SNMMI 2020: Global Virtual Annual Meeting Announced

On April 30, Vasken Dilsizian, MD, president of SNMMI, released a statement on the launch of an extraordinary collaborative project to take the society's Annual Meeting online for 2020. The meeting, originally scheduled for June 13 to 16 in New Orleans, LA, will be held July 11–14 entirely online and available as both live events and recorded presentations. "We wanted to do the planning and lay the groundwork to ensure that we could offer online the same vibrant, diverse, and scientifically cutting-edge content to which we have become accustomed at SNMMI Annual Meetings," Dilsizian said at the time of the release. "Through the efforts of the entire SNMMI community—leadership, members, industry, presenters, and staff—we are confident that this will be both a success and a forward-looking bright spot as we emerge from challenging times."

The decision to create a global virtual meeting was made when it became apparent that New Orleans would not be ready in June to host a large meeting like SNMMI's. The New Orleans Ernest N. Morial Convention Center, where many of the meeting's exhibits and presentations were scheduled, is slated to remain as a temporary COVID-19 health care facility through the fall. Travel, both domestic and international, is likely to remain problematic in the near future.

The interactive platform for the virtual meeting will allow members of the nuclear medicine community to attend live continuing education sessions, review and listen to hundreds of scientific abstracts on demand, tour a technically dazzling virtual exhibit hall, and attend networking events—all in a flexible format designed to meet individual schedule needs. Meeting content will be free to all SNMMI members, with discounted registration available to nonmembers.

The SNMMI Annual Meeting is usually attended by more than 5,000 physicians, technologists, scientists, and exhibitors. "I am truly excited about this exceptional and innovative program, which will include nuclear medicine and molecular imaging experts from around the world," said Dilsizian. "We have the opportunity this year to reach out and connect with even more members of our community, wherever they are, to share perspectives, advance techniques, learn about new technologies, and explore scientific discoveries that will continue to sustain our growth as an essential specialty in modern medicine."

SNMMI has posted and will continuously update additional information about the 2020 Virtual Meeting at www.snmmi.org/am2020, including a section on frequently asked questions.

Early Guidelines in the COVID-19 Pandemic

The International Atomic Energy Agency (IAEA) announced on April 21 the development of guidelines to help nuclear medicine departments adapt operating procedures to minimize the risk of coronavirus disease 2019 (COVID-19) infections among patients, staff, and the public. The guidelines also addressed possible shortages of essential imaging radiopharmaceuticals resulting from global air traffic restrictions. These recommendations were first published on April 15 ahead of print in the *European Journal of Nuclear Medicine and Molecular Imaging* by Diana Paez, head of the IAEA Nuclear Medicine and Diagnostic Imaging Section, and a panel of experts representing nuclear medicine practitioners from 10 countries.

"Noncommunicable diseases continue to kill millions of people each year, and patients must have access to PET/CT scans and radiotherapy to battle cancer," said May Abdel-Wahab, director of the IAEA Human Health Division. "Nuclear medicine physicians and staff need guidance to carry out imaging studies while preventing the further spread of COVID-19 during procedures. They also need to be prepared for potential disruptions in the supply chain of essential radioactive tracers."

These early guidelines were produced in response to requests from nuclear medicine departments in several IAEA Member States and were based on a review of available literature as well as contributions from a panel of international experts and results from an April 16 IAEA-organized webinar on COVID-19 challenges for nuclear medicine departments. The IAEA is also organizing a broad range of other global webinars during the pandemic, with more than 4,000 attendees in the first weeks of April alone.

"During the COVID-19 pandemic, special emphasis must be placed on implementing all infection prevention and control measures so that the essential nuclear medicine services can be provided," said Paez. "The document is a targeted effort to support departments in achieving this objective during this most challenging time."

The IAEA guidelines are based in part on World Health Organization guidance for essential health services during an outbreak. Detailed in the document are recommendations on establishing simplified purpose-designed governance and coordinating mechanisms, identifying context-relevant essential services, optimizing service delivery settings and platforms,

establishing effective patient flow (screening, triage, and targeted referral) at all levels, rapidly redistributing health work force capacity, and identification of mechanisms to maintain availability of essential equipment and supplies. The section on patient flow includes recommendations based on a typical patient's journey through a nuclear medicine department. The document also details how nuclear medicine practitioners should proceed when, during a procedure, findings show patterns consistent with a possible COVID-19 infection.

"The guidelines offer a practical checklist, which is very welcome at this time where there is lot of uncertainty and a lack of consistent information throughout the medical field," said Stefano Fanti, director of the Nuclear Medicine Division at the St. Orsola–Malpighi University Hospital (Bologna, Italy) and an author of the guidelines. "They will help to ensure that we can continue to deliver these essential services while mitigating COVID-19 infection risk in patients and staff."

The report concluded: "The current COVID-19 pandemic poses many challenges for the practice of nuclear medicine. If adequately prepared, departments can continue to deliver their essential services, while mitigating the risk for patients and staff." The complete article is available through open access at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159284/. More on IAEA involvement from the Section on Nuclear Medicine and Diagnostic Imaging is available at https://www.iaea.org/topics/nuclear-medicine-and-diagnostic-imaging-section.

Guidelines for Treatment in the United States

A panel of U.S. physicians, statisticians, and other experts on April 21 released treatment guidelines for COVID-19. These recommendations, issued from the National Institutes of Health (NIH) and intended for health care providers, were based on published and preliminary data and the clinical expertise of a panel of experts drawn from health care and academic organizations, federal agencies, and professional societies with direct involvement in the rapidly evolving pandemic. In a statement accompanying the release, NIH and the authors noted that the guidelines should be considered a "living document" and are expected to be updated often as new clinical and research data accrue. The guidelines are available at covid19treatmentguidelines.nih.gov.

The guidelines consider 2 broad categories of therapies in use by health care providers for COVID-19: antivirals, which may target the coronavirus directly, and host modifiers and immune-based therapies, which may influence the immune response to the virus or target the virus itself. The panel's conclusions about treating COVID-19 with various agents in these 2 classes are described in summary recommendations. The document then provides background information about each agent, including clinical data about use, ongoing clinical trials, and known interactions with other drugs. These data support the guideline statements, which are tiered by both strength and quality of evidence for each recommendation. The guidelines also describe evaluation and stratification of patients based on their risk of infection and severity of illness, as well as best practices for managing patients at different stages of infection. Special considerations for pregnant women and for children who are infected are also included.

A comprehensive section addresses a range of considerations for clinicians caring for the most critically ill hospitalized patients, including multiple recommendations for critical care, infection control procedures, hemodynamic and ventilation support, and drug therapy.

Also included are recommendations on the use of concomitant medications, including statins, corticosteroids, nonsteroidal anti-inflammatory drugs, and others.

NIAID COVID-19 Research Priorities

The National Institute of Allergy and Infectious Diseases (NIAID) released on April 23 its plan for accelerating research associated with diagnosing, preventing, and treating COVID-19. The *NIAID Strategic Plan for COVID-19 Research,* available at: https://www.niaid.nih.gov/sites/default/files/NIAID-COVID-19-Strategic-Plan-2020.pdf, identifies 4 key priorities. In a press release, NIAID summarized these priorities.

The first targets improving fundamental knowledge about SARS-CoV-2 and COVID-19, including studies to characterize the virus and better understand the ways in which it causes infection and disease. This research will include natural history, as well as transmission and surveillance studies to determine why some individuals experience mild symptoms of infection and others become critically ill. The role of asymptomatic individuals in viral spread and the potential seasonality of viral circulation will also be explored. The report also calls for development of small and large animal models that can recapitulate COVID-19 disease seen in humans.

The second research priority is development of rapid, accurate diagnostics and assays to identify and isolate COVID-19 cases and track the spread of the virus. Researchers will work to improve the speed and accuracy of these diagnostic assays to mitigate the spread of the disease during the current outbreak and any future ones. In addition, new and improved serologic assays to detect antibodies to the virus will be explored to enhance surveillance efforts and identify individuals who may have resolved a previous COVID-19 infection.

The third research priority is characterizing and testing potential treatments for COVID-19. These efforts will include identifying and evaluating: drugs that might be repurposed to treat COVID-19 and novel broad-spectrum antivirals; virus-targeted antibody-based therapies; monoclonal antibodies; and host-directed strategies to target immune response to the virus. The report targets conducting multiple clinical trials in parallel among various patient populations, including hospitalized people and outpatients, to accelerate the successful delivery of an effective agent.

NIAID's fourth research priority is development of safe and effective vaccines to protect individuals from infection and prevent future SARS-CoV-2 outbreaks. The institute's researchers and collaborators are adapting vaccine candidates and approaches previously employed to address the related Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome coronaviruses and apply them to the current pandemic. NIAID will also leverage

(Continued on page 17N)

JNM Editors' Choice Awards for 2019

Johannes Czernin, MD, editor-in-chief of *The Journal of Nuclear Medicine* (*JNM*), and his associate editors and editorial board announced in April the articles chosen as the most outstanding contributions to the journal appearing in 2019. The *JNM* Editors' Choice Awards are scheduled for June presentation as part of the SNMMI Annual Meeting. Awarded articles are selected by the associate editors by anonymous vote. "Along with my colleagues on the editorial board, I am pleased to recognize these contributions as outstanding in a year of high-quality submissions to *JNM*," said Czernin. "The articles selected for these awards represent visionary activities in our field, from laboratory to clinical applications. They represent the future of nuclear theranostics and brain imaging biomarkers, respectively."

Clemens Kratochwil, MD

In the category of Best Clinical Article, the award goes to researchers from University Hospital Heidelberg (Germany) for "^{68}Ga-FAPI PET/CT: Tracer uptake in 28 different kinds of cancer" (*J Nucl Med.* 2019; 60:801–805). The authors include Clemens Kratochwil, Paul Flechsig, Thomas Lindner, Labidi Abderrahim, Annette Altmann, Walter Mier, Sebastian Adeberg, Hendrik Rathke, Manuel Röhrich, Hauke Winter, Peter K. Plinkert, Frederik Marme, Matthias Lang, Hans-Ulrich Kauczor, Dirk Jäger, Jürgen Debus, Uwe Haberkorn, and Frederik L. Giesel. This extraordinary contribution, with relevance across the spectrum of oncologic practice, was also named the best overall article in *JNM* for 2019. At the 2019 SNMMI Annual Meeting, an image from this article was named the SNMMI Image of the Year.

Carola Focke, MD

Investigators from University Hospital of Munich/LMU Munich (Germany) are the recipients of the award for Best Basic Science Article for "Early and longitudinal microglial activation but not amyloid accumulation predicts cognitive outcome in PS2APP mice" (*J Nucl Med.* 2019; 60:548–554). The authors include Carola Focke, Tanja Blume, Benedikt Zott, Yuan Kleinberger, Simon Lindner, Franz-Josef Gildehaus, Leonie Beyer, Barbara von Ungern-Sternberg, Peter Bartenstein, Laurence Ozmen, Karlheinz Baumann, Mario M. Dorostkar, Christian Haass, Helmuth Adelsberger, Jochen Herms, Axel Rominger, and Matthias Brendel.

"The associate editors and I are grateful for these outstanding contributions," said Czernin. "The research teams represented here include both young and more experienced nuclear medicine investigators as well as dedicated collaborators from other fields. These and similar efforts ensure that *JNM* remains the journal of choice for publishing clinical, basic, and translational research in nuclear medicine, including both molecular imaging and therapy."

(Continued on page 16N)

its extensive clinical trial infrastructure to support experimental vaccines through phase 1 safety and dosing testing while simultaneously planning for advanced clinical testing of the most promising candidates.

The research priorities document summarized these efforts: "NIAID is focusing its considerable expertise and emerging infectious disease resources to facilitate the development of medical countermeasures including diagnostics, therapeutics, and vaccines. The resulting discoveries will not only help mitigate the current pandemic, but also inform prevention, diagnosis, and treatment of future emerging infectious diseases."

International Atomic Energy Agency
National Institutes of Health
The National Institute of Allergy and Infectious Diseases

Newsline Is Looking for First-Hand Accounts

The COVID-19 pandemic is affecting the nuclear medicine community in multiple ways—some that we all share but also with many highly personal or practice-site–specific repercussions. The Newsline editor is seeking first-hand reports from nuclear medicine physicians, technologists, physicists, and others about their experiences in dealing with, working through, and meeting the challenges of this difficult time. A special Newsline issue will be dedicated to these reports and to overall effects on nuclear medicine practice and research. Contributions can be short anecdotes or longer reports and can be sent to Nancy Knight, PhD, the consulting Newsline editor, at nknight@umm.edu.

Also note: The SNMMI COVID-19 Resource Center continues to post information and resources relevant to nuclear medicine practice and research at http://www.snmmi.org/COVID-19. Resources are updated frequently.

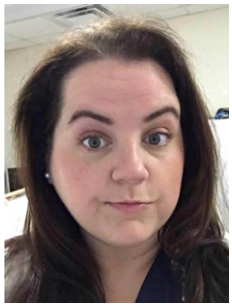
Outstanding *JNMT* Articles for 2019

Kathy S. Thomas, MHA, CNMT, PET, editor-in-chief of the *Journal of Nuclear Medicine Technology* (*JNMT*), and members of the journal's board of editors announced in April the winners of annual awards for outstanding articles. These awards are presented each year to the authors of articles that have contributed significantly to practice, education, and science in the field.

The first-place Editors' Choice Award for 2019 went to Jena-Lee McKee, Mary Beth Farrell, Kathy Hunt, Vivian Loveless, and Charity Brannen from West Tennessee Healthcare/Dyersburg Hospital (Dyersburg, TN) for "Efficiency of radiolabeling eggs before and after microwave cooking for gastric emptying scintigraphy studies" (*J Nucl Med Technol.* 2019;47:144–148). The second-place award went to Audrey B. Davis, Melanie H. Pietryka, and Susan Passalaqua from Banner MD Anderson Cancer Center (Gilbert, AZ) for "Technical aspects and administration methods of ^{177}Lu-DOTATATE for nuclear medicine technologists" (*J Nucl Med Technol.* 2019;47:288–291). Sarah Frye, Ross Frye, Barbara Sterkel, Razi Muzaffar, and Medhat M. Osman from Clinical Health Sciences/St. Louis University (MO) received the third-place award for "The need for increased awareness about potential quality control problems in aging γ-cameras" (*J Nucl Med Technol.* 2019;47:223–226).

Geoffrey M. Currie, from Charles Sturt University (Wagga Wagga, Australia) and Regis University (Boston, MA), was the recipient of the award for best continuing education article for "Pharmacology, Part 5: CT and MRI contrast media" (*J Nucl Med Technol*. 2019;47:189–202). The award for best educators' forum article went to Cybil J. Nielsen, Sarah S. Brosmer, Patrick J. Byrne, and S. Gregory Jennings from the Indiana University School of Medicine (Indianapolis) for "An evaluation of qualities of nuclear medicine technology programs and graduates leading to employability" (*J Nucl Med Technol.* 2019;47:29–34).

"These excellent articles show the wide range of issues confronting the increasingly diverse and complex practice of nuclear medicine, including both molecular imaging and therapeutics," said Thomas. "We congratulate this year's awardees and all those whose contributions continue to make *JNMT* a vital resource for our community."

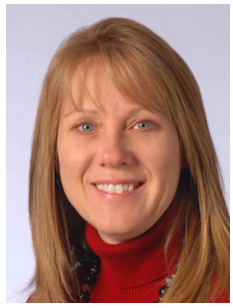


Jena-Lee McKee

Audrey B. Davis

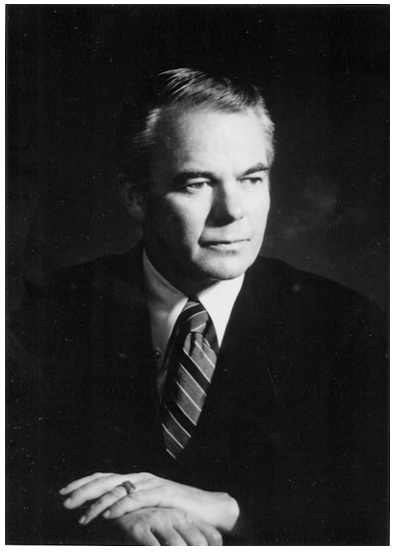
Sarah Frye

Geoffrey Currie



Cybil J. Nielsen

Wil Borchers Nelp, MD (1930–2020)



Wil Borchers Nelp, MD, died peacefully in his sleep on March 14 in Seattle, WA. He was 90 years old. His nuclear medicine generation included the founders of the clinical specialty. He and his colleagues, people like Henry Wagner, Jr., MD; David Kuhl, MD; Joseph Ross, MD; Joseph Kriss, MD; Alexander Gottschalk, MD; Rosalyn Yalow, PhD; Paul Harper, MD; Tyra Hutchens, MD; Hal Anger; and Powell (Jim) Richards, established nuclear medicine as an independent medical specialty in the United States. Nelp was a leader among leaders, especially in training residents and fellows. My colleague, David Mankoff, MD, a former nuclear medicine resident under Nelp and vice chair for research in the Department of Radiology at the University of Pennsylvania (Philadelphia), spoke for all of Nelp's trainees: "I am very proud to have trained in nuclear medicine under Wil. He leaves a huge legacy for the field and generations of trainees who carry his work and mentorship forward."

Nelp received his undergraduate degree from Franklin College of Medicine (IN) in 1951 and his MD from Johns Hopkins University in 1955. After training in internal medicine, he became Hopkins' first trainee in nuclear medicine, recruited by Wagner. In 1962 he was hired to establish the University of Washington (Seattle) Division of Nuclear Medicine, where he served as division director until 1995 and as a professor of medicine and radiology. He was president of SNM (SNMMI) in 1973 and a lifetime member of the American Board of Nuclear Medicine. In 2008, the University of Washington created the Wil B. Nelp, MD, Endowed Professorship in Nuclear Medicine.

When Nelp arrived at the University of Washington in 1962, it was an exciting time, with new nuclear medicine divisions popping up in medical schools across the country. Most of the leaders of these new academic units were in their 30s and 40s. There was an air of excitement and youthful vigor about the entire enterprise, with the Atomic Energy Commission (forerunner of both the Department of Energy and Nuclear Regulatory Commission) supporting the push to apply radioactivity to medical science and clinical care.

I remember my first meeting with Nelp, shortly after he established his clinical and educational programs in nuclear medicine at the University of Washington Hospital. With some difficulty, I found him in the hospital basement, where architects and planners must have put the nuclear medicine department because they believed a bunker would be the safest place to house radioactivity. I was really impressed with Wil from the first moment we met. He was a handsome man—dapper, one might say, in a "preppy" kind of way—as well as charming and friendly. I introduced myself as a first-year medical student and told him that I had spent my college years working as a radiochemistry technician in a lab that analyzed fallout samples from our atmospheric testing program in the Pacific. I was interested in using what I had learned there and applying it to help patients by using the radiotracer principle. I asked if that made sense. He was quite gracious and showed me around nuclear medicine, including the clinical area, where patients were undergoing testing for thyroid function, vitamin B12 absorption, iron kinetics, and even the presence of cancers through imaging. The images were created by rectilinear scanners that collected radioactivity in a planar image by passing over a patient's organs to produce a scintillation scan, displayed as a series of dots on heat-sensitive paper. That first day I saw a lateral image of a brain tumor, created by ^{203}Hg uptake. I was fascinated by the technology but also struck by Nelp himself: the perfect role model for the kind of physician I might like to be, comfortable with the basic sciences of physics and chemistry but with a primary interest in using these tools to care for patients.

From the day I met Nelp, I was hooked on nuclear medicine and thought of my training trajectory as bending toward nuclear medicine as my field and internal medicine as a primary specialty, because I wanted to use my medical skills in the care of patients. Subsequently, and especially during medical school, the University of Washington Nuclear Medicine Department, its clinics, and laboratories became my second home. In the summers or during breaks I spent a lot of time in the laboratory. Between my second and third years of medical school, I was a full-time researcher, selected for a U.S. Public Health Service fellowship in nuclear medicine. During this time and between classes in medical school I worked incessantly in the lab, where we developed 2 radiopharmaceutical formulations (one of which was the ^{99m}Tc S colloid kit, much as it is used today) and where I published my first 6 papers, all of which were coauthored by Nelp and other trainees.

I was productive, in part, because it was fun, but also because Nelp was a great teacher. During evening hours when I worked alone in the laboratory, he would often drop by to see how things were going and chat about the science and practice of nuclear medicine. I learned practical laboratory methods, including statistics, from him during those days, as well as what it was like to be a nuclear medicine physician—knowledge that has served me well during my long career.

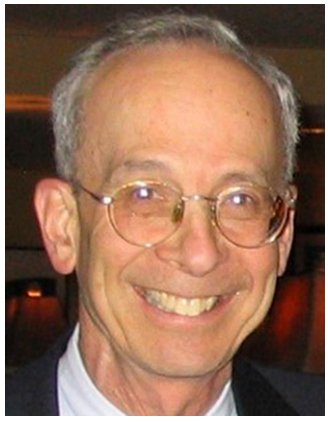
Nelp had exceptional clinical training in internal medicine from Johns Hopkins, and I admired him as a clinician: his approach to patients, his deep knowledge of medicine, and his respect for patients, staff, and trainees. I was also influenced by his professionalism and the respect he showed for his colleagues in the medical school and basic sciences programs. He was a powerful role model, and I count myself truly fortunate to have known and been taught by him.

Wil Nelp leaves an extraordinary legacy that continues through generations of nuclear medicine scientists and physicians. Speaking for myself, more than 100 fellows and trainees from several continents have graduated from programs that I have led—some of whom I continue to see and work with regularly and many more of whom I often think. I remember Nelp often, too, when I speak to trainees in nuclear medicine, when I revisit Seattle, and when I see the great and essential specialty that nuclear medicine is today. Stewardship of the field passed from founders like Nelp to me and my contemporaries. Nelp's influence and contributions will remain a part of this cycle of life as we pass the torch to our current and future trainees.

Steven M. Larson, MD
Memorial Sloan Kettering Cancer Center
New York, NY

IN MEMORIAM

David C. Moses, MD (1940–2020)



David C. Moses, MD, died quietly in his sleep on April 5, at the age of 79. He was my dear friend, colleague, coworker, and one of the most positive individuals I have had the pleasure of working with and knowing.

Dr. Moses graduated in 1962 with a BA in biology from the University of Chicago (IL) and received his MD in 1966 from Temple University School of Medicine (Philadelphia, PA). He was an intern at the Philadelphia General Hospital (1966–1967) and a resident in internal medicine at Temple University Hospital (1967–1968). From 1968 to 1970, he was a clinical associate, U.S. Public Health Services, at the National Institutes of Health in Gerontology Research Center in Baltimore (MD) and subsequently a fellow in nuclear medicine at the Johns Hopkins Medical Institute (Baltimore, MD; 1970–1972). He was board certified in nuclear medicine as well as quality assurance and utilization review. He held hospital privileges at several hospitals in Baltimore over his career, including Sinai Hospital, Franklin Square Hospital Center, Mercy Medical Center, Good Samaritan Hospital, and Northwest Hospital. Among his many positions, he was chief of the Department of Radiology (1987–1991), head of the Division of Nuclear Medicine (1974–1991), and physician advisor on Quality, Risk and Clinical Resource Management (1991–2004) at Sinai Hospital. Early in his career he served as clinical chief of the Nuclear Medicine Unit at the University of Michigan Medical Center (Ann Arbor; 1972–1974). His professional activities were extensive, including service as president of the Mid-Eastern Society of Nuclear Medicine (1982–1984) and of the Maryland Society of Nuclear Medicine (1986–1988).

Dr. Moses was also a certified public accountant, a certified financial planner, an avid reader, and a tennis and racquetball player—a man of many talents. His most endearing quality was his welcoming smile, which is so evident in his photograph. He always welcomed people as if seeing them was the best thing that happened to him that day; it certainly was one of the best things that happened to me on those days. He will be fondly remembered for his graciousness and always positive attitude.

He was a devoted and beloved husband, father, and grandfather, survived by his wife of 56 years, Yael Margalit Moses; children, Dr. Ron Moses and Dr. Eydie Kolko; and grandchildren Avi Moses, Elana Kolko, Dalia Kolko, Maya Friedberg, and Zev Friedberg.

We all will miss him.

Douglas Van Nostrand, MD, FACP, FACNM
Director, Nuclear Medicine Research
MedStar Health Research Institute
Washington, D.C.

A Year of Successes and Challenges

Vasken Dilsizian, MD, President, SNMMI

The past year has been an extraordinary journey for me as president of SNMMI—a year of rewards and hard work, excitement and challenge, successes for SNMMI and progress for the nuclear medicine profession, interrupted by the pain and disruption of the COVID-19 pandemic.

Nuclear medicine science and practice sustained upward trajectories with further progress for both diagnostic and therapeutic agents and the continued rise of nuclear theranostics. The FDA approval in 2019 of ^{68}Ga-DOTATATE and ^{177}Lu-DOTATATE was a tremendous development for neuroendocrine tumor patients, for the nuclear medicine community, and for our growing role in multidisciplinary oncologic practice. Peptide-receptor radionuclide therapy is quickly becoming more available in the United States and is continuing to grow in Europe and beyond. In the past year, research has shown positive results for nuclear theranostics in an expanding number of cancers, and the potential for new theranostics has increased. With each step, nuclear medicine improves precision patient care and becomes a more critical element of cancer therapy.

SNMMI has moved along the same upward trajectory. In the past year, the society has worked actively to support the field and the profession. Our 2019 Annual Meeting drew top experts at the forefront of nuclear medicine research. We documented and, in many cases, provided the first publication of critical advances through the pages of *The Journal of Nuclear Medicine*, which ranks among the top medical imaging journals worldwide. We have worked tirelessly with government regulators and legislators to facilitate approval of new tracers, fair and equitable reimbursement for procedures, creation of a reliable domestic isotope supply, appropriate recognition of the skills and training required for a range of roles within our specialty, and many more issues. These efforts are seeing direct results in better understanding and support of the nuclear medicine field.

These successes were not achieved in a vacuum. SNMMI is both a leader and an essential member of a worldwide collaboration of organizations synergistically advancing the use of nuclear medicine techniques in more effective diagnosis and treatment of an expanding range of diseases and health conditions. The society has also accelerated communication with referring physicians, patients, and the public. These efforts will continue to reap rewards in coming years.

In 2020 the COVID-19 pandemic changed the world as we once knew it, creating difficult and sometimes heartbreaking personal and professional challenges for us all—clinicians, researchers, and patients. Through all of this, SNMMI has stood by to support all members of the nuclear medicine community, ready to provide the resources and services needed and dedicated to maintaining the responsiveness and flexibility to do so in a rapidly changing environment. We transitioned all in-person events, including our 2020 Annual Meeting, to virtual venues and added a large number of new and useful webinars, creating a true on-demand virtual curriculum. The society has seen a burst of involvement in virtual and digital activities, with webinar attendance doubling and even tripling and digital participation at an all-time high.

Vasken Dilsizian, MD

We rapidly launched the SNMMI COVID-19 Resource Center to communicate with our members and others on the best ways to provide high-quality and compassionate care for our patients while instituting measures to keep our colleagues and staff safe while doing so. We formed task forces for the society and the Technologist Section to answer questions from the community and provide webinars and useful articles. We initiated a special forum on SNMMI Connect for COVID-related discussion and sponsored additional targeted forums specific to issues of interest to scientists and pharmacists. We cooperated with the International Atomic Energy Agency and with the American Society of Nuclear Cardiology on guidelines and webinars.

Next month, SNMMI will hold its first-ever virtual Annual Meeting from July 11 to 14. This promises to be an innovative and enriching experience for us all. Moving from our planned in-person meeting in New Orleans to our first virtual Annual Meeting was a significant challenge, but we are excited to be able to offer cutting-edge, peer-reviewed scientific and educational content on a high-quality interactive platform. This will be presented in an easily accessible format that can be adapted to virtual attendees' schedules. This immersive and innovative experience will be free for SNMMI members.

For SNMMI, our members will always come first. Our goal is to support you, anticipate and respond to your needs, and act quickly, even when events take us all by surprise. We will come through these difficult times. Through the collaborative efforts of health professionals and researchers, nuclear medicine will forge ahead into a new, bright future.

I want to express my heartfelt appreciation to SNMMI's loyal and dedicated members, Board of Directors, and staff, who continue to work so effectively together to navigate around obstacles and keep us sailing smoothly on our true course.

High Amyloid Levels and Early-Stage AD

The National Institute on Aging (NIA) released a press statement on April 6 about the first published data from the Anti-Amyloid Treatment in Asymptomatic Alzheimer's Disease (AD) study, supporting the hypothesis that higher levels of amyloid protein in the brain represent an early stage of AD. The results were published as "Association of factors with elevated amyloid burden in clinically normal older individuals in the A4 study screening cohort" on the same day in *JAMA Neurology* by Sperling et al. from Brigham and Women's Hospital/Massachusetts General Hospital/Harvard Medical School (Boston, MA), the University of Southern California (San Diego), Eli Lilly & Co. (Indianapolis, IN), and Siemers Integration LLC (Zionsville, IN). Amyloid burden in clinically normal older adults in the study was associated with a family history of disease, lower cognitive test scores, and reports of declines in daily cognitive function.

With completion expected in late 2022, the A4 study is an ongoing prevention trial launched in 2014 to test whether the drug solanezumab, a monoclonal antibody, can slow cognitive decline associated with elevated brain amyloid if started before clinical symptoms appear. "A major issue for amyloid-targeting AD clinical trials, and one that is being addressed with the A4 study, is that previous trials may have been intervening too late in the disease process to be effective," said NIA Director, Richard J. Hodes, MD. "A4 is pioneering in the field because it targets amyloid accumulation in older adults at risk for developing dementia before the onset of symptoms."

After a complex and large-scale prescreening process, the A4 researchers included 4,486 cognitively normal participants (65–85 y) who underwent ^{18}F-florbetapir amyloid-β PET imaging. This yielded a group of 1,323 individuals with elevated amyloid levels who were eligible to continue in the A4 study. Those individuals with amyloid-β positivity were slightly older than those who were amyloid-β negative, but no differences were seen in sex, education, marital or retirement status, or self-reported lifestyle factors. Amyloid-β–positive individuals were more likely to have family histories of dementia and at least 1 apolipoprotein ε4 allele. Amyloid-β–positive individuals also had worse performance on cognitive screening assessments. The authors concluded that these results "demonstrate the feasibility of enrolling these high-risk participants in secondary prevention trials aimed at slowing cognitive decline during the preclinical stages of AD."

JAMA Neurology
National Institute on Aging

NLM Expands COVID-19 Literature Access

The National Library of Medicine (NLM), part of the National Institutes of Health, announced on March 25 that it would be expanding access to scientific papers on coronavirus for researchers, care providers, and the public, as well as for text-mining research. The effort makes use of NLM's PubMed Central (PMC), a digital archive of peer-reviewed biomedical and life sciences literature. PMC currently provides access to almost 6 million full-text journal articles. NLM stated in a press release that it had stepped up its collaboration with publishers and scholarly societies to increase the number of coronavirus-related journal articles freely available in PMC, along with available supporting data. Submitted publications will be made available in PMC as quickly as possible after publication, in formats and with needed permissions that support text mining.

To advance this initiative, NLM reported that standard procedures for depositing articles into PMC were being adapted to provide greater flexibility and ensure that coronavirus research remains readily available. NLM will also engage with journals and publishers that do not currently participate in PMC but are in-scope for the NLM Collection. Additional information, including a list of participating publishers and journals, is available at: https://www.ncbi.nlm.nih.gov/pmc/about/covid-19.

By making this collection of articles more readily available in machine-readable formats, NLM hopes to enable artificial intelligence researchers to develop and apply novel approaches to text mining to answer questions about coronavirus. NLM has already made more than 10,000 full-text scholarly articles from PMC related to the coronavirus available through the COVID-19 Open Research Dataset (CORD-19), representing the most extensive machine-readable coronavirus literature collection available for text mining.

National Library of Medicine

IAEA Focus on ^{68}Ga

The International Atomic Energy Agency (IAEA) announced on April 8 the launch of a new Coordinated Research Project (CRP) advancing its commitment to international efforts in the production and application of theranostic radiopharmaceuticals. The new CRP will focus on direct cyclotron production of [^{68}Ga]$GaCl_3$ and related radiopharmaceuticals. According to a press release at the launch, the CRP is intended to aid and share international experience on production and quality control of ^{68}Ga using the ^{68}Zn(p,n)^{68}Ga route. It will also focus on radiopharmaceutical production, quality control, quality assurance, supply challenges, and regulatory aspects for ^{68}Ga use in clinical applications.

The most common method for obtaining ^{68}Ga is with a ^{68}Ge/^{68}Ga generator. The eluted ^{68}Ga, in the form of [^{68}Ga]$GaCl_3$, can be used for labeling and has led to significant advances in targeted PET radiopharmaceuticals. A previous IAEA CRP on generator-based ^{68}Ga radiopharmaceuticals was completed in 2017.

The current CRP focuses on building knowledge sharing among research-oriented facilities using cyclotron-based approaches to expand ^{68}Ga availability for preclinical and human use. Specific goals include: transfer of technology and expertise for optimal cyclotron production of ^{68}Ga using solid and/or liquid targets; transfer of expertise and methods for the separation and purification of cyclotron-produced [^{68}Ga]$GaCl_3$; provision of guidance for quality control and quality assurance of cyclotron-produced [^{68}Ga]$GaCl_3$; provision of radiosynthetic procedures for preparation of widely used ^{68}Ga radiopharmaceuticals (i.e., somatostatin-receptor and prostate-specific membrane antigen ligands) using cyclotron-produced [^{68}Ga]$GaCl_3$, including quality control tests; development of guidance for regulatory approval for human use of radiopharmaceuticals using cyclotron-produced [^{68}Ga]$GaCl_3$ for investigational and routine clinical applications; and adaptation of methods developed for production of [^{68}Ga]$GaCl_3$ using liquid and solid targets to other radionuclides accessible through this technology.

Facilities can join the CRP if they meet minimal criteria necessitated by the short half-life of ^{68}Ga: they must have an existing operational cyclotron with a proton beam energy >12 MeV; a solid target station or a dedicated liquid target system (not in use for routine production of ^{18}F); and a dedicated synthesis module for radiometals.

Proposals to join the CRP are due no later than July 31. More information is available at https://www.iaea.org/projects/crp/f22073.

International Atomic Energy Agency

Imaging Volumes Down During Pandemic

Volumes for imaging procedures after nationwide lockdowns remained markedly low in late April but, according to one source, appeared to be stabilizing across the United States. Quinsite, LLC (Chapel Hill, NC), a health care analytics and consulting firm, releases daily updated reports on the effect of the COVID-19 pandemic on radiology practices. As of April 27, the website indicated that the estimated lost revenue in radiology practices was $37,000 per full-time employee since a designated pandemic effect start date of March 16. The work Relative Value Unit impact was –45.1%. The greatest effects were seen in the western states, where imaging volumes were off 46.8%, with comparable figures of 42.6% in the east and 45.5% in the middle states. The data are also broken down by weekly changes, with the drop in average daily volumes in the April 27 report at 48.2%, not quite as precipitous as that in previous weeks. Mammography has experienced the greatest drop in average daily volume, 78.8% since March.

Quinsite LLC

FROM THE LITERATURE

Each month the editor of Newsline selects articles on diagnostic, therapeutic, research, and practice issues from a range of international publications. Most selections come from outside the standard canon of nuclear medicine and radiology journals. These briefs are offered as a monthly window on the broad arena of medical and scientific endeavor in which nuclear medicine now plays an essential role. The lines between diagnosis and therapy are sometimes blurred, as radiolabels are increasingly used as adjuncts to therapy and/or as active agents in therapeutic regimens, and these shifting lines are reflected in the briefs presented here.

^{18}F-FDG Uptake and Atrial Arrhythmia in Cardiac Sarcoidosis

In an article e-published on April 19 ahead of print in the *International Journal of Cardiology*, Yodogawa et al. from the Nippon Medical School (Tokyo, Japan) and the Chiba Hokusou Hospital (Japan) reported on an investigation of the presence of atrial ^{18}F-FDG uptake on PET/CT in patients with cardiac sarcoidosis and the relationship with atrial arrhythmia. The retrospective study included 62 patients with cardiac sarcoidosis who underwent PET/CT imaging and echocardiography, as well as serum studies. Twenty-five patients (40.3%) had atrial arrhythmia (2 with atrial tachycardia and 23 with atrial fibrillation). Eighteen of the 25 patients with atrial arrythmia were found to have atrial uptake on PET/CT (72.0%), and 14 of the 37 (37.8%) without atrial arrythmia had atrial uptake. A significant association was found between atrial arrhythmia and age, atrial ^{18}F-FDG uptake, and left atrial diameter. Sex, serum tests, and left ventricular ejection fraction were not found to have significant associations with atrial arrhythmia.

International Journal of Cardiology

PET/CT and CE-CT Discrepancy in Inflammatory Breast Cancer

Jacene et al. from the Dana-Farber Cancer Institute/Brigham and Women's Hospital (Boston, MA) reported on April 21 ahead of print in *Breast Cancer Research and Treatment* on a study comparing contrast-enhanced CT (CE-CT) with ^{18}F-FDG PET/CT in initial staging of inflammatory breast cancer, looking at resulting discrepancies in imaging results and potential effects on patient management. The study included 81 women with inflammatory breast cancer who underwent both PET/CT and CE-CT before treatment. Images were independently interpreted for locoregional and distant metastases, with findings classified by anatomic site as negative, equivocal, or positive for breast cancer involvement. Paired imaging findings were then reviewed as concordant or discordant. Discordant findings were characterized as related

to the presence or absence of distant metastases, affecting the locoregional radiation therapy plan, or the result of incidental findings not related to inflammatory breast cancer. A total of 47 discordant findings between the 2 modalities were identified in 41 patients (50.6%). Thirty of these (63.8%) were related to the presence or absence of distant metastases, most often with disease detection by PET/CT. In 12 patients, PET/CT identified disease not seen on CE-CT. PET/CT suggested changes to management plans created by CT alone in 15 patients and correctly characterized 5 of 7 findings that were equivocal on CE-CT. The authors concluded that "Preliminary data suggest that FDG PET/CT may be the imaging modality of choice for initial staging of inflammatory breast cancer," adding that prospective trials testing initial staging with ^{18}F-FDG PET/CT including important clinical endpoints are warranted.

Breast Cancer Research and Treatment

^{18}F-Fluciclovine PET/CT and PSA Thresholds in BRPC

In a study e-published on April 18 ahead of print in *Urologic Oncology*, Armstrong et al. from the University of Utah Health Sciences/Huntsman Cancer Institute (Salt Lake City) reported on a study assessing various prostate-specific antigen (PSA) thresholds at which ^{18}F-fluciclovine PET imaging may be optimal in biochemically recurrent prostate cancer after definitive treatment. The retrospective study included the records of 115 men who underwent an ^{18}F-fluciclovine PET scan after definitive therapy, with a focus on the rate of positive imaging findings at specific PSA thresholds. No concerning lesions were identified on PET in 25 (21.7%) men, 32 (27.8%) had a single lesion, 45 (39.1%) had 2–5 lesions, and 13 (11.3%) had >5 suspicious lesions. At PSA thresholds of 0.5, 0.5–2.0, and >2 ng/mL, lesions were detected in 55.5%, 70.6%, and 91.5% of patients, respectively. Additional analyses indicated a PSA threshold of 2.10 ng/mL and a PSA cutoff of 1.38 ng/mL. The authors noted that because the probability of having positive imaging findings and increasing numbers of suspicious lesions rises with increasing PSA, a lower PSA threshold of 0.5 ng/mL for ^{18}F-fluciclovine PET imaging could allow earlier intervention with salvage therapies in biochemical recurrence. They cautioned that using a threshold <1 ng/mL carries a higher risk for multiple negative scans. They concluded that "employing a higher PSA threshold of 1 to 2 carries greater sensitivity and specificity and may maximize identifying individuals with early biologically recurrent prostate cancer who may benefit from early intervention, while minimizing negative scans."

Urologic Oncology

^{18}F-FDG PET/CT and COVID-19 Visualization

Lütje et al. from University Hospital Bonn (Germany) reported on April 7 ahead of print in *Nuklearmedizin* on nuclear imaging in the early days of the coronavirus SARS-CoV-2 outbreak. The article provided a summary and discussion of the use of PET/CT in COVID-19 in the earliest weeks of its global spread and reviewed suggestions for possible applications of nuclear medicine techniques, including visualization of immune response to viral challenge in nonhuman primates, visualization of very early lymph node involvement, monitoring of treatment response and prediction of recovery time, and evaluation of ^{18}F-FDG uptake in areas outside the lung. Most of these potential applications remain speculative and are based on experience and research with previous viral outbreaks. The authors emphasized the importance of a multidisciplinary approach in COVID-19 management and the potential of nuclear medicine in collaborative management of the disease.

Nuklearmedizin

MRI and ^{18}F-Flortaucipir in AD Phenotypes

In an article e-published on April 15 ahead of print in *Annals of Clinical and Translational Neurology*, Josephs et al. from the Mayo Clinic (Rochester, MN, and Jacksonville, FL) reported on a study designed to assess relationships between MRI volumetry and ^{18}F-flortaucipir PET findings in typical and atypical clinical phenotypes of Alzheimer disease (AD) by age and decade. The study included 564 participants (β-amyloid–positive typical AD, 86; β-amyloid–positive atypical AD, 80; and β-amyloid–negative normal controls, 398) who underwent apolipoprotein-E genotyping and imaging with MR, ^{18}F-flortaucipir, and ^{11}C-Pittsburgh compound B. MR gray matter volumes and ^{18}F-flortaucipir SUV ratios were assessed for the hippocampus, entorhinal cortex, and neocortex, as well as ratios of hippocampal-to-neocortical and entorhinal-to-neocortical volume and flortaucipir uptake. Additional analyses looked at these variables and phenotypes within 3 age groups (50–59, 60–69, and 70+ y). For the youngest group, greater medial temporal atrophy and PET tracer uptake were observed in the typical than in the atypical phenotype. The typical phenotype also showed greater frontal neocortex uptake. In the remaining groups, hippocampal volume loss was greater in the typical than the atypical phenotype, but only the 60–69-y-old group and not the 70+-y-old group showed a difference in hippocampal ^{18}F-flortaucipir uptake. Over all, a pattern of higher neocortical ^{18}F-flortaucipir uptake correlated with younger age decade for both phenotypes. The authors concluded that the relationships between MRI volumetry and ^{18}F-flortaucipir uptake on PET differ across AD clinical phenotypes and within phenotype by age groups, suggesting that "there is potential risk of masked effects by not accounting for genarian in participants with β-amyloid and τ-positive biomarker defined AD."

Annals of Clinical and Translational Neurology

PET/CT and Bone Marrow Involvement in Follicular Lymphoma

St-Pierre et al. from the Mayo Clinic (Rochester, MN) reported on April 22 ahead of print in *The Oncologist* on a study of the value of ^{18}F-FDG PET/CT

in determining bone involvement in staging follicular lymphoma, using standard bone marrow biopsy as the comparative gold standard. The study included a total of 548 patients with newly diagnosed grade 1–3A follicular lymphoma who underwent ^{18}F-FDG PET imaging. Imaging data considered included the presence, pattern, and location of bone involvement; spleen involvement; and SUVs in the L3 vertebral body. These data were compared with bone marrow biopsy reports. When patients with focal bone lesions on PET/CT were excluded from the analysis, the sensitivity and specificity of PET/CT in detecting bone or marrow involvement, compared with biopsy, were 53% and 88%, respectively. The sensitivity and specificity of spleen involvement on PET/CT in predicting a positive bone marrow biopsy were 55% and 86%, respectively. An L3 SUV_{max} of <2.0 was associated with a negative predictive value of 96% for bone marrow involvement, and an L3 SUV_{mean} <1.4 was associated with a negative predictive value of 100%. The authors concluded that in newly diagnosed follicular lymphoma, PET/CT-detected bone and splenic involvement is highly specific for positive bone marrow involvement. Very low SUVs in the lumbar spine have a high negative predictive value, so that confirmative bone marrow biopsy might be avoided in this subset of patients. They added that bone marrow biopsy remains necessary to definitively exclude bone marrow involvement in a large majority of follicular lymphoma patients with a negative PET.

The Oncologist

^{177}Lu-PSMA Scintigraphy in Elevated PSA and Negative Imaging

In an article e-published on April 13 ahead of print in *Urology Journal*, Ghodsirad et al. from Shohadaye Tairish Hospital/Shahed Beheshti University of Medical Sciences (Tehran, Iran) reported on a study evaluating the sensitivity of ^{177}Lu–prostate-specific membrane antigen (^{177}Lu-PSMA) scintigraphy for detection of metastatic sites in patients with biochemically relapsed prostate cancer but negative imaging results on MR, MR spectroscopy, CT, or bone scintigraphy. The study included 26 men (mean age, 70 y; range, 46–89 y) with biochemical recurrence after surgery or radiation treatment who underwent conventional imaging with negative results. Each participant underwent ^{177}Lu-PSMA-617 diagnostic planar whole-body imaging and SPECT at 3, 24, and 72 h after tracer injection. Results were compared against an additional CT. ^{177}Lu-PSMA-617 imaging detected lesions in the lung (6), abdominal lymph nodes (2), and mediastinum (2) in a total of 10 (38.5%) patients. The authors concluded that the fact that a ^{177}Lu-PSMA SPECT scan can detect metastatic lesions in more than a third of patients with biochemical recurrence and negative conventional imaging is especially relevant for those locations and circumstances in which ^{68}Ga-PSMA for PET is either unavailable or not feasible.

Urology Journal

Long-Term Effects of ^{131}I in Toxic Multinodular Goiter

Roque et al. from the Egaz Moniz Hospital/Occidental Hospital Centre (Lisbon, Portugal) and the University of Siena (Italy) reported on April 22 ahead of print in the *Journal of Clinical Endocrinology and Metabolism* on a study describing the long-term effects of 15 mCi radioiodine in patients treated for toxic multinodular goiter. The study included 153 such patients who were followed annually for up to 12 y for thyroid function, antithyroid antibodies, and ultrasound. Mean thyroid volume reductions were $\geq$50% 3 y after therapy, with the largest reductions seen in the first year (30% $\pm$ 17.8%). Most patients (60%) saw their lowest volumes 3–6 y after treatment. Twenty-two percent of patients experienced regained volumes, but overall the net reduction was statistically significant as late as 9 y after therapy. The mean time to hypothyroidism was 2.7 $\pm$ 2.4 y. Patients who were hyperthyroid saw annual volume decreases of 50% for the first 3 y without additional ^{131}I treatment. At the end of the 12-y follow-up, 61.6% of patients were euthyroid, 11% were hyperthyroid (4.8% overt), and 27.4% were hypothyroid (2.7% overt). Hyperthyroidism was cured in 89% of patients. The authors summarized their findings that "the treatment of toxic multinodular goiter with 15 mCi of radioactive iodine induced low hypothyroidism rates while providing high cure rates and significant volume reduction, maintained in the long-term."

Journal of Clinical Endocrinology and Metabolism

Parotid Gland PET and Late Radiation-Induced Xerostomia Prediction

In an article published on April 6 in *Radiotherapy and Oncology* (2020;148:30–37), Wilkie et al. from the University of Michigan (Ann Arbor) and the Ann Arbor Veterans Administration reported on a study assessing associations between parotid gland PET biomarkers and late radiation-induced xerostomia and evaluating the incremental value of pretreatment PET for predictive xerostomia models. The study included imaging data from 47 patients with human papilloma virus–associated oropharyngeal squamous cell carcinoma before and after uniform chemotherapy/radiation therapy. The authors looked at associations among the 90th percentile of SUVs on PET before/after treatment, mean parotid gland doses, late xerostomia defined by the Xerostomia Questionnaire, and salivary flow rates. Significant associations were identified between late xerostomia and both mean parotid gland dose and SUVs before and after treatment, with posttreatment PET agreement being generally stronger. The addition of the SUV 90th percentile from pretreatment PET improved the prediction model for late moderate or severe xerostomia. The authors concluded that "the addition of pretreatment parotid gland PET biomarkers improved a predictive model for late patient-reported xerostomia" more than

parotid gland doses or pretreatment xerostomia assessment.

Radiotherapy and Oncology

Nonparathyroid Findings on SPECT/CT Parathyroid Localization

Mallick et al. from the University of Pittsburgh Medical Center (PA) reported on April 11 ahead of print in the *Journal of Surgical Research* (2020;252:216–221) on a study of the frequency and types of unexpected and significant findings in ^{99m}Tc-sestamibi SPECT/CT imaging for primary hyperparathyroidism. The study, a retrospective review of all SPECT/CT imaging performed for primary hyperparathyroidism at a single institution over a 6-y period, included 2,413 imaging records. Of these, 652 patients (27%) were found to have 677 (28%) nonparathyroid findings, including thyroid nodules (331, 49%), of which 47 (6.9%) were malignancies: 40 papillary thyroid cancers (11 microcarcinomas), 5 follicular thyroid cancers, 1 medullary carcinoma, and 1 noninvasive follicular thyroid neoplasm with papillary-like features. Pulmonary nodules were identified in 177 patients (26%), among whom 9 were diagnosed with primary lung lesions (6 non–small cell cancers, 1 small cell cancer, 1 carcinoid, and 1 pulmonary sequestration). SPECT/CT also identified 14 patients (2.1%) with breast abnormalities, including 3 cancers. Nine patients (1.3%) had imaging findings of metastatic disease within the lungs (4), bones (3), and mediastinum (2), and 1 patient was diagnosed with follicular lymphoma. Two intracranial tumors were also identified, in addition to dysplastic Barrett esophagitis (1), hiatal hernia (20), and aortic aneurysm (13). In total, 72 (10.6%) of the 677 patients with nonparathyroid findings had premalignant or malignant results on SPECT/CT. The authors summarized their data by writing that in patients undergoing localization for primary hyperparathyroidism with ^{99m}Tc-sestamibi SPECT/CT "nonparathyroid findings are frequent (27%) and can lead to newly diagnosed malignant or premalignant lesions in at least 3% of patients."

Journal of Surgical Research

SNMMI Expands Free Virtual Curriculum

SNMMI announced on April 10 the availability of free and flexible access to its extensive virtual curriculum, which has been expanded since the onset of the COVID-19 pandemic. The content is available free to SNMMI members.

A new SNMMI webinar series, "Artificial Intelligence Methods and Applications in Medical Imaging and Nuclear Medicine," debuted on April 7 with the highest registration ever for an SNMMI webinar. The 6-part series, organized by the Physics Instrumentation and Data Sciences Council, continued through May 12 and reviewed the ways in which artificial intelligence methods are applied in imaging, including current challenges, limitations, and future promise. This series is a part of the new free curriculum, and each webinar offers 1 hour of continuing education (CE) credit for physicians, pharmacists, and technologists.

A new "Quality in Nuclear Medicine" online program is designed to assist learners in understanding the skills vital to practice quality, including evaluating images, managing triage, understanding disease processes, and achieving high-quality interpretable studies. This 12-module program offers 10.25 CE credits for technologists, pharmacists, physicians, and physicists.

On April 29 the SNMMI COVID-19 Task Force organized a webinar on "Imaging of a COVID-19–Positive Patient: What to Expect." The SNMMI-TS quarterly webinars continued on April 22 with "Considerations for Implementing a Successful Cardiac PET Program." The Clinical Trials Network webinar on May 7 was titled "There's a New PET Drug in Town: Manufacturing and Approval Considerations for Your Institution." The SNMMI PET Center of Excellence organized and presented "^{68}Ga-DOTATATE PET/CT: How to Read These Studies and Pitfalls: Case-Based Approach" on April 10. SNMMI has also joined with the American College of Nuclear Medicine to offer webinars on gastric emptying, cardiac CT, ^{177}Lu-DOTATATE prostate-specific membrane antigen therapy, and writing a quality report.

Additional webinar series are planned for:

- PET imaging (gallium imaging, PET imaging of cardiac sarcoid, ^{18}F-fluciclovine PET/CT, pediatric PET, PET/MR imaging of prostate cancer, grant writing, and others); and
- Correlative imaging (vasculitis/arteritis/atherosclerosis, device inflammation/infection, breast imaging, cardiac sarcoid/amyloid, and myocarditis/pericarditis/endocarditis).

Registration is available for future live webinars, with many more available on demand at: www.snmmi.org/webinars.