Researchers at Yale Cancer Center have been awarded a prestigious SPORE grant from the National Cancer Institute (NCI) for the Yale translational program in Skin Cancer. The five-year, $11.5 million grant will aid a prominent team of Yale investigators in research focusing primarily on two dominant forms of skin cancer, basal cell carcinoma and melanoma, with additional interest placed on the already successful Cutaneous T Cell Lymphoma program at Yale Cancer Center.

"We are very honored to receive one of only four skin cancer SPORES awarded by the NCI. In addition, this is the first SPORE grant ever awarded to Yale. A major reason that this application was reviewed so strongly was the enormous support of Yale Cancer Center," said Dr. Ruth Halaban, Principal Investigator of the Yale SPORE in Skin Cancer. Dr. Halaban is leading the efforts along with co-principal investigators, Dr. Mario Sznol, Co-Director of the Yale Cancer Center Melanoma Program and Dr. Robert Tigelaar, Professor of Dermatology and Immunology.

SPORE, an acronym for "Specialized Programs of Research Excellence," concentrates on cancer research and the rapid movement of laboratory findings to the patient population. Startling statistics have proved basal and squamous cell carcinomas to be the most prevalent form of all cancers with one million newly diagnosed cases in the United States.

Diagnosed Twice and Still Going Strong

A little over three years ago, Allan Schwartzman was enjoying an active retirement. He was an avid sailor, a passionate traveler, and was taking classes to nurture his writing skills. When he went for a routine check-up and a chest X-ray showed a spot on his lung, his doctor thought it might have been a scar from pneumonia and sent him on his way. But Allan, a former smoker who quit 27 years ago, wondered why it hadn’t shown up before and decided to consult a pulmonologist.

That decision sent him down a road that ultimately saved his life. After diagnostic scans revealed a tumor, Allan underwent surgery at New York Presbyterian Hospital to remove the lower lobe of his left lung, followed by chemotherapy. "Within five days of receiving the chemotherapy treatment I was in terrible pain, as if someone had set an electrode into my feet – the pain radiated up through my entire body," he said. He also needed radiation to his chest, but since he would need treatment on a daily basis, he thought New York City was too far to travel from his home in Westport. A friend referred him to the late John Murren, MD, a medical oncologist at Yale Cancer Center who specialized in lung cancer. Dr. Murren recommended radiation oncologist Lynn Wilson, MD, MPH, who began Allan on a radiation regimen consisting of 30 treatments over 30 consecutive days. The radiation to his chest created a burning feeling in his esophagus that was extremely painful, and Allan was grateful when the treatment ended. He looked forward to getting on with his life, but unfortunately, the cancer recurred in his brain in early 2005.

Allan was very impressed with Dr. Wilson and returned to his care to undergo whole brain radiation and gamma knife radiosurgery, which pinpoints radiation to the exact abnormalities that are determined to be cancerous. Once again, he came to Yale each day to undergo multiple treatments. Although the radiation wasn’t physically uncomfortable, Allan Schwartzman is looking forward to new journeys with his wife and family.

"My motto is, whatever has to be done, do it." Allan Schwartzman

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Bringing New Treatments to Our Patients

Despite the significant advances that have been made toward the treatment and prevention of cancer, research efforts are still needed to develop new drugs to improve cancer care and cure. With a rich history of drug discovery and development at Yale, researchers at Yale Cancer Center are finding new ways to treat cancer and to give patients renewed hope for cure of their disease.

The Developmental Therapeutics Research Program at Yale Cancer Center, directed by Dr. Edward Chu, Chief of Medical Oncology and Professor of Medicine and Pharmacology, and Dr. Yung-Chi Cheng, the Henry Bronson Professor of Pharmacology, has successfully led the discovery of 25 new therapeutic molecules that are now effectively used to treat cancer patients. The newest initiative of the Developmental Therapeutics Program, a Phase I multidisciplinary research team, focuses the transition of these laboratory discoveries into the innovative treatment of patients using clinical trials at Yale Cancer Center.

Phase I Clinical Trials at Yale Cancer Center

![Table with Phase I Clinical Trials at Yale Cancer Center](image)

“Yale has tremendous basic science and core resources to support the development of cancer treatments. With the implementation of a formalized Phase I research team, we will now have even greater success in using our basic science advances to provide new treatments to our patients through clinical trials,” Dr. Chu said.

Dr. Cheng has led his research team to the successful discovery of several cancer treatments in the laboratory, including PHY-906, a Chinese herbal combination now in clinical trials for both colorectal and liver cancers. “Cancer is a complicated disease. Therefore, to treat cancer you have to consider that each individual patient may need special treatment. We’ve made a lot of advances in this area in the past 50 years, however, there is still a lot left to do clinically. The defined collaboration between our research and the clinical team at Yale Cancer Center will help to expedite our progress,” explained Dr. Cheng.

Phase I clinical trials investigate the potential success of new molecules or new combinations of therapies, which have shown great promise in the laboratory setting. When there is no standard or successful treatment option for cancer patients, they often choose to try a new therapy offered in a phase I clinical trial. “While there are advantages and disadvantages to participating in a phase I clinical trial, for many patients with advanced cancer it is a reasonable treatment option with the potential for good response,” said Dr. Mario Sznol, Vice Chief of Medical Oncology at Yale Cancer Center and a principal investigator of several phase I clinical trials.

James Lee, MD, PhD, Assistant Professor of Medicine, joined Yale Cancer Center last year and has since concentrated his efforts on phase I research and clinical trials. “There is ample opportunity at Yale Cancer Center to continue to increase the number of treatment options we have for our patients through phase I clinical trials of Yale discoveries,” Lee said. By combining his basic science and clinical experience, Dr. Lee hopes to build upon the already successful translational research at Yale Cancer Center.

The Yale Cancer Center Phase I research team meets weekly to discuss the progress of patients enrolled on phase I clinical trials and the potential inclusion of additional patients. Each patient is evaluated prior to participating in the study by a multidisciplinary team of physicians who work together to determine the best treatment plan for every patient. While receiving treatment through a clinical trial, all patients are closely monitored by the principal investigator of the trial, a specially trained nurse, and their primary oncology team.

“Phase I clinical trials are best done at comprehensive cancer centers where the basic scientists and physicians continuously collaborate to achieve treatment advances for our patients,” Dr. Sznol said.
Two New Breast Surgeons Bring Their Expertise to the Yale-New Haven Breast Center

Dr. Baiba J. Grube and Dr. Dalliah Mashon Black have joined the Yale-New Haven Breast Center to care for women in need of breast surgery. Both Dr. Grube and Dr. Black have focused their careers on the treatment and care of women with breast cancer and exclusively perform breast surgery at Yale. They will be working with the physicians within the Yale-New Haven Breast Center and Yale Cancer Center Breast Cancer Program to offer the most advanced and best patient care available.

Dr. Grube has been named an Associate Professor of Surgical Oncology. She was born in Germany and received her medical degree from the University of Utah before completing her internship and residency at the University of Vermont, where she was chief resident of general surgery from 1984–1985. Here, at the Yale-New Haven Breast Center, Dr. Grube looks forward to providing education and support to women of all ages with any type of breast disorder, whether it is a benign condition or breast cancer. She encourages women to seek a doctor they can connect with and to ask as many questions as are needed to stay educated. Building a relationship with patients is something Dr. Grube focuses on.

In addition to providing the highest level of patient care, Dr. Grube has concentrated her efforts on researching and learning about how cancer affects the elderly. “Historically, breast cancer in elderly women has not been studied as intensely as in younger women. Also, due to their more complex living situations, older women do not always have access to treatment and education. New mechanisms must be developed to help elderly women receive the best treatment,” Dr. Grube said.

The medical environment and outstanding multidisciplinary care are part of what drew Dr. Grube to Yale-New Haven Hospital. “Collaboration with other doctors and departments is very important in treating breast cancer, and Yale has an outstanding team of doctors and support continued on page 6.”

JUDY SIROTA ROSENTHAL

Still Going Strong continued from page 1

this time around, Allan found the experience to be emotionally draining. “It began to bother me, but on the other hand, I was glad to have these therapies so I could get better. My motto is, whatever has to be done, do it,” Allan said.

In addition to Dr. Wilson, Allan is also being treated by pulmonologist John McArdle, MD, and oncologist Scott Gettinger, MD. “I’m glad I found Yale. Everybody has been wonderful,” he said. “It’s a very pleasant place to go if you have to be treated for cancer.” Allan regularly undergoes an MRI and CAT scan every three months and is currently taking an oral form of chemotherapy that is designed to block tumor cell growth by targeting a specific protein binding site found within cancerous cells.

Facing a diagnosis of cancer twice hasn’t been easy, but Allan has a no-nonsense attitude toward his illness and treatment. The desire to live and to recover is what has pulled him through, he said, as well as putting himself in the hands of physicians at Yale Cancer Center whom he trusted. Although he’s still working on getting his energy level back to what it once was, he has resumed some of the activities that he used to enjoy. He has been sailing with friends, has taken his grandson on a trip to London, and has scheduled a five-week trip to Argentina and Chile in February. “I set little future goals that I want to be able to achieve,” he said. This fall he is enrolled in a film appreciation course at New York University and plans on taking in some shows with his wife Lois, who is a clinical psychologist.

Allan knows firsthand how difficult it can be to face a life-threatening illness, but he said it’s important not to dwell on dying or suffering. “I’d be lying if I said I didn’t have dark thoughts every once in a while,” he said. To clear his mind when that happens, he visualizes a pleasant memory from his past. It could be a beautiful hike he took with his wife or a swim in a river with a lovely waterfall. Meanwhile, he’s looking forward to creating new memories, such as watching his 13-year-old grandson graduate from college and celebrating his 50th wedding anniversary next year. “Getting diagnosed with cancer is not a death sentence,” he said. “I want to live and look forward to all of the journeys that are ahead of me.”

left: Dr. Baiba J. Grube, right: Dr. Dalliah Mashon Black

PICTURE CREDIT: PETER BAKER

1-866-YALECANCER • yalecancercenter.org
Yale-New Haven Hospital Breaks Ground for New Cancer Hospital

Yale-New Haven Hospital (YNHH) broke ground last month for its new, world-class cancer hospital project. “This new cancer hospital will be a place of compassion and hope – where the latest research breakthroughs can be applied at the bedside for the benefit of all of our patients,” said Marna P. Borgstrom, President and CEO, Yale-New Haven Hospital, who was joined by the leadership of Yale Cancer Center and Yale School of Medicine and hundreds of community supporters to mark the official start of the cancer hospital’s construction.

The new cancer hospital will integrate all of Yale Cancer Center and Yale-New Haven Hospital’s oncology patient services in one building specifically designed for cancer care. The 14-story facility will contain nearly 500,000 square feet, and will include 112 inpatient beds, outpatient treatment rooms, expanded operating rooms, infusion suites, diagnostic imaging services, a specialized women’s cancer center, including the Yale-New Haven Breast Center and the GYN Oncology Center, as well as a floor each for diagnostic and therapeutic radiology.

The new cancer hospital is estimated to cost approximately $467 million, and is expected to open upon its completion in 2009.

clinical trials at Yale Cancer Center

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 open for accrual at Yale Cancer Center, please visit yalecancercenter.org or call 1-866-YALE-CANCER.

Phase I clinical trials open for patients:

- **HIC 0511000860** A Phase I Study of the mTOR Inhibitor Rapamycin (Rapamune, Sirolimus) in Combination with Abraxane
  - Dr. Maya Abu-Khalaf, MD
  - Maysa Abu-Khalaf, MD (Paclitaxel protein-bound particles) in Advanced Solid Cancers

- **HIC 0509000642** A Phase I, Open-Label Study Evaluating the Pharmacokinetics of Components of S-1 in Patients with Impaired Hepatic Function
  - Dr. Wasif Saif, MD
  - Wasif Saif, MD

- **HIC 0509000643** A Phase I, Open-Label Study Evaluating the Pharmacokinetics of Components of S-1 in Patients with Varying Degrees of Renal Function
  - Dr. Wasif Saif, MD
  - Wasif Saif, MD

- **HIC 0508000436** A Phase IA, Multicenter, Dose-Escalation Study of Oral AEE788 on a Continuous Daily Dosing Schedule in Adult Patients with Advanced Cancer
  - Dr. James Lee, MD, PhD
  - James Lee, MD, PhD

- **HIC 0510000723** A Phase I Trial of the Combination of Sirolimus and SU11248 (Sutent) in Patients with Advanced Solid Tumors that are Non-Curable with Standard Therapy
  - Dr. Mario Sznol, MD
  - Mario Sznol, MD

- **HIC 0601000999** A Phase I, Open-Label, Randomized, Cross-Over, Pharmacokinetic Study Evaluating the Effect of the Dihydropyrimidine Dehydrogenase (DPD) Inhibitory Action of 5-Chloro-(2,4)-Dihydroxpyridine (CDHP) as an S-1 Component
  - Dr. Wasif Saif, MD
  - Wasif Saif, MD

- **HIC 0604001305** An Open Label, Dose Escalation Trial of Oral PXD101 in Patients with Advanced Solid Tumors
  - Dr. Kevin Kelly, DO
  - Wm. Kevin Kelly, DO

event calendar October 2006 – February 2007

- **Ongoing** Coast to Coast: A Run for Survivorship
  - Christian McEvoy is running across the country to support cancer survivors at Yale, check on his progress and pledge to support a mile of his run at coasttocoastrun.org

- **November 1, 2006**
  - Understanding Cancer Lecture Series
  - New Discoveries in Cancer Treatment
  - Dr. Edward Chu
  - Yale-New Haven Hospital Cafeteria; 6:00 PM
  - Sponsored by the Wellness Community
  - (888) 700-6543

- **November 11, 2006**
  - Frankly Speaking about Lung Cancer
  - A symposium for patients and families to learn about the progress made in the treatment of lung cancer.
  - Yale Cancer Center Thoracic Oncology Program
  - The Anlyan Center; 9:00 AM
  - Sponsored by the Wellness Community
  - (888) 700-6543

- **December 6, 2006**
  - Patient and Family Holiday Party
  - Harkness Lounge, Yale School of Medicine; 2:00 – 4:00 PM
  - (888) 700-6543

- **January 10, 2007**
  - Understanding Cancer Lecture Series
  - Treatment Advances in Early Stage Prostate Cancer
  - Dr. John Colberg and Dr. Richard Peschel
  - Yale-New Haven Hospital Cafeteria; 6:00 PM
  - (888) 700-6543

- **February 7, 2007**
  - Understanding Cancer Lecture Series
  - Coping with Cancer: A Focus on Complementary Therapies
  - Dr. Mary Crooks, LCSW and Dr. Chris Gaynor
  - Yale-New Haven Hospital Cafeteria; 6:00 PM
  - (888) 700-6543
The spirit of the riders and volunteers at the CT Challenge on Sunday, August 27th showed their overwhelming support of cancer survivors throughout the state of Connecticut. Despite the rainy day, over 300 riders raised money and rode in honor or memory of cancer survivors and to establish the Connecticut Challenge Survivorship Clinic at Yale Cancer Center.

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 new clinic provides screening for long-term consequences resulting from cancer treatment and information to help survivors minimize or avoid future health concerns.

“The enthusiasm and dedication of the riders and supporters of the Connecticut Challenge is inspirational as we set out to provide care for cancer survivors throughout the state of Connecticut through the newly opened clinic at Yale Cancer Center,” Dr. Ken Miller, Medical Director of the Clinic said.

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 establishment of the Survivorship Clinic at Yale Cancer Center, or to find out how to participate in next year’s ride on August 26, 2007, please go to ctchallenge.org.
We have some of the best treatment, detection, and预防 of breast cancer and patients should stay at New-Haven Hospital, and in the New Haven community, is very helpful in studying the racial disparities that exist in cancer. “The racial diversity among patients here at Yale New-Haven Breast Center,” said Dr. Black.

It takes a team effort in order to build treatments and programs to give patients the best possible results. Interaction between medical oncology, radiation oncology, social workers, and genetic counselors is needed to treat breast cancer. She agrees with Dr. Grube in that it takes more than one specialty to treat breast cancer.

Dr. Black also plans on researching and studying the racial disparities that exist in cancer. “The racial diversity among patients here at Yale New-Haven Hospital, and in the New Haven community, is very helpful in understanding the racial disparities in breast cancer,” explained Dr. Black.

“There is hope in treating breast cancer and patients should stay encouraged, especially with early detection. A diagnosis of breast cancer is not the end of the world. We have some of the best treatment options available here at Yale,” said Dr. Black.

Also funded under the SPORE grant is a Developmental Research Project and Career Development Program directed by Dr. Tigelaar. The Developmental Research Project will provide support to skin cancer-related pilot projects to encourage new multidisciplinary collaborative research efforts in skin cancer. The Career Development Award Program is designed to stimulate young investigators to devote a portion of their research toward skin cancer as well as to enhance and focus the careers of individuals who have already shown interest and promise in this field.

“An important part of the Developmental Research Project will be to interface with existing research programs within Yale Cancer Center. The combination of support and efforts between Yale Cancer Center and the SPORE program will enable Yale to make a huge impact on the overall understanding of skin cancers and the development of effective new treatments for our patients,” Dr. Tigelaar explained.

Yale Cancer Center has established eight Targeted Areas of Research Excellence (TARE) to provide special emphasis on disease focused translational programs. “These defined areas of excellence receive support from the Center to stimulate their maturation into competitively funded formal programs with major potential to improve the prevention, diagnosis, and care of patients with particular types of cancer. The skin SPORE is the first of these TARE to mature to that advanced level,” Dr. Edelson explained. Two other cancer disease areas, Lymphoma and Breast, are also being targeted by the Center for SPORE applications, with the goal of their submission within the next two years.

Approximately 8,000 people die of metastatic melanoma every year.” He added, “The primary goal of the SPORE grant is to better understand the biology of these diseases with a focus on discovering targets that will lead to improved diagnosis and treatment, and to translate those findings into clinical applications that can be beneficial to patients.”

“The SPORE grant will allow Yale Cancer Center to expand our already significant research efforts in cutaneous oncology. With the support of the National Cancer Institute, Yale will continue to make advances into the prevention, detection, and treatment of all types of skin malignancies,” said Dr. Richard Edelson, Director of Yale Cancer Center.

A major strength of the Yale SPORE in Skin Cancer is the versatile group of 26 distinguished scientists and clinical investigators assembled from eight different departments at Yale University, as well as external collaborators who will work in partnership on the program. Risk assessment, diagnosis/prognosis, and patient-tailored therapy are three main concentrations of Yale Cancer Center’s SPORE in Skin Cancer. According to Dr. Halaban, studies will focus on the following translational applications: assessment of environmental and genetic factors in the development of early onset basal cell carcinoma; identification of targets of current therapies used to treat melanoma, development of novel immunological therapies; development and implementation of technologies to identify tumor markers; and establishment of a complete database of information that includes clinical and basic research data.