THE CANCER LETTER

Vol. 35 No. 17
May 1, 2009

PO Box 9905 Washington DC 20016 Telephone 202-362-1809

Undeterred By Randomized Trial Results, AUA Calls For Baseline PSA At Age 40

By Paul Goldberg

The American Urological Association hasn't allowed data from randomized trials to shake its belief in screening for prostate cancer.

Less than a month after the New England Journal of Medicine published trial results that point to overdiagnosis and low or no benefit from screening men over the age of 50, AUA rolled out a "best practice statement" that suggests that screening should begin even earlier—at age 40.

"The future risk of prostate cancer is closely related to a man's PSA score; a baseline PSA level above the median for age 40 is a strong predictor of prostate cancer," states the guideline presented at the AUA annual meeting

(Continued to page 2)

White House:

Obama Reiterates Support For Doubling Budgets For Cancer Research, Other Science Agencies

By Kirsten Boyd Goldberg

President Barack Obama reiterated his support for doubling funding for cancer research in a speech at the National Academy of Sciences on April 27.

But it was his reiteration of his March 9 executive memorandum to restore scientific integrity to government that received the longest and loudest applause from the audience of about 600 scientists at the NAS annual meeting in Washington.

"Under my Administration, the days of science taking a back seat to ideology are over," he said. "Our progress as a nation—and our values as a nation—are rooted in free and open inquiry. To undermine scientific integrity is to undermine our democracy. It is contrary to our way of life."

Under the memorandum, the White House Office of Science and Technology Policy, led by John Holdren, is charged with ensuring that federal policies are based on "the best and most unbiased scientific information," Obama said.

Obama announced a major policy goal: a call for the U.S. to spend "more than 3 percent" of the gross domestic product on research and development. In 2007, total spending on R&D was $368 billion, or about 2.7 percent of GDP. To reach Obama's goal, the U.S. would have to spend about $60 billion more per year on R&D, if the economy doesn't grow. He didn't state a timeframe to meet this goal.

In 1964, at the height of the Apollo program, U.S. spending on R&D

(Continued to page 4)

Skeptics Challenge Rationale For PSA Screening Guideline

(Continued from page 1)

April 28. "Such testing may not only allow for earlier detection of more curable cancers, but may also allow for more efficient, less frequent testing."

The recommendation places U.S. urologists in the position of advocating for the most aggressive screening measures despite questions about validity of PSA findings and its potential for doing harm. The move also makes observers wonder whether specialty groups that detect and treat cancer should be in the business of issuing screening guidelines.

"We must wonder whose interests are being served," said David Ransohoff, professor of medicine, cancer epidemiology and cancer prevention and control at the University of North Carolina Lineberger Comprehensive Cancer Center. "Professional subspecialty organizations obviously have critically important expertise that must be considered in any guidelines-making. But such organizations may also represent the professional and economic interests of their members, which may conflict with what is in the best interest of patients and the public."

Outside genitourinary oncology, specialty groups that offer cancer screening tests seem reluctant to give them up. Recently, the American College of Gastroenterology reversed its prior position of accepting multiple strategies for screening for colon cancer.

In March 2008, specialty groups involved in screening for colon cancer agreed to harmonize their guidelines. This move was intended to give something to all groups in order to induce patients to get some form of screening.

However, in March 2009, ACG backed away from this united front, issuing a guideline stating that colonoscopy every 10 years after age 50 is the preferred strategy.

Statement "Directly Contrasts" Other Guidelines

In a statement April 27, AUA acknowledged that its best-practice statement "directly contrasts recent recommendations issued by other major groups." The society's recommendation cites two papers that suggest that men in their 40s with a PSA value above the median—0.6 to 0.7 ng/mL—are at higher risk for prostate cancer.

The studies are:

—Fang, J., Metter, E.J., Landis, P., et al: Low levels of prostate-specific antigen predict long-term risk of prostate cancer: results from the Baltimore Longitudinal Study of Aging. Urology, 58: 411, 2001

—Loeb, S., Roehl, K.A., Antenor, J.A., et al: Baseline prostate-specific antigen compared with median prostate-specific antigen for age group as predictor of prostate cancer risk in men younger than 60 years old. Urology, 67: 316, 2006

Critics say this rationale is typical of a guideline based on risk rather than outcome.

"They refer to papers that simply describe an elevated risk in certain categories of men, depending on their PSA or change in PSA," said Barnett Kramer, director of the NIH Office of Medical Applications of Research and one of the investigators on the NCI-sponsored Prostate, Lung Colorectal and Ovarian Cancer Screening Trial. "That is the type of criteria, which I consider insufficient for making a screening recommendation, but it's the same type of criterion that was used to make the original recommendation in the 1990s, and that led to the current pseudoepidemic of prostate cancer."

A recently published U.S. randomized trial showed that the death rate from prostate cancer after seven to 10 years of follow-up remained unchanged.

A European study found a slight benefit that came at an high cost of overdiagnosis: 1,410 men would need to be screened and 48 additional cases of prostate cancer treated in order to prevent one death. The results of these trials were published in the March 26 issue of The New England Journal of Medicine (The Cancer Letter, March 20).

THE CANCER LETTER

® The Cancer Letter is a registered trademark.

Editor & Publisher: Kirsten Boyd Goldberg
Editor: Paul Goldberg

Editorial: 202-362-1809 Fax: 202-379-1787
PO Box 9905, Washington DC 20016
Letters to the Editor may be sent to the above address.

Subscriptions/Customer Service: 800-513-7042
PO Box 40724, Nashville TN 37204-0724
General Information: www.cancerletter.com

Subscription $385 per year worldwide. ISSN 0096-3917. Published 46 times a year by The Cancer Letter Inc. Founded Dec. 21, 1973, by Jerry D. Boyd.

"I think it's particularly important to look for health outcomes at this point, given the recent publication of the randomized controlled trials, one of which is showing no benefit, and the other is showing at best a small absolute benefit, but considerable overdiagnosis, overtreatment and adverse effects of treatment," Kramer said.

Formulating PSA screening guidelines is particularly challenging, because the test is not clearly predictive, Kramer said. "When formulating screening guidelines, it's always useful to have an understanding of the natural history of the tumors that are detected by the program," he said. "At this point, we don't, since all of our methods to predict the natural history of screen-detected cancers are imprecise and crude."

Looking over the list of members of the panel that drafted the AUA statement, Otis Brawley, chief medical officer of the American Cancer Society, is puzzled by the outcome.

"These are smart people," Brawley said. "Where in the world did this come from? It's based on one small study that talks about diagnosis of cancer. We need to get away from studies on how to diagnose cancer, and start getting into studies to figure out if early detection, diagnosis, and aggressive treatment of a particular cancer saves lives.

"I am concerned that they have gravitated to a relatively small body of literature that suggests that the PSA at the age of 40 is somewhat predictive of whether one is at risk of prostate cancer later on," Brawley said. "I am concerned that the adoption of this recommendation will cause a lot of guys to be overly concerned that they are at risk for prostate cancer.

"The word that I have heard used is a 'previvor,' as opposed to a survivor. Screening or baselines at age 40 will create a group of men labeled 'at risk.' This has the potential to create problems with insurability, and other social issues," Brawley said.

To a great extent, this is a systemic problem in urology and other subspecialties, critics say.

"The one thing I continue to be concerned about is the lack of primary care medicine and epidemiology expertise on consensus panels," Brawley said. "These consensus panels tend to be overwhelmingly comprised of subspecialists, who treat the disease, and because they treat the disease, they may sometime miss the big picture. For too long in urology, the emphasis has been on finding cancer. The emphasis has not been on saving lives."

The U.S. Preventive Services Task Force guidelines on prostate cancer recommend neither PSA nor digital rectal exam. The American Cancer Society has been moving away from recommending screening over the years, as evidence documenting overtreatment emerged.

"It's important to look at the perspective of the group that is making recommendations," Kramer said. "As a rule of thumb, generalist societies that have to manage all health conditions and weigh the risks and benefits of managing one health condition in comparison to others tend to be more conservative when it comes to cancer screening.

"Sometimes specialty societies and specialty advocacy groups have a different perspective, because they are dealing with a numerator rather than a denominator of all conditions," Kramer said.

The data from randomized trials of PSA didn't appear to weaken the support for screening on the part of patients' groups.

In a joint statement, 13 of these groups urged continuation of screening.

"Every man, regardless of his age, has the right to know whether he is at risk from prostate cancer, a disease that still kills over 28,600 American men every year, and many more around the world. We encourage all men to be proactive, and to seek out information and support in regard to their health," the statement read.

Further, the patient groups urged continuing reliance on PSA and DRE "until better options are available."

Ultimately, the controversy over screening raises questions about what constitutes guidelines and how they should be drafted.

Most so-called guidelines issued in the U.S. are actually reports of consensus panels that have no clear rules of operation and may be prone to political influence.

"There are over 200 guidelines-making organizations and over 2,000 guidelines, some of which directly disagree with each other," Ransohoff said. "To make guidelines right requires a lot of work, and a lot of explicit and transparent analysis, like the USPSTF has done historically."

In the existing free-for-all of guideline writing, it's not always obvious who is saying what and why. "What happens when guidelines disagree?" Ransohoff said. "How are patients, doctors, and payers to adjudicate—or even just to understand—the reasons for disagreement and what to do?"

A recent editorial in the Journal of American Medical Association urged physicians to disregard guidelines. "If all that can be produced are biased, minimally applicable consensus statements, perhaps

guidelines could be avoided completely," wrote Terrence Shaneyfelt and Robert Centor of the VA Medical Center in Birmingham, Ala. "Unless there is evidence of appropriate changes in the guideline process, clinicians and policy makers must reject calls for adherence to guidelines.

"Physicians would be better off making clinical decisions based on valid primary data."

Drug Development:

Provenge Met Approval Criteria In Phase III Trial, Sponsor Says

By Paul Goldberg

The prostate cancer vaccine Provenge was shown to increase survival in patients with advanced prostate cancer and has met the conditions for approval specified in the "special protocol assessment" agreement with FDA, the drug's sponsor said.

Dendreon Inc., the sponsor, presented the results of the 512-patient randomized phase III trial of Provenge (sipuleucel-T) in metastatic androgen-independent prostate cancer at the American Urological Association meeting April 28.

According to the company's presentation, the Kaplan-Meier curves separate early, and remained separated for more than four years following randomization.

The Hazard Ratio was 0.775, indicating a 22.5% reduction in the risk of death in the treatment arm. The P value was 0.032, exceeding the pre-specified level of statistical significance of less than 0.043.

The median survival difference between the arms was 4.1 months. The median survival in the treatment arm was 25.8 months versus 21.7 in the placebo arm. The percentage of patients alive at three years by Kaplan-Meier estimate was 31.7% compared to 23%, a 38% relative increase in three-year survival.

The safety profile of sipuleucel-T was found to be consistent with that reported in previous studies, the company said. The most common adverse events observed at a higher frequency in the treatment arm were chills, pyrexia or fever, and headache. The percentage of patients who experienced serious adverse events was comparable between the treatment arms.

The company said it plans to file an amended application with FDA in the fourth quarter of this year.

Two years ago, the company sought approval of the agent, but was told by FDA to complete a trial powered for survival.

White House:

Obama Urges Scientists To Spend Time In Classroom

(Continued from page 1)

reached it's highest level, 2.88 percent.

"We will not just meet, but we will exceed the level achieved at the height of the space race, through policies that invest in basic and applied research, create new incentives for private innovation, promote breakthroughs in energy and medicine, and improve education in math and science," he said. "This represents the largest commitment to scientific research and innovation in American history."

The president committed to doubling the budgets of three science agencies—the National Science Foundation, the Department of Energy's Office of Science, and the National Institute of Standards and Technology. He also announced the launch of the Advanced Research Projects Agency-Energy, a new Department of Energy organization modeled after the Defense Advanced Research Projects Agency. Also, Obama said he would triple the number of NSF graduate research fellowships.

The recent concern over swine flu "is one more example of why we can't allow our nation to fall behind" in science and medicine, Obama said. "Unfortunately, that's exactly what's happened.

"Federal funding in the physical sciences as a portion of our gross domestic product has fallen by nearly half over the past quarter century," he said.

"Because of recent progress—not just in biology, genetics and medicine, but also in physics, chemistry, computer science, and engineering—we have the potential to make enormous progress against diseases in the coming decades," Obama said. "And that's why my administration is committed to increasing funding for the National Institutes of Health, including $6 billion to support cancer research—part of a sustained, multi-year plan to double cancer research in our country."

Two days after Obama's speech at NAS, on his 100th day in office, Congress passed the fiscal 2010 budget that included the $6 billion in cancer research funding.

Obama's remarks referenced President Abraham Lincoln's establishment of the National Academy of Sciences in the midst of the Civil War, as well as the founding of land-grant colleges, and building the transcontinental railroad. "Even in the hardest times, against the toughest odds, we've never given in to pessimism; we've never surrendered our fates to chance;

we have endured; we have worked hard; we sought out new frontiers," Obama said.

"Today, of course, we face more complex challenges than we have ever faced before: a medical system that holds the promise of unlocking new cures and treatments—attached to a health care system that holds the potential for bankruptcy to families and businesses; a system of energy that powers our economy, but simultaneously endangers our planet; threats to our security that seek to exploit the very interconnectedness and openness so essential to our prosperity; and challenges in a global marketplace which links the derivative trader on Wall Street to the homeowner on Main Street, the office worker in America to the factory worker in China—a marketplace in which we all share in opportunity, but also in crisis.

"At such a difficult moment, there are those who say we cannot afford to invest in science, that support for research is somehow a luxury at moments defined by necessities," he said. "I fundamentally disagree. Science is more essential for our prosperity, our security, our health, our environment, and our quality of life than it has ever been before."

In his remarks, Obama also announced "a renewed commitment to education in mathematics and science." The goal would be to improve the scores of American students "from the middle to the top of the pack in science and math over the next decade."

However, he said, "there is a projected shortfall of more than 280,000 math and science teachers across the country by 2015. And that's why I'm announcing today that states making strong commitments and progress in math and science education will be eligible to compete later this fall for additional funds under the Secretary of Education's $5 billion Race to the Top program."

He encouraged the audience of scientists to "spend time in the classroom, talking and showing young people what it is that your work can mean, and what it means to you." Also, young people should be encouraged to enter programs that provide a degree in scientific fields and a teaching certificate.

"I want us all to think about new and creative ways to engage young people in science and engineering, whether it's science festivals, robotics competitions, fairs that encourage young people to create and build and invent—to be makers of things, not just consumers of things," he said.

Obama also announced appointments to the President's Council of Advisors on Science and Technology (PCAST), led by Harold Varmus and Eric Lander.

The list of members is available at: http://www.ostp.gov/galleries/press_release_files/PCAST%20Release%204-27-09%20new.pdf.

President Obama is only the fourth U.S. president to deliver a speech at an NAS annual meeting. Past addresses include President George H.W. Bush in 1990, President Jimmy Carter 1979, and President John F. Kennedy 1961.

The text of Obama's speech is available at: http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-the-National-Academy-of-Sciences-Annual-Meeting/.

A video recording, audio recording, and photos of the event are available at http://national-academies.org.

Washington In Brief:

Senate Confirms Sebelius As Health Secretary

KATHLEEN SEBELIUS was confirmed by the Senate on April 28 as secretary of the Department of Health and Human Services on a vote of 65-31. She was immediately sworn in and received a briefing on the swine flu situation.

Nine Republicans voted in favor of Sebelius, including **Sen. Arlen Specter**, of Pennsylvania, who announced he will become a Democrat.

Since January, **Charles Johnson**, a holdover from the Bush administration, has served as acting secretary.

Medical Policy:

Measures Needed To Reduce Conflicts Of Interest, IOM Says

New voluntary and regulatory measures can strengthen protections against financial conflicts of interest in medicine without hindering patient care or the advancement of medical knowledge, according to a new report by the Institute of Medicine.

The report tackles conflicts of interest across the spectrum of medicine, from biomedical research to clinical care and from the training of new doctors to the continuing education of physicians. It recommends several actions to improve disclosure of financial ties between the medical community and industry, limit company payments and gifts, and remove industry influence from medical education and the development of practice guidelines.

"It is time to end a number of long-accepted

practices that create unacceptable conflicts of interest, threaten the integrity of the medical profession, and erode public trust while providing no meaningful benefits to patients or society," said Bernard Lo, chairman of the committee that wrote the report and professor of medicine and director of the program in medical ethics, University of California, San Francisco. "We also need more specific disclosure of the financial relationships that doctors and researchers have with medical industries. This report spells out a strategy to protect against financial conflicts while allowing productive relationships between the medical community and industry that contribute to improved medical knowledge and care."

All academic medical centers, journals, professional societies, and other entities engaged in health research, education, clinical care, and development of practice guidelines should establish or strengthen conflict-of-interest policies, the report says. Disclosure by physicians and researchers not only to their employers but also to other medical organizations of their financial links to pharmaceutical, biotechnology, and medical device firms is an essential first step in identifying and managing conflicts of interest and needs to be improved.

The committee noted substantial variations in institutions' conflict-of-interest policies and shortcomings in physicians' and researchers' adherence to policy requirements. The format for disclosure and categories of relationships should be standardized to help institutions judge the risk that a relationship poses and to ease the burden for individuals who must report information to multiple organizations with different policies.

Also, Congress should require pharmaceutical, biotechnology, and device firms to report through a public Web site the payments they make to doctors, researchers, academic health centers, professional societies, patient advocacy groups, and others involved in medicine. A public record like this could serve as a deterrent to inappropriate relationships and undue industry influence. It also would provide medical institutions with a way to verify the accuracy of information that physicians, researchers, and senior officials have disclosed to them.

The report calls on researchers, medical school faculty, and private-practice doctors to forgo gifts of any amount from medical companies and to decline to publish or present material ghostwritten or otherwise controlled by industry. Consulting arrangements should be limited to legitimate expert services spelled out in formal contracts and paid for at a fair market rate. Physicians should limit their interactions with company sales representatives and use free drug samples only for patients who cannot afford medications. Several professional organizations and industry groups have set new limits on gift giving and other relationships between industry and the medical community, but it is too soon to gauge the effects these changes, the committee noted.

Greater transparency and accountability are needed in the development of clinical practice guidelines, which advise physicians on how to best provide care. Groups that develop guidelines should not accept direct industry funding for this work and generally should exclude individuals with conflicts of interest from the panels that draft guidelines, the report says. In addition, the current system for financing accredited continuing medical education relies too heavily on industry support and needs to be overhauled to be free of industry influence and provide high-quality education.

Professional societies, government agencies, and the groups that accredit medical schools can encourage adoption and implementation of conflict-of-interest policies by publicizing which institutions have adopted the recommended policies and which have not. This publicity could motivate institutions to close gaps in their conflict-of-interest policies or to justify why they disagree with the recommendations. For example, groups that accredit and certify medical schools could set standards for the adoption of conflict-of-interest policies and publicly list the institutions that follow those standards. Similarly, the World Association of Medical Editors could publicize which journals have adopted authorship and other policies consistent with its conflict-of-interest statements. The report also calls for more research on the impact of conflict-of-interest policies so that future policies can be based on more rigorous evidence.

Although the report calls for some new legislation and regulations, it also emphasizes the role of voluntary efforts by medical groups, industry, and individual professionals. Voluntary action is more likely to reinforce professional values and foster policies that minimize unintended consequences and administrative burdens. However, the report warns, if the industry and the medical community fail to strengthen their conflict-of-interest policies, practices, and enforcement, more policymakers may turn to legislative solutions, as officials in some states have.

Interactions between industry and the medical community have evolved over decades, becoming commonplace today and producing both benefits and

concerns. Research collaborations have yielded new cancer drugs and many other advances in the prevention, diagnosis, and treatment of illness, the report notes. At the same time, legal and media investigations into relationships between industry and the medical community have led to embarrassing revelations about lack of disclosure and dubious relationships, congressional legislative proposals, and prosecutions. Although data are limited on the extent to which conflicts result in biased decision making or harm, such conflicts can erode trust in doctors and the research enterprise, the report concludes.

The study was sponsored by NIH, Robert Wood Johnson Foundation, Greenwall Foundation, ABIM Foundation, Burroughs Wellcome Fund, and Josiah Macy Jr. Foundation.

Copies of the report, "Conflicts of Interest in Medical Research, Education, and Practice," are available at http://www.nap.edu. A podcast of the public briefing held to release this report is available at http://national-academies.org/podcast.

Philanthropy:

Stand Up To Cancer Names Balma As Executive Director

STAND UP TO CANCER (SU2C) announced the appointment of **Diane Balma** as its first executive director. Formerly vice president of strategic relations at Susan G. Komen for the Cure, Balma is a cancer survivor and will work with the nine-member SU2C Executive Leadership Committee.

"We are proud to welcome Diane Balma, a highly respected executive with the skill and passion to refine Stand Up To Cancer's strategy and help take this still relatively young initiative to the next level," said **Lisa Paulsen**, a member of the ELC and president and CEO of the Entertainment Industry Foundation. "Diane has a terrific blend of experience in fundraising, public awareness, advocacy, and policy as it relates to cancer research. The breadth of her background is a wonderful fit with our core mission: raising funds for teams of investigators who will work together to translate science from basic research in the lab to new treatments in the clinic in record time."

Since its inception in May 2008, SU2C has raised over $100 million. A Scientific Advisory Committee has been working with the American Association for Cancer Research to select the first round of Dream Team grants, which will be announced this spring. SU2C monies will also be used for some high-risk, high-impact individual cancer research projects, which are often not supported by conventional funding sources.

SU2C was established by a group of media, entertainment and philanthropic leaders, and held a telecast last Sept. 5.

"Diane's long-standing relationships with so many organizations in this field will help ensure that SU2C's unique resources are utilized effectively to benefit those struggling with cancer, as well as those who will face a diagnosis in the future," said **Laura Ziskin**, a film and television producer who was executive producer for the telecast, and an ELC member.

Before joining Susan G. Komen for the Cure, Balma worked as a litigator in the San Francisco Bay area.

NIH News:

NIH Releases Research Plan To Address Digestive Diseases

NIH released the first long-range plan for tackling digestive diseases, including digestive cancers.

"Opportunities and Challenges in Digestive Diseases Research: Recommendations of the National Commission on Digestive Diseases," describes the impact of diseases ranging from foodborne infections to cancer and liver failure, and maps out priorities for research over the next 10 years.

The report is online at: http://www2.niddk.nih.gov/AboutNIDDK/CommitteesAndWorkingGroups/NCDD/FinalResearchPlanPosting.htm.

"NIH-funded research has led to tremendous discoveries in peptic ulcer disease, viral hepatitis, and colorectal cancer. To build on these advances and break new ground, we'll be looking for investigator-initiated projects and developing new initiatives that respond to the commission's recommendations," said Griffin Rodgers, director of the National Institute of Diabetes and Digestive and Kidney Diseases. "Of course, bringing in new investigators and utilizing NIH's peer review system to identify projects with high scientific merit will continue to be high priorities."

The report emphasizes the importance of cross-cutting research, encouraging multidisciplinary efforts to advance understanding of causes and improve diagnosis and treatment of digestive diseases. The high-impact goals recommended by the commission include:

—Better understanding of basic biology of the digestive system.

—Improving the understanding of functional gastrointestinal disorders and motility disorders such

as irritable bowel syndrome.

—Identifying additional infection-causing microbes.

—Developing more efficient tools to predict and detect cancers.

—Developing objective criteria to diagnose and evaluate inflammatory bowel diseases based on comprehensive genetic studies.

—Developing new treatment strategies for intestinal failure and regeneration, nutritional disorders and support, surgically modified gut (altered stomach following bariatric surgery for weight loss), and transplantation.

—Understanding the neuromuscular biology of diseases of the oropharynx (mouth and pharynx) and esophagus.

—Improving treatments for the diverse diseases of the stomach and small intestine.

—Developing more efficient ways to categorize diseases of the colon and rectum.

—Identifying the biologic and genetic triggers for acute and chronic pancreatitis.

—Testing new approaches to detect, prevent and treat diseases of the liver and biliary system (organs and ducts that produce and move bile to help digestion).

—Using bioengineering, biotechnology, and imaging to improve patient outcomes and treatments.

Former NIH Director Elias A. Zerhouni established the commission in 2005. The 16 members of the commission represent academic and medical research, health care professionals and patient-advocacy groups. The commission also included 18 non-voting ex officio members from the NIH and other federal agencies. For more information about the commission, see http://www2.niddk.nih.gov/AboutNIDDK/CommitteesAndWorkingGroups/NCDD.htm.

University of Cincinnati Wins $22.7 Million For New Center

NIH announced that the University of Cincinnati will become the 39th member of its Clinical and Translational Science Award consortium.

Led by the National Center for Research Resources, the national network of medical research institutions is working together to accelerate the process of turning laboratory discoveries into treatments for patients, to engage communities in clinical research efforts and to train the next generation of clinical and translational researchers.

The consortium was launched in 2006, with new members added in 2007 and 2008. Approximately 60 CTSAs will be connected when the program is fully implemented in 2012. NCRR will award additional CTSA grants this year; more awards are expected in the next several months.

In this latest award, the University of Cincinnati will receive $22.7 million over five years. The new Center for Clinical and Translational Science and Training will expand its support for pediatric research through the Cincinnati Children's Hospital Medical Center; enhance new translational technologies, including large-scale studies of proteins, drug discovery, imaging, nanomedicine, gene transfer and stem cell biology. The center also will increase outreach into the local community, including collaborations with the Cincinnati Veterans Affairs Medical Center.

A fifth funding opportunity announcement for CTSAs is available, calling for the next round of applications to be submitted by Oct. 14, with the awards expected in July 2010. Further information available at www.ncrr.nih.gov/crfunding.

Funding Opportunities:

NIH, NASA Invite Research For International Space Station

NIH and the National Air and Space Administration are partnering to conduct biomedical experiments that astronauts could perform on the International Space Station.

NIH announced its willingness to fund highly meritorious biomedical experiments that could utilize the unique environment in space and produce breakthroughs to improve human health on Earth.

"As the primary federal agency for conducting and supporting medical research, the NIH looks forward to facilitating access to our nation's life sciences laboratory in space," said Stephen Katz, director of the NIH's National Institute of Arthritis and Musculoskeletal and Skin Diseases, and NIH liaison to NASA.

Further information: http://www.niams.nih.gov/News_and_Events/NIH_NASA_Activities/default.asp.

Other Funding Announcements

Extension of the Expiration Date for PA-06-042 the Academic Research Enhancement Award http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-084.html.

Recovery Act Limited Competition: Academic Research Enhancement Award (R15) (RFA-OD-09-007) http://grants.nih.gov/grants/guide/rfa-files/RFA-OD-09-007.html.

Distribution Policy for The Cancer Letter

Thank you for your purchase of this issue of The Cancer Letter! Because issue and subscription sales are our major source of revenue, we wouldn't be able to provide you with the information contained in this newsletter without your support. If you have any questions or comments about the articles, please contact the editors (see page 2 of your issue for contact information).

We welcome your use of the newsletter and encourage you to send articles once in a while to colleagues. But please don't engage in routine distribution of The Cancer Letter to the same people week after week, unless your organization has purchased a site license or group subscription. If you aren't sure, ask the person who is paying for this subscription. If you are sending the newsletter to an unauthorized list, please stop; your actions are against Federal law. If you received this newsletter under an unauthorized arrangement, know that you are in receipt of stolen goods. Please do the right thing and purchase your own subscription.

If you would like to report illegal distribution within your company or institution, please collect specific evidence from emails or photocopies and contact us. Your identity will be protected. Our goal would be to seek a fair arrangement with your organization to prevent future illegal distribution.

Please review the following guidelines on distribution of the material in The Cancer Letter to remain in compliance with the U.S. Copyright Act:

What you can do:

- Route a print subscription of the newsletter (original only) or one printout of the PDF version around the office.
- Copy, on an occasional basis, a single article and send it to a colleague.
- Consider purchasing multiple subscriptions. We offer group rates on email subscriptions for two to 20 people.
- For institution-wide distribution or for groups larger than 20, consider purchasing a site license. Contact your librarian or information specialist who can work with us to establish a site license agreement.

What you can't do without prior permission from us:

- Routinely copy and distribute the entire newsletter or even a few pages.
- Republish or repackage the contents of the newsletter in any form.

If you have any questions regarding distribution, please contact us. We welcome the opportunity to speak with you regarding your information needs.

The Cancer Letter
PO Box 9905
Washington DC 20016
Tel: 202-362-1809
www.cancerletter.com