Tobacco Smoke Could Possibly Be More Harmful to Black Children

By Katie Pence
dama.kimmon@uc.edu

Black parents may want to think twice about lighting up in front of their children after a study by UC researchers revealed black children are more susceptible to toxins found in environmental tobacco smoke than their Caucasian counterparts.

New research from Stephen Wilson, MD, suggests that African-American children are more susceptible to toxins found in environmental tobacco smoke than their Caucasian counterparts.

UC Leading Cincinnati Arm of Study on Prescription-Opiate Addiction

By Dama Kimmon
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A growing number of Americans are using prescription opiates for nonmedical purposes. The 2005 National Survey on Drug Use and Health showed that more than 2.2 million Americans over the age of 12 were new, non-medical users of pain relievers—surpassing the number of new marijuana abusers.

The same survey showed that the number of people admitting to being current prescription-opiate abusers (6 million in 2005) was higher than the number abusing cocaine, heroin, hallucinogens and inhalants combined. Recognizing this problem, the National Institute on Drug Abuse (NIDA) of the National Institutes of Health launched the first national treatment study for people addicted to opiate painkillers like Vicodin (hydrocodone) and Oxycontin (oxycodone hydrochloride).

Called the Prescription Opiate Addiction Treatment Study (POATS), the trial will treat people who obtain drugs illegally or those getting them by prescription. Eugene Somoza, MD, PhD, of UC’s psychiatry department, is an expert on substance abuse and the

Grant Application on Schedule

By Dama Kimmon
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The Academic Health Center’s (AHC) application for a National Institute of Health Institutional Clinical and Translational Science Award (CTSA) is on schedule for the Oct. 24, 2007, deadline. All nine working groups report major progress on their sections of the grant proposal.

AHC leaders met with faculty March 13 to present an update and explain in more detail the planning process, address concerns and challenge, answer questions and lay out the timeline for the remainder of the application period. More than 130 people from UC, Cincinnati Children’s Hospital Medical Center and the Veterans Affairs Medical Center attended the update.

Calcium Channel Research Provides Clue to Heart Failure

Researchers Report Further Understanding of Cellular Mechanism Essential for Maintaining Heartbeat

By David Bracey
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Research into the key role that calcium plays in regulating heartbeat occupies some of the world’s top scientists—two of whom are advancing the field at UC.

Arnold Schwartz, PhD, DSc, and Litsa Kranias, PhD, have recently published separate papers reporting further understanding of what happens in the “calcium channel”—a cellular mechanism essential for maintaining heartbeat—particularly when it goes wrong in heart failure. Their results suggest possible approaches to prevention, diagnosis and treatment.

Both Schwartz, director of the Institute of Molecular Pharmacology and Biophysics at UC, and Kranias, director of cardiovascular biology in the pharmacology and cell biophysics department, are internationally recognized for their basic research into calcium’s role in heart failure.

Calcium Channel Fault Found

Schwartz, working with an international research team studying causes of heart failure in genetically engineered mice and human tissue, found a fault in the calcium channel that could provide a key to understanding how human hearts fail, and what to do about it.

The findings, says Schwartz, provide a new target for genetic treatment of human heart failure, and raise the possibility of a new diagnostic approach as well.

The study, published in the March 14, 2007, edition of the online journal PNAS, was a collaboration also involving Roger Hullin, MD, of the Swiss Heart Center, Bern; Stefan Herrig, MD, PhD, and Jan Matthes, MD, of the University of Cologne, Germany; and Ilona Bodi, PhD, Schwartz’s UC colleague.

It has long been known that calcium plays a key role in controlling heartbeat. To do so it passes through a protein channel, or pore, which in turn is regulated by a group of “accessory” proteins, a major component of which is the beta-2a regulatory protein.

What this study found, says Schwartz, is that in many types of terminal human heart failure this beta-2a protein is increased or “over-expressed,” and that the electrical activity in the heart’s cells shows a distinct pattern of “single-channel” activity, an indicator that the influx of calcium into the heart has also increased.

The research team studied a mouse model with an over-expressed pore that was developed in Schwartz’s laboratory. As a consequence of the over-expression,
Tobacco: Black Children at Greater Risk

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to 12, who suffered from asthma and were exposed regularly to tobacco smoke.

Researchers measured cotinine levels in blood serum and hair as well as environmental tobacco smoke in the main activity room of each residence.

Wilson said the main goal of the study was to test whether high-efficiency particulate air filters reduced children’s exposure to environmental tobacco smoke in a household where five or more cigarettes were smoked per day.

However, these researchers uncovered more.

“Previous studies have shown differences in cotinine levels among active smokers,” Wilson says. “We extended this work by showing large differences in cotinine levels among children exposed to environmental tobacco smoke.”

“This raises questions as to whether there are differences in exposure or metabolism for other ingredients of tobacco that could ultimately lead to the development of cancer and other tobacco-associated diseases.”

Wilson said race was an important variable since African-American children suffer from higher rates of tobacco-related disorders, for example, asthma, sudden infant death syndrome and low birth weight.

He said more research needs to be done to assess racial differences in exposure to other elements of tobacco.

“We need to understand how certain populations—particularly those groups who are most susceptible—respond to environmental tobacco smoke so we can reduce and ultimately eliminate disparities in these health outcomes,” he said.

“These results raise questions as to whether there are racial differences in other tobacco toxins, particularly those compounds that are known to cause cancer.”

Wilson’s research team included UC faculty members Robert Kahn, MD, Jane Khoury, PhD, and Bruce Lanphear, MD, MPH, all of Cincinnati Children’s Hospital Medical Center.

The study was funded by a grant from the National Heart, Lung, and Blood Institute, the Robert Wood Johnson Generalist Physician Faculty Scholars Award and the UC Department of Internal Medicine.

Jet Engines Help Scientists Solve Mysteries of the Voice

UC Team Demonstrates How Airflow Affects Areas of Rotational Motion—Known As Vortices—To Produce Unique-Sounding Voices

Voice expert Sid Khola, MD, (right) and aerospace engineer Ephraim Gutmark, PhD, used methods for studying jet noise to help explain why individual voices can sound very different.

By Jamie Davis

Although scientists know about basic voice production—the two “vocal folds” in the larynx vibrate and pulsate airflow from the lungs—the larynx is one of the body’s least understood organs.

Sound produced by vocal-fold vibration has been extensively researched, but the specifics of how airflow actually affects sound have not been shown using an animal model—until now.

Vortices, or areas of rotational motion that look like smoke rings, produce sound in jet engines. New research from UC uses methods developed from the study of jet noise to identify similar vortices in an animal model.

Sid Khola, MD, lead author of the study, says vortices may help explain why individual voices are different and can have a different richness and quality to their sound.

“If vortices didn’t affect sound production, the voice would sound mechanical,” says Khola, assistant professor of otolaryngology. “The vortices can produce sound by a number of mechanisms. This complexity produces a sound that makes my voice different from yours.”

Khola and his team reported their findings in the March edition of Annals of Otology, Rhinology and Laryngology.

“Understanding how airflow patterns affect sound in a jet engine (aeroacoustics) helps us determine how we can reduce jet noise,” says coauthor Ephraim Gutmark, PhD, a UC professor of aerospace engineering. “We can apply the same physical understanding of aeroacoustics to study normal and abnormally speaking voices.”

According to Khola, computational and theoretical models have been developed to demonstrate how vortices affect sound production, but the UC team is the first to demonstrate it using an animal model, which makes their findings more applicable to the human larynx.

“Currently, when surgery is required to treat voice disorders, it’s primarily done on the vocal cords,” says Khola. “Actually knowing there are additional sources that affect sound may open up a whole new way for us to treat voice disorders.”

In addition to better surgery techniques, Khola says, having a better understanding of how vortices affect voice production could help in the development of improved pharmacological approaches and clinical pathology services, as well as improved training of the voice.

Khola and Gutmark’s collaborators in the study are UC’s Shannumug Murugappan, PhD, and Ronald Scherer, PhD, now at Bowling Green State University.

The study was funded by a grant from the National Institute on Deafness and Other Communication Disorders.
Surgery Resident Approaches Life With “Think Big” Motto

By Amanda Harper

First-year surgery resident Callisia Clarke, MD, has known since she was 8 that she wanted to be a doctor. That’s the type of focus and motivation this 25-year-old African-American woman has always had in her life. And it’s obvious to anyone who meets Clarke that she is woman with deep-seated values and a real passion for her chosen profession. “I think you need to find a niche and do well at it to make a difference in someone’s life,” she says. “My parents always encouraged me to be whatever I wanted to be, and for as long as I can remember I’ve wanted to be a doctor.” In March, Clarke was honored by Applause Magazine with a 2007 Leader of the Future Award. The program recognizes 10 people under age 30 who are positively influencing the African-American community by serving as outstanding role models and demonstrating leadership through their work and community service. Clarke definitely fits the bill. During her medical training, she served as an ambassador for the UC College of Medicine by participating in local, regional and national minority recruitment activities and tutoring undergrad-uate medical students. Clarke also served as an AIDS counselor at University Hospital, UC’s primary teaching hospital, and volunteered at health fairs around the city. Last fall, she traveled with UC trauma surgeon Kenneth Davis, MD, to Tanzania with the Village Life Outreach Project as part of a philanthropic mission to provide critical medical care and education to impoverished people in Africa. “I was taught from a very young age that it’s important to give back to those who are less fortunate than I, so community service has been a part of my life, and always will be,” says Clarke. “Giving back is something my parents have always selflessly done, and when I was a child they were constantly involved in some community project that I was also expected to participate in,” she explains. “That’s a quality I admire in them and want to have in my own life.” As an aspiring surgeon-scientist, Clarke says the hard work and long hours she’s logged practicing her craft are well worth it. Now she’s looking forward to refining her skills further through her residency at University Hospital. Clarke hopes to conduct research on medical problems that specifically affect African-Americans. She says she hasn’t yet decided on a surgical specialty, but she’s leaning toward transplantation or surgical oncology. Everything in Clarke’s life is driven by the motto “Think Big,” an acronym for the qualities she says every person can use to stay grounded in both their professional and personal lives: Talent, Hope and honesty, Insight and intelligence, Being Nice to others, Knowledge, Books, In-depth learning and God. “I have the best job in the world because I can still come in to work everyday and smile,” says Clarke. “I have friends who’ve taken an easier course who can’t say the same.”

UC Team Discovers Way to Fight Antibiotic-Resistant Bacteria

By Katie Pence

Research by a team at UC has helped in the discovery of a new way to fight antibiotic-resistant bacteria, responsible for preventing treatment of lung infections in patients with cystic fibrosis and life-threatening cases of pneumonia.

A study done in collaboration with the University of Washington found that using a metallic “Trojan Horse”—tricking the bacteria by replacing the iron they need from their environment with the metallic element gallium—can kill bacteria.

The study appeared in the April 2007 issue of the Journal of Clinical Investigation.

The UC team headed by Bradley Britigan, MD, chairman of the internal medicine department at UC and staff physician at the Cincinnati Department of Veterans Affairs Medical Center, found substituting gallium for iron would prevent the bacteria from growing.

“All bacteria need iron from their host environment to grow and replicate,” said Britigan, co-author of the study. “Without enough iron, the organism has a much more difficult time forming biofilms.”

Researchers have discovered a way to combat antibiotic-resistant bacteria like pseudomonas aeruginosa pictured here.

In both cell cultures and in mice, the gallium treatment killed bacteria and prevented the formation of biofilms.

Britigan says he believes the use of gallium could be a new way to prevent or treat lung infections, especially in cystic fibrosis patients.

“Treatment of these infections has become more difficult in recent years due to the development of resistance to conventional antibiotics,” he said.

Gallium is already Food and Drug Administration-approved for treating high calcium levels in cancer patients, and research is underway to determine whether it can be used to fight tuberculosis and other lung infections.

“We already knew it could be used against cancer cells,” Britigan said. “But until recently, no one has looked at it as a means for treating bacterial infections. We want to examine possible mechanisms of resistance that could develop in bacteria, extend the animal models to look at possible toxicity if used in humans, and find a better way to administer the drug to humans that would be more convenient and pose less potential for toxicity.”

Researchers from the University of Iowa also participated in the study.

The study was funded by a grant from the National Institute of Allergy and Infectious Disease as well as the Department of Veteran Affairs.

Pharmacy Students Visit GRI

Anne Böker and Julia Hövenier (back), pharmacy students from the University of Münster, spent a month in Cincinnati learning how German pharmacists practice. Böker says one of the biggest differences is homework. “The students we stayed with (members of the rowing team) had lots of homework. In Germany, you go to class and have one exam at the end of the semester. We don’t ever get homework. It’s up to us to learn more about something outside of class,” she says. German students also focus more on basic science, whereas U.S. students put emphasis on clinical pharmacy. Jim Krittel, PhD, (right) a College of Pharmacy professor, hosted the students and gave them a tour to work on in his lab at the Genome Research Institute.

They also shadowed pharmacy students in clinical and retail sites.
**HEART: Two Basic Science Researchers Explore Calcium’s Role in Heart Failure**

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The animal’s heart received a sustained increase of calcium. Schwartz says, slowly became overdeveloped (hypertrophied) and eventually failed. All the changes in the animal model—biochemical, physiological and pathological—resembled the human heart process.

“When the model is adapting to the increased calcium with each heartbeat, you don’t see anything wrong with the heart,” Schwartz explains. “But we found that the beta-2a protein compensates for the protein increase by becoming under-expressed, while single-channel activity remains very normal looking.”

As the animal ages, Schwartz says, the heart begins to fail. Beta-2a increases and single-channel calcium activity looks almost identical to that in a failing human heart.

A second major component of the study was to genetically engineer a mouse model in which beta-2a in the heart was over-expressed from birth. When that mouse was mated with a young mouse in an adaptive phase, the transgenic offspring showed over-expressed beta-2a, and a single-channel pattern identical to that in the older mouse and the failing human heart.

**Close as We’ve Gotten to Cause and Effect**

“This is about as close as we have gotten so far to cause and effect,” says Schwartz. “We need to do much more research, but it’s possi- ble that somehow nature provides a mechanism in which the heart is able to adapt to certain stresses by changing the amount of a particu-lar accessory protein, in this case beta-2a, which in itself regulates the calcium channel.”

“We’ve been investigating how this happens,” Schwartz says. “But if it’s so, the question then is what can be done about it therapeutically.”

“The most exciting possibility is to lower beta-2a in a heart that’s beginning to fail, because if you keep beta-2a low, the heart won’t fail. This finding opens the way to new genetic approaches to heart failure.”

Funding for the research done in the United States came from two grants held by Schwartz from the National Heart, Lung, and Blood Institute of the U.S. National Institutes of Health. Kranias and her team demonstrated that the calcium controls are themselves regulated by a pro-tein called phospholamban, which triggers the heart’s accelerated response during emergency “fight or flight” situations, and they found a link between mutations on the phospholamban gene and heart failure.

They reported in the Dec. 15, 2006, Journal of Biological Chemistry that performing genetic “surgery” on part of a molecule that inhibits phospholamban’s function could lead to a new treat-ment for heart failure.

In heart failure, Schwartz says, phospholamban is found to be malfunctioning, resulting in reduced calcium cycling and heart contraction.

“There’s a big problem with this protein,” Kranias says, “so it’s become the target of a lot of treat-ment approaches.”

Phospholamban is one of a group of proteins that become phosphorylated, and this changes its activity. Phosphorylation of phospholamban (in response to a light-on-light stimulus, for exam-ple) increases heart function. Reducing the level of phosphoryla-tion, however, which occurs in heart failure, results in diminished pumping action.

**New Molecule Discovered**

While studying processes that actually control phospholamban phosphorylation, Kranias and her colleagues discovered a new mole-cule—a protein called inhibitor-1. When it’s active, inhibitor-1 increases phospholamban phos-phorylation and the heart’s pump-ing function.

Recently, however, the team identified a new phosphorylation site on inhibitor-1, one that had before never been identified in heart tissue.

It’s this finding, the researchers say, that might provide a clue for a new treatment for heart failure.

“This new site regulates heart function, but in the wrong way,” Kranias says. “It’s a negative regula-tor that depresses the calcium that’s cycling through the cardiac muscle. It lowers the level of phosphoryla-tion in the phospholamban, which would explain some of the prob-lems in the failing heart.”

The inhibitor-1 molecule is pre-sent in everyone’s heart, Kranias says. It appears to have a “good side,” which phosphorylates nor-mally, and a “bad side,” which in heart failure actually depresses heart function.

**Bad Guy Molecule**

“This guy becomes a bad molecule and reduces function,” says Kranias. “So if you want to help a failing heart, you’ve got to get rid of this bad side, or part of the molecule.”

“What we’re trying to do is use gene therapy to enhance calcium cycling through phospholamban by truncating (shortening) the inhibitor-1 molecule to eliminate its bad side.”

Preclinical trials using the trun-cated molecule, which Kranias and her coworkers have patented, are already under way in collaboration with Harvard researchers.

The other UC researchers on Kranias’ team were Patricia Rodriguez, PhD, Bryan Mitton, PhD, and Jason Waggoner, PhD. The study was funded by the National Institutes of Health and the Leducq Foundation.

Arnold Schwartz, PhD, DSc, says new findings about how calcium channels in the heart function could open the door to new genetic approaches to heart failure.
This spring, UC surgeon Timothy Broderick, MD, will delve deep—again—with members of the NASA team to help improve medical care for future space travelers.

Together with astronauts Heidemarie Stefanyshyn-Piper, Jose Hernandez and flight surgeon Josef Schmid, Broderick will “splash down” on May 7 as part of the 12th NASA Extreme Environment Mission Operations (NEEMO). The crew will spend 12 days submerged aboard the National Oceanic and Atmospheric Administration’s Aquarius Underwater Laboratory off the Florida coast.

The undersurface environment provides similar conditions to those on the moon, which helps the researchers more accurately gauge the effects of “extreme” environments on equipment and the human body.

NEEMO 12 is just one part of a larger NASA research program aimed at developing and refining medical technologies that can be used to care for sick astronauts during long space voyages. The “aquanauts” will test two remotely controlled surgical robots in a variety of advanced medical experiments, including robotic tele-surgery on simulated patients.

Broderick is principal scientist for NEEMO 12, which includes research projects from UC, the National Space Biomedical Research Institute, NASA Space and Life Sciences Directorate, SRI International, and the University of Washington.

One UC experiment will test semi-autonomous robots. Unlike today’s robotic surgery—in which a surgeon controls every move of a robot to make it help perform tasks—robotic surgery of the future may use robots that are programmed to perform surgeries on their own.

Broderick and his team won’t be quite so close to the point in the NEEMO 12 mission—but they are testing a surgical robot’s ability to perform specific important tasks. “One test might involve equip- ping the surgical arm with a needle and telling it to drain an abscess,” explains Broderick. “But the sur- geon will only supervise, not control, the robotic arm.”

He says applications refined during the NEEMO 12 mission will help surgeons overcome interplanetary communication lag time and improve the care of astronauts on future missions to the moon and Mars.

“We need to figure out better ways to care for astronauts before we make the long trip to Mars,” Broderick says. “Telemedicine and robotic surgery could be key in maintaining the health of future spacefarers and responding to medical emergencies in space.”

Piper, commander of the NEEMO 12 mission, says the undersurface environment is a great analogue for space. “This mission will help us prepare for a moon exploration mission,” she says. “For example, we need to know how to effectively distribute the weight on a space suit so that we’re still able to work. Our underwater ‘moon-walking’ experiments will help us figure that out.”

Piper and the rest of the NEEMO 12 crew recently visited UC for mission kickoff events, including a national crew announcement, biomedical engineering seminar and visits with children at Cincinnati Children’s Hospital Medical Center and Shriners Hospital for Children.

For more information visit www.nasa.gov/neemo.

Life as a Patient Helps One UC Med Student Find Focus

By Dama Kimmon

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The transition between years three and four of medical school is tough enough. Battling cancer at the same time seems nearly impossible.

But UC medical student Rob Johnson took on both challenges during his third year, wrapping up a surgery clinical rotation and trying to decide what field of medicine he wanted to focus on, when he learned he had testicular cancer.

He had surgery, took his regularly scheduled two-week break, and then headed into his fourth year and several weeks of radiation therapy

“I wanted things to stay as nor- mal as possible,” says Johnson. “I learned that leaving everything out didn’t add to his perspective from his experiences will be—and already has been—invaluable to the patients that he sees,” says UC radiation oncologist William Barrett, MD. “He has a very strong empathy for people anyway, and his experiences certainly allow him a first-hand understanding of what’s important in his patients’ eyes.”

Johnson, who earned his undergraduate degree in botany from UCLA, joined 141 other UC College of Medicine students at Match Day March 15 as they learned where they would be head- ed for residency programs. He was matched with the radiation oncology residency program at the University of Louisville.

About Testicular Cancer

• Testicular cancer accounts for about one percent of all cancers in men and is most common in men between the ages of 20 and 39.

• Symptoms include a lump, swelling or enlargement in the testicle and/or pain or discomfort in a testicle.

• Most testicular cancers are found during self-exams, but some symptoms are not obvious enough to be detected without a physical exam by a physician.

• Common treatments include surgery, radiation therapy and chemotherapy.

Source: National Cancer Institute

Match Day Results

Of the 142 UC students participating in Match Day, 71 were paired with Ohio-based residency programs, including 29 with University Hospital and 11 with Cincinnati Children’s Hospital Medical Center.

OPiATE: Study Looks at Prescription Drug Addiction

By Amanda Harper

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For more information visit www.nasa.gov/neemo.
Advocates and Researchers Work Together to Educate the Public About Links to Cancer

Breast Cancer and the Environment Research Center Focuses on Community Awareness and Education

By Amanda Harper
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American anthropologist Margaret Mead once said: “Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it’s only the thing that ever has.” Those words ring true at UC, where a collaborative group of scientists, doctors and community advocates is trying to do just that—concerning public understanding of environmental factors that increase the risk for early-onset puberty, breast cancer and other diseases.

On May 12, the Cincinnati Breast Cancer and the Environment Research Center (BCERC) will host its third annual public forum on the environment and cancer—“Looking Upstream for Environmental Links to Breast Cancer” —that finds a resource for anyone who wants to understand how the environment can impact cancer risk.

Established in 2003, the Cincinnati BCERC—one of only four such centers in the nation—is a joint research effort between the UC College of Medicine and Cincinnati Children’s Hospital Medical Center. The BCERC’s work focuses on the potential links between environmental factors, puberty and breast cancer, and on educating the community about its findings. The center is funded by a seven-year grant from the National Institute of Environmental Health Sciences and the National Cancer Institute.

The center has three primary projects: a laboratory research study looking at the effects of diet on mammary gland development; an epidemiologic (population) study called “Growing Up Female” that focuses on environmental and genetic factors contributing to early-onset puberty; and a community outreach and education program.

Kate Brown, PhD, who heads outreach and education efforts for the center, says the 40 plus volunteer breast cancer advocates are critical to the center’s success. In addition to supporting girls and their families during study evaluations, the advocates are out in the community educating others about the center’s research objectives and findings.

“Our advocates have told us repeatedly that they want access to current research findings in lay language, but that’s not always easily accessible,” explains Brown. “The advocates help us to figure out what findings are most important for people in the community to know about, and then to communicate that information in terms that are understandable to the average person.”

Most advocates are also breast cancer survivors, so they have a unique perspective on the fight against the disease that claims more than 40,000 American women each year. Each woman has a different reason for volunteering, but all share a passion for what they are doing.

“The breast cancer mortality rate for African-American women is too high, so it’s important that we become more involved in breast cancer research to help find answers,” says African-American Andrea Ice, a part-time outreach specialist for the BCERC and three-time breast cancer survivor. “I feel like we’re on the right path to learn more about breast cancer. Hopefully, one day our efforts will help eradicate the disease.”

Advocate Bamita Bailey was only 29 when she first learned she had breast cancer. She was 36 when it came back again. She says she got involved with the BCERC to help change the future for her daughter, who grew up knowing that her mother was battling breast cancer.

“I don’t want her to have to face the same issues that I went through,” Bailey explains. “I have to believe that we can change how we think of breast cancer during my lifetime. We’ve made great strides in early detection, but we need to focus more on prevention instead of always reacting to a diagnosis. The BCERC is beginning that change, and I’m very excited to be a part of it.”

“There are so many ways to volunteer in the breast cancer arena,” adds advocate Ann Hermitz, “but I volunteer at the BCERC because it allows me to look at the ‘whys’ of the disease and how it can be prevented in future generations.”

In addition to updates on the Cincinnati BCERC projects, this year’s forum will include sessions on water quality standards and monitoring regulations, new research into the health effects of bisphenol A—a chemical widely used in plastic food containers and water pipes—and how the pace of physical and cultural development in children has changed and how that may affect their health in the future.

Registration for the event is $15 and includes breakfast, educational materials and parking. Space is limited and registration is requested by May 7. Nursing continuing education credits are pending. For more information, visit www.uc.edu/growingupfemale.

“Looking Upstream” forum attendees have the opportunity to ask a panel of experts questions about their concerns related to environmental exposures.

The ERC teaches young professionals the skills necessary for pursuing occupational and environmental health careers. A key focus of the center is to provide an interdisciplinary collaboration between students in the colleges of engineering, nursing and medical education.

This year, NOSH will award about $80,000 for projects related to occupational and environmental health and safety issues conducted through July 2007. Applications must be submitted by Monday, May 7 at 4 p.m. For more information, contact Amber Twitty at amber.twitty@uc.edu or (513) 558-5710.

Grants Fund Minority Blood Donor Campaign

Hoxworth Blood Center has received a $60,000 grant to develop an education and outreach campaign encouraging minorities to donate blood. Currently, less than 8 percent of Hoxworth’s blood donors are minorities.

The donation came in the form of two grants of $25,000 each from the H.B., E.W. and F.R. Luther Charitable Foundation and the H.G., H.F. and L.T. Dornette Foundation.

Munda Named Champion Surgeon

Rino Munda, MD, division of plastic surgery, was recognized as a “Champion Surgeon” by the Renal Network at their annual meeting in Chicago on March 15. Champion Surgeons are those surgeons who have been identified by dialysis facilities as an elite group that has achieved excellence in arteriovenous (AV) fistula creation and maintenance. They are considered to be invaluable partners by the dialysis facilities they work with in the ongoing efforts to increase AV fistula placement and patency rates.

Degmen Named to ORAU Council

Sandra Degmen, PhD, vice president for research, has been named vice chair of the Oak Ridge Associated Universities (ORAU) Council of Sponsoring Institutions. She will serve as vice chair for two years, followed by a two-year term as chair. In her role as vice chair, she will oversee a policy committee responsible for the review of grant applications for junior faculty, fellows and graduate students for selected ORAU grant programs. Degmen will also serve on the ORAU Board of Directors.

UC has been a member of ORAU since spring 2005. As a member, the university takes part in ORAU-sponsored or –administered scientific research programs. Faculty and students at member institutions also benefit from opportunities for travel grants, internships and laboratory research at federal facilities.

Boyece Authors Book

Suzanne Elizabeth Boyce, PhD, College of Allied Health Sciences, has coauthored a book called Eliciting Sounds: Techniques and Strategies for Clinicians, 2nd edition. Her chapter of the book shows magnetic resonance images, produced at UC, of people saying the sounds “Y” and “T” and explains why “Y” is a difficult sound for children and adult learners of English to produce. UC’s Christy Holland, PhD, biomedical engineering, and Anh Choe, MD, radiology, contributed to the book’s content.

Rao Elected to Honorary Fellowship

Maripalli Rao, PhD, a professor in environmental health, has been elected a fellow of the International Statistical Institute. Founded in 1885, the institute is one of the oldest scientific organizations in the world and has members from 133 countries. Rao is the only fellow from UC.

UPCOMING EVENTS

APRIL 8
Eighth Annual Bone Dinner
8 a.m. to 3:45 p.m.
Koger-Brayford Conference Hotel
Presentation on the diagnosis and treatment of osteoporosis.
Free to physicians and UC staff. Details at www.confer-
ing.uc.edu/boneday.

APRIL 12
Edward A. Gall Lecture
toon at 1 p.m.
Koger Auditorium
Nelson Fausto, MD, University of Washington, will discuss molecular mechanisms of liver regeneration and carcinogen- esis. Call (513) 558-2748.

APRIL 14
34th Annual Felson Lecture
8:30 a.m. to 1 p.m.
Medical Sciences Building, Rm. 7601
Alan Maurer, MD, Temple University, will give an overview of the use of PET/CT. Call (513) 584-4396.

APRIL 18
State of the Academic Health Center Address
 Noon to 1 p.m.
Koger Auditorium
Jane Henney, MD, senior vice president and provost for health affairs, will recap the state of the university since spring 2005. Call (513) 558-4533.

APRIL 26
Florence Nightingale Awards
6 to 9 p.m.
Hyatt Regency, Cincinnati
The College of Nursing will honor outstanding nurses in the community. Call (513) 558-3311.

APRIL 27-28
Fifth Annual Orthopedic Trauma Event
8 a.m. to 5 p.m.
Duke Energy Center
Update on the management of fractures and orthopedic trauma. Call (513) 558-2978.

Burger Named Associate Division Director

Andrew Burger, MD, has been named associate division director of cardiovascular diseases. Burger specializes in echocardiography, nuclear cardiology and heart failure. He joins UC from Beth Israel Deaconess Medical Center in Boston.

Havlin Joins Hematology- Oncology

Kathleen Havlin, MD, has been named associate professor of clinical medicine in the division of hematology and oncology. A breast cancer specialist, Havlin will conduct clinical research at UC and see patients at the Barrett Cancer Center.