

Cancer Lines

The Cancer Program of UNC-Chapel Hill & UNC Health Care

Spring 2008

UNC
N.C. CANCER HOSPITAL
LINEBERGER COMPREHENSIVE
CANCER CENTER

Cancer Survivorship: From Clinics to Communities, UNC is There

For many cancer patients, the end of active treatment creates a lot of uncertainty. After long periods of regular treatments and doctor visits, the routine changes. But concerns, challenges and potential health problems remain.

"Some have described it as being 'dropped off a cliff,'" says Elizabeth Sherwood, coordinator of cancer survivorship programs. "Their cancer may be treated, but the cancer is still part of their life. As healthcare professionals, we can facilitate this transition from active treatment to surveillance by attending to the concerns of the patient and managing some of the ongoing physical issues related to cancer and cancer treatment."

Cancer survivors in North Carolina will now receive this kind of wide-ranging post-treatment care. Earlier this year, the Lance Armstrong Foundation (LAF) invited the UNC Lineberger Comprehensive Cancer Center to join the LIVESTRONG Survivorship Center of Excellence Network. UNC Lineberger is now one of only eight centers in the nation designed to

address the needs of the growing number of cancer survivors. There are now about 12 million cancer survivors in the U.S.; about 300,000 North Carolinians are survivors.

"In the past the focus has almost entirely been on treatment and 'beating' the cancer," explains Marci Campbell, the Center's principal investigator and professor of nutrition at UNC's School of Public Health. "Our cancer survivors need programs and services to help them deal with long-term health issues including possible late effects of their cancer. They are concerned about wellness issues such as healthy eating, exercise, weight control and quitting smoking in

order to prevent other chronic diseases. They also need psycho-social support and may have issues and concerns about employment, insurance, etc."

The LIVESTRONG Survivorship Center of Excellence at UNC Lineberger was formed with a five-year \$1.5 million

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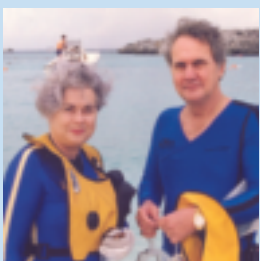
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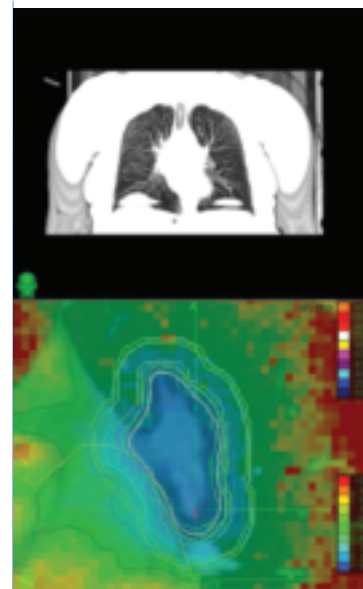
Dr. Paul Godley (left) and Elizabeth Sherwood (right) meet with patient Nathan Ladd during his visit to the survivorship clinic.

Radiologists Bet on Simulations

Ironically, a technology originally used to develop nuclear weapons is now being used by radiation oncologists at UNC to deliver more accurate doses of radiation therapy.

Physicists working on the Manhattan project developed an algorithm relying on random sampling to calculate the chain reaction in nuclear weapons. They called it a Monte Carlo simulation, and it is now used to calculate how radiation deposits in human tissue.

"It's nice that it can now be used to heal the sick and cure cancer," says Dr. David Morris, assistant professor of radiation oncology and director of the UNC CyberKnife® program. "It makes it easier for us to know what dose we are actually delivering, and it will likely make it easier for us to understand and determine the risk for tumor control and treatment complications."



The upper image shows the Monte Carlo predictions of radiation dose deposited in the lung tumor and surrounding tissue. The color map indicates the expected accuracy of the calculation, with the blue region over the tumor indicating a calculation accuracy of 99% or better.

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the inside line up

director's *Message*



Dr. H. Shelton Earp, III

In today's world we are exposed to huge amounts of information. How does information shape medical decision-making? Our researchers are looking at questions about how the amount, delivery method and type of information people receive impacts their care. What information helps patients to make better medical decisions? Or clinicians to offer better therapies? Or survivors to know what tests and follow-up care they need?

Patients are asked to make critical decisions while under the enormous stress of a cancer diagnosis. This stress can affect how well they absorb and process information. *Cancer Lines* reports on efforts by physicians and scientists at the UNC Decision Support Lab. These Lineberger members work at the Sheps Center for Health Services Research and develop strategies and methods to help people make decisions about their cancer risk, screening and treatment.

When cancer patients and their physicians are working together on getting the best treatment, information is on center stage. But once the routine of seeing doctors and nurses is in the past, how survivors get information is less clear. UNC's new survivorship clinic is addressing this issue for patients at UNC and in communities across the state.

Having more information can help clinicians plan treatment more effectively. The Monte Carlo system, profiled in these pages, uses information from supercomputers to improve the accuracy of radiation doses, especially for patients with tumors near the lung.

Information is also helping UNC shape priorities and programs of the University Cancer Research Fund (UCRF). Through listening sessions in Greenville, Asheville, Wilmington and Greensboro, we have received thoughtful and useful insights from patients, survivors, health care professionals and citizens about the cancer priorities in their communities. One more session in Charlotte is scheduled for May 20.

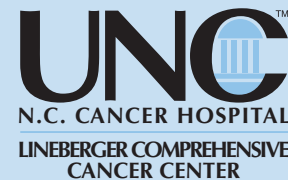
Regionally, UNC is joining forces with East Carolina University to increase the flow of ideas, clinical trials, prevention

strategy projects, training opportunities and technologic advancements between our two institutions. This partnership will strengthen cancer research and care and will help both universities and our patients.

UCRF funds were leveraged by a \$9 million gift from Fred Eshelman to the UNC School of Pharmacy's programs in drug discovery, nanotechnology and individualized therapy. This gift will accelerate discoveries that can be translated into effective therapies for cancer patients.

The first wave of UCRF innovation grants in laboratory and clinical sciences have been awarded. These projects range from unraveling the cause of nicotine dependency to developing a new technology for assessing genetic change in breast cancer.

The goal of the UCRF is to expand our information and advance our understanding of cancer. In its first year, we have made progress toward that goal. We thank the NC Legislature for their vision in creating this fund and the communities we have visited for their insights. We are mindful each day of North Carolina's enormous confidence and trust in what we are doing. We are grateful for this opportunity to save lives and reduce suffering from cancer, in North Carolina and beyond. ●



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Earp Receives UNC's Thomas Jefferson Award

Dr. Shelley Earp, UNC Lineberger director, has been honored by his peers with the 2008 Thomas Jefferson Award. The annual award recognizes a UNC faculty member who, through personal influence and performance of duty in teaching, writing and scholarship, has best exemplified the ideals and objectives of Thomas Jefferson. UNC faculty members nominate candidates for the honor, which carries a cash prize; a

faculty committee chooses the recipient.

Chancellor James Moeser presented the award at a meeting of the Faculty Council on April 25. Barbara K. Rimer, dean of the School of Public Health and Alumni Distinguished Professor, wrote the citation honoring Earp.

"A man of Jeffersonian breadth and depth, Dr. Earp is an exemplary scientist and humanitarian, educator and healer,

mentor and leader, citizen and colleague... true blue Tar Heel," Rimer said.

"Dr. Earp has strengthened this university not only through his own accomplishments, but by nurturing a culture of collaboration. Because of Dr. Earp's efforts, there is better treatment today for patients in North Carolina, and there will be much better prevention and treatment tomorrow." ●

UNC-Chapel Hill, ECU Team Up on Cancer Care, Research

The University of North Carolina's two medical schools and their cancer centers have signed a memorandum of understanding that creates a partnership to advance cancer research and bring leading-edge treatment to North Carolinians.

Officials at East Carolina University's Brody School of Medicine and its Leo W. Jenkins Cancer Center, the University of North Carolina at Chapel Hill's School of Medicine and its Lineberger Comprehensive Cancer Center and the UNC system signed a memorandum of understanding outlining basic aspects of an arrangement where they will work together to improve cancer care for North Carolinians and further research into the state's leading cause of death.

"Service to North Carolina is a key part of the University's mission, and this new partnership involving our two highly respected medical schools will help us advance and expand how we care for cancer patients, train physicians and



conduct collaborative research that benefits our citizens," said UNC President Erskine Bowles. "Working together, medical faculty and scientists at ECU and UNC at Chapel Hill can accomplish far more than they could individually. This is truly a case where two plus two can equal five."

In the past few months, 12 ECU faculty have become members of UNC Lineberger's research programs.

UCRF Spurs Large Gift for Cancer Research

Fred Eshelman, chief executive officer and founder of Wilmington-based PPD Inc., had a vision to improve his alma mater. He would

pledge \$9 million to support cancer research at the UNC School of Pharmacy if a matching gift could be found.

The board of North Carolina's University Cancer Research Fund accepted the challenge and matched the gift, generating a total investment of \$18 million over five years. The funds will support the work of the UNC School of Pharmacy and UNC Lineberger Comprehensive Cancer Center researchers whose work focuses on genetics, individualized cancer therapy, drug discovery and drug delivery.

"This gift is a wonderful example of a private gift leveraging cancer fund money through partnerships among cancer center faculty across UNC," said Robert Blouin, dean of the UNC School of Pharmacy. "Working together we will accelerate discoveries that can be translated into more effective therapies for cancer patients. Fred Eshelman's gift will speed the fight against cancer in North Carolina and beyond," said Dr. Shelley Earp, UNC Lineberger director.

Survivorship

continued from page 1

grant and is charged with developing survivorship programs and services through the N. C. Cancer Hospital and partnering sites around the state. The Center benefits from the advice and expertise of a large Community Advisory Board made up of cancer survivors and advocates from around the State. This group meets quarterly with the UNC team to plan upcoming activities, advise on issues of concern to the survivor community, and provide feedback on progress.

Not A New Idea

The focus on survivors isn't new to UNC Lineberger. The pediatric oncology practice has run a survivorship clinic for about 15 years. A similar clinic for testicular cancer patients who have completed treatment was recently established.

"Through this clinic, we are piloting the use of a survivorship care plan, a treatment summary, and a transition plan to assist patients in their transition back to their primary care physician and life after cancer treatment," explains Dr.

Paul Godley, associate professor of medicine and the Center's co-principal investigator.

"The clinic services have received high praise from patients, and plans for additional survivorship clinics for breast cancer patients, bone marrow transplant patients, and adult survivors of childhood cancers are in development."

Researchers and clinicians will develop clinical survivorship programs for specific cancers at the N.C. Cancer Hospital, as well as education and outreach programs at UNC and its community based centers in Greensboro, Newton Grove and Wilmington.

Nathan Ladd, a testicular cancer survivor from Kill Devil Hills, N.C., finds value in the clinics. "Attending the survivorship clinic is the right thing to do for me. I beat the cancer, so I want to stay on top of it," he says. "This clinic is the way to do that. I am monitored and tested and followed for any possible late effects from treatment. Not taking

action is the worst thing you could do." Read more about Ladd at nccancerstories.org

Expanded Services

The LAF designation allows UNC Lineberger to build on its clinical and investigative experience to become a nexus for survivor and family support, service, research and advocacy in North Carolina. "We will collaborate with our partners at the state level to ensure that programs and services reach cancer patients and families as well as to enhance education for health providers caring for cancer survivors in their communities," Campbell says.

The team also will work with Walter Shepherd, director of the State of North Carolina Comprehensive Cancer Program in Raleigh, to expand the reach of survivorship programs and education to every region of the state. Shepherd also is the executive director of the North Carolina Advisory Committee on Cancer Coordination and Control in the State Division of Public Health.

In addition, the Center of Excellence will share its clinical and outreach programs with colleagues at East Carolina University in Greenville, and Rex Hospital in Raleigh. Plans to expand to other interested sites are being developed.

"A statewide network of information for patients, families, and caregivers as well as health care professionals will be established and made accessible," notes Mindy Gellin, LAF outreach coordinator. Additionally, a peer counseling program will be built, matching survivors with trained peers to provide support and information primarily via telephone.

A Collaborative Effort

The Center for Excellence Network also enables members to collaborate and learn from each other. Working together, Network members will be able to establish best practices for survivor care. "One of the innovations we hope to bring is experience working

translational drug development. He also will establish a Good Laboratory Practice Analytical Facility at UNC.

"Dr. Zamboni is one of the first scientists recruited with help from the University Cancer Research Fund and is a true investment in clinical research excellence," said Dr. Claire Dees, associate professor of medicine and head of the Lineberger Clinical Research Protocol Office. "He is not only a terrific scientist, but also brings analytical capabilities to our Early Phase Clinical Trials Program that will place UNC in the top rank of cancer centers."

UCRF Completes First Round of Competitive Awards Program

One initiative of the University Cancer Research Fund is the establishment of a new competitive cancer award program open to UNC faculty to support novel collaborative science across the broad continua of cancer - from fundamental laboratory science to community intervention, from disease prevention to palliative care, and



Marci Campbell, LIVESTRONG Survivorship Center of Excellence principal investigator, and Mindy Gellin, outreach coordinator, discuss program plans.

with community partners to deliver health services," Godley says. "Another emerging idea of ours is to develop a survivorship cohort that can be utilized to answer important questions about the long-term health-related challenges faced by cancer survivors."

A cohort is a group of people who are tracked over an extended period of time to enable long-term studies. Godley hopes to collaborate with other LIVESTRONG Survivorship Centers of Excellence on this new study concept.

Strengthened Commitment

The addition of the Center of Excellence showcases UNC Lineberger's role as a leader in the comprehensive care of cancer patients.

The Center also represents a commitment by UNC Lineberger, UNC Hospitals and the University to support cancer patients throughout their cancer journey, not just while they are undergoing treatment. "We are dedicated to helping them through the transition to life after treatment," Godley says.

"Becoming a LIVESTRONG Survivorship Center of Excellence is an extraordinary honor," adds Dr. Shelley Earp, UNC Lineberger's director. "The collaboration among UNC's Schools of Medicine and Public Health, in partnership with North Carolina communities, will help us understand how best to address the needs of survivors across the population." ●

Zamboni Joins UNC School of Pharmacy and UNC Lineberger

William Zamboni, PharmD, PhD, an expert in translational studies of anticancer agents, has joined the UNC School of Pharmacy and the UNC Lineberger Comprehensive Cancer Center.

Zamboni, who came to UNC from the University of Pittsburgh, is an associate professor in the School's Division of Pharmacotherapy and Experimental Therapeutics. He is also a member of the School's Institute for Pharmacogenomics and Individualized Therapy (IPIT) and a UNC Lineberger member.

"Dr. Zamboni brings an international reputation in cancer clinical pharmacology and will make a big impact on the development of new therapies for the patients of North Carolina," says Howard McLeod, the director of IPIT.

He will direct a drug development and clinical pharmacology lab focusing on the translational development of drugs, anticancer agents, and nanoparticles. The lab will have the capacity to support all pharmacologic studies required in

from childhood to adult. The projects should demonstrate significant potential for advances and break new ground at UNC.

Competition was fierce with 123 applications requesting \$18.3 million in support. Applications came from faculty representing nearly 30 departments in the College of Arts and Sciences and in the Schools of Dentistry, Medicine, Pharmacy and Public Health.

The first Innovation Award winners were announced in February. 18 faculty members received Innovation Awards totaling \$2.26 million in funding. In addition, 8 faculty members received Clinical Innovation Awards totaling \$500,000. Dr. Rudy Juliano chaired the Innovation Award Review Committee while Dr. Richard Goldberg chaired the Clinical Innovation Award Review Committee. For a detailed description of each of these grants, visit: www.unclineberger.org/ucrf/grant/ ●

faculty Profile

There are no tricks to studying the intricacies and complications of cancer, but for Nancy Raab-Traub there is a lot of magic.

The professor of virology, who loved reading fantasies as a child, knew early on that her favorite pastime would probably not lead to a career in sorcery. But her chosen path would be just as bewitching.

In the eighth grade Raab-Traub visited the World's Fair in Seattle and saw a picture of a virus that could infect bacteria. It was the beginning of a fascination with molecular biology that would lead to her delving into the unknowns of the Epstein-Barr virus (EBV).

Demystifying EBV

EBV is one of eight human herpesviruses that remain in the body after infection. More than 95 percent of the world has the EBV, but for people with impaired immune systems or certain populations (like those in China, the Mediterranean and Africa), it can cause cancer.

"EBV causes all of the lymphomas that develop in patients after organ or bone marrow transplantation and many of the lymphomas that develop in patients with AIDS," Raab-Traub, UNC Lineberger Virology Program leader, explains.

Even though EBV-associated cancers rarely occur in the U.S., about half of Hodgkins lymphoma cases, which occur mainly in young adults, are EBV-associated.

"As most people are infected with the virus, it is important to determine why cancer develops in some infected people and not others," she says. Lab work done by Raab-Traub and her team focuses on identifying the viral genes expressed in these cancers to determine how the genes force the infected cells to grow and become cancer.

Conjuring Up A Career

Raab-Traub started her work in Chapel Hill as a post-doctoral fellow with Joseph Pagano, Lineberger director emeritus and one of the first researchers to study the cancer, nasopharyngeal carcinoma. She had just completed her PhD at the University of Chicago.

"I was interested in how EBV caused cancer and I wanted to work with him and apply the new molecular skills that I had learned and helped to develop at the University of Chicago," she recalls.

Raab-Traub's research interests were piqued by a job in a virology lab as an undergraduate at the University of Michigan. "I loved the laboratory work and was thrilled with learning how to find out important things about human disease," she says. That love continues today. "My major goal is to contribute to our understanding of the causes of

disease and cancer, and to teach students how to ask and answer important questions."

And, to show them how spellbinding it can be to search for a cure for cancer.

Nancy was one of the original group of faculty recruited for Lineberger. She has risen to national prominence and has steadfastly refused to accept offers for leadership positions elsewhere. Her two children, Emily, 27, a UNC graduate, and Donald, 24, an Appalachian State graduate, were born in Chapel Hill and raised in the early 20th century Raleigh house that Nancy lovingly restored. ●



Nancy Raab-Traub

research Briefs

Looking for Signs of Life

Jack D. Griffith, Kenan Distinguished Professor of microbiology and immunology at the UNC School of Medicine and a UNC Lineberger member, found ancient cellulose microfibers in samples taken from pristine ancient salt deposits deep beneath the New Mexico high desert.

How ancient? Until now, the oldest evidence of biological material was some protein fragments dated at 68 million years. "The age of the cellulose microfibers we describe in the study is estimated to be 253 million years old," Griffith said. "These are the oldest native macromolecules to date to have been directly isolated, visualized and examined biochemically." His report was the cover story for the April issue of the journal *Astrobiology*.

The samples are from the Department of Energy's Waste Isolation Pilot Plant (WIPP), the world's first underground repository licensed to safely and permanently dispose of radioactive waste left over from nuclear weapons research and production. Griffith studies the samples in his transmission electron microscopy lab at the Cancer Center. In examining the content of fluid "inclusions," or microscopic bubbles, in the salt and in solid halite crystals, he and his team found abundant cellulose microfibers that were "remarkably intact."

Their examination clearly revealed the cellulose was in the form of microfibers as small as five nanometers in diameter, as well as composite ropes and mats. DNA also was observed, but in much lesser amounts than cellulose. The study was supported in part by grants

from the National Institute of Environmental Health Sciences and the National Institute of General Medical Sciences.

The cellulose appears highly stable and more resistant to ionizing radiation than DNA. "If it is relatively resistant to harsh conditions such as those found in space," Griffith says, "it may provide the ideal 'paper trail' in the search for life on other planets."

Obesity May Keep Some Women from Getting Cancer Screenings

A review of cancer screening studies shows that white women who are obese are less likely than healthy weight women to get the recommended screenings for breast and cervical cancer. The trend was not seen as consistently among black women, though there were fewer high-quality studies that examined black women separately.

"Obesity is increasing, and so is the evidence that obesity increases the risk of certain cancers like colorectal cancer and post-menopausal breast cancer," says Sarah Cohen, an epidemiology researcher at the School of Public Health. "It's a disturbing trend, then, to see that women who are at increased risk of cancer because of their body size are less likely to be

receiving screening tests that can detect cancer early, when it is treatable."

According to the survey, fewer women got the recommended screening test (Papanicolaou - or Pap - tests) as body mass index increased. The studies showed a stronger trend among white women than black women. The studies also showed lower rates of mammograms - which screen for breast cancer - among obese white women compared to healthy weight women. The study results were published online by the American Cancer Society.

In addition to Cohen, the review was written by Andrew Olshan, chair of the UNC epidemiology department, adjunct research professor in the UNC School of Medicine's department of otolaryngology/head and neck surgery, and program leader for cancer epidemiology in the UNC Lineberger Comprehensive Cancer Center; Rachel Palmieri, Sarah Nyante, Daniel Koralek, Sangmi Kim, and Patrick Bradshaw. The review was supported in part by grants from the National Cancer Institute.

Most Lethal Melanomas are on Scalp and Neck

People with scalp or neck melanomas die at nearly twice the rate of people with melanoma elsewhere on the body, including the face or ears, UNC researchers have found.

The analysis of 51,704 melanoma cases in the U.S. confirms that survival rates differ depending on where skin cancer first appears. Those with scalp or neck melanomas die at a rate 1.84 times higher than those with melanomas on the extremities, after controlling for the possible influences of age, gender, tumor thickness and ulceration.

Simulations

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Several years ago, Lineberger partnered with Dell and Microsoft to speed processing/computing time for Monte Carlo simulations in radiation oncology to deliver more accurate dose calculations. The project has since expanded to include new supercomputers to increase the efficiency of Monte Carlo simulation as well as other applications for radiation oncology such as better imaging and targeting of tumors. This new capacity will allow the simulations to be used in the clinic, not just in the lab.

Only a handful of medical centers worldwide have begun to use Monte Carlo simulations in



Eric Schreiber and Dr. David Morris with the CyberKnife® system at UNC.

conjunction with the CyberKnife® Robotic Radiosurgery System. UNC is one of those places.

This is a huge boon to UNC Lineberger radiation oncologists and the cancer patients they treat because the combination allows technicians to direct radiological treatment more precisely. "No one likes measuring with a 'crooked ruler,'" Morris quips. "Until now, that is the best we have had available. Monte Carlo simulation is the most accurate and precise dose calculation around."

By running these simulations, UNC Lineberger specialists can get an accurate picture of what radiation dose the patient will actually receive from a given course of treatment. The result is a more targeted treatment that optimizes patient outcomes.

"For example, a conventional treatment planning calculation might indicate that a certain beam arrangement produces a uniform dose across the entire tumor," explains Eric Schreiber, chief physicist for the UNC CyberKnife® Center and a research assistant professor of radiation oncology. "But a subsequent Monte Carlo calculation could more accurately reveal that a portion of the tumor might be receiving 10 percent less dose than intended. It's important that the physician know this, because less dose can result in less effective tumor control. Having this information allows the physician to adjust the plan to ensure that the entire tumor is treated to the appropriate dose." ●

Faculty Appointments

Chair of Radiation Oncology



Dr. Lawrence Marks has been appointed chair of the department of radiation oncology at the UNC at Chapel Hill School of Medicine. Regarded as one of the country's top breast cancer specialists, Marks comes to UNC from Duke University, where he had been a member of the radiation oncology faculty since 1989.

"This is an exciting time to be at UNC," Marks said. "The new facility is a wonderful opportunity to provide patient-friendly, state-of-the-art cancer care. And with the state's deep commitment to the University Cancer Research Fund, there is a mandate here to expand UNC's already excellent cancer research program."

Pediatric Division Chief



Dr. Stuart Gold, professor of pediatrics, has been named division chief of pediatric hematology and oncology at the UNC School of Medicine. Gold joined the UNC faculty in 1989.

As division chief, Gold is responsible for developing the division's clinical care programs, translational research, and training of residents and fellows. He will continue running a monthly outreach clinic at New Hanover Regional Medical Center in Wilmington, NC. ●

"Scalp and neck melanoma patients have a higher rate of death than patients with melanoma anywhere else on the body," said Nancy Thomas, M.D., Ph.D., associate professor of dermatology in the UNC School of Medicine, a member of the UNC Lineberger Comprehensive Cancer Center and the study's senior author. Anne Lachiewicz, a medical student in the UNC School of Medicine, is the lead author of the study.

Thomas recommends that physicians pay special attention to the scalp when examining patients for signs of skin cancer. "Only six percent of melanoma patients present with the disease on the scalp or neck, but those patients account for 10 percent of melanoma deaths. That's why we need to take extra time to look at the scalp during full-skin examinations," she said.

The study helps address a controversy among cancer researchers: whether scalp and neck skin cancer is more lethal primarily because it's diagnosed later than other melanomas. "That was the thinking of a lot of people in the field," Thomas said. But the analysis indicates that the presence of the melanoma on the scalp or neck, in itself, is an indicator of a poorer prognosis.

"We think there's something different about scalp and neck melanomas," Thomas said. "This gives us directions for research to look at tumor cell types in those areas at the molecular level and to see if there are differences. I'm interested in identifying the mutations that drive malignancy."

The results appear in the April 2008 issue of the journal *Archives of Dermatology*. Study co-authors are from the University of New Mexico. Funding was provided by the National Cancer Institute and a Holderness Medical Foundation Fellowship to Lachiewicz. ●



Kramer Honored

Mark Kramer is the 2008 recipient of the W. Scott Blackwood Excellence in Research Administration Award. Kramer is UNC

Lineberger's assistant director for research administration.

The Award recognizes a University employee for meritorious and distinguished accomplishments in research administration at UNC at Chapel Hill. Kramer was nominated by

Dr. Shelton Earp, UNC Lineberger director, and Dr. Michael O'Malley, UNC Lineberger associate director. In their nomination letter they praised Kramer for his excellence, dedication, commitment and service to the University. "For the past 23 years, he has worked tirelessly for the Cancer Center and UNC. He has always looked for new ways to improve our systems and faculty. Mark's legendary 70 hour work weeks help make UNC Lineberger what it is." ●

Dole Announces Nearly \$4 Million for UNC Health Research

U.S. Senator Elizabeth Dole visited UNC on January 18 to announce that she helped secure nearly \$4 million for three major health research initiatives at UNC. In a visit to the UNC Lineberger Comprehensive Cancer Center, Dole said that the federal budget for fiscal year 2008 includes \$2.4 million for the North Carolina Cancer and Genomics Research Center, \$560,310 for the Program in Racial Disparities and Cardiovascular Disease, and \$984,000 for the Collaborative Initiative in Biomedical Imaging. Dr. Terry Van Dyke, Sarah Graham Kenan Professor of Genetics in the UNC School of Medicine and UNC Lineberger faculty member, is principal investigator of the North Carolina Cancer and Genomics Research Center. ●

Senator Elizabeth Dole visits with Dr. Terry Van Dyke and Shari Sweeney (far right), a research technician in the Van Dyke lab.



Helping Doctors and Patients Make Better Decisions

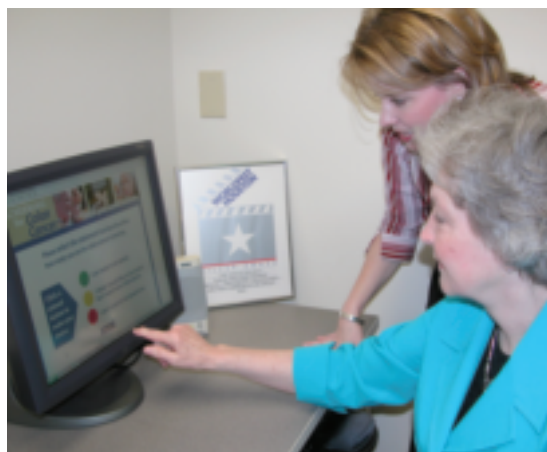
When we're not feeling well, we're often scared and anxious. "Our ability to bring in new information may not be as good as it usually is," explains Michael Pignone, associate professor of medicine. And that can impact our treatment and outcomes. "Given the right means of presentation, doctors can provide both individualized and population-based recommendations to patients, who can then incorporate their preferences and values into making decisions about their care."

That's why researchers and clinicians at UNC Lineberger are focusing on helping patients and their doctors make better decisions when it comes to healthcare. "We're doing research to figure out how we can better help patients and doctors work together to make better decisions," he says. "We're giving information in advance, like decision aids, to help people have grist for the mill. We're also looking at helping patients learn to get their questions and concerns across to their doctors and make sure those things are being implemented."

Breast Cancer

"Our beliefs about risk inform our medical choices," asserts Noel Brewer, assistant professor of health behavior and health education. "The chances of cancer coming back, the chances of being cancer free, the chances of side effects."

In his research, Brewer discovered that breast cancer patients are very interested in new genomic tests that identify the risk of cancer recurrence with greater accuracy. "Although these tests are not yet developed for all types of breast cancer, they can help many patients with early stage breast cancer make better decisions about whether to have chemotherapy. Potentially, some of these women could safely forgo this treatment because the genomic test suggests that they are at low risk and there would be little benefit."



Jennifer M. Griffith, Decision Support Lab director (standing), works with a study participant.

Colorectal Cancer

Decision-making among colorectal cancer patients who are neither exceptionally fit nor exceptionally frail is the focus of Hanna Sanoff, assistant professor of hematology and oncology. "In situations where there is no 'right' answer or where substantial risk comes both with treatment and without, it is of the utmost importance that each patient's individual preference be taken into account when deciding about whether to proceed with chemotherapy," she explains. "Yet patients are largely unable to communicate their preferences to their physician if they are not provided with enough information to understand the nature of the decisions, and the consequences of each possible choice."

Sanoff has undertaken a project to assess the adequacy of the decision-making process and the information exchange in colon cancer patients faced with the choice of receiving chemotherapy for stage II or III cancer. Results of the survey are expected soon. "My long-term goal is to compare the adequacy of information exchange and decision-making in younger to older patients," she says.

"While this present study will be too small to answer that question, I hope it will provide adequate preliminary data to allow us to plan, and receive funding, for a larger study."

Prostate Cancer

To help men decide whether to undergo prostate cancer screening, Stacey Sheridan, assistant professor of medicine, developed an intervention. "This will help men make better decisions because it provides evidence-based information to help them clarify their values and encourage participation in decision-making with their doctors," she explains.

The intervention includes a video that provides an overview of the kinds of prostate cancer and the process of learning and deciding about screening. There also is a coaching session for patients in which they begin to define their values, understand their decision-making process, and prepare for a discussion of screening with their doctors. Finally, the intervention also includes training for healthcare providers, helping them convey the importance of screening and highlight the value of shared decision-making.

Pignone, Brewer, Sanoff, and Sheridan are members of a multi-disciplinary group of investigators called the Working Group on Risk, Communication, and Shared Decision Making whose members are affiliated with UNC Lineberger and the Sheps Center for Health Services Research. "We work together to perform basic and applied research into clinical decision making for a range of cancer related decisions, including those related to prevention, treatment and survivorship," Pignone explains. "We've developed the UNC Decision Support Lab where we seek new solutions to many of the vexing cancer care problems, such as the persistence of ethnic disparities in health outcomes and the inconsistent application of effective health services." ●



Outstanding Service Recognized

Anne Wilson of Morganton, NC, received the 2008 Outstanding Service Award from the Lineberger Board of Visitors. Wilson was cited for her "inspiring

advocacy for lung cancer research at the state and national level" by Center director Dr. Shelley Earp. "Anne speaks with eloquence about the urgent need for increased research into the causes and new therapies for lung cancer," he said. "She is a strong and effective advocate for this important cause." Anne and John Wilson's 28-year-old daughter, Katherine, died of lung cancer in 2005. Since Katherine's death, the Wilson family has supported a scholarship in Katherine's memory at the UNC School of Nursing as well as the Patient and Family Resource Center at UNC Lineberger.

In 2006, she won an international photography contest for her picture titled "This is not a Dress Rehearsal" of Katherine and her father John, both hairless due to Katherine's chemo and a sympathetic shave by John. ●



Pictured (left to right): Pam Baker, Resource Center Staff; Stephanie Lu, UNC graduate student; and Aimee Shea, UNC oncology dietitian welcome program participants.

First Annual Nutrition Luncheon

In recognition of National Nutrition Month, March 2008, the Patient and Family Resource Center sponsored weekly nutritional programs related to symptom management in the chemotherapy and radiation therapy waiting areas. Aimee Shea, MPH, RD, LDN, the outpatient oncology dietitian, shared tips, recipes, and food samples with patients and family members. As part of the insightful session, the presenters gave food tips for participants who have difficulty swallowing or are dealing with GI side effects, and handling a loss of appetite during cancer treatment.

A highlight of the month was marked by UNC's First Annual National

Registered Dietitians Day Luncheon in memory of Zeny Datiles. Shea presented the 2007 American Institute for Cancer Research (AICR) guidelines on cancer prevention and nutrition to a "standing room only" crowd. Special lunches of healthy comfort food were also served to patients in the chemotherapy infusion area who were unable to attend the luncheon.

Heartfelt thanks to the family of Zeny Datiles. "Zeny's Garden," the Oncology Nutrition Library of the Patient and Family Resource Center, was established in memory of Zeny Datiles and in recognition of the work that Zeny began more than 25 years ago as a dietitian at UNC. ●

leaving a *Legacy*

Walter and Earlene Ward of Asheboro have always enjoyed a zest for life, adventure and new discoveries. Their passion for diving began in 1980 when a primitive sign advertising dive trips caught their attention while driving down the Yucatan coast. Ever since, their travels have taken them to dive locales in remote corners of the world including Hawaii, Tahiti and the Caribbean.

That is until 1997 when Walter's diagnosis of non-Hodgkin's Lymphoma suddenly put their lives on hold. Earlene, who was previously treated for rectal cancer, had already done her homework. At the time she sought several opinions including a consultation at Memorial Sloan-Kettering. Everyone said the same thing: "the best place for cancer care is right here in your back yard at UNC." Earlene added, "We knew from my cancer experience that UNC would treat Walter's cancer proactively and aggressively. In Walter's case there was no time to waste, he needed emergency treatment. Thank God UNC was there for us to act without delay."

Earlene reflects on the most challenging year of their lives: "Drs. Mitchell, Tepper and Shea worked as a team on Walter's treatment plan. We are so grateful for their wisdom and their profound sense of caring. They lifted the



Earlene and Walter Ward

burden of worrying so we could pour all of our energy into Walter's recovery."

Walter recalls that through interaction with these talented physicians they became aware of the importance of research. "Cancer takes a devastating toll on all family members. We want to be part of finding a cure."

Following Walter's recovery, the Wards decided to create a \$450,000 Charitable Remainder Trust (CRT) that

would provide a life income for them with the remainder to benefit UNC Lineberger and upkeep of the cemetery of their country church. "It has been a wise decision for us. We sold an inherited piece of property, and it made no sense to pay half of the proceeds in taxes. The CRT was the perfect financial tool for us to make an impact in areas we care deeply about."

Thanks to excellent care from UNC, the Wards were able to resume their favorite hobby of diving. Just recently they spent a week in St. Kitts and Roatan exploring the wonders beneath the ocean's surface. What better way to celebrate life and new discoveries! ●



The Power of One visit www.celebrations.com/cure

Work with UNC Lineberger through its affiliation in the Cancer Research Alliance (CRA) - a newly formed collaboration of National Cancer Institute-designated Comprehensive Cancer Centers - to help raise funds for cutting-edge cancer research through national cause marketing business partnerships.

This Mother's Day through Father's Day, May 11 through June 15, support the CRA by donating \$1 to cancer research. The Cancer Research Alliance will give your \$1 infinite power by adding it to all the other dollars we generate. This money will then be used to speed progress on new treatments that are less invasive, more targeted and more powerful.

Please join our efforts to accelerate cancer research by visiting our sponsor www.celebrations.com/cure. Help us make this time of year from Mother's Day through Father's Day a time of infinite hope for families everywhere. So add your \$1 and pass the word onto friends and family to do the same. Because change starts right here and now with the infinite power of you. ●

Cancer Survivor Climbs Mt. Kilimanjaro to Raise Funds

Harriet Farb, an 18-year breast cancer survivor, climbed Mt. Kilimanjaro in January and raised \$15,000 for the UNC Lineberger Patient and Family Resource Center. While on active therapy for a recurrence, she made the trip with her brother, Ron Farb, co-founder of the non-profit Climb for Cancer that sponsored the trip. They made it to 17,000 feet – 70 mile per hour winds prevented her and others from making the summit.

Harriet said, "I have been blessed, and now is my chance to pay back for all the love and support I have received as a cancer patient."

To read more about Harriet's trip: www.unclineberger.org/gift/events/farb



volunteer *Spotlight*

The nurses in the oncology infusion floor call them "the dynamic duo" for their energy and compassion. Since 1993, Jeanne Hagen has volunteered in the clinical cancer center, helping patients to be more comfortable during their visits and infusions and working with the nurses to make sure needed supplies are stocked and easily accessible.

"We're here for the patients and the nurses," said Jeanne's husband, Armin, a volunteer since 1994. The couple distribute newspapers, offer juices and other nourishment and blankets and pillows, but most important, they offer support

and care to patients and families. "Patients and families are here for hours," explained Jeanne, "so we want them to be comfortable."

The four hours they spend at UNC are greatly appreciated by the patients, families and nurses. "They have developed strong relationships with patients and nurses," said Pat Decator, a longtime nurse in the infusion area. "They're the constant presence on Fridays, and our patients and families look forward to seeing them.



Jeanne and Armin Hagen offer juice to patient Margery Barton.

They also help the nurses by keeping the storage closets stocked and orderly, critical since our clinic stays so busy."

"It's payback time," the Hagens say. "We've had happy lives, so we're glad to help here." The Hagens moved to Fearington Village in 1991, leaving Long Island to move to an area with "an academic medical center and a good environment for families." They both had retired from Sperry (now Unisys) when they decided to relocate to North Carolina.

In addition to her duties at the clinic, Jeanne also volunteered to participate in two Breast Cancer Prevention Trials. Her mother died of breast cancer, and her sister had the disease, so Jeanne thought taking part in the trial was a positive step. "In fact," she said, "it saved my life." Because trial participants are so closely followed, when a small spot appeared on a mammogram, the follow-up care revealed a spot on her ovaries that was quickly removed while pre-cancerous.

Both are active with the UNC Hospitals Volunteer Association and with various committees at Fearington. ●

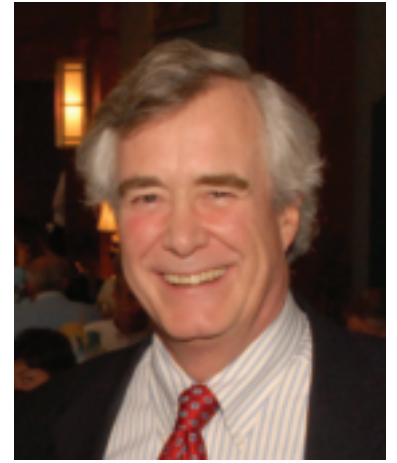


2008 Beach Ball Brings 5 Year Proceeds to over \$500,000!

The 5th Annual UNC Lineberger Beach Ball was a tremendous success this year attracting more than 700 guests and raising more than \$155,000 for UNC Lineberger's cancer treatment, research and prevention programs. Thanks to our honorary hosts, Coach Butch and Tammy Davis and to our Lineberger Leadership partners, BlueCross BlueShield of North Carolina and Long Beverage, Inc. Pictured above with Coach Davis are the 2008 Beach Ball co-chairs Deb Shah, Suzie Havens and Bev Foster.

Shea Named UNC Lineberger Associate Director of Clinical Outreach

Dr. Thomas Shea has been named associate director of clinical outreach for the UNC Lineberger Comprehensive Cancer Center. Shea, professor of medicine and director of UNC Health Care's Bone Marrow and Stem Cell Transplantation program, will lead UNC Lineberger's efforts to develop collaborative efforts in education, research and clinical care through interaction with North Carolina's Area Health Education Centers, health systems, and oncology practices.



"Tom Shea is one of the best known cancer doctors in North Carolina," said Dr. Shelton Earp, UNC Lineberger director. "His role in developing UNC's Bone Marrow Transplant program has put him in touch with everyone across the state over the last fifteen years. His academic and clinical accomplishments make him the ideal person to develop partnerships to advance clinical trials accrual, oncology care quality, and new programs to benefit patients across North Carolina."

In his new position, Shea will increase interactive videoconferences for continuing medical education and patient care conferences as well as a mechanism for enrollment of patients onto selected early phase clinical trials through a web-based data management tool that will be available at participating sites. He will also emphasize provision of new services such as survivorship programs and clinics to patients treated both in Chapel Hill and throughout the region. ●

Larry Marks and Stuart Gold appointed to key UNC Lineberger positions. See page 5.

calendar
of events

M A Y 2 0 0 8

20th UCRF Listening Session, Morehead Inn, Charlotte, NC

J U N E 2 0 0 8

14th Komen Race for the Cure, Raleigh, NC

S E P T E M B E R 2 0 0 8

12th Fall Lineberger Board of Visitors Meeting, Kenan Center, Chapel Hill, NC

O C T O B E R 2 0 0 8

4th Paws for a Cause Dog Walk/Animal Parade, Rocky Mount, NC

10th Roy Williams' Fast Break Against Cancer, Dean E. Smith Center, Chapel Hill, NC

22nd Tickled Pink Luncheon, Pope Box, Kenan Stadium, Chapel Hill, NC

23rd Tickled Pink Twilight, Pope Box, Kenan Stadium, Chapel Hill, NC

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