

cancer center CS

A Publication for Friends of Duke Comprehensive Cancer Center, A Comprehensive Cancer Center Designated by the National Cancer Institute

DUKE CANCER EMBARKS ON A GLOBAL INITIATIVE

he creation of the Duke Global Health Institute in 2006 marked the beginning of a more aggressive effort by Duke to reduce health disparities in local communities as well as throughout the United States and the world. Led by Michael Merson, MD, the institute is built on collaboration among researchers from schools and departments throughout Duke University in an effort to combat global health problems like HIV/AIDS and cancer and to address the economic, social, environmental, and political issues associated with global healthcare.

In March and again in September of 2007, H. Kim Lyerly, MD, director of the Duke Comprehensive Cancer Center, and Wei Chen, PhD, assistant professor of medicine, visited Peking University. The trip in September included Kenneth Buetow, PhD, associate director of the National Cancer Institute (NCI), Bob Annechiarico, director of the Cancer Center's Information Systems, and Christo Andonyadis, D.Sc., associate director for Clinical Trials Application Engineering at the NCI's Center for Bioinformatics.

"Because of the different language, different standards, and different approaches to research, the first thing we needed to do was develop common research protocols between the two countries," says Chen. "Working with the NCI, we hope to use the caBIG tool to share data with researchers in Peking." caBIG, launched by the NCI in 2004, is a voluntary network of infrastructure, tools, and ideas that enable the collection, analysis, and sharing of data and knowledge in



First Lady Laura Bush and H. Kim Lyerly, MD, discuss international collaborations during a White House luncheon.

an effort to speed research discoveries and improve patient outcomes. Duke is a primary partner of the NCI on the caBIG project.

Once the infrastructure is in place, research collaborations can begin, drawing on the strengths of both Duke and Peking University. Initial research will focus on tissue banking, clinical trials data, and pharmacogenomics, the study of how an individual's genetic inheritance affects the body's response to drugs.

"Because of the large population in China and the higher rates of certain cancers, we will be able to conduct large clinical trials that may not be possible in the United States alone," says Chen. "Clearly, this is going to be an exciting and pioneering collaboration." *

\$1 Million Pledge to Honor a Father and Build Partnerships Around the World

The Duke Comprehensive Cancer Center (DCCC) has received a one million dollar pledge from the estate of John Balderacchi that will be used to support cancer research at Duke and global partnerships.

"My dad was treated for prostate cancer at Duke and received excellent care," says John Balderacchi's son, Arthur, a Duke alumnus. "Dad lived until he was 93, and I consider that a great success, thanks to Duke."

After his father's death in January 2007, Balderacchi began efforts to fulfill his father's wishes to use part of the estate to fund cancer research at Duke. He met with several cancer researchers at Duke to learn more about their work. An art professor at the University of New Hampshire for 37 years, Balderacchi was very familiar with the challenges associated with collaboration within a large academic setting. "I could see that Duke is different; the collaborative environment is wonderful. Researchers are working with their colleagues in other departments as well with colleagues from around the world. That's how research should be conducted, but often isn't."

Half of the estate gift will support the research of Neil Spector, MD, director of Translational Research in Oncology at Duke. Spector is one of the lead developers of Tykerb, a new breast cancer drug recently approved by the FDA for HER2 metastatic breast cancer patients. Spector has focused



cancer and has a particular interest in fighting inflammatory breast cancer (IBC). He believes Tykerb may also be effective in treating IBC, a rare, but aggressive cancer that

much of his research in breast

John Balderacchi is more prevalent among residents along the Mediterranean basin and among Native Americans and African Americans.

"I want to form working groups of top IBC investigators from around the world so we can work together conducting research to find a cure for this devastating disease," says Spector. "The initial focus of our research will be breast cancer, but we will focus on applications for other tumors as well."

The other half of the Balderacchi estate gift will provide support to an international scholar who will conduct research at Duke. "This gift is especially important as Duke forms more partnerships with researchers from around the world," says H. Kim Lyerly, MD, director of the DCCC. "It is often difficult for international researchers working in the United States to receive government funding, so this generous gift from Mr. Balderacchi is very important to our efforts to share information and learn from our colleagues around the globe."

"We are very grateful to the Balderacchi family for having the foresight to invest in development of partnerships that reach beyond national borders by supporting the training of international scholars in cancer research at Duke," says Michael Merson, MD, director of the Duke Global Health Institute. "This gift creates a wonderful synergy between the strengths of our faculty and the needs in the field."

Duke Comprehensive Cancer Center

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FROM THE •

Director





Tony Means, PhD Deputy Director

Nelson Chao, MD



NEW MEMBERS OF LEADERSHIP TEAM

Donald McDonnell, PhD



Neil Spector, MD



Chris Willett, MD

Dear Friends,

I are pleased to announce five new members of the Duke Comprehensive Cancer Center's senior leadership team:

Tony Means, PhD, Nanaline H. Duke Professor and chairman of the department of pharmacology and cancer biology, has been appointed to the position of deputy director. Dr. Means is an internationally renowned basic research scientist and experienced administrator. In his role as deputy director, he will work with the Cancer Center's senior leaders to develop new strategic initiatives to support the Cancer Center's growing number of cancer investigators.

Chris Willett, MD, Leonard R. Prosnitz, MD, Professor and chairman of the department of radiation oncology, has assumed the newly created dual role of associate director of clinical research and medical director of the Oncology Site Based Research Program. Dr. Willett and his team of experienced research administrators are working with Cancer Center leadership, School of Medicine

administration, and Duke Health System administration to ensure that the infrastructure and programs for clinical research at Duke continue to be outstanding.

Donald McDonnell, PhD, Glaxo-Wellcome Professor of Molecular Cancer Biology, has assumed the role of associate director of basic research. Dr. McDonnell will help chart the future directions of the Cancer Center in basic research. He is internationally recognized for his contributions to the pharmacology of nuclear receptors.

Neil Spector, MD, spent eight years involved in the development of targeted cancer therapies at GlaxoSmithKline as director of Exploratory Medical Sciences before joining Duke University as director of the Duke Translational Research in Oncology Program in 2006. He has been recognized internationally for his research achievements including his leadership in the development of the breast cancer drug Tykerb.

Nelson Chao, MD, is director of Duke's Bone Marrow Transplantation (BMT) Program. Chao assumed leadership of the Duke BMT Program in 1996. He has performed over 2,000 transplants, including over 600 allogeneic transplants and is widely recognized for his research on the management and prevention of graftversus-host disease. In 2000, Dr. Chao obtained his MBA from the Fuqua School of Business at Duke University.

These new leaders bring a wealth of knowledge, experience and expertise which will enable the Duke Comprehensive Cancer Center to continue to be a world leader in cancer research and care.

Sincerely, H. Kim Lyerly, MD · Director

HARVARD PHYSICIAN-SCIENTIST NAMED DEAN OF DUKE UNIVERSITY SCHOOL OF MEDICINE

ancy C. Andrews, MD, PhD, an internationally renowned researcher and former dean for basic sciences and graduate studies at Harvard Medical School, became dean of the Duke University School of Medicine on October 1. Andrews, 48, is the first woman to be appointed dean of Duke's School of Medicine and becomes the only woman to lead one of the nation's top 10 medical schools. The Duke Comprehensive Cancer Center is a center within the School of Medicine.

A pediatric hematologist/oncologist by training, Andrews previously oversaw research in Harvard Medical School's pre-clinical sciences departments, as well as physician-scientist and graduate education. She also served as the director of the Harvard-MIT MD/PhD Program, where she led the development of the program's current curriculum. She was an associate in medicine in the Children's Hospital of Boston, and distinguished physician in pediatric oncology at the Dana-Farber Cancer Institute.

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"My goal, and that of President Brodhead, was to identify and recruit the best candidate in the country for this position, and it was clear to us early on that Dr. Andrews was that person," says Victor J. Dzau, MD, chancellor for health affairs and president and CEO of the Duke University Health System.

Andrews will succeed R. Sanders Williams, MD, who was recently promoted to the position of senior vice chancellor for academic affairs after serving as dean of the Duke School of Medicine since April 2001.

"I am deeply appreciative and humbled by the opportunity to lead one of the premier medical schools in the United States," Andrews said. "I am looking forward to working with members of one of the most respected biomedical faculties in the world, and with the larger team of healthcare and research professionals that comprise Duke Medicine and drive its strong reputation."

Duke's School of Medicine consistently rates as one of the nation's top 10. The school's more than 2,000 faculty members received \$349.8 million in research support from the National Institutes of Health last year, ranking it fifth among U.S. medical schools. *

RESEARCH Notes

DIAGNOSING SKIN CANCERS WITH LIGHT, NOT SCALPELS

n an early step toward nonsurgical screening for malignant skin cancers, Duke researchers have demonstrated a laser-based system that can capture three-dimensional images of the chemical and structural changes beneath the surface of human skin.

"The standard way physicians make a diagnosis now is to cut out a mole and look at a slice of it with a microscope," says Warren Warren, PhD, James B. Duke Professor of chemistry, radiology and biomedical engineering, and director of Duke's new Center for Molecular and Biomedical Imaging. "What we're trying to do is find signals of cancer without having to remove the mole."

"This is the first approach in which we can target molecules like hemoglobin and melanin and get microscopic images that are the equivalent of what a doctor would see if he or she were able to slice the mole," Warren says.

The distributions of hemoglobin, a component of red blood cells, and melanin, a skin pigment, serve as early warning signs for skin cancer growth. But because skin scatters light strongly, simple microscopes cannot be used to locate those molecules except right at the surface.

Warren's research group has now developed

a technology for coaxing both hemoglobin and melanin inside questionable skin moles to emit light by exciting them with highly controlled laser pulses.

The glow of the hemoglobin- and melanin-bearing structures can be magnified by a microscope outside the skin and manipulated



"What we're trying to do is find signals of cancer without having to remove the mole."

WARREN WARREN, PhD

by computers to create cellular-scale images. The noninvasive technique could enable doctors to see as much as a millimeter below the skin's surface—more than enough for diagnosis, Warren says.

Warren is now working with James Grichnik, MD, an associate professor in the dermatology and cell biology department, to begin testing the technology in the clinic. *

More Patients May Benefit from Stem Cell Transplantation

Patients suffering from hematological diseases such as leukemias and lymphomas may need stem cell transplantations to replace those cells destroyed by high doses of chemotherapy and to provide a new immune system to fight their disease. Unfortunately, many people are not even eligible for a transplantation. Those who undergo the transplantation usually must be young and healthy in order to tolerate the chemotherapy—and must have a sibling with a perfect match of major antigens in the immune system. Researchers at the Duke Comprehensive Cancer Center (DCCC) have found methods that address both of these issues.

In a paper in the Journal of Clinical Oncology, nearly 20 Duke researchers reported findings from the first large successful study of transplanting stem cells from donors who are not fully matched while using less aggressive chemotherapy than is standard practice.

The researchers used a less toxic regiment to suppress the immune system so older and sicker patients can tolerate it. In addition, they used the drug alemtuzumab which helps prevent the patient's body from rejecting the new cells (graft rejections) and the new cells from rejecting the patient's body (graft-versus-host disease).

The researchers then used stem cells



David Rizzieri, MD

from donors who were not fully matched. Traditionally, there is only a one in four chance that a sibling is a fully match. However, in this new method, donors have to be only at least half matched, so parents or even adult children can be donors. Now, 90 percent of people have a potential match.

This combination of treatments has led to 90 percent of patients in the study growing donors cells. Even though the patients in the study were sicker and older than those who traditionally get the transplantation, fewer than 10 percent died shortly after the therapy from the toxicity and fewer than 10 percent had severe graft-versus-host disease.

"Now that the stem cell transplantations work in these patients, we can work to fight the cancer," says lead researcher of the study and DCCC member David Rizzieri, MD. *

High-Intensity Ultrasound May Launch Attack on Cancer, Wherever it Lurks

An intense form of ultrasound that shakes a tumor until its cells start to leak can trigger an "alarm" that enlists immune defenses against the cancerous invasion, according to a study led by researchers at the Duke Comprehensive Cancer Center and Duke University's Pratt School of Engineering.

The new findings from animal experiments

suggest that once activated by the ultrasound, the immune system might even seek and destroy cancer cells, including those that have spread through the blood-



Pei Zhong, PhD

stream to lurk in other parts of the body.

This high-intensity focused ultrasound, or HIFU, is in use in several countries and is being used in clinical trials in the United States, to kill tumors by heating them.

Duke researchers have found that HIFU might work even better if it is first delivered in a manner that shakes the cells. That shaking ruptures tumor cell membranes, causing them to spill their contents. The toxic spill then alerts the immune system to the cancer threat, leading to the production of tumorfighting white blood cells.

"HIFU in the current form can only be used to treat the primary tumor," says senior author Pei Zhong, PhD, an associate professor in Duke's mechanical engineering and materials science department and a Cancer Center member. "We now think that HIFU delivered in a different mode, with emphasis on using mechanical vibration to break apart the tumor cells, may have an even more significant impact in suppressing cancer metastasis by waking up the immune system."

If the effect seen in mice holds true in human patients, such a treatment could be an important advance in many cancer therapies because of its potential to tackle both primary tumors and metastatic cancers that have spread to other organs—all without the need for surgery, the research team reported in the Journal of Translational Medicine.

The lead author of this study is Zhenlin Hu, who is now in Shanghai, China. *

SPONSORED BY THE CITIZENS ADVISORY COUNCIL

The Citizens Advisory Council (CAC) is the longest standing advocacy group at the Cancer Center. For more than 30 years, this group has supported the mission of the Cancer Center through outreach and personal philanthropy. For more information about the CAC, please contact Doreen Matters at (919) 667-2616.



HENRY FRIEDMAN, MD James B. Powell Jr. Professor of Neuro-oncology



ALLAN FRIEDMAN, MDGuy L. Odom Professor
of Neurosurgery

The Brain Tumor Program at Duke was founded in 1937 as one of the first in the United States. Seventy years later, it is one of the largest and most successful programs of its kind in the country.

Dedicated entirely to the treatment and cure of brain and spinal tumors in children and adults, The Preston Robert Tisch Brain Tumor Center at Duke combines the resources of a leading research organization with a commitment to the best in patient care. With a staff of more than 250 doctors, nurses, social workers, and staff, more than 6,000 patients have been treated at the center in the last 10 years. The Brain Tumor Center is led by Director Darell Bigner, MD, PhD, Edwin L. Jones, Jr., and Lucille Finch Jones Cancer Research Professor of Pathology; and Deputy Directors Allan Friedman, MD, Guy L. Odom Professor of Neurosurgery, and Henry Friedman, MD, James B. Powell Jr. Professor of Neuro-oncology.

In an interview with Dr. Allan Friedman and Dr. Henry Friedman, who have been at Duke for 33 years and 26 years respectively, they share their thoughts about brain tumors and hope:

What differentiates Duke from other places that treat brain tumors?

Dr. Allan Friedman: There are several key differences. The Preston Robert Tisch Brain Tumor Center is a complete center where we have researchers studying brain tumors from many

angles and then implementing what is learned in the clinic. We have some researchers looking at the basic science of cancer stem cells while others are researching the importance of exercise and others are testing new medicines. Second, we are realistic in our approach to treatment and are willing to try new things in order to help the patient. Also, only a few places treat the whole patient. In addition to the physical treatment, we have social workers who help with things such as family support and working through the social and psychological changes a brain tumor brings. Dr. Henry Friedman: In addition to providing patients with FDA-approved drugs, 66 percent of our adult patients and 75 percent of our pediatric patients are enrolled in clinical trials where they can try the newest—and possibly bettertherapies. Nationally, fewer than five percent of adult brain tumor patients are enrolled in trials. In addition, we do what few other brain tumor centers do, and that is prescribe drugs to our patients that have been approved by the FDA for other cancers. These are drugs like Avastin where trials have shown them to be safe and effective for colon cancer and lung cancer. Now, Dr. James Vredenburgh at Duke has shown in clinical trials that Avastin shrinks the majority of recurrent malignant gliomas, the most common and deadly form of brain cancer. Because of the long FDA review process and the fact that few companies manufacture drugs specifically for brain tumors due to the relatively small number of people who have them, this is often the best way of getting safe drugs to patients.

The center's motto is "At Duke there is hope," but how do you instill hope in patients with such a serious disease?

Dr. Allan Friedman: We are an upbeat place. We are going to make every attempt to cure every patient we see and we strive to make sure that every patient has the best possible quality of life. Those with the worst brain tumors have an 18 percent disease-free survival of three years, so we know that people can recover. We try our best to push that number higher and give every patient the best chance. This is not false. We have patients leading healthy lives that prove it. Dr. Henry Friedman: We have the best results in the nation, partially because we think outside the box. Treatments at Duke have been so successful that we will open a brain tumor survivorship center in early 2008. This center is for patients who have been off treatment for at least two years. The center will offer services to help those patients with issues associated with living with a brain tumor. We believe that this is the first center of its kind.

What is your favorite part of the job?

Dr. Allan Friedman: I love working with the patients and their families. Being a brain surgeon, you have a special bond with the patient. You are operating on someone's brain! You learn a lot about the patient, and it's always wonderful to see them have a great outcome. In addition, my colleagues are terrific.

Dr. Henry Friedman: I love everything about my job, from taking care of patients to researching new breakthroughs. I love seeing patients and their families have a good outcome. It's special seeing patients who come to us with no hope end up having successful treatment here with an improved quality of life.

t has been only six months since my brain tumor was discovered and removed, but I feel great. I'm actually a little nervous that I feel so great. I think, "Should anyone be this happy after having part of his brain removed?" But thanks to the treatment I received from everybody at The Preston Robert Tisch Brain Tumor Center at Duke—the doctors and nurses and social workers—and my faith in God, I've been able to fight this. I don't know if I could have gone back on the radio if not for those things.

It was a normal day in April for me. I've been on Raleigh's top 40 radio station G105 since I was 25 years old—15 years. That day was no different. For more than two hours that morning I was joking around with Kristin and Mike, who work with me on Bob and the Showgram, our morning show. But then, at one point when I tried to speak, I couldn't make the words come out right. I was getting anxious and the more I tried, the worse I did. We went to a commercial and after about three or four minutes, I felt fine. After the show, I had a meeting with my boss and another similar episode—this time lasting four to five minutes—occurred. I knew what I wanted to say but I couldn't say it right.

I went home to rest and when I woke up, I felt different. I can't really explain it. My wife Lu told me I should see my doctor, but I didn't want to go. The next day, I decided I needed to be checked out. The first day of tests didn't show anything. Then, the next day I got an MRI. While I was



and are not related. Henry prescribes what treatments and medicines I still need such as chemotherapy. I also get radiation treatment.

I can't say how great the staff at Duke is. When I brought the doctors and nurses on my radio show right after returning to the airwaves, I was in tears. I mean, these people saved my life. And they gave us all kinds of help. The social workers explained to Lu and me how we talk to our kids about my tumor and how to deal with our finances.

I have such a great life, family, and job. Since the diagnosis I've quit smoking (I've been addicted for more than 20 years), started to exercise, and have tried to watch what I eat. I've also had an even better relationship with God and my family. Work is even more fun now, and we're getting our best ratings ever. It's awesome to say that I have the most listened to morning show in the Triangle, but it's even better to be able to say that I feel great after having a brain tumor. *

SPREADING HOPE THROUGH THE AIRWAVES

waiting for the radiologist to give me the results, I saw my primary care doctor rush into the building. I knew that couldn't be a good sign. He told me that I probably had a brain tumor. From that moment to the next day is still a blur.

I went home to be with Lu (my two daughters were away at the time), and we just cried for two days—the two worst days of my life. On that second day, we didn't know what else to do, so we went into the bathroom, got down on our knees, and prayed to God. We asked Him what to do and then left it in His hands. Since then, I have not been afraid.

My doctor told me that Duke had world-renowned experts in brain tumors and he suggested I go there for treatment. I felt so grateful to have these top docs right here in the Triangle. At Duke, they told me I had a grade three anaplastic astrocytoma tumor and that I needed surgery.

It was great having the best brain surgeon in the world, Dr. Allan Friedman, operate on me. He put Lu and me at ease, and we felt very confident in his work. The coolest part was actually being awake during part of the surgery. First, I was put to sleep. Then, Dr. Friedman started to operate on my skull, removing some of it. He then woke me up, but I was not in any pain at this point. Since the possible side effects from the surgery are loss of vision or speech, we were concerned. After all, I talk for a living! To decrease the risk of loss of speech or vision, the physician assistant James Carter would show me pictures and ask me to identify them during the surgery. Dr. Friedman would stimulate different parts of my

brain to see which parts were doing what. Since the brain is not labeled, he had to be sure that he wasn't operating on parts that may affect thoughts, vision, and speech. Apparently those areas can be in different locations in different people.

"My oncologist is Dr. Henry Friedman, and he is just awesome. Amazing that two of the top brain tumor docs in the world have the same name—and are not related."

Possibly the worst part of my ordeal was waking up after surgery. I didn't feel great, but I had great people taking care of me. There was my nurse, Nick Jones. He looks like a big motorcycle guy, but he is actually a very cool guy. I don't know how I would have made it through post-surgery without him. In recovery, I had another great nurse, Tami Lloyd, who helped ease my nerves the night before surgery and helped me to walk after it.

My oncologist is Dr. Henry Friedman, and he is just awesome. Amazing that two of the top brain tumor docs in the world have the same name—

Bob DumasRadio Personality and
Brain Tumor Survivor



NOTES

CANCER CENTER STAFFERS REACH OUT TO UNDERSERVED POPULATIONS

The Duke Comprehensive Cancer Center, home to one of only 15 Cancer Information Service (CIS) offices in the country funded by the National Cancer Institute (NCI), is the second oldest office in the nation. The CIS office at Duke serves North Carolina, South Carolina, and Georgia by partnering with local, state, and regional organizations to increase awareness of cancer prevention, early detection, diagnostic, and treatment services, primarily in underserved communities.

Using a three-pronged approach which includes a partnership program, research program, and information specialists, the CIS provides information about cancer to patients and their families, physicians and other health professionals, and the public. By providing the latest, most accurate information on cancer from the NCI, the CIS helps to ensure that cancer education resources are being used to assist individuals to make informed decisions for healthier lifestyles.

The CIS partnership program has facilitated partnerships with more than 650 nonprofit, private, and other government organizations nationally to help deliver messages and materials about cancer to people who may have difficulty obtaining health information because of educational, financial, cultural, or language barriers.

"Our goal is to focus on the unique community needs while partnering with organizations in that community to reduce the cancer burden. By collaborating with trusted organizations, we leverage resources to address health disparities and apply the latest evidence-based approaches



Laura Kujawski and Becky Hartt Minor

to cancer control issues," says Becky Hartt Minor, program director for the CIS at Duke.

According to Laura Kujawski, assistant director of the southeast CIS partnership program, the CIS participates in cancer control and health communications research that supports the NCI's priorities and programs. CIS research helps identify new and better ways to communicate health information to a variety of audiences.

The CIS also has information specialists who have access to comprehensive, accurate information on a range of cancer topics, including the most recent advances in cancer treatment. The confidential service is available by calling 1-800-4-CANCER. The CIS information specialists cannot provide medical consultations and do not make referrals to specific doctors; however, they can tell callers about clinical trials and cancer-related services, such as treatment centers, mammography facilities, and other cancer organizations. *

KidsCan!

New Support Services for Kids of Patients with Cancer

In September, the Duke Cancer Patient Support Program (DCPSP) announced a new program available at Duke to support children ages six to 18 who have a parent or caregiver who has been diagnosed with cancer. KidsCan! provides education and emotional support to children through monthly meetings during which feelings, memories, and new beginnings are discussed with social worker D.J. Pappas, M.Ed., NCC, LPC.

"The Cancer Patient Support Program believes in treating the whole person, not solely the cancer," says Cheyenne Corbett, director of the DCPSP. "And we believe in treating the whole family because cancer touches the lives of each member of the family system. Through KidsCan!, we are expanding our family-centered programming to provide essential support to children."

According to Corbett, children think about disease and death differently than adults. When families go through the stress of a cancer diagnosis, the children in the family sometimes need extra help understanding and coping with their feelings and emotions.

KidsCan! meets at the Morris Cancer Clinics on the second Monday of each month from 6:00 until 8:00 p.m. A light dinner is served to families, and then the children meet to discuss a topic and do a theme-related activity. The parents meet separately to discuss family issues.

For more information about KidsCan! at Duke, call the Duke Cancer Patient Support Program at (919) 684-4497. *



Joel and Justine Huntsinger (pictured with D.J. Pappas) attended the first Duke KidsCan! meeting in September. The theme of the meeting was "What is cancer?" The children blew bubbles to illustrate how cancer cells can grow out of control.

Cancer Patient Support Program Celebrates 20 Years of Service



Sharon Riley (pictured with Julie Dodge) was one of several women at the 20th anniversary celebration who donated their ponytails to Pantene Beautiful Lengths, a campaign that encourages people to donate their hair to create free wigs for women who have lost their hair due to cancer.

The Duke Cancer Patient Support Program (DCPSP) celebrated its 20th anniversary by hosting a family fun day in Durham on July 28. The event, dubbed A Care Affair, featured food, music, and activities for patients, donors, volunteers, medical personnel, and their families, as well as members of the local community.

"I think it is important to recognize the fact that this program hasn't always been here," says Rachel Schanberg, who founded the DCPSP in honor of her daughter, who died of cancer at the age of 26. "It's been around 20 years, but it wasn't there for my daughter. Thankfully it's here for my husband, who is now battling cancer."

Cheyenne Corbett, current director of the DCPSP credits the Schanberg family for their vision of the DCPSP. "They worked very hard to create this program, and develop services including support groups and a wig and turban program that support those impacted by cancer." *

Ovarian Awareness Walk Sets Record



Andrew Berchuck, MD, Melanie Bacheler, Angeles Secord, MD, and Susan Murphy, PhD

The Gail Parkins Memorial Ovarian Awareness Walk on September 15 raised \$282,059 to fund ovarian cancer research at the Duke Comprehensive Cancer Center. Hundreds of participants, including survivors, friends, family members, and Duke physicians and staff, walked the two-mile loop in Raleigh, NC. Physican-researchers Andrew Berchuck, MD; Angeles Secord, MD; and Susan Murphy, PhD, from Duke accepted the check from the event organizer Melanie Bacheler. Bacheler founded the event in 2003 in memory of her mother Gail who died of ovarian cancer. "This event is intended to raise the level of awareness for this disease, provide financial support to research efforts, and to pay tribute to those touched by ovarian cancer," says Bacheler. "One by one, day by day, a little bit at a time, we can make a difference!" To learn more about this event, visit ovarianawareness.org

GIFT TO FUND GENOMIC LUNG CANCER RESEARCH

cumner Brown of Phoenix recently gave more than \$600,000 to establish the Emilene Brown Genomic Cancer Research Fund at the Duke Institute for Genome Sciences & Policy (IGSP). A portion of the gift is intended to support the genomic lung cancer research of Anil Potti, MD, assistant professor in the IGSP and division of medical oncology. The remainder of the gift will be used to help fund the research of talented postdoctoral fellows and young investigators studying the mechanisms of cancer initiation and progression, under the supervision of Potti and the IGSP.

Potti developed a close relationship with Sumner and his wife Emilene after Emilene's diagnosis of early stage lung cancer, a bond which has persisted through difficult times. Mrs. Brown passed away in December 2006.

Potti's research involves the use of genomic technology to personalize lung cancer therapy. This technology and research is currently being tested by Duke investigators in several clinical trials. One trial involves patients

with early-stage non-small cell lung cancer who have undergone surgery to determine whether those patients should also receive chemotherapy. One-third of those patients who do not receive chemotherapy after surgery have a recurrence of cancer. However, because it is difficult to predict which patients will have a recurrence, most physicians do not prescribe chemotherapy so as to prevent their patients from experiencing the toxic side effects of the drug.

"I am very appreciative of my friendship with Mr. Brown and the continued relationship between him and the IGSP," says Potti. "This funding will help advance our



Anil Potti, MD

understanding of genomics related to cancer and should help us save many lives each year."

Duke University is a leader in personalized medicine. Through a partnership between the IGSP and the Duke Comprehensive Cancer Center, scientists are using genomics to determine which chemotherapies are most effective in individual patients with lung, breast, prostate, and ovarian cancers. *

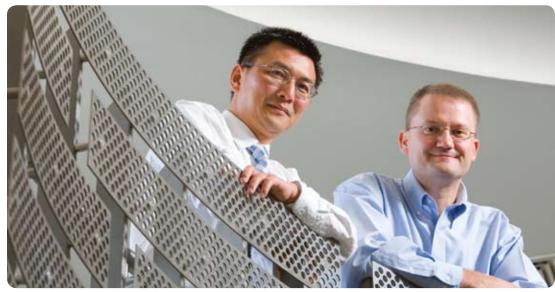
Unique Partnership Funds Innovative Research

The Alexander & Margaret Stewart Trust donated \$150,000 to fund six pioneering cancer research projects at Duke. This gift was matched by the estate of Ruth Duvall Clark. Ms. Clark, a Duke graduate and a long-time member of the Cancer Center's Citizens Advisory Council, designated a portion of her estate to the Cancer Center to be used to support cancer research.

Cancer investigators Wei Chen, PhD, Tim Clay, PhD, Donald McDonnell, PhD, Tannishtha Reya, PhD, Jeremy Rich, MD, and Xiao-Fan Wang, PhD, were awarded the grant, which will provide \$50,000 in funding for the coming year to each investigator.

"We are so pleased that the Cancer Center was selected by the Stewart Trust to receive these funds, and are also indebted to the estate of Ms. Clark for generously remembering Duke in her estate plan," says Karen Cochran, executive director of development, Duke Comprehensive Cancer Center.

The Stewart Trust, established in 1947 in Washington, DC, distributed more than



Wei Chen, PhD and Tim Clay, PhD

\$4 million in grants in 2006 for research in cancer and pediatric diseases and to provide assistance to residents of economically disadvantaged communities. The Trust invites only a few select institutions to apply for their cancer research grants and funds researchers who

take innovative approaches. As a condition of consideration, the Trust requires that all of the money it awards be matched dollar for dollar, thereby doubling the amount of funding available for research projects. *



INTERVIEW WITH JOHANNA BENDELL, MD

More than 37,000 Americans will be diagnosed with pancreatic cancer in 2007, according to the American Cancer Society. Pancreatic cancer is con-

sidered one of the more challenging cancers to treat; however physicians and researchers at Duke Comprehensive Cancer Center are working together to create new and improved treatment options for patients. We spoke with Johanna Bendell, MD, a gastrointestinal oncologist at the Duke University Medical Center, about pancreatic cancer.

What does the pancreas do?

Dr. Bendell: The pancreas is an organ about six inches long, found near the stomach, backbone, liver, and intestine, that helps with digestion. The pancreas serves two main purposes: the first is to make insulin to regulate blood sugar; the other is to secrete enzymes to break down food, especially fatty food. It is an important organ but people can live without it by taking medicines that replace the insulin and enzymes given off by it.

What causes pancreatic cancer?

Dr. Bendell: There has been a great deal of research done to determine the cause of pancreatic cancer, but there is no definite agent, except smoking. Those who smoke are two to three times more likely to develop pancreatic cancer than those who do not. However, non-smokers still develop the disease. For reasons we don't know, individuals who have diabetes have a slightly increased risk of developing pancreatic cancer. Also, individuals with chronic pancreatitis, a disease of the pancreas, are at increased risk of developing the disease.

What are the symptoms of pancreatic cancer?

Dr. Bendell: Unfortunately, at the early stages of pancreatic cancer, when the tumor is small and easier to treat, there are usually no symptoms. When the tumor gets larger, the patient may have jaundice, with yellow skin especially around the eyes. Other symptoms include abdominal pain, weight loss, and fatigue. Some patients develop diabetes. Pancreatic cancer can be very difficult to diagnose because many conditions have these same symptoms, and the tumors aren't always detectable on even the best scans.

What are the treatment options?

Dr. Bendell: Surgery is the only way to cure pancreatic cancer; however, only 20 percent of patients are eligible for surgery. If the tumor has a particular location or if the disease has metastasized, surgery may not be an option. At Duke, most patients who have surgery receive chemotherapy and radiation first since that course of treatment may improve the chance of removing



the tumor completely. After surgery, most patients in the United States receive chemotherapy or a combination of chemotherapy and radiation. Those with a local but inoperable disease may receive either chemotherapy or chemotherapy with radiation. Those with a metastasized cancer (cancer that has spread to other parts of the body) receive only chemotherapy.

What does the future look like for the disease?

Dr. Bendell: I'm really excited about the research we are conducting at Duke. We are investigating different cell proteins using genomics to better understand pancreatic cancer. We are also working on a project using biomarkers to determine how pancreatic cancer differs among individuals. We are using a large collection of blood samples to develop blood tests-similar to PSA tests for prostate cancer—which may help us determine who is at an increased risk for developing pancreatic cancer. These tests, if proven effective, may be able to detect the disease at an earlier stage when it is easier to treat. There is great research being conducted here at Duke, and I'm optimistic about improving the prognosis for patients with pancreatic cancer. *

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