#### **NMAA Program**

The Nuclear Medicine Advanced Associate (NMAA) program is now fully underway and offered through a consortium of 3 universities: the University of Missouri School of Health Professions (UMSHP: Columbia), the University of Arkansas for Medical Sciences (Little Rock), and Saint Louis University (MO). The 3 institutions, each of which currently offers a bachelor's degree in nuclear medicine technology, cooperatively participate in curriculum development, course instruction, and supervision and assessment of NMAA interns. The distancelearning program provides professionals already working in the field with an opportunity for advancement. Upon completion of the program, students will earn a master's degree in imaging sciences and can take national credentialing examinations for NMAAs.

"As a patient I would want the best qualified individuals taking care of me," Glen Heggie, RTNM, EdD, chair of the Department of Cardiopulmonary and Diagnostic Sciences and director of the nuclear medicine program at UMSHP told a Kansas City educational reporter. "As a technologist, I'd want as many opportunities to hone and improve my own skills. Recognizing that nuclear medicine has broadened, it follows that an advanced form of certification or degree should be available to recognize practitioners with additional and advanced abilities and skills. The program gives people a place to be recognized for what they are doing and lets the patients know that there are people in the field that have these additional skill sets."

The program began this year, and 5 semesters are required for completion. Students with bachelor's degrees in nuclear medicine are accepted on a rolling basis and may begin the program in the fall, spring, or summer semester. Coursework includes both online instruction and clinical instruction at facilities affiliated with the program and associated with the degree. After finishing the program, students take the certification exam recognized by SNM. The consortium will

graduate its first group of NMAA students in 2011.

"The program is based on evolving information," Heggie said. "Therefore, it is important that all of the universities involved in the program share their knowledge, expertise, and specialist faculty. It is the only way we can build a current, comprehensive, and resilient program that we can all benefit from. This certification isn't to replace physicians; however, many technologists are capable of doing more than we've allowed them to or acknowledged that they are competent to do."

Kansas City Education infoZine

# i6 Challenge Seeks Innovation

The U.S. Department of Commerce Office of Innovation and Entrepreneurship and Economic Development Administration (EDA) announced on May 3 a new \$12 million innovation competition, in partnership with the National Institutes of Health (NIH) and the National Science Foundation (NSF). EDA will award up to \$1 million to each of 6 teams around the country with the most innovative ideas to drive technology commercialization and entrepreneurship. NIH and NSF will award a total of up to \$6 million in additional funding to NIH or NSF Small Business Innovation Research (SBIR) grantees associated with winning teams. Entrepreneurs, investors, universities, foundations, and nonprofits are encouraged to participate in the i6 Challenge. The deadline for applications is July 15.

"The i6 Challenge will help new biomedical technologies succeed and foster their entry into the marketplace," NIH Director Francis S. Collins, MD, PhD, said. "NIH supports small business through both its SBIR and Small Business Technology Transfer programs. We welcome the opportunity to increase and accelerate technology commercialization across the United States through this partnership with the Department of Commerce." More information is available at: www.eda.gov/i6.

U.S. Department of Commerce

### Kuhl Awarded ARRS Gold Medal

On May 2 in San Diego, CA, David E. Kuhl, MD, professor of radiology at the University of Michigan Medical School (Ann Arbor) was the recipient of the American Roentgen Ray Society (ARRS) Gold Medal for Distinguished Service to Radiology. Kuhl, who has been called the father of emission tomography, was a primary contributor to the development of tomographic imaging in nuclear medicine. In the late 1950s, he developed a novel method of tomographic imaging of the distribution of radioactive isotopes in the body. In the mid-1960s, he succeeded in axial transverse tomographic imaging of humans. The technology was a significant impetus in the development and evolution of various methods of CT, including

Kuhl received his medical degree from the University of Pennsylvania (Philadelphia). After completing a rotating internship at the Hospital of the University of Pennsylvania, he served 2 y at the U.S. Naval Hospital in Portsmouth, VA. He completed his residency and fellowship in radiology at the University of Pennsylvania and served on the faculty there until 1976, when he moved to the University of California—Los Angeles. Since 1986, his academic home has been the University of Michigan, where his research focus has been in brain neurochemistry and degenerative disease.

In 2009, Kuhl received the Japan Prize from the Science and Technology Foundation of Japan. He was awarded for his work in the field of technological integration of medical science and engineering and his contribution to tomographic imaging in nuclear medicine.

American Roentgen Ray Society

### FDA/NIH Safety Reporting Portal

The Food and Drug Administration (FDA) and the National Institutes of Health announced on May 24 the launch

of a new Web site designed to provide a mechanism for reporting of pre- and postmarket safety data to the federal government. The Web site currently can be used to report safety problems related to foods, as well as adverse events occurring on human gene transfer trials. Consumers can also use the site to report a limited subset of pet-related problems. The new site, called the Safety Reporting Portal (SRP) includes different features for different types of reporting, including a reportable food registry, a registry for problems with pet food and pet treats, and a site at which animal drug manufacturers can report adverse drug events. The site is also piloting the reporting of adverse events in clinical trials, using as a first case human gene transfer studies. Biomedical researchers involved in these trials can report an adverse event, indicating whether it might be an unanticipated consequence of the product being tested. Trial sponsors can use the portal to prepare a report, print it, and send it to the agency to satisfy reporting requirements for investigational new drugs.

In the future, the system will include other types of clinical trials and, eventually, safety problems arising from products regulated by a broad array of federal agencies. The 2 sponsoring agencies noted that this "is a first step toward a common electronic reporting system that will offer 1-stop shopping, allowing an individual to file a single report to multiple agencies that may have an interest in the event." In the meantime, the new portal redirects individuals who want to submit reports about other products regulated by FDA, the U.S. Department of Agriculture, Environmental Protection Agency, or the Consumer Product Safety Commission to the appropriate contact.

U.S. Food and Drug Administration

#### **New ACMUI Member**

The Nuclear Regulatory Commission (NRC) announced in May the selection of John H. Suh, MD, as a radiation oncologist representative on the Advisory Committee on the Medical Uses of Isotopes (ACMUI). The ACMUI was established in 1958 and advises the NRC on policy and technical issues related to the

regulation of the medical use of radioactive material.

Dr. Suh received his bachelor's and medical degrees from the University of Miami Miller School of Medicine (FL). He completed his internship. residency, and fellowship at the Cleveland Clinic (OH), where he joined the staff and specialized in neurooncology and stereotactic radiosurgery. He became the residency director in the Department of Radiation Oncology. During his tenure with the Cleveland Clinic, Dr. Suh served as clinical director for the Department of Radiation Oncology, director of the Cleveland Clinic Gamma Knife Center, chair of the Department of Radiation Oncology at the Taussig Cancer Institute, and associate director of the Gamma Knife Center at the Brain Tumor and Neurooncology Center.

He is board certified in radiation oncology and currently serves as the section head for the central nervous system/pediatric section for the American Board of Radiology's oral examination. His awards have included the National Brain Tumor Foundation Clinical Research Award, Teacher of the Year Award, and selection as one of America's Top Physicians for Cancer. He has authored more than 120 publications and served as the institutional principal investigator for the Radiation Therapy Oncology Group at the Cleveland Clinic since 1995.

Nuclear Regulatory Commission

## Global Variation in Child CT Dose Levels

The International Atomic Energy Agency (IAEA) released on April 23 the results of an international study indicating that in some countries children are overexposed to radiation when undergoing CT scans, with many children receiving adult-appropriate radiation doses. The IAEA study, which was carried out at 128 health care facilities in 28 developing countries in Africa, Asia, and Eastern Europe, also found wide variations in radiation levels and in the frequency of CT scans performed on children younger than 15 y.

IAEA Radiation Safety Specialist, Madan Rehani, PhD, who coordinated the study, reported that 11 CT centers in 6 countries were using adult exposure parameters for pediatric patients. The study also found great variation in the levels of radiation used from region to region. According to Rehani, an additional problem in developing countries is that the available CT machines are older models without automatic exposure controls found in modern equipment. "We also found in this study that sometimes the radiation output from CT machines was fine, but the patients were getting too much radiation because the operators scan larger parts of the patient's body than necessary," said Rehani. "So the operator's skill is as important as the machine's adjustment, so training and awareness raising are essential."

In addition, the study showed that pediatric CT scanning is more common in Africa than in Asia and Eastern Europe. This frequency, Rehani said, could be related to the limited availability of alternative medical imaging techniques, such as MR and ultrasound, in Africa or because some CT scans are performed unnecessarily.

The study also provided positive results. The 11 centers that were using adult CT exposure levels on children all responded to the IAEA findings and are now addressing these issues. "This is an ongoing process of increasing awareness about correct exposure factors," said Rehani.

Recently the IAEA joined forces with Image Gently, the U.S.-based campaign launched in 2008 by the Alliance for Radiation Safety in Pediatric Imaging. The chair of the Alliance, Marilyn J. Goske, MD, said that much has been accomplished in the short time that the 2 organizations have been cooperating. "It's clear that the mission of our 2 groups is strongly aligned. We're both dedicated to radiation protection for patients and, in particular, children, and we believe that informing parents about their child's imaging studies and possible concerns regarding radiation is very important."

International Atomic Energy Agency