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SNMMI: The Professional Organization for Nuclear Medicine & Molecular Imaging Physicians

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The ABNM welcomes comments from diplomates and residents regarding issues raised in this Tracers or any other issues affecting the practice of nuclear medicine in certification.
Please email your comments to George M. Segall, M.D., Executive Director. 
American Board of Nuclear Medicine: gsegall@abnm.org
The ABNM 2015 Winter Meeting in Phoenix, Arizona this February was a wonderful opportunity to discuss transformations and ways to better serve current and future diplomates, the public, and the specialty of nuclear medicine in general. Some of the resulting plans centered on improving our Maintenance of Certification (MOC) process and others looked at current residency training strategies.

It has never been more critical that we find ways to ensure public safety that practicing physicians can better incorporate into their busy lives. We, on the ABNM board, fully recognize it is our duty to continue developing more meaningful and efficient measures to assess physician competency. As our Executive Director, Dr. George Segall, discusses in this publication, many changes are now in motion to improve MOC, including an enhanced, more practical MOC re-certification exam.

Another important area examined at this meeting concerned optimizing residency training. The identity of nuclear medicine continues to rapidly evolve. With current studies such as PET/CT and SPECT/CT relying heavily on knowledge of anatomic imaging, it is already difficult for residents to find a balance between learning CT and the basics of nuclear medicine. New technologies are moving rapidly into the workplace including PET/MR, which involves a dizzying array of complex MR techniques, as well as dedicated breast imaging (MBI/BSGI) scintigraphy, which requires understanding mammography, ultrasound, and breast MRI. It is also clear that we cannot anticipate what other exciting new techniques will be introduced in the future. Therefore, incorporating diagnostic radiology into our training has become essential in order to do more than take call or compete in the job market; it provides a solid basis of knowledge across many platforms. In that light, new combined residency programs, with both 4- and 5-year paths leading to dual certification in Nuclear Medicine and Diagnostic Radiology (NM/DR), continue to open. The Board also thought about the future of our specialty as we continued evaluating ways in which we might work more closely with the ABR, re-imagine training programs of the future, and attract more trainees into the exciting field of molecular imaging. While these discussions are important, I am pleased to note, as the list of new diplomates posted here indicates, that our current programs remain strong.

The end of our meeting resulted in sad transitions as our colleagues, Dr. Kirk Frey and Dr. Chun Kim, rotated off the ABNM. Their expertise and dedication have been invaluable to us all. As I now also move on, from my position as ABNM Chair to my role as Past-Chair, I am pleased to hand the reigns over to our incredible new Chair, Dr. Louise Thomson. Dr. Munir Ghesani now moves into the role of Vice-Chair and Dr. Erin Grady becomes our Secretary-Treasurer. It has been an honor to serve as Chair, and I hope to continue work that helps promote our field and demonstrates what makes nuclear medicine so special and unique.
The ABNM fiscal year is January 1 through December 31. A full audit is conducted every two years by a certified public accounting firm, UHY. The firm audited the financial statements for the year ending December 31, 2012, and expressed an “unqualified opinion” (an independent auditor’s judgment that a company’s financial records and statements are fairly and appropriately presented, and in accordance with Generally Accepted Accounting Principles) in a report issued May 31, 2013. The same firm conducted a less extensive financial review of ABNM’s 2013 financial statements. The report issued on June 6, 2014 stated, “We are not aware of any material modifications that should be made to the accompanying 2013 financial statements in order for them to be in conformity with accounting principles generally accepted in the United States of America.” Another full audit will be conducted this year.

The United States Income Tax Return, Form 990, filed by all non-profit organizations, is publicly available. There are many websites that provide free access to the tax returns, including the returns filed by the ABNM. One such website is http://foundationcenter.org/findfunders/990finder/.

In 2014, total non-investment income was $876,835, and total expenses were $943,663. We had planned for a budget deficit -$91,092 largely due to one-time expenses related to redesign of the ABNM website. We finished the year $24,264 under budget with a deficit of only $-66,828. The 2015 budget is balanced, with operating income and expenses projected to be $854,307. A break down of the major income and expense categories for 2014 is shown in the pie charts.

The largest percentage of income is derived from Maintenance of Certification annual dues. Annual dues were $150 when they were instituted in 2007. They were increased to $175 in 2010. The dues were increased to $400 in 2012, partially to offset the fee paid by diplomates for the Maintenance of Certification. As a result, the exam fee, which was $2,050 in 2011, has been decreased by $205 per year. The 2015 exam fee is $1230. It will be phased out completely in 2021.

The largest expense is salary for six employees, including the Executive Director, Associate Executive Director, Administrator, Data Analyst, and two Secretaries. The percentage of expense for salary has decreased from 58% in 2011 to 46% in 2014.

The ABNM also has $1.56 million in an investment portfolio as of December 2014, which is managed by Wells Fargo Advisors. The portfolio value was $694,410 at the end of 2008, which was the year S&P 500 fell 38% in value. The portfolio value has recovered as a result of sound investment strategy. The ABNM business plan includes the expectation of 6% earnings per year on investments, allowing up to 3% of investment income (about $46,800 annually) to support operations. The investment portfolio is the ABNM’s reserve fund for unexpected financial difficulties, and major new initiatives.
Message from Communication Committee

ABNM Gets Social

If you don’t know already, the American Board of Nuclear Medicine has a presence on Facebook and also on Twitter. We’re hoping this can be a good way to get information to you about upcoming deadlines, news you can use, interesting articles about ABNM or other updates in our specialty.

To find us on Facebook, search “ABNM” and look for the official ABNM seal. If you want our posts to show up on your news feed, you need to “like” us and then when we post you’ll be able to see it. On Twitter, we go by the handle “@ABNM”. You can search that and then click on the button to “follow” us. In general, similar things are posted on both social media platforms, but as you probably know, Facebook gives us a chance to be a bit wordier.

We hope you find this useful!

Erin E. Grady, M.D.
Social Media–Communications Committee
The ABNM is introducing several MOC initiatives in an attempt to make the MOC process more valuable, (see articles https://abnm_wordpress_uploads.s3.amazonaws.com/wordpress/wp-content/uploads/2014-2_MOC_Committee_Msg.pdf and https://abnm_wordpress_uploads.s3.amazonaws.com/wordpress/wp-content/uploads/2014-1_Changes_Part2_MOC.pdf). One of those initiatives, the Enhanced MOC Exam (SNMMI Newsline J Nucl Med. 2015 Jun;56(6) has already made an appearance in the form of an exam study guide (https://abnm_wordpress_uploads.s3.amazonaws.com/wordpress/wp-content/uploads/ABNM_Study_Guide_Key_Articles.pdf). This list of open access key articles will be used by the Board as a source of questions for the MOC exam. For the 2015 MOC exam, there will be some questions that relate to the content covered in the articles. Eventually, about 30% of the questions on the MOC exam will be derived from these articles. But, even for the 2015 exam, these articles provide a source of information the Board feels is valuable. We welcome suggested additions to this list.

E-mail reminders are now being sent to diplomates at least once a year at the beginning of January. The annual reminder lists any gaps remaining from the previous year and shows the requirements for the upcoming year. For diplomates that are more than 1 year behind in requirements or who have an upcoming MOC exam, reminders are sent every two months listing the gaps that should be closed by the end of the year. To suppress the two monthly reminders, unclick the “frequent reminders” box on My Profile. We have had a few startup problems with the e-mails. Please let us know if your reminder seems incorrect, abnm@abnm.org.

The MOC Policy has been updated, https://www.abnm.org/index.php/moc-policy/. The changes in policy are relatively minor, making diplomate status consistent with the American Board of Medical Specialties (ABMS) terminology.
New Diplomates Who Passed the 2014 Certification Examination

Mona Ahmed, M.D.
Ahmad Aouthmany, M.D.
Swapnil Bagade, MBBS, DMRD
Ethan Bergvall, M.D.
Adam Bobbey, M.D.
Adam Brandeberry, M.D.
Mark Bryan, M.D.
Erica Cohen, DO, MPH
Irene Cruite, M.D.
Cory Daignault, M.D.
Diego Davila, M.D.
John Doan, M.D.
Liran Domachevsky, M.D.
Abtin Doroudinia, M.D.
Shana Elman, M.D., MA
Amir Entezari, M.D.
Reza Fardanesh, M.D.
Sarah Foster, MBBS
Anthony Fotenos, M.D., Ph.D.
Youhanna Gad, M.D., M.B.Ch.B.
Daniel Graf, M.D., MPH
Paul Grant, DO
Orlin Hadjie, M.D.
Caitlin Hardy, M.D.
Shandon Hatch, M.D.
Kari Hopfer, DO
Changping Jia, M.D., Ph.D.
Prashant Jolepalem, M.D.
Bhishak Kamat, M.D.
Asha Kandathil, M.D.
David Karimeddini, M.D.
John Kim, M.D.
Ilana Kogan, M.D.
Matthew Kruse, M.D.
Joanna Kusmirek, M.D.
Neha Kwatra, M.D.
Jay Lee, M.D.

Sonia Lee, M.D.
Joshua Leighton, M.D.
Minh Lu, M.D.
Rikesh Makanji, M.D.
Nouf Malibari, MBBS
Padma Priya Manapragada, MBBS, DGO
Theodore Marentis, MD
Ameneh Mashayekh, M.D.
Blaine Mischen, M.D.
Christopher Mudge, M.D.
Chiayi Ni, M.D.
Leonard Ong, M.D.
David Paik, M.D.
Ricardo Palmquist, M.D.
Mahadevan Rajaram, MBBS, FACC, FRCPC
Alireza Rezaee, M.D.
Christopher Riedl, M.D.
Hatice Savas, M.D.
Bital Savir-Baruch, M.D.
Wisam Shaba, M.D.
Sindu Sheth, M.D.
Tarun Singhal, M.D.
Shree Subedi, M.D.
Brian Thorpe, M.D.
Daniel Thut, DO
Lauren Toney, M.S., M.D.
Hebert Vargas Alvarez, M.D.
Benjamin Viglianti, M.D., Ph.D.
Daniel Wale, DO
Rick Wray, M.D.
Jason Wright, M.D.
Guofan Xu, M.D., Ph.D.
John Yang, M.D.
Rajkumar Yarlagadda, M.D.
Ella Yevdayev, M.D.
Brett Yockey, M.D.
Diplomates Who Passed the 2014 MOC Examination

Gunsel Acikgoz, M.D.
Fabio Almeida, M.D.
Adrian Alvarez De La Campa, M.D.
Navid Ardakani, M.D.
Anca M. Avram, M.D.
David A. Bader, M.D.
Twyla Brianne Bartel, DO, MBA, FACNM
Ernest Victor Belezzuoli, M.D.
Daniel Dancis Benjamin, M.D.
John D Berger, M.D.
Dale Brannon, M.D.
Rachel Helen Braunstein, M.D.
Allan Roy Britt, M.D., Ph.D.
Shelly Kristin Broline Sitton, M.D.
Jason Chung, M.D., MBA
Christopher James Conlin, M.D.
Jonathan M. Davison, M.D.
Bayram Firat Dayanikli, M.D.
Ronnie Dean Derrwaldt, DO
Samy Dhurairaaj, M.D.
Christine Zunich Dickinson, M.D.
You Guang Ding, M.D.
Eli Dweck, M.D.
Janet F. Eary, M.D.
Hossam El-Zeftawy, MB ChB
Michael Fagien, M.D.
Matthew Steven Falk, M.D.
Irfan Farukhi, M.D.
Ronald Evan Fisher, M.D., Ph.D.
Cameron Carl Foster, M.D.
Kent Friedman, M.D.
Elizabeth Denise Gallegos, M.D.
Nina M. Gazmen, M.D.
David W. Gentry, M.D.
Steven B Glassman, M.D.
Stanley J. Goldsmith, M.D.
Mark William Graves, M.D.
Seza Gulec, M.D.
Pawan K. Gupta, M.D.
Nathan C. Hall, M.D., Ph.D.
Eileen Marie Hart Roman, M.D.
Gary Herzog, M.D.
Thomas F. Heston, M.D.
Sidney R. Hinds II, M.D.
Chi-Lai Ho, M.D.
Jason Sandford Jacob, M.D.
Martin Jacobs, M.D.
Majid Zaydan Khalaf Janabi, M.D.
Richard N. Joyrich, M.D.
Nael Mohammed-Ali Khayyat, M.D.
Janusz K. Kikut, M.D.
Sun Yong Kim, M.D.
Gerald M. Kolodny, M.D.
Kush Kumar, M.D.
Chi-Wai Gerry Kwok, M.D.
John Michael Lahorra, M.D.
David G. Landsnes, M.D.
Duncan Lill, M.D.
Ruth Lim, M.D.
Roberta Camille Locko, M.D.
Dee Malkeneker, M.D.
Vivek Manchanda, M.D.
Cynthia L. Mayer, D.O.
Corina M. Millo, M.D.
John Walter Millstine, M.D.
Satoshi Minoshima, M.D., Ph.D.
Karen A. Mortzikos, M.D.
Brian P. Mullan, M.D.
Ashok Muthukrishnan, M.D., MS
Sleiman Youssef Naddaf, M.D.
Mark Alan Nathan, M.D.
Henry Huy Khanh Nguyen, M.D.
Smruti Parikh, M.D.
Stephen Patrick Penor, M.D.
Franco Giovanni Policaro, M.D.
Vicki Quan, DO
Robert Paul Quarles, M.D.
Vijendra J. Rao, MB BS, M.D.
J. Daniel Rasband, M.D.
Khurram Rashid, M.D.
Robert J. Rienzo, M.D.
Karen Cheryl Rosenspire, M.D., Ph.D.
Jonas Francisco Y. Santiago, M.D.
Bartolo Santiago-Delgado, M.D.
Ida Mary Santiago-Maldonado, M.D.
Tawfeeq Amjadali Sayyed, MBBS
Daniel Raymond Scanga, M.D.
John Peter Seibyl, M.D.
Amer Shammas, M.D.
Nataraj Shanmugam, BM, BS
Akash Sharma, M.D.
Henry H. Shih, M.D.
Gamal F. Sidarous, M.D.
Kevin Lwin Aung Soe, M.D.
Royce Keith Solano, M.D.
Kaveh Soleimanpour, M.D.
Gabriel Soudry, M.D.
Shayne Squires, M.D.
Charles G. Stepherson, DO
David Allan Swanson, M.D.
Amol M. Takalkar, M.D., MS
Susan Shiu Shan Tang, MB BCh
Kyle M. Tharp, M.D.
Bao Ngoc To, M.D.
Shlomo Topchik, M.D.
Frank Steven Torok, M.D.
Jonathan Earl Travis, M.D.
Gregory T. Turner, M.D.
Minal Shreyas Vasanawala, MBBS
Joseph Thomas Viggiano, M.D.
Scott Charles Williams, M.D.
Irini Momtaz Youssef, MB ChB
Kousha Zamegar, M.D.
ABNM Maintenance of Certification: Getting It Right

George Segall, MD, Executive Director, American Board of Nuclear Medicine

In February 2015, the American Board of Internal Medicine (ABIM) issued a public statement regarding its Maintenance of Certification (MOC) Program titled, “We Got It Wrong. We’re Sorry.” Although the ABIM was responding to criticism specific to its program, widespread concern has focused on the larger American Board of Medical Specialties (ABMS) MOC program, which was updated in 2015. These concerns include the burden in terms of time and cost to meet MOC requirements when these have not been accompanied with convincing proof of value. Specific criticism has been leveled at Part 3: Assessment of Knowledge, Judgment, and Skills, with the contention that closed-book tests are no longer relevant when physicians can easily access online resources while caring for patients. Part 4: Improvement in Medical Practice also has been criticized for being difficult to understand and track—as well as being redundant for physicians who participate in quality improvement activities with their medical groups and hospitals. Cynics believe that MOC is a money-making enterprise controlled by individuals not directly involved in patient care and who have lost contact with the realities of day-to-day clinical practice.

The American Board of Nuclear Medicine (ABNM) MOC program was launched in 2006. The board has been working to make the program more relevant, user friendly, and meaningful for all diplomates, including physicians with time-limited certificates issued since 1992 as well as physicians with lifetime certificates.

The ABNM has enhanced Part 2: Lifelong Learning and Self-Assessment, with a reference list of key articles to help busy physicians identify the most important and useful citations. To facilitate preparation and allay anxiety these key articles will also be the source for approximately 30% of the content of the Certification and Recertification (MOC) examinations. Some of the key articles include continuing education articles published in The Journal of Nuclear Medicine, which provides American Medical Association Category 1 Continuing Medical Education (CME) credit, as well as Self-Assessment Module (SAM) credit, free of charge for SNMMI members. The plan is for all of the key articles to have open access and eventually to offer free SAM credit. A list of the key articles is available at www.abnm.org.

The ABNM MOC exam is written by the board members, who are practicing physicians from a wide variety of practice settings. The MOC exam has about 140 multiple-choice questions and takes about 3.5 hours to complete. Questions are geared to practicing physicians and test clinical knowledge and interpretive skill. The first-time ABNM MOC pass rate is typically higher than 95% each year. The ABNM has begun discussing options to the traditional multiple-choice secure examination, recognizing that physicians’ clinical practice may have become specialized over the years and that practical knowledge is regularly accessed on the Internet on a day-to-day basis.

The ABNM has developed several optional practice improvement projects for Part 4: Improvement in Medical Practice. These projects are available without charge on the SNMMI website at www.snmmi.org. Physicians can also develop their own projects. The ABNM also gives credit for practice improvement projects that physicians complete to meet the requirements of other ABMS member boards. The ABNM recognizes, however, that keeping track of these projects may be difficult, so is developing a new option in the form of a survey tool. The new project will be a practice guideline-based survey that can be completed by individuals or groups of physicians, with the help of nuclear medicine technologists and administrative personnel. Survey results will be aggregated to produce a national practice profile, which will be sent to each participating physician to enable comparisons of local practice with national data. It is anticipated that when practitioners or practices recognize themselves as outliers in this benchmarked data, changes in practice will result. It is hoped that this survey-based project will be easy to complete and provide valuable results.

Finally, the ABNM believes that participation in MOC should be not only easy and valuable but also cost effective. For this reason, the ABNM began to phase out the MOC examination fee in 2012, recouping the cost in the annual fee paid by participating physicians, which has been $400 since 2012. The current MOC examination fee is $1,230, which will decrease by $205 each year until it disappears in 2021. The ABNM is trying to “get it right” by designing an MOC program that is easy, valuable, and cost effective. Stakeholder input is extremely important for continued development. Please share your thoughts by writing to me at abnm@abnm.org.
SNMMI-The Professional Organization for Nuclear Medicine & Molecular Imaging Physicians

*Drs. Munir Ghesani and Helen Nadel — Co-Chairs, SNMMI Membership Task Force*

For more than 60 years, The Society of Nuclear Medicine and Molecular Imaging (SNMMI) has been dedicated to advancing the science, technology and practical application of nuclear medicine, molecular imaging and radionuclide therapy. Its 18,000 members worldwide represent the best and the brightest, committed to leading the charge to improve human health and the advancement of the field.

As SNMMI continues to extend its reach as a world-class leader in advancing nuclear medicine and molecular imaging and explore opportunities to better serve its members, SNMMI has partnered with ABNM to develop a sustainable body of knowledge that is essential for all individuals who practice nuclear medicine and to expand the available resources to help complete and maintain the Maintenance of Certification (MOC). In the coming months, SNMMI members will have exclusive access to a state of the art MOC Part IV - Performance in Practice Evaluation, which includes a library of projects, templates and other resources. With MOC Part IV, evidence of evaluation of performance in practice, including the medical care provided for common/major health conditions, and physician behaviors, such as communication and professionalism, as they relate to patient care is examined.

SNMMI’s mission is to provide its members with the high quality resources, tools and support needed to be successful. Members receive exclusive benefits, many of which aren’t available anywhere else:

- SNMMI members and ABNM diplomates receive access to Study Guide Key Articles for certification and recertification exams.
- Free Journal SAMs, CE credits with SNMMI’s online journal exams and credit history tracking
- Free subscription to The Journal of Nuclear Medicine, which has the highest impact factor of any nuclear medicine journal worldwide
- Up to 40% off SNMMI meeting registrations where thousands of nuclear medicine professionals collaborate and network
- Representation in congress, as well as other federal agencies like CMS, DOE, FDA, NRC, etc., to ensure physicians get proper reimbursement and have access to new tracers and technology
- Annual access to more than $300,000 in awards, scholarships and grants
- Tools and resources to promote faster, more cost-effective drug development and increase the availability and performance of molecular imaging radiopharmaceuticals for use in the clinic through the Clinical Trials Network

SNMMI members continue to develop innovations in medical imaging to allow for noninvasive diagnosis, management and treatment of diseases, benefiting countless patients. To become a member of SNMMI’s prominent community of top professionals, please visit [www.snmmi.org/join](http://www.snmmi.org/join).
2014 Contribution List

The ABNM appreciates all the diplomates who support the ABNM by paying MOC fees and voluntary contributions every year. In addition, we would like to thank the following diplomates for their generous support of the ABNM through a financial donation in 2014.

**Platinum ( > $2,000)**
- Dr. Chi-lai Ho

**Gold ($1000-$1999)**
- Dr. Vaseem Chengazi
- Dr. Dominique Delbeke
- Dr. Kevin Donohoe
- Dr. Robert Matthews
- Dr. George Segall

**Silver ($500-$999)**
- Dr. Eva Dubovsky
- Dr. David Mankoff
- Dr. Kenneth McCoy
- Dr. Janis O’Malley
- Dr. J. Anthony Parker
- Dr. Jian Yu

**Bronze ($200-$499)**
- Dr. Alfonso Janoski
- Dr. Anton Johnson
- Dr. John Roberts
- Dr. Scott Sherman
- Dr. Yogeshkumar Patel
- Dr. Jorge Brito
- Dr. Rudsen Bueser
- Dr. Samuel Krinsky
- Dr. Bao To
- Dr. Harvey Ziessman

**Bronze ($200-$499) continued**
- Dr. Alfonso Janoski
- Dr. Anton Johnson
- Dr. John Roberts
- Dr. Scott Sherman
- Dr. Yogeshkumar Patel
- Dr. Jorge Brito
- Dr. Rudsen Bueser
- Dr. Samuel Krinsky
- Dr. Bao To
- Dr. Harvey Ziessman

**Technetium (Up to < $199)**
- Dr. Frank Altomare, Jr.
- Dr. Nelson Arnstein
- Dr. Rama Eachempati
- Dr. William J. Elton
- Dr. Feng Qing
- Dr. Salil Sarkar
- Dr. Harold Scheinman
- Dr. James Woolfenden
- Dr. Marcial Favila
- Dr. Kamal Greiss