

# VA Research Currents

## QUERI centers to be funded for amputation, chronic heart failure

new solicitation from VA's Office of Research and Development calls for the establishment of two new Quality Enhancement Research Initiative (QUERI) centers, focusing on chronic heart failure and amputation. Each center is expected to be funded initially for three years, starting in Sept. 2004, with a total annual core budget of up to \$350,000 plus additional money for start-up costs.

VA established QUERI in 1998 as a health-services program designed to boost the implementation of research results and improve quality of care and patient outcomes. Since then, eight QUERI centers—each focused on a disease common to veterans—have worked to identify evidence-based procedures and other best practices and promote their implementation throughout VA. Existing QUERI centers are conducting work in ischemic heart disease, mental health, substance abuse, HIV/AIDS, spinal cord injury, stroke and colorectal cancer. A previously funded QUERI center on chronic heart failure will be replaced by the new center.

The new QUERI center on amputation will address an area of long-standing priority for VA, and one that has received renewed emphasis due to the growing numbers of limb-loss casualties in Iraq and Afghanistan.

HSR&D 2004 national meeting March 9 – 11, Washington DC www.hsrd.research.va.gov So far, QUERI has led to a number of interventions to improve care. One example is the stepped-up rate of influenza and pneumonia vaccination among veterans at 23 VA spinal cord injury centers across the nation, the result of increased education for clinicians and patients.

Notification of intent to apply for the QUERI funding is due to Central Office by April 1, 2004. The full solicitation can be viewed on the ORD website at www.va.gov/resdev/fr/frrfp/solicitations.cfm or the Health Services Research and Development website at www.hsrd.research.va.gov/for\_researchers/funding/solicitations.

For further details, address scientific questions to Dr. Brian Mittman at (818) 895-9544 or brian.mittman@med.va.gov; or administrative questions to Linda McIvor at (202) 254-0230 or Linda.McIvor@hq.med.va.gov.

# Veterans with PTSD improved after 9-11

How did war veterans with post-traumatic stress disorder react to the events of Sept. 11, 2001? A recent study led by VA psychiatrist Robert Rosenheck, MD, yielded unexpected results.

Rosenheck, director of VA's Northeast Program Evaluation Center in West Haven, Conn., and a professor of psychiatry and public health at Yale University Medical School, found that veterans admitted to PTSD clinics within six months *after* Sept. 11 generally had less severe symptoms than those admitted within six months *prior* to the attacks. Likewise, those who had follow-up assessments after Sept. 11 showed greater improvements than those who had come for follow-up visits before Sept. 11.

The researchers studied the records of 9,640 veterans nationwide. Veterans in New York and Washington were excluded, since they were especially close to the attacks. About 93 percent of the veterans had seen combat. The researchers measured PTSD symptoms, such as nightmares and sensitivity to loud noises, and drug and alcohol use, violent behavior and employment. Besides the easing of PTSD symptoms, they found a significant drop in violence and alcohol use in the month following 9-11, although the trend reversed itself in the following months.

Rosenheck told the Associated Press that for veterans with PTSD who "feel isolated, stigmatized or excluded from mainstream life because of their symptoms, the period after may have been one in which they experienced

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# ORD approves new advisory group after meeting with field leaders

he Office of Research and Development (ORD) has approved the formation of a new Field Research Advisory Committee to promote more effective communication between ORD and research programs in the field. The group was proposed Jan. 23 at a national meeting in Washington that included ORD staff and VA associate chiefs of staff for research from around the nation.

The idea for the advisory committee developed during a town hall meeting in which several participants called for improved communication and field involvement in strategic planning for VA research. Jonathan B. Perlin, MD, PhD, deputy under secretary for health and acting chief research and development officer, agreed that communication must improve and challenged the group to create an inclusive process for meaningful discussion.

The working plan calls for the advisory committee to include the chief research and development officer, the deputy chief research and development officer, and the directors of the four research services. It will also include five associate chiefs of staff, a director of a Rehabilitation Research and Development center of excellence, a director of a Health Services Research and Development center of excellence,

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researchinfo@vard.org

a principal investigator of a VA cooperative study, and a non-clinician investigator chosen from all VA research career scientists and senior research career scientists.

The two-day meeting in Washington began with a plenary session led by Mindy Aisen, MD, deputy chief research and development officer. Aisen noted that she and Perlin will be as inclusive as possible in managing ORD and VA research.

The meeting also featured presentations on technology transfer, research oversight, biosafety and biosecurity, human research protections, the four ORD services, finance, and nonprofit research foundations. Three additional working groups addressed issues identified as critical by meeting participants. Their recommendations included the following:

Focus of the Research Services – Emphasize scientific content rather than type of research in funding decisions for basic laboratory and clinical research; develop better ways to identify and transfer basic science discoveries in the clinical arena; and have multiple panels review proposals that fall in the "gray area" between laboratory and clinical science.

Research Initiatives – Appoint field advisory groups to assist the four services in managing their research portfolios and examine specific initiatives; solicit feedback from the field on structuring the new Research Enhancement Award Program for translational research; and consider increasing use of Cooperative Studies coordinating centers rather than establishing new clinical research centers of excellence.

Merit Review – Ensure that scores are transmitted to the field promptly after review; direct review panels to increase emphasis on the investigator profile section rather than assign numeric value to productivity, and do not use "letters of intent" for Laboratory and Clinical Science projects to assess scientific content.

#### Growth spurt for VA's rehabilitation journal

VA's *Journal of Rehabilitation Research and Development* (JRRD) is celebrating a number of recent milestones:

- The journal, published in Baltimore, received 182 manuscript submissions in 2003—more than double the figure for 2002.
  - JRRD's website had more than one million "page views" in 2003.
- JRRD was admitted to the Directory of Open Access Journals (www.doaj.org) and is currently the only rehabilitation journal in the recently established portal.

Of perhaps greatest significance to authors, the journal reduced its average review time from 206 days in 2002 to 50 days in 2003. This is due largely to JRRD's switch to Web-based submission and review through Manuscript Central. Another factor is the journal's considerable expansion of its database of potential reviewers, which has increased well beyond the VA system and now represents scientists nationally and internationally. For information about the journal visit http://www.vard.org/pubs/pubs.htm.

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# Finding may help eczema sufferers tolerate smallpox vaccine

he lack of a certain peptide in the skin of people with atopic dermatitis—the most common form of eczema—may explain why they are at high risk of adverse reactions to the smallpox vaccine, reports a team including VA dermatologist Richard Gallo, MD, PhD, in the February *Journal of Immunology*. The finding may lead to new treatments to allow those with the skin condition to be vaccinated against smallpox without breaking out in a potentially deadly rash.

According to Gallo, of the VA San Diego Health Care System and the University of California, San Diego, the finding may also lead to safer testing to identify those who should not receive the vaccine.

In experiments in test tubes and mice, the researchers found that a

germ-killing peptide called LL-37—largely absent from the skin of those with atopic dermatitis—selectively kills vaccinia, the living virus in the small-pox vaccine. The virus is a relatively benign cousin of variola, the virus in smallpox. The researchers believe LL-37 may be a key part of the normal immune response that allows vaccinia to confer immunity for smallpox but stops it before it can replicate and cause harm.

In 2002, a team including Gallo and colleague Donald Leung of the National Jewish Medical and Research Center and Colorado Health Sciences Center reported that people with atopic dermatitis (AD) are prone to recurring skin infections because they fail to produce germ-killing peptides known as beta-defensins and cathelicidins. The compounds, which include "antimicrobial cathelicidin peptide," or LL-37,

work together to kill many common viruses, funguses and bacteria.

People with a history of even mild AD who receive the smallpox vaccine are at high risk for eczema vaccinatum, a condition in which the live virus in the vaccine spreads through the body and causes severe rashes over the area once affected by the eczema. This side effect is usually mild, but can be severe, and in rare cases, fatal. As a precaution, AD patients are advised to receive the vaccine only if they have already been exposed to the smallpox virus, since the disease itself is more dangerous.

Up to 3 percent of American adults, and 17 percent of children, have AD. The chronic, hereditary disease is marked by red, itchy, swollen skin, and often accompanied by asthma and allergies. It accounts for about 1 in 6 U.S. dermatologist visits.

## Sigmoidoscopy less effective for elders, women

Sigmoidoscopy, a common screening test for colon cancer, is less likely to attain an adequate depth of insertion in older patients, according to a study by a researcher at the San Francisco VA Medical Center. The study, in the Feb. 1 *American Journal of Medicine*, also found that women are up to twice as likely as men to have inadequate exams.

The flexible sigmoidoscope is about 60 centimeters long and 1.3 centimeters wide, with light-conducting fibers and a lens system that allows a physician to see around bends in the colon. The scope is threaded into the patient's rectum and lower third of the colon. A tiny video camera in the sigmoidoscope allows the doctor to examine the wall of the colon for polyps, cancers or other abnormalities. The sensitivity of this procedure as a screening tool depends on how much of the colon can be viewed. A reach of 50 to 60 centimeters into the colon from the anus is considered adequate.

To determine the adequacy of the procedure among various age groups, a team led by Louise Walter, MD, a VA geriatrician and assistant professor at the University of California, San Francisco, reviewed 15,406 records of

sigmoidoscopies for colorectal cancer screening on non-symptomatic people age 50 and older performed between 1997 and 2001. She found that the percentage of exams that failed to reach 50 centimeters into the colon increased from 10 percent in men ages 50 to 59, to 22 percent in those age 80 or older. The rate of inadequate exams in women climbed from 19 percent in the younger age group to 32 percent in women 80 or older.

Walter cited two factors that may contribute to the differences she found between the sexes: Women are more likely to experience pain from the procedure, which could prevent completion of the procedure; and women have a more pronounced curve in the sigmoid colon, which can obstruct the sigmoidoscope.

As for the difference among age groups, Walter found in her analysis that older people were less successful in attaining adequate bowel cleansing prior to the procedure. But bowel preparation accounted for only a portion of the unsuccessful procedures, she said, and the age difference persisted even after adjustment for bowel preparation.

## Career milestones

Graham H. Creasey, MD, a staff physician at the Cleveland VAMC and associate professor at Case Western Reserve University, was appointed to the Consortium for Spinal Cord Medicine, a project of the Paralyzed Veterans of America. Creasey's research focuses on using electrical stimulation to control bladder and bowel function in patients with spinal cord injury.

Susan Keay, MD, PhD, a staff physician at the Baltimore VAMC and professor of medicine at University of Maryland, was named Researcher of the Year Award by the Interstitial Cystitis Association. Keay is working to develop a noninvasive diagnostic test for interstitial cystitis, a chronic form of bladder inflammation.

Malcolm R. McNeil, PhD, a researcher at the VA Pittsburgh Health Care System and professor at the University of Pittsburgh, was honored by the National Student Speech-Language-Hearing Association for distinguished contributions to student research and clinical mentoring in speech-language pathology and audiology. McNeil's work centers on aphasia, cognitive-linguistic impairments and sensorimotor speech disorders.

Juan Sanchez-Ramos, MD, PhD, a staff physician at the James A. Haley VA Hospital and neurology professor at the University of South Florida, received the university's inaugural Outstanding Research Award for his work on bone marrow stromal cells, which share characteristics with stem cells and may be useful in autografting treatments for spinal cord injury, stroke or neurodegenerative diseases.

Myron Spector, PhD, director of tissue engineering at the VA Boston Healthcare System and a professor of orthopaedic surgery at Harvard Medical School; and Dan Mazzucco, PhD, a former VA employee and doctoral student in Spector's program, jointly received the 2004 John Charnley Award from the Hip Society for research into the role of joint fluid in the wear of joint-replacement prostheses.

#### **VA Research Week**

National VA Research Week is slated for April 11 – 17, 2004. Associate chiefs of staff and administrator officers for research and development at all sites have been notified of the date, and packets of promotional materials will be sent to the field by VA Research and Development in early March.

For more information contact Chris Amereihn at (410) 962-1800, ext. 252, or chris@vard.org.

#### PTSD (cont. from pg. 1)

special feelings of inclusion and acceptance." In the words of Rosenheck and co-author Dr. Alan Fontana in their article in the Dec. 2003 issue of *Psychiatric Services:* "It is possible that these veterans benefited from the shared feelings of national unity, pride and patriotism in the months after September 11 as well as from the normalization of PTSD-like reactions by the news media and a sense of mastery at having past experience in coping with trauma."

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VA Research and Development Communications Department of Veterans Affairs 103 S. Gay St., Rm. 517 Baltimore, MD 21202