VA RESEARCH CURRENTS

NEWS FOR THE RESEARCH COMMUNITY OF THE U.S. DEPARTMENT OF VETERANS AFFAIRS • APRIL 2007

VA clinical trial casts doubt on routine use of angioplasty, stenting

major U.S.-Canadian trial found that percutaneous coronary intervention (PCI)—typically, the use of balloon angioplasty plus stenting—did little to improve outcomes for 2,287 patients with stable coronary artery disease who also received optimal drug therapy and underwent lifestyle changes. Results of the study, led by VA's Cooperative Studies Program and the Canadian Institutes of Health Research (CIHR), were presented March 27 at the American College of Cardiology meeting in New Orleans and published April 12 in the *New England Journal of Medicine*.

"We wanted to determine whether there was a clinical benefit to the combination of angioplasty and medical therapy, compared to medical therapy alone. We did not find such a benefit," said lead author William E. Boden, MD, a consultant at the Western New York VA Healthcare Network. Boden is also medical director of cardiovascular services for Kaleida Health; chief of cardiology for Buffalo General and Millard Fillmore hospitals; and professor

see HEART on pg. 7

A cardiac catheterization lab at the University of Rochester Medical Center, one of 35 non-VA sites that took part along with 15 VA medical centers in the "COURAGE" trial.



Drug helps PTSD nightmares

A generic drug already used by millions of Americans for high blood pressure and prostate problems has been found to improve sleep and lessen trauma nightmares in veterans with posttraumatic stress disorder (PTSD).

"This is the first drug that has been demonstrated effective for PTSD nightmares and sleep disruption," said Murray A. Raskind, MD, executive director of the mental health service at the Veterans Affairs Puget Sound Health Care System and lead author of a study appearing April 15 in *Biological Psychiatry*.

The randomized trial of 40 veterans compared a nightly dose of prazosin with placebo over eight weeks. Participants continued to take other prescribed medications over the course of the trial.

see PTSD on pg. 2

New book offers insights, advice for researchers writing proposals

What are the benefits of including a "logical model" in your research proposal? How thorough must your literature review be? What points should be included in

your plan for managing data?

These are among the myriad questions covered in-depth in "Writing Effective Research Proposals," a new164-page soft-cover manual written in lively, easy-toread prose by Lee Sechrest, PhD, professor emeritus in psychology at the University of Arizona and longtime reviewer for VA's Health



Research and Development Service (HSR&D) and the National Center for Health Services Research, now known as AHRQ; and

PTSD (from pg. I)

At the end of the study, veterans randomized to prazosin reported significantly improved sleep quality, reduced trauma nightmares, a better overall sense of well being, and an improved ability to function.

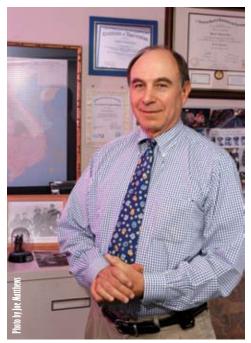
"These nighttime symptoms are heavily troublesome to veterans," said Raskind, who also is director of VA's VISN 20 Mental Illness Research, Education and Clinical Centers program. "If you get the nighttime symptoms under control, veterans feel better all around."

Raskind, also a professor of psychiatry and behavioral sciences at the University of Washington, estimates that of the 10 million U.S. veterans and civilians with PTSD, about half have trauma-related nightmares that could be helped with the drug.

Participants were given 1 mg of prazosin per day for the first three days. The dose was gradually increased over the first four weeks to a maximum of 15 mg at bedtime. The average dose of prazosin in the trial was 13.3 mg. By comparison, typical prazosin doses for controlling blood pressure or treating prostate problems range from 3 mg to 30 mg per day in divided doses.

The drug did not affect blood pressure compared to placebo, though some participants reported transient dizziness when standing from a sitting position during the

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Murray Raskind, MD, of the Puget Sound VA has found an effective treatment for nightmares associated with PTSD.

first weeks of prazosin titration. Other occasional side effects included nasal congestion, headache, and dry mouth, but these were all minor, according to the authors.

"This drug has been taken by many people for decades," said Raskind. "If there were serious long-term adverse side effects, it is likely we would know about them by now."

The relatively small size of the study was due to the easy availability of this generic drug, Raskind said. "If you are doing a study with a new drug, the only way people can get it is to be in the study. With prazosin, we have approximately 5,000 veterans with a PTSD diagnosis taking it already in the Northwest alone. So we had to find veterans with PTSD who were not [taking it]."

For treating PTSD, prazosin costs 10 to 30 cents a day at VA contract prices. It is not a sedating sleeping pill, emphasized Raskind. "It does not induce sleep. But once you are asleep, you sleep longer and better." And better sleep can make a big difference. "This drug changes lives," Raskind said. "Nothing else works like prazosin." Trauma nightmares appear to arise during light sleep or disruption in REM sleep, whereas normal dreams—both pleasant and unpleasant— occur during normal REM sleep. Prazosin works by blocking the brain's response to the adrenaline-like neurotransmitter norepinephrine. Blocking norepinephrine normalizes and increases REM sleep. In this study, veterans taking prazosin reported that they resumed normal dreaming.

One dose of prazosin works for 6 to 8 hours. Unlike similar drugs, prazosin does not induce tolerance; people can take it for years without increasing the dose. But when veterans stop taking it, Raskind said, the trauma nightmares usually return.

Aside from the VA-funded study he just published, Raskind is working on three larger studies of prazosin. One, a VA cooperative study slated to start this month, will enroll about 300 veterans at 12 VA facilities. The second, a collaborative study with Walter Reed Army Medical Center and Madigan Army Medical Center, will enroll active-duty soldiers who have trauma nightmares. The third study, funded by the National Institute of Mental Health, will look at prazosin in the treatment of civilian trauma PTSD.

Facts on PTSD and VHA

• VHA operates approximately 200 specialized PTSD programs.

• Of the 631,000 veterans from OIF/OEF who have been discharged from the service who have seen combat duty since FY 2003, 34,000 (5%) have received a possible diagnosis of PTSD.

• VA has hired 100 veterans of the war in Iraq and Afghanistan to serve as counselors at its Veterans Readjustment Counseling Centers.

VA investigators in the media

Charles P. O'Brien, MD, PhD, and **Anne Childress, PhD,** of the Philadelphia VA Medical Center were among the featured experts in HBO's recent "Addiction" project, which included films, a website and a book. The effort was produced in partnership with the Robert Wood Johnson Foundation, the National Institute on Drug Abuse, and the National Institute on Alcohol Abuse and Alcoholism.

James Dale, MD, of the Memphis VA Medical Center appeared in an April 1 CBS Sunday Morning segment titled "A Shot in the Arm," about the risks and benefits of vaccines. Dale holds the patent for StrepVax, a Streptococcus vaccine now in clinical trials.

Matthew J. Friedman, MD, PhD, and Paula Schnurr, PhD, executive director and deputy executive director, respectively, of VA's National Center for Postraumatic Stress Disorder in White River Junction, Vt., were featured in a Feb. 28 National Public Radio broadcast about their study comparing prolonged exposure therapy to present-centered therapy for female veterans with PTSD.

Steven G. Scott, DO, director of VA's Polytrauma Center in Tampa, was interviewed by correspondent Bob Woodruff as part of a Feb. 28 ABC News Now special report on traumatic brain injury among recently returned veterans.

Data-security training

The latest information on datasecurity training for VA researchers including the new Web course that must be completed by June 12, 2007—is available on the VA research website at www. research.va.gov/resources/data-security. Questions on data security and privacy can be send to ResearchData@va.gov.



Subburaman Mohan, PhD (right), and research associate Bouchra Edderkaoui, PhD, of the Loma Linda VA examine osteoclast cells as part of their study on a gene that appears to regulate bone density.

Loma Linda team identifies gene tied to bone density

In a study appearing online this month in *Genome Research*, a team at the Loma Linda VA discovered that a gene called DARC negatively affects bone density in mice and may play an important role in osteoporosis risk.

"If our finding using the mouse model is confirmed in humans, then we may be able to develop therapies that are based on inhibiting the function of the DARC gene," said Subburaman Mohan, PhD, a senior scientist at the Loma Linda VA and professor of medicine and biochemistry at Loma Linda University. "We will also be able to develop genetic screens to identify individuals who are at risk for osteoporosis."

Low bone mineral density (BMD)—the main clinical indicator of osteoporosis—is influenced by environmental factors such as diet and exercise and by genetic factors. Previous studies had pointed to a region on mouse chromosome 1 as containing a gene responsible for BMD regulation. Mohan and colleagues honed in on this region of chromosome 1 and found a gene called DARC (Duffy Antigen Receptor for Chemokines) that showed different levels of expression in mice with higher BMD. The analogous chromosomal region in humans has been shown to influence osteoporosis.

The protein encoded by DARC binds to chemokines—small signaling proteins involved in osteoclast formation. Osteoclasts break down bone in a process called bone resorption, releasing minerals such as calcium, phosphate, and magnesium into the bloodstream and reducing BMD.



Recent publications and presentations by VA investigators

Below is a brief sampling of recent publications and presentations by VA investigators, based on notifications received by R&D Communications (see reporting requirements at www.research. va.gov/resources/ policies/pub_notice.cfm.) Every attempt is made to present a cross section of investigators, topics and medical centers. Only VA-affiliated authors are listed here, due to space constraints.

"Alteration of NPY and Y1 Receptor in Dorsomedial and Ventromedial Areas of Hypothalamus in Anorectic Tumor-Bearing Rats." William T. Chance, PhD; Ramesh Dayal, MS. **Cincinnati.** *Peptides*, Feb. 2007.

"The Attitudes towards Loss of Hearing Questionnaire (ALHQ): A Comparison of Paper and Electronic Formats." Gabrielle Saunders, PhD; Anna Forsline, MA; Peter Jacobs, MS. **Portland.** *Journal of the American Academy of Audiology*, Jan. 2007.

"Bringing the War Back Home." Karen H. Seal, MD, MPH; Charles Marmar, MD. **San Francisco**, *Archives of Internal Medicine*, March 12, 2007.

"Developing a Fundable Research Grant." Connie Uphold, PhD, RN. Gainesville. Annual Conference of the National Organization of Nurse Practitioner Faculties. April 13-14, 2007.

"Dietary Grape Seed Proanthocyanidins Inhibit UVB-Induced Oxidative Stress and Activation of Mitogen-Activated Protein Kinases and Nuclear Factor-KappaB Signaling in In-Vito SKH-1 Hairless Mice." Santosh K. Katiyar, PhD. **Birmingham.** *Molecular Cancer Therapy*, March 2007.

"Do Orders Limiting Aggressive Treatment Impact Care for Acute Myocardial Infarction?" Tiffany A. Radcliff, PhD; Aram Dobalian, PhD, JD; Cari Levy, MD. **Den-** **ver, Sepulveda.** *Journal of the American Medical Directors Association*, Feb. 2007.

"Education Predicts Quality of Life Among Men With Prostate Cancer Cared for in the Department of Veterans Affairs." Sara J. Knight, PhD; Stacey L. Hart, PhD; Christopher J. Kane, MD. **San Francisco.** *Cancer*, March 22, 2007.

"Extracellular Superoxide Production by Enterococcus Faecalis Promotes Chromosomal Instability in Mammalian Cells." Mark M. Huycke, MD. **Oklahoma City.** *Gastroenterology*, Feb. 2007.

"Heterogeneity in Hip Fracture Patients: Age, Functional Status, and Comorbidity." Joan D. Penrod, PhD; Albert L. Siu, MD, MSPH. **Bronx.** *Journal of the American Geriatrics Society*, March 2007.

"The Impact of Pharmacist-Managed Oral Anticoagulation Therapy in Older Veterans." I. O. Poon, PharmD, BCPS; U. K. Braun, MD, MPH. **Houston.** *Journal of Clinical Pharmacy and Therapeutics,* Feb. 2007.

"Kinematic and Kinetic Comparisons of Transfemoral Amputee Gait Using C-Leg and Mauch SNS Prosthetic Knees." Ava D. Segal, MS; Michael S. Orendurff, MS; Glenn K. Klute, PhD; Martin L. McDowell, CPO; Janice A. Pecoraro, RN; Jane Shofer, MS; Joseph M. Czerniecki, MD. **Seattle.** *Journal of Rehabilitation Research and Development*, Nov.-Dec. 2006.

"Missing Data on the Center for Epidemiologic Studies Depression Scale: A Comparison of 4 Imputation Techniques." Douglas Ried, PhD; Bruce Vogel, PhD. **Gainesville.** *Research in Social and Administrative Pharmacy*, March 2007.

"Pharmaceutical Company Payments to Physicians: Early Experiences with Disclosure Laws in Vermont and Minnesota." Joseph S. Ross, MD, MHS. **Bronx.** *Journal of the American Medical Association*, March 21, 2007.

"Physiologic Correlates of Perceived Therapist Empathy and Social-Emotional Process during Psychotherapy." Scott P. Orr, PhD. **Manchester.** *Journal of Nervous and Mental Disease*, Feb. 2007.

"Predictors of Overall and Cancer-Free Survival of Patients with Localized Prostate Cancer Treated with Primary Androgen Suppression Therapy: Results from the Prostate Cancer Outcomes Study." Mark Garzotto, MD; Tomasz M. Beer, MD. **Portland.** *Journal of Urology,* April 2007.

"Press Releases By Academic Medical Centers: Not So Academic?" Steven Woloshin, MD, MS; Lisa Schwartz, MD, MS. **White River Junction.** 30th Annual Meeting of the Society of General Internal Medicine, April 27, 2007.

"Prevalence of Obesity and High Blood Pressure in Veterans with Spinal Cord Injuries and Disorders." Frances M. Weaver, PhD; Eileen G. Collins, PhD; Bridge Smith, PhD; David Gater, MD, PhD. **Hines, Ann Arbor.** *American Journal of Physical Medicine and Rehabilitation,* Jan. 2007.

"Screening Mammography for Women 40 to 49 Years of Age: A Clinical Practice Guideline from the American College of Physicians." Kevin B. Weiss, MD, MPH: Douglas K. Owens, MD, MS. **Palo Alto.** *Annals of Internal Medicine*, April 3, 2007.

"Should Mitigating Comorbidities Be Considered in Assessing Healthcare Plan Performance in Achieving Optimal Glycemic Control?" Leonard M. Pogach, MD, MBA; Donald R. Miller, ScD; David Aron, MD. **East Orange, Bedford, Cleveland.** *American Journal of Managed Care,* March 2007.



VA RESEARCH CURRENTS/APRIL 2007

PROPOSALS (from pg. I)

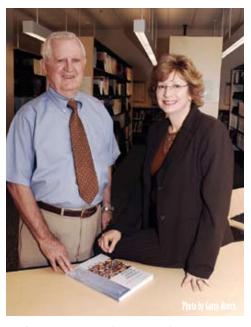
Judi Babcock-Parziale, PhD, a research health scientist in the Southwestern Blind Rehabilitation Center at the Southern Arizona VA Health Care System.

The book, supported through HSR&D, was written with VA's funding process in mind. But it contains a storehouse of advice and insights likely to help researchers submitting proposals to any funding agency. It addresses topics such as identifying the research problem; understanding peer review; developing an overall research strategy; identifying and quantifying variables; specifying outcomes; working up a data analytic plan; and developing a budget and financial justification.

The guide has been distributed to directors of HSR&D Centers of Excellence and REAPs, as well as to HSR&D Career Development awardees. It was also given to attendees at the authors' workshop on proposal-writing at the HSR&D national meeting in February—a session Sechrest and Babcock-Parziale have done for 13 years—and is available for purchase through the Public Interest Research Service (email Public Interest.ResearchSvcs@ gmail.com).

"We've had some very nice feedback from a wide range of readers," notes Babcock-Parziale, adding that readers seem to appreciate the book's informal style and practical approach to common challenges. "A number of investigators have emailed and told us they refer to the book often when writing a grant. The book serves as a guide to remind investigators not only about 'how' to write their proposal but 'what' to write for each section of the grant."

As she and Sechrest point out in their preface: "The vagaries of the scientific review process and the funding process within an agency are such that even good proposals may not get completely favorable, let alone laudable, reviews, and even proposals that



Lee Sechrest, PhD, and Judi Babcock-Parziale, PhD, are the authors of "Writing Effective Research Proposals."

are well-reviewed on scientific grounds may ultimately not get funded because of agency priorities, funding limitations, and other reasons. ... What we think is possible is to write proposals that will be effective in the sense that they will be read carefully, will be taken seriously and will be accorded respect in the review process and in the ultimate assigning of merit scores."

VA Research Currents interviewed Babcock-Parziale to learn more about the book and the process of writing effective proposals.

RC: How have your workshops at HSR&D national meetings helped shape the book?

JBP: We are reminded many times that investigators have to deal with realities, not just theory. For example, we have had discussions centered on the notion that plans for statistical analysis must conform reasonably well to standard practice in the field, even if potentially better approaches may be available.

RC: The book offers tips on effectively presenting study design and methodology in grant proposals, but also reminds research-

ers about some fundamental principles in research design. Was it hard to focus only on issues related strictly to grant-writing?

JBP: It was hard to put aside issues having to do with methodological choices, and we did not succeed entirely in doing so. It is difficult to write about how to present some design issue without commenting on why it would be better to resolve it in one way rather than another.

RC: What do you see as the most common misconceptions researchers have about the proposal-review process?

JBP: Probably the most prevalent mistake is to assume that one's proposal will be reviewed by one or more persons with expertise in the exact topic area addressed by the proposal. That leads to the assumption that any issue overlooked in the proposal will be overlooked by reviewers who will, of course, understand that [the applicant] would obviously do the right thing. Persons writing proposals often just do not comprehend the appetite of reviewers for details.

RC: To what extent can mentors help younger investigators avoid some of the pitfalls described in your book?

JBP: Without doubt, senior investigators make the same mistakes as novices. In fact, we find ourselves making the same mistakes. They are hard to avoid. Research proposals are complex, and space to deal with issues is limited. A high level of awareness is necessary to sort through everything and make sure all the important issues are covered. Mentors can, we think, be very helpful, as they will have written proposals and many will have participated in review.

RC: How can other colleagues play a role in helping investigators optimize their proposals?

JBP: We are not familiar with the review



Duct tape: Does it really help warts?

Let uct tape may have hundreds of household uses—from patching hoses to repairing old books—but is curing warts one of them?

Not likely, according to a study conducted by the Minneapolis VA Center for Chronic Disease Outcomes Research and published in last month's Archives of Dermatology. The study, led by Rachel Wenner, MD, formerly a fellow at the center, sought to tease out the truth amid contradictory research findings on duct tape and warts. A 2002 study published in the Archives of Pediatrics and Adolescent Medicine found duct tape more effective than cryotherapy (freezing) for curing warts, and caused a bit of a stir in the media and among parents. But a 2006 study in the same journal reported that duct tape was no better than placebo.

Experts aren't sure why duct tape might work, but one theory is that it somehow stimulates the body's immune system to attack the virus that causes warts. Another theory focuses on the tape's adhesive properties.

In the VA study, 80 adults with warts were treated with either duct tape or moleskin—a protective, but not curative, treatment, intended as a control. The researchers used clear duct tape—not the more familiar gray type—to facilitate double-blinding.



Duct tape—at least the transparent type failed to prove itself an effective treatment for warts in a study of 80 adults at the Minneapolis VA Center for Chronic Disease Outcomes Research. At right is study leader Rachel Wenner, MD.



After a two-month treatment regimen, only about 1 in 5 patients in either group had complete remission of their target wart.

One explanation for the duct tape's failure to perform, said the authors, may be the type of tape used. The researchers used transparent duct tape based on information from the manufacturer indicating it contained the same rubber-based adhesive as the standard gray tape, the type used by researchers in the 2002 pediatric study. But the manufacturer later stated that its clear tape in fact used an acrylic-based adhesive, similar to that of the moleskin.

Senior author Erin M. Warshaw, MD, MS, said using the clear tape was "important for blinding purposes," but that her team would possibly consider future studies with standard duct tape to once again test the product's potential as a wart treatment.

Next ORD field conference call: Monday, May 21, 2007 • 1:30 pm EST Dial 1-800-767-1750 (access code: 17323)

GENE (from pg. 3)

To confirm the involvement of DARC in regulating BMD, Mohan's team characterized the skeletal phenotype of mice with and without the DARC gene. The DARCknockout mice showed increased BMD and lower bone resorption compared with mice possessing the DARC gene. Mohan's team also showed that antibodies to the DARC protein, which blocked its action, inhibited the formation of osteoclasts.

According to Mohan, the DARC gene may underlie racial variations in osteoporosis risk. "There are interesting differences between African Americans and Caucasians that could be associated with this gene. African Americans exhibit significantly higher BMD compared to Caucasians. Also, African Americans generally do not have the Duffy protein on red blood cells, while Caucasians do. The potential genetic association between DARC-gene variation and these traits in humans certainly makes it worthy of further investigation."

Mohan's team collaborated with researchers at Jackson Laboratory in Maine and the New York Blood Center. Funding was provided by the Department of Defense.

HEART (from pg. I)

of medicine and public health at the State University of New York at Buffalo School of Medicine and Biomedical Sciences.

Boden added that while several smaller studies had been done, there was an "absence of information" in this area and that the VA-led trial was the largest yet to test the benefits of PCI over optimal medical therapy alone for stable artery disease.

Trial included 50 sites in U.S. and Canada

The American Heart Association recommends treating stable coronary artery disease with medications and lifestyle changes. Still, the great majority of PCIs performed in the U.S. are in those with stable disease. Overall, the procedure accounts for more than \$23 billion annually in U.S. health care costs.

The study, named "Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation" (COURAGE), involved patients at 15 VA medical centers and 35 non-VA U.S. and Canadian hospitals. Participants—most of them Caucasian males, with an average age of 62—had at least one coronary artery that was more than 70percent blocked. They experienced regular chest pain, or angina, at least several times per week. About 38 percent had a history of heart attack, 33 percent had diabetes, 71 percent had high cholesterol, and 67 percent had high blood pressure.

All participants received optimal medical therapy (OMT): medications to lower blood pressure and cholesterol and prevent clots, along with lifestyle programs for smoking cessation, physical activity, and nutrition.

Half the study volunteers also underwent percutaneous coronary intervention (PCI), a procedure in which an interventional cardiologist clears plaque from a blocked artery. For almost all the PCI patients, this meant angioplasty, in which a balloon-



Palo Alto researcher studies aging and aviation Joy Taylor, PhD, of the Stanford/VA Aging Clinical Research Center in Palo Alto, oversees a flight simulation test. She recently published findings in *Neurology* from a study involving 118 pilots, aged 40 to 69, showing that expert knowledge and experience may compensate for age-related declines in cognitive performance.

tipped catheter is used to open up the artery, plus a stent—a wire-mesh tube placed to keep open the affected artery. Because drug-eluting stents, which are coated with medications that help prevent scarring, were not approved until the trial was nearly over, only a few COURAGE patients received this type. But studies have shown little difference between coated and non-coated stents for the prevention of heart attacks and deaths.

No difference between groups in deaths, heart attacks, strokes

At a median follow-up of almost five years, the rates of death, nonfatal heart attack, stroke, and hospitalization for heart disease were the same in the two study groups: those who received only OMT, and those who received PCI plus OMT. There were also no differences between the groups in cholesterol levels, blood pressure levels, or blood-sugar control. The groups also made lifestyle changes at similar rates: After five years, 75 percent of patients in both groups were following the recommended diet, and about 40 percent were getting regular exercise. The PCI group was more likely to report relief from angina throughout most of the follow-up period, but this difference disappeared over five years of follow-up.

"People assume that once you have PCI, it's curative," said Boden, "but I think the best we can say is that it's palliative." He also pointed to the relatively good outcomes of those who did not undergo the cardiac procedure: "Fully two-thirds of patients in the medical therapy group ultimately became symptom-free and never required an intervention."



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PROPOSALS (from pg. 5)

practices of all VA installations, but most have an internal review process that begins with a review conducted by the local research and development committee. Many of the larger sites perform a rigorous internal review, and proposals must be approved locally before they are submitted to one of the four VA research services. The local reviews are likely to be helpful in catching typos, identifying unclear concepts, and making suggested edits or additions.

Having additional outside experts look at a proposal may help when specific expertise is lacking within a VA station. Also, if the research topic is not wellknown or understood, it is helpful to have reviewers from other disciplines read the proposal. If they do not understand the study's purpose, specific aims, or other fairly obvious aspects of the proposal, the investigator has "a lot of explaining to do." A true test of a well-written proposal is to have an investigator who is unfamiliar with the topic or field of inquiry read the proposal, understand the conceptual and analytic model, and respond with few questions about the study's purpose, methods or importance.

RC: To what extent is poor writing a culprit in failed proposals? Would some scientists be well-advised to invest in a professional editor to whip their proposals into shape?

JBP: A few blunders in writing style will not hurt a great deal, although they will certainly not help. It may be useful for some investigators to get some editorial help, but some reviewers have an aversion to proposals that look "manufactured." Editors can be helpful in improving organization, making headings consistent, taking out unnecessary verbiage, and so on, but editors who try to "slick up" a proposal too much may do a disservice.

RC: How helpful is the feedback that investigators receive from funding agencies?

JBP: In general, researchers in and outside VA get good feedback. VA HSR&D is particularly good at providing thorough reviews, which include the detailed comments prepared by two anonymous reviewers. Outside VA, the function of review has probably been slighted in recent years with the practice of triaging proposals, since that eliminates the discussion that often brings out other problems but may also help resolve those problems noted in reviews.

RC: Now that you've written this book, will you still do your workshops at the HSR&D national meeting?

JBP: We plan to. Our intent has always been to have participants read the book first and then come to the annual meeting prepared to talk about their own specific problems and issues not covered adequately in the book. We look forward to that.

HEART (from pg. 7)

Peter Liu, MD, scientific director of the CIHR Institute of Circulatory and Respiratory Health, added, "The findings suggest that if a patient with heart disease is doing well, the latest available medications are very effective and there is no need for PCI."

The VA-CIHR study, conducted between 1999 and 2004, received additional support from pharmaceutical and biotechnology companies that contributed funding, drugs and medical devices or supplies.