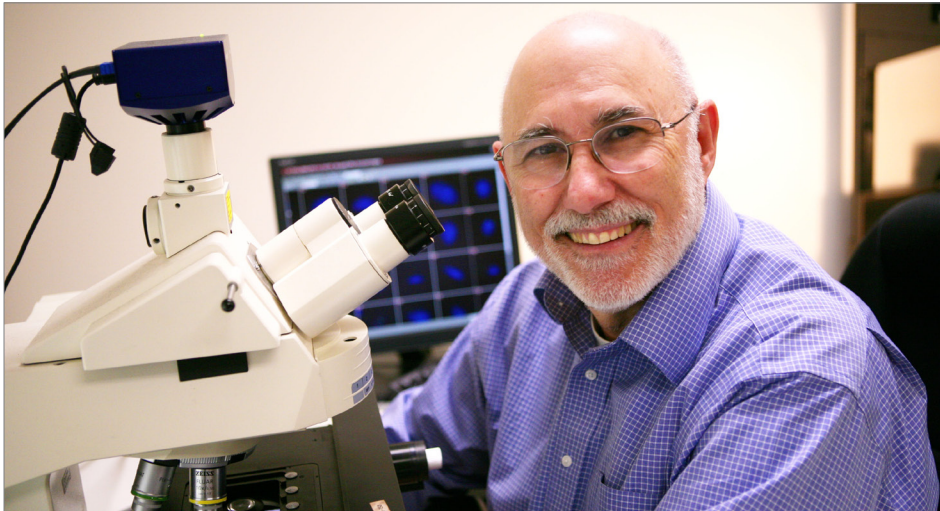


# Cancer Center BULLETIN

A PUBLICATION OF THE HAROLD C. SIMMONS COMPREHENSIVE CANCER CENTER

Dr. Jerry Shay | *Professor of Cell Biology*



## CONVERGENCE LAUNCHES LEARNING COMMUNITY DAY FOR CANCER

UT Southwestern Medical Center will hold its first Learning Community Day on Wednesday, April 7. The occasion brings together students from its three degree-granting institutions in a campuswide event to culminate the 2009-2010 year's emphasis on a common "science of medicine" theme: cancer.

Sponsored in part by the Harold C. Simmons Comprehensive Cancer Center, the event is designed to increase students' knowledge and understanding of cancer, cancer research and cancer patient care, as well as to enhance their ability to communicate this knowledge to peers, professionals, patients and the public.

A component of the medical center's Quality Enhancement Plan (QEP), also called Convergence, Learning Community Day for Cancer provides an opportunity for effective inte-

gration between the UT Southwestern Medical School, UT Southwestern Graduate School of Biomedical Sciences and UT Southwestern School of Health Professions.

Dr. Jerry Shay, professor of cell biology and associate director for education and training at the Simmons Cancer Center, directs the inaugural Learning Community Day, which features student poster presentations and lectures that highlight translational medicine. In addition, graduate, medical and health professions students will participate in small-group discussions of a cancer research case study under the guidance of faculty mentors and facilitators from the graduate and health professions schools.

Events open to the campus community include:

## GRAND ROUNDS

The speaker for the upcoming Simmons Cancer Center Grand Rounds is Dr. George R. Stark, professor of genetics at Case Western Reserve University and Distinguished Scientist at the Cleveland Clinic Foundation's Lerner Research Institute.

Dr. Stark is an international leader in the study of interferons and cytokines, proteins in human cells that fight against viral infections and diseases such as cancer.

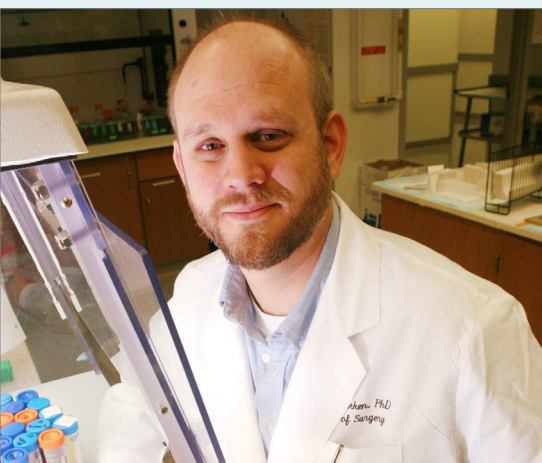
The lecture will be held April 9 from 11:30 a.m. to 12:30 p.m. in the Medical Education and Conference Center in the T. Boone Pickens Biomedical Building (NG 3.112).

Dr. Stark spent nine years as an associate director of research at the Imperial Cancer Research Fund in London. In 1992, he became the chair of the Lerner Research Institute, a position he held until August 2002. He was elected to the National Academy of Sciences in 1986, to the Fellowship of the Royal Society in 1990 and to the Institute of Medicine in 2002.

Dr. Stark's work with interferons, together with that of Dr. James Darnell, led to the discovery of the family of JAK-STAT (Janus kinase-signal transducers and activators of transcription) signaling pathways, which take part in the regulation of cellular responses to cytokines and growth factors. ❖

## PANCREATIC CANCER RESEARCH SHOWS PROMISE

Human pancreatic cancer cells dramatically regress when treated with chemotherapy in combination with a synthetic compound that mimics the action of a naturally occurring “death-promoting” protein found in cells, researchers at UT Southwestern have found.



Dr. Rolf Brekken

The research, conducted in mice, appears in the April 1 issue of *Cancer Research* and could lead to more effective therapies for pancreatic and possibly other cancers, said Dr. Rolf Brekken, associate professor of surgery and pharmacology and the study’s senior author.

“This compound enhanced the efficacy of chemotherapy and improved survival in multiple animal models of pancreatic cancer. We now have multiple lines of evidence in animals showing that this combination is having a potent effect on pancreatic cancer, which is a devastating disease,” he said.

In this study, Dr. Brekken and his team transplanted human pancreatic tumors into mice, then allowed the tumors to grow to a significant size. They then administered a synthetic compound called JP1201 in combination with gemcitabine,

a chemotherapeutic drug that is considered the standard of care for patients with pancreatic cancer. They found that the drug combination caused regression of the tumors.

“There was a 50 percent regression in tumor size during a two-week treatment of the mice,” said Dr. Brekken, a member of the Simmons Cancer Center. “We also looked at survival groups of the animals, which is often depressing in human therapeutic studies for pancreatic cancer because virtually nothing works. We found not only significant decrease in tumor size, but meaningful prolongation of life with the drug combination.”

The drug combination also was effective in an aggressive model of spontaneous pancreatic cancer in mice.

The compound JP1201 was created at Joyant Pharmaceuticals based on a technology licensed from UT Southwestern to mimic the action of a protein called Smac. Dr. Xiaodong Wang, professor of biochemistry, discovered Smac in 2000 and found that this protein plays a key role in the normal self-destruction process present in every cell.

UT Southwestern researchers are using Smac mimetics in breast and lung cancer research, as well. Dr. Brekken said the next step is to develop a compound based on JP1201 that can be tested in humans in clinical trials.

The research was supported by Susan G. Komen for the Cure and Joyant Pharmaceuticals, a Dallas-based company and UT Southwestern spinoff that is developing medical applications of Smac-mimetic compounds. ❖

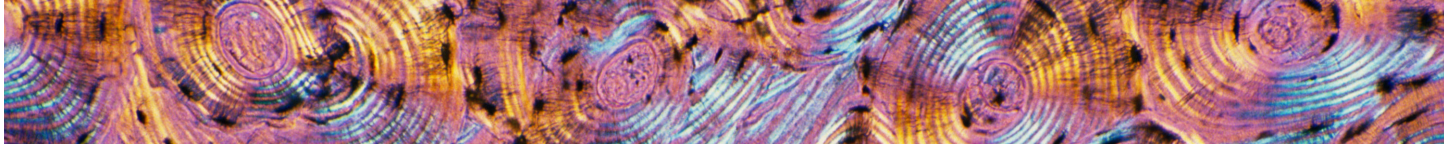
CONVERGENCE continued from page 1

- Poster presentations available for viewing, 8 a.m. to 6:30 p.m., outside the lecture halls beneath Eugene McDermott Plaza, (D1).
- “Cancer: Tomorrow’s Care Today,” a presentation by Dr. James Willson, director of the Simmons Cancer Center; Dr. Joan Schiller, deputy director of the cancer center; and Dr. John Minna, director of the Nancy B. and Jake L. Hamon Center for Therapeutic Oncology Research and the W.A. “Tex” and Deborah Moncrief Jr. Center for Cancer Genetics. 1 p.m., Gooch Auditorium.
- “Deconstructing Tumor Suppression,” a University Lecture, will be presented by Dr. Gerard Evan, a cancer researcher at the Helen Diller Family Comprehensive Cancer Center, University of California, San Francisco. 4 p.m., Gooch Auditorium.
- Poster session, reception and poster awards presentation, 5:00 p.m., outside the lecture halls beneath Eugene McDermott Plaza, (D1).

Dr. Susan Cox, professor of obstetrics and gynecology, associate dean for medical education, and director of Convergence at UT Southwestern, said the Learning Community Day will serve as a means to enhance student education, foster advances in translational research, and ultimately improve health and patient care.

“By participating in these events, students from all three schools will know more about the latest scientific and clinical research in cancer,” said Dr. Cox, holder of the Gillette Professorship in Obstetrics and Gynecology. “They’ll also have a deeper respect for the need to collaborate with other health care professionals when caring for individual patients.” Next year’s theme will be obesity and metabolism.

For more information, visit: [www.utsouthwestern.edu/convergence](http://www.utsouthwestern.edu/convergence) ❖



## CPRIT AWARDS \$2.2 MILLION TO INVESTIGATORS FOR CANCER PREVENTION STUDIES

The Cancer Prevention and Research Institute of Texas (CPRIT) has awarded \$2.2 million to three investigators at UT Southwestern to support cancer prevention programs.

The \$6.8 million in funding announced March 10 represents the first round of prevention grants awarded to clinics, health districts, community-based organizations and academic institutions across the state of Texas.

CPRIT funded 12 studies covering a broad spectrum of preventive services. The proposals were selected from among 56 applications.

The UT Southwestern grants were awarded to members of the Harold C. Simmons Comprehensive Cancer Center and will fund programs aimed at preventing and reducing the risk of breast, colorectal and cervical cancers.

Two of the grants will fund projects to provide innovative cancer screenings through the Moncrief Cancer Institute. Dr. Keith Argenbright, an associate professor of clinical sciences at UT Southwestern and medical director of Moncrief Cancer Institute, has partnered with physicians and hospitals in Fort Worth and the surrounding areas to provide the most advanced cancer population research in Tarrant County. Moncrief, under the direction of Dr. Argenbright, has expanded programs and built on opportunities for new grant funding focusing on the development of effective strategies to prevent and detect cancer.

“The grants will aid researchers to develop programs to ensure that strategies for preventing and detecting cancer are as effective as possible,”

said Dr. Celette Sugg Skinner, professor of clinical sciences and associate director for population science and cancer control at the Simmons Cancer Center. “There are disparities all around us that turn out to be cancer-related. That’s why our research has to go from the test tube, where we usually think of cancer research, all the way out to the clinics and to the most broad communities.”

Here is a breakdown of the prevention grants to Simmons Cancer Center members:



• \$999,877 to **Dr. Argenbright**, who also is an associate professor in the Simmons Cancer Center. The grant will

provide breast screening and patient navigation services for patients in Denton, Hood, Johnson, Parker and Wise counties.



• \$898,662 to **Dr. Samir Gupta**, assistant professor of internal medicine who specializes in colon cancer

screening. The grant will increase colorectal cancer screenings at John Peter Smith Health Network in Tarrant County with a focus on screening uninsured patients. The benefits and costs of the screening outreach program will be assessed.



• \$299,998 to **Dr. Jasmin Tiro**, assistant professor of clinical sciences, who specializes in understanding and promoting

health behaviors. Dr. Tiro will evaluate an intervention program for patients attending safety-net clinics in Dallas that promotes patient understanding and demand for the vaccine against the human papillomavirus or HPV, which causes cervical cancer.

CPRIT was established in 2007 after Texas voters approved a constitutional amendment that authorized the state to fund cancer research and prevention programs. The ten-year initiative will invest \$3 billion in cancer research and prevention programs in Texas.

In February, CPRIT awarded more than \$18.5 million to investigators at UT Southwestern to support cancer-related research projects and to recruit a cancer investigator.