Levine Cancer Institute is changing the course of cancer care by removing the barriers that separate patients from world-class research and treatment.

**Built on the Strength of a Network**

**New Charter Members Announced**

**CAROLINAS HEALTHCARE SYSTEM’S LEVINE CANCER INSTITUTE RECENTLY** announced its 12 charter member institutions, the first group of CHS-affiliated hospitals as part of the system’s new cancer care network. This connection among member institutions brings increased access to specialist consults, research offerings, and innovative programs and services to patients closer to where they live, based on the involvement of the participating centers in the Institute’s programs.

“We take cancer care very seriously. Through our elite network of affiliated hospitals and physicians, located across the Carolinas, we’re able to bring patients the best cancer care in a more convenient way,” says President Derek Raghavan, MD, PhD. “The Institute is a national model and shows how we’re investing in our community and the lives of patients by removing the barriers that separate them from access to breakthrough research and treatments.”

Charter member institutions include:

- AnMed Health–Anderson, SC
- Batte Cancer Center at Carolinas Medical Center-NorthEast–Concord, NC

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- Blue ridge HealthCare–Grace and Valdese Hospitals–Morganton and Valdese, NC
- Carolinas Medical Center (the Institute’s research and administrative headquarters)–Charlotte, NC
- Carolinas Medical Center–Lincoln–Lincolnton, NC
- Carolinas Medical Center-Mercy–Charlotte, NC
- Carolinas Medical Center-Pineville–Charlotte, NC
- Carolinas Medical Center-University–Charlotte, NC
- Cleveland Regional Medical Center–Shelby, NC
- Edwards Cancer Center at Carolinas Medical Center-Union–Monroe, NC
- Roper St. Francis Healthcare–Roper, Bon Secours St. Francis, and Roper St. Francis Mt. Pleasant Hospitals–Charleston, SC
- Stanly Regional Medical Center–Albemarle, NC

CONNECTING A VAST NETWORK OF CARE

Member institutions work together across the network to focus on initiatives like quality of care, technology, clinical trials, data sharing and review, patient navigation, health disparities and community outreach.

“A network of cancer centers and hundreds of cancer care locations across the Carolinas connected technologically and organizationally means patients don’t have to travel long distances to get highly specialized care,” says Edward Kim, MD, chair of the Institute’s Department of Solid Tumors and Investigational Therapeutics. Dr. Kim joined the Institute in July, from MD Anderson Cancer Center, and is one of more than 30 cancer specialists from top-ranked programs across the country recruited to work with the hundreds of oncologists, surgeons and radiologists across the system.

“The Institute is taking a novel, distributed approach, which we believe to be the future of cancer care,” says Roper St. Francis Healthcare President and CEO David L. Dunlap. “The opportunity to be part of a network of cancer programs driving excellence through shared knowledge, and research and programmatic opportunities, will enhance the quality and convenience of cancer care for our patients, as

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New Staff Members Join Levine Cancer Institute

AS CAROLINAS HEALTHCARE SYSTEM’S LEVINE CANCER INSTITUTE CONTINUES TO BUILD AN ELITE CANCER program, two more physicians join the growing team of nationally and internationally recognized cancer experts.

JOSHUA S. HILL, MD
Joshua S. Hill, MD, surgical oncologist, comes to the Institute after completing a fellowship in surgical oncology at the University of Texas, MD Anderson Cancer Center’s Department of Surgical Oncology in Houston.

Dr. Hill received his medical degree from The Ohio State University in Columbus and completed a residency in general surgery at the University of Massachusetts in Worcester. He has won several awards, including the Ferguson Award in Surgery, bestowed by The Ohio State University’s Department of Surgery and Resident Teacher of the Year Award from the University of Massachusetts.

Dr. Hill’s clinical interests focus on gastrointestinal, pancreatic and liver cancers. He will collaborate with Institute researchers on developing best practices for surgical and nonsurgical treatment of these cancers.

STEVE B. RIGGS, MD
Steve B. Riggs, MD, joins the Institute from Virginia, where he served as assistant professor and associate program director of the Department of Urology at Eastern Virginia School of Medicine (EVSM). Dr. Riggs has extensive clinical trials experience in various areas of urologic oncology, including bladder, kidney and prostate, having worked closely for several years with the famed prostate and bladder cancer surgeon Paul Schellhammer, MD.

Dr. Riggs received his medical degree from Medical University of South Carolina in Charleston. Following a surgery internship at Vanderbilt University Medical Center in Nashville, TN, he completed a urology residency at University of Mississippi Medical Center in Jackson and a fellowship in urologic oncology at the University of California Medical Center in Los Angeles. He has received several awards, including EVSM’s 2012 resident teaching award for the Department of Urology.

He has lectured at regional and international meetings on bladder, kidney and testicular cancer, as well as robot-assisted urologic surgery. Dr. Riggs is interested in urologic oncology, and in particular, how to reduce post-operative complications and improve patient experience.

Dr. Riggs is now seeing patients at McKay Urology in Charlotte, and will continue research efforts through the Institute’s clinical trials unit.
Bridget S. Bongaard, MD, FACP, FIM
Medical Director, Integrative Oncology, Batte Cancer Center at CMC-NorthEast

Russell H. Greenfield, MD
Medical Director, Integrative Oncology, Levine Cancer Institute in Charlotte

Holistic Cancer Care

LEVINE CANCER INSTITUTE IS ADVANCING CARE FOR patients with the establishment of an Integrative Oncology program. Physicians can augment conventional medicine with complementary therapies to help patients achieve the best outcomes.

EVIDENCE-BASED RECOMMENDATIONS

“People, when they have a life-threatening illness, want to be sure they’re doing everything within their power to heal themselves,” says Bridget S. Bongaard, MD, medical director of Integrative Oncology, Batte Cancer Center at Carolinas Medical Center-NorthEast. “We want to support them but keep them safe and steer them toward modalities that are evidence-based.”

Studies show that 40 to 80 percent of cancer patients use some form of complementary therapy. Most people decide what to try by visiting health food stores, hearing friends’ opinions or reading articles online, rather than seeking the advice of their healthcare provider.

“People are reticent to discuss those therapies with their physicians because they think the physician will ask them to stop,” says Russell H. Greenfield, MD, medical director of Integrative Oncology at the Institute in Charlotte. “Wouldn’t it be better to go to people who are well-grounded in conventional medical care and also the complementary therapies you might be interested in, to get you moving toward therapies that may be good for you while steering you clear of harmful or ineffective therapies?”

FULLY INTEGRATED CARE

The program provides patients with access to acupuncture, massage therapy and more in the same facility where they receive chemotherapy and radiation, and providers will be armed with research showing how cancer patients respond to treatment.

“At the Institute, patients get the best of conventional care and also have access to these therapies, if they choose,” says Dr. Greenfield. “We can help patients decide which, if any, of the available complementary therapies could help them safely heal and respond more effectively; we know where the data suggest safety and effectiveness.”

Physicians with the Integrative Oncology program will emphasize education to help heal the whole patient.

“The Institute will contribute to the prevention and treatment of cancer like no other cancer center across the nation. It’s a bold endeavor and wonderful statement to have prevention and health optimization be part of a cancer institute,” Dr. Greenfield says.

Additional offerings will vary across the network. For more information about the Integrative Oncology program, contact Beth York, director for survivorship and integrative medicine, at beth.york@carolinashealthcare.org or 980-442-2000.

"STUDIES SHOW THAT 40 TO 80 PERCENT OF CANCER PATIENTS USE SOME FORM OF COMPLEMENTARY THERAPY."
CHANGING THE COURSE OF CANCER CARE

An Exciting Quarter for HER2+ Breast Cancer Research

LEVINE CANCER INSTITUTE OFFERS PATIENTS ACCESS to hundreds of clinical trials at any given time. Of note, we have recently been involved in investigating novel agents for women with advanced HER2 over-amplified breast cancer to improve quality of life and overall survival. “Over-amplified” HER2 disease occurs when the HER2/neu gene is expressed to excess and presents a good target for one of the novel therapeutic compounds. About 15 to 20 percent of women diagnosed with breast cancer have the HER2 over-amplified form of the disease.

MAKING POSITIVE STRIDES

At the American Society of Clinical Oncology annual meeting in June, positive Phase 3 results of the EMILIA clinical trial, investigating the effectiveness of trastuzumab emtansine (T-DM1) to treat HER2 over-amplified breast cancer, were released. The agent works by binding to HER2 to deliver chemotherapy linked to trastuzumab preferentially to cancer cells, sparing healthy cells. Carolinas HealthCare System had this and other trials open evaluating this agent.

Pertuzumab, another HER2 drug we’ve investigated, recently received FDA approval for use as a first-line therapy for women with HER2 over-amplified metastatic breast cancer. Pertuzumab should be used in combination with other HER2-targeted medicines like trastuzumab. It works by helping to prevent the HER2 receptor from pairing with other HER receptors on the surface of cells, a process that’s believed to play a role in tumor growth and survival. It’s the first medicine that has been shown to improve upon the current standard of treatment—trastuzumab and chemotherapy—in women with previously untreated HER2 over-amplified metastatic breast cancer. Pertuzumab and trastuzumab complement each other. Both bind to the HER2 receptor but in different places—the combination is thought to provide a more comprehensive blockade of HER signaling pathways.

These breakthroughs are a direct result of the contributions made by many heroic patients who chose to participate in clinical trials comparing current standards of care to what we think will be better.

We believe this new drug combination, using two targeted medicines, will transform the way HER2 over-amplified metastatic breast cancer is treated. Then, as with all research, the goal is to administer the drugs to patients with earlier stages of disease, so that we can prevent them from developing late-stage disease. For example, we’re also one of only six sites in the world and only two in the country to offer patients access to a Phase 1 study investigating the use of pertuzumab for early-stage first-line treatment of the disease. Moreover, these targeted therapies will allow us to more effectively treat patients without the level of chemotherapy toxicity we see today. Additionally, these agents could have implications to help us apply targeted therapies to other types of cancer.

An exciting Quarter for HER2+ Breast Cancer research

By Steven A. Limentani, MD
Medical Director for Clinical Trials, Levine Cancer Institute

CLINICAL TRIAL PARTICIPATION

For information about how to refer a patient, contact:
Beatriz Perez-Li, RN
704-446-5285
beatriz.perezli@carolinashhealthcare.org
Stanly Regional Medical Center

A Leader in Patient Navigation

**When Its Founders Built the Hospital That is Now Stanly Regional Medical Center,** they built more than a medical facility. They began a legacy of trust, commitment and service to the people of Stanly County and the surrounding areas. Today, more than 60 years later, those roots run deep as Stanly Regional continues to provide advanced medical care not often seen in communities of its size.

Stanly Regional is a 119-bed not-for-profit hospital, located in Albemarle, just 45 miles east of Charlotte, NC. More than 600 employees and a 100-member active medical staff work hand-in-hand to care for patients. In addition to the hospital, the healthcare system, known as Stanly Health Services, includes a skilled nursing facility, a physician network of 15 medical practices, a home health agency and a durable medical equipment company.

**Designed with the Patient in Mind**

In 2010, Stanly Regional opened The Breast Center, which is designated as a Breast Imaging Center of Excellence by the American College of Radiology. The Center was built with the patient in mind, from the interior design to the addition of a breast health navigator, helping individuals through their diagnosis and treatment.

The patient navigator is an experienced nurse and breast cancer survivor. Because of her successful efforts, Stanly Regional has now expanded the patient navigator program to include lung cancer patients, and will soon assist those suffering from genitourinary cancer.

John Green, MD, a board-certified radiologist and co-medical director of The Breast Center, developed a database software solution to streamline the navigation program and facilitate communication among a patient’s healthcare providers. More comprehensive than similar products currently on the market, the software is used by Levine Cancer Institute as a model that will be incorporated throughout Carolinas HealthCare System. As a result of his substantial commitment to the concept and implementation of patient navigation, Dr. Green was appointed as one of the medical directors of the Institute’s patient navigation program.

“Together, these enhancements have standardized patient care and helped Stanly Regional dramatically decrease the interval from a breast cancer diagnosis to definitive surgery, with a target of less than two weeks for patients. This compares favorably with the four-to-six-week wait time or sometimes even longer, as a national average,” says Dr. Green.

Stanly Regional is proud to be a charter member of Levine Cancer Institute.
Grassroots Cancer Support Projects

THREE LEVINE CANCER INSTITUTE ORGANIZATIONS each won $10,000 LIVESTRONG grants for cancer programs and patient support thanks to votes from the community. These grants bring national attention and funds from the LIVESTRONG organization to North and South Carolina cancer patients.

Carolinas HealthCare System’s LIVESTRONG Community Impact Projects winners are:

- **The Creative Center, Hospital Artist in Residence**: Levine Cancer Institute, Charlotte, NC. This program is a partnership with UNC-Charlotte to help patients and families to express their cancer journey through many art mediums.
- **LIVESTRONG at the YMCA**: Stanly County YMCA, in partnership with Stanly Regional Medical Center, Albemarle, NC. This program offers people affected by cancer a safe, supportive environment to participate in physical and social activities focused on strengthening the whole person.
- **Certification for Advanced Palliative Care-Pillars4Life**: Roper

LIVESTRONG

St. Francis Healthcare, Charleston, SC. Certification for Advanced Palliative Care provides fully integrated care of the mind, body and spirit for people facing a long-term cancer-care journey, including counseling, nutrition and a variety of medical services. Pillars4Life enhances the quality of life for cancer patients by helping cancer centers efficiently attend to the needs of a greater number of patients.

Levine Cancer Institute Trains Liberian Physician

FOR FIVE WEEKS THIS SPRING, EMMANUEL Ekyinabah, MD, an internal medicine physician from Liberia, and a nurse traveled halfway around the world to study cancer treatment and prevention at Carolinas HealthCare System’s Levine Cancer Institute. Dr. Ekyinabah trained with an expert team of more than 20 oncologists.

The need is urgent for physicians in Liberia to receive help managing and solving oncology issues. In Liberia, an African nation plagued for years by civil war and disease, healthcare—particularly cancer care—has not yet caught up with the country’s political and social progress. There are very few ways to determine cancer stage diagnosis and there are limited amounts of chemotherapy drugs and no radiation treatment available for patients who are diagnosed with cancer.

This training is the beginning of an ongoing relationship between Levine Cancer Institute, Dr. Ekyinabah and his fellow physicians in Liberia. In fact, it’s an ongoing mission at CHS to conduct international medical outreach.

In addition to supporting Liberia, CHS’s International Medical Outreach Program has for nearly 70 years promoted sustainable healthcare in 24 nations. In 2011 alone, the program hosted and trained 17 international medical personnel in Charlotte and donated $2.5 million worth of medical equipment and materials, including mobile cardiac catheterization laboratories, emergency department equipment and materials and mobile X-ray machines.

For more information, scan this QR code to watch a video featuring Dr. Ekyinabah and Dr. Nazemzadeh.
Built on the Strength of a Network

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well as those around the region.”

The Institute is creating dozens of programs to support patients through every step of their care, including survivorship and integrative medicine programs like patient navigation and fertility preservation. It offers programs aimed at reducing disparities and providing access to cancer care for those who wouldn’t otherwise receive it. To date, it has screened almost 200 uninsured Charlotte women for breast cancer and has programs in Union and Stanly counties to reach rural and Hispanic communities.

The Institute’s research and administrative headquarters on the campus of Carolinas Medical Center will be completed in October 2012 and will house the region’s first Phase 1 clinical trials unit, to expand patient access to novel new therapies. However, the Institute will function as a series of integrated units, so patients would only travel to Charlotte if they require a higher level of care or during early phase clinical trials.

“This concept of a ‘cancer institute without walls’ wouldn’t be possible without the strong bond between these member institutions,” says Dr. Raghavan. “Together, we’re elevating clinical practice and bringing access to more research, more specialists, standard treatment protocols and innovative programs to all patients throughout the region.”

AN ELITE CANCER NETWORK

For more information about Levine Cancer Institute, call 980-442-2000 or 1-800-804-9376. To sign up for Levine Cancer Navigator, visit levinecancerinstitute.org/physician.

PHASE 1 CLINICAL TRIALS UNIT

A 5,000-square-foot specialized Phase 1 clinical trials unit is located on the fourth floor of the new Levine Cancer Institute building. Although Phase 1 investigations are already being conducted within Carolinas HealthCare System, this specialized unit will allow the Institute to greatly expand existing efforts and to work with cancer programs throughout CHS.

“In an era when new treatments are being developed daily, the Phase 1 unit will serve as a regional center of excellence for patients to receive exciting new agents for the treatment of their cancers,” says Steven Limentani, MD, Institute clinical trials medical director. “The unit will provide increased opportunities for physicians to offer their patients access to novel drug therapies and treatments.”