UNC Lineberger Comprehensive Cancer Center

# cancerlines

September 2012

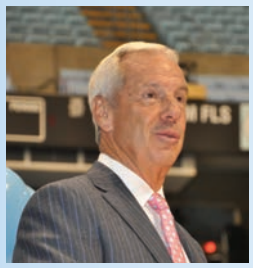
UNC LINEBERGER

## the inside line up











UNC CANCER CARE

# Breaking the cancer code


"We know that cancer is a disease of DNA, but we don't know enough about cancer DNA," says Neil Hayes, MD, MPH, one of several UNC Lineberger faculty members involved in the Cancer Genome Atlas project (TCGA).

TCGA is the biggest effort in genetic research since the original race to sequence the human genome. A joint project of the National Cancer Institute and the National Human Genome Research Institute, the project seeks to understand the errors in DNA that cause human tumors to grow uncontrolled – the basis of cancer. Identifying the changes in each cancer's complete set of DNA – the genome – and understanding the interactions, common characteristics and differences in the DNA profiles of 20 different types of cancer will give researchers and doctors insights that were never before possible.

"It's the most exciting time ever to be a scientist or clinical scientist working in cancer genetics," says Chuck Perou, PhD, the May Goldman Shaw Distinguished Professor of Molecular Oncology Research at UNC Lineberger.

"The cancer community is holding its breath for these tumors to be sequenced and an understanding of what the mutations are so we can start targeting those mutations with drugs," adds Dr. Hayes, who is an associate professor of medicine.

Progress is being made and UNC is at the center of these discoveries which, cancer experts hope, will make cancer treatment more targeted, more effective, less toxic and ultimately turn cancer into a chronic disease.

"It may not end up being personalized medicine, in the sense that each individual patient gets a unique set of treatments," says Dr. Hayes.

"It could be precision medicine," argues Dr. Perou, whose work was instrumental in understanding breast cancer subtypes, the definition of which has already led to more targeted treatments.

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# Cancer screening guidelines: Who does, who doesn't, who should?

*Part two of a series exploring current issues in cancer screening with some of UNC Lineberger's top experts.*

The United States Preventive Services Task Force's (USPSTF) 2009 revised guidelines for breast cancer screening were broadly covered by the news media, criticized by other agencies, professional organizations and advocacy groups, and became the subject of congressional testimony. But what most women over 40 want to know is how they should interpret the recommendations, conflicting information in the media, and personal risk factors to make their own decision about when to get a mammogram.

The USPSTF now recommends mammography screening every two years between the ages of 50 and 74 – citing specific benefits and harms of mammography, which includes issues like over-diagnosis, false-positive results, heightened anxiety

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# director's message

As many of our readers know, I have spent my entire career at UNC. There are lots of great things that go along with staying in Chapel Hill — a great place to live and raise a family, a wonderful college atmosphere, terrific colleagues, the opportunity to do research at a high level and, yes, there is basketball. Another advantage of the "long view" is watching the clinical and scientific growth of our faculty and their emergence as national leaders, whose ideas influence cancer care. In this sense, I get to see how strategic investments made with private support pay off "big-time."

**Seed grants grow into successful programs**

The UNC Lineberger Seed Grant Program fosters idea germination. These investments, funded through private philanthropy, are awarded through a rigorous competitive process run by our senior leaders. These grants allow our faculty to test important and novel ideas in cancer research and — if we're lucky — these high risk, high reward projects result in promising discoveries leading to bigger things for patients and cancer discovery. Seed grants are often the key to obtaining the data needed to compete successfully for large-scale government and foundation funding. In this way, we leverage donor contributions considerably.

In this issue of Cancer Lines, you'll read about one great example — **Carey Anders, MD** — whose initial research into breast cancer brain metastases was funded through a seed grant in 2010. This summer, she received a 2012 Damon Runyon clinical investigator award, one of the most prestigious grants for young investigators in cancer research.

She is one of many of our talented faculty who have taken a seed grant and used it to build solid research programs that will bring hope to cancer patients and families. For example, in 2005, **Neil Hayes, MD, MPH**, got a seed grant to investigate ways to predict differences in how lung cancer patients respond to chemotherapy — he has published that work and his genomic approaches have launched his career as a national leader of the NCI-Cancer Genome Atlas Project.

**Nancy Thomas, MD, PhD**, received a grant in 2006 to test out an idea about early diagnosis of melanoma using DNA methylation profiling. She now has more than $2.4 million in funding and is collaborating with others here at UNC Lineberger to validate a diagnostic test. She just won a subsequent award to test a new drug implicated in melanoma by her first seed grant research. The germination of new ideas allow a great faculty member to make this leap from the lab to the patient.

These are just a few examples of breakthroughs that wouldn't be possible without your support. Seed grants, endowed faculty positions and flexible research funds provided by private donors have been essential to our ability to build UNC Lineberger into a nationally-recognized cancer research center.

**National recognition and local support**

In July, we were pleased that UNC Cancer Care once again joined UNC's top programs in the 2012 U.S. News and World Report best hospital rankings, placing 43rd. Our pediatric oncology program was also highly-ranked, coming in at 26.

UNC Hospitals was also among four U.S. hospitals recognized for quality care and patient safety by the American Hospital Association (AHA). Our own Bone Marrow Transplant Service was just named the UNC Hospital's highest rated clinic for patient satisfaction in 2012 and four of the top five UNC clinics this year were NC Cancer Hospital clinics. The Hospital's great work was honored by being named a finalist for the prestigious American Hospital Association-McKesson Quest for Quality Prize. This prize recognizes health care organizations committed to creating a culture of quality patient care and developing successful approaches to quality improvement.

While national recognition is one way we measure our success, the fact that our community supports our efforts to provide outstanding cancer care to all North Carolinians is very close to our hearts. From the Get Heeled 5k and Corona Cares to Elaine O'Neil's annual celebration of North Carolina in her artwork, our community supporters make many of the patient support and treatment programs at the N.C. Cancer Hospital stronger and better — directly impacting the lives of patients and families with cancer and making their journey a little easier.

We are all passionate about the fight against cancer, and it is inspiring to see what we can achieve together. Thank you for being part of something bigger than all of us.

## Breaking the Cancer Code

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UNC Lineberger teams are doing a lot of the scientific "heavy lifting" for TCGA, characterizing the gene expression patterns of all 20 tumor types to be studied, and looking at genome expression through the Proteome Characterization Center, led by Xian Chen, PhD.

Thanks to the University Cancer Research Fund (UCRF), which purchased the equipment to do much of the sequencing as well as the tremendous computation and data storage capability needed for analysis, UNC will receive over $20 million in grants for genomic projects. New proteomic analysis instrumentation and techniques, also supported by UCRF have made UNC Lineberger a leader in figuring out how DNA errors change protein function, which in turn affects how cells function. And under the leadership of Drs. Perou and Hayes, UNC Lineberger is leading analysis of the sequencing data to figure out how DNA errors change the proteins that eventually govern how cells function.

For example, Drs. Hayes and Perou, along with Katherine Hoadley, PhD, a UNC Lineberger Research Associate, led a team that found four types of glioblastoma multiforme (GBM), the most common malignant brain cancer in adults.

The team also recently completed analysis showing that 96 percent of ovarian serous adenocarcinoma tumors demonstrate mutations in the tumor suppressor gene TP53. Tumor suppressor genes produce proteins that normally prevent cancer formation. When the genes mutate and the proteins they make lose their functionality, tumors can form. The team also found sets of genes associated with different patient survival patterns, identifying a set of 108 genes associated with poor survival and 85 genes associated with better survival in ovarian cancer.

More recently, Todd Auman, PhD, research assistant professor at the UNC Eshelman School of Pharmacy and UNC Lineberger member, helped lead the team demonstrating that the pattern of genomic alterations in colon and rectal cancer is the same regardless of anatomic location, or origin within the colon or the rectum. The study also found that colorectal tumors with very high levels of genetic errors were generally more aggressive.

All of these findings have direct implications for selecting more targeted therapies. Upcoming findings are to be published in one of the world's top journals. Dr. Perou and Dr. Hoadley led the national breast cancer team and Dr. Hayes provided major insights for the lung and head and neck cancer teams.

"It's both very rewarding but at the same time challenging," says Dr. Hayes. "Rewarding in that we are getting it done; but there is no shortcut to getting some clarity on key cancer pathways. This insight is helping us understand how these mutations interact to change a normal cell into a cancerous one."

"It's challenging because these data sets are huge and potentially spectacular. Therefore, we are making data sets publicly available so that scientists around the world publish exciting insights from data that we haven't had the time to examine. Knowledge is being generated faster than we can absorb it. We are also gathering data that we don't yet have methods to analyze," he adds.

"Breaking secret code is a great analogy for what UNC is doing with this project," says Shelley Earp, MD, UNC Lineberger's director. "We make breakthroughs that provide us with lots of raw data, but it needs to be further interpreted to provide the intelligence we need to defeat cancer. We are moving very rapidly and the potential for real patient benefit has never been greater."

## Cancer Screening *continued from page 1*

about cancer, unnecessary procedures such as biopsies, and increased health care costs. This is a change from the previous recommendation that women begin regular mammograms at age 40.

On the other side of the argument are radiologists, whose professional organization, the American College of Radiology, calls the USPSTF recommendations "Ill advised and dangerous."

Cherie Kuzmiak, DO, Chief of the UNC department of radiology's breast imaging division says, "There are several compelling arguments behind ACR's statement and the association's recommendation for annual screening beginning at age 40. While everyone acknowledges that there are downsides to mammography — issues like discomfort, the chance of over-diagnosis, the need for additional exams — our professional organization argues that the USPSTF isn't taking into account the value of human life. The evidence shows that mammography is a major factor in the 30 percent decrease in the death rate from advanced breast cancer since 1990."

Dr. Kuzmiak notes the ACR's argument that the USPSTF's review of the literature on mammography was selective and that many studies ignore the clinical consensus that breast cancer therapy is more effective when cancer is found at a smaller size and earlier stage.

Keith Amos, MD, FACS, assistant professor of surgical oncology, still tells women to be screened every year beginning at age 40. He says, "As a physician, I know that no test is perfect. I think some concerns about over-screening are relevant, but I can't throw the current best screening tool under the bus until there's something else to replace it."

He notes that screening rates still lag — the Center for Disease Control and Prevention's (CDC) best estimate is that just over 72 percent of eligible women get the recommended mammogram — and worries that the USPSTF recommendation might give some women a rationale for putting off their mammogram.

"The American Cancer Society recommends screening beginning at age 40 — so that's when I begin recommending mammograms. The reality is that risk is difficult to assess. Most patients don't understand their individual risk for cancer and should ask their doctor to go over the risk factors with them so that they can make an informed decision about screening. Issues like prior breast biopsies, family history, and age at first menstrual cycle should be taken into account in deciding when and how often to get screened," Dr. Amos says.

Cancer center director Shelley Earp, MD, says that what we need is a better detection system and more precise molecular prognostic tests.

"These are important issues that we are working on at UNC. Dr. Otto Zhou in the department of physics is collaborating with Dr. Ray Lee, a new faculty member in radiology, and others to build a prototype and test a carbon nanotube x-ray imaging system for breast cancer detection that shows real promise in breast imaging."

*Keith Amos, MD, FACS still tells women to be screened every year beginning at age 40.*

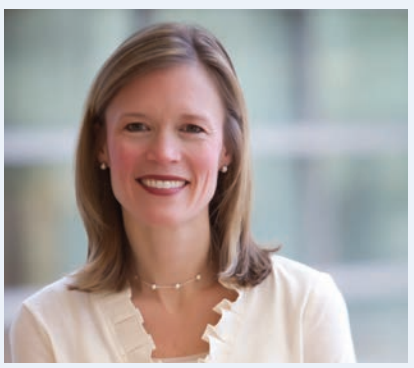
"That's the role that UNC Lineberger and other comprehensive cancer centers need to play. We know that we don't have all of the answers, and it's our responsibility to move the field forward," he concludes.

### Learn More about cancer screening online:

National Cancer Institute
http://www.cancer.gov/cancertopics/pdq/screening

American Cancer Society
http://www.cancer.org/Healthy/FindCancerEarly/index

## Two UNC Lineberger faculty honored by Damon Runyon Cancer Research Foundation



Carey Anders, MD, and William Kim, MD, are both recipients of prestigious Clinical Investigator Awards from the Damon Runyon Cancer Research Foundation.

Dr. Anders received a 2012 award and Dr. Kim received a continuation of his 2011 award. Both are assistant professors of medicine and members of UNC Lineberger Comprehensive Cancer Center.

Dr. Anders' award is one of six in the country this year. She will receive a three-year $450,000 grant to support the development of her cancer research program, which is focused on improving survival for women with breast cancer brain metastases. Her goals are to provide a new therapy for patients who presently have few therapeutic options, while laying the foundation for future clinical trials incorporating biomarkers to enhance therapeutic response and survival for women with HER-2-positive breast cancer brain metastases.

Dr. Kim will receive an additional two years of funding totaling $300,000, a grant made possible through the William K. Bowes, Jr. Foundation, and Connie and Robert Lurie. His work is focused on renal cell carcinoma, a type of kidney cancer that has poor prognosis when diagnosed at later stages. He will use the continuation grant to collaborate with Gary Johnson, PhD, professor and chair of pharmacology, to use a new technique developed in Johnson's laboratory to identify new drug combinations in real time.

The Damon Runyon Cancer Research Foundation provides today's best young scientists with funding to pursue innovative research. Eleven scientists supported by the Foundation have received the Nobel Prize, seven others have received National Medals of Science, and 61 have been elected to the National Academy of Sciences.

photo by Dan Sears

## Kenan Institute appoints Joseph DeSimone director

UNC-Chapel Hill's Frank Hawkins Kenan Institute of Private Enterprise has appointed Joseph DeSimone,PhD, as its new director.

DeSimone is the Chancellor's Eminent Professor of Chemistry at UNC and William R. Kenan Jr. Distinguished Professor of Chemical Engineering at NC State University and of Chemistry at UNC. He is also a member of UNC Lineberger.

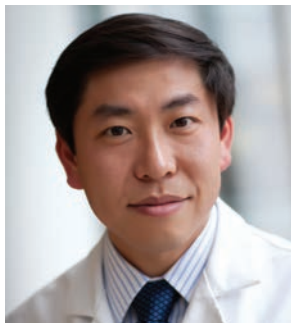
He replaces John D. Kasarda, who stepped down in June after serving as the director of the Kenan Institute for 22 years.

## Bae-Jump appointed to NCI Gynecologic Cancer Steering Committee

Victoria Bae-Jump, MD, PhD will serve a two-year term as a junior investigator on the Gynecologic Cancer Steering Committee of the National Cancer Institute, a member institute of the National Institutes of Health. The committee addresses, designs and prioritizes gynecologic cancer clinical trials to identify the best science in clinical research. Dr. Bae-Jump is an assistant professor of gynecologic oncology and a member of the UNC Lineberger Comprehensive Cancer Center.

# Chen and Wang: A recruitment coup for UNC Lineberger and Radiation Oncology

*Ron Chen, MD, MPH*



*Andrew Wang, MD*

UNC radiation oncologists Andrew Wang, MD, and Ron Chen, MD, MPH, both came to UNC together in 2010 after training at an innovative program in Health Sciences and Technology. The program, a joint venture of Harvard Medical School and the Massachusetts Institute of Technology, is intended to create future leaders in biomedical research.

"The program provides medical training for people from other disciplines, such as computer sciences, physics, or engineering. Medical students learned major concepts in medical research and how to use engineering and the physical and biological sciences to address medical problems from a fundamental perspective. It challenges you to come up with different solutions to problems and trained us to think outside the box," says Dr. Wang.

### Helping patients attracted them to medicine

While they ended up in the same training program and the same department at UNC, they have different perspectives on how they ended up here — pursuing very different research paths while sharing many interests.

After Dr. Chen took a year off from college to volunteer at a Winston-Salem hospice, he changed his major from chemical engineering to pre-med. "It was a life-changing experience. I applied to medical school knowing that I wanted to work in cancer. Cancer is an inspiring field."

Dr. Wang agrees, but also likes the variety of work involved in their chosen field, noting, "Radiation oncology is a little bit of everything. It has a lot of medicine, it has quite a bit of surgery involved with the various procedures, and it has a fair amount of technology. You think in three-dimensional terms about how the radiation beams should align. Most of all, it's rewarding to be able to help cancer patients."

Now he and Dr. Chen are on the way to becoming research leaders in very different areas — but both with a passion for finding innovative ways to look at problems. Both are radiation oncologists who see patients, mentor students and residents, and conduct research. Both were recruited to UNC Lineberger by Larry Marks, MD, chair of the department of radiation oncology, with support from the University Cancer Research Fund.

### Cancer outcomes and comparative effectiveness

Dr. Chen conducts quality of life research in prostate cancer and was recently lead author on a study in the Journal of the American Medical Association that compared patient outcomes for different types of radiation therapy, gaining national media attention. "While research into finding and developing new cancer treatments is crucial, in prostate cancer, that's only part of the picture. It is often a curable disease and patients can live many years after diagnosis, making survivorship and long-term quality of life issues very important," he says. He credits mentors Tim Carey, MD, MPH, director of the Cecil G. Sheps Center for Health Services Research, and Paul Godley, MD, PhD, MPP, a medical oncologist who is vice dean for faculty affairs in the School of Medicine, for helping establish his independent research efforts.

### Better treatment via nanotechnology

Dr. Wang also credits his mentors and collaborators with helping him get his career off the ground — but in very different fields. "Joe DeSimone is supportive and enthusiastic about working together and Wenbin Lin and I have started a company to develop nanoparticle-based platinum therapeutics for cancer treatment," he says. Dr. Lin is a professor of chemistry and pharmacy. Among Dr. DeSimone's many roles at UNC and NC State, he is co-director of the UNC Center for Cancer Nanotechnology Excellence, one of seven centers established by the National Cancer Institute.

"For the field of nanomedicine to succeed it needs the innovation and talent of chemical engineers and chemists, the realistic world view and knowledge of cancer researchers as well as physicians who understand the technology and how to find the right application," says Dr. Wang.

Both physician scientists are thriving at UNC. Dr. Chen is co-director of the UNC Extracranial Disease Cyberknife® Program, treating prostate cancer and overseeing treatment for liver, lung and other tumors. "Cyberknife technology is an advanced way to deliver radiation. I recently gave a lecture via the UNC TeleHealth program, sharing this technology with physicians and healthcare workers across the State," he adds.

Dr. Wang treats hematologic malignancies, gastrointestinal and urologic cancers and runs a lab devoted to using nanoparticle carriers to successfully develop therapeutics that had previously failed clinical development due to pharmacologic challenges — often called "orphan drugs" because they are abandoned for various reasons during the development process.

The radiation oncology colleagues were drawn to UNC by excellence, but in different areas. While Dr. Wang says, "I looked for a strong nanomedicine program and UNC is one of the top three in the country," Dr. Chen asserts, "UNC is a nationally known place for survivorship care and research and for health services outcomes research." Both credit radiation oncology chair, Larry Marks, MD, with fostering an environment where innovation is welcome, or even expected.

"It's a great fit for me. Having my research be relevant and directly tied to improving care for patients makes it an inspiring place to be," says Dr. Chen, who has already received an ASCO Cancer Foundation Merit Award.

Dr. Wang has filed three patent applications and published multiple research findings. He received a Paul Calabresi Career Development Award from the National Cancer Institute and several awards from the American Society for Radiation Oncology.

He says, "I think UNC is an ideal place to develop a career."

## Carey named Division Chief of Hematology-Oncology and Physician-in-Chief of the N.C. Cancer Hospital

Lisa A. Carey, MD, has been appointed Chief of the Division of Hematology and Oncology at the University of North Carolina School of Medicine and Physician-in-Chief of the N.C. Cancer Hospital.

Dr. Carey, a member of the UNC faculty for more than ten years, is Richardson and Marilyn Jacobs Preyer Distinguished Professor in Breast Cancer Research, Professor of Medicine, Medical Director of the UNC Breast Center, and Associate Director for Clinical Research at UNC Lineberger Comprehensive Cancer Center.

In her role as division chief, Dr. Carey will be responsible for the overall administration of the division, including clinical practice, educational activities, research programs, fiscal management, and meeting the missions of patient care, research, and education. This includes leading a diverse group of more than 50 clinicians, investigators, physician extenders and fellows, which has grown substantially.

As Physician-in-Chief, Dr. Carey is responsible for the clinical operations of the N.C. Cancer Hospital and will work with Shelley Earp, MD, Director of UNC Lineberger and UNC Cancer Care to coordinate care of cancer patients throughout the UNC Health Care System. More than 135,000 patients with cancer are served each year by UNC Health Care through inpatient and outpatient clinics.

As Physician-in-Chief, Dr. Carey will report to Dr. Earp, in his role as Director of UNC Cancer Care, Brian Goldstein, MD, MBA, Chief Operations Officer of UNC Hospitals and Marlene Rifkin, Senior Vice President of UNC Hospitals who oversees Oncology Services. In her role as Division Chief she will report to Dr. Runge, Chair of the Department of Medicine.

"Dr. Carey is recognized internationally as one of the world's most thoughtful clinician investigators. Her mastery of cancer biology and genetics and their application to improving patients' lives sets her apart. This type of interdisciplinary leadership, combined with her consummate clinical skills, will provide remarkable direction as the division prepares for the new era of cancer care," said Dr. Earp.

## UNC Cancer Care nationally ranked by U.S. News & World Report "America's Best Hospitals"

Only 3 percent of hospitals in the United States meet the U.S. News Best Hospitals criteria. In its 2012 hospital rankings, UNC's adult cancer programs ranked 43rd overall and pediatric cancer programs ranked 26th. Overall, eleven specialties at UNC Hospitals were recognized as nationally ranked or high performing by U.S. News & World Report in its annual "America's Best Hospitals" issue.

Other UNC Health Care specialties ranked in the the top 50 this year were Gynecology (34) and Otolaryngology (42).

# research briefs

## B Cell survival holds key to chronic graft vs. host disease

In chronic Graft vs. Host Disease (GVHD), the differences between the donor bone marrow cells and the recipient's body often cause these immune cells to recognize the recipient's body tissues as foreign and the newly transplanted cells attack the transplant recipient's body. Symptoms can range from dry eyes and dry mouth, hair loss and skin rashes, vulnerability to infection, liver and lung and digestive tract disorders. For patients who received bone marrow or stem cells, it is estimated that 40-70 percent may experience chronic GVHD.

B cells, which produce proteins called antibodies, are one type of immune cell involved in GVHD. In the journal Blood, **Stefanie Sarantopoulos, MD, PhD,** and a UNC Lineberger team reports lab results showing that B cells from patients with chronic GVHD are much more active than cells from patients without the disease. The team also outlines the cell signaling pathways that contribute to this increased activity — identifying a promising target for developing new therapies for the diseases.

*Read more: http://unclineberger.org/news/b-cell-survival*

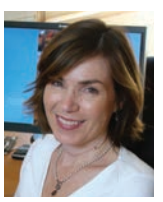
## Junk-food diets spur inflammation more than saturated fats alone

A diet based on American junk food could lead to more obesity-induced inflammation than a diet high in animal fat, according to a new study led by UNC Lineberger member **Liza Makowski, PhD**.

The study analyzed inflammatory responses in rats fed different diets: control diets, a lard-based high-fat diet and a "cafeteria junk-food" diet consisting of nutrient-poor snacks such as salami, chocolate, cookies and chips.

"The diet that consisted of human junk food caused the most inflammation and dramatic metabolic changes," said Dr. Makowski, who is an assistant professor of nutrition at UNC's Gillings School of Global Public Health and the study's senior author.

*Read more: http://unclineberger.org/news/inflammation-from-diet*



## Cancer Rumors may affect health behaviors, decisions

What are cancer rumors and why do people share them?

A team of scientists, including UNC's **Christine Rini, PhD**, reports that cancer rumors, such as the idea that one can get cancer from being in contact with a cancer patient, may affect health-related behaviors and medical decision-making.

Dr. Rini says, "It's common for people to share information about cancer in their conversations with family members and friends. Although we tend to trust people we care for and the information may sound right, the content of the information is not always accurate."

The scientists surveyed 169 members of established online cancer discussion groups about informal cancer statements — cancer rumors — heard from non-medical sources. Their results are published in the June 24, 2012 online issue of the Journal of Health Communication.

*Read more: http://unclineberger.org/news/cancer-rumors*

## Human papillomavirus types do not replace others after large-scale vaccination

Vaccines against human papillomavirus (HPV) are now recommended by the Centers for Disease Control and Prevention for both teenage boys and girls. The vaccine protects against the two most common types of the virus that cause cervical cancer: HPV 16 and 18. Is there a chance that the increased number of people vaccinated might result in an increase of other types of HPV that cause cancer?

An international team of scientists including **Jennifer Smith, PhD**, studied this question in a group of 2228 Kenyan men as a "nested" trial in a larger trial. Their first paper in the Journal of Infectious Diseases showed that little evidence exists for potential HPV type competition in a cross-sectional study. Viral type competition occurs when different types of a particular virus compete for dominance.

*Read more: http://unclineberger.org/news/human-papillomavirus-types-do-not-replace-others-after-large-scale-vaccination*

## Loss inspires Engel to Ironman status

The week that Patrick Engel of Charlotte began his training for his first Ironman competition, his father, Daniel Engel, was diagnosed with lung cancer. Patrick says, "As the weeks went on, my training and his battle really became linked together in my mind. I knew I wanted to do something to tie the two together."

When Patrick's father died on April 25th, he decided to turn his Ironman race into a fundraiser for UNC Lineberger, swimming 2.4 miles, biking 112 miles and then running a marathon (26.2 miles) with the support of pledges from friends and family.

"Although I could have worked with any number of cancer-related charitable organizations, Lineberger just felt right. It is close to Charlotte, and it has ties to the school my wife, Jennifer, and I graduated from and love."

"Jennifer also knew about UNC Lineberger from her undergraduate days when she chose to perform her sorority service hours at UNC Lineberger, working with a cancer awareness program. Jennifer was required by her sorority to perform service hours and she says her "heart was just drawn to volunteering at Lineberger". "Jennifer had a very positive experience there." Patrick notes, "Little did either of us know that her stepfather, Mel Jordan, would be treated there for lung cancer a few years later before his death in 1999."

"My mother-in-law talked about how the staff was so compassionate with the way they handled his cancer battle. The staff made the treatments personal, and he didn't feel like a number or 'just another patient'."

Patrick raised over $2600 online through UNC Lineberger's peer-to-peer fundraising application and says, "It was very reassuring to know that every penny was going directly to UNC Lineberger to support the mission of research and patient care."

"After losing my dad, Jennifer's stepfather and grandmother to lung cancer, I was determined to make my Ironman experience more meaningful by using my race to honor them and raise funds for UNC Lineberger."

Patrick finished his Ironman day in 10 hours and 55 minutes, which placed him 216th out of 2,797 participants. "It was a long, exhausting day but ended with a great feeling of accomplishment. Hearing 'You are an Ironman' when I crossed the finish line was just incredible" says Patrick of his experience. Even better than the physical accomplishment, Patrick is most of proud of the difference his generous donors made to UNC Lineberger. "Even if just one patient's quality of life is improved, every mile raced and every minute spent training will be well worth it. I'm proud to have been part of such a great event and to have helped such a great organization as Lineberger" saya Patrick.

*For information on how you can support UNC Lineberger through peer-to-peer fundraising — for any event — please call Jennifer Bowman at 919-966-5905 or email jennifer_bowman@med.unc.edu.*

*Drs. Rathmell, Davis and Lieb lead the team*

### The V Foundation for Cancer Research has awarded a $600,000 grant to a UNC Lineberger team

UNC Lineberger members W. Kimryn Rathmell, MD, PhD, Ian Davis, MD, PhD, and Jason Lieb, PhD, all former V Scholar Award winners, and their colleague Brian Strahl, PhD, focus on finding new treatments for renal cell carcinoma (kidney cancer).

The V Foundation's translational grant program, created in 2000, strives to bridge the gap between the laboratory and patient bedside. The goal of this grant program is to bring the benefits of new basic-level understandings to patients more quickly and efficiently. The competitive grant application process is supervised by The V Foundation's Scientific Advisory Board. The three-year commitment is one of only ten grants awarded in the nation.

## UNC Lineberger announces first Marci Kramish Campbell Dissertation Award recipient

Carmina G. Valle, MPH, is the recipient of the first Marci Kramish Campbell Dissertation Award, a competitive $5,000 award to recognize excellence in dissertation research focused on cancer and the population sciences.

Valle is a PhD student in the Department of Nutrition at UNC Gillings School of Global Public Health who has extensive professional experience at the National Cancer Institute (NCI), both with the Office of Cancer Survivorship and the Analytic Epidemiology Research Branch. From 2002–2004 she was a Presidential Management Fellow at the NCI. She is a previous recipient of a UNC Lineberger Cancer Control Education Program Predoctoral Fellowship, the Ruth L. Kirchstein National Research Service Award from the Department of Nutrition, and the Caroline and Thomas Royster, Jr. Multi-Year Fellowship from The Graduate School at UNC-Chapel Hill.

Her dissertation examines the feasibility and effectiveness of using online social networking to improve physical activity behaviors among young adult cancer survivors (between the ages of 18 and 39). Young adult cancer survivors are at increased risk for second cancers, recurrence, psychological distress and other issues as a result of their cancer and treatment. Previous research shows that regular physical activity can lower risk and enhance these survivors' quality of life and length of survival.

This award honors Marci Kramish Campbell, PhD, a national leader in cancer prevention and control, disparities and survivorship research who was a faculty member at UNC-Chapel Hill and a program leader at UNC Lineberger Comprehensive Cancer Center. She was an exceptional mentor who died much too soon from colon cancer in December, 2011.

*Carmina G. Valle, MPH*

The award is funded by donations from Dr. Campbell's family, friends and colleagues. The goal is to endow this award to create a permanent legacy in Dr. Campbell's honor. Contributions may be made payable to UNC Lineberger and mailed to Campus Box #7295, Chapel Hill, NC 27599-7295.

## Cocktails for Cancer raises more than $18,000 to benefit cancer research at UNC Lineberger

The 6th Annual Cocktails for Cancer was held on Saturday, August 25, at The Great Room at Top of the Hill. The attendees danced to tunes from The Fabulous Daddy-Os and enjoyed a lively auction emceed by former Tar Heel basketball player and sports broadcaster Eric Montross. The cocktail party and auction event raised more than $18,000 to benefit cancer research at UNC Lineberger.

Pictured: Leah Forbes Waldrop, Lin Carmichael, Eric Montross, Courtney Scott Fox. Photo credit: Brooke Dever Photography

## Gear up for an "Event-ful" fall with UNC Lineberger!

### Get up early for Fast Break Against Cancer

*Coach Roy Williams is tipping of the men's basketball season with the 8th annual Fast Break Against Cancer on Friday, October 12, at the Dean E. Smith Center. In its seven year history, Coach Williams has raised more than $1.2 million for cancer research at UNC Lineberger through this seated breakfast and one-of-a-kind live auction event. Emceed by UNC broadcasting legend Woody Durham, this year's featured speakers will be Coach Williams' dear friend Ted Seagroves, who was recently diagnosed with pancreatic cancer, and Dr. H.J. Kim, his surgeon at UNC.*

*To purchase tickets or learn more, visit unclineberger.org/signature-events or call 919-966-5905.*

### Kick up your heels at the Get Heeled 5K

*The Get Heeled 5K presented by Fleet Feet will be held on Saturday, October 13, at the Friday Center in Chapel Hill. This annual family-friendly race benefits pediatric oncology programs at UNC Lineberger.*

*The Get Heeled 5K kick-off event, "Kick Up Your Heels" will be hosted at Southern Season on September 30 and the whole community is invited to partake in this private shopping opportunity. Former UNC basketball great Eric Montross, "Voice of the Tar Heels" Jones Angel and UNC baseball alumnus and pediatric cancer survivor Chase Jones will be on hand. One hundred percent of the ticket sales ($10 each) and 10% of sales generated during the event will benefit pediatric oncology programs.*

*Register for the Get Heeled 5K or buy tickets for the Southern Season "Kick Up Your Heels" event at www.getheeled5k.com.*

## Rashkis Elementary honors Marjory Moe with hospital donation, tiles

Marjory Moe retired from Rashkis Elementary School after 10 years of service as its first librarian and a long career as a librarian in multiple schools. A breast cancer survivor, she was honored on the occasion by Rashkis students, parents and faculty with two commemorative tiles purchased in her honor and a donation to cancer research. The tiles will be installed on planters in the Outdoor Terrace of the N.C. Cancer Hospital.

The inscriptions on the tiles read "In Honor of Marjory Moe" and "Rashkis Elementary 2012 Read-a-Thon."

Mrs. Moe was diagnosed with breast cancer in 2008 and underwent chemotherapy followed by a mastectomy and radiation. "I was lucky enough to be placed with the wonderful team of Dr. Fran Collichio, Dr. Nancy DeMore and Dr. Jan Halle. When you're dealing with cancer, life doesn't get much better if you've got those three powerful women in your corner."

Also in her corner were her family and the Rashkis staff and students. "The outpouring of love and affection and care and support four years ago was absolutely humbling, and four years later to have them do the same for me at my retirement was really something."

Each year the Rashkis PTA holds a Read-a-Thon to raise funds for school programs. Stephanie Lucas, PTA President, who spearheaded the project, explains. "We used our end-of-year Read-a-Thon to celebrate Mrs. Moe, and designated one day completely devoted to letting her know how important she has been to all of our kids. We asked families to contribute a dime a day during the weeklong Read-a-Thon in her honor, and the PTA matched those funds. At her request, those funds went to Lineberger."

## UNC Lineberger welcomes new Board of Visitors members

The Lineberger Board of Visitors is a statewide organization of community leaders who work to increase public awareness, promote the interests, and advance the priorities of the UNC Lineberger Comprehensive Cancer Center as we strive to bring the best in cancer research and care to the people of North Carolina and beyond. UNC Lineberger is pleased to announce Gordon Grubb of Raleigh as chair and David Routh of Chapel Hill as vice chair of the Board of Visitors. We are also grateful to our new members:

**Marion and Norma Cowell,** Charlotte, NC
**Phil Cree,** Chapel Hill, NC
**Bob and Roberta Crumley,** Rocky Mount, NC
**Sandra Henson,** Chapel Hill, NC
**Ed and Carla Herring,** Laurinburg, NC
**Arthur and Debra Holmes,** Chapel Hill, NC
**Brent and Dana Jones,** Danville, CA
**Danny and Betty McComas,** Wilmington, NC
**Patrick and Carol Nash,** Washington, NC
**Troy Smith ,** New Bern, NC
**Richard and Jere Stevens,** Cary, NC
**Eddie Wall,** Morganton, NC
**Drew and Tammy Woerner,** Dunn, NC

# calendar of events

## September

30th **"Kick Up Your Heels"** kickoff event at A Southern Season for the Get Heeled 5k, benefiting UNC Lineberger pediatric oncology programs, tickets at www.getheeled5k.com.

## October

1st — 31st **Turn the Town Pink** and patronize participating businesses to support UNC Lineberger's patient and family support programs. Contact Jennifer Bowman at (919) 966-5905 or Jennifer_bowman@med.unc.edu.

14th **Fast Break Against Cancer,** call 919-966-5905 or visit unclineberger.org/signature-events

15th **Get Heeled 5K** presented by Fleet Feet Sports to support UNC Lineberger pediatric oncology programs, at the Friday Center more information at www.getheeled5k.com.

For more information about these events and other UNC Lineberger news, visit www.unclineberger.org, or follow us on

UNC LINEBERGER

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## Celebrate North Carolina and support the N.C. Cancer Hospital!

For over a decade, Elaine O'Neil has been recreating the places you love in North Carolina with her art. Now you can celebrate these places throughout the year with her "Luv This Place" 2013 calendar.

UNC Lineberger is thrilled that noted textile collage artist Elaine O'Neil has once again produced a limited edition calendar with twelve original scenes that highlight the beauty and character of North Carolina. A portion of the proceeds will benefit the N.C. Cancer Hospital. Calendars can be purchased online at unclineberger.org/elaineoneilcalendar.