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# NCI Director Varmus visits UNC Lineberger



Perou, PhD receives
Battle Award



Basch, MD, MSc appointed to NCI Board of Scientific



Mia Hamm
Foundation
supports UNC BMT
patients



### UNC Lineberger: a national leader in comparative effectiveness research

In the April 2013 issue of the journal *Blood*, a coalition of more than 100 researchers and physicians from across the globe put their names to an article calling for a rethinking of the costs of cancer care. Focusing on how drugs for chronic myloid leukemia could cost patients more than \$100,000 a year, the authors called for a global discussion on the morality and economics of drug discovery and cancer treatment.

"As physicians, we follow the Hippocratic Oath of 'Primum non nocere', first (or above all) do no harm. We believe the unsustainable drug prices in CML and cancer may be causing harm to patients. Advocating for lower drug prices is a necessity to save the lives of patients who cannot afford them," wrote the authors.

The rising costs of healthcare have become a major concern to physicians treating cancer at UNC Lineberger. Those

concerns lie at the heart of a field known as comparative effectiveness research.

Comparative effectiveness research encompasses questions about the relative safety and effectiveness of care, cost comparisons between treatments and the impact of care on patients' immediate and long-term well-being. While research in the field dates back to the 1970s, the growing importance of controlling healthcare costs and evaluating the quality of life delivered by care has brought the field into the center of

the national conversation about how to deliver high quality patient-centered medical care.

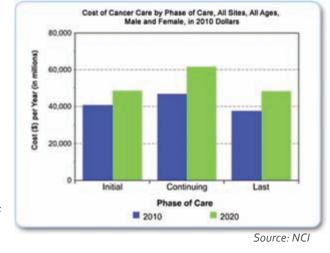
At UNC Lineberger Comprehensive Cancer Center, comparative effectiveness research has become a major focus of the institution's mission to provide cancer care to North Carolina's citizens. Researchers hope to improve the information, tools and training available to physicians to

help them provide the highest level of care. To achieve this goal, researchers across the university compare the effects of drugs and medical technology including newer vs. older surgical and radiation interventions to gather clinical, biological, and data on patient-reported outcomes.

The effectiveness of new technology is a major focus of the research of Ronald Chen, MD, MPH, assistant professor of radiation oncology. Dr. Chen, who studies the relative effectiveness of treatments for prostate cancer, has published

multiple studies that demonstrated a rapid and widespread adoption of new radiation therapies which may not provide a marked improvement in the long-term health of patients. With an increased focus on who will have to pay for the rising cost of medicine, Dr. Chen said that the future will bring a renewed focus on whether new treatments justify the additional financial burden they place on patients and the health care system.

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#### Unique UNC program supports single fathers due to cancer

Support Group member Jorge De La Cruz with his

family: Francisco, Angel, Jorge, and Sinuhe

An estimated 20,000 men in the United States annually lose their wives/partners to cancer and face the simultaneous

challenges of managing their own grief while learning how to be a single parent to a grieving child. Although support groups for all types of cancer patients and survivors exist, there are none designed specifically for this group of single parents.

A program at UNC Lineberger provides support and resources for these men and their children. The program, called Single Fathers Due to Cancer () is the first of its kind in the United States and was featured on the NBC TODAY Show on March

25 and in the New York Times on April 22.

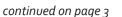
This unique program, begun in 2010, features peer advice on practical issues as well as professional counseling from program directors Justin Yopp, PhD, assistant professor of psychiatry, and Donald Rosenstein, MD, professor of

psychiatry and director of the UNC Comprehensive Cancer Support Program.

Dr. Rosenstein explains, "Our program was developed to help fathers at a most challenging time of their lives. The fathers in our support group have told us that they benefitted from the opportunity to meet with and learn from other fathers in their situation. Our goal now is to spur development of similar groups at other institutions."

One father says, "You see people dealing with the same issue you're dealing with so you don't feel alone. So, if someone else has found something that works with a

kid or worked with grief, I think to myself, 'I may try that.'"
The Program includes a monthly support group for





### director'smessage

Dr. Harold Varmus, Nobel Laureate and NCI Director, recently spoke at UNC about his "passion for discovery and how

interpersonal relationships can influence the quality of a scientist's work." Dr. Varmus told the audience that "science, when conducted in the most exciting ways, involves partnerships, friendly rivalries, and a wide spectrum of human relationships."

A hallmark of UNC is our strong collaborative environment where faculty share ideas and mentor younger faculty. Out of this collegiality comes great science.

And as molecular discoveries and new technologies fuel development of cancer therapies, we have to make sure that these advances offer true benefit and improvement to our patients. This starts with forward looking clinical trials, and we are pleased to announce that Claire Dees and Neil Hayes have been appointed to co-lead our Clinical Research Program.

As drugs or novel therapeutic interventions advance to FDA approval, the real work begins. Does what works in the confine of a clinical trial at a comprehensive cancer center work in the real world and with all types of patients? To answer, scientists conduct what is called comparative effectiveness research. The *Cancer Lines* cover story

describes our leadership in this emerging field.

National expert Ethan Basch, came to UNC Lineberger from Memorial Sloan-Kettering to lead and develop our Cancer Outcomes Research Program. He joined an already robust program including faculty members Bill Carpenter, Ron Chen, Bryce Reeve, Hanna Sanoff, Stephanie Wheeler, Matt Milowsky, Karyn Stitzenberg and others

Program member Ron Chen's study last year is a good example of the need for and utility of comparative effectiveness. His comparison of three prostate cancer therapies showed that the newer proton therapy was not more effective than conventional radiation therapy or intensity modulated radiation therapy that is more expensive.

Men diagnosed with localized prostate cancer are offered multiple treatment options. Newer radiation and surgical techniques have been widely adopted but there is not a lot of evidence to demonstrate that these treatments are better than older therapies. These developments, combined with media coverage of conflicting recommendations regarding PSA (prostate-specific antigen) screening and advocacy of watchful waiting, make for a confusing treatment landscape without much evidence that one path is better than another.

Another component of comparative effectiveness and a critical part of the Cancer Outcomes Research Program is our Integrated Cancer Information and Surveillance System. Program members have extensive experience in using

secondary data for patient-centered outcomes research, including outcomes, patterns of care, comparative effectiveness, health services research, and organization studies.

This program aims to optimize cancer outcomes in North Carolina and beyond. It will inform and shape future cancer care and is already being supported new NCI grants.

Our research and clinical programs also address the physical, financial and emotional issues facing our patients. One new program addressing the emotional needs is receiving national attention is Single Fathers Due to Cancer. This first-of-its-kind effort, led by Don Rosenstein and Justin Yopp, provides support and resources to the underserved group of fathers and children and seeks to help other cancer centers develop similar programs. This unique program was featured on the *Today Show* and the *New York Times* and has generated interest from throughout the country.

Our ability to develop and offer these types of innovative programs rests on philanthropy. We are incredibly humbled by the generosity of individuals and groups throughout our state. In this issue, we have highlighted some wonderful stories of support - from funding a new pediatric oncology camp to seed grants for leading-edge cancer treatment to support for UNC BMT patients and families.

Without you, we could not make the research progress we have into cancer's causes and better ways to treat it. We deeply appreciate your support.



#### Dees and Hayes named co-leaders of UNC Lineberger Clinical Research Program

Claire Dees, MD, and Neil Hayes, MD, MPH, have been appointed as co-leaders of the Clinical Research Program at UNC Lineberger Comprehensive Cancer Center. Dr. Dees and Hayes have extensive and complementary expertise in translational and clinical research. As co-leaders of the Clinical Research Program, they will help plan the efforts of UNC Lineberger's physician researchers to move discoveries into innovative trials of new clinical therapies for patients.

As the bridge between the laboratory and the patient, clinical trials play a crucial role in the development and evaluation of new treatments and approaches. For patients who have exhausted standard

therapy, some trials can provide an avenue to novel drugs or devices not available elsewhere.

The physicians and researchers at UNC Lineberger oversee over 200 clinical trials each year for a broad range of cancer types at the N.C. Cancer Hospital and at locations across the globe.

Lisa Carey, MD, Cancer Center Associate Director for Clinical Research and Physician in Chief at the N.C. Cancer Hospital, said "In the modern era, leaders in clinical research have to have expertise in performance and application of genetic techniques and tumor sequencing as well as expertise in design,

performance, and analysis of clinical trials from the earliest testing through to FDA approval. Claire Dees and Neil Hayes have that kind of training and experience."

As an active member of the UNC Breast Center, Dees chaired the breast cancer clinical trials group and leads the Lineberger Developmental Therapeutics Working Group. She chairs the Protocol Review Committee and the Protocol Specific Research core. She also serves as the medical director of the Clinical Trials Unit in the N.C. Cancer Hospital.

Hayes served as national co-chair of the Data Analysis Sub-Group for The Cancer Genome Atlas Project at UNC and chairs the UNCSequencing Project (UNCseq). UNCseq serves as resource for patients with difficult to treat tumors, identifying and targeting the molecular weaknesses specific to the patient's cancer. The ultimate aim for UNCseq is to provide every patient with tumor analyses that will allow their physicians to prescribe targeted and efficient therapies on an individualized basis.

#### NCI Director Visits UNC

National Cancer Institute Director and Nobel Laureate Dr. Harold Varmus was the keynote speaker at the third annual Oliver Smithies Nobel Symposium on April 19. He spoke before a capacity crowd of students, postdoctoral fellows and other university community members. He paused for a moment with Dr. Shelley Earp, UNC Lineberger director.



#### Comparative effectiveness continued from page 1

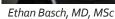
"I think the federal government and the insurance companies have gotten smarter over time, and they are realizing the trends that we are describing in



Ronald Chen, MD, MPH

these papers – that is, rapid adoption without proven benefit," said Dr. Chen. "This is a broad problem which is certainly not limited to just prostate cancer or radiation therapy." Comparative effectiveness

research at UNC Lineberger has been an important part of research into cancer care for years. Comparisons of outcomes and cost form a core part of clinical trials conducted at the center. In clinical trials, the majority of studies use randomized controlled trials to test new treatments against existing alternatives. In recent years, this research has expanded to areas like cost comparisons of treatments and observational studies on



the effects of treatment on patients.

Ethan Basch, MD, MSc, Director of Cancer Outcomes Research at the UNC Lineberger, is one of the nation's leading experts on comparative effectiveness research. A member of the National Cancer Institute (NCI) Board of Scientific Advisors, Dr. Basch researches ways of improving the quality of communication between patients and their physicians by incorporating patient-reported assessments of care.

"Comparative effectiveness research looks at how treatment options perform in a real-world setting, and is particularly important in cancer treatment, where patients are not only fighting their disease but also enduring treatments that may have a significant impact on their ability to function and their quality of life," said Dr. Basch.

Dr. Basch, who leads the National Cancer Institute's Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE) initiative to develop a standardized patient reporting system, has led efforts to create standardized patient reporting tools for use in the clinic. In 2012, Basch published recommendations

in the Journal of Clinical Oncology guiding healthcare providers on the best methods of incorporating patient evaluations in their practice.

"Without this information, stakeholdersincluding patients, physicians and nurses, payers, researchers and regulators—have incomplete information for decision-making about a given treatment," Dr. Basch wrote in the journal.

Bryce Reeve, PhD, UNC Lineberger member and associate professor of health policy and management at UNC Gillings School of Global Public Health, has focused his efforts on measuring the impact of cancer and its treatment on children's lives. Building on the PRO-CTCAE initiative in adult patients lead by Dr. Basch, Dr. Reeve received a five-year grant from the NCI to design and evaluate a self-report measure of symptomatic adverse events experienced by children receiving treatment for cancer..

To highlight the need for this research, Dr. Reeve described a research study, led by Dr. Marilyn Hockenberry (Texas Children's Cancer Center), that collected measures of fatigue directly from a child undergoing chemotherapy and compared the

child's responses with both the child's parent and clinican (the clinician who was most familiar with the child) reported on the child's fatigue levels. Compared with the fatigue levels reported by the child, the investigators found the agreement between the child and parent was fair and between the child and clinician was poor. "We find that clinicians tend to underreport both the number of symptoms as well as the severity of symptoms relative to what patients report, and so what we've seen described both in adult and pediatric research studies on the safety and efficacy of interventions is likely an underrepresentation of the actual experiences of patients in clinical trials," said Dr. Reeve.

One tool used by researchers to evaluate patient outcomes is the National Institutes of Health's Patient- Reported Outcome Measurement Information System (PROMIS). The PROMIS initiative provides access to researchers and providers to a set of validated patient-reported questionnaires on many of the quality of life

domains measured in comparative effectiveness research studies. This includes standardized measures of domains such as physical function, pain, fatigue, sexual function, depression, anxiety, and sleep disturbance. PROMIS measures can be used to measure differences among different treatment groups on relevant patient domains to inform comparative effectiveness decision making.

At Lineberger, Drs. Reeve and Chen have partnered on a four-year NCI grant to evaluate the impact of prostate cancer and its treatment on men's lives. Evaluating the experience of approximately 1,500 prostate cancer patients with diverse age, ethnic characteristics and educational backgrounds from throughout North Carolina, the study will measure patients' health-related quality of life before treatment and three, 12 and 24 months after treatment. The men receiving treatment report their experiences and perspectives as they relate to physical, mental and social aspects of health and impact of treatments on bowel, urinary, and sexual functioning.

Comparative effectiveness research into prostate

cancer treatments has informed much of Dr. Chen's research

The use of data in determining standards of care is at the core of comparative effectiveness research, and the economic pressures of medical care on insurers, the government and patients will lead to an increased need for the broad array of research encompassed by the comparative effectiveness label.

"In the future, we are moving in a direction where we have to prove something is better before being allowed for adoption into use," said Dr. Chen.



Nurse Stacey Anderegg prepares a patient for chemotherapy.

#### Single fathers continued from page 1

fathers and their children. The website includes common experiences of single fatherhood, resources to support children, and helpful organizations and resource information. It also features a series of short videos featuring the fathers in the support group addressing issues ranging from "The Wedding Ring Thing" (whether and when to stop wearing their wedding ring) to "Get Yourself Together, Man" (dating).

Program leaders recently published a report in the Clinical Journal of Oncology Nursing describing the program's development so that other institutions may develop similar initiatives and that further studies can be done. To read more, visit: http://singlefathersduetocancer.org.



Drs. Justin Yopp and Donald Rosenstein

# facultyprofile

#### Victoria Bae-Jump: care and research for women's cancers

Victoria Bae-Jump, MD, PhD, decided that she would pursue a career in oncology as an undergraduate at Duke after volunteering with a cancer recreation program.

"Something about oncology struck a chord with me. There's so much that needs to be done about cancer, and the patients were amazingly brave," says Dr. Bae-Jump.

The daughter of a pediatrician and a pediatric nurse, Dr. Bae-Jump joined her brother and

sister in becoming a physician when she earned her doctoral and medical degrees from Virginia Commonwealth University. The assistant professor of gynecologic oncology completed her residency and a fellowship at UNC before joining the faculty.

A physician/scientist with an active lab and clinical practice focused on endometrial cancer, Dr. Bae-Jump treats gynecologic cancer patients and conducts research in ovarian and endometrial cancers, seeking more effective therapies.

"I enjoy taking care of women, and we don't know as much about endometrial and ovarian cancers, so I was drawn to these diseases from both a clinical and research perspective."

She studies the link between obesity and endometrial cancer. "This cancer is obesity driven, yet not all women who get endometrial cancer are obese, so there must be a much more complex molecular relationship. I think that obesity-related endometrial cancers are probably biologically different, in that these cancers arise in a unique metabolic environment from those endometrial



cancers that arise in leaner women. If that's true, we maybe should be treating these cancers differently, taking into account the metabolic composition of the women with this disease."

She is studying a drug called metformin, commonly used to treat diabetes. "Epidemiologic studies have shown that diabetic patients who were on metformin were less likely to get cancer, and if they did get cancer, they fared better. People began to think that

metformin might have some anti-tumorigenic effects." Dr. Bae-Jump's lab work supports this hypothesis.

Dr. Bae-Jump has just completed a pre-operative window clinical trial testing the effect of metformin on newly diagnosed endometrial cancer patients to determine if it decreases the proliferation of the cancer cells in their tumors.

Another endometrial cancer clinical trial she developed was recently approved by the National Cancer Institute's Gynecologic Cancer Steering Committee (GCSC). This nationwide trial, opening later this year, is sponsored by the Gynecologic Oncology Group (GOG) and will compare the standard therapy of the drugs Paclitaxel/carboplatin combined with either metformin or with placebo. The trial is significant for another reason. It was being reviewed at Dr. Bae-Jump's first meeting as a new GCSC member, so she had to leave the room during deliberations.

"Serving on this committee has helped me better understand how all the clinical trials for gynecologic cancers happen, all that goes into them and the approval processes. The overall number of women with gynecologic cancers is small. The statistics speak volumes: one in eight women will be diagnosed with breast cancer and one in 80 with ovarian cancer, so clinical trials groups and collaboration among institutions are critical to improve therapies."

Some of her work with other institutions is involved with her leadership role as president-elect of the Mid-Atlantic Gynecologic Oncology Group, a forum to exchange scientific information and foster collaborative research in gynecologic cancers.

Dr. Bae-Jump's collaborative work is also local. "The best part of being at UNC is the collaborative atmosphere. Everyone is very open to helping each other. It's unique in this way.

"I have a great job because I get to do so many different things: operate, see patients in clinic and help them with their chemotherapy and their life issues as well as run a laboratory and clinical trials. Caring for my patients helps me continually remember what's important and what are the critical research questions for our cancers and how we can help people."

Dr. Bae-Jump, and her husband, Ethan Jump, live in Chapel Hill with their three children: Sammy, who is eight, and four-year-old twins Ben and Emily.

She and Ethan, a UNC fan, met during her sophomore year at Duke. "He introduced me to the concept of sports. I didn't know Duke was good at basketball until he told me. I root for UNC because I like to see my husband happy, except for Duke-Carolina when I usually root for Duke."

#### New face, new role at UNC Lineberger



Megan Fazekas-King



Cindy Rogers, JD

Megan Fazekas-King joined the UNC Lineberger team in March in the role of E-content developer. Her primary areas of focus are new media, website management and e-mail marketing.

Megan comes to UNC Lineberger from the North Carolina Preconception Health Campaign at the March of Dimes where she focused on social marketing and new media techniques aimed at improving women's health and birth outcomes.

Cindy Rogers, JD, is Patient Assistance Coordinator for the Comprehensive Cancer Support Program at the N.C. Cancer Hospital. Cindy oversees the Cancer Patient Assistance Fund, supplied by generous Lineberger donors and intended to assist patients experiencing financial hardship while undergoing oncology treatment. She also collaborates with Lineberger clinicians and clinical social workers, financial counselors and Cancer Patient Assistance Fund Advisory Board Members to comprehensively address patients' financial hardship and access all public and private sources of assistance.

Cindy previously served as a program assistant to the Carolina Well Cancer Survivorship Program where, among other things, she assisted with the development of cancer treatment summaries and survivorship care plans for breast, testicular and prostate cancer patients.

#### Perou receives Battle Award

Charles Perou, PhD, the May Goldman Shaw Distinguished Professor of Molecular Oncology, has been honored with the 2013 Hyman L. Battle Distinguished Cancer Research Award. This \$25,000 award was established in 2007 by the Battle Foundation of Rocky Mount to recognize exceptional cancer research in the UNC School of Medicine.

Dr. Perou's work in breast cancer has had a worldwide impact on the understanding



of the characterization of triple negative breast cancer. His research in RNA expression profiling of human tumors has produced seminal work in cancer biology.

### research briefs

#### Basch appointed to NCI Board of Scientific Advisors

Ethan Basch, MD, MSc, Director of Cancer Outcomes Research at the UNC Lineberger, has been appointed by the Director of the National Cancer Institute to serve on the Board of Scientific Advisors (BSA).

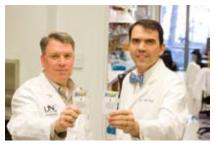
The BSA evaluates and makes recommendations on research priorities, grant programs and cooperative agreements of the NCI. Dr. Basch is a medical oncologist and health services researcher whose research focuses on patient-reported outcomes, comparative effectiveness research and drug regulatory policy. The Cancer Outcomes Research Program is an interdisciplinary program supporting the work of investigators across the Health Affairs Schools and the College of Arts and Sciences analyzing and improving cancer health services and outcomes.

"Dr. Basch is a superb oncologist with outstanding health services research skills particularly in the area of patient reported outcomes. His work is truly germane to the patient experience and improving cancer outcome. At this time of national health care reform that will alter how we care for cancer patients, it is crucial that NCI get top-flight advice from people like Dr. Basch," said Shelley Earp, MD, Director of UNC Lineberger.

Read more: http://unclineberger.org/news/basch-appointed-to-nci-board-of-scientific-advisors

#### Towlettes clean up difficult-to-remove anticancer drugs from surfaces

A set of towlettes developed by two researchers at Carolina can safely remove difficult-to-clean anticancer drugs commonly found on surfaces in hospitals, pharmacies, clinics and labs. The product, called Hazardous Drug Clean – or HDClean – addresses the growing concern regarding the safety of health care workers who frequently handle these potentially dangerous drugs.



"Health care workers who prepare, administer and dispose of chemotherapy drugs are at increased risk of developing health complications, such as skin rashes, infertility, and other problems," says Stephen Eckel, a leading expert on the issue and an adjunct assistant professor at the UNC Eshelman School of Pharmacy.

"HDClean is one way to reduce exposure and maintain a safe working environment."

Cleaning products currently used in pharmacies, labs and hospitals worldwide typically use solutions that contain alcohol or water, or a combination of the two, explains William Zamboni, an associate professor at the pharmacy school and a member of the Lineberger Comprehensive Cancer Center, who, along with Eckel, created HDClean. While these products are commonly used to disinfect, they are not recommended as agents to remove the presence of hazardous drugs.

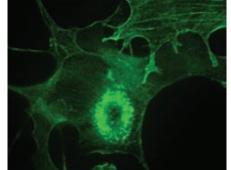
Read more: http://unclineberger.org/news/towlettes-clean-up-difficult-to-remove-anticancer-drugs-from-surfaces

#### Otey probes how pancreatic cancers metastasize

Research led by Carol Otey, professor of cell biology and physiology and a member of UNC Lineberger, discovered that the protein palladin, found in the cells surrounding pancreatic cancers, plays a role in the spread of the disease to other parts of the body. Palladin enhances the ability of cancer-associated fibroblasts (CAFs) to assemble organelles known as invadopodia to break down the barriers between cells and create pathways for tumors to spread throughout the body.

"There's a growing body of literature that shows that these cells have a role in cancer formation and metastasis," said Otey.

Researchers have begun focusing significant attention to the tumor microenvironment, as evidence grows that the cells and proteins found outside of cancer cells play



a crucial role in tumor formation, growth and metastasis. Understanding the interplay between the microenvironment and the tumors could lead to new targets for treatment and screening, especially in cancers that are resistant to therapies that directly target the cancerous cells.

"Cells seem to be partnering together to form the tumor and promote its growth," said Otey.

Read more: http://unclineberger.org/news/storming-the-gates-2013-uncresearch-probes-how-pancreatic-cancers-metastasize

#### Smithies named to first class of the Fellows of the AACR Academy

In April, Oliver Smithies, DPhil, Weatherspoon Eminent Distinguished Professor in the Department of Pathology and Laboratory Medicine and

member of UNC Lineberger, joined 106 other of the nation's most accomplished cancer researchers as members of the first class of Fellows of the American Association for Cancer Research Academy, the first group to receive the honor.

Smithies shares his 2007 Nobel Prize with Mario Capecchi of the University of Utah and Martin Evans of University College London for their work in



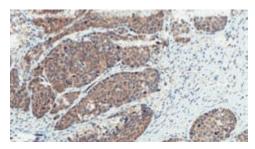
developing the technique of gene targeting. Gene targeting has become a cornerstone of modern genetics and pharmaceutical research, allowing for the breeding of research animals that have specific genes turned on and off to allow researchers to investigate the function of genes and assist in developing treatments for a variety of genetically based disorders, including cancer.

"It is possible to modify a gene in a living cell in a planned way. That's gene targeting, and that was the first time anyone had been able to demonstrate that that was possible," said Smithies.

Read more: http://unclineberger.org/news/smithies-named-to-first-class-of-the-fellows-of-the-aacr-academy

#### Hayes lab documents head and neck cancer molecular tumor subtypes

Head and neck squamous cell carcinoma (HNSCC) is the seventh most common form of cancer in the United States, but other than an association with the human papillomavirus, no validated molecular profile of the disease has been established. By analyzing data from DNA microarrays, a UNC-led



team has completed a study that confirms the presence of four molecular classes of the disease and extends previous results by suggesting that there may be an underlying connection between the molecular classes and observed genomic events, some of which affect known cancer

genes. The clinical relevance of the classes and certain genomic events was demonstrated, thus paving the way for further studies and possible targeted therapies.

Neil Hayes, MD, MPH, associate professor of medicine and senior author, says, "Cancer is a disease caused by alteration in the DNA and RNA molecules of tumors. A cancer results when broken molecules initiate a cascade of abnormal signals that ultimately results in abnormal growth and spread of tissues that should be under tight control within the body.

"However, most common tumors, including head and neck cancer, have relatively little information in the public record as to how these signals coordinate to create different patterns of abnormalities. This study is among the largest ever published to document reproducible molecular tumor subtypes. Subtypes, such as those we describe, represent attractive models to understand and attack cancers for treatment and prognosis.

Read more: http://unclineberger.org/news/hayes-lab-documents-head-and-neck-cancer-molecular-tumor-subtypes

### volunteerprofi

#### Pink Pacers raise funds and fun for UNC Lineberger

It's easy to spot Katy Gilliam and her fellow Pink Pacers at any event – simply look for pink tutus.

Why tutus? According to Katy, "A tutu makes everything better." Tutus, glitter and a whimsical approach to fundraising distinguish the Pink Pacers from other UNC Lineberger Comprehensive Cancer Center volunteers.

Katy and her fundraising group, the Pink Pacers, coordinate the family-friendly Get Heeled 5K that



Dave and Katy Gilliam with their children Scott and Anna

was recently awarded the "Best 5K in the Triangle" by Endurance Magazine. With almost 1,000 participants at the 2012 walk-run event, the 2013 race is destined to set new records for this group, who has cumulatively raised more than \$100,000 for UNC Lineberger.

It all started seven years ago when Katy first took part in a national breast cancer walk. For Katy, supporting cancer patients, survivors, and honoring loved ones through a fundraising walk was a life-changing experience. In 2009, after realizing how much money they raised for the national organization, Katy and others on her team decided to change their focus to UNC Lineberger and make an impact locally.

"We wanted an event where our families and our children could be involved and where we could make a direct impact on our community with 100 percent of the funds we raised. UNC Lineberger had the programs we wanted to support," said Katy.

And, the Get Heeled 5K was born.

The Pink Pacers initially raised funds for the UNC Lineberger Get REAL and Heel Program that provides healthy living, exercise, stress management and mind-body coaching for breast cancer survivors. Over time, however, their efforts shifted to UNC Pediatric Oncology, specifically programs for patient and family supportive care services.

"Our events became more family-centered," Katy explained. "As we worked with Lineberger and the community, we learned about more and more children going through treatment at UNC, and we began going to the clinic. Working with pediatric oncologists like Dr. Stuart Gold and Dr. Julie Blatt has been an amazing experience."

The Pink Pacers are very active and plan a number of events throughout the year, including the Get Heeled 5K, a Gymnastics Day with UNC



Gymnastics Coach Derek Galvin and the team, a shop-for-a-cause night at Southern Season, and a host of others at UNC and in the Triangle.

Even armed with pink tutus, putting on all of these events was challenging at first. "We're not trained to do this," Katy said. "I'm a coach, Brooke Bowersox is a teacher, Carrie Gilmore previously worked at Student Affairs for UNC, and Mike Cashion is a salesperson. Our spouses and families are big supporters and helpers. With our families and friends and people who really care about the community, we get it done."

Katy's passion for supporting young cancer patients and their families is contagious, and so is her enthusiasm for volunteering. "It's about an experience wrapped around active living and giving back to the community. We're here to have fun."

Katy serves on the new Advisory Board for the UNC Pediatric Oncology Program, where she is helping them to organize their first survivor day event. She and her husband, Dave, live in Chapel Hill with their son, Scott, and daughter Anna.

Learn more about the Pink Pacers and this year's Get Heeled 5K on Saturday, September 14: www.getheeled5k.com.



#### **Liberty Health Care sponsors Lineberger Event**

Raj Pruthi MD, professor of surgery and co-director of Lineberger's Urologic Oncology Program, was the keynote speaker for a public event on "Understanding Prostate Cancer, Prostate Health, and Men's Health" held March 21 at UNC- Wilmington. The event was sponsored by UNC Lineberger Board of Visitors member Ronnie McNeill and Liberty Health Care. Pictured (left to right): Sandy McNeill, Joe Calcutt, Cyndi McNeill, Dr. Raj Pruthi and Ronnie McNeill.

#### Local businesses honor employees

A new Employee of the Month Program is making third Tuesdays a lot brighter. That's when honored employees at UNC Hospitals are presented flowers from University Florist, a massage certificate from Massage Envy and a haircut/styling certificate from

Great Clips.

The new program recognizes employees in eight divisions, including the NC Cancer Hospital, for their dedication, positive attitude and outstanding work ethic.

The idea for the program began with Charles House, longtime Chapel Hill resident and owner of University Florist, who lost his wife, Mary, to cancer in 2001. "Our family had great interactions with the nursing team when Mary was undergoing cancer

treatment, so we wanted to honor them for their wonderful care.

"There are a lot of unsung heroes in the medical complex. This program is a way to recognize them for the great work they do in our community." Mr. House and University Florist have been joined by additional area businesses. Randall Diers, franchise owner for Massage Envy Chapel Hill and Raleigh, agrees. "We appreciate all that the UNC Oncology staff does, and once we heard about the program, we wanted to participate."

Dr. Mary Tonges, Senior Vice President and

Chief Nursing Officer of the UNC Hospitals Division of Nursing, says, "We are extremely grateful to these local businesses to recognize nursing team members who demonstrate outstanding dedication to patient care, go above and beyond to serve as a resource to colleagues, and exhibit overall excellence in their work. The delivery of flowers and other gifts to these most deserving individuals is a meaningful way to applaud their efforts."

Cosby Dudley, local franchisee of Great Clips in Chapel Hill and Carrboro, shares the community spirit. "It is important to give back to the local community, and we are particularly excited about supporting this program at UNC Hospitals. These folks take great care of people in need all day long, so it's nice to be able to do a good deed in return."



Charles House of University Florist presents April winner Delma Armstrong, BSN, RN, OCN, with flowers. Meghan McCann, director, oncology nursing services, UNC Hospitals.

## donorprofiles

#### Pinehurst couple's gratitude for care leads to generous bequest

In 2008 new UNC Lineberger Board of Visitors members Brenda and Don Hiscott of Pinehurst hosted a reception for UNC Lineberger featuring neurosurgeon Dr. Matt Ewend as one of the speakers. They had no way of knowing that nine months later they would see Dr. Ewend again, this time in the OR at UNC where Brenda would undergo surgery for removal of a brain mass caused by a rare type of lymphoma called MALT (gastric mucosa-associated lymphoid tissue).

Brenda explains, "I never knew I had cancer. We joined the Board after attending a reception at Wayne and Billie Ann Peterson's home and learning about UNC Lineberger. Cancer has touched all of us, and we wanted to do something to help Lineberger."

Because of her care at UNC and their confidence in UNC Lineberger scientists, the Hiscotts have made a generous gift in the form of a bequest to UNC Lineberger.

Brenda had suffered puzzling symptoms for several years until her Pinehurst physician, Dr. Jeff Kilpatrick, performed a sobriety test involving placing fingers of her right and left hand on her nose. Brenda recalls, "When I couldn't do it, he ordered an MRI that revealed brain abnormalities and told me I needed to go to Chapel Hill. He added, 'Didn't Dr. Ewend speak at your party?""

Brenda's other UNC care team members are Drs. Kristy Richards and David Morris. She says, "We are incredibly grateful to Drs. Ewend, Richards and Morris and their teams. They have given me tremendous support through our cancer

journey." Brenda has also been diagnosed with Stage IV follicular lymphoma, an incurable form of cancer

Brenda and Don remain active in their community. They work with Volunteers in Police Service, where they help to prevent crime by riding on patrols. Both are avid photographers and plan their travels around photo opportunities.

Don says, "We decided to make a planned gift to UNC Lineberger because we have

every confidence that the talented team of scientists and physicians there will achieve great things in research and discoveries. Of course we are incredibly grateful for the superb and compassionate care Brenda has and continues to receive, but foremost, we want to find cures for cancers and we believe strongly that the team at Lineberger will get the job done."



#### Mia Hamm: loyal supporter of UNC BMT patients and families

Since 2001, the Garrett Hamm Fund, established by the Mia Hamm Foundation, has provided critical support for the UNC Bone Marrow and Stem Cell Transplantation Program. Regional



Mia Hamm and golfer Annika Sorenstam at a Foundation golf tournament.

patients, their families and related donors have received much-needed help with expenses during their lengthy stays in Chapel Hill required by the transplantation protocol.

Dr. Tom Shea, professor of medicine and director of the UNC program, explains, "The Garrett Hamm fund has been a critically important lifeline over the years that has provided funds to help cover the costs of lodging, transportation and food for our patients and their caregivers during the long and difficult transplant process. Beyond the direct costs of medical care, most, but not all of which is covered by insurance, our patients face thousands of dollars of out-of-pocket expenses and find that resources like the Garrett Hamm Fund are immensely helpful when confronted with these kinds of financial challenges."

With gifts totaling \$140,000, the Mia Hamm Foundation has been the largest private donor to this UNC Program. Mia Hamm hosts an annual golf tournament to benefit the Foundation.

Michelle Brunner, executive director of the Foundation, says, "The Mia Hamm Foundation is proud to partner with the Bone Marrow and Stem Cell Transplant Program at UNC to support families during what can be a very difficult time. Together, over the past 12 years, we have been able to help a lot of patients and their families, and that is certainly central to our mission."

The Garrett Hamm Fund was established at UNC Lineberger in memory of Mia Hamm's brother, Garrett, who passed away from complications related to a bone marrow transplant in 1997.

#### Swing for the Cure supports breast cancer research

Since 2009, the River Landing Golf Association for Ladies (RLGALS) has supported breast cancer research at UNC Lineberger through their annual "Swing for the Cure" golf tournament at River Landing in Wallace, NC. Although their fundraising for breast cancer research began in 2004, they shifted their support from a national organization to UNC Lineberger as a result of the exceptional care former RLGALs chair, Kathy Lord, witnessed when her husband was treated at UNC.

"We were so impressed by Kathy's comments," said RLGALS chair Judy Sayko. "As a result, a number of us toured the N.C. Cancer Hospital and learned more about the advances being made in breast cancer research and treatment. We shared this experience with the other members and recognized the importance of focusing our efforts on UNC Lineberger, with 100 percent of the funds supporting research."

The RLGALS have worked hard to make their fundraising golf tournament unlike any other, even including a helicopter ball drop raffle as an element in Swing for the Cure.

In their five years of giving, the group has raised almost \$40,000 for UNC Lineberger, and they show no signs of slowing down. This year, the RLGALS have increased their commitment to UNC Lineberger by funding a seed grant to fund novel breast cancer research projects. Judy explained, "Funding a seed grant was an easy decision for us. We want to make a real and lasting impact in breast cancer research and we like that multiple projects will be supported through our fund."



## calendar

#### September

14th Get Heeled 5K Chapel Hill, NC

7 1 st Pedal for Peds Chapel Hill, NC

27th Board of Visitors meeting Chapel Hill, NC Blue Ribbon Gala, Carolina Club, Chapel Hill, NC

October

Roy Williams' Fast Break Against Cancer Smith Center, Chapel Hill, NC, Date TBD

26th Pink Football Game (UNC vs. Boston College) Chapel Hill, NC

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



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### First Annual Retreat for Children with Cancer and their Families

The first annual Pediatric Oncology Retreat was held on April 20-21 at the Aqueduct Center in Chapel Hill. Children who have been patients in the UNC pediatric clinic participated with their parents, siblings and caregivers for a weekend filled with therapeutic and educational sessions focusing on survivorship and support for families. Children and adults alike enjoyed a fireside chat and s'mores, movie night, keepsake artwork and games. N.C. Cancer Hospital staff members and volunteers were on hand to facilitate. Among the highlights was a soccer clinic provided by 10 members of the UNC Women's Soccer Team. Special thanks go to an anonymous Charlotte donor and Brent and Dana Jones from Danville, CA for making the retreat possible.

