



RESEARCH QUARTERLY UPDATE

Office of Research and Development

www.research.va.gov

Summer 2014

An overview of key accomplishments and initiatives in VA research

NEW INITIATIVES



Dr. Steve Singh at the Washington, DC, VA Medical Center is chairing a VA cooperative study to test the safety and efficacy of implantable cardiac defibrillators. The study will involve Veterans age 70 and older. (Photo by Robert Turtill)

Comparative study to track the efficacy and safety of implantable cardiac defibrillators is approved

A trial to study the safety and efficacy of implantable cardioverter defibrillators (ICDs) to prevent sudden cardiac death in patients 70 years old and older has been approved by VA's Cooperative Studies Program and will soon begin to recruit participants.

Continued on page 2

Vietnam Veterans to take part in nationwide Alzheimer's study

An article in the June 2014 issue of *Alzheimer's and Dementia* reported on a newly developed study to determine whether traumatic brain injury (TBI) and posttraumatic stress disorder (PTSD) increase Alzheimer's risk as Veterans age. The information collected in the study will help researchers learn more about how these issues may affect Vietnam Veterans as they grow older, as well as Iraq and Afghanistan Veterans.

Continued on page 2

THIS ISSUE: **THE GOLDEN VETERAN**

FROM THE CHIEF R&D OFFICER



Americans are living longer than ever before because of better health care. By 2030, more than 70 million Americans will be aged 60 or older—one in every five citizens. Today more than half of the patients in VA medical centers are older than 60.

In the 1970s, VA began planning to meet the challenges the aging World War II population would present. To handle this complex issue, the department developed Geriatric Research, Education and Clinical Centers (GRECCs). GRECCs attract scientists and health science

Continued on page 2

Also in this Issue

IN THE NEWS	3
A CHAT WITH OUR EXPERTS	5
HONORABLE MENTIONS	8
NOTEWORTHY PUBLICATIONS	10
OTHER RECENT PUBLICATIONS	11



U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Research & Development

Continued from page 1

students to the field of geriatrics in order to increase basic knowledge of aging and the diseases commonly associated with it. They also study how care is delivered to elders and the effects of rehabilitation.

Today, there are 19 GRECCs at VA facilities throughout the nation, publishing scores of high-quality peer-reviewed articles on aging each year, and providing thousands of hours in geriatric education to medical and health care students and post-doctoral fellows. GRECC-affiliated research, however, is only part of a larger portfolio the Office of Research and Development manages to address older Veterans and their health care needs. I am very excited about the work VA researchers have done, and are doing, in support of the “golden” Veteran.

For many older Veterans, aging brings inactivity and limitations on their mobility. Accordingly, our researchers are looking at improved rehabilitation strategies to counteract frailty and deconditioning, and to help older Veterans with disabilities adapt to their limitations. For example, researchers at our Atlanta and Baltimore medical centers are developing a user-friendly wayfinding system for Veterans with vision loss that will allow them to navigate their home environments with the assistance of a mobile application on their smart phones.

Researchers at VA’s Northern California Health Care System are looking at the cellular and molecular mechanisms that underlie the resistance of muscle to grow after they have atrophied following

Continued on page 3

Comparative study to track the efficacy and safety of implantable cardiac defibrillators is approved

Continued from page 1

ICDs are battery-powered devices placed under the skin to keep track of heart rates. Thin wires connect the ICD to the heart, and if an abnormal heart rhythm is detected, the device delivers an electric shock to restore normal heartbeat.



The trial (CSP 592) will compare ICD implantation with current standards of care for patients with chronic heart failure who meet clinical standards for pacemaker implementation. A control group will receive the “optimal standard of care” for heart failure, to include, for example, guidance on lifestyle modification and disease management. Those receiving ICDs will receive the standard interventions plus the device. The three areas that will be studied include the impact of ICD implementation on mortality, especially whether the defibrillators can reduce the rates of sudden death in those of advanced age; how well the device’s powerful therapeutic action is tolerated in older Veterans; and whether and to what extent ICDs improve Veterans’ quality of life. The trial is expected to begin in November 2014 and will last one year. The study’s chair is Dr. Steve Singh of the Washington, DC, VA Medical Center.

Vietnam Veterans to take part in nationwide Alzheimer’s study

Continued from page 1



Vietnam Veterans salute at the 20th anniversary of the Vietnam Memorial dedication, in 2002. Hundreds of Vietnam Veterans will take part in a new study on the link between war injuries—namely TBI and PTSD—and Alzheimer’s disease later in life. (Photo: Brien Aho/USN)

Nationwide, approximately 1,000 Vietnam Veterans will participate in screening interviews and 500 will be interviewed by telephone. Approximately 300 Vietnam Veterans will be eligible to complete the entire study.

The study will be funded by the Department of Defense (DoD). Its lead investigator will be Dr. Michael Weiner, a San Francis-

Continued on page 3

NEW INITIATIVES

co-based VA investigator who heads the national Alzheimer's Disease Neuroimaging Initiative (ADNI). The study itself is being referred to as DOD-ADNI.

Related story in this issue of *VARQU*: "Brain injury in Veterans tied to higher Alzheimer's risk" (page 6).

Relationship between diabetes and vascular inflammation in older Veterans to be studied

Diabetes affects about 1 million Veterans within the VA health care system, nearly 20 percent of VA's patient population.

Type 2 diabetes usually occurs in adults. In this type of diabetes, the pancreas does not make enough insulin to keep blood glucose normal. The condition is associated with resistance to insulin and higher concentrations of sugar and insulin in the blood. More than 90 percent of adults with diabetes have type 2 diabetes.

Among the more common effects of high blood sugar and insulin is the occurrence of atherosclerosis. Atherosclerosis is characterized by the constriction and eventual closure of blood vessels that lead to and from the heart and brain, which can lead to heart attacks and strokes. A condition called vascular inflammation makes atherosclerosis worse.

An ongoing study at the Eastern Colorado VA Medical Center led by Dr. Marc L. Goalstone is exploring some of the causes of vascular inflammation and hopes to determine the role that high concentrations of insulin play in atherosclerosis and vascular inflammation. Dr. Goalstone is also a lecturer in the University of Colorado Denver's department of integrative biology.



One in five VA patients has diabetes, and a new study will examine the role that vascular inflammation plays in the disease. Here, Veterans Glenn Williams (left) and Ronald Ross (right), both participants in a diabetes study at the Philadelphia VA, meet with study coordinator Kirsten Rogers. (Photo by Tommy Leonardi)

FROM THE CHIEF R&D OFFICER

Continued from page 2

long periods of immobilization and bed rest. Once we understand why muscle atrophy takes place, we will be able to design more targeted and effective treatments for this condition.

And researchers at the Miami VA Medical Center are looking at whether treatment with large oral doses of vitamin D, a low-cost, easy-to-administer treatment, will benefit physical performance in male Veterans aged 65 to 90. These studies and many others will help us reduce frailty and loss of independence in elderly Veterans—which should have a dramatic impact on their quality of life.

In this issue of *VA Research Quarterly Update*, we'll summarize some of the recent advances our researchers have made in combatting the conditions of aging in Veterans. The work we are doing, in many different areas, demonstrates our full commitment to optimizing the health, well-being, and independence of the golden Veteran. I appreciate this opportunity to share our successes with you.

Timothy J. O'Leary, MD, PhD
Chief Research and
Development Officer



IN THE NEWS

Rejuvenation factor in blood turns back the clock in old mice.

The May 9, 2014, issue of *Science* featured an article about three research studies that showed that blood from young mice could reverse cognitive aging in older mice. One of those studies

Continued on page 4

IN THE NEWS

Continued from page 3

was done by researchers with the VA Palo Alto Health Care System, Stanford University, and the University of California, San Francisco.

The studies follow up on centuries of speculation about the



Dr. Tony Wyss-Coray and colleagues found that injecting blood from young mice into old mice had a rejuvenating effect. (Photo by Curt Campbell)

effect young blood can have on the elderly. The VA study, led by Dr. Tony Wyss-Coray, injected older mice (about 60 years old in human years) with plasma drawn from mice that were about 20 years old in human years. The hippocampi of the mice that were given injections of young plasma for several years stopped shrinking, and their scores on memory and learning tests, such as remembering their way through mazes, improved by

Continued on page 5

A CHAT WITH OUR EXPERTS

GRECCs are hubs for geriatric research

VA's Office of Geriatrics and Extended Care Services (GEC) is committed to optimizing the health and well-being of Veterans with multiple chronic conditions, life-limiting illness, frailty or disability associated with chronic disease, aging, or injury. Their programs maximize each Veteran's functional independence and lessen the burden of disability on Veterans, their families, and caregivers.

GEC manages 19 Geriatric Research, Education and Clinical Centers (GRECCs). Each year, these research units publish hundreds of peer-reviewed articles, provide thousands of person hours in geriatric education, and are awarded millions of dollars in research grants. They provide care to the aging Veteran population and help train many of the health care professionals who will provide that care for years to come.

The Office of Research and Development has full funding approval over the intramural research efforts of VA researchers supported by the GRECCs. A special committee reviews the merits of research proposals related to aging issues. ORD has no direct administrative control over individual GRECCs, and no responsibility for monitoring their work.

VARQU spoke with Dr. Susan Cooley, GEC's chief of geriatric research and evaluation and chief of dementia initiatives, and Dr. Kenneth Shay, director of geriatric programs.

VARQU: The Office of Geriatrics and Extended Care Services has committed itself to optimize the health and well-being of older Veterans. How do VA researchers contribute to those efforts?

Cooley: There are lots of ways in which VA researchers contribute to our office's overall effort. Obviously, they conduct high-impact research funded by VA, NIH, and other organizations. They also contribute to the development of new approaches and new models of patient care.

In addition to their actual research activities, they participate in educating health professionals and students—medical students, nurses, and others—so they may be involved in professional education. We also use their specific expertise on work groups that are either within VA or with another federal agency, to ensure scientific as well as clinical perspectives are taken into account.

Researchers also develop information we use for program development and evaluation, clinical guidance, and policy. One of the things that's really important to me is



Dr. Susan Cooley

Continued on page 5

A CHAT WITH OUR EXPERTS

Continued from page 4

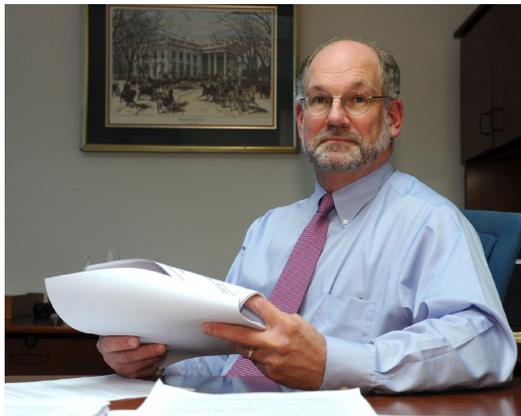
helping us avoid “a premature leap into policy.” This is a phrase I originally heard from a colleague, and it fits a concern that I have.

To the extent that we now use evidence-based practice, we have to know if a particular idea is “ready for prime time.” Is it ready to be disseminated widely in our system and beyond the VA system? Is it ready to inform a policy that will mandate everyone should do a particular thing? Or, are the data inconclusive on the particular topic so that further research is needed?

What I often look to VA researchers for is their expertise and objectivity to help me anticipate unintended consequences of something before we try to write a policy or to mandate it. So I really like the connection—and I think it’s a very important connection—between our researchers and our policy development to avoid “premature leaps into policy.”

How is the work of GRECC-based researchers coordinated?

Shay: VA has centers of excellence in a number of different areas, but to my understanding they all derive from the model set up with GRECCs, and Clinical Centers), and we’ve got 19 of those. They do a great deal of VA’s geriatric research. They constitute about \$113 million in total research expenditures



Dr. Kenneth Shay

from all sources every year, and that’s over 10 percent of VHA’s total research expenditures.

The GRECCs have comprehensive research programs, including biomedical lab science, clinical science, health services, rehabilitation research, and participation in cooperative studies. Each GRECC has different selected focus areas: some just one or two, others more than that because they are older and have expanded into additional areas.

They cover the whole spectrum of geriatric syndromes, disease entities, aging, chronic illness, and new models of care. In addition, they also conduct clinical demonstration projects that are not truly research, but generate data for more formalized research; that is, they create a mechanism for generating pilot information on which more formal proposals for research support can be developed.

GRECC research funding is about two-thirds from the National Institutes of Health, the Department of Defense, and other non-VA government sources, about one-quarter from the Office of Research and Development, and the remainder comes from foundations or other sources such as private industry. Those proportions are relatively

Continued on page 6

IN THE NEWS

Continued from page 4

roughly 50 percent.

In humans, the hippocampus is one of the first areas of the brain to show degenerative change in Alzheimer’s and dementia patients. In a few months, Wyss-Coray plans to initiate a clinical trial with early-stage Alzheimer’s patients.

Choosing Wisely recommendations on annual physicals. A recent article in *AARP* magazine included a statement from a VA researcher that



The routine annual physical may be overrated, according to VA’s Dr. Jeremy Sussman, who was quoted in an *AARP* magazine article.

may have surprised some readers. Dr. Jeremy Sussman of the VA Ann Arbor Health Care System asserted that there is little evidence that having an annual checkup keeps people healthy, and that many tests physicians regularly perform don’t make sense unless there’s a reason to suspect a problem.

According to Sussman, an individual’s specific needs should

Continued on page 6

IN THE NEWS

Continued from page 5

determine how often he or she sees a physician. “We certainly don’t think people should never see doctors—quite the opposite,” he is quoted as saying. “We question the value of seeing someone for the sake of seeing someone.”

Sussman served on a Society of General Internal Medicine task force that made recommendations to the Choosing Wisely initiative, sponsored by the ABIM foundation. The initiative aims to promote conversations between health care providers and patients by helping patients choose care that is supported by evidence; not duplicative of other tests or procedures already received; free from harm; and truly necessary.

Brain injury in Veterans tied to higher Alzheimer’s risk—

In a study published online in *Neurology* in June 2014, a team of researchers from VA and the University of California, San Francisco, looked at the records of 188,764 Veterans aged 55 years or older who had at least one inpatient or outpatient visit during both the years 2000-2003 and 2003-2012 and did not have a diagnosis of dementia on their first visit.

They found that older Veterans with a diagnosis of a traumatic brain injury (TBI) had a 60 percent greater risk of developing dementia over a nine-year period. According to the research team, “Our results suggest that TBI in older Veterans may predispose [them] toward development of symptomatic dementia and raise concern about the potential

Continued on page 7

A CHAT WITH OUR EXPERTS

Continued from page 5

stable. Currently, the amount from VA is at a relative high because the amount from NIH and other governmental agencies is down because of their lower funding rates.

Other ways we coordinate things include a monthly call Dr.



A research participant works out at the Birmingham VA as part of a GRECC study. (Photo by Joe DeSciose)

Cooley runs with the GRECC associate directors for research. On those calls, they share information and opportunities for inter-GRECC collaboration. This is at a pretty high pitch right now. Dr. Greg Cole of the Greater Los Angeles GRECC has pulled together a series of three different monthly calls of GRECC investigators presenting on their work having to do with Alzheimer’s disease and other dementias from the standpoint of basic science and relationships with health services, physical activity, and models of care.

Dr. Miriam Morey, the associate director for research at the Durham (N.C.) GRECC, and an exercise physiologist, has been identifying areas of research at all of the GRECCs that have to do with the benefits of physical activity in the elderly, which is something that is highly touted in general. VA’s most visible program, MOVE! (Managing Overweight and/or Obesity for Veterans Everywhere), generally discourages participation by Veterans over age 70 due to safety concerns. And yet, we have a lot of information that shows really positive effects of physical activity in older individuals in terms of cardiovascular fitness, reduction of risk factors for cerebral and cardiovascular illnesses, mood disorder and cognitive status improvements, as well as glycemic and lipid control. So there’s a great deal of work in the GRECCs to really promote activity among older individuals.

Other topics that are being investigated include falls and mobility; infection control at long-term care facilities; and obesity and aging. So there’s a lot of shared interests among the GRECCs, working independently initially and then we’re trying to get them to “play in the same sandbox” whenever possible.

And then there’s sharing information with other VA centers of excellence that have interests in common with GRECCs such as MIRECCs

Continued on page 7

A CHAT WITH OUR EXPERTS

Continued from page 6

(Mental Illness Research, Education, and Clinical Centers of Excellence). Particularly with MIRECCs, there are shared interests in dementia, and serious mental illness and depression in advanced age. PADRECCs (Parkinson's Disease Research, Education, and Clinical Centers), study Parkinson's disease, a disease of the elderly that is also often associated with cognitive decline, so there's much shared interest there.



Veteran Kenneth Hanners has his blood pressure taken at a fall prevention clinic at the Birmingham VA. (Photo by Joe DeSciuse)

ership, members of Congress, and other stakeholders. We also have annual reports from the GRECCs, and we use that information to respond to inquiries from internal and external sources. Our office will often go to the annual reports and look for highlights of particular research topics to be able to give examples to respond to particular inquiries.

We also try, each year, to have multi-GRECC symposia at various meetings of professional organizations, for example at the Gerontological Society of America and the American Geriatrics Society. These are in addition to individual presentations at symposia that one or another GRECC might be doing.

VA researchers, themselves, are active participants in scientific and professional meetings, and, of course, publications are a bedrock way of disseminating information. GRECC researchers, for example, have some 1,300 articles published in peer-reviewed publications every year. So there are a variety of ways VA gets information out about aging and geriatric topics.

How do the GRECCs communicate to the public and to other professionals in the field about their work?

Cooley: We disseminate information in a variety of ways. We have a GRECC Internet website, and individual GRECC sites have their own websites with information about their own particular activities and products.

The GRECC Forum on Aging is a newsletter that's put out twice a year. It's coordinated by the Puget Sound GRECC and is distributed to senior VA leadership, members of Congress, and other stakeholders. We also have annual reports from the GRECCs, and we use that information to respond to inquiries from internal and external sources. Our office will often go to the annual reports and look for highlights of particular research topics to be able to give examples to respond to particular inquiries.

Continued on page 8

IN THE NEWS

Continued from page 6

long-term consequences of TBI in younger Veterans and civilians." The results of the study were covered in a number of news media outlets, including *USA Today*.



A new VA study compared the effects of CPAP therapy versus weight loss on cardiac risk factors in people with both obesity and sleep apnea. (Photo courtesy of FDA)

Losing weight does far more to reduce cardiovascular risk factors in people with obstructive sleep apnea than therapy with continuous positive airway pressure (CPAP) alone, according to the results of a study conducted by researchers at the Philadelphia VA Medical Center, the University of Pennsylvania, and Temple University School of Medicine that was published June 12, 2014, in the *New England Journal of Medicine*.

Sleep apnea is a disorder in which a person stops breathing during the night, perhaps hundreds of times. The best treatment for the disorder is a CPAP system, which provides patients with oxygen through a machine weighing about 5 pounds that fits on a bedside table. The machine delivers slightly pressurized air to keep the throat open during the night.

Sleep apnea is strongly linked to obesity, and weight loss itself can reduce cardiovascular risk factors. To separate the risks

Continued on page 8

IN THE NEWS

Continued from page 7

obesity poses compared with those posed by sleep apnea, the research team divided subjects into three groups: those who were treated only for obesity; those who were treated only for sleep apnea; and those who were treated for both issues.

The team found that 24 weeks of weight-loss intervention, whether or not it was combined with CPAP therapy, reduced levels of inflammation in the body, insulin resistance, and dyslipidemia (cholesterol and fat levels in the blood.) CPAP therapy alone did not provide these benefits.

Losing weight also reduced blood pressure levels, as did CPAP therapy. "Our findings suggest that both obstructive sleep apnea and obesity have an independent causal relation to hypertension," Dr. Julio Chirinos, a researcher with the Philadelphia VA Medical Center, told *ReutersHealth*. 

For more "VA Research in the News" items see the online version of VARQU at:

www.research.va.gov/pubs/varqu

HONORABLE MENTIONS

Dr. Roy Bloebaum receives 2014 Paul B. Magnuson Award—Dr. Roy D. Bloebaum, director of the Bone and Joint Research Laboratory at the VA Salt Lake City Health Care System, was awarded VA's Paul B. Magnuson Award for 2014 for his work in helping to create the next generation of prosthetic limbs and joints.

Bloebaum and his team of mul-

Continued on page 9

A CHAT WITH OUR EXPERTS

Continued from page 7

Dr. Cooley, your specialty is in dementia initiatives. What is the current state of research in that area?

Cooley: This is an area that is rapidly expanding—you might even say exploding. It's accelerated by the U.S. National Alzheimer's Plan, which is coordinated by the Department of Health and Human Services. The National Alzheimer's Plan—which refers also to related dementias, so it's broader than just Alzheimer's disease [AD]—has goals including preventing and effectively treating Alzheimer's and related dementias by 2025. That's not too many years off!



Leon Bryant spends time with his father, Leon Douglas Bryant, at the VA community living center in Baltimore. (Photo by Mitch Mirkin)

It's a very ambitious goal and has a very major research component in order to prevent and effectively treat Alzheimer's and related dementias by 2025. The other goals include enhancing care quality and efficiency; expanding supports for people with AD and their families; enhancing public awareness and engagement on this major public health issue; and improving data across agencies to track progress. Research has a role in accomplishing all of those, but particularly the first goal.

There are a variety of action items included in the National Alzheimer's Plan. One for VA is an action item for research collaboration with the Department of Defense. The action item is to begin meetings to leverage research in areas related to neurodegeneration. Also as part of the plan, VA is collaborating with NIH in many ways.

In addition, VHA has a Dementia Steering Committee, which has made recommendations for further research. The committee's basic idea is that we need further research on the development and implementation of best practice models for dementia care in the VA health care system. Topics include pathobiology; genomics and epigenomics; risk factors; use of new technologies; end of life care; caregiver support; the cost effectiveness of standardized processes; and others. Many, many areas have been defined by the steering committee as important and needing further research.

What other recent research findings in the area of geriatrics are you excited about?

Cooley: I wanted to mention an area of research on behalf of our new chief consultant for geriatrics and extended care, Dr. Richard Allman,

Continued on page 9

A CHAT WITH OUR EXPERTS

Continued from page 8

who was formerly the director of the Birmingham/Atlanta GRECC. That is “life-space” research, which is a measure of mobility. Mobility is the functional domain in which older adults most frequently report difficulty, and it highly coordinates with the quality of life.

Life-space reflects participation in the surrounding world. By contrast, most assessments of mobility focus on specific mobility related tasks such as walking, or climbing stairs or driving. Life-space, however, reflects the full continuum of mobility and involves a person’s ability to carry out multiple different mobility-related tasks. That’s a particularly exciting area of research, and it happens to be one that our new chief consultant has been working in for quite some time.

What are some other important GRECC studies on the horizon?

Cooley: There are so many issues in our own aging, and in our caring for our parents and friends, and there are so many challenges that come with aging, but it is exciting that these things are now being investigated.

Fall risk reduction strategies are important. We all could go into stories about our parents and friends having a fall and what happens in its aftermath. It’s crucial to reduce risk and prevent falls to the extent possible, as opposed to focusing only on what happens after a fall.

We’re looking at risk factors for dementia, including the potential roles of traumatic brain injuries, posttraumatic stress disorder, and other factors. It’s a rising area of research. There’s also smart home technology, including home sensor technology for passive monitoring of people at home to provide respite for care givers, and other types of technology like telehealth adaptations for geriatric care. We have some studies of the use of telehealth for dementia diagnosis and care management, and we are looking at developing a smartphone application for caregiver support.

Delirium prevention as well as support is another big area for research, especially in hospital settings such as ICUs. We’re using data to identify patients at higher risk for iatrogenic complications [illnesses caused by medical examinations and treatment]. Unfortunately, things can often get worse when we try to make them better, and some people may be at greater risk for that.

Some other things that come to mind include the REACH-VA (Resources for Enhancing All Caregivers Health in VA) caregiver initiative. This is based on a NIH-funded cooperative study, and VA has adapted it for use in our settings with dementia caregivers as well as with traumatic brain injury and spinal cord injury caregivers, and VA investigators will be looking at the cost-effectiveness of the initiative.

There is also planning underway for palliative care research cooperation through a state-of-the-art (SOTA) conference. There’s a

Continued on page 10

HONORABLE MENTIONS

Continued from page 8

tidisciplinary investigators have focused on osseointegrative devices, which allow prostheses to be attached directly to a patient’s bone, eliminating the need for socket technology. These implants



Dr. Roy Bloebaum

offer hope to Veterans who, due to the nature of their limb loss, cannot be fitted for

conventional prostheses that rely on sockets. In 2012, the U.S. Food and Drug Administration selected Bloebaum’s team to conduct an early feasibility study to implant such devices in 10 Veterans with limb loss.

The Magnuson award honors the life and legacy of Paul B Magnuson, M.D., who, as a bone and joint surgeon, continuously sought new treatments and devices to help his patients cope with their disability. The award is presented annually to a VA investigator who exemplifies the entrepreneurship, humanitarianism, and dedication to Veterans displayed by Dr. Magnuson.

Dr. Rory Cooper receives 2014 Henry Viscardi Achievement Award and 2014 Joseph F. Engelberger Robotics Award—Dr.

Rory Cooper is one of 12 recipients of the International 2014 Henry Viscardi Achievement Awards. These awards honor leaders in the disability community who have had a major impact on shaping attitudes, raising awareness, and im-

Continued on page 10

HONORABLE MENTIONS

Continued from page 9

proving the quality of life of people with disabilities.

In addition to the Viscardi award, Cooper received the 2014 Joseph F. Engleberger Award for Application in Robotics. The award, the robotics industry's highest honor, was presented to him in June at the 45th International Symposium on Robotics in Munich, Germany.

Cooper, who has a spinal cord injury himself and uses a wheelchair for mobility, is the director of VA's Human Engineering Research Laboratories, where investigators develop and test innovative technologies



Dr. Rory Cooper

related to wheelchairs and mobility. He is also a distinguished

professor at the University of Pittsburgh, and is the co-director of the National Science Foundation's Quality of Life Technology Engineering Research Center.

Dr. Michael Gaziano inducted into the Royal College of Physicians—The London-based Royal College of Physicians, an organization that has supported and represented physicians for nearly 500 years, has inducted Dr. Michael Gaziano into its ranks. Gaziano is an internationally recognized chronic disease epidemiologist and trialist.

He is one of the directors of the Massachusetts Veterans Epidemiology Research and Information

Continued on page 11

A CHAT WITH OUR EXPERTS

Continued from page 9

lot of work going on involving VA Community Living Centers [CLCs—formerly VA nursing homes]. Researchers are developing a toolkit for measuring cultural transformation at CLCs, which is a big initiative that's been going on for several years, and developing a roadmap for best practices in CLC resident-centered care, including the assignment of resident staff.

There's a long-term-care CREATE [VA HSR&D's Collaborative Research to Enhance and Advance Transformation and Excellence]. The CREATE has four projects underway to address Geriatric and Extended Care's interest in transforming long-term care to meet Veterans' needs: the use of medical foster homes; accelerating discharge from CLCs; the impact of staff training to reduce hospitalization; and, again, tools for CLC culture change.

Those are some things that are underway, on the horizon, and really address things we all recognize as important.

Shay: A kind of cross-cutting issue is the whole idea of shared decision-making and advance care planning. That certainly is something that our office has a role in, and several GRECCs have roles in. With VHA's focus on patient-centered care, that's going to continue to be important. Our office's website has tools for shared decision-making that help Veterans and families explore their options for long-term services and settings.



NOTEWORTHY PUBLICATIONS

Family involvement improves end-of-life-care—At the end of their lives, most patients lose the ability to make decisions about their own care. When that happens, and even before, the families of many patients get involved in decision-making on their loved ones' behalf.

Researchers with the division of geriatrics at the San Francisco VA Medical Center looked at the records of 34,290 Veterans who died at any of 146 VA facilities between 2010 and 2011. They divided those Veterans into two groups: those whose records showed that the Veteran's family had had documented discussions with his or her health care team in the last month of life, and those whose families had no involvement.

The researchers found that those Veterans whose families were involved in their care were more likely to have had a discussion about palliative care (care for patients with serious, chronic, and life-threatening illnesses that focuses on improving life and providing comfort) with their health care team. They were also more likely to have been visited by chaplains, and to have had a do-not-resuscitate order on file. Such orders instruct doctors, nurses, and emergency

Continued on page 11

NOTEWORTHY PUBLICATIONS

Continued from page 10



A VA study explored the impact that family involvement has on end-of-life care. (Photo: iStock)

medical personnel to not attempt emergency cardiopulmonary resuscitation should a patient's heartbeat or breathing stop.

Patients whose families were involved in their end-of-life care were not, however, more likely to die in either a hospice or palliative care unit than those whose families had no documented discussions with the patient's health care team in the last month of their lives. The researchers concluded that for vulnerable patients who may lack family and friends, clinicians should support early advance care planning so that these Veterans' end-of-life wishes can be known and followed. (*Journal of Pain and Symptom Management*, May 2, 2014, epub ahead of print.)

VA partners with Alzheimer's Association—VA cares for more than 300,000 Veterans with dementia, and a recent study points

to a promising new model to enhance the care and services they receive. Five VA sites partnered with nearby Alzheimer's Association chapters to deliver a program called Partners in Dementia Care to Veterans and their caregivers. The program integrates health care and community services. Benefits were seen in areas such as relationship strain, depression, and unmet need, especially



Nearly 200 Veterans and their caregivers completed a recent study of the Partners in Dementia Care program. (Photo: iStock)

for Veterans with greater impairments. Further study is underway to learn how the program can be put into action most effectively; researchers are looking at practical issues such as cost, financing, reimbursement, marketing, and integration of the program with existing services. (*Alzheimer's Research and Therapy*, Feb. 28, 2014)

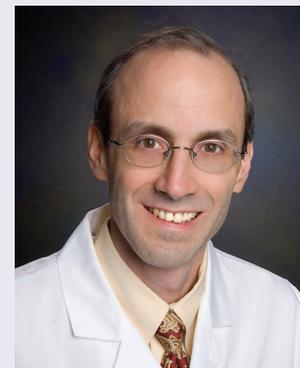
Continued on page 12

HONORABLE MENTIONS

Continued from page 10

Center (MAVERIC), located at the VA Boston Healthcare System. He is also one of the national principal investigators for the Million Veteran Program. At the Boston VA, he runs a preventive cardiology program with an associated fellowship.

In addition to his VA work, Gaziano is a professor of medicine at Harvard Medical School, serves as the chief of the division of aging at Brigham and Women's Hospital, and is principal investigator on the ongoing Physicians' Health Study (PHS). PHS is a large-scale mail-based cohort comprised of 29,000 physicians who have been followed for up to 30 years.



Dr. Michael Gaziano

For more "honorable mentions" see our website:
www.research.va.gov/pubs/varqu

OTHER RECENT PUBLICATIONS

PTSD is negatively associated with physical performance and physical function in older overweight military Veterans. KS Hall et al. *Journal of Rehabilitation Research and Development*, May 2014

Performance-based assessment of falls risk in older Veterans with executive dysfunction, BL Fischer et al. *Journal of Rehabilitation Research and Development*, May 2014.

Continued on page 12

OTHER RECENT PUBLICATIONS

Continued from page 11

Prisoner of war status, posttraumatic stress disorder, and dementia in older Veterans, O Meziab et al. *Alzheimers & Dementia*, June 2014

National evaluation of the effectiveness of cognitive behavioral therapy for insomnia among older versus younger Veterans, BE Karlin et al. *International Journal of Geriatric Psychiatry*, May 29, 2014 (epub ahead of print.)

Sensitivity of osteoporosis screening guidelines for eventual hip fracture in older male Veterans, JM Pavon et al. *BoneKEY Reports*, May 7, 2014

Helping Invested Families Improve Veterans' Experiences Study (HI-FIVES): Study design and methodology, CH Van Houtven et al. *Contemporary Clinical Trials*, May 14, 2014

Advance directive completion by elderly Americans: a decade of change, MJ Silveira et al. *Journal of the American Geriatric Society*, Apr. 2014

Galectin-3 is independently associated with cardiovascular mortality in community-dwelling older adults without known cardiovascular disease: The Rancho Bernardo Study, LB Daniels et al. *American Heart Journal*, May 2014

A pilot study of partial unweighted treadmill training in mobility-impaired older adults, MJ Peterson et al. *BioMed Research International*, 2014. Epub Feb. 19, 2014

Congestive heart failure self-management among US Veterans: The role of personal and professional advocates, *Patient Education and Counseling*, June 2014.



NOTEWORTHY PUBLICATIONS

Continued from page 11

Ocular tremor does not originate from head movements—In 2012, researchers at the Richmond VA Medical Center and Virginia Commonwealth University, led by Dr. Mark S. Baron, found that patients with Parkinson's disease (PD), even those with a recent diagnosis, displayed an "ocular tremor" that was not found in non-Parkinson's patients.

All of the 112 PD patients, whether on medication or not, showed an inability to maintain a stable fixed gaze when shown a target on a computer screen. Only two of the 60 healthy participants had the same problem, and one of those went on to develop PD symptoms within two years. The research team concluded, therefore, that ocular tremors are pervasive in PD—and could be an early warning sign of the movement disorder.

Other researchers looked at the results of that study and hypothesized that the inability to maintain a stable fixed gaze was not caused by ocular tremors but instead by movements of the subjects' heads. In response, the Richmond team conducted an additional study that



Richard Hutton, who has Parkinson's disease, receives care at the Philadelphia VAMC. VA researchers studied a type of gaze abnormality as a possible early warning sign of the disease. (Photo by Tommy Leonardi)

looked at eye movements in eight Veterans with Parkinson's disease both with their heads free, and with their heads restrained by a head-holding device and a dental impression bite plate.

They found that ocular tremor was observed in all of the study participants, and that it was not influenced by the head being either free or fixed. The team's findings therefore supported their initial finding that ocular tremor may be a reliable clinical biomarker for PD. (*Parkinsonism and Related Disorders*, July 2014)



For more noteworthy publications see the online version of VARQU at: www.research.va.gov/pubs/varqu