New Collaborations Expand the Variety of Breast Cancer Research at Yale

Each year brings new advances in the detection, prevention, and treatment of cancer and researchers around the country focus their efforts on getting one step closer to a cure. The scientists in the Yale Cancer Center Breast Cancer Program exemplify this strategy by integrating research into every discipline of the Program, from basic to clinical research and each stage in between.

“We are lucky to have the opportunity to take advantage of the excellent basic science at Yale to bring advances in breast cancer research into the foreground,” Dr. Lyndsay Harris, Associate Professor of Medical Oncology and Director of the Yale Cancer Center Breast Cancer Program, said.

With funding from national sources like the Susan G. Komen Breast Cancer Foundation, the National Institutes of Health, the United States Department of Defense, and the Breast Cancer Research Foundation, scientists at Yale have formed collaborations to create novel research programs that aim to quickly translate new findings into clinical care for our patients.

A three-year study into the basic biology of Ductal Carcinoma in Situ (DCIS), a non-invasive form of breast cancer, led by Donald Lannin, MD, Professor of Surgery and Director of the Yale-New Haven Breast Center, and David Stern, PhD, Professor of Pathology, is one example of how fundamental findings may lead to continued on page 6

Inspiring Others to Give through Leadership

During a recent interview in his Hartford office, United Technologies Corp. (UTC) President and CEO Louis Chênevert shared his philosophy on giving, “Companies and people have to lead by example. If UTC gives support and shows leadership, perhaps others will be inspired to give.”

Mr. Chênevert, co-chair of the current Smilow Cancer Hospital fundraising campaign and a member of the Yale Cancer Center Director’s Advisory Board for the last seven years, has become one of the largest supporters of Yale Cancer Center. In July, he announced a $1 million gift from UTC to the new Smilow Cancer Hospital. In addition, he and his wife Debbie made a personal contribution to the new hospital, which is slated to open in fall 2009.

Mr. and Mrs. Chênevert have been touched by cancer; they both lost their fathers to the disease in 2000. After experiencing such personal loss, they began to passionately support Yale Cancer Center. “I think there are a lot of opportunities to find more cures with this new cancer hospital. This integrated facility creates a more patient-friendly environment,” Mr. Chênevert said.

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In Connecticut, UTC contributes approximately $5 million to non-profit organizations each year. “The Smilow Cancer Hospital is important to the residents of this region because every week...”

In this issue... Inspiring Others to Give through Leadership • Breast Cancer Research at Yale • Row for Hope Medical Oncology Volunteer Program • The Connecticut Challenge • Yale’s Mammography Van
In 2007, Paul and Joy Ridley founded Row for Hope, a non-profit organization that raises money for cancer research. The motivation to start their organization came when the siblings lost their mother to skin cancer in 2001. Then later that year their father was diagnosed with prostate cancer. He was successfully treated, and is now cancer-free. However, the impact cancer had on the Ridley family remained.

On December 1st, Paul will set out on a solo, unsupported, trans-Atlantic journey by rowboat in the hopes of raising $500,000 for Yale Cancer Center. Beginning in the Canary Islands, Paul will row 2950 miles to Antigua, over a span of 60 to 80 days. To achieve his goals, he will row 10-12 hours a day and will have to consume 8,000-10,000 calories each day. The boat is a state-of-the-art, custom-built fiberglass composite craft named Liv, Norwegian for “Life.” “There’s no obvious connection between rowing and cancer research, but I wanted to raise money. I was able to find a way to combine supporting cancer research with what I do best. I’m not a scientist, but I can row,” said Paul. Paul is poised to become the third and youngest American to row any ocean solo and unsupported.

Seeing the different outcomes that can occur when someone is diagnosed with cancer, Paul and his sister Joy decided to do everything they could to support the research that had saved their father, and to prevent other families from having to experience what they went through when they lost their mother. This rowing journey is a way for Paul to not only support cancer research, but to honor his mother’s memory as well.

Row for Hope chose to partner with Yale Cancer Center in order to fund cutting-edge research that is dedicated to bringing tomorrow’s cancer treatments and cures to patients today. “We knew we wanted to be associated with one of the most well-known, most successful cancer research centers in the country. After meeting and interacting with the physicians and staff at Yale Cancer Center, we knew it was the right place. It is a place where real progress is being made in cancer research,” Paul explained. Funds raised by Row for Hope in 2008-2009 will help to expand the efforts of Dr. Mario Sznol, Vice-Chief of Medical Oncology and Co-Director of the Yale Cancer Center Melanoma Program. Dr. Sznol’s expertise is in cancer immunotherapy, early drug development for cancer, and the treatment of patients with melanoma and renal cell carcinoma.

“There is no limit to the ways you can make an impact. With the help of my wonderful team, I’ve been preparing for this journey mentally and physically, and I know what to expect. We have one goal and it is not to set records, but to raise $500,000 for cancer research. That is the only way in which our success will be measured,” Paul said.
Medical Oncology Volunteer Program Benefits Both Patients and Volunteers

When patients enter the Yale Medical Oncology Clinics for the first time most are nervous and full of questions. Many of them have recently been diagnosed with cancer and are not sure what to expect. Some come alone, others with support systems; all welcome the greetings and assistance provided through the Medical Oncology Volunteer Program.

Sheryl Sobolewski has worked for Yale-New Haven Hospital for over 20 years, and in the past five years has worked with more than 50 volunteers in her role as Volunteer Coordinator for the Yale-New Haven Medical Oncology Treatment Center. Sheryl oversees the training of new volunteers in the Medical Oncology Volunteer Program and works with them one-on-one until they feel comfortable enough on their own. "It’s important to provide the appropriate training so that the volunteers are able to offer the best support they can to the patients," Sheryl said.

There are four opportunities for volunteers. While all of the roles offer the opportunity for volunteers to assist patients and families the most complex, and popular role, is the position of patient navigator. Patient navigators greet new patients, explain what to expect during their appointment, answer questions, and provide anything the patient may need from blankets to conversation. A patient aide youth program is also available for individuals between the ages of 14 and 18.

Volunteers range from college and high school students to retirees. Pat Gurrieri, a retiree, has been volunteering as a patient navigator for nearly three years. "The medical oncology volunteer program is a great opportunity and it’s very rewarding. I get to meet courageous people and help them at a time when they need it the most. Many of these patients have been coming here as long as I have, and you form connections with them," Pat said. Since he is not dealing with patients in any clinical manner, he feels that it relaxes them knowing he is there simply as a friendly face to provide support.

Nancy, who is also a patient navigator with the Medical Oncology Volunteer Program, is a cancer survivor and is familiar with what patients go through. Nancy commented, "I have experience with what these patients are going through so I understand their needs a little better. A lot of them come alone, and I couldn’t imagine that. This is my way of giving back. This is also a great way to provide support to the nurses who are so wonderful and sometimes are just too busy to provide the little things that patients may need. That’s where we come in."

With the building of the new Smilow Cancer Hospital, Sheryl hopes to expand the services offered. A committee has been organized that will look at the needs of the patients and decide what should be included in the program. Expansion of the arts and crafts and complementary therapy programs have all been discussed. A bigger goal for Sheryl is to have enough volunteers to fill each volunteer opportunity for every shift that is needed. "This is a great opportunity for people to work outside their comfort zone," Sheryl said. "It is very flexible and is a great way to make an impact on another person’s life. It is not only the patients that benefit from this program, but the volunteers as well." Nancy, who has only been volunteering for a few months, has already seen the connections that can be made. "Hearing a patient say 'I’m so happy you’re here’ and then being able to get them whatever they may need, sometimes without even having to ask, is such a wonderful experience," Nancy said.

If you would like more information about the program please contact Sheryl Sobolewski at (203) 737-1882 or sobolews@ynhh.org
Yale Cancer Center currently has numerous clinical trials available to cancer patients in search of novel therapies. These trials are evaluating new methods of prevention, detection, and treatment of cancer. Clinical trials give patients at Yale Cancer Center immediate access to the future of cancer care. Clinical trials are currently available for patients in fifteen different disease areas. For more information on all of the trials currently offered for patients at Yale Cancer Center, please go to yalecancercenter.org/trials or call 1-866-YALECANCER.

**A Select Listing of Protocols for MELANOMA:**

- **HIC 27409**
  - **Mario Szol, MD**
  - A Phase I Study of 5-Azacytidine in Combination with Interferon-Alfa in Unresectable or Metastatic Melanoma and Renal Cell Carcinoma

- **HIC 0509000563**
  - **Harriet Kluger, MD**
  - A Double-Blind, Randomized, Placebo-controlled Phase III Trial of Carboplatin, Paclitaxel, and BAY 43-9006 versus Carboplatin, Paclitaxel, and Placebo in Patients with Unresectable Locally Advanced or Stage IV Melanoma

- **HIC 0603001235**
  - **Mario Szol, MD**
  - A Phase I Study of CR01 I-vcMMAE in Patients with Unresectable Stage III or Stage IV Melanoma

- **HIC 0508000542**
  - **Mario Szol, MD**
  - A Phase I Ascending Multi-Dose Study of BMS-663513, an Agonistic Anti-CD137 Monoclonal Antibody, Administered Every Three Weeks, in Patients with Malignant Melanoma

- **HIC 0608001765**
  - **Harriet Kluger, MD**
  - A Phase II Study of DASATINIB (BMS-354825) as First Line Therapy in Unresectable or Metastatic Melanoma

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For the latest schedule information and audio and written archives of all shows, please go to yalecancercenter.org/answers.
The weather records will show that Saturday, July 26th was sunny and warm, but anyone in the vicinity of the Greenfield Hill Church knows the sun shone brightest on the church green. From the Survivors’ Lap of Honor at 8:00am to the final finisher at 5:30pm, the green overflowed with spirit, fun, and emotion as rider after rider – 437 in all – crossed the finish line with smiles on their faces and arms raised in celebration.

Working together, the riders and 194 volunteers made the fourth annual CT Challenge a tremendous success. Riding in honor or memory of cancer survivors and to raise funds to support the Connecticut Challenge Survivorship Clinic at Yale Cancer Center, each cyclist left the starting line with a special commitment to succeed.

The leadership of the CT Challenge has allocated the proceeds from the annual event to support The Connecticut Challenge Survivorship Clinic at Yale Cancer Center to address the needs of cancer survivors. The clinic opened in 2006 and provides screening for long-term consequences resulting from cancer treatment and information to help survivors minimize or avoid future health concerns. Funds raised through the annual junior ride support the HERO’s Clinic, a dedicated resource for survivors of pediatric cancer through Yale Pediatrics.

“Thank you for your support!” said Dr. Richard Edelson, Director of Yale Cancer Center.

The Connecticut Challenge Survivorship Clinic is the first dedicated, multidisciplinary resource for cancer survivors in our State through the Connecticut Challenge Survivorship Clinic and the HERO’s Clinic. Both programs provide comprehensive supportive care services for cancer survivors. We are extremely grateful for the continued support of the Connecticut Challenge and all of the riders, volunteers, and donors who make this event so special,” said Dr. Richard Edelson, Director of Yale Cancer Center.

The Connecticut Challenge Survivorship Clinic is the first dedicated, multidisciplinary resource for cancer survivors in Connecticut to provide patients and their families with vital information on cancer prevention, wellness, supportive services, and the latest health research and developments. For more information, or to schedule an appointment for a consultation, please call (203) 785-CARE.

For more information on the Connecticut Challenge, to contribute to the Survivorship Clinic at Yale Cancer Center, or to find out how to participate in next year’s ride, please go to ctchallenge.org.

1 Team Yale HERO’s Clinic  2 Jeff Keith and Dennis Brown  3 Karin Keith and her son, Harrison  4 Remembrances along the bike route  5 Melinda Irwin and Mark Ellis and their two sons
too many families have to deal with the devastating news of a loved one who’s been diagnosed with cancer,” Mr. Chênevert said.

Construction of the 14-story Smilow Cancer Hospital began in 2006, and the 497,000-square-foot building is expected to be complete in late 2009. The hospital will house 112 inpatient beds, outpatient treatment rooms, expanded operating rooms, diagnostic imaging service, infusion suites, therapeutic radiology and a specialized Women’s Cancer Center with a reception area recognizing UTC’s donation. “UTC’s contribution to the Smilow Cancer Hospital is an investment in our local community and our support of the Women’s Health Center complements our efforts to promote diversity,” Mr. Chênevert explained.

Mr. and Mrs. Chênevert, the parents of two daughters, personally donated $540,000 to name the pediatric oncology waiting area and a private inpatient room in the new facility. These new spaces will bear their names and will serve as a lasting reminder of their devotion to cancer care and Yale Cancer Center’s mission.

“Yale has a superb track record of finding new ways and different methods to treat this disease, which is why I have high confidence in this institution,” Mr. Chênevert said. “Now with Smilow Cancer Hospital plus the new research center [Yale’s new West Campus], the tools are there.”

The Smilow Cancer Hospital Fundraising campaign is being co-chaired by Jonathan and Jody Bush, Marvin and Helaine Lender, and Louis and Debbie Chênevert. Together the co-chairs are determined to raise $100 million for the new hospital. To date more than $92 million has been pledged to the new hospital.

Yale’s Mammography Van to Help Women in Uganda

In Uganda most people rely on traditional herbs for treatment of symptoms, and with cancer, this often leads to very late diagnoses. Further hindering care, many citizens cannot afford the treatment they need and are unable to travel for their care. 95% of women diagnosed with breast cancer in Uganda already have very advanced disease when they seek treatment.

Dr. Fred Okuku, who just completed a six-month visit to Yale Cancer Center sponsored by the Yale/Johnson & Johnson Physician Scholars in International Health Program, is a fellow in oncology and a third year medical resident at Makerere University in Uganda. In an attempt to increase treatment options for patients in Uganda, many physicians like Dr. Okuku are traveling to the United States for training. “In Uganda we have one oncologist for 29 to 30 million people. When I get back home, it will be a great opportunity to teach people about health education based on my experiences here,” he explained.

To help further the prevention and detection of breast cancer in Uganda, Dr. Kenneth Miller, a medical oncologist and Director of the Connecticut Challenge Survivorship Clinic at Yale Cancer Center, purchased a retired mammography van from Yale-New Haven Hospital and shipped it to Uganda with the help of Doc to Dock, a non-profit that ships medical supplies to areas in need. When the van arrives in Uganda it will be used to screen women in the outskirts of Kampala, the country’s capital city. “We hope that by providing new screening options with the mammography van, we will encourage women in Uganda to have routine screening done,” Dr. Miller said.

When Dr. Okuku returns to Uganda he will begin a breast cancer research project looking at ductal carcinoma in situ, a very early stage of cancer. Dr. Miller and Dr. Okuku also hope to work together on a project looking at the biology of breast cancer in women from Uganda. Together, they hope to discover if there are biological differences causing the earlier onset of breast cancer in Ugandan women.

Improved access to cancer screening will undoubtedly provide the first step to ensuring women who are diagnosed with breast cancer are diagnosed at an earlier stage and provide them with a chance for cure. Dr. Okuku will be only the third oncologist in the country when he finishes his training. He explained, “Care is improving in Uganda. There has been an attempt to build health centers in every village. We hope that this mammography van, generously donated by Dr. Miller and his wife Joan, will help continue to improve health care in our country.”

new options for treatment and prevention of the disease. Lannin and Stern are studying the individual biology of DCIS in an effort to determine why the disease occurs in some women, a critical step to possibly discovering a method for prevention of the disease.

Other basic science research currently underway at Yale is focused on molecular markers, DNA repair, variations in microRNA expression, and epigenomics. Focused on changes in the genome, epigenomics is the newest focus of cancer research. “It seems likely that cancer may be closely related to aberrations in the epigenome, which then trigger vulnerable cells to mutate and cause cancer,” Dr. Harris explained. Scientists hope that their ability to understand and potentially revise changes in the epigenome at an early stage may lead to their ability to alter the progression of cancer. Efforts in this area at Yale are led by Frank Slack, PhD, Associate Professor of Molecular, Cellular, and Developmental Biology.

While basic research at Yale seeks to understand and interrupt the emergence of cancer, clinical research is providing new options for women with breast cancer through clinical trials. Yale Cancer Center medical oncologists Maya Abu-Khalaf, MD, Gina Chung, MD, Michael DiGiovanna, MD, PhD, and Harris are all investigators on clinical trials looking at various new therapies for women, which range from new combinations of chemotherapy and angiogenesis inhibitors to pre-operative therapy and alternatives to overcome drug resistance.

New techniques in the delivery of radiation therapy are also being revealed through studies led by Joanne Weidhaas, MD, PhD, Assistant Professor of Therapeutic Radiology. Partial Breast Irradiation has been recommended for the last several years and is used to treat early stage breast cancer by irradiating only the area immediately surrounding the cancer. Weidhaas is also using Mammosite technology to deliver radiation therapy inside of the breast and directly target the cancerous area.

“We are pleased to have the opportunity to offer women so many innovative therapies through clinical trials. Our ability to personalize treatment for each patient provides us with many more options than were previously available to us,” Dr. Harris said. “Each new year brings more opportunities and exciting news from the laboratories at Yale and throughout the world. Each of these advances gives hope to women diagnosed with breast cancer.”