Wahl Elected to National Academy of Medicine

The National Academy of Medicine (NAM) announced on October 19 the election of 70 new members and 10 international associates. Among the new members was Richard L. Wahl, MD, the Elizabeth E. Mallinckrodt Professor and head of radiology at Washington University School of Medicine (St. Louis, MO). NAM members are selected in recognition of their professional achievements and commitment to service. NAM has taken over many of the roles previously performed by the Institute of Medicine and joins the National Academy of Sciences and the National Academy of Engineering as advisers on matters of science, technology, and health. The role of the Institute of Medicine has been redefined to focus on consensus study and convening activities.

Wahl, who also serves as director of the Mallinckrodt Institute of Radiology and is an active SNMMI member, is a pioneer in radioimmunotherapy, PET imaging, and hybrid-modality PET technologies. He holds 18 patents and has published more than 400 peer-reviewed scientific articles. He is the primary author of several textbooks, including *Principles and Practice of PET and PET/CT*. He has received a U.S. Department of Energy Achievement Award; the Tetalman, Berson–Yalow, and 2 Alavi–Mandel awards from SNMMI; the Academy of Radiology Research Distinguished Investigator Award; and the Academy of Molecular Imaging's Distinguished Scientist Award. He joined the Washington University faculty in October 2014 after serving as the Henry N. Wagner, Jr., MD, professor, director of the Division of Nuclear Medicine, and vice chair of radiology at Johns Hopkins University (Baltimore, MD).

National Academy of Medicine

High-Risk, High-Reward Research Awards

The National Institutes of Health (NIH) announced on October 6 the award of 78 grants to scientists proposing highly innovative approaches to major contemporary challenges in biomedical research, as part of the High-Risk, High-Reward Research program supported by the NIH Common Fund. "This program has consistently produced research that revolutionized scientific fields by giving investigators the freedom to take risks and explore potentially groundbreaking concepts." said NIH Director Francis S. Collins, MD, PhD. "We look forward to the remarkable advances in biomedical research the 2015 awardees will make."

The NIH Common Fund encourages collaboration and supports a series of exceptionally high-impact, trans-NIH programs. Common Fund programs are designed to pursue major opportunities and gaps in biomedical research that no single NIH institute could tackle alone but that the agency as a whole can address to make the biggest impact possible on the progress of medical research. The High-Risk, High-Reward Research program manages the following 4 types of awards: (1) the Pioneer Award; (2) the New Innovator Award; (3) the Transformative Research Award; and (4) the early Independence Award.

For 2015, NIH presented 13 Pioneer, 41 New Innovator, 8 Transformative Research, and 16 Early Independence awards. Total funding, which represents contributions from the NIH Common Fund and multiple NIH institutes, centers, and offices, is ~$121 million.

Many of the awardees plan to use molecular imaging and analysis as elements of their research. Examples of interest to nuclear medicine include NIH Transformative Research Awards to both Simon R. Cherry, PhD, and Ramsey D. Badawi, PhD, at the University of California, Davis, whose project is titled "EXPLORER: Changing the molecular imaging paradigm with total body PET." The EXPLORER system is intended to be "the world's first total-body scanner that allows all the tissues and organs to be imaged simultaneously and will provide an effective sensitivity gain of at least a factor of 40 over current clinical PET/CT scanners." Another example is the Early Independence Award to Terence P. Gade, MD, PhD, from the University of Pennsylvania (Philadelphia), whose project is titled "Image-based phenotyping of hepatocellular carcinoma cell survival under ischemic stress: toward metabolic imaging of cancer dormancy using hyperpolarized ^{13}C technology." The objectives of this project include characterizing the nutrient microenvironment as well as epigenetic and proteomic alterations underlying metabolic stress response–induced metabolic adaptation in cells surviving ischemic stress, developing a dynamic hyperpolarized ^{13}C nuclear MR spectroscopy and spectroscopic imaging–based approach to enable noninvasive detection of cells surviving ischemic stress in vitro, and translating this approach to characterize cells surviving transarterial embolization in vivo.

More information on current awardees and the NIH Common Fund High-Risk High-Reward Research Program can be found at http://commonfund.nih.gov/highrisk.

National Institutes of Health

NIDA Reorganization

On October 1 the National Institutes of Health (NIH) announced that the National Institute on Drug Abuse (NIDA) has reorganized its divisional structure to integrate its research portfolio, promote translational research, and increase efficiencies. The reorganization comes after a period of speculation about the future of the institute and will incorporate research on clinical neuroscience, brain development, and behavioral treatment development

into existing and newly formed components of NIDA divisions. "We believe the reorganization will allow us to take advantage of new scientific opportunities, especially those addressing multidisciplinary and translational science," said NIDA Director Nora D. Volkow, MD.

In May of this year, the organizational structure was evaluated by a NIDA Advisory Council Workgroup considering the effects of overall reduced staffing and emerging scientific priorities. "The workgroup noted that advances in addiction neuroscience have outpaced or rivaled those achieved for any other brain disease," said John Rotrosen, MD, workgroup chair and professor of psychiatry at New York University School of Medicine (NY). "Given these developments, the workgroup encouraged NIDA leadership to embrace an organizational structure that would strengthen functional integration throughout NIDA and continue to emphasize translational neuroscience, brain development, and neurobehavioral interventions research as core elements of NIDA's mission."

In response to the workgroup's recommendations, which were reviewed by the NIDA Advisory Council and received the council's concurrence, portions of the Division of Clinical Neuroscience and Behavioral Research (DCNBR) will join the Division of Basic Neuroscience and Behavioral Research to form the Division of Neuroscience and Behavior. This division will develop a neuroscience research program spanning molecular biology, chemistry, pharmacology, genetics, and epigenetics, as well as integrative, functional, behavioral, and cognitive neuroscience.

DCNBR's behavioral treatment development portfolio will join the Division of Pharmacotherapies and Medical Consequences of Drug Abuse to form the Division of Therapeutics and Medical Consequences (DTMC). DTMC will address the full range of treatment development, including a focus on the ways in which behavioral interventions and combined treatments could target brain circuits responsible for addiction. DCNBR's remaining portfolio, focusing on treatment delivery and services research along with its portfolio on brain development and addiction etiology, will become part of the Division of Epidemiology, Services, and Prevention Research, which will allow it to integrate research at the intersection of biologic and social systems.

These changes will help to "infuse a focus on neurodevelopment throughout NIDA's programs," according to an NIH press release. The new organizational structure will also encourage scientific integration through transdivisional research teams addressing crosscutting themes and emerging priorities. This reorganization went into effect on October 1. The new organizational chart is available at: http://www.drugabuse.gov/about-nida/organization.

National Institutes of Health

NIH/Wellcome Trust/HHMI Open Science Prize

The National Institutes of Health (NIH) announced on October 20 a partnership with the Wellcome Trust (London, UK) and the Howard Hughes Medical Institute (Chevy Chase, MD) to launch a global science competition for new products or services to advance "open science," a movement to make scientific research data broadly accessible to the public. Up to 6 teams of technology experts and researchers will be awarded $80,000 each to develop original ideas into prototypes or to advance existing early-stage prototypes. The prototype judged to have the greatest potential to further open science will receive $230,000. The goal of the Open Science Prize is to support the development and prototyping of services, tools, and platforms to overcome challenges and ensure that the increasing amounts of biomedical and supporting data can be used to advance discovery and spur innovation.

"Research is a global, data-driven enterprise and our ability to improve health increasingly hinges on our ability to manage and make sense of the enormous amounts of data being produced by scientific research," said NIH Director Francis S. Collins, MD, PhD. "I expect the Open Science Prize to generate innovative ideas to improve data access and establish new international collaborations that will illustrate the transformative power of sharing research data."

The first phase of the competition is accepting applications through February 29. Six teams will be selected on the advice of a panel of experts to receive the prize money to advance their ideas to prototypes and will be required to submit their prototypes by December 1. The overall winner is expected to be announced on February 28, 2017.

More information about the Open Science Prize can be found at: http://opensciencepriz.org.

National Institutes of Health

2016 HOPPS and MPFS Final Rules

On Friday, October 30, the Centers for Medicare & Medicaid Services (CMS) released the Calendar Year (CY) 2016 Final Rules for the Hospital Outpatient Prospective Payment System (OPPS) and the Medicare Physician Fee Schedule (MPFS). The public comment period closed for both rules on December 29, and the rules became effective on January 1.

The OPPS rule updates Medicare payment policies and rates for hospital outpatient department and ambulatory surgical center services. The CY 2016 final rule contains a net decrease in OPPS payments of 0.4%. This decrease results from a 2.0% cut to the OPPS conversion factor intended to account for CMS's overestimation of the amount of packaged laboratory payments for laboratory tests that were previously paid under the Clinical Laboratory Fee Schedule. CMS deferred discussion of a 0.2% cut related to the 2-midnight policy. Beneficiary coinsurance for OPPS services is projected to decrease from 19.9% in CY 2015 to 19.3% in CY 2016.

Several important OPPS policy updates as outlined by SNMMI government relations staff include:

- Finalizing consolidation of Ambulatory Payment Classifications, compressing 23 Nuclear Medicine APCs to 5 APCs;
- Creating a new Level 4 to accommodate stakeholder requests to separate PET studies from other nuclear medicine studies;
- Creating 2 new pass-through radiopharmaceutical codes for amyloid agents; and
- Creating Quality Improvement Organization medical reviews for patient status claims.

The MPFS rule pays for covered physicians' services furnished to a person with Medicare Part B. This rule is the first fee schedule since Congress acted to protect physician payments from annual cuts. The rules are intended to "advance value-based purchasing and promote program integrity." SNMMI government relations staff outlined several important MPFS policy updates on the SNMMI website at http://www.snmmi.org/NewsPublications/NewsDetail.aspx?ItemNumber=14880. Among these were:

- Delay of the appropriate use criteria (AUC) for advanced diagnostic imaging services. Instead, CMS anticipates adopting policies regarding claims-based reporting requirements in the CY 2017 and CY 2018 rulemaking cycles. CMS does not intend to require that ordering professionals meet this requirement by January 1, 2017.
- In addition, CMS is modifying the proposed definition of provider-led entity (PLE) to focus on the practitioners and providers that comprise an organization. The definition includes national professional medical specialty societies whose members are actively engaged in delivering care in the community and eliminates the need to establish a separate definition for national professional medical specialty societies. This will also include alliances and collaboratives of hospitals and hospital systems. CMS stated that it does not believe the modified definition of PLE will limit the AUC market or the participation of third parties (e.g., radiology benefits managers) in the AUC development process.

The full CY 2016 OPPS Final Rule is available at http://federalregister.gov/a/2015-27943. The full CY 2016 Medicare Physician Fee Schedule Final Rule is available at: http://federalregister.gov/a/2015-28005.

SNMMI
Centers for Medicare & Medicaid Services

XR-29 Radiation Dose Penalties

On November 9 SNMMI released advice to nuclear medicine practices relative to a new CMS code modifier as part of coming enforcement of XR-29 radiation dose penalties. The Protecting Access to Medicare Act (PAMA) established radiation dose requirements that took effect on January 1. Medicare will reduce reimbursement to the technical component by 5% for CT scans acquired on technology that does not meet the new standards in 2016 and by 15% in 2017. CMS created the modifier "CT" to be reported with diagnostic CT CPT codes conducted on machines that do not meet National Electrical Manufacturers Association CT guidelines.

No current nuclear medicine CPT codes are affected by this provision. In nuclear medicine, this change will affect only providers using equipment that does not comply with the radiation dose requirements in PAMA and billed as diagnostic CT services for the following CPT codes: 70450 through 70498, 71250 through 71275, 72125 through 72133, 72191 through 72194, 73200 through 73206, 73700 through 73706, 74150 through 74178, 74261 through 74263, and 75571 through 75574 (and any succeeding codes)

SNMMI advised practices to check with manufacturers and obtain a letter to keep in the billing files for each CT piece of equipment in the practice, documenting whether the equipment meets or does not meet the standards. If all equipment meets the standards, no additional action is necessary. If 1 or more pieces of CT equipment do not meet the standard, practices should work with their billing staff to identify from the list of CPT codes above any studies performed on those pieces of equipment so that the CT modifier can be appended. This will result in a 5% reduction in payment rate for those services for CY 2016.

SNMMI

Manhattan Project National Historical Park

U.S. Secretary of the Interior Sally Jewell and U.S. Secretary of Energy Ernest Moniz signed a memorandum of agreement on November 10 establishing the Manhattan Project National Historical Park. The agreement directs the way in which the National Park Service (NPS) and the Department of Energy (DOE) will work together to preserve, protect, and provide access to the historic resources associated with Manhattan Project locations in Oak Ridge, TN, Los Alamos, NM, and Benton County, WA. The park will be managed as a partnership between the DOE, which owns and manages the properties, and the NPS, which will provide interpretation, visitor information, and assistance in the preservation of historic buildings at the sites. The 2015 National Defense Authorization Act established the Manhattan Project National Historical Park, which tells the story of people, events, science, and engineering that led to creation of the atomic bomb. The purpose of the agreement is to identify facilities and areas under the DOE's administrative jurisdiction that will initially be included in the park and to establish a broad framework for management and interpretation of those facilities and areas.

To learn more about the Manhattan Project National Historical Park, see http://www.energy.gov/management/office-management/operational-management/history/manhattan-project/manhattan-project-0.

U.S. Department of Energy