

KU Cancer Center Names Director of Drug Discovery and Development

In This Issue:

Research Team
Creates New
Cancer Drug

Prostate Center
Provides All Options

New Physicians
Join Cancer Center

Patient Proves
The Show Goes On

Nurses Honored
For Excellent Care



Scott Weir, PharmD, PhD, works with a multidisciplinary team that is developing a new cancer drug. (See story on page 3.) From left are Brian Blagg, PhD, Dr. Weir, Roger Rajewski, PhD, and Jim Baxendale, MS, MBA. Photo by Edmée Rodriguez.

The University of Kansas Cancer Center is committed to developing new drugs to fight cancer and other diseases. Now Scott Weir, PharmD, PhD, is leading those efforts as the first director of its Office of Therapeutics, Discovery and Development.

"KU is in a unique position to create university-wide drug development projects," said Dr. Weir.

"It has defined cancer as its top priority and has one of the top pharmacy schools in the country to support that commitment. It also has a partnership with the Stowers Institute for Medical Research, the largest privately funded cancer research organization in the country. Finally, KU is part of

Greater Kansas City, an area that has everything necessary to advance drugs to market."

Dr. Weir's task is to help the university advance promising drugs from discovery through early development.

"We form multidisciplinary teams that develop and implement plans to move drug candidates forward in cancer and all other therapeutic areas," he said. "I look for opportunities to form collaborations within and outside the university to accomplish this. Putting these pieces together is a challenge, but success will establish KU as the top cancer center for

Continued on page 3

MESSAGE FROM THE DIRECTORS

Dear Friends,

With this issue of *Advances*, we are delighted to welcome Scott Weir to the KU Cancer Center as the first director of the office of Therapeutics, Discovery and Development.

Scott will help us bring cancer-fighting drugs developed in our scientists' laboratories to clinical trials for patients. This work will significantly advance our effort to be designated a Comprehensive Cancer Center by the National Cancer Institute – and will ultimately benefit patients around the world.

To illustrate the drug development process, we feature a story about HSP90, a new compound that looks promising for the treatment of prostate cancer and possibly other diseases. We'll keep you informed about the progress of this research project and others in future issues.

You will also read about the hospital's regional leadership in prostate cancer care. At the Midwest Prostate Center, an expert team of specialists will provide patients with a complete range of options. One of these patients, Michael Spicer, shares his courageous (and entertaining) story of recovery in this issue.

Finally, we hope you will mark your calendars for two benefits later this year – "Treads & Threads" and "Uncork the Cure." Donor support through these events and others has helped us make important progress in cancer research and patient care. These gatherings are a wonderful way to celebrate our shared commitment to this cause.

Wishing you good health,



Roy Jensen, MD
Director, The University of Kansas Cancer Center
Director, Kansas Masonic Cancer Research Institute



Stephen Williamson, MD
Medical Director, Cancer Center
The University of Kansas Hospital
Director, Hematology/Oncology
The University of Kansas Medical Center



The University of Kansas Medical Center (KUMC) offers educational programs through its Schools of Medicine, Nursing, Allied Health and Graduate Studies. The University of Kansas Hospital is the primary teaching hospital for KUMC. The Kansas Masonic Cancer Research Institute (KMCRI) is a cancer research program at KUMC.

Irene M. Cumming
President and Chief Executive Officer
The University of Kansas Hospital

Barbara Atkinson, MD
Executive Vice Chancellor
The University of Kansas Medical Center

Roy Jensen, MD
Director
The University of Kansas Cancer Center and
Kansas Masonic Cancer Research Institute

EDITORIAL BOARD

Sheri Dunbar
Associate Director
Kansas Masonic Cancer Research Institute

Mary King
Director, Communications Services
The University of Kansas Hospital

Jan Lewis
Editorial Manager
Communications Services
The University of Kansas Hospital

Traci Wilper
Event Coordinator
Kansas Masonic Cancer Research Institute

Jeff Wright
Executive Director of Cancer Services
The University of Kansas Hospital

Valerie Renault
Editor

Laura Coffey, Valerie Renault
Photography

Mac Fechtling
Graphic Designer

Advances is published three times a year by The University of Kansas Hospital's Communications Services Department. Please send your comments, story ideas and mailing list requests to:

Valerie Renault
The University of Kansas Hospital
Communications Services, Westwood Campus
2330 Shawnee Mission Pkwy., Ste. 302
Westwood, KS 66205-2005
913-588-1024
vrenault@kumc.edu

FOR MORE INFORMATION

The University of Kansas Hospital
913-588-1227

Kansas Masonic Cancer Research Institute
913-588-4700

Kansas University Endowment Association
913-588-1431

bringing new drugs to patients who need them.”

Dr. Weir has spent nearly 20 years in pharmaceutical research and development. Most recently, he was senior director of preclinical technologies for Aptuit Inc. in Kansas City, Mo. From 1999 to 2005, he was with Quintiles, Inc., also in Kansas City, first as executive director of biopharmaceutical sciences and later as vice president for early development and laboratory services. Prior to that, he held senior positions with Hoechst Marion Roussel, Inc., Marion Merrell Dow, Inc., and Marion Laboratories, all in Kansas City.

“Dr. Weir brings a strong business background to his work at KU, having dedicated his career to helping develop new drugs,” said Roy Jensen, MD,

Success will establish KU as the top cancer center for bringing new drugs to patients who need them.

director of the KU Cancer Center. “His expertise in business and science will help us advance the discoveries made at KU and the Stowers Institute to clinical trials.”

To foster collaboration between researchers on the Medical Center and Lawrence campuses, Dr. Weir also works closely with Jim Roberts, PhD, vice provost for research at the Lawrence campus, and Paul Terranova, PhD, senior associate dean for research and graduate education at the Medical Center campus.

“We expect Scott’s work to have an economic development impact, as well as an impact on students and basic research,” noted Dr. Roberts.

“Transferring KU’s research into medicines that help people is our goal. Scott has a unique background to support that goal and a strong mandate to make it happen.”

Dr. Weir received a BSc degree in biology from the University of Nebraska at Omaha. He completed his PharmD and PhD degrees at the University of Nebraska Medical Center.

His appointment is the first of four planned this year as the university prepares to seek National Cancer Institute designation for the KU Cancer Center.

In the Beginning: Creating a New Cancer Drug

Cancer is a disease of excess. While a healthy body continually needs new proteins, in cancer cells, proteins multiply in a harmful way.

One of the culprits in this growth gone awry is heat shock protein 90 (HSP90).

According to Brian Blagg, PhD, professor of medicinal chemistry at KU in Lawrence, HSP90 usually does good work. It helps stabilize cells when they suffer from stresses – such as heat and shock – and watches over newly formed peptides (small proteins) to make sure they mature. But sometimes the results are cancerous.

So Dr. Blagg began developing compounds that would inhibit HSP90, and thereby halt the growth of cancer.

Now he is the inventor in a multidisciplinary team that brings together KU researchers from the Lawrence and Medical Center campuses.

That team includes Jeffrey Holzbeierlein, MD, a physician-scientist at The University of Kansas Hospital. He and Dr. Blagg are developing a drug that will inhibit HSP90 in prostate cancer. Their research is funded by grants from the National Cancer Institute and the Department of Defense. (The Army treats many prostate cancer patients through its Veterans hospitals.)

“We think this drug will inhibit many of the proteins that are important in the development and propagation of prostate cancer,” explained Dr. Holzbeierlein.

Slightly different versions of the compound may be beneficial in treating neurodegenerative diseases such as Alzheimer’s Disease, Parkinson’s Disease and multiple sclerosis.

Continued on page 4

Jeffrey Holzbeierlein, MD, researches the new prostate cancer drug and cares for prostate cancer patients.



New Cancer Drug *(continued from page 3)*

Mary Lou Michaelis, PhD, professor of pharmacology and toxicology in Lawrence, is using a cellular model to see if the drug protects nerve cells against a toxin produced in Alzheimer's.

The HSP90 team members play intersecting roles in the complex process of creating a drug. In simple terms, drug creation moves through these steps:

1. Drug discovery begins at the cellular level in the lab, where Drs. Blagg, Holzbeierlien and Michaelis are conducting experiments on the compound created by Dr. Blagg.
2. The compound is then synthesized into a drug that can
3. As experiments are performed, intellectual property is generated, increasing the commercial value of KU inventions. Jim Baxendale, MS, MBA, director of KU Technology Transfer and Intellectual Property, will facilitate licensing

be delivered to animals and humans. Roger Rajewski, PhD, acting director, and Michelle McIntosh, PhD, assistant research professor, both from the Product Development Core of the Higuchi Biosciences Center in Lawrence, characterize the pharmacokinetics and pharmaceutical properties of the compound. This leads to development of a product for animal and human testing.

of the drug, which could result in a spin-off company to produce a commercial product.

4. If all goes well, the HSP90 inhibitor will be packaged as a drug for clinical testing with humans. As director of the Office of Therapeutics, Discovery and Development, it's the job of Scott Weir, PharmD, PhD, to ensure that compounds move from the cellular level to patients as quickly and efficiently as possible.

When the drug reaches the clinical trial stage, prostate cancer patients at The University of Kansas Hospital will benefit from early access to this new treatment. Physicians at the Midwest Prostate Center will lead the trials. (See page 5).

New Physicians Expand Cancer Team Expertise

Marc F. Inciardi, MD, has 22



years of experience in radiology, including the past 15 years dedicated to breast imaging. He specializes in all facets of breast

imaging and diagnosis, including mammography, ultrasound, magnetic resonance imaging (MRI) and image-guided needle biopsy.

Dr. Inciardi completed medical school and a residency in diagnostic radiology at the University of Oklahoma Health Science Center, Oklahoma City. He completed a fellowship in ultrasound and computed tomography (CT) at the University of Southern California Medical Center, Los Angeles.

He is certified by the American Board of Radiology, with a subspecialty in diagnostic radiology.

Ania G. Pollack, MD, is a neuro-



surgeon who specializes in tumors of the brain and spine, skull-base neurosurgery, spinal disc disease and spinal stenosis, carotid endarterectomy and general neurological surgery.

Her research interests include neuro-oncology, Von Hippel-Lindau disease (a rare genetic disorder that causes tumors to grow throughout the body), angiogenesis (the growth of new blood vessels) and stereotactic radiosurgery.

Dr. Pollack completed medical school at the University of Chicago Pritzker School of Medicine. She completed an internship in general surgery, a residency in neurosurgery and a fellowship in skull-base surgery and surgical neuro-oncology at Northwestern University, Chicago.

Mark Your Calendars!
**Uncork the
Cure 2006**

Saturday, October 21

This premier wine event to benefit cancer research at the KU Cancer Center will be held at Milburn Golf and Country

Club. For information, call

913-588-4732 or visit

www.uncorkthecure.org.

PROSTATE CANCER PATIENTS BENEFIT FROM ALL OPTIONS

At The University of Kansas Hospital, a team of specialists provides prostate cancer patients with results for controlling cancer, incontinence and impotence that are among the best in the country.

In July, this multidisciplinary team will offer care through the new Midwest Prostate Center.

The center is staffed by J. Brantley Thrasher, MD, director, and Jeffrey Holzbeierlein, MD, both urological oncologists/surgeons; Eashwer Reddy, MD, a radiation oncologist; and Peter VanVeldhuizen, MD, a medical oncologist. We asked Dr. Thrasher about the center.

Prostate cancer is the second leading cause of death among men in the United States. What are the options for patients?

There are many. What's unique about our center is that we are the only place in Kansas and a multi-state area that can offer patients **every** treatment option for prostate cancer available in America today. That includes all surgery techniques for prostate removal. Dr. Reddy provides all radiation options, both internal (brachytherapy) and external, including intensity modulated radiation therapy (IMRT).

In addition, only the Midwest Prostate Center offers sural nerve grafting for men whose nerves cannot be spared during surgery. This approach has proven very effective in preserving erectile function and potency.

The physicians at the Midwest Prostate Center are (from left) Eashwer Reddy, MD, Peter VanVeldhuizen, MD, and director J. Brantley Thrasher, MD. Jeffrey Holzbeierlein, MD, is pictured on page 4.

How does a patient know which option is best?

Every patient has three specialists developing his treatment plan – a surgical oncologist, medical oncologist and radiation oncologist. We fit the approach to the patient, and quality of life is a major factor.

This is a huge benefit for patients, because our center has some of the best and most experienced physicians in the Midwest. We deal with prostate, bladder and kidney cancer every day.

In addition, Dr. Holzbeierlein and I both have fellowship training. There are very few fellowship-trained urologic oncologists in the state.

Why is a physician's fellowship training important for patients?

It means we completed extra specialty training in cancer after finishing our specialty training in urology. This advanced training gives us a distinct advantage in treating all forms of genitourinary cancer. [Dr. Thrasher's fellowship was at Duke University, and Dr. Holzbeierlein's was at Memorial Sloan-Kettering Cancer Center in New York.]

What are the newest treatments for men with prostate cancer?

Dr. Holzbeierlein and I have extensive training using the

daVinci® robotic surgical system for patients who are candidates. With proper use, this system enhances a surgeon's ability to perform extremely precise, nerve-sparing procedures. It eliminates more cancerous cells and reduces post-operative risks, such as incontinence and impotence.

For men who have benign prostatic hyperplasia – a non-cancerous enlargement of the prostate – we offer Greenlight laser treatment.

Plus, as part of an academic medical center, we can offer patients new chemotherapeutic drugs through clinical trials, which Dr. Van Veldhuizen directs. And we have an active research program.

What's in the future for patients with this disease?

We continue to develop less invasive surgical treatments, like the robotic and perineal approaches, which benefit patients with shorter hospital stays, less blood loss and fewer post-operative complications. Later this year, the center will expand its laparoscopic procedures.

And with more research on genetic and chemopreventive approaches, we'll find better methods for early detection and prevention of prostate cancer and disease.



News in Brief

Honors, Research, Service

Li Wang, PhD, received the 2006



“Liver Scholar Award” for research support from the American Liver Foundation and the American Association for the Study of Liver Diseases.

Kim Engelman, PhD, received an American Cancer Society Research Scholars Grant to develop a mammography services quality index for facilities that have high repeat mammography rates.

She also received a grant from the Susan G. Komen Foundation to assess whether the use of a mammography breast plate cushion will significantly decrease the level of discomfort experienced by African-American women during their screening mammography exam.

William Jewell, MD, chaired the



recent review of Skin Specialized Program of Research Excellence (SPORE) and participated in the review of Prostate SPORE. SPORE is funded by the National Cancer Institute.

Siddhartha Ganguly, MD, and



members of the hospital's **Blood and Marrow Transplant (BMT) Program** presented their research findings on the use of autologous stem cell transplantation in patients with acute myeloid leukemia at the American Society of Blood and Marrow Transplantation/Center for International Blood and Marrow Transplant Research Tandem BMT Conference. An abstract appeared in *Biology of*

Blood and Marrow Transplantation, 2006: 12:2 (Suppl): 1.

Dr. Ganguly and the BMT team also published their findings on autologous transplantation for follicular lymphoma research in *Annals of Hematology*, May 2005.

Barry Skikne, MD, and members



of the **Blood and Marrow Transplant (BMT) Program**

recently presented their findings on the use of autologous stem cell transplantation in the management of Hodgkin's lymphoma at the American Society of Blood and Marrow Transplantation/Center for International Blood and Marrow Transplant Research Tandem BMT Conference. An abstract appeared in *Biology of Blood and Marrow Transplantation*, 2006: 12:2 (Suppl): 1.

Jeffrey Holzbeierlein, MD, Brian Blagg, PhD, and colleagues published “HSP90 Inhibitors Identified from a Library of Novobiocin Analogues” in the *Journal of American Chemical Society*, (Communication); 2005; 127(37). Other KU contributors were Yu, X. M.; Shen, G.; Neckers, L.; Blake, H.; and Cronk, B.

Brian Petroff, DVM, PhD, and doctoral student **Alison Ting** presented their rat model of simultaneous breast and ovarian cancer at the American Association of Cancer Research (AACR) in April.

Bruce Kimler, PhD, also presented a poster session at AACR on one of the celicoxib prevention trials being conducted by the Breast Cancer Prevention Center.



Patient Joanne Burns of Ottawa, Kan., with Elizabeth Alex.

Daffodil Days

In March, NBC Action News anchor Elizabeth Alex presented fresh daffodils to cancer patients at The University of Kansas Hospital in celebration of Daffodil Days. For cancer survivors, these first flowers of spring represent the gift of life.

For others, they serve as a remembrance of loved ones lost and the continued hope for a cure. Alex's late husband, Brian Moran, received cancer treatment at the hospital.

How You Can Help

You can support patient care or cancer research in a number of ways. For information on giving opportunities and fundraising events, please contact:

Stephanie Grinage or
Michael Johnson
KU Cancer Center
913-588-5249
sgrinage@kuendowment.org or
mjohnson@kuendowment.org

Michael Spicer embodies the theatrical credo that the show must go on.

After having surgery for prostate cancer at The University of Kansas Hospital last year, he had no plans to appear on stage. He was focused on walking and recuperating as his surgeon, Jeffrey Holzbeierlein, MD, had instructed.

But his wife was directing *La Cage aux Folles* at the Salina Community Theater, where Spicer is executive director, and she still needed to cast a major part.

“She asked what I thought about doing the role. I said, ‘I just had surgery.’ She said, ‘It’s still a ways off.’ So two weeks later, when I had worked up to walking a couple of miles a day, I said I’d do it.”

Spicer played a drag performer in the play, which many know as the Nathan Lane role in the American film version of *The Birdcage*. And he played it to the hilt – complete with shaved legs and waxed eyebrows and chest.

“In the words of a *Chorus Line* song,” he said, “‘It’s what I did for love.’”

Spicer’s approach to his prostate cancer was equally single-minded. “In a situation like this, you try to take away the best of what the experience is going to be. You wish you didn’t have cancer, but since you do, you deal with it as a minor inconvenience, then move on with your life.”

Even more impressive, this was Spicer’s second round of surgery. Five years earlier, head and neck surgeon Terrance Tsue, MD, at The University of Kansas Hospital treated him for an ameloblastoma (a benign tumor) in his right maxillary sinus.



Michael Spicer with his wife, Vickee, and children, Maggie and Tristan.

“It’s what I did for love.”

After a specialist in another state told him he would have to lose his right eye, Spicer sought the opinion of Dr. Tsue, who was able to remove the tumor with a much less radical approach.

When Spicer was diagnosed with prostate cancer, recommendations from a friend in Salina and from Dr. Tsue led him to Dr. Holzbeierlein and the Midwest Prostate Center.

“I felt very comfortable with the way Dr. Holzbeierlein described the options to me. Because my ameloblastoma had been treated once before when I lived in California and recurred, I knew I wanted the option that would most completely clear the cancer. Plus, he was able to save both nerves, which was a key issue.”

Spicer also wanted the least invasive option so he could recover as quickly as possible. Now, one year out from surgery, the father of two



Spicer (right) as “ZaZa” in *La Cage aux Folles*.

has exceeded normal recovery standards.

“I’m still here – healthy, active and doing my job. I can look forward to seeing my kids graduate from high school and college and get married.”

And as a public figure in the Salina area – the Community Theater is the second largest in the state – Spicer said his experience with prostate cancer has had positive results.

“It’s amazing how many women who volunteer at the theater have insisted their husbands get tested. If you look for the silver lining in life, this will do.”

Save the Date! Treads & Threads September 8, 2006

The "racy" black-tie gala at Kansas Speedway benefits the Cancer Center at The University of Kansas Hospital. Country superstar LeAnn Rimes will be the headline entertainer.

This year's proceeds will purchase new technology for the Midwest Prostate Center, expand the Patient Resource Center and provide educational training for members of our cancer care team.

For event and ticket information, call 913-588-8888 or visit www.treadsandthreads.org.

Hematology/Oncology Nurses Honored



Among those congratulating the nursing honorees were (front row, from left): Dana Cunningham, RN, Angela Rueter, RN, Lori Torrillo, RN, Marci Bailey, RN, Tammy Peterman, RN, senior vice president and chief nurse executive, Irene Cumming, hospital president and chief executive officer. Back: Chris Ruder, RN, Stephen Williamson, MD, medical director, Cancer Center, Jeff Wright, executive director, Cancer Services, Kathy Ducey, RN, and Bob Page, senior vice president and chief operating officer.

Be Well!

You can learn more about preventing, treating and living with cancer through the wellness and prevention programs offered by The University of Kansas Hospital. To register, call 913-588-1227 or visit kumed.com.

Cancer patients know that nurses are the heart of health care, and each year two of our nurses are honored for providing outstanding care.

Lori Torrillo, RN, BSN, OCN, and Angela Rueter, RN, BSN, OCN, received the Award for Excellence in Hematology and Oncology Nursing in January. Torrillo works in The University of Kansas Hospital

outpatient Cancer Center, and Reuter works with inpatients on the hospital's Hematology/Oncology Unit 42.

The \$1,000 awards were established by the division of Hematology/Oncology, with funds generously contributed by the hospital's Cancer Center physicians, pharmacists and grateful patients. KU Endowment administers the fund.

The University of Kansas Cancer Center
3901 Rainbow Blvd.
Kansas City, KS 66160



NON-PROFIT ORG.
US POSTAGE
PAID
PERMIT NO. 1
KANSAS CITY, KS