



N^{otes} cancer center

A Publication for Friends of
Duke Comprehensive Cancer Center

SUMMER 2006

FACT OR FICTION: A LOW-FAT DIET REDUCES YOUR RISK OF CANCER

Does what you eat really matter? Conflicting reports make it difficult to determine what we should and should not eat. The media report on studies regularly, with results that often are contradictory and complicated.

Earlier this year, the results of the National Institutes of Health's Women's Health Initiative (WHI) were released in the *Journal of the American Medical Association*. In the study—the largest of its kind—one of the trials tested the diet of 48,000 post-menopausal women. The women were randomly assigned to an intervention or control group. The intervention group received instructions and behavior modification education to help them limit their fat intake to 20 percent of total calories; while the control group was told not to reduce their fat intake. Scientists followed the women for an average of eight years.

When the results were released earlier this year, the media reported that the study showed eating a low-fat diet did not lower the risk of breast cancer, colon cancer, or heart disease. A closer examination of the results of the study indicate that the findings were not that definite.

"It's a great study but difficult to reduce the findings to a sound bite," said Wendy Demark-Wahnefried, PhD, RD, LDN, a nutritionist at the Duke Comprehensive Cancer Center (DCCC). Demark-Wahnefried considered several factors related to the study:

- Many of the women in the intervention group did not lower their fat intake to the desired level, at least not over the course of the entire study. In addition, women in the control group lowered their fat intake even though they were told to keep it constant. What if the women in each group actually adhered to the fat intake levels requested?
- The study lasted eight years. The amount of fat we consume may matter, but so might the amount of time we actually follow a low-fat diet. What if the women would have stayed on the low-fat diet for a longer period of time?
- The study looked at total fat, and researchers did not specify "good" fats vs. "bad" fats. In addition, researchers only looked at older women.

In fact, the results did show that for certain subgroups of women, a low-fat diet did reduce the risk of breast cancer. Among women in the low-fat diet group who began the study with the highest baseline fat consumption and among women who most strictly adhered to the study's dietary-fat goals, a 15 to 20 percent overall reduction in breast cancer incidence occurred. In other subsets, results were promising but since they appeared in the margin of error, researchers cannot be fully confident that the cancer rates were reduced due to diet.

"Results of the study can be confusing, and that's unfortunate," said Demark-Wahnefried. "While researchers try to draw conclusions from a large pool of women, each individual is different." Demark-Wahnefried believes that in the future there will be genetic testing to see how susceptible one is to getting a particular cancer and based on this, doctors will prescribe a specific diet or treatment to that person to lessen the risk.

"Right now, what we do know is that people tend to think of cancer in general terms, yet cancer is a progressive disease," explained Demark-Wahnefried. "We have to remember however that not all cancers behave alike and what initiates cancer is not necessarily what makes it continue to grow. There's a difference in prevention versus control."

"We have to remember however that not all cancers behave alike and what initiates cancer is not necessarily what makes it continue to grow. There's a difference in prevention versus control."

WENDY DEMARK-WAHNEFRIED, PHD, RD, LDN



In a study reported in May of 2005 called the Women's Intervention Nutrition Study which was funded by the National Cancer Institute and the Breast Cancer Research Foundation, researchers tested whether a low-fat diet was helpful in preventing a recurrence of breast cancer among older women with early-stage disease.

In this study, fat intake was limited to less than 15 percent of total calories, thus it was a much more stringent diet than prescribed in the WHI study. Roughly 50 women at Duke participated in the trial, which suggested that low-fat diets could protect against recurrence.

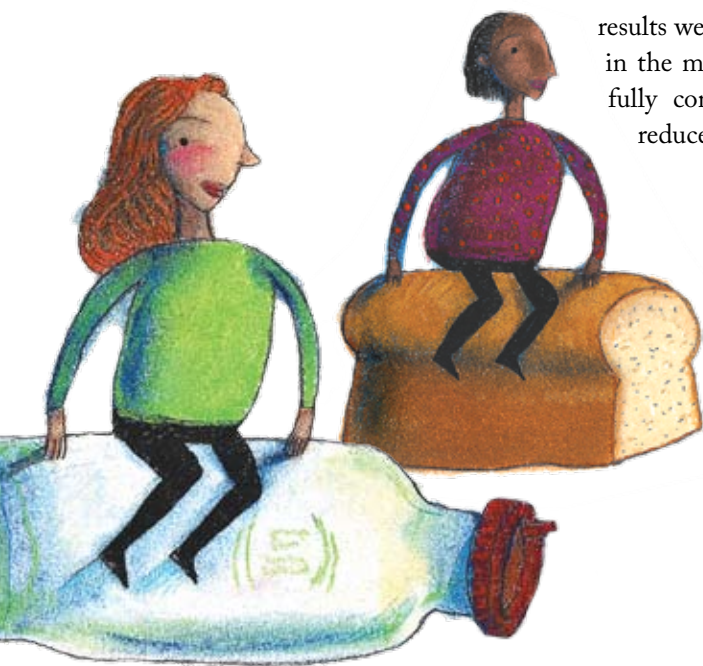
Researchers acknowledge that more investigations must be conducted before we can be certain exactly how disease occurs. In the meantime, the seemingly mixed messages can be overwhelming and frustrating, and more research with longer follow-up time is needed to continue to explore the link between what we put in our mouths and the risk of cancer.

Demark-Wahnefried—along with other researchers—do caution that although the link between a low-fat diet and cancer has not been confirmed, this doesn't give us license to splurge on cakes and doughnuts. Reducing fat and increasing fruits and vegetables and whole grains in our diets will ensure that our bodies are getting enough nutrients and may contribute to our overall health. *

THIS ISSUE:

Communication is Key for Patients and Physicians, page 2

First Hand, pages 4–5



Duke Comprehensive Cancer Center
DUKE UNIVERSITY HEALTH SYSTEM



Non-Profit Org.
U.S. Postage
PAID
Durham, NC
Permit No. 60

FROM THE • Director



NEIL SPECTOR, MD, WILL BE A TREMENDOUS ADDITION TO OUR TEAM

As director of the DTRO, Dr. Spector will create and lead a team of researchers and physicians with the goal of expanding our efforts to translate exciting findings in the laboratories into new therapeutics that can benefit cancer patients.

Dr. Spector's work in the development of targeted cancer therapies has been recognized worldwide. He directed the Nelarabine project, which received FDA approval for the treatment of childhood acute lymphoblastic leukemia in 2005. Since 1998, he has also directed the development of lapatinib. This project has been heralded as an example of how targeted cancer agents should be developed in this era of personalized medicine. Dr. Spector is currently directing two large global trials investigating the use of lapatinib in women with inflammatory breast cancer.

In addition to his role in the DTRO, Dr. Spector will also serve as the scientific director of the Duke Clinical Research-Oncology program, which is responsible for conducting and coordinating clinical trials in cancer. He will also treat patients at the Durham Veterans Administration Medical Center.

This is an exciting era of research and care at the DCCC, and Dr. Spector is a tremendous addition to our team. With his leadership, the DTRO will challenge the standard methods of drug discovery and approval to ensure that Duke continues to be a leader in the development of new cancer therapeutics.

Sincerely,
H. Kim Lyerly, MD · Director

Dear Friends,

This summer, Neil Spector, MD, will join the Duke Comprehensive Cancer Center (DCCC) as director of the new Duke Translational Research Oncology (DTRO) program. Dr. Spector previously served as the director of Exploratory Medical Sciences-Oncology of GlaxoSmithKline and as an attending physician in hematology and oncology at the Dana-Farber Cancer Institute at Harvard Medical School. He brings more than 16 years of experience in cancer drug development to Duke.

COMMUNICATION IS KEY FOR PATIENTS AND PHYSICIANS

Communication about cancer treatment is challenging for both patients and for their physicians. Patients are often confronting intense fear and loss. Physicians want to be hopeful and optimistic, while at the same time accurate and honest, which can be extremely difficult.

At Duke's School of Medicine, communications training is an integral part of students' education. The curriculum for medical students includes a practice course during which students develop interviewing and counseling skills. Medical residents at Duke can also participate in a small group, two-day retreat called PREPARE (Program of Resident Education to Promote Awareness and Respect at the End of Life), led by James Tulsky, MD, director of Duke's Center for Palliative Care.

"What many physicians have not been taught is communications skills," said Tulsky. "Communication skills are essential, especially for oncologists, yet less than five percent have ever had formal communications training. Many physicians in practice today were trained before communication became a standard part of the curriculum."

This gap in training has led the National Cancer Institute (NCI) to recognize improving communication skills as a national priority for oncologists. Tulsky, who received the 2006 American Academy of Hospice and Palliative Medicine's Excellence in Scientific Research in Palliative Care award, has committed his professional life to understanding and improving doctor-patient communication.

"At the Center for Palliative Care, our work focuses on improving patient-provider communication, including discussions about care plans, pain management, and the psychosocial and spiritual needs of patients," said Tulsky. "Our mission is to conduct research and provide educational tools that help to improve the understanding of communication in the medical setting."

In the Center's SCOPE (Study of Communication in Oncologist-Patient Encounters) project, more than 400 conversations between 59



"Ultimately, we expect our work to improve communication between oncologists and patients, resulting in higher quality cancer care."

JAMES TULSKY, MD

oncologists and 287 patients were recorded with the patients' permission. After completing this initial phase of the study, the oncologists were divided into two groups. One group of oncologists will receive a personalized CD-ROM that contains their conversations packaged together with educational material. The other group was only exposed to a one hour lecture on communication. After having time to review the CD-ROM, additional conversations will be recorded between these same oncologists and a new sample of patients.

"By allowing the physicians to hear themselves, we hope to increase their understanding of what is and is not effective when they talk to patients, and to help them find ways to enhance their skills," said Tulsky. "I think oncologists are great people. They are some of the most committed physicians you will ever meet, and they want to do what is best for their patients. Ultimately, we expect our work to improve communication between oncologists and patients, resulting in higher quality cancer care."*

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

Karen Cochran Executive Director of Development

Jill Boy Editor

David Elstein Writer

Becky Levine Contributing Writer

DCCC is a designated Comprehensive Cancer Center by the National Cancer Institute.

Produced by the Office of Creative Services and Marketing Communications

© 2006 Duke University Health System MCOG 4483



Discovery May Lead to New Treatment for Liver Cancer

Duke researchers have made a discovery that could lead to a targeted treatment for liver cancer. According to researchers from Duke University Medical Center and Johns Hopkins University School of Medicine, the unchecked activity of a cell signaling pathway in the body which is crucial in embryonic development could lead to

Laboratory experiments show that blocking the cell signaling pathway, called the Hedgehog pathway, kills cancer cells but leaves mature healthy liver cells intact. The researchers found that treating patients with medications that interrupt this pathway would likely eliminate the cancer cells while sparing healthy liver tissue.

“Currently, there are no good chemotherapies for liver cancer, and many people with advanced liver disease are too ill for surgery to remove tumors,” said Jason Sicklick, MD, a postdoctoral fellow at Duke and lead author of the study.

“There is a desperate need for effective anticancer treatments that are safe for patients with liver disease.”*



“The cancer’s incidence is rising in the United States due to the increasing prevalence of obesity, which raises the risk of liver cancer five- to six-fold.”

ANNA MAE DIEHL, MD

liver cancer. Research showed that the liver’s response to injury could also be instrumental in the development of cancer.

Liver cancer often develops in people with cirrhotic livers damaged by chronic infections such as hepatitis or by alcohol abuse, and is also linked to obesity. It is rare in people with healthy livers. The cancer’s incidence is rising in the United States due to the increasing prevalence of obesity, which raises the risk of liver cancer five- to six-fold, said Anna Mae Diehl, MD, chief of Duke’s Gastroenterology Division, Cancer Center member, and senior author on the study.



Duke Uses Genetics to Select Cancer Treatments

Choosing the best cancer treatments is often akin to throwing darts at a massive corkboard, hoping to hit the desired target. But scientists have now developed a novel method for selecting the most effective anti-cancer drugs based on the patient’s unique tumor activity.

The new approach scans the tumor for evidence of widespread genetic changes that drive the tumor’s growth and survival. Rather than simply identifying defective genes, the scientists identify altered “pathways” that consistently escape normal regulation in tumors.

These cell signaling pathways are a complex hierarchy of genes and proteins that act upon one another in a tag-team relay to ultimately drive a cell’s cancerous activity, according to scientists

from the Duke Comprehensive Cancer Center and the Duke Institute for Genome Sciences and Policy.

Identifying which pathways are deregulated in each type of tumor—and to what degree—provides a critical tool for enabling physicians to choose the right drugs for each patient, said Joseph Nevins, PhD, senior author of the study which was published in *Nature*.*

“Identifying which pathways are deregulated...provides a critical tool for enabling physicians to choose the right drugs for each patient.”

JOSEPH NEVINS, PHD



Ovarian Cancer Patients Survive Longer When Drugs Given Via Abdomen

A national study of women with advanced ovarian cancer has demonstrated that physicians can significantly extend their patients’ survival by giving them anti-cancer drugs directly into their abdominal cavity in addition to the standard intravenous (IV) chemotherapy.



Angeles Alvarez Secord, MD

A team of oncologists including physicians from the Duke Comprehensive Cancer Center showed that women who received part of their chemotherapy abdominally—called “intraperitoneally” (IP)—survived an average of 16 months longer than women who received IV chemotherapy alone.

Results of the study were published in the *New England Journal of Medicine*. Duke is one of more than 40 cancer centers that participated in the trial and has conducted previous studies demonstrating IP therapy’s benefits in treating ovarian cancer.

“Infusing chemotherapy directly into the abdomen more effectively targets the region where ovarian cancer cells remain after most of the tumor is surgically removed,” said Angeles Alvarez Secord, MD, a gynecologic oncologist and lead investigator of the study at Duke. “Moreover, direct infusion of drugs via IP therapy allows much higher concentrations of chemotherapy to bathe residual tumors than can be safely achieved with traditional intravenous chemotherapy.”*

First hand

DAVID BRIZEL, MD

Head & Neck Cancer

Spring break in Florida is a ritual for many college students, full of crazy activities. My spring break trip to Fort Lauderdale in 1982 was wild in a different way. It was during that break that I discovered what I wanted to do with the rest of my life.

I escaped from the cold weather of Chicago, where I was in medical school at Northwestern, to South Florida to visit my family. Rather than head to the beach on a Saturday morning, I attended a symposium on breast cancer that my father, also a radiation oncologist, recommended. After the conference, I met Dr. Jay Harris of the Harvard Joint Center for Radiation Therapy, one of the speakers. Harris, a renowned radiation oncologist, convinced me to go to Boston to take a senior elective course in radiation oncology. I spent a month there and absolutely loved the experience.

I subsequently did my residency at the Joint Center. Even after deciding to pursue a career in radiation oncology, I was not sure on which area I would focus. As a resident, I rotated among the different services and especially enjoyed my work with head and neck cancer. It was intellectually stimulating and very challenging in terms of day-to-day management of the patients. The things that most of us take for granted—eating, drinking, and breathing—can be seriously impaired both by the cancer itself and the treatment that is necessary.

I came to Duke in 1987 and have concentrated in the field of head and neck cancer. Head and neck cancer includes all types of cancer from the collarbone to the top of the scalp except for tumors originating in the brain. Some examples include cancers of the larynx, tongue, tonsils, sinuses, and saliva glands. While tobacco use and heavy alcohol use are considered factors in developing head and neck cancers, nearly a third of my patients rarely drink and have never used tobacco.

About 60 percent of my job is patient oriented and the rest is research. My job would be impossible without the expertise and assistance of a dedicated team that includes a physician assistant, nurses, residents, physicists, dieticians, and administrative support. While each day may be somewhat different, there are similarities each week. On days in the clinic, I take part in an 8:00 a.m. meeting with residents and then see 20–35 patients over the course of the day. We see initial consultations, patients undergoing treatment, and former patients coming back for a check up.

Continuity of care is crucial because problems can arise even after the completion of treatment. I love seeing patients who I have treated in the past. It's very uplifting to see them continue with life.



Other days, I plan the treatments I'll give my patients. Technique matters in radiation oncology. Our job would be simple if we only had to focus on aiming the radiation beams at the tumor. We must exert equal effort in attempting not to do long-term harm to healthy tissues that are adjacent to the tumor. As the technology that allows us to accomplish both of these goals has improved over the years, the process has become more complex and time consuming. Before the patient even starts treatment, I spend about three to four hours of planning per patient compared to an hour previously, to make sure that the best care possible is delivered.

I am gratified to know that since I joined Duke we have been at the forefront in the development of innovative, new, and better treatments that are allowing more patients with head and neck cancer to survive and lead normal, productive lives. A major reason that I love working at Duke is that I can actively collaborate with great researchers on projects that will hopefully lead to even more improvements in the future.

At Duke, we offer many clinical trials in which patients can receive cutting-edge treatments. Some of these treatments may change the face of cancer and are currently not available to patients anywhere else in the country. It's intellectually satisfying to see a new treatment successfully go from idea to implementation.

"I am gratified to know that since I joined Duke we have been at the forefront in the development of innovative, new, and better treatments that are allowing more patients with head and neck cancer to survive and lead normal, productive lives."

As much as I love my job, there are things in life besides work. I enjoy spending time with my wife and two daughters. I also try to ride my bicycle five to six days a week, weather permitting. Riding makes me feel good mentally and physically—it increases my tolerance for stress and lets me relax. It also gives me uninterrupted time to think.

Some people may think that being an oncologist is sad and depressing. While there are definitely sad moments in my job, it is not at all depressing. In fact, I find it quite uplifting. Head and neck cancer overall is more curable than many other types of cancers. Even for those patients we cannot cure, I know that I can often alleviate some of their symptoms and suffering, and that too is both important and satisfying. *

WILLIAM "BUD" YOUNTS

a patient's journey with cancer

It never hurts to get a second opinion.

If I hadn't, I might not be here today.

In January 2005, I had flu-like symptoms and went to see my local physician near Charlotte, NC. I could feel a swollen lymph node on one side of my neck and was given antibiotics. Both of my parents had survived cancer, but I never thought it could happen to me, especially at only 49. Antibiotics did not work, so I went back for diagnostic tests. By April, I was told it might be lymphoma, and a surgical biopsy was scheduled—but that diagnosis turned out to be incorrect.

During February and March, I remember being bewildered that no doctor stepped forward, took me by the hand, and said "I'll lead you through this." I learned that the patient has to accept the full responsibility and personal accountability for managing this life event.

"The most critical element of my care at Duke was the comprehensive intake. Specialists in medical oncology, radiation oncology, surgery, and pathology were in clinic simultaneously, and each was involved in my evaluation."



I came to the Duke Comprehensive Cancer Center for a second opinion. I received my MBA from the Fuqua School of Business at Duke, and my classmate Dr. Nelson Chao, director of the Duke Cancer Center's Adult Bone Marrow Transplant Program, suggested that I receive an evaluation at Duke.

The most critical element of my care at Duke was the comprehensive intake. Specialists in medical oncology, radiation oncology, surgery, and pathology were in clinic simultaneously, and each was involved in my evaluation. I was diagnosed with stage four squamous cell carcinoma at the base of my tongue. Immediately, Dr. David Brizel took the lead in coordinating my treatment. Many other places seemed to pass you from specialist to specialist and don't look at you holistically. Comprehensive intake probably saved my life.

Only three weeks after arriving at Duke, I began treatment, including chemotherapy and radiation followed by surgery. I also decided to take part in a stage three clinical trial that included an investigational new drug. The clinical trial was an important part of my cure. I wanted to be aggressive in fighting this disease, but each patient must make his or her own decision.

Spiritual faith was a blessing to me throughout this event. I experienced healing miracles and am convinced that prayer works. Within 36 hours of my first treatment, the four centimeter lump was reduced by 50 percent. I was given a sacred prayer shawl from several women at Rocky Mount United Methodist Church who knitted it. I wore it every day and received both physical and spiritual comfort from it.

I also created a t-shirt. Most people have seen concert t-shirts that list all of a band's tour stops on the back. I designed the "2005 Farewell to Cancer Tour" shirt that listed my treatment dates, and I would check them off after completion. My caregivers autographed it. The shirt was one way for me to accept that I had cancer and to deal with it.

When I was diagnosed, my daughter was 19 and my son was 16. I didn't want them to feel overwhelmed, but at the same time, they needed to understand their dad faced a life threatening disease. Both came to appointments, watched my treatments and talked to my doctors to learn more. A parent has to be sensitive to fears of abandonment, but shouldn't underestimate a child's capability to be strong.

I can proudly say that I've beaten the disease. I come back to Duke every other month for follow-up visits related to the clinical trial. I have no serious pain and have minimal lasting effects from the disease or treatment. I credit the team at Duke and the angel on my shoulder. During my treatment, I was still able to run my company while staying at Caring House, which is located near Duke. Caring House was a blessing and being there helped me manage the situation. It helped to be around others who understand what you are going through.

Nobody is ever glad to get cancer, but you do have a choice in how you respond to it. A lot of blessings have come from it. I've never felt more cared for and cared about than during my treatment. I've rekindled old friendships, including some with people I had not seen in 30 years. In addition, I've learned to become more patient and even lost 40 pounds. I believe you can choose to be happy while having cancer. *

For more information about Caring House, visit www.caringhouse.org.

AWARDS

Means Wins Goodman and Gilman Award

Anthony Means, PhD, Nanaline H. Duke Professor and chair of the Department of Pharmacology and Cancer Biology, has received the ASPET (American Society for Pharmacology and Experimental Therapeutics) Goodman and Gilman Award in Receptor Pharmacology. This



Anthony Means, PhD

award is given in recognition of lifetime achievement in receptor research.

Osada Wins Malek Award

Takuya Osada, MD, PhD, assistant research professor of surgery, has been named the 2005-06 Malek Cancer Research Scientist Award recipient by the Duke Comprehensive Cancer Center (DCCC). Osada's research is in the field of cancer vaccines. He is also involved in clinical trials for colorectal cancer patients. The \$10,000 award is given annually by the DCCC to a junior investigator. The award was established by Marlene and Frederic Malek to recognize



Takuya Osada, MD, PhD

a promising cancer investigator. Mrs. Malek is a member of the Cancer Center's Board of Overseers.

Blobe Wins Joklik Award

Gerard Blobe, MD, PhD, is the 2006 winner of the WK Joklik Award for Excellence in Cancer Research. The award is presented to an investigator at Duke whose research has made an important advance in basic cancer research. Blobe's research focuses on the transforming growth factor-beta (TGF-beta) signal transduction pathway, and specifically, the role of this pathway in cancer biology. The award is presented in honor of Wolfgang (Bill)



Gerard Blobe, MD, PhD

Joklik, a world-renown cancer researcher and co-founder of the Duke Comprehensive Cancer Center.

Rizzieri Wins Scholar Award from Leukemia & Lymphoma Society

David A. Rizzieri, MD, associate professor of medicine, recently received the Scholar in Clinical Research award from the Leukemia & Lymphoma Society. The award provides Rizzieri \$110,000 a year for five years to further his research of allogeneic hematopoietic transplantation.

The Scholar in Clinical Research award is presented to highly qualified investigators



David A. Rizzieri, MD

who conduct research that will advance the prevention, diagnosis, or treatment of hematologic malignancies.

Horwitz Wins Stafford Award

Mitchell E. Horwitz, MD, has received the 2006 Stafford Award. Horwitz, an assistant professor of medicine, won the \$10,000 award for his proposal to develop a technique that is used to reduce Graft-Versus-Host-Disease following an allogeneic stem cell transplant. Graft-Versus-Host-Disease is a condition that results when the immune cells of a transplant from a donor attack the tissues of the person receiving the transplant. The Stafford Award was established as a memorial to Lisa Stafford by her parents Jack and Deta Stafford to recognize a promising researcher in leukemia or bone marrow



Mitchell E. Horwitz, MD

transplantation. Jack and Deta Stafford are members of the Cancer Center's Board of Overseers.

Potti Receives Bell Award

The Duke Comprehensive Cancer Center has awarded the 2006 Robert M. and Barbara R. Bell Basic Science of Cancer Award to **Anil Potti, MD**, a postdoctoral fellow at Duke University Medical Center's Divisions of Hematology/Oncology. Potti won the award for his genetic research in the study of cancer and treatment for cancer. The award, endowed by Dr. Robert M. and Barbara R. Bell, is given annually to a postdoctoral fellow who has demonstrated exceptional abilities in basic cancer research. Dr. Bell founded and chaired the Department of Molecular Cancer Biology at Duke and is the former deputy director and acting director of the Cancer Center.



Anil Potti, MD

Brizel and Hurwitz Win Rundles Award

Professor of Radiation Oncology **David Brizel, MD**, and **Herbert Hurwitz, MD**, associate professor of medicine, are the 2006 winners of the R. Wayne Rundles Award for Excellence in Cancer Research. The award is presented to



David Brizel, MD



Herbert Hurwitz, MD

Duke investigators whose research has made an important contribution to the detection, treatment, or prevention of cancer. Brizel specializes in head and neck cancer, while Hurwitz is an expert of gastrointestinal cancers. The award pays tribute to Wayne Rundles, MD, a pioneer in chemotherapy and leader in the development of national cancer programs and policies. Rundles served as a model to physician scientists beginning their careers in the field of cancer.

FELLOWSHIP HONORS FORMER DUKE GOLFER

'I visited Maria, and we talked about Duke. Duke was a magical place for her.'

Maria Garcia-Estrada attended Duke University from 1999-2003. A world-class golfer, she played on Duke's golf team, leading the team to victories in the 2000 ACC Tournament and the 2002 NCAA Tournament.

In 2003, Maria graduated from Duke and went on to pursue a career in stock trading. She worked as trader trainee at Marquette Partners in Chicago, reporting to Jim Heinz, managing partner at Marquette.

"I recruited Maria from Duke," explained Heinz. "We often recruit student-athletes because they are usually very successful in trading. To be a trader is difficult. You have to manage failure. Maria was persistent, and I liked that."

Maria eventually transferred to Marquette's London office and was doing well in her career. But in early 2005, she began having pains in her back. "Maria was missing days of work, and that wasn't like her," said Heinz.

In February of 2005, she was diagnosed with sarcoma, a malignant tumor of the soft tissues of the body. The malignancy is rare and difficult to treat. Each year in the United States, 8,700 new cases of soft-tissue sarcoma are diagnosed in adults and in children.



Maria's fight, though valiant, was short. In September 2005, she passed away at age 24.

Soon after Maria's death, Heinz, in conjunction with Maria's family in Tenerife, Spain, began raising money to develop a fellowship to honor her legacy. "When Maria was sick I visited her, and we would talk about Duke. Duke was a magical place for her," said Heinz.

In the fall of 2005, \$500,000 was contributed to the Duke Comprehensive Cancer Center to create the Maria Garcia-Estrada Cancer Development Award in Soft Tissue Tumor Research to recruit a faculty member with a specific interest in sarcoma.

"There are not many cancer centers that conduct research in novel therapeutics for sarcoma patients," said Heinz. "I know that Maria would be pleased and honored to have this research being done in her memory at Duke." *

An interview with Myles Wittenstein

Chair of the Duke Comprehensive Cancer Center Board of Overseers

Describe the Board of Overseers and its role within the Cancer Center?

The Board of Overseers provides a wonderful opportunity for people to get involved with one of the premier cancer centers in the nation. There is a spirit of caring, generosity, and kindness and a level of expertise at the Duke Comprehensive Cancer Center that is unique.

The Board is comprised of volunteers from across the country who act as advocates for patient care and research and work to spread the good news about the Duke Cancer Center through outreach events and other activities.

What inspired you to join the Board?

I've been a member of the Board since the early 1990s. I'm a graduate of Duke University and have always tried to support Duke.

Cancer has touched all of us and has touched me personally, so I thought that being on the Board was a great way to have a positive impact on the fight against this disease. As a Board member, I can support the Cancer Center through financial contributions as well as contributions of my time.



You met with Duke University Medical Center Chancellor Victor Dzau earlier this year. What did Dr. Dzau say?

I met Dr. Dzau during a meeting that encompassed chairs from all of the Duke University Medical Center Boards. Dr. Dzau has big ideas for growth and progress. He is committed to ensuring that Duke continues to be one of the premier medical institutions in the world, and I know that is also Dr. Lyerly's vision for the Cancer Center.

GENES AND ENVIRONMENT INTERACT TO PROMOTE CANCER

Day by day, environmental scientists identify new culprits in the cancer equation in which genes, environment, and lifestyle interact to increase cancer risks in some people but not in others.

The Duke Comprehensive Cancer Center (DCCC) and Duke Nicholas School of the Environment and Earth Sciences held a conference this spring to present their latest findings on how the environment impacts cancer. The conference is part of a year-long celebration of Duke University Medical Center's 75th Anniversary. Gifts from philanthropists Fred and Alice Stanback were used to sponsor the conference and to fund joint research projects between Nicholas School and Cancer Center researchers. *



Pictured at the conference are H. Kim Lyerly, MD, director of the DCCC, and Secretary Bill Ross of the NC Department of Environment and Natural Resources.



The Angels Among Us 5K and Family Fun Walk,

held on April 1, at Wallace Wade Stadium on the Duke campus, raised \$671,041 to support brain tumor research at Duke. More than 750 runners participated in the 5K race, while 91 teams walked to honor loved ones. "This event always exceeds our expectations and provides much needed philanthropic support for our research," said Darell Bigner, MD, PhD, director of the Preston Robert Tisch Brain Tumor Center at Duke. Dr. Bigner, along with the center's deputy directors Henry Friedman, MD, and Alan Friedman, MD, were at the event to show support for their patients and the families and individuals who participated.

ASK THE EXPERT



INTERVIEW WITH JENNIFER GARST, MD

More than 172,000 people will be diagnosed with lung cancer this year, and 163,500 will die from it. More women will die from lung cancer than from breast and ovarian cancer combined. Research funding, however, is considerably less than funding for other major types of cancer. Many people think that only smokers get lung cancer, but 10 percent of men and at least 20 percent of women who have lung cancer have never smoked. We spoke with Jennifer Garst, MD, a thoracic oncologist with the Duke Comprehensive Cancer Center and board member of Women Against Lung Cancer, about the disease.

Besides smoking, how can someone get lung cancer?

Dr. Garst: Over the last 10 years or so, we have seen a rise in non-smokers who are getting lung cancer. We do not fully understand why, but we do know some of the causes. Secondhand smoke is the number two cause of lung cancer after smoking. It is not a good idea to be around smokers, whether it is at a bar or in your home. Radon is the number three cause of lung cancer. Although radon is more prevalent in certain parts of the country, it is probably beneficial for everyone to have their houses tested for radon since it is an odorless gas.

What symptoms are there? Are there tests to determine if someone has lung cancer? What are the treatment options?

Dr. Garst: The symptoms can be vague: fatigue, cough, and weight loss. It is usually not until someone is coughing up blood that the person will see the doctor. Because of this, 60 percent of patients are diagnosed in the advanced stages of cancer, when there is a very low survival rate. There are various new treatment options such as a specialized chemotherapy, targeted pills, and the use of genomics to customize treatments for individuals. Research to produce more effective treatments is needed. Since studies have shown that a yearly chest x-ray does not improve the survival rate for lung cancer, more research needs to be done to develop diagnostic tests.

Is there hope for people who have been smoking for years? What's the best way to quit?

Dr. Garst: It is never too late to quit. In addition to lowering your risk of getting cancer, those who quit are also able to breathe easier, lower their blood pressure, and respond better to treatments of several types of cancer. Interestingly, the most successful quitters are those who go "cold turkey." I usually recommend a combination of nicotine replacement such as the patch, medicine such as Zyban, and counseling. At Duke, we are fortunate to have the Center for Nicotine and Smoking Cessation Research where smokers can get paid to participate in research studies that investigate effective ways to quit. *

How are men and women different when it comes to lung cancer?

Dr. Garst: On average, compared with men, women with lung cancer are diagnosed at an earlier age, have less exposure to tobacco, and live longer once diagnosed. Also, while the rate of lung cancer in men is going down, it has gone up dramatically in women. More research needs to be done to determine why these differences exist, but researchers hypothesize it may be due to the fact that women's lungs are smaller, leading to a higher concentration of toxins or that they metabolize these toxins differently. In addition, estrogen and genetics may play a role.



Executive Committee

Director

H. Kim Lyerly, MD

Associate Director, Basic Science Research
Anthony Means, PhD

Associate Director, Clinical Research
Jeffrey Crawford, MD

Associate Director, Genome Sciences
Huntington Willard, PhD

Associate Director, Population Research
Celette Sugg Skinner, PhD

Associate Director, Translational Research
Francis Ali-Osman, DSc

Associate Director, Business and Finance
Nancy Jenkins

Associate Director, Development
Karen Cochran

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

Chief, Division of Gynecologic Oncology
Andrew Berchuck, MD

Co-Leader, Neuro-oncology
Darell Bigner, MD, PhD

Co-Leader, Bone Marrow Transplant
Nelson Chao, 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, Cancer Genetics and Genomics
Joseph Nevins, PhD

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

Chair, Department of Radiation Oncology
Christopher Willett, MD

Patient Advocate
Vernal Branch

To contact Duke Comprehensive Cancer Center's Office of Development call (919) 667-2600.

To make an appointment call 1-888-ASK-DUKE.

For more information visit cancer.dukehealth.org.