but I was very eager to do something with direct clinical relevance. I had heard about an elective in cardiac radiology and tried to sign up for it but found that two of my classmates already had taken the available slots. The head of cardiac radiology suggested that I speak with a new faculty member, Dr. E. James Potchen, who was chief of nuclear medicine and was very eager to work with medical students. Jim Potchen, who is probably one of the smartest people I have ever met, created an elective that included clinical exposure to nuclear medicine and a laboratory experiment that resulted in my first scientific publication. From that point on, I was hooked on pursuing an academic career in radiology and nuclear medicine.

With Potchen as my mentor, I spent as much time as possible in nuclear medicine for the rest of medical school and then, after my internship year, started my residency training in radiology and nuclear medicine. In my final year of residency, Jim Potchen went on sabbatical and I took on much of the responsibility for running the nuclear medicine clinic. As it turned out that was very good training, because Jim Potchen decided not to return to WU from sabbatical. I was offered, and after much soul searching, accepted the position as the new chief of nuclear medicine (to begin the day after my residence ended). Nearly 47 years later, it seems like this was a pretty good decision! My fascination with nuclear medicine is just as strong today as it was then, offering a practice covering a broad spectrum of disease, combining biochemistry and physiology with anatomy, and providing many of the best attributes of both radiology and internal medicine. Since the rise of PET and, now, theranostics, the future of this specialty looks even brighter.
The Nuclear Medicine community lost one of the pioneers in molecular imaging with the death of Sam Gambhir at the age of 57 due to cancer. Sam was dedicated to the development of precision health and early detection of cancer. He received the Dean’s Medal, one of Stanford’s highest honors, shortly before he died. Click on the link to see a very moving tribute video and hear Sam speaking about his vision of the future of health care.


Sam came to Stanford in 2003 as the Head of Nuclear Medicine, as well as Director of the Molecular Imaging Program at Stanford (MIPS), Director of the Precision Health and Integrated Diagnostics (PHIND) Center, Division Chief of the Canary Center for Cancer Early Detection, and Member of the Bio-X Program. He became the Virginia and D.K. Ludwig Professor for Clinical Investigation in Cancer Research in 2009. He became the Chair of Radiology in August 2011.

Those of us who worked with Sam knew how special he was. He was not only brilliant, he was also a visionary. I wasn’t sure what to think when I first heard Sam speak about continuous health monitoring technologies like smart toilets that could monitor changes in our chemistry. It sounded like science fiction, but Sam had a relentless dedication to thinking collaboratively and outside the box. He brought together researchers from different fields to work together to advance medical imaging. He talked about injecting “molecular spies” that could look for molecular errors and send signals that we could image with molecular tools. He was a pioneer in reporter PET imaging strategies. He was always thinking ahead, way ahead.

He was very supportive of everyone in the department, and empowered individuals. He had a genuine love and respect for colleagues. He went to great lengths to provide assistance in times of personal need, including being at your bedside if you were hospitalized. He was universally loved and admired for his hard work and dedication. Our feelings for Sam grew even stronger when Sam and Aruna’s only child, their son Milan, developed brain cancer when he was 14 years old. Milan died 21 months later on May 2, 2015. He was only 16 years old. Sam worked throughout this period of intense personal grief. Although he was open about his grief, we could only imagine what it was like for him and Aruna. To see him carry-on was both heartbreaking and inspiring. When Milan died there was a memorial service in Stanford’s Memorial Church. The 1200 seat sanctuary was nearly full. It was our turn to show Sam and Aruna our love and respect.

We were like his family. For his students he was a caring father figure who inspired them to be the best they could be. He likened students to candles, and taught us that it was our responsibility to light those candles. Sam’s last public gathering was the annual department holiday party on December 9, 2019. Although it was a festive occasion, we knew that Sam and Aruna had painful memories, and were facing an uncertain future. So when Sam told us that nothing is more important than our patients, and that we were here to relieve suffering and help people, we understood he was speaking from a deep and private place. He showed us that tragedy could only be endured with purpose. Those words echo even more loudly now.

Life moves on, and memories of Sam both sadden and console us. We try to live up to his ideals and honor his memory. The world has lost a great scientist and physician. We have also lost our friend and leader.

George Segall, MD

In Memoriam:
Sanjiv Sam Gambhir, MD, PhD, 1962 - 2020

1030 Highlands Plaza Drive, Suite 511E Saint Louis, Missouri 63110-1343  •  (314) 367-2225  •  abnm@abnm.org  •  www.abnm.org
## 2020 In-Training Examination (ITE) Statistics

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