

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.”

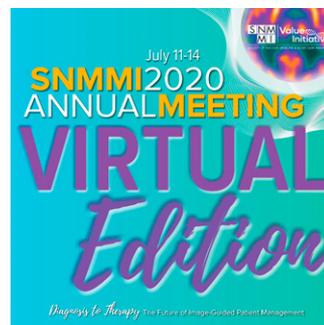
The decision to create a global virtual meeting was made when it became apparent that New Orleans would not be ready in June to host a large meeting like SNMMI's. The New Orleans Ernest N. Morial Convention Center, where many of the meeting's exhibits and presentations were scheduled, is slated to remain 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, non-steroidal 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

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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 "⁶⁸Ga-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 Aderberg, 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.

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.



Carola Focke, MD

"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."

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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 med-

ical 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.