A Publication for Friends of Duke Comprehensive Cancer Center

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### **TISCH FAMILY GIVES \$10 MILLION FOR CANCER RESEARCH AT DUKE**

uke University Medical Center received a \$10 million gift from Preston Robert Tisch and his family to support cancer research at the Brain Tumor Center at Duke and at the Duke Comprehensive Cancer Center (DCCC). This is the single largest gift ever received by the DCCC. Tisch is chairman of Loews Corporation and co-owner of the New York Giants football organization.

cancer center

Of the \$10 million gift, \$5 million will be used to fund basic and translational research of promising new brain tumor drugs and to support brain tumor clinical trials. This gift, in part, extends the translational program that Accelerate Brain Cancer Cure (ABC<sup>2</sup>) created with Duke in 2002 to accelerate potentially life-saving drugs from the laboratory to the clinic in an effort to save patients with brain tumors.

The other \$5 million will be used to create the Preston Robert Tisch Cancer Investigators' Fund. Duke University Medical Center will contribute an additional \$5 million toward the Investigators' Fund. In recognition of the gift, the Brain Tumor Center at Duke will be renamed The Preston Robert Tisch Brain Tumor Center at Duke.

"The benevolence of the Preston Robert Tisch family will have an enormous impact upon the search for new brain tumor treatments and we are indebted to them for their generosity," said Victor Dzau, MD, chancellor for health affairs at Duke University and president and CEO of Duke University Health System. "Their contribution will enable Duke to recruit and retain the brightest researchers and will create tremendous promise for all cancer research at Duke." Henry Friedman, MD, co-leader of the Brain Tumor

Center at Duke, called Tisch "a great humanitarian and an

accomplished leader," and said the center is proud to bear his name. "This wonderful show of support will allow Duke to continue its leadership in the eradication of all types of cancer," Friedman said. "It is my hope that people all across the clobe suffering from

people all across the globe suffering from brain tumors will be the beneficiaries of our

Preston Robert Tisch

gift," said Tisch. Speaking for the Tisch family, Mr. Tisch's son Steve added: "We are pleased to contribute to Duke's cutting-edge research and treatments to enable the Brain Tumor Center to take its work to the next level. In New York, we have had a long term commitment to the NYU Medical Center, which is making great strides in health care; now we are pleased to add our support to Duke, which has been doing exemplary work in the battle against brain tumors." Steve Tisch has been elected to the Board of the Duke Brain Tumor Center. **\*** 



#### **KE** Duke University Medical Center Celebrates its 75th Anniversary

July 21, 2005, marked the 75th anniversary of the opening of the Duke University Medical Center. On July 21, 1930, after two and a half years of construction, Duke Hospital opened its doors. Later that year, the Duke University School of Medicine offered its first classes, followed by the School of Nursing in 1931. Victor Dzau, MD, chancellor for health affairs at Duke University and president and CEO of the Duke University Health System, said, "In keeping with our heritage, the Duke University Medical Center seeks to provide both excellent and socially relevant medical education, research and patient care, and we are expressly committed to the search for solutions to regional and national health care problems."

#### **NEW WEAPON BATTLES MELANOMA**

ared Gollob, MD, is fighting an uphill battle against one of the deadliest forms of cancer: melanoma. The very cells he is trying to kill are genetically programmed to survive amidst the harshest conditions. Melanocytes are designed to resist the sun's damaging ultraviolet rays since the pigment they produce protects the skin from severe burns. Yet when melanocytes become cancerous—deemed melanoma—that same tenacity prevents them from being destroyed.

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Duke Establishes

Center for Survivorship,

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Gollob, an oncologist at the Duke Comprehensive Cancer Center and at Durham's Veterans Affairs Medical Center, has a new weapon in his arsenal against melanoma, and it is showing promise in an early phase I clinical trial available only at Duke. He is combining a drug called decitabine with high doses of an immunestimulator called interleukin-2 (IL-2). In doing so, Gollob has been able to shrink melanoma in about half of patients: far greater than the 15 percent response rate that Gollob typically sees with IL-2 alone.

Decitabine works in a novel manner. It doesn't kill cancer cells nor does it activate the immune system like IL-2 does.

Instead, it removes molecules—called methyl groups—that silence genes which control cell death and immune recognition in melanoma cells.

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Jared Gollob, MD

When these genes become reactivated, melanoma cells become more visible to the immune system and are more susceptible to being killed when attacked by the immune system.

In the trial, patients with advanced melanoma receive a low dose of decitabine for two weeks, followed by very high doses

of IL-2. The hope is that decitabine will alter gene expression in melanoma cells so the IL-2 can work more effectively, said Gollob. \*







"Strategies for battling cancer have dramatically changed in the past decade, and so must the methods of developing new drugs to battle cancer."

he time has come for academia, regulatory agencies, pharmaceutical companies, small biotechs, and consumer groups to band together with a common purpose of eradicating cancer.

Today, many scientists lack sufficient training in regulatory-speak to rapidly move new and innovative cancer drugs from the laboratory through the approval pipeline. FDA policies are understood within but aren't shared with scientists who need to know them. Big pharmaceuticals seek drugs that will cure the masses, yet cancer drugs are becoming increasingly targeted to the individual's unique molecular makeup. Small biotechs fold before promising drugs come to fruition.

Patients themselves are fearful of clinical trials, despite their critical role in drug development. In fact, only three percent of adults with cancer enroll in clinical trials, yet through these trials they can receive the most innovative drugs available in the world. No patient is ever denied the best current therapy; even better, they may receive a more effective treatment. Parents of children know this, and the vast majority of children with cancer have been enrolled in clinical trials over the past five decades. As a result, dramatic changes have occurred in my lifetime, as nearly 80 percent of children diagnosed with cancer today will be long term survivors, compared to less than 10 percent when I born in the 1950s.

The system needs fixing, and the best way to start is with a collective dialogue. This dialogue should cross the language barriers and bring us toward a common mantra: speeding drugs to cancer patients in need.

Together, we are taking a tangible step toward corrective action through the Accelerating Anticancer Agent Development and Validation workshop. Last June, the Duke Comprehensive Cancer Center, the FDA, the National Cancer Institute, the American Society of Clinical Oncology and the American Association for Cancer Research sponsored the workshop in Washington, D.C. to train young scientists how to test new drugs and navigate their timely approval. Scientists from across the nation and world arrived with their novel drug data in hand, poised to learn how they can expedite their drugs through the testing and approval process. Senior mentors explained the regulatory requirements and provided feedback for investigators who needed to refine and amend their drug testing strategies.

It is currently estimated to take 15 years from the time a drug is discovered until it reaches the patient. Clearly, this is not acceptable. Strategies for battling cancer have dramatically changed in the past decade, and so must the methods of developing new drugs to battle cancer. We can set the stage for creating a new model of efficient, rapid drug development, or we can sit back and watch as promising drugs sputter and stall. The choice is ours, and we chose to take action.

Sincerely, H. Kim Lyerly, MD · Director

#### DUKE ESTABLISHES THE CENTER FOR CANCER SURVIVORSHIP

he Duke Comprehensive Cancer Center (DCCC) has partnered with Amgen, one of the world's leading biotechnology companies, to establish the Duke Center for Survivorship with a \$500,000 grant from the Amgen Foundation.

"We are certainly indebted to the Amgen Foundation for this generous gift and to George Morrow for his guidance and support," said H. Kim Lyerly, MD, director of the DCCC. Morrow is a member of the Duke University Medical Center Board of Visitors and executive vice president of global commercial operations for Amgen. He was instrumental in the establishment of this partnership.

The Duke Center for Cancer Survivorship combines the services offered by three pre-existing patient care programsthe Cancer Patient Support Program, Oncology Recreation Therapy, and the Cancer Patient Education Program-to offer Duke cancer patients the most comprehensive support

Jill Boy Editor

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MCOC 4245

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DCCC is a designated Comprehensive Cancer Center

Produced by the Office

of Creative Services and

Marketing Communications

Duke University Health System

Melissa Scearce Contributors

by the National Cancer Institute.

#### Cancer Center Notes is

produced three times a year by Duke Comprehensive Cancer Center; Office of Communications, DUMC 2714, Durham, NC 27710; Phone: 919-684-3560: Fax: 919-684-5653; E-mail: jill.boy@duke.edu

H. Kim Lyerly, MD Director

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by focusing on healing the body, mind and soul through a network of complimentary services and resources. The three main focuses of the Center are support, therapy, and education.

The Duke Cancer Patient Support Program (DCPSP) was created in 1987 by Rachel Schanberg and today consists of over 100 volunteers and five professionally-trained counselors dedicated to providing

with encouragement as they cope with the impact of cancer on their lives. Through the program, patients can participate in individual and/or family counseling, psychoeducational support groups, and self-image programs. All services offered



"The Duke philosophy is that individuals become cancer survivors at the time of their diagnoses and continue to be survivors the rest of their lives." TINA PICCIRILLI, DIRECTOR **CENTER FOR SURVIVORSHIP** 

by DCPSP are provided without charge to patients and families. The Oncology Recreation Therapy has been a pioneer recreation therapy program in the United States since 1976. State and nationally certified therapists use treatment interventions and music, games, crafts, and humor to optimize functioning, coping and quality of life during treatment. The education focus of the Center is provided by the Cancer Patient Education Program, which educates patients and their families about their options and teaches ways to cope with cancer and treatment side effects. The program's Patient and Family Resource Center houses useful information for patients and their families. \*



RESEARCH

#### Heat Enhances Cancer Radiation Therapy

Using hyperthermia before radiation treatment has been shown to shrink tumors completely in more patients with recurrent cancer than radiation treatment alone, according to a study led by Duke Comprehensive Cancer Center member Ellen Jones, MD, PhD, and a team of radiation oncologists.

In a sample of 109 cancer patients, the researchers found that the dual therapy shrank tumors completely in 66 percent of patients



with cancers in the breast, chest wall, head and neck, and skin (melanoma). By contrast, radiation alone caused full tumor shrinkage in 42 percent of patients.

Ellen Jones, MD, PhD

Patients with recurrent cancer may have a poor prognosis because the cancer is typically aggressive and because a full dose of radiation is too toxic a second time, said Jones. Thus, finding new ways to improve the effectiveness of radiation is critical to enhancing the patient's quality of life and potentially extending survival.

"Adding hyperthermia to standard radiation gives us a strategy to get more mileage out of a modest dose of radiation for previously treated patients, who cannot tolerate a full dose," said Jones. Hyperthermia improved local tumor control in the site of recurrence.

While extending survival is the ultimate goal of any treatment, even partial tumor shrinkage can improve a patient's quality of life by reducing pain and discomfort caused by tumors, said Jones. \*

"Adding hyperthermia to standard radiation gives us a strategy to get more mileage out of a modest dose of radiation for previously treated patients, who cannot tolerate a full dose."

#### Nitric Oxide Finding May Yield Better Cancer Treatments and Blood Substitutes

Duke researchers demonstrated how to safely deliver more oxygen to oxygen-deprived tissues in the body, a finding that could lead to more effective blood substitutes and cancer treatments.

Led by Mark Dewhirst, DVM, PhD, and Howard Hughes Medical Institute researchers, the study showed how simply adding a molecule called nitric oxide to the blood's hemoglobin can make it deliver more oxygen to tissues—without boosting heart rate or constricting blood vessels.

"Hemoglobin needs its natural partner in the blood, nitric oxide, to do its job of delivering oxygen to tissues, but current treatments deliver hemoglobin without nitric oxide," said Dewhirst. "Hemoglobin by itself actually reduces oxygenation to tissue because it constricts blood vessels, reducing blood flow." Thus, when delivered

The Duke researchers were seeking ways to

improve oxygen levels inside tumors, which are often low in oxygen. These tumors are more resistant to treatment with chemotherapy or

alone, hemoglobin may cause potentially fatal side effects and limit the effectiveness of radiation and chemotherapy.

radiation, said Dewhirst.



Mark Dewhirst, DVM, PhD

"If we could raise the level of tumor oxygenation before radiation, we would have a better chance of killing more cancer cells," added Dewhirst.

Pierre Sonveaux, PhD, a post-doctoral fellow in Dewhirst's laboratory, said the result of the study is the strongest proof yet that hemoglobin senses oxygen levels and unloads nitric oxide when oxygen levels are low. "These results open up the possibility of using [nitric oxide and hemoglobin] therapeutically in patients where there is not adequate oxygen perfusion to tissue," Sonveaux said. \*

"If we could raise the level of tumor oxygenation before radiation, we would have a better chance of killing more cancer cells."

#### Stem Cells Found In Cerebellum; Possible Cell of Origin for Childhood Brain Tumors

Researchers at the Duke Comprehensive Cancer Center have discovered the presence of stem cells in the cerebellum, a brain region where a deadly type of brain tumor originates. Their findings suggest that such tumors, called medulloblastomas, could arise from stem cells gone awry.

The cerebellum is the brain's control center for motor coordination and cognitive function, yet little has been known about the origins of the neurons and supporting "glial" cells that populate this region.



Robert Wechsler-Reya, PhD

The Duke discovery

of stem cells in the cerebellum suggests a possible origin for these normal cells and provides a starting point for understanding the basis of medulloblastoma, the most common malignant brain tumor in children.

Medulloblastomas arise in the cerebellum but their cells of origin have remained unclear. However, a number of these tumors have been shown to contain proteins that are normally found on neural stem cells. This finding perplexed scientists, as stem cells had never been shown to exist in the cerebellum.

The Duke study supports the theory that medulloblastomas could arise from these cells, said the researchers. They hope their discovery will eventually lead to more targeted, less toxic treatments that disrupt the process by which stem cells could give rise to brain tumors.

"Some medulloblastomas are believed to arise from a type of cell called a granule cell," said Robert Wechsler-Reya, PhD, assistant professor of Pharmacology and Cancer Biology and senior author on the study. "However, the majority of medulloblastomas have no clear cell of origin. Our discovery demonstrates for the first time that stem cells reside in the cerebellum and provides us with a starting point for identifying the cells and genes involved in many medulloblastomas." **\*** 



**DR. MICHAEL MORSE** GI Oncologist and Researcher

# My daughter is five years old. By the time I was her age, I already knew I wanted to be a doctor.

Throughout medical school at Yale and the beginning of my residency at the University of Washington in Seattle, I was interested in cardiology. Then, during the second year of my residency, I spent a month working with a dynamic, well-known medical oncologist. I really liked his approach to the management of cancer and dealing with people with serious illnesses. Medical oncology represented a different way of interacting with people than cardiology, and it had a wealth of scientific opportunities to translate developments in the laboratory into clinical realities. I decided to do a fellowship in medical oncology, and I was impressed with Duke's program, which offers diverse experiences. When I came to Duke to interview, I was amazed to see that second-year fellows were studying new genes and working on new drugs. I came here in 1993 for a threeyear fellowship and have been here ever since.

My clinical specialty is gastrointestinal (GI) oncology, so I see patients with esophageal, gastric, pancreas, stomach, colon, liver, and other GI cancers. I sub-specialize in hepatic malignancies such as metastases to the liver and primary liver cancers. We have a busy multidisciplinary outpatient clinic at Duke, and my team and I see a wide range of patients there three days a week. On a typical day, the first patient we see might be coming in for a followup exam five years out from their cancer; the next might be starting a new round of chemotherapy for an advanced cancer. The third might be coming in to enroll in a clinical trial, while the fourth might already be on a clinical trial. Each week we have a multidisciplinary GI conference where the team-including radiologists, surgeons, oncologists, nurses, and physician assistants-discusses cases and plots strategies.

When I'm not in the clinic, I spend as much time as possible on my research, which is focused on developing and testing new cancer vaccines and other drugs that can help our patients. I started this research during my fellowship, working with Dr. Kim Lyerly, who is now director of the Cancer Center. We have an interdisciplinary group that works closely together, including physicianscientists, PhD scientists, post-doc students, and laboratory technicians. My main role is translating the basic science development of vaccines into clinical trials and designing and overseeing these trials.

Right now we're performing cutting-edge studies on using vaccines therapeutically: we're trying to take someone who has cancer and stimulate their immune system to do a better job of attacking the cancer. We start in the basic science laboratories developing potential cancer vaccines, then we go through testing in animal models, write clinical trial protocols, get regulatory approval and grant funding, and then conduct a clinical study and analyze the results.

Several of the vaccines we've created use dendritic cells, the primary immune stimulators in the body. These vaccines cause the immune system to attack tumors by causing them to recognize antigens, proteins that appear foreign to the immune

system. We've also tested vaccines that use viruses to tell the dendritic cells what they should tell the immune system to do. So far, we've been

seeing signs that we are activating the immune system to recognize cancers, and our goal is to get better and better at stimulating the immune system. One example is a vaccine being tested for people who had surgery to remove colon cancer that had spread to the liver. As many as three quarters of these people—even with chemo—have the cancer come back eventually. Through these studies, we're trying to determine if a vaccine can reduce the chance of the cancer coming back and, if so, what's the best kind of vaccine.

Another important part of my job is teaching. Medical oncology fellows and medical students rotate through the GI clinic, and I also teach residents while doing rounds on the inpatient services at Duke Hospital and the Durham VA Medical Center. Our GI clinic presents a great opportunity to learn because medical oncology



requires you to address a lot of the same chronic medical issues as internal medicine, but it also presents acute illnesses that must be managed. Hopefully it gives young physicians who might be interested in medical oncology a taste of what it's like.

What I like about my job is that every day is different. I like variety, which may be why I'm in academics. I like variety in my personal life, too. My wife, Emy Louie, is an architect, and more artistic than scientific. We come from different ethnic backgrounds, and we have very different personalities, but it works well—it's exciting. Our daughter, Amber, mixes many of our qualities. She likes to dance and be

"Right now we're doing cutting-edge studies on using vaccines therapeutically: we're trying to take someone who has cancer and stimulate their immune system to do a better job of attacking the cancer."

> theatrical, and she's incredibly gregarious. I find it fascinating to watch her grow up.

As an oncologist, it's challenging to take care of people who have serious illnesses. There are many rewarding aspects of this work: interacting with people; developing something successfully in lab or having a clinical trial that shows promising results; being asked to deliver a speech at a national meeting; or having people from other parts of the world come to us for treatment.

In this profession, you have trying times and you have triumphant times. Fortunately, the triumphant times get you through the trying times. The courageous people I meet and work with every day are constant reminders of what's really important. \* "In this profession, you have trying times and you have triumphant times. Fortunately, the triumphant times get you through the trying times. The courageous people I meet and work with every day are constant reminders of what's really important."

# **GORDON COLE**

An advocate for research in the battle against colorectal cancer

# I was diagnosed with stage IV colorectal cancer

out of the blue on August 1, 2003. I was 54 years old, in good health,

and had no symptoms other than an occasional bit of blood on the toilet tissue. I told my doctor, and a few days later I went for a colonoscopy. They found the cancer immediately, and saw that it had metastasized to my liver.

The surgeon I talked to in Greensboro, N.C., felt that, in my situation, I should go to Duke to have the best outcome. He called a Duke surgeon, Dr. Kurt Ludwig, whose specialty is sphincter-saving surgery. The next week I had back-to-back appointments at Duke with Dr. Ludwig, liver surgeon Dr. Bryan Clary, and oncologist Dr. Michael Morse. This multidisciplinary team worked with my oncologist in Greensboro, and together agreed on a protocol: five weeks of chemo and radiation to shrink the primary tumor, then colon and liver surgery in December 2003. That winter, I started six months of chemo, including the newly approved drug Avastin, which was tested at Duke.

After that, things were looking pretty good, and my periodic scans were clear, so Dr. Morse asked if I'd be interested in volunteering for a novel vaccine trial that was funded by the National Cancer Institute. I said yes. The idea of the vaccine is to stimulate your immune system to attack the potential cancer and prevent it from forming tumors. Turns out, even though I didn't get the vaccine that Dr. Morse was studying—I got the other vaccine—my immune system had some sort of response, so we'll see if it prevents a recurrence.

This past winter, I didn't need any treatment. Then in July, a follow-up scan showed two new spots in my liver, so I had surgery in August.

I'm a strong believer in cancer research. Without it, we'll never find a cure. That's why I volunteered for the vaccine study and a blood study, and I'll do it again if the opportunity arises. When you participate in a study, you're getting involved in promising research that has the potential to improve your health, and you get medical follow-ups and oversight. To me, it's a no-brainer. I'm also on the board of directors of the new Greensboro chapter of Golfers Against Cancer, a volunteer group that raises awareness and money for cancer research. In September, we held our first Greensboro event—a golf tournament, silent auction, and dinner. We raised more than \$100,000 this year, and all of the money will go to cancer research at one of North Carolina's three comprehensive cancer centers or toward private research wherever it can do the most good, the quickest.

My wife Sue and I go to a lot of national cancer conferences. At a Cure Today conference in Washington, D.C., we went through lobbying training, and then visited the offices of two of our representatives on Capitol Hill to lobby for the new Cancer Care Improvement Act. At home, a lot of people refer newly diagnosed friends to me because I've been through it all. When I was first diagnosed, a guy was there for me, and it was a tremendous help to have someone with similar problems tell me what he went through and put me at ease. I even wrote a flier called "You Have Cancer! Now What?" to share things I've found helpful when you first get the diagnosis, like having someone come with you to appointments to help ask questions and take notes, where to find useful information, the importance of being your own advocate-and most important, never giving up hope! (Contact me at Gordon@ jmaappraisals.com if you'd like a copy.)

Sue is an executive with U.S. Trust Company, and I work as a commercial real estate appraiser. Although I've continued to work, I've been very lucky that she has a good job, because it has taken a lot of pressure off of me. We have two grown daughters, and my family has been very supportive, especially Sue. I had to make myself let her help, which is the best thing you can do for a caregiver.



This experience makes you appreciate things and puts into perspective what's important. It has given me a new focus, with a new interest in research. I'm doing very well: I'm strong, I exercise all the time, try to eat right, and don't drink much anymore.

A friend who went through the same diagnosis and treatment as me, told me: "Don't listen to the statistics, because it's old news." The results of studies are five and six years old. In the meantime, new treatments are becoming available. There are a lot of new drugs and a lot of new options for treatment. I may not be cured, but if we can manage the cancer, in my opinion, that's just as good. **\*** 

#### AWARDS AND APPOINTMENTS

#### Interim Director of Cancer Prevention Program Named

Celette Sugg Skinner, PhD, has been appointed interim director of the Duke Comprehensive Cancer Center's Prevention, Detection, and Control Research Program. Skinner

is a behavioral scientist who joined the Cancer Prevention, Detection, and Control Research Program in 1998. She received a master in communications research from the Wheaton Graduate School in 1982 and a doctorate in health



behavior and education from the University of North Carolina School of Public Health in 1991. Dr. Skinner specializes in developing and evaluating individually tailored cancer communications. Her intervention research has targeted early detection of cancer among minority populations and facilitating decisionmaking about screening, genetic counseling, and genetic testing for individuals at elevated risk for developing breast, ovarian, and colon cancer.

#### Yan Receives 2005 Peter A. Steck Memorial Award

Hai Yan, MD, PhD, assistant professor in the Duke University School of Medicine Department of Pathology and principle investigator of the molecular oncogenomic lab at the Duke Comprehensive Cancer Center, has received the 2005 Peter A. Steck Memorial Award sponsored by The Pediatric Brain Tumor Foundation.

The award recognizes scientific excellence by a young investigator in the field of neurooncology. Yan was the one recipient chosen from investigators nationwide this year. He was awarded for his research in characterizing the molecular genetic basis of medulloblastoma, which has led to the identification of a critical neuro-developmental gene involved in tumor progression.



The award has been given yearly to honor the late Peter A. Steck, PhD, who discovered the MMAC1/ PTEN gene in 1997, and to support young neurooncology researchers.

#### Febbo Receives Damon Runyon Foundation Grant

Phillip Febbo, MD, assistant professor in the Duke Institute for Genome Sciences & Policy and Department of Medicine, has received a Clinical Investigator Award from the Damon Runyon Cancer Research Foundation.

The grant provides \$750,000 over five years to support Febbo's work on resistance to chemotherapy in metastatic cancer with a



specific focus on prostate cancer. Joe Nevins, PhD, and H. Kim Lyerly, MD, are Febbo's mentors for this award.

The Damon Runyon-Lilly Clinical Investigator Award provides support for the

development and training of young physicians conducting patient-oriented research.

## TWINS SHARE DREAM OF STUDYING MEDICINE, CURING CANCER

ach morning this summer, Waynekid and Wayneho Kam commuted together from Cary, N.C., to the Duke University Medical Center to spend their day studying the biological composition of the body and investigating possible treatments for cancer. They donned their lab coats and headed to their respective laboratories in Independence Park and in Duke's Morris Cancer Clinic. Waynekid and Wayneho Kam are 16 years old and identical twins. They were among 14 North Carolina high school students chosen to participate in a six-week internship program, Summer on the Edge, sponsored by the Duke Comprehensive Cancer Center.

Each year, high school students from across North Carolina compete among more than 100 others to win the opportunity to work side by side with accomplished biomedical research scientists at Duke. The interns work in labs and also go on rounds with Duke physicians and attend lectures given by Duke faculty members.



The Summer on the Edge program has been fostering excitement of biomedical science in students like Waynekid and Wayneho since 1989.

Rising juniors at Southeast Raleigh Magnet High School, Waynekid and Wayneho applied to the Duke program after being encouraged by their medical science teacher. At Southeast, the brothers are both ranked number one in their class. They have the exact same grades and grade point average.

"I was interested in Summer on the Edge because it offers more than textbooks can. It is real world experience," Waynekid said. "In high school, we do experiments for fun and we already know the outcome. At Duke, we don't know what will happen. You get frustrated, but you have to keep working. If successful, our research could save people's lives."

"I've seen what cancer can do," said Wayneho. "My fourth grade teacher had cancer. My Alegebra II teacher had cancer, too, and she survived. I hope to help find a cure. Through this experience, I see now that I can definitely make a difference for people with cancer."

Wayneho worked with Lawrence Marks, MD, professor of radiation oncology, and Robert Prosnitz, MD, an associate in Department of Radiation Oncology.

Waynekid worked in Zhen Yan's lab on research which seeks to understand human molecular changes during exercise. Yan is an assistant research professor of cardiology.

The twins plan to pursue an education and careers in the medical field and would like to attend Duke or the University of North Carolina at Chapel Hill. \*



Tina Ludwig and Gerry Raynor were among the ovarian cancer survivors who came out to show their support.

"We are awestruck and humbled by the dedication of our patients and their families who have come together to raise funds to support our ovarian cancer research program."



#### Duke Benefits from Key to the Cure

The Duke Comprehensive Cancer Center partnered with Saks Fifth Avenue and Mercedes-Benz of Raleigh for the Key to the Cure, a national shopping weekend on October 28-29, which benefited the Duke Comprehensive Cancer Center's Director's Fund. The fund supports research of all types of cancer. Saks Fifth Avenue initiated its shopping weekend throughout the country in 1999. The Key to the Cure event is held simultaneously at all 65 Saks Fifth Avenue locations throughout the nation over the same weekend. During the past six years, the company has donated over \$16 million to organizations throughout the United States.

# WALK HELPS FUND OVARIAN CANCER RESEARCH; NEW STUDY UNDERWAY FOR EARLY DETECTION

varian cancer survivors joined more than 700 family members and friends at the Gail Parkins Memorial Ovarian Awareness Walk on September 24, at Sanderson High School in Raleigh, N.C. The event raised more than \$180,000 to support ovarian cancer research at the Duke Comprehensive

Cancer Center (DCCC).

The top three fundraising teams were Dona's Dream Team, Black-Eyed Susans, and Melinda Bynum Team. The top three individual fundraisers were Becky Yates, Mildred Pennington, and Liz Leach.

"We are awestruck and humbled by the dedication of our patients and their families who have come together to raise funds to support our ovarian cancer research program," said Andrew Berchuck, MD, co-leader of the Ovarian Oncology Research Program at the DCCC. "With their support we will continue to work towards the development of better treatments and ways to diagnose this disease earlier." In addition to the two-mile walk, many of the participants attended an educational forum which took place prior to the walk. The forum featured Duke ovarian cancer specialists Berchuck, Angeles Secord, MD, and John Soper, MD; Joellen Schildkraut, PhD, a nationally recognized epidemiologist at Duke whose research includes the molecular epidemiology of ovarian and breast cancers; and Daniel Clarke-Pearson, MD, of University of North Carolina at Chapel Hill's Lineberger Cancer Center. Audience members learned about the symptoms of ovarian cancer, treatment options, and new research for early diagnostic techniques.

Recently, Duke was chosen to participate in a National Cancer Institute (NCI)-sponsored clinical trial that aims to develop an accurate means of detecting ovarian cancer soon after the disease returns. "We are excited to be a part of this important research and believe that this study may ultimately provide us with important information that could help predict the presence of early stage ovarian cancer," said Berchuck. "We know that when found early, ovarian cancer can most effectively be treated."\*



#### Duke President Tours Cancer Center

H. Kim Lyerly, MD, director of the Duke Comprehensive Cancer Center, hosted Duke University President Richard Brodhead for a tour of cancer clinics and laboratories on July 27. President Brodhead, who later called the tour "inspiring," met with DCCC researchers, clinicians, and graduate students. Pictured are Francis Ali Osman, DSc; Mark Dewhirst, DVM, PhD; Brodhead; Ana Ponce; Tannishtha Reya, PhD; and Lyerly.

## FINDING THE "CAN" IN CANCER

our women with ties to the Duke Comprehensive Cancer Center (DCCC) are the authors of a new book, *Finding the "CAN" in Cancer*. The title was inspired from the late Nancy Emerson, a former DCCC

development officer and volunteer, and her desire to see patients understand the potential for good in something as troubling as cancer diagnosis and treatment. In the book, Emerson, along with friends Pam Leight, the late Susan Moonan, and Terri Schinazi, shared more than 70 years of experience dealing with cancer. The women combined their personal experiences as patients, volunteers, and supporters to offer practical tips for coping with side effects, tests and procedures, and emotional and spiritual issues. While keeping medical terminology and technical details to a necessary minimum, the four friends pooled their knowledge to help patients understand the human side of a serious medical condition. **\*** 



<mark>Susan Moonan,</mark> Pam Leight, Terri Schinazi, and Nancy Emerson

# NCCU AND DUKE CANCER CENTER PARTNER IN PREVENTION OUTREACH

orth Carolina Central University (NCCU) sophomore Janelle Rowell spent her summer interning in a medical science discipline she didn't even know existed. Rowell worked with the Duke Comprehensive Cancer Center (DCCC) epidemiologists to study the patterns, causes, and control of cancer in certain populations.

"I didn't even know about cancer detection, prevention, and control before I started my internship," Rowell said. "I spent my first two

"Healthcare will be more effective if the professionals involved in creating the paradigms for educating and modifying behavior share the cultural nuances, sensitivities and perspectives of the target population."

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Co-Leader, Structural and Chemical Biology Lorena Beese, PhD

**Co-Leader, Breast and Oncology** Andrew Berchuck, MD

Medical Director, Oncology Clinical Service Unit Thomas D'Amico, MD

**Co-Leader, Radiation Oncology** Mark Dewhirst, DVM, PhD

**Co-Leader, Nucleic Acid Biology** Mariano Garcia-Blanco, MD, PhD

**Director, Biostatistics and Bioinformatics** Stephen George, PhD

**Director, Center for Genomic Medicine** Geoff Ginsburg, MD, PhD

**Co-Leader, Bone Marrow Transplant** Joanne Kurtzberg, MD

**Co-Leader, Cancer Genetics and Genomics** Joseph Nevins, PhD

**Co-Leader, Breast and Ovarian Oncology** Victoria Seewaldt, MD

**Co-Leader, Radiation Oncology** Christopher Willett, MD

**Co-Leader, Immunobiology** Michael Zalutsky, PhD

Patient Advocate Barbara Parker weeks learning all I could about the treatments and stages of breast cancer, but it was quite an experience to also learn about the genetics of what causes this cancer."

Rowell's internship was offered through the Partners Allied in Research (PAIR) program, which is funded by the National Cancer Institute. This program partners the DCCC, NCCU, and the Lincoln Community Health Center

> in an effort to increase the number of minorities in the cancer research field. Only two percent of doctoratetrained scholars in the United States within the life, physical and social sciences are African American.

Dr. Sandra White is a principle investigator of PAIR and a biology professor at NCCU, while Celette Sugg Skinner, PhD, is the principle investigator from Duke and director of the Cancer Detection, Prevention, and Control Research Program at Duke. Both believe that more African American scholars in the cancer behavioral research field will help eliminate the racial disparities that exist in cancer outcomes.



PAIR interns Kari-Claudia Allen, Janelle Rowell, Crystal Johnson, and Lisa Battle (from left to right)

"We know that the cancer incidence and mortality rate is significantly higher in African Americans," White said. "The PAIR program believes healthcare will be more effective if the professionals involved in creating the paradigms for educating and modifying behavior share the cultural nuances, sensitivities and perspectives of the target population."

Rowell worked on a genetic epidemiology study led by Duke Associate Professor of Prevention Research Joellen Schildkraut, PhD. The study collects information from breast cancer patients to identify factors that influence the incidence of breast cancer in females who are carriers of specific gene mutations. \*



## Websites Offer Patients Enhanced Information

Visit cancer.dukehealth.org, Duke's newest website offering more information about cancer treatment and patient services. Visitors to the site will find detailed information about how to make an appointment, clinical trials, as well as links to helpful cancer resources.

The Duke Comprehensive Cancer Center's original website, **cancer.duke.edu**, has been redesigned and now provides more information about Duke's cancer research activities.

# Duke Comprehensive Cancer Center ranked 6th among the nation's hospitals for excellent cancer care in

the 2005 issue of U.S. News & World Report America's Best Hospitals.

