



Fowler Named Distinguished Basic Scientist of Year

Joanna S. Fowler, PhD, a senior chemist at the U.S. Department of Energy (DOE) Brookhaven National Laboratory (BNL) was named the 2005 recipient of the Distinguished Basic Scientist of the Year Award from the Academy of Molecular Imaging on March 22 at the group's annual meeting in Orlando, FL. Fowler, Director of the BNL Center for Translational Neuroimaging, was honored for her many career achievements, including early work on ^{18}F -FDG and other radiotracers that have become mainstays of medical diagnosis and research. "It has been a privilege for me to be associated with an outstanding group of collaborators throughout my career and to have the longstanding support of the DOE, which has nurtured the development of new imaging technologies that have had a major impact on human health," Fowler said. "I am especially dedicated to using imaging to understand addictive disorders, which place an enormous burden on families and on the health care system." Fowler received her doctorate in chemistry from the University of Colorado and did postdoctoral work at the University of East Anglia and at BNL. In addition to her BNL appointment, she is an adjunct professor in the chemistry and biomedical engineering departments at Stony Brook University. Fowler, an SNM member, was elected to the National Academy of Sciences in 2003. Her numerous honors include the American Chemical Society Glenn T. Seaborg Award for Nuclear and Radiochemistry (2002), the Society of Nuclear Imaging in Drug Development Alfred P. Wolf Award (2000), the DOE E.O. Lawrence Award

(1999), and the Francis P. Garvan-John M. Olin Medal in 1998.

Academy of Molecular Imaging

NRC Amends Specialty Medical Board Certification Criteria

On March 25, the Nuclear Regulatory Commission (NRC) announced amendments to the criteria used to recognize certifications conferred by professional specialty boards on applicants for various medical radiation safety positions. This is a final rule implementation of several changes to 10 CFR Part 35, "Medical Use of Byproduct Material," based upon recommendations by the NRC's Advisory Committee on the Medical Uses of Isotopes and NRC Agreement States. According to an NRC press release, the changes are designed to make the process of recognizing boards by the NRC or Agreement States more efficient. "These changes to the certification criteria will continue to ensure the safe use of radioactive material by medical licensees while improving the process of recognizing board certifications," said Jack Strosnider, director of the NRC Office of Nuclear Materials Safety and Safeguards.

The final rule provides specialty boards more latitude in making the determination that an individual is fully trained and capable of performing duties related to radiation safety. The revised requirements include a degree from an accredited college or university, professional experience, passing an examination conducted by the specialty board, and specialized training. The specific degree level and amount of training and experience required vary depending on the position. The NRC will publish the procedures for recognizing specialty boards, as well as the list of those whose certifications meet the criteria, on its Web site instead of in its reg-

ulations, a move designed to make changing the list or adding or removing boards easier.

Nuclear Regulatory Commission

Continued Efforts to Counter DOE Cuts

Mathew L. Thakur, PhD, Bennett S. Greenspan, MD, Michael J. Welch, PhD, and representatives from the SNM Public Affairs Department attended the Department of Energy (DOE) Office of Science Nuclear Science Advisory Committee meeting in Rockville, MD, on March 11 to continue to publicize the negative effects of proposed budget cuts to nuclear medicine programs. Earlier in the month, the SNM brought together via conference call the awardees of DOE Medical Applications program funding to discuss action items to help in the fight against the proposed cuts. Several awardees expressed their appreciation to SNM for empowering them with the information necessary to make constructive and effective arguments against cuts in funding. A few groups of awardees have formed coalitions to lobby at the district office level. The Public Affairs department and representatives from the SNM/American College of Nuclear Physicians also attended the meeting of the DOE Office of Science Biomedical and Environmental Research Advisory Committee on April 20 and 21 to continue these efforts.

Society of Nuclear Medicine

CARE Bill Advocacy

Representative Charles Pickering, Jr., (R-MS) reintroduced the Consumer Assurance of Radiologic Excellence (CARE) bill, HR 1426, in the U.S. House of Representatives on March 17. The CARE bill currently has 20 original cosponsors and will be referred to the Committee on En-

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ergy and Commerce. SNM/SNMTS will issue an "Action Alert" after the spring recess, when the Senate RadCARE bill is expected to be introduced by Senator Michael B. Enzi (R-WY). SNMTS leaders attended the "RT in DC" meeting of the American Society of Radiologic Technologists, April 10–12, where attendees focused on advocacy for technologist licensure and the CARE/RadCARE bill.

*Society of Nuclear Medicine
Technologist Section*

CDC Announces Agency-Wide Research Agenda

The Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substance and Disease Registry announced on March 3 the development of the first agency-wide research agenda in the history of the organizations. The new agenda will set the overall course for research conducted within the agency and for research conducted by external grantees and partners. "The primary objective of CDC's research agenda will be to address the agency's health protection goals and priorities," said Dr. Robert Spengler, Director of the CDC Office of Public Health Research. "We envision a CDC-wide research agenda that can coordinate, support, and promote the collective research that the agency conducts or supports."

The research agenda will identify areas that CDC should address or coordinate with other partners in protecting the nation's health, provide incentives for expanded research funding, fill critical knowledge gaps that help achieve health protection goals, and provide evidence to improve existing or establish new public health interventions. CDC is currently spending approximately \$31 million for the protection research initiative. Last year \$21.7 million was allocated through 57 grants to promote and support research initiatives. Four Research Agenda Development Public Participation Meetings

were held in March to solicit public input into areas of research. The first draft of the agenda will be developed by CDC staff, researchers, organizational partners, and the public and is expected to be available for public comment in June and completed in August. More information may be found at www.cdc.gov/od/ophr/.

*The Centers for Disease Control
and Prevention*

House Testimony on Quality of Imaging

James Borgstede, Chair of the American College of Radiology (ACR) Board of Chancellors, told the House Ways and Means Subcommittee on Health on March 17 that the overuse of medical imaging procedures by less qualified providers lowers the quality of patient care, undermines patient safety, threatens the status of Medicare, and drains the American health care system of billions of dollars each year. Speaking on behalf of the ACR and other groups that support the recent Medicare Payment Advisory Commission (MedPAC) recommendations, he noted that current law does not effectively address a problem that contributes to lowering standards of patient care and accelerating costs. "We are deeply concerned by the exponential growth in office-based imaging by those who may lack the education, training, equipment and clinical personnel to safely and effectively use these studies to better their patients' health," Borgstede said. "The real harm is excessive exams and unnecessary exposure to radiation leading to a missed diagnosis, which can result in additional patient injury or even patient death."

In his testimony, Borgstede reported that nonradiologist physicians now perform more than half of all nonhospital imaging in the United States and that nonradiologists who own imaging equipment are up to 7 times more likely to order diagnostic tests than those who refer patients to a facility in which they have no fi-

ancial interest. He noted that poor images taken by less-qualified personnel on suboptimal machines can have substantial effects on patient outcomes and on rising costs. "Given the likelihood that Medicare spending on the highest-cost modalities (CT, MRI, PET) may approach \$100 billion over the next 10 years, deterring just 5% of projected spending would represent a substantial savings to Medicare and improve care," Borgstede said. "Private insurers who have looked into this issue found a disturbing trend and took steps to clamp down on the practice. A recent Blue-Cross/Blue Shield study shows nearly a third of imaging performed by nonradiologists to be unnecessary and another well-regarded study shows that number to be as high as 50%!"

At the same hearing, Mark Miller, executive commissioner of the MedPAC, testified that Medicare payments to physicians for medical imaging services increased by more than 60% between 1999 and 2003, from \$5.7 billion to \$9.3 billion. Over the same period, Medicare payments for diagnostic imaging services increased by 45%, compared with 22% for all physician services, and Medicare payments for nuclear medicine increased by 85%. MedPAC recommended that CMS require providers who perform medical imaging services and physicians who interpret the results to meet quality standards to qualify for Medicare payments and improve coding edits for such services. MedPAC has also recommended that Congress include nuclear medicine and PET procedures under existing federal self-referral (Stark) law and tighten other aspects of Stark law dealing with physician ownership.

Cardiologists and other physicians who testified said that they perform medical imaging services in their offices and have the expertise to interpret the results properly. "When I conduct images in my office, I can read them immediately to expedite diagnosis and begin treatment," said Kim Allan Williams, a cardiologist

who testified on behalf of the Coalition for Patient Centered Imaging. Rep. Pete Stark (D-Calif.) noted that the testimony demonstrated “a little bit of a turf war” and recommended that experts work with lawmakers to determine whether the medical imaging industry requires additional federal regulation.

*American College of Radiology
Kaiser Daily Health Policy Report*

CDC Closes Radiation-Related Thyroid Study

Newsday, the Associated Press, and numerous western United States newspapers reported in the closing days of March that the Centers for Disease Control and Prevention (CDC) had quietly halted funding for a long-term and ongoing study on the connection between radioactive fallout and thyroid disease among individuals living downwind of atomic testing in Nevada during the 1950s and early 1960s. More than 1,300 of 4,000 former students who lived in southwestern Utah and eastern Nevada had been evaluated for the study, with a corresponding control group of Arizona residents.

The Deseret (UT) Morning News reported on March 28 that Dr. Joseph L. Lyon, a University of Utah researcher who headed the latest arm of the study looking at long-term effects, had received notification of the CDC decision in a March 21 letter. Michael A. McGeehin, director of the CDC Division of Environmental Hazards and Health Effects, noted in the letter that a board of scientific experts from outside the CDC had reviewed Lyon’s protocol and recommended that the study not be funded beyond the 2004 grant award.

Lyon’s studies were initiated in 1977 after a number of federally funded research projects in the 1960s had concluded that fallout had not increased the incidence of any diseases in downwind populations. The conclusions of Lyon and his colleagues differed, including widely publicized results summarized in 1993 in “A co-

hort study of thyroid disease in relation to fallout from nuclear weapons testing” (*JAMA*. 1993;270:2076–2082). Their findings that the population of children who had lived downwind of the test sites had in excess of the expected numbers of thyroid neoplasms played a substantial role in the passage of the 1990 Congressional Radiation Exposure Compensation Act, which provided “compassionate payments” to residents who had lived in downwind areas at the time of the nuclear tests. Lyon is among the authors of several additional articles stemming from results of the study, including “The Utah Thyroid Cohort Study: analysis of the dosimetry results” (*Health Phys.* 1995;68:472–483) and “Nuclear weapons testing and research efforts to evaluate health effects on exposed populations in the United States” (*Epidemiology*. 1999; 10:557–560).

When contacted by the *Deseret Morning News*, CDC spokesperson John Florence said, “CDC does not have the financial resources available to continue the project. It’s a funding issue.”

*Deseret Morning News
Associated Press*

NCRP Holds Annual Meeting

The National Council on Radiation Protection and Measurements (NCRP) 41st Annual Meeting, “Managing the Disposition of Low-Activity Radioactive Materials,” was held on March 30 and 31 in Arlington, VA. The meeting highlighted ongoing regulatory efforts to establish viable disposition alternatives for many types of low-activity radioactive materials that are expected to be generated in large quantities as power reactors and other nuclear facilities are decommissioned over the coming decades. Participants in the meeting included representatives of federal and state regulatory agencies, industries involved in the disposal and/or recycling of low-activity materials, public policy experts, and representa-

tives of international organizations dealing with issues similar to those faced by the United States. A primary goal of the meeting was to provide a forum for exploring risk-informed decision-making processes and provide insights into future regulatory approaches that could facilitate decisions at the federal and state levels. Speakers at the meeting included John B. Little, as the 29th Lauriston S. Taylor Lecturer, and B. John Garrick, as the second Warren K. Sinclair Keynote Speaker. A tribute to the life and scientific accomplishments of Lauriston S. Taylor was presented by Robert O. Gorson. Follow-up information will be posted on the Web site at www.ncrponline.org.

*National Council on Radiation
Protection and Measurements*

HHS Awards Bioshield Contract for Liquid Potassium Iodide

The Department of Health and Human Services announced on March 18 the award of a \$5.7 million contract to Fleming & Company Pharmaceuticals of Fenton, MO, for the manufacture and delivery of 1.7 million pediatric doses of liquid potassium iodide (KI) under the BioShield program. The flavored liquid KI formulation is the first to be developed specifically for children and is administered with a graduated eyedropper. “The acquisition of this new and easy-to-administer pediatric KI formulation is an important step forward for our nation’s radiological preparedness program,” said Assistant Secretary for Public Health Emergency Preparedness Stewart Simonson.

Once it is delivered to HHS, the pediatric KI will be made available to states that submit and receive approval from HHS for plans they develop to distribute the new product in communities around commercial nuclear power plants.

The Food and Drug Administration has approved KI in tablet form as a
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chimeric tumor necrosis antibody was “well tolerated and can be used systemically or locally to treat refractory tumors of the lung.”

Journal of Clinical Oncology

LundADose Method for Absorbed Dose Assessment in Therapy

In an article published in the February issue of *Cancer Biotherapy and Radiopharmaceuticals* (2005;20:92–97), Sjogreen et al. from Lund University (Sweden) described a new method for absorbed-dose assessment in radionuclide therapy. The method is based on activity quantification by a conjugate-view methodology that is applied to serial whole-body, anterior–posterior, scintillation camera scans. The method includes separate corrections for attenuation, scatter, and overlapping organs. Additional development includes accommodation of the capabilities of

dual-head camera systems with built-in anatomical imaging. Time–activity data are included, along with dosimetric calculations based on the model of the Medical Internal Radiation Dose committee. The “LundADose” program enables automatic quantification, image registration, and absorbed dose calculations for larger numbers of patient studies. The method was evaluated in performance of whole-body activity quantification for patients undergoing radioimmunotherapy with ^{111}In - or ^{90}Y -labeled monoclonal.

Cancer Biotherapy and Radiopharmaceuticals

^{123}I -Rituximab Imaging of CNS Lymphomas

Dietlein et al. from the University of Cologne (Germany) reported in the April issue of the *European Journal of Haematology* (2005;74:348–352) on dosimetric measurements of

systemically administered intravenous ^{123}I -labeled rituximab to evaluate uptake in primary central nervous system lymphoma (PCNSL). The study included 4 patients with PCNSL who received a preinfusion of rituximab followed by 200–500 MBq ^{123}I -rituximab. SPECT imaging was performed at 1, 24, and 48 hours after administration of the radiolabeled compound. One patient showed very weak uptake of ^{123}I -rituximab into tumor tissue, with uptake 9-fold lower than blood-pool accumulation. The authors concluded that these data suggest that systemic monoclonal antibody–based radioimmunotherapy is not feasible in patients with PCNSL, because a sufficient activity delivered to tumor would be associated with severe hemotoxicity. They noted that whether “an uptake of therapeutic rituximab doses into PCNSL can be achieved remains questionable.”

European Journal of Haematology

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nonprescription drug and in January approved the Fleming pediatric product.

Department of Health and Human Services

MDS and AECL Announce Mediation for MAPLE Project

MDS Inc. and Atomic Energy of Canada Limited (AECL) announced on March 11 that the 2 companies had reached an agreement to seek a mediated resolution of issues related to the construction, commissioning, and operation of the MAPLE facilities in Chalk River, Ontario. Ontario Appeals Court Judge Stephen Goudge has been

appointed as the mediator and will work closely with the 2 parties. The Government of Canada has agreed to have a representative as a formal observer in this process. Robert Van Adel, President and Chief Executive Officer of AECL added, “We are entering into this voluntary mediation process with the spirit and intent of arriving at a satisfactory resolution to all of the outstanding issues, and we look forward to the successful commissioning of the MAPLE reactors.”

Atomic Energy of Canada Limited

Donut Stop Delays Radionuclide Delivery

On March 10, *The Pawtucket (RI) Times* reported that a truck

containing $^{99\text{m}}\text{Tc}$ destined for stress testing at a local hospital had been stolen outside a Dunkin’ Donuts store in Seekonk, MA. The driver left the truck running while in the store. Police immediately entered the pickup truck’s information into a national computer alert system, and a regional broadcast was issued to all area police departments about the potentially hazardous material. The vehicle was found later in the day, with the radionuclide vials intact and unopened. The thief was unaware of the nature of the cargo, contained in a small “ammo” box in the truck’s cab.

The Pawtucket (RI) Times