

Duke Comprehensive Cancer Center

notes

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By Jim Shamp, February 26, 2004

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DURHAM—Duke University Medical Center researchers played a key role in developing Avastin, the experimental cancer drug approved Thursday [February 26, 2004] by the U.S. Food and Drug Administration. It also goes by the generic name bevacizumab.

A Duke team led by physician Herbert Hurwitz, assistant professor of medicine at the Duke Comprehensive Cancer Center, spearheaded the multicenter study that helped win the drug's approval for clinical use as the first "anti-angiogenesis" therapy to shrink tumors and help patients with metastatic colorectal cancer survive longer.

Bevacizumab is known as an anti-angiogenesis drug because it blocks the formation of blood vessels in tumors—a process called angiogenesis—and thus inhibits their growth. Harvard

FDA approves new cancer drug

University's Judah Folkman, the internationally renowned father of anti-angiogenesis, whose work led to human testing of Avastin, received a 1999 City of Medicine award in Durham.

Duke's Hurwitz originally presented the results of the study, funded by Genentech Inc., on June 1 at the annual meeting of the American Society of Clinical Oncology in Chicago. The study supported the long-debated approach of choking off a tumor's blood supply to inhibit tumor growth, Hurwitz said. This anti-angiogenesis approach has been touted as a plausible strategy against tumors but has never been proven successful in a large, randomized group of patients—until now.

"Our study offers important proof of the philosophy that targeting a tumor's blood supply can, in fact, inhibit the tumor's ability to proliferate," Hurwitz said at the time. "Moreover, our current success will likely lead the cancer community to conduct large-scale clinical testing of bevacizumab as a treatment for other types of cancers."

In the study, some 800 patients at various institutions nationwide were randomly assigned to receive bevacizumab plus standard chemotherapy (irinotecan, 5-FU and leucovorin), or the standard chemotherapy with placebo.

Patients who received bevacizumab plus chemotherapy survived a median of 20.3 months, compared to 15.6 months for patients who received just standard chemotherapy. Bevacizumab also delayed cancer progression for a median of 10.6 months vs. 6.2 months for the standard chemotherapy. In addition, the bevacizumab and chemotherapy combination shrank tumors by at least half in 45 percent of patients vs. 35 percent in patients that received only standard chemotherapy.

"Metastatic colorectal cancer is a very aggressive disease, so we view these results with real optimism, as we now have another weapon in the fight against this cancer," Hurwitz said. He noted that the drug represents one of many weapons in a battery of drugs designed to combat the disease. "Cancer is a very savvy opponent, and it often devises ways to circumvent our current methods of inhibiting it," Hurwitz said. "In addition, each tumor has its own characteristics that may cause it to behave differently from another patient's tumor. For these reasons, no single therapy will work for every patient, so it's important to develop multiple ways of combating the growth and spread of cancer." ● © Durham Herald Company, Inc.

Experimental Brain Tumor Treatments Show Promise

Cancer Center researchers have shown that four new and experimental drugs can significantly inhibit the growth of deadly brain tumors in animals, and they expect these promising results to hold true in humans, as well.

In fact, one of the drugs—ZD6474—significantly slowed the growth of three different types of brain tumors, a remarkable finding given that brain tumors are very distinct in their biologic makeup, said Jeremy Rich, MD, an assistant professor of medicine in the Brain Tumor Center at Duke.

"Despite our best efforts in the laboratory and the clinic, the survival rate for glioblastoma—the most common and lethal brain tumor—hasn't changed in 10 years," said Dr. Rich. "This new class of drugs has shown great promise in treating human tumors that were grown in mice,

and we feel these results are indicative of how the drugs may act in humans."

In another successful yet daring experiment to cure deadly brain tumors, Duke researchers led by Matthias Gromeier, MD, assistant professor of molecular genetics and microbiology, have combined the cancer-killing properties of poliovirus with a harmless genetic coding element from the common cold. The resulting modified virus created a remarkably strong anti-cancer agent that rapidly killed cancer cells in laboratory cell cultures and in animals—and without causing polio. Testing of the new viral agent in humans should begin within two years.

This study was a collaborative effort with Darell Bigner, MD, Henry Friedman, MD, Allan Friedman, MD, and John Sampson, MD, of the Brain Tumor Center at Duke. ●

Planning for Health

Duke Leaders Urge Health Care Overhaul

The U.S. health care system is inefficient, wasteful, expensive, frequently inaccessible, and in need of repair. So say leaders of Duke University Medical Center, who propose a plan for fixing the ailing system with a powerful combination of science, savvy, and common sense. A key component of the proposal is a strengthened focus not only on treating disease, but on preventing or minimizing it in the first place, according to Ralph Snyderman, MD, President and CEO of the Duke University Health System, and R. Sanders Williams, MD, dean of the Duke University School of Medicine.

"Emerging scientific fields—including several specialized types of genomics and diagnostic imaging—can facilitate assessment of each individual's risk for developing disease, as well as early diagnosis and effective prevention and

treatment," Dr. Snyderman says. "This is particularly important for the major chronic diseases, such as cancer, cardiovascular disease, diabetes, asthma, and musculoskeletal disorders, which account for the greatest burden of human suffering.

"Yet, despite vast expenditures for health care, 40 million Americans today lack ready access to health services, while effective therapies are inconsistently and ineffectively applied."

Drs. Snyderman and Williams call instead for a "prospective health care" model in which physicians would use rapidly evolving tools to determine an individual's specific risk for developing particular diseases. This information would then allow for personal health planning and interventions that would prevent or detect disease in its earliest stages, when treatments generally can provide the maximum benefit. ●



from the director

In early February after almost a year of preparation, the Duke Comprehensive Cancer Center submitted its proposal to the National Cancer Institute for a five-year renewal of its Cancer Center Support (Core) Grant. The Core Grant is one of the nation's most prestigious forms of recognition and is crucial funding needed to support vital research programs, recruitment of new faculty, new facilities, and core resources. We will be notified later this year about the amount of funding we will receive.

The proposal included many notable accomplishments that truly solidify the Duke Comprehensive Cancer Center as a world leader in cancer research and care. As you will read below and throughout this newsletter, we have much to be proud of at Duke. Most importantly, every accomplishment and every success gives us all hope because with each step forward we come closer to reaching our goal—to improve and extend the lives of all patients with cancer.

- > The Duke Comprehensive Cancer Center was established in 1972 by the National Cancer Institute (NCI) as one of the original eight comprehensive cancer centers. Today, Duke is one of only 38 NCI recognized Comprehensive Cancer Centers nationwide.
- > The Duke Comprehensive Cancer Center treats approximately 5,000 new patients with cancer in over 120,000 clinic visits annually. Thirty percent of those patients came from outside of North Carolina. Duke cares for 11% of all cancer patients in North Carolina.
- > The Duke Comprehensive Cancer Center was ranked seventh among the nation's best cancer treatment hospitals in 2003 by *US News & World Report*.
- > A national clinical trial led by researchers at the Duke Comprehensive Cancer Center was the first to show that the anti-angiogenesis drug, Avastin™, shrinks tumors by choking off their blood supply.
- > The Breast Cancer Research Program of the Duke Comprehensive Cancer Center was awarded a SPORE (Specialized Program of Research Excellence) grant by the National Cancer Institute (NCI). The Duke Breast Cancer Program is one of only 10 programs in the country to receive a breast SPORE Grant.
- > The Brain Tumor Center at Duke also has been awarded a P20 SPORE Grant from the National Cancer Institute and has received one of only two brain tumor grants from the National Institute of Neurological Disorders and Stroke. The Brain Tumor Center at Duke is internationally recognized as a leader in the research and treatment of brain tumors.
- > Recently, scientists at the Duke Comprehensive Cancer Center scientifically validated for the first time that stem cells in umbilical cord blood can infiltrate damaged heart tissue and transform themselves into the kind of heart cells needed to halt further damage.

The Core Grant is, of course, of critical importance to the Duke Comprehensive Cancer Center, but does not diminish our need for your continued support. In fact, philanthropy is what ultimately will set Duke apart from other cancer centers. Often a small philanthropic investment is all that is needed to demonstrate the promise of a concept. Once established, this promise is more easily leveraged into additional federal, corporate or additional private support.

This year holds unique and exciting opportunities for cancer research and care to see tremendous progress, and Duke Comprehensive Cancer Center will be at the forefront of that effort.

Sincerely,
H. Kim Lyerly, M.D.



Duke Partnership Creates Community Collaboration

In an effort to capitalize on their respective strengths and areas of expertise, the Duke Comprehensive Cancer Center; Lincoln Community Health Center of Durham, North Carolina; and North Carolina Central University (NCCU), one of the sixteen senior institutions in the University of North Carolina system and one of North Carolina's Historically Black Universities, have created a *Partnership to Eliminate Disparities in Cancer Outcomes and Research*. The collaboration is called PAIR—*Partners Allied In Research*. Its goal is to build an infrastructure that will increase representation of minorities in cancer prevention research, and expand the perspective and reach of cancer research conducted at each of the partnering institutions.

"We are very excited about working together," said Dr. Celette Sugg Skinner of the Duke Comprehensive Cancer Center. Dr. Skinner and Dr. Sandra L. White, Professor in the Department of Biology at North Carolina Central University, are the institutions' Principal Investigators.

"Through the partnership, we are able to fund joint symposia where we can learn together, internship opportunities for NCCU students, and collaborative pilot projects that address cancer disparities right here in our community," Dr. Skinner continued. "We're also working together to develop a specialized concentration in cancer prevention and control that would give advanced certification to NCCU undergrads majoring in Health Education; the specialized training should make them quite competitive for admissions to graduate programs in epidemiology and other cancer-related fields."

The program is funded through a pair of three-year planning grants to the Duke Comprehensive Cancer Center and North Carolina Central University. The grants were awarded by the Minority Institution Cancer Center Partnership, Comprehensive Minority Biomedical Branch of the National Cancer Institute (NIH). ●

New Building Approved by Trustees Second MSRB Will Have Cancer Research Space

The Duke University Board of Trustees has given the go-ahead to a construction project that would create a second Medical Science Research Building (MSRB).

The 165,000-square-foot medical science building will support the growing need for research space for a number of centers and departments, including the Duke Comprehensive Cancer Center, the Stedman Nutrition Center, the department of surgery and the department of medicine.

"Duke has recruited outstanding new leadership in these and other departments," said R. Sanders Williams, MD, dean of Duke's School of Medicine. "The new research space will help us recruit other leading researchers, enhance research productivity and accommodate the advanced equipment that is central to our research enterprise."

MSRB II will also support and complement the nearby Center for Human Genetics and Center for Models of Human Disease. The four-level building, which will cost \$64 million, will be built on the southeast corner of Research Drive and Erwin Road, near the existing MSRB. ●

Ready for Prime Time Cancer Center highlighted in new TV ad campaign

Kim Drake, a full-time mother, was diagnosed in 1995 with brain cancer. An MRI revealed a tumor the size of an orange located behind her left eye. Drake went to her local hospital for surgery, but the physician was not optimistic. "Then my brother found out about Duke's brain tumor program online and I decided to get treatment here," Drake recalls. "Duke gave me the best chance to beat this."

These days, Drake is a healthy, happy mother who volunteers at the Cancer Center, sharing her story with other brain tumor patients. And thanks to a television advertising campaign that began airing on stations in December, she's now sharing her story with a wider audience. Drake is one of several patients featured in the 30- and 60-second commercials, which feature a montage of Duke cancer patients telling heartfelt, highly personal stories about the serious malignancies they have survived with Duke's help. ●

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New Breast Scanner Detects Early Cancer Signs

Duke researchers have developed a new breast scanner that is designed to detect subtle changes in breast cells before a lump can be felt by hand or seen with X-ray mammography. Such early detection should enable doctors to more successfully treat breast cancer before it has formed a tumor or spread to lymph nodes, said Martin Tornai, PhD, associate professor of radiology and biomedical engineering at Duke and developer of the device. The new camera has undergone extensive testing in artificial breasts and will begin testing in women this spring.

The camera uses nuclear medicine to pick up chemical changes to breast cells that signal the cells are becoming malignant, said Dr. Tornai. The camera

should be particularly useful for detecting tumors in large or dense breasts, which are difficult to image using traditional mammography because X-rays often cannot penetrate them. Moreover, the geometry of the new device allows for imaging small breasts and the nearby chest wall. It can even image the axillary lymph nodes to look for evidence of metastasis, which traditional mammography cannot do.

In clinical practice, the procedure would take 10 to 20 minutes per breast, and should be more comfortable for the patient than mammography, because the breast is not compressed during the procedure. Patients may not even need to remove their bra, since the device never touches the breast, noted Dr. Tornai. ●

Protein Linked to Tamoxifen Resistance

Cancer Center researchers have identified a protein that breast cancer tumors over-produce when they become resistant to the drug tamoxifen. The researchers said their finding could help them predict which tumors will benefit from tamoxifen—the frontline drug used to treat operable breast cancer—and which tumors won't.

Future studies will be able to determine if tumors that over-produce this protein, called MTA-1, could be treated with a different hormonal therapy following their initial treatment with surgery, chemotherapy and/or radiation, said Kimberly Blackwell, MD, assistant professor of oncology at the Duke Comprehensive Cancer Center.

In years past, tamoxifen was the only option to help prevent breast cancers from recurring in women with estrogen-positive tumors, said Dr. Blackwell. But a percentage of women develop resistance to the drug.

“We have a multitude of hormonally based drugs at our disposal that are designed to treat or prevent breast cancer and its recurrence,” said Dr. Blackwell. “Our ultimate goal is to test tumors at the time of diagnosis to determine what their molecular signatures are and then to select the best therapy aimed at treating the tumor.”

Other authors on the research team, all from Duke, include Mark Dewhirst, PhD, Donald McDonnell, PhD, Holly Dressman, MD, Stacey A. Snyder, and Jeffrey R. Marks, PhD. ●

Discovery Could Help Block Early Metastasis

In one of the clearest models of cancer metastasis, Cancer Center scientists have shown that spreading cancer cells receive growth-sustaining signals from nearby blood vessels telling them where to go for permanent nourishment and oxygen. These signals actually protect the fledgling cancer cells long before new blood vessels have grown around the cancer to supply it with a more permanent source of nutrients and oxygen.

“We’ve demonstrated a give-and-take relationship in which cancer cells release signals to nearby blood vessels to stimulate new vessel growth; in turn, blood vessels release signals that sustain the migrating cancer cells as they try to establish themselves in new tissue,” said Duke cancer biologist Mark Dewhirst, PhD.

These findings present a model of the earliest stages of cancer metastasis and bolster medicine’s latest strategy of blocking blood vessel growth as a means of inhibiting cancer’s spread.

Scientists have long known that tumors secrete proteins which promote the growth of new blood vessels to sustain the tumor’s continued growth. What they didn’t realize is that endothelial cells that line the blood vessels are also releasing signals back to the cancer cells that protect the cancer cells from dying and direct them to grow toward the blood vessel.

“Our data show that blood vessel endothelial cells are involved in cancer survival and growth at a far earlier stage than we had originally believed,” said Dr. Dewhirst. “This discovery energizes our efforts to block these signals from being released and to inhibit new blood vessels from forming.” Such a strategy is called anti-angiogenesis.

Dewhirst said these findings will help researchers develop strategies to block the earliest stages of cancer metastasis—or spreading from the primary tumor site—because they demonstrate how the fledgling metastatic cancer cells adapt and survive in their new environment. ●

New Prostate Clinic Offers Convenient, Collaborative Care

A new Prostate Clinic has opened at Duke, offering prostate cancer patients a multidisciplinary approach to care and treatment.

“Cancer treatment is becoming more complex and more multidisciplinary, which means that patients often need to see physicians in several different specialties before a decision is made regarding their treatment,” says radiation oncologist Mitch Anscher, MD. “This is especially true for patients with prostate cancer, since there is no one single treatment that is accepted as the gold standard for most patients.”

All patients in the Prostate Clinic meet with specialists in urology, medical oncology, and radiation oncology including Drs. Mitchell Anscher, Brian Quaranta, Dan George, Cary Robertson, and Brian Murphy. The physicians then discuss and consult with one another before providing a unified recommendation of treatment for each patient. “Our approach allows the patient to see all of the doctors in one day and receive a recommendation for appropriate treatment that same day or soon after,” says Dr. Anscher.

Patients can make an appointment at the Prostate Clinic by calling (919) 668-8108. ●

New Player Identified in Cellular Relay Event that Suppresses Cancer

Researchers at the Duke Comprehensive Cancer Center have found a new player in a molecular “relay event” that cells play out to keep themselves healthy and growing normally. When any member of the team malfunctions, cells grow unrestrained and often become cancerous.

In fact, mutations in this particular relay event—called the TGF-beta signaling pathway—are involved in all pancreatic cancers and 80 percent of colon cancers, said Gerard Blobbe, M.D., Ph.D., Assistant Professor of Medicine, Pharmacology and Cancer Biology at Duke.

The new cellular team member that Dr. Blobbe and his collaborators Robert J. Lefkowitz, Professor of Medicine and Biochemistry, and Xiao-Fan Wang, Professor of Pharmacology and Cancer Biology, reported in *Science* is a protein called beta-arrestin, which helps regulate the strength of signals transmitted inside the cell, much as a dimmer on a light switch controls the intensity of light.

While seemingly inconsequential, the newly identified player is critical because it tempers the loud message from the “team captain,” TGF-beta, which speaks to its players from outside the cell. TGF-beta is an important signaling protein that regulates how cells grow, divide, differentiate, die at the appropriate time and establish new blood vessels to nourish the cell, among other functions.

When TGF-beta’s relay team of signalers fails to function properly, the resulting imbalance can lead to a variety of diseases, including cancer, heart disease and asthma, said Dr. Blobbe.

Too much or too little of TGF-beta can upset the cell’s status quo or “homeostasis” and cause disease, so defining how TGF-beta works inside the cell is critical to developing ways of manipulating its behavior, he said. “The ultimate goal would be to develop therapeutic ways to block its tumor-promoting effects while maintaining its tumor suppressor effects.” ●

Firsthand

Firsthand Dr. Kim Blackwell

I live for my family first, my farm, and my career in breast cancer, which tells you how much I like what I do. I can't imagine doing anything else. I get up at six every morning and feed our horses and dogs. My one-year-old son gets up about seven, and I feed him and get him dressed. I drop him off at day care, then I come to work.

I spend the first hour or two of each morning returning phone calls and e-mails, mainly requests for second opinions or referrals from physicians from all over the country. Duke has clinical trials that aren't open anywhere else, so if a physician wants to put a patient on a trial, I call back quickly because they usually need to make immediate decisions.

On Wednesdays, I'm in the multidisciplinary Breast Clinic, and it's extremely busy. We usually see four to six new patients and 18 to 20 total patients on a given day, from 8 a.m. straight through to 6 p.m. My particular clinical interest is taking care of young women with breast cancer.

I have an amazing physician assistant, Lee Daly, who helps me take care of patients. Lee is one of the best breast cancer providers I've ever seen. She also helps me run many of the clinical trials. Lee and I usually meet once a week to focus on clinical trials and to go over plans for our returning patients.

On the other days of the week, I meet with people sponsoring our clinical trials, MD/PhD candidates, and medical students. I might also have a teleconference with other researchers about one of our clinical trials or a laboratory project. I usually meet with my lab manager, Stacey Snyder, who's another critical person; she carries out many of the experiments we do in the laboratory.

My research is based on questions that arise from caring for patients in the clinic, so my research team and I study approved drugs to figure out how they work and why tumors become resistant to them. I also



PA Lee Daly, Eloise McCoy, and Dr. Kim Blackwell

study research drugs that are promising but not yet FDA-approved to determine how we can combine them with treatments we already have. In addition, I'm working with one of the medical residents, Carey Anders, MD, to begin studying fertility issues in very young women who have had breast cancer.

At the end of each day, my husband picks our son up, and I go home at about 7 p.m. I bring the horses in and feed them, then we eat, put my son to bed, and that's my day! I usually go to bed around 10 or 10:30 p.m.

When I was in high school, I wanted to be a large-animal vet, but in college at Duke, I realized I was more interested in women's

health issues. I started the undergraduate AIDS volunteer program and worked for the Cancer Information Service (1-800-FOR-CANCER), which is sponsored by the National Cancer Institute and based at Duke for this region. Through these experiences, I realized I really wanted to work with breast cancer and take care of younger adults. So I went to medical school at the Mayo Clinic with that goal in mind. Then I returned to Duke for my residency and fellowship and joined the Duke faculty.

I love this cancer center. It's one of the top cancer centers in the country—there's not a better place to be doing breast cancer research than Duke right now. Our

director is a breast cancer surgeon, we have one of the largest clinical breast cancer operations in the nation, and we have a Specialized Program of Research Excellence (SPORE) grant from the National Institutes of Health (NIH) in breast cancer. This is one of the few places where a physician can merge really good science and really good patient care.

Breast cancer specialists get to see many aspects of a person's life: her goals, what she's done, what she wants to do. You get to know your patients so well, and 99 percent of the time, you get to share the happiest moments with them. And if you can help them in some way, it's an incredibly powerful thing. ●

Firsthand Eloise McCoy, Breast Cancer Patient

I was diagnosed with advanced breast cancer in July 2000. The doctors in Georgia gave me a zero-percent chance of survival. I went to another hospital, but they weren't very optimistic there either—they gave me a 25 percent chance. Then I went to Duke. The odds were against me, but I am beating the odds!

I had surgery and I pulled through with flying colors. I was cancer-free, went through radiation treatment, and everything was fine. But then the cancer metastasized, and in January 2003 I was diagnosed with cancer in my liver. The doctors weren't very optimistic, but they gave it their best shot. By this time, my stomach was huge—I looked like I was nine months pregnant—and I had very skinny arms. I looked like those starving kids in Africa. My breathing was erratic and I had to use a wheelchair and cane.

One night, right after I'd been told my chance of survival was slim, I was in my van, hysterically crying and praying. I looked out and saw a big ball of light suspended in the air, and as it moved toward me, it formed a star. It stood beside my van, then moved away and disappeared. I couldn't move or speak, yet at the same time, I felt comforted.

Mysterious things have been happening to me throughout my journey with cancer. Strangers have been coming up to me and giving me messages from God. It's helping me get through.

My doctors tried oral chemo, but it worked too slowly, so they tried Navelbine. I hemorrhaged, ended up in intensive care, and almost died. After that, the doctors were scared to try anything else. They said, "We think it's best if you just live what life you have left, because we don't feel you're going to make it."

My daughter, Dé, said, "Mommy, Lee Daly said if you needed her, to call her, so call Duke." (Eloise and Dé met Lee, a physician assistant, while receiving treatment at another cancer center. Lee has since moved to Duke.) So I called Lee, and she said, "No situation is impossible, Eloise. Get over here ASAP—we're going to pull you through this."

I came to Duke in May 2003. Lee and Dr. Kim Blackwell orchestrated my treatment.

We tried the Navelbine again, but with another drug, Herceptin®. Again, I hemorrhaged. I ended up in a hospital over July 4th weekend. They did emergency surgery to stop the bleeding, and I almost didn't make it. So I figured, Navelbine is not for me!

Dr. Blackwell suggested another chemotherapy, Taxotere®, along with the Herceptin. Dé and I discussed the negatives, and decided to try it. The Taxotere and Herceptin have been working well. In a few months, the tumors had shrunk by about a third. My stomach started getting smaller, then all of a sudden, I didn't have to use the wheelchair anymore. One morning I woke up, and my stomach was flat and my arms were all filled out! When Lee saw me, she called me "a miracle," and Dr. Blackwell was overwhelmed. All of us were hugging! Dr. Blackwell says if these drugs stop working, we've got a backup that's even more awesome.

I've gone back to school. I have a degree in mathematics and computer science, and a master's degree in business administration. Now I'm working on my PhD in ministry at the A&D School of Theology in Wilmington, North Carolina. I'm also writing a book, "As the Storm Rages," about my journey.

I couldn't have made it this far without the support of my family and friends—especially my daughter, Dé Corbett. She turned down medical school and moved me into her home to take care of me.

If I didn't have a strong faith in God, I would be dead by now, and I would not be here at Duke getting the best treatment. Without Lee Daly, Dr. Blackwell, and all of the nurses, I couldn't have done it. I knew God wanted me at Duke, and I love it here. ●

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Firsthand Meet...Lee Daly, Physician Assistant, Duke Breast Program

As a physician assistant in the Duke Breast Program, Lee Daly says that the most rewarding part of her job is "knowing that I can make a small difference in patients' lives."

Patient Eloise McCoy would say that Lee is underestimating the impact she has on the women she helps care for. In fact, Daly is the reason that McCoy decided to come to Duke for treatment when other hospitals gave her little hope of survival.

"Lee Daly is the one who told me, 'No situation is impossible,'" says Ms. McCoy. "She made me feel that I could live, and without her and Dr. Blackwell, I couldn't have done it. She's awesome—I love her!" (Read Ms. McCoy's own story on this page.)

Daly modestly deflects the credit. "It really was Eloise's courage and strength that made things happen," she says. "She was willing to take a risk on a medication. We were unsure what the effect would be, but she had faith it would work. She's an amazing woman—I've gained a lot from working with her."

A graduate of the Duke Physician Assistant Program, Daly has worked with several physicians at the Duke Comprehensive Cancer Center over the years, both caring for patients and doing research. She currently works with Dr. Kim Blackwell in the Duke Breast Clinic and laboratory.

Daly sees patients on Wednesdays and Fridays. She and Dr. Blackwell work closely together, consulting with each other and drawing on the expertise of the Cancer Center's surgeons, radiation oncologists, social workers, pharmacists, and other health care professionals. Daly also teaches in the Physician Assistant Program, shares her experience with residents and fellows, and conducts clinical research with Dr. Blackwell. She is particularly interested in issues that affect the quality of life of breast cancer patients during and after treatment, such as weight gain, lymphedema, and other side effects.

Dr. Blackwell is one of Daly's biggest fans. "She's taken excellent care of Eloise and so many other patients. She also helps run our clinical trials. She makes it possible for me to see the number of patients I see and still get things done in the laboratory. We make a good team." ●



Duke plays a major role in a nationwide project for improving cancer care

Duke University is one of forty-nine cancer centers nationwide that will participate in an innovative project sponsored by the National Cancer Institute (NCI) called the Cancer Biomedical Informatics Grid (caBIG). caBIG is intended to create a cancer-based biomedical informatics network that will connect teams of cancer investigators, their data, and their tools to enhance discovery and enable research teams to pursue new collaborative efforts. The goal is to leverage the strengths and expertise of cancer investigators, doctors, and entire centers globally.

"We know that cancer centers all over the country are working toward the same goal: to offer cancer patients the best research and treatment possible," said Kim Johnson, Director of Cancer Center Information Systems for the Duke Comprehensive Cancer Center. "Cancer Centers recognize the need to share technical knowledge so that everyone has the best opportunity to find new and effective cancer treatments faster and more efficiently. When we do that, everyone wins... especially all cancer patients."

caBIG is an ongoing project that will continually redefine how research is conducted, care is provided, and patients and participants interact with the biomedical research enterprise. The Duke Comprehensive Cancer Center is participating in the project with representation and leadership in four areas: Clinical Trials, Integrative Cancer Research, Architecture, and Strategic Planning. ●

Major Awards and Honors

Charles Hammond, MD, EC, Hamblen Professor and former Chair of Obstetrics and Gynecology, was named President of the American College of Obstetricians and Gynecologists.

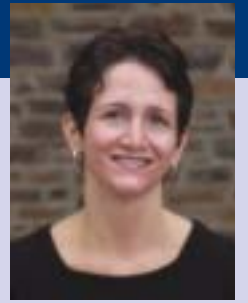
Joseph Heitman, MD, PhD, Associate Professor of Molecular Genetics and Microbiology, was awarded the Amgen Award by the American Society for Biochemistry and Molecular Biology for his influential research in transplantation biology and infectious disease.

Christian Raetz, MD, PhD, Chair of the Department of Biochemistry, received the Avanti Award from the American Society for Biochemistry and Molecular Biology for outstanding contributions to lipid research.

John York, PhD, Howard Hughes Medical Institute Assistant Investigator and Assistant Professor of Pharmacology and Cancer Biology, received the American Society for Biochemistry and Molecular Biology's Schering-Plough Scientific Achievement Award for outstanding research contributions to biochemistry and molecular biology.

James Tulskey, MD, was recently awarded the prestigious Presidential Early Career Award for Scientists and Engineers (PECASE) for excellence in research. This national award, conferred by the White House Committee on Science and Technology, recognizes investigators who have achieved the highest degree of scientific productivity at an early stage in their career.

Renee Webb Awarded the Evelyn Morgan Excellence in Nursing Award



Duke nurse Renee Webb, RN, MSN, was awarded the Evelyn Morgan Award for Excellence in Oncology Nursing Practice. The award, given in honor of Duke's first oncology nurse, recognizes a nurse who has contributed significantly to the field of oncology nursing through direct patient care at the Duke Comprehensive Cancer Center.

Cochran is Executive Director of Development



Karen Cochran, former Associate Dean for Development and Alumni Relations for The Fuqua School of Business, has been named Executive Director of Development for the Duke Comprehensive Cancer Center.

"Karen is a seasoned professional and has already begun to provide outstanding leadership in the Cancer Center's fundraising and development efforts," said Steven A. Rum, Vice Chancellor of Development and Alumni Affairs for Duke University Medical Center, as he made the announcement last October. "She

brings a wealth of experience to this position with a career that has spanned more than 18 years. The Cancer Center is fortunate to have someone so professional and dedicated to lead this effort."

H. Kim Lyster, MD, Director of the Duke Comprehensive Cancer Center, added, "Karen brings a combination of education, experience, and skills to this important position. Her role in the Cancer Center is absolutely key to our ability to continue to expand the Cancer Center's research and patient care initiatives."

Under Cochran's leadership, The Fuqua School of Business surpassed its Campaign for Duke goal of \$80 million and increased annual fund revenue from \$600,000 to \$1.6 million in six years. Cochran also served as a co-leader in the creation of the inaugural Coach K/Fuqua School of Business Leadership Conference, a successful outreach initiative that led to the establishment of the Center for Organizational Leadership and Ethics at Fuqua. She previously served as Director of Development for the business school from 1997-1999. ●

We Regret Our Errors

In the Duke Comprehensive Cancer Center's 2002-2003 Annual Report, David and Joann Grimes, who are members of the Cornerstone Society and James B. Duke Society, were omitted from the Honor Roll listing. Pulling for Kids—a jazzercise event held each year in Cary, NC, in memory of Andrew Haggar—was also omitted. All funds raised at this benefit go directly to the Duke Comprehensive Cancer Center to be used specifically for neuroblastoma research. We extend our gratitude toward the Grimes and everyone involved with Pulling for Kids for their generous support, and offer our sincere apologies for these inadvertent omissions.

—Jill Boy, Editor

"Giving to Duke is like Funding an Insurance Policy"

"Giving to Duke every year is like funding an insurance policy. You give knowing that you might reap the benefits of that gift in later years." Those are the sentiments of Jack and Marsha Slane of High Point, N.C., who recently contributed to the Duke Comprehensive Center Director's Fund.



est needs and have the most impact. It is used to support new and innovative research and treatments and can also be used to establish endowed professorships and to assist with the recruitment of the most outstanding basic, translational and clinical researchers staff to the Cancer Center.

"The Director's Fund is critical to the Cancer Center," Karen Cochran, Executive Director of Development for the Cancer Center. "Because of the generosity of the Slanes and others, we have been able to fund successful initiatives that otherwise might have gone unfunded. Such as recruitment of

"We have recognized what a difference research has made through the years, so we have continued to give. Money is the fuel needed to slay the cancer dragon," said Mrs. Slane. "We give now with hopes of funding new ways to prevent and treat cancer. We have seen many friends battle this disease, and have always known that we didn't want to wait until we had cancer to give."

faculty and new and promising research initiatives." "Giving is just the right thing to do," said Mr. Slane. "The Duke Cancer Center is a great place to invest your money. In business, you invest in R&D (research and development). When you invest in cancer research, your money can really make a difference." ●

The Director's Fund is the Duke Comprehensive Cancer Center's annual fund and is used to support initiatives that address the great-

Take A Seat Gala Huge Success for Cancer Center

Members of the Duke Comprehensive Cancer Center's Citizens Advisory Board and Board of Overseers joined forces to raise over \$240,000 to benefit the DCCC. More than 300 people attended this unique black tie gala featuring an auction of 65 chairs and other pieces of unfinished furniture which were transformed into one-of-a-kind works of art by artists from across the country.



Duke President Nan Koehane admiring a live auction item designed by artist Susan Laws, owner of "Heirlooms" in Durham.

Spring Into Action! Get Involved in Upcoming Cancer Center Events

The Eleventh Annual Angels Among Us 5K and Family Walk, which benefits The Brain Tumor Center at Duke, will be held on Saturday, April 24, at Wallace Wade Stadium at Duke University. For information about how to participate or volunteer, visit www.angelsamongus.org or contact Dorrys McArdle at mcard002@mc.duke.edu or (919) 667-2616.

The Rainbow of Heroes Walk, benefiting the Pediatric Bone Marrow and Stem Cell Transplant Family Support Program, will be held on Saturday, May 1, at Duke's North Pavilion. For information about how to participate or volunteer, please visit www.cancer.duke.edu/PBMT/support.asp or contact Jane Schroeder at schro005@mc.duke.edu or (919) 668-1128.

The Joann Gaddy Grimes Big Event to Fight Cancer (formerly Bike and Walk to Fight Cancer) is celebrating its 10th year anniversary this year. The event will take place on Saturday, May 15, in Greensboro at Hagan Stone Park and benefits the Cancer Center's Director's Fund. This fund is used to support new and innovative research and treatments. To be a part of this fantastic day, please log on to www.bike4duke.org or contact Stefanie Ratledge at [svratledge@yahoo.com](mailto:srvatledge@yahoo.com) for more information. ●



Dr. Mike Colvin, Director Emeritus, and his wife Macey served as honorary chairs of the evening. Other honorary chairs not pictured were Dr. Kim Lyerly, Director of the Cancer Center and his wife Dr. Anne Lyerly, and Dr. Ralph Snyderman, Chancellor for Health Affairs.



The past and present come together to enjoy a fun-filled evening with friends. (Left to Right) Dr. Bill Shingleton, Founding Director, and Dr. Kim Lyerly, Current Director of the Duke Comprehensive Cancer Center.



(Pictured L-R) Take A Seat Co-chairs Betsy Oakley and Penny Lambert with Citizens Advisory Board Chair Nancy Wright. Other committee members not pictured are Frances Roberson, Tom Wagg, Jaree Todd, Ross Harris, Larry Hines and B.J. Williams.



Sandy and Frances Roberson celebrating their "live auction" purchase.

Nevins Named Director of Genome Technology Center

Joseph Nevins, PhD, a Howard Hughes Medical Institute investigator and James B. Duke professor of genetics at Duke, has been named director of the Center for Genome Technology (CGT), a center of the Duke Institute for Genome Sciences and Policy.

Dr. Nevins investigates the genes that control normal cell growth and the genetic disruptions that lead to cancerous tumor development. His work incorporates DNA microarray or gene chip technology to simultaneously measure the activity of thousands of genes, thereby creating “genetic fingerprints” that can help predict the future course of breast, ovarian, and brain cancers.

Dr. Nevins has been interim director of the CGT since its inception in 1999. The center develops and applies novel approaches to the analysis of the genome—an organism’s complete set of genetic instructions. Part of its mission is to provide support for investigators in applying these technologies for their research.

Dr. Nevins received his PhD in microbiology at Duke, where he studied viral gene regulation. He completed his postdoctoral studies as a Jane Coffin Childs Fellow at Rockefeller University, where he focused on the mechanisms by which DNA is transcribed into messenger RNA. He returned to Duke in 1987. ●



Willett Named Chair of Radiation Oncology

Christopher G. Willett, MD, a specialist in gastrointestinal cancers, has been named chair of the department

of radiation oncology at Duke University Medical Center. Dr. Willett assumed his new duties on March 1, 2004. Prior to accepting the position at Duke,

Dr. Willett served as clinical director of radiation oncology at Massachusetts General Hospital in Boston and professor of radiation oncology at Harvard Medical School.

“Dr. Willett will bring exemplary leadership to the radiation oncology department, which is a vital component of the Duke Comprehensive Cancer Center,” said R. Sanders Williams, MD, vice chancellor for academic affairs and dean of the School

of Medicine at Duke. “His high national visibility in the field of radiation medicine and cancer treatment, his leadership experience, and his vision for enhancing Duke’s research in emerging fields of radiation oncology will continue to help provide the very best care and treatment for our patients and education for our students.”

“I am honored to be joining Duke,” Dr. Willett said. “The specialty of oncology is entering

an extraordinary phase of development, and Duke is poised to contribute significantly and lead these efforts. I look forward to working with the outstanding physicians, scientists and medical school and hospital staff on these endeavors.”

Dr. Willett’s clinical research interests include new therapies for treating rectal and pancreatic cancer and the use of intraoperative radiation therapy in treating gastrointestinal cancers. ●



Steve Shearer and his friend Jeff Barker celebrate a successful Bowl-a-Thon on January 17. The event, held at The Strike Zone in Nicholasville, Kentucky, raised \$10,000 for The Brain Tumor Center at Duke. Steve, a Duke patient and brain tumor survivor, organized the event with the help of family and friends. The Strike Zone donated the lane and shoe rentals for the event.



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