

Following Obama victory, expectations are high for shake up of s&t structure

With President-elect Barack Obama due to take office on Jan.20 2009, expectations are running high that the nation's s&t structure will be reorganized, the presidential s&t advisor post and Office of S&T Policy (OSTP) will be upgraded, and nominees named promptly for cabinet-level posts at Agriculture, Commerce, Defense, Education, Energy, Health & Human Services, Homeland Security, State, and Transportation in the Obama administration.

No leading candidate has yet emerged as President Obama's s&t advisor. Campaign sources have tended to dismiss suggestions that the EGG (ethnicity, gender, and geography) criteria used by President Clinton's transition team will be employed in the selection process.

Selecting candidates to head Environmental Protection Agency (EPA), National Oceanic and Atmospheric Administration (NOAA), and the National Institutes of Health (NIH) are rumored to be at an "advanced stage." These agencies could thrive if the new administration starts to implement new environmental, climate change, and stem cell research policies. Finding potential candidates to run NASA is likely to prove a harder task.

The federal s&t and r&d budget outlook remains bleak with no signs of real growth over the next few years.

Capitol Hill, where Democrats will again control both the House and Senate, will see many changes due to retirements, election defeats, and seniority rules. Several key House and Senate committee are likely to get new chairmen. [Continued, page 10]

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NASA license rights sold

Exclusive license rights to 11 NASA-owned patents were sold on Oct.30 at the Fall 2008 Live Intellectual Property Auction in Chicago for \$55,000 plus an ongoing royalty stream.

The NASA patent portfolio (Lot #56) consisted of 10 US patents and 1 US patent application for a new signals processing technology, known as the Hilbert-Huang Transform (HHT).

This is believed to be the first time that federal government-owned patent rights have been sold at a public auction.

Held by Ocean Tomo, the one-day auction attracted over 500 participants, 87 lots, and had cumulative sales of \$12.84-million, including buyers' premium.

"This has been a great day for NASA," said Goddard Space Flight Center's

Innovative Partnership Programs (IPP) chief Nona Cheeks. “We demonstrated that the federal government can be innovative in how it commercializes federally-funded technology for the benefit of the American public.”

“By being the first federal agency to participate in a live, public auction of exclusive patent licenses, NASA has blazed a trail for others,” said Ocean Tomo Federal Service LLC director Connie Chang. “We’re thrilled with this outcome.”

Although tech-transfer officials at other federal agencies are intrigued by the NASA-Ocean Tomo activity, there’s no sign that others are yet ready to follow NASA’s lead.

“We shall carefully watch this development,” said a military tech-transfer manager, who asked not be named. “We are always interested in new approaches [and] new tools.”

NASA had three lots in the Oct.30 auction. The other two lots (#57 & #58), which relate to global positioning system (GPS) receivers and capaciflector sensor technology, were not sold.

“[W]e’ve already been contacted on the two remaining NASA lots and have [a] strong indication that these will transact post-auction,” Ocean Tomo CEO James Malackowski said.

NIST safety panel reports

A blue ribbon commission of safety and management experts issued a report Friday on the adequacy of safety programs at the National Institute of Standards and Technology (NIST), and findings to help the agency improve the safety of its operations.

The NIST Blue Ribbon Commission on Management and Safety noted that safety is currently not a “core value” of the agency, but said NIST’s staff is “eager, willing and ready” to embrace a stronger safety culture.

The commission was formed in August by Commerce Secretary Carlos Gutierrez, following a June 9 plutonium incident at the NIST Boulder campus in Colorado.

In its report, the panel said it found “serious

safety concerns” at NIST and identified the root cause of these as a lack of leadership to ensure a disciplined safety culture. But the panel’s report commended NIST staff for their “candor and openness” in discussions with the commission, and said the approach outlined by NIST’s recently-appointed deputy director Patrick Gallagher was a “cause for optimism.”

Gallagher, in his presentation to the panel, proposed several management changes. These included more authority for NIST Boulder management over safety and facilities, placing a dedicated chief safety officer at a high-level in the organization, improved sharing of information and resources across organizational barriers, and reducing the high variability in safety management by setting performance measures, metrics and goals.

Previous investigative reports on the NIST plutonium incident as well as other NIST safety-related documents were studied by the commission, which held two public meetings and gathered information from over 35 individuals at all levels at NIST.

In its report, the expert panel found that “immediate action” was needed to provide leadership for integrating safety more fully into NIST’s day-to-day work. It noted that the agency’s identification of hazards and safety training was inconsistent, its safety performance hadn’t been benchmarked against similar organizations with strong safety cultures, and NIST lacked a set of meaningful measurement tools to evaluate and manage its safety operations. The panel also found NIST had a serious lack of resources for safety.

“We’re committed to making the management and other changes necessary to ensure that safety is a core value at NIST,” deputy director Gallagher said last week. “The commission’s report will be invaluable to us as we work to ensure that our world-class research efforts are matched with an equally exemplary safety culture that’s fully integrated into everything we do.”

The six commission members are Paul Croce, Ken Fivizzani, Kenneth Rogers, Charles Shank Sr., William VanSchalkwyk, and Thomas Young.

“I’d like to thank the commission for lending their substantial expertise to carrying out this very important study,” said Gutierrez, “and assure them that we’ll be working with NIST to follow through on actions that address their findings.”

The commission’s report is at:

<www.nist.gov/director/blueribbon/index.html>

GAO probes FFRDCs

Best practices for the management and oversight of Federally-Funded Research & Development Centers (FFRDCs) should be shared between federal agencies, and the Departments of Health & Human Services (HHS) and Homeland Security (DHS) should revise their personal conflict-of-interest policies to address FFRDC contract employees, according to a Government Accountability Office (GAO) report released last week.

In 2006, \$13-billion (14%) of federal r&d funding went to 38 FFRDCs that conduct specialized research. Major FFRDC sponsors are the Department of Defense (DOD), Department of Energy (DOE), Department of Health & Human Services (HHS), Department of Homeland Security (DHS), and National Science Foundation (NSF).

“All federal agencies that sponsor FFRDCs are subject to the same federal regulations, and each agency included in our review has developed its own processes and procedures to ensure compliance and conduct oversight of its FFRDCs,” said GAO, noting that in at least one key area the different approaches could produce significantly different results. All FFRDCs are required to address organizational conflicts-of-interest, but only DOD and DOE have requirements that their FFRDC contractors address specific areas of personal conflicts-of-interest of their employees.

“In light of the special relationship that FFRDCs have with their sponsoring agencies,

which often involves access to sensitive or confidential information,” GAO said, “it is critical not only that the FFRDC as an entity but also that employees of the entity in positions to make or influence research findings or agency decision making be free from conflicts.”

Lack of such safeguards could diminish the FFRDC’s ability to offer “impartial, technically sound, objective assistance or advice.”

No interagency forum currently exists for agencies to share their best practices for managing FFRDCs, but GAO noted that the Federal Laboratory Consortium (FLC) for Technology Transfer was created to share information among the nation’s federal labs and research centers.

The 52-page report, *Federal Research: Opportunities Exist to Improve the Management and Oversight of Federally Funded Research and Development Centers*. [GAO-09-15], dated Oct.8 but not issued until Nov.7, is at:

<www.gao.gov/cgi-bin/getrpt?GAO-09-15>

ATVM loan rule issued

An interim final rule by the Department of Energy (DOE) that implements the Advanced Technology Vehicles Manufacturing Incentive Program, authorized by section 136 of the *Energy Independence and Security Act of 2007* (EISA), was issued Nov.5.

DOE was provided with funding under the FY09 Continuing Resolution to make available up to \$25-billion in direct loans to eligible applicants for costs of re-equipping, expanding, and establishing manufacturing facilities in the US to manufacture advanced technology vehicles, and their components. Such vehicles must provide meaningful improvements in fuel economy performance.

DOE was also required by Congress under the FY09 Continuing Resolution to issue interim final regulations for the program by Nov.29, and has beaten that deadline.

“Issuance of this interim final rule opens the process for automakers and component

manufacturers to immediately apply for government funding under the Advanced Technology Vehicles Manufacturing Incentive Program,” Energy Secretary Sam Bodman said last week. “Since Congress provided funding for this loan program approximately 30 days ago, [DOE] has worked quickly and responsibly to draft this rule, set up a loan office, and establish a credit review board to review loan applications.”

Congress has appropriated \$7.5-billion to cover the subsidy costs of direct loans issued to auto manufacturers and component suppliers under EISA. However, the actual amount of loans that DOE will be able to issue with this funding, up to the statutory ceiling of \$25-billion, will depend on the circumstances of specific borrowers and proposed projects.

DOE, which also must comply with statutory requirements including the National Environmental Policy Act (NEPA) in connection with issue of any loans under the program, plans to act quickly to review and evaluate applications it gets from eligible applicants.

For more details of the ATVM loan program, visit: www.atvmlan.energy.gov/

PCAST energy update

An update of its 2006 energy report was given to President Bush last week by the President’s Council of Advisors on S&T (PCAST).

“While recent economic turmoil is leading to lower oil prices and may influence investments in new technologies,” say PCAST co-chairs John Marburger and Floyd Kvamme in their Nov.5 letter to President Bush, “the fundamental long-term need for energy security and environmental sustainability is unchanged.”

Marburger is director of the White House Office of S&T Policy; Kvamme is partner emeritus with Kleiner Perkins Caulfield & Byers, a Silicon Valley venture capital firm.

The original PCAST report, *The Energy Imperative: Technology and the Role of Emerging Companies*, examined activities of private sector innovation and entrepreneurs in

clean and efficient energy technologies. It also contained policy recommendations to cut US dependence on foreign oil and reduce emissions from energy production and use.

In its 22-page update, PCAST expresses optimism that US imported oil demand will continue to decline, but adds that federal funding for energy r&d will need continued growth.

The 2008 update report is at:

www.ostp.gov/galleries/PCAST/PCAST%20Energy%20update-final.pdf

A green r&d partnership!

A meeting of the US-Ireland R&D Partnership, attended by senior US and Irish government officials, was held last week.

At a Nov.5 reception at the Irish Embassy in Washington DC, Ireland’s Ambassador to the US Michael Collins welcomed Irish researchers and scientists, their US counterparts, and senior federal officials.

“The Irish government recognizes that investment in scientific research is vital to Ireland’s long-term economic and social development,” Ambassador Collins said. “Our government has committed a substantial investment to making the transition to a knowledge economy by funding world-class research in Ireland.”

“To achieve and sustain [our] ambitious goals, we realize and understand full well that a partnership approach is crucial,” he said. “That means we want the scientific research community in our higher education institutions working with their colleagues in industry for the greater good. Industry-academic partnerships are being nurtured and developed in Ireland, and we believe that the output from these collaborations will underpin our future competitiveness.”

“I’m excited to be part of this important partnership,” said Health & Human Services Deputy Secretary Tevi Troy. “I talked about it today with some of my senior career people who are going to be involved in the transition [process]. I said that this partnership is a really essential and important part of what

we're doing, and I want to make sure this is something that continues from administration to administration."

Other speakers were Northern Ireland Bureau deputy director Aidan Cassidy, Science Foundation Ireland director general Prof. Frank Gannon, the partnership's Northern Ireland co-chair Prof. Fabian Monds and Ireland co-chair Dr Killian Halpin.

The US-Ireland R&D Partnership program is a unique initiative by the governments of the US, Northern Ireland and the Republic of Ireland to advance scientific progress in fields likely to have a significant impact on the health, well-being and economic prosperity of their citizens. The partnership's origins date back to the 2002 US-Ireland Business Summit in Washington DC.

The program helps link scientists and engineers in partnerships across academia to address crucial research questions, foster new and existing industrial research activities that could make important contributions to the partners' respective economies, and expand educational and research career opportunities in science & engineering.

The government departments and agencies supporting the initiative are the National Science Foundation & National Institutes of Health), Northern Ireland's Invest NI & Dept. for Employment & Learning), and Ireland's Science Foundation Ireland.

The thematic areas prioritized as important research challenges: Nanotechnology, Sensors, Diabetes, and Cystic Fibrosis.

A joint steering group, composed of senior representatives from government, academia and private industry across the three jurisdictions, guides the partnership. Working groups having representatives from each jurisdiction have also been formed in each thematic area to advise and make recommendations to the steering group on scientific themes and issues for each area.

Under the US-Ireland R&D process, the partnership helps researchers submit joint research proposals in the priority areas and, as part of the funding process, the governments

will contribute to the costs of researchers based in their jurisdictions. All partnership proposals must have significant research involvement from researchers in all three jurisdictions.

The meeting also included Nov. 6 workshop sessions at NSF in Arlington, Va.

Transatlantic science

Hundreds of US, Canadian and Norwegian scientists, researchers, government officials, and industry executives took part in the 7th Transatlantic Science Week 2008, held last month in Ottawa and Washington DC.

The Oct.20-23 event, which was organized by the Royal Norwegian Embassies in Ottawa and Washington DC, sought to strengthen and increase Transatlantic cooperation in research, innovation, and higher education. A US-Norway bilateral s&t cooperation was signed in 2005.

Featuring plenary presentations, panel and group discussions, during which researchers and officials exchanged ideas and experiences, the forum opened in Canada with health and energy topics, and continued in the US at the Carnegie Institution for Science with a theme of global impact through research. This was followed by a symposium on cancer research and innovation, and a session on international cooperation for biobanks at the National Institutes of Health.

Speakers at the Washington DC forum included National Science Foundation (NSF) deputy director Kathie Olsen, State Dept. science adviser Nina Federoff, Carnegie Institution president Richard Meserve, Research Council of Norway director general Arvid Hallén, and Norway's Ambassador to the US Wegger Strømmen.

DOE transition plans

Details of the Department of Energy's (DOE) efforts to compile comprehensive information on all past and forthcoming issues and developments for the next administration to provide a timely and

efficient transition, were released last week.

DOE began work to outline an effective foundation and blueprint for the next administration very early in 2008, and Energy Secretary Bodman has directed his team to be “forward-leaning” in all of its efforts.

DOE’s 2008 transition work has been led by acting Deputy Secretary Jeffrey Kupfer. Ingrid Kolb, a career federal employee with 30 years’ service, is DOE’s 2008 agency transition coordinator and is overseeing daily transition operations. DOE program analysis & evaluation director Jay Hoffman is helping Kolb with preparation of transition briefing materials.

With a \$24-billion annual budget, almost 115,000 employees, and 17 national labs, DOE believes “a seamless transition” to the next administration is “vitaly important.”

Virtual birthday party

Schools around the world will take part in an all-day virtual birthday party this week to wish NASA a happy 50th anniversary through the agency’s Digital Learning Network (DLN).

The virtual party on Nov.13 starts at 9:00am EST with live video conferences every hour on the hour until 6:00pm. NASA anticipates schools in Australia, Canada, India, Japan, Mexico, New Zealand, Slovenia and the UK will participate in the live digital connection.

During each webcast, international schools will connect with a US school and one of the ten NASA field centers. The DLN sites will each host a 45-minute video conference about a unique program in the agency’s 50 year history of discovery and exploration. These topics will include: Space shuttle (hosted by Kennedy Space Center, Fla.); Project Mercury (Marshall Space Flight Center, Huntsville, Ala.); The Viking Project (Langley Research Center, Hampton, Va.); Hubble Space Telescope (Goddard Space Flight Center, Greenbelt, Md.); Project Gemini (Johnson Space Center, Houston, Texas); Stennis Space Center history (Stennis Space Center, Miss.); X-43 (Dryden Flight Research Center, Edwards AFB, Calif.); Icing Tunnel (Glenn

Research Center, Cleveland, Ohio); Arc Jet Facility (Ames Research Center, Moffett Field, Calif.) and the Phoenix Mars Lander (Jet Propulsion Laboratory, Pasadena, Calif.).

NASA’s DLN started in spring 2004 with three hub sites at Langley, Glenn and Johnson and now includes all ten field centers. Through interactive video conferencing, the network allows future generations of explorers to link with scientists, engineers and researchers without leaving the classroom.

The virtual birthday party is being held through a partnership of NASA, Discovery Education of Silver Spring, Md., the US Distance Learning Assn. and Polycom.

To view the live Nov.13 DLN webcasts, visit: <<http://dln.nasa.gov/dln/content/webcast>>

EPA to hold VC summit

A one-day summit on programs to commercialize environmental technologies is to be held this week in Washington DC by the Environmental Protection Agency (EPA).

The EPA-Venture Capital Community Summit: Exploring Programs to Commercialize Environmental Technology, will follow up a report issued in April this year by the National Advisory Council for Environmental Policy and Technology (NACEPT).

EPA and the Venture Capital Community: Building Bridges to Commercialize Technology recommends that EPA create programs, similar to those of the Department of Energy, to provide financial support to encourage venture capital (VC) investment in the commercialization of environmental technologies.

The Nov.12 summit, which will feature senior career EPA managers and top VC executives who were part of NACEPT’s study, is expected to produce a companion to the earlier report that will be given to the next administration. Results of the Summit will be discussed on Nov.13 in a NACEPT forum on future directions for EPA, to be chaired by the agency’s administrator.

For more details of the event, contact Paul Shapiro at shapiro.paul@epa.gov

To register for the Summit, visit the National Center for Environmental Research (NCER) web site at:

<www.epa.gov/ncer/venturecapital>

The earlier NACEPT report is at:

<www.epa.gov/etop>

Student ambassadors!

Forty-six undergraduate and graduate students have been selected to represent NASA in their local communities as recipients of the agency's International Year of Astronomy (IYA) Student Ambassadors program.

The IYA Student Ambassadors program is designed to encourage undergraduate and graduate students to participate in IYA activities and create excitement about NASA's discoveries in astrophysics, planetary science and solar physics within their local communities and beyond.

"NASA is a major partner in the US celebration of IYA activities," Astrophysics education and public outreach lead Hashima Hasan said Nov.4 in Washington. "The Student Ambassadors program is just one of many activities the agency has planned throughout the coming year."

Two of the students - Univ. of North Carolina Chapel Hill sophomore Rebecca Holmes and Univ. of Puerto Rico at Arecibo junior Norberto Gonzalez - will attend opening ceremonies of an IYA event in Paris, France in January 2009.

The ambassadors were selected from over 150 online applications.

The IYA Student Ambassadors program is managed by the National Space Grant Foundation through a grant from NASA.

For more information, visit

<<http://astronomy2009.nasa.gov>>

New NIH policy unveiled

A new policy establishing goals to encourage funding for scientists new to the National Institutes of Health (NIH) and those at an early stage in their careers was announced on

Oct.31.

Involving new investigators is considered essential to the vitality of health-related research and has been the focus of several important initiatives. NIH hopes this new policy will nurture a new cadre of promising scientists and provide the continued expertise needed to foster the next generation of biomedical research.

"Exceptional scientists with new ideas are at the core of our success - we must invest in the future of our new scientists today if we expect to meet the nation's health challenges of tomorrow," NIH director Dr Elias Zerhouni said on his final day at the agency.

NIH officials expect the new policy to allow new investigators to achieve success rates comparable to those of established scientists submitting new grant applications. Achieving such rates should allow NIH to support 1,650 or more New Investigators across all of its institutes and centers in FY09, a number equivalent to that reached in FY08.

The Early Stage Investigator policy stems partly from a major NIH initiative underway to enhance the peer review process with a goal of "fund[ing] the best science, by the best scientists, with the least amount of administrative burden."

Meeting on select agents

A multi-agency public meeting to discuss issues relating to compliance with the Federal Select Agent program, including entity registration, security risk assessments, biosafety requirements, and security measures, will be held next month by the Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), the Department of Health and Human Services' (HHS) Centers for Disease Control and Prevention (CDC), and Justice Dept.'s Federal Bureau of Investigation (FBI) in Riverdale, Md.

The *Public Health Security and Bioterrorism Preparedness and Response Act of 2002*, which was signed into law by

President Bush in June 2002, contacts sections that provide for the regulation of certain biological agents and toxins by HHS & USDA, and for interagency coordination between the two departments regarding overlap agents and toxins.

CDC has been designated by HHS as the agency with primary responsibility for implementing the provisions of the Act; APHIS is the agency fulfilling that role for USDA. CDC and APHIS list select agents and toxins, and FBI's Criminal Justice Information Service conducts security risk assessments of all individuals and non-governmental entities that request to possess, use, or transfer select agents and toxins.

The Dec.9 event, an opportunity for the regulated community and others to obtain specific regulatory guidance and information on standards concerning biosafety and biosecurity issues related to the Federal Select Agent Program, will be held at the USDA Center, 4700 River Road, Riverdale, Md. CDC, APHIS and FBI representatives will be present to address questions and concerns. All attendees must register in advance of the meeting.

For more details, contact the Agricultural Select Agent Program at (301) 734-5960.

Registration forms are at:

<www.selectagents.gov>

UK regional innovation

Innovation is the key for the UK to beat the economic downturn, according to new research published recently by the National Endowment for Science, Technology and the Arts (NESTA), which finds that connecting with new markets and exploiting international opportunities will be key ingredients for UK regions to remain competitive in a recession.

"This research is important because it demonstrates that no region, with the possible exception of London, will be able to withstand the economic crisis in isolation," NESTA chief executive Jonathan Kestenbaum said Oct.29. "The ingredients for survival in a downturn hinge on the ability to connect with markets

that focus on new science, technology and innovation within and beyond the UK."

NESTA's analysis, which maps the UK's innovation strengths region by region, shows that the regions most likely to thrive are those with strong international networks to other innovative nations and the ability to share that knowledge across the region.

UK regions best equipped to come out of the recession are London, the South East, East of England and Scotland's central belt. This is because they are globally well-connected and less dependent on their resources coming from any one single country.

The report cites the West Midlands and North West England as being among the strongest to access knowledge and business players globally, while Wales and Northern Ireland were among the weakest to benefit from global networks and learning opportunities.

"Traditionally, the keys to successful innovation were considered to be the ability to create knowledge and exploit it," Kestenbaum added. "However, the dynamics are changing. Those who can access knowledge, bring it home and share it around are more likely to build a healthier economy."

He also warned that if the UK doesn't connect with new markets, it risks remaining stagnant.

The research defines a region's ability to use innovation successfully by five factors: access, anchor, diffuse, create, and exploit.

With a mission to transform the UK's capacity for innovation, NESTA has the largest portfolio of early-stage businesses in the nation, and is a leading authority on how to support and grow new ideas. It also devises radical approaches and shapes policy to address current pressing economic, social and environmental challenges.

Innovation by Adoption - Measuring and mapping absorptive capacity in UK nations and regions was compiled with data for 26 indicators from the UK's administrative

regions and nations.

The full NEST report is at:

<www.nesta.org.uk/innovation-by-adoption>

NIST electronic nose device

National Institute of Standards and Technology (NIST) researchers, by combining a sensitive detector technology able to distinguish hundreds of different chemical compounds with a pattern-recognition module that mimics the way animals recognize odors, have recently created a new approach to ‘electronic noses.’

The detector could become a potent tool for sniffing out nerve agents, environmental contaminants, and trace indicators of disease, as well as monitoring industrial processes and aiding in space exploration.

Their researchers’ electronic nose, described in a recent paper, is more adept than conventional methods at recognizing molecular features even for chemicals it has not been trained to detect, and also robust enough to deal with changes in sensor response that come with wear and tear.

In animals, odorant molecules in the air enter the nostrils and bind with sensory neurons in the nose that convert the chemical interactions into an electrical signal that the brain interprets as a smell. Humans have about 350 types of sensory neurons and many copies of each type. Dogs and mice have several hundred more types of sensory neurons than humans.

Odor recognition proceeds in a step-by-step fashion where the chemical identity is resolved gradually as initial coarse information is refined over time to allow finer discrimination, and this approach inspired the NIST researchers to develop a parallel ‘divide and conquer’ method to use with the electronic nose.

The technology is based on interactions between chemical species and semiconducting sensing materials placed on top of micro-electro-mechanical system (MEMS) microheater platforms developed at NIST.

The electronic nose used in the current work

consists of eight types of sensors in the form of oxide films deposited on the surfaces of 16 microheaters, with two copies of each material. Precise control of these individual heating elements allows scientists to treat each of them as a collection of ‘virtual’ sensors at 350 temperature increments between 150 to 500EC, raising the number of sensors to about 5,600.

People detect and remember many different smells and that knowledge is used to generalize about smells they haven’t encountered before. The electronic nose also needs to be trained to recognize the chemical signatures of different smells before it can deal with unknown ones.

The big advantage of this system, according to NIST researchers Barani Raman and Steve Semancik, is that you don’t need to expose the array to every chemical it could come in contact with in order for it to recognize and/or classify them. By breaking the identification process down into simple, small steps using the most information rich data avoids ‘noisy’ portions of the sensor response, thereby adding robustness against the effects of sensor drift or aging.

A paper, *Bioinspired methodology for artificial olfaction*, written by NIST researchers B. Raman, J. Hertz, K. Benkstein and S. Semancik, who are continuing to work on applications involving rapid identification of chemicals in unknown backgrounds or in a complex cocktail, was published online (Oct.15) in *Analytical Chemistry*.

DHS holds SETCP FSE

Completion of *Southern Exposure*, a full-scale exercise (FSE) marking the culmination of the Southeast Transportation Corridor Pilot (SETCP), was announced last week by the Department of Homeland Security (DHS).

The FSE, which ran from Oct.23 through Nov.5, was sponsored by DHS’ Domestic Nuclear Detection Office (DNDO) and other federal, state, and local participants. It was intended to demonstrate the Southeast

region's abilities to coordinate, communicate and respond during and after a possible radiological/nuclear threat to the region's interstate highways.

"This full-scale exercise demonstrated the enhanced coordination and capabilities that the Southeast Transportation Corridor Pilot has implemented in the region," DNDO director Vayl Oxford said Nov.6. "We'll review the valuable lessons learned from working with state and local law enforcement that can be used to extend radiological/nuclear detection capabilities to other areas of the US."

Overarching goals for *Southern Exposure* were set to provide participating states with an opportunity to test the Southeast region's alarm adjudication process, as well as exercise federal, state and local entities in adjudicating a radiological detection alarm during a commercial vehicle inspection.

Nine states (Ala., Fla., Ga., Ky., Miss., N.C., S.C., Tenn. and Va.), the District of Columbia, and the Port of Charleston, S.C., took part in the FSE, using their response protocols and technical expertise to adjudicate alarms from fixed and mobile radiological detection equipment. Each entity participated in a coordinated threat stream on military bases, activities and infrastructure, and some entities conducted multiple exercises to evaluate the full suite of detection capabilities now in place.

SETCP was created to evaluate the efficacy of including radiation detection systems in state commercial vehicle inspection activities, and develop a regional threat detection and interdiction architecture, starting at interstate weigh stations. The pilot, which began in 2006, assessed a regional concept, including alarm resolution protocols and an enhanced regional communication infrastructure and collaboration for information exchange.

Small biz gets a big book!

A report, *What Works for Small Businesses*, was released recently by Sens. John Kerry, D-Mass. and Olympia Snowe, R-Maine, the chairman and ranking member, respectively of the Small Business and Entrepreneurship

Committee.

A state and local government reference guide of proven practices for assisting small businesses, the 269-page report contains successful practices now being implemented throughout the US, and has hundreds of innovative methods to enhance entrepreneurship and improve the economy.

"These ideas have been put into action and are actually working today for small businesses," Sen. Kerry said Oct.28. "I hope that the programs detailed in this guide will be embraced and improved upon by state and local governments across America to provide support for entrepreneurs."

"The best practices guide we're releasing will greatly benefit economic development agencies seeking practical and proven solutions to address challenges facing small businesses," Sen. Snowe said. "By compiling a list of effective initiatives, the guide will also help policymakers transplant to their state and local communities programs that are demonstrating results in other areas of the country. Instead of reinventing the wheel each time a new problem arises, the guide truly proves a valuable menu of inventive proposals to fix a wide variety of problems."

The senators sought out programs, policies and initiatives from every state in search of ones that have proved successful in encouraging and supporting small business development.

What Works for Small Businesses is at: <http://sbc.senate.gov/What%20Works%20for%20Small%20Businesses%20September%202008.pdf>

Obama win raises hopes

(Continued from front page)

Many science, engineering, and technical societies, industry associations, and business groups issued statements last week after the elections, congratulating Sen. Obama.

"As President-elect Obama and policy-makers move to calm economic fears and address the federal budget," American Assn.

for the Advancement of Science (AAAS) CEO Alan Leshner said in a Nov.7 statement congratulating Sen. Obama on his victory, “we hope that the role of r&d as a key economic stimulus can be reevaluated at the highest levels. We have been encouraged by the next president’s clear recognition of the relationship between science and economic progress.”

“From health care to energy to climate change to environmental sustainability, President-elect Obama will enter office facing a daunting array of complex challenges threatening the well-being of our nation and the environmental health of our planet,” Biotechnology Industry Organization (BIO) president & CEO Jim Greenwood said Nov.5. “Biotechnology is uniquely suited to help provide answers to these challenges.”

The Union of Concerned Scientists (UCS) said that it’s looking forward to quick and decisive action to combat climate change by the new Obama administration and Congress, after what it claims has been “eight long years of obstruction” by the Bush administration.

“President-elect Obama has argued that our economic, energy and environmental problems share the same solution,” UCS president Kevin Knobloch said Nov.5. “We’re looking to the new president and Congress to work together to build a clean energy economy that will create millions of new jobs here at home, expand capital investment, make our nation less dependent on oil, and prevent the worst consequences of global warming.”

Technology licenses

NASA Langley Research Center in Hampton, Va. intends to grant a partially exclusive license to **Slingshot Product Development Group** (Lawrenceville, Ga.) for three inventions: Passive fetal heart monitoring system (US pat. 6,749,573); Method for simultaneously making a plurality of acoustic signal sensor elements (US pat. 6,954,971); and Passive fetal heart monitoring system (US pat. 6,551,251). The proposed license’s field-of-use is limited to passive fetal heart monitoring systems.

Air Force Research Laboratory in Rome, N.Y. intends to grant an exclusive patent license to **Eclipse Composites Engineering LLC** (Herriman, Utah) for an antenna for compact satellite terminal invention (US pat. appl. 12/231,420). No details were given of the proposed territory or field-of-use.

Air Force Materiel Command at Wright-Patterson AFB in Ohio intends to grant an exclusive patent license to **First Technology Safety Systems Inc.** (Plymouth, Mich.) to an anthropomorphic manikin head skull cap load measurement device (US pat. 7,204,165) and other related know-how. No field-of-use limits were cited.

Air Force Materiel Command at Wright-Patterson AFB, Ohio intends to grant an exclusive or partially exclusive license to **Tribologix Inc.** (Dayton, Ohio) for an object with durably bonded lubricant layer or other functional coating (US provisional pat. appl. 61/123,566). No field-of-use limits were cited.

People in the news

Dr Raynard Kington was named acting National Institutes of Health (NIH) director on Oct.31, following the departure of Dr Elias Zerhouni. Dr Kington, deputy director since Feb.9 2003, has shared in the overall leadership, policy direction, and coordination of the agency’s biomedical research and research training programs. NIH has 27 institutes and centers with a budget of almost \$29-billion and 18,000 employees.

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William Brennan has become acting under secretary for oceans and atmosphere at Commerce and acting administrator of the National Oceanic and Atmospheric Administration (NOAA). Currently assistant secretary and NOAA deputy administrator, he succeeds retired Admiral Conrad Lautenbacher Jr., who resigned after seven years to return to the private sector. Confirmed by the Senate in June as assistant secretary, Brennan is responsible for managing NOAA’s science and operational programs. He served previously as NOAA’s deputy assistant secretary for international affairs and led its international efforts to support policies and interests in ecosystem-based management,

climate change, Earth observation, and weather forecasting. Brennan also serves as director of the US Climate Change Science Program.

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Rear Admiral Nevin Carr, Jr. is to take over from Rear Admiral Bill Landay as chief of the Office of Naval Research (ONR) in mid-December. His appointment as 23rd Chief of Naval Research (CNR) was revealed Oct.30 in assignments announced by Chief of Naval Operations Admiral Gary Roughead. “[He’s] the right officer for this challenging and important job,” Roughead said Nov.4. A 29-year Navy veteran, Carr is head of the Navy International Programs Office (NIPO) and will transition from this to lead ONR. His career includes tours aboard eight surface vessels.

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 Department of Energy (DOE) assistant secretary for environmental management **James Rispoli** will leave DOE on Nov.22, it was revealed last week. Rispoli, who was sworn in by Energy Secretary Sam Bodman in August 2005, has led the nation’s \$6-billion/year program to clean up the waste and contamination remaining from former nuclear weapons research and production.

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 Recipients of the 2008 Department of Defense (DOD) Chief Information Officer (CIO) awards were announced by DOD assistant secretary for networks and information integration and CIO John Grimes at an Oct.30 Pentagon ceremony. Team awards went to: 1st: Joint Task Force (Global Network Operations), US Strategic Command, Arlington, Va.; 2nd: Army Medical Communications for Combat Casualty Care, Fort Detrick, Md.; 3rd: Army Knowledge Online/Defense Knowledge Online, Ft. Belvoir, Va.; 4th: Marine Corps Center for Lessons Learned, Quantico, Va.; 5th: National Security Agency’s Secure Mobile Environment - Portable Electronic Device, Fort Meade, Md. Individual awards went to: 1st: US Army LTC **Anthony Evans**, Fort Belvoir, Va.; 2nd: US Air Force Maj. **Douglas Gimlich**, HQ US Air Forces Europe; 3rd: US Air Force LTC **Angela Burth**, Joint Staff, Pentagon. The awards, now in their 8th year, are based on outstanding achievement in at least one of seven key areas. Winners were selected from 80 nominations received from around the world.

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Shawne Carter McGibbon has been appointed acting chief counsel for advocacy at the Small Business Administration’s (SBA) Office of

Advocacy. McGibbon, who has been deputy chief counsel for advocacy for the past six years, succeeds Thomas Sullivan who left last month to join the law firm of Nelson Mullins Riley & Scarborough. “With the current economic and financial situation, it’s important that the voice of small business be heard loud and clear in Washington,” McGibbon said Nov.6. Prior to joining SBA, McGibbon worked on Capitol Hill and for the Maryland House of Delegates. She has a bachelor’s from Georgetown Univ. and JD from George Washington Univ. National Law Center.

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Krishna Jonnalagadda was appointed director of business development, nanotechnology by Battelle last week. He will direct nanotechnology strategy development in collaboration with the national labs that Battelle manages or co-manages for the Department of Energy (DOE). Prior to joining Battelle, Jonnalagadda worked for over ten years at Motorola, most recently as director of engineering for accessory products. He led innovative business development at Motorola for several areas including printed electronics, nanotechnology, wireless health monitoring, and low power distributed sensor networks. “We’re pleased to have Krishna join our team,” Battelle vice president of industrial and international markets Spencer Pugh said Nov.5. “His expertise will help Battelle grow its advanced materials and nanotechnology business.” Jonnalagadda has an MBA from the Kellogg Graduate School of Management at Northwestern Univ. and a PhD from Univ. of Illinois at Urbana Champaign. He has more than 20 patents pending. Headquartered in Columbus, Ohio, Battelle is the world’s largest non-profit independent r&d organization.

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