Increasing the focus on kidney disease

Major grant heightens research center’s profile as one of tops in nation

The University of Kansas Medical Center has received a $5.4 million grant to find a cure and advance treatments for polycystic kidney disease (PKD), one of the most common life-threatening genetic diseases.

The grant is from the National Institute of Diabetes and Digestive and Kidney Diseases, part of the National Institutes of Health. The grant specifically was awarded to James Calvet, PhD, a professor in the Department of Biochemistry and Molecular Biology, and his colleagues at the Kidney Institute.

“It's a big help,” Calvet said. “It really provides us an opportunity to further develop our PKD expertise.”

At least 600,000 people in the U.S. suffer from PKD, a slow-progressing disease passed along within families. In PKD, clusters of noncancerous cysts develop within the kidneys. The cysts can grow large enough and in such number they cause kidney failure.

“This grant will further raise our profile as one of the top research medical centers in the country,” said Alan Yu, MB BChir, director of the Kidney Institute and the Division of Nephrology. “The award will cement kidney diseases as one of our most highly prized research programs on campus.”

The PKD program encompasses four research cores that will work together to target PKD research and therapies. The cores are led by Chris Ward, PhD (Gene Targeting Core); Xiaogang Li, PhD, and Ken Peterson, PhD (Epigenetics Core); Darren Wallace, PhD (Biomarkers Core); and Yu (Clinical Research Core).

A main focus of the research here is slowing proliferation of cyst cells in the kidney. The research already has led to the development of a promising drug awaiting FDA approval.

The medical center’s kidney research program dates to the 1960s. Its reputation came into its own in 1970 when Jared Grantham, MD, was named Nephrology director.

“Our medical center,” Yu said, “is arguably the birthplace of modern PKD research and has been widely recognized for major contributions to the field over the past 35 years.”

By the Numbers: Royals fan first aid

Congratulations to our Kansas City Royals! Not only did more fans head to Kauffman Stadium this season, but more of them also visited first-aid stations staffed by The University of Kansas Hospital, the team’s official healthcare provider.

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<tr>
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<th>2013</th>
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<th>2015</th>
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<tr>
<td>Fans treated</td>
<td>2,129</td>
<td>3,067</td>
<td>4,689</td>
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<td>Average number of fans treated per game</td>
<td>26</td>
<td>34</td>
<td>51</td>
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<thead>
<tr>
<th></th>
<th>2015 (regular season)</th>
<th>2015 (post-season)</th>
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<tr>
<td>Fans treated</td>
<td>69</td>
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To suggest a By the Numbers, email Advances@kumc.edu.

10-15 Staff and physicians working at The K per game

269 Consecutive games worked by medical technician David Smith, starting Sept. 2012
### Events

**Moving the spotlight** – It’s natural to focus on problems in life rather than on the positives. Why? The negative is what we wish would be different. Through meditation, writing, and group discussion, learn to focus on practicing a new way of thinking and feeling. The session is 2:30-4 p.m. Tuesdays, Nov. 10-Dec. 1, at Turning Point: The Center for Hope and Healing in Leawood. Call 913-574-0900 to register.

**Lung cancer education** – Learn the latest in advancements, hear stories of survival and connect with others who share your experience. The event, Shine a Light on Lung Cancer, is 5:30-7 p.m. Thursday, Nov. 12, at the Richard and Annette Bloch Cancer Care Pavilion at the Westwood Campus Atrium. Register at shinealightonlungcancer.org or call 913-588-1227.

**Enchanted Evening** – Marillac will host its annual “Enchanted Evening” supporting children and families facing mental illness and behavioral health challenges. The black-tie masquerade gala is 6 p.m. Friday, Nov. 13, at The Gallery at the Power & Light District. Go to marillac.org/enchanted-evening for details and ticket information. Marillac’s inpatient care program is part of The University of Kansas Hospital.

**O₂ Breathe** – An inaugural 5K run/walk benefits pulmonary hypertension treatment at The University of Kansas Hospital. The event, organized by a patient and his family, is 8-11 a.m. Saturday, Nov. 14, at English Landing Park in Parkville. For information, go to o2breathe.org and click on the Midwest Chapter, or email Lauren Donnelly at ldonnelly2@kumc.edu.

More events are at kumed.com/event-detail.

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### PROGRAM SPOTLIGHT

**Detecting recurrent prostate cancer**

Each year, 250,000 men learn they have prostate cancer. Initial therapy can lead to high chances for remission, yet for up to 40 percent of those men, the disease returns within five years.

It’s called recurrent prostate cancer, and physicians at The University of Kansas Hospital have developed a groundbreaking method for detecting it.

The method involves a PET scan with a radioactive compound called C-11 acetate. Compared with CT or PET scans using conventional compounds, the new procedure is three times more effective at pinpointing the cancer’s exact location in the patient’s lymph nodes, according to Reginald Dusing, MD, director of the hospital’s Division of Nuclear Medicine. This allows radiation therapists and surgeons to treat only cancerous sites.

Dusing started researching the compound in 2005. Two years later he initiated a clinical study of 20 men. When the sensitivity turned out to be so positive, he started taking clinical referrals in 2007.

Along with his post-doctorate fellow, Warner Peng, MD, Dusing worked to identify the ideal time for using the scan based on PSA levels from data collected from the first 250 patients. They found a single PSA test of more than 1.24 was just as effective as prior protocols requiring men to go through multiple PSA tests over lengthy periods of time.

The hospital has performed more than 450 of the C-11 acetate PET scans – routinely four a week – and plans to significantly increase the number in January. Our hospital is the only one currently using the method in large numbers since 2007, due in part to the complex FDA approval process to use C-11 acetate this way, Dusing said.

“This test is proving to be a quantum leap over the current standard imaging techniques – bone scanning, CT and even MRI in diagnosing recurrent prostate cancer metastasis,” he said. “The study once again shows that at The University of Kansas Hospital we’re not just applying the latest techniques, we’re developing them.”

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### EXPOSURE

**Driven to stop diabetes**

NASCAR driver Ryan Reed, who was 17 when diagnosed with Type I diabetes, visited The University of Kansas Hospital last month to share his inspiring story. Now 22, he told patients and staff how he hasn’t let the disease slow him down. And he found plenty of time to sign autographs and snap selfies, here with young fans Hunter and Emily Williams.
In the News
A recap of recent articles, TV segments and other media coverage of the region’s leading academic medical center

- Hot dogs, red meat cause cancer – The Kansas City Star, Oct. 26. After studying decades of data, the World Health Organization deemed processed meats carcinogenic and said red meat is “probably carcinogenic,” with links to prostate, pancreatic and colon cancers. The announcement isn’t surprising to Bethany Diggett, clinical oncology dietitian at The University of Kansas Hospital. “We’ve done a lot of research into red and processed meats’ links to cancer,” she said. She has given up processed meats and limits consumption of red meat to 4 to 6 ounces per week.

- Avoiding a repeat flu season? – KMBZ, Oct. 26. Last year the flu struck early and hard, but it’s a different story now, at least so far. “The flu this year hasn’t really hit us yet, and that’s encouraging,” said Lee Norman, MD, chief medical officer at The University of Kansas Hospital. “We never really know what kind of a flu year we’re going to have.” The best way to avoid it is to get the flu shot, he said.

- Higher tobacco age could boost cancer designation – The Kansas City Business Journal, Oct. 22. Healthy KC is urging area cities to raise the age to buy tobacco from 18 to 21. Doing so would support The University of Kansas Cancer Center’s push for a higher designation because the initiative illustrates the metro is progressive at preventing cancer. “We have to show that the designation has an impact on what we do in the community,” said Edward Ellerbeck, MD, MPH, chair of Preventive Medicine and Public Health at the University of Kansas Medical Center.

- Advances in stem cell treatment – Leaven News, Oct. 16. Stem cell research and treatments have gone from science fiction to science fact. “This is cutting-edge medicine – as cutting-edge as it gets – as represented by stem cell transplantation,” said Joseph McGuirk, DO, director of hematologic malignancies and cellular therapeutics at The University of Kansas Cancer Center. Stem cells can renew themselves and change into different types of specialized cells. He noted most of the progress in treating blood cancers with stem cells has occurred in the past 20 years.

News Briefs

Royals, hospital continue winning streak
The Kansas City Royals and The University of Kansas Hospital have extended their partnership, renewing the hospital’s role as the team’s official healthcare provider. The official partnership began in 2011.

Under the five-year agreement, the hospital will continue to provide medical care to the team and fans at Kauffman Stadium.

Under the five-year agreement, the hospital’s Sports Medicine & Performance Center will continue to provide medical care to the team. The specialists will provide comprehensive healthcare, from preseason screening and in-season orthopedic and medical services to postseason treatment and recovery.

The hospital and the Royals will maintain Health Awareness Day initiatives at Kauffman Stadium and provide first aid for fans at home games, along with other events scheduled at Kauffman Stadium.

“We couldn’t be happier with this partnership,” said Dayton Moore, Royals general manager and senior vice president of baseball operations. “We’ve experienced success on and off the field as this relationship has grown over the years – due in no small part to The University of Kansas Hospital’s commitment to our players and the rest of the Royals family.”

New comfort for young cancer patients
Pediatric oncology patients at The University of Kansas Cancer Center’s Westwood Campus now have a treatment space to call their own.

At about 1,500-square-feet, the two-room area is cozy and perfect for young patients who must receive the four-hour chemotherapy treatments, said Treatment Nurse Manager Melissa Reeves, RN. The area includes toys, a crib, gaming station and TVs.

A door separates the new rooms from the adult treatment area, giving pediatric patients and their families the solitude and comfort they need.

“It feels like it’s a separate unit,” Reeves said. “And the families feel calmer because they know they’re not disturbing the adult patients.”

Three pediatric oncology nurses are dedicated to the area, in addition to Reeves. About 20 to 30 children – three or four a day – receive chemotherapy at the Westwood Campus, compared with 120 adults per day.

A hero’s greeting
The Chiefs’ Travis “Super Shadow Buddy” Kelce on Oct. 27 brought smiles, Shadow Buddies and treats to pediatric patients and families, including 23-month-old Gideon Grabill and his mom, Twila. The team’s starting tight end, Kelce has his own Shadow Buddy sporting Chiefs shorts and a T-shirt featuring his No. 87 and signature.
New dean for school – Abiodun Akinwuntan, PhD, MPH, has been named dean of the University of Kansas School of Health Professions effective Jan. 18. Health Professions is one of three schools at the University of Kansas Medical Center, providing education and research in a wide range of healthcare fields.

“Dr. Akinwuntan brings with him a rich history of international experience and training,” said Douglas Girod, MD, the medical center’s executive vice chancellor. “He has experienced success as a highly collaborative researcher within various departments and schools, and we look forward to benefitting from his unique skill set at the medical center.”

Akinwuntan currently serves as associate dean for research in the College of Allied Health Sciences and professor of physical therapy, ophthalmology and neurology at Georgia Regents University in Augusta.

A recipient of the 2013-14 U.S. Fulbright Scholarship Award, he previously served as a senior lecturer at the University of East London and a doctoral research assistant at Katholieke Universiteit Leuven in Belgium.

“I consider it a privilege to become a part of the legacy of the School of Health Professions,” said Akinwuntan. “My interactions with the faculty and staff of the school during the interview process convinced me I will be working with a vibrant and successful team.”

Top Doctors – Two physicians from our academic medical center are named to Ingram’s latest “Top Doctors” list.

Gary Doolittle, MD, told the magazine how he was inspired to become a physician – growing up in a family of six boys and watching the family physician work his magic. Now, as oncologist at The University of Kansas Cancer Center, he’s researching and treating cancer, particularly malignant melanoma.

He points to immunotherapy, which re-engineers a patient’s cells to seek out and kill cancer cells, as one of his field’s most promising developments: “Some of the new agents are really remarkable in their affinity for melanoma, lung cancer, and bladder cancer – diseases traditionally not easy to treat but ones that are responding to these immunotherapy drugs.”

Tomas Griebling, MD, MPH, decided on a career in urology after helping a woman in her early 90s who suffered from incontinence. After a minimally invasive procedure, the woman took Amtrak to see her kids in California, something she never would have considered before.

“Seeing that type of impact on people’s lives was a big factor for me,” said Griebling, who left Iowa for the University of Kansas Medical Center because it enabled him to work in both urology and geriatric medicine. “Urinary incontinence is one of the most common diagnoses I see,” he added. “If we can make an improvement for people, we can really change their lives.”