The University of Kansas School of Medicine has had some extraordinary years in our 106-year history. In 1962, the School began teaching all four years of medical school at its Kansas City campus. In 1971, we extended the School’s reach in Kansas, establishing a community-based clinical campus in Wichita. In 2007, the School opened the $52 million Robert E. Hemenway Life Sciences Innovation Center, attracting some of the nation’s most renowned researchers and millions of dollars in grant funding.

These are all significant milestones, and the School has seen countless more over the years. But in the School’s storied history, it would be difficult to find a year more filled with major accomplishments than 2011. It truly was a defining year for our institution.

While there are scores of successes we could point to in 2011, the School of Medicine’s year was notable for four achievements in particular:

• Translating research into more cures and therapies with the awarding of a Clinical and Translational Science Award (CTSA) from the National Institutes of Health, among other research achievements

• Providing patient care in a state-of-the-art environment with the opening of our new Medical Office Building in Kansas City

In the pages that follow, you will read about these remarkable accomplishments and the extraordinary people who made them happen. As a result of their efforts, 2011 was a defining year for the KU School of Medicine.

Barbara Atkinson, MD
EXECUTIVE VICE CHANCELLOR, UNIVERSITY OF KANSAS MEDICAL CENTER
EXECUTIVE DEAN, UNIVERSITY OF KANSAS SCHOOL OF MEDICINE

H. David Wilson, MD
DEAN, UNIVERSITY OF KANSAS SCHOOL OF MEDICINE–WICHITA
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014  Providing Patient Care in a State-of-the-Art Environment

018  By the Numbers

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As the need for physicians in rural and underserved areas continues to grow, the School of Medicine in 2011 began educating even more doctors for Kansas.
In 2011, the School of Medicine made national headlines for its innovative new approach to training doctors for rural practice – an approach that could define how other states deal with their growing rural physician shortages.

Kansas, like so many other states across the country, is striving to train enough health care providers, particularly for rural and underserved populations. While the School of Medicine is acknowledged as a national leader in training rural and primary care physicians, it has still been a challenge to educate and help place enough doctors who are interested in practicing outside larger cities.

In an effort to provide more doctors for rural Kansas, the School of Medicine in August opened a new campus in Salina and expanded its Wichita campus medical education program to a full four years. The expansion increased the number of first-year KU medical students from 175 to 211 in 2012.

With just eight students in each class, the Salina campus is thought to be the smallest four-year medical education site in the nation. While the instruction in Salina is more intimate, the training and curriculum are identical on all campuses.

“The Salina campus just makes sense, and it’s great that it’s been put into practice. From a rural policy perspective, this is big news.”

— ALAN MORGAN
PRESIDENT OF THE NATIONAL RURAL HEALTH ASSOCIATION
THE NEW YORK TIMES
“SMALL-TOWN DOCTORS MADE IN A SMALL KANSAS TOWN,” JULY 23, 2011
diagnosing and recommending treatment to patients at the KU family medicine clinic. The goal is to teach students to work in health care teams while they are still in school, so that the commitment to interprofessionalism will carry over to their clinical practices.

Options such as the interprofessional clinic and a modern medical education curriculum are part of the reason the School of Medicine is on the rise. In fact, in 2011, U.S. News & World Report reported, in a first survey of this kind, that the KU School of Medicine was the nation’s most popular medical school. The ranking is based on the percentage of admitted students who opt to enroll in the program. At the KU School of Medicine, 176 – or 82.2 percent – of the 214 accepted students chose to attend the school in the academic year beginning in 2010.

More evidence of the School of Medicine’s strength: an overwhelming stamp of approval from the Accreditation Council for Graduate Medical Education (ACGME) after the school’s five-year accreditation review. The nationally recognized accrediting authority notified the school of its compliance with standards, with no citations at all, which is rare in the ACGME review process.

The hope is that by going to medical school in Salina, a small city of 50,000 in the center of the state, students will remain personally and professionally rooted in a rural environment. School of Medicine leaders are optimistic that when the Salina and Wichita students graduate, they will be more likely to leave medical school with a deep commitment to practicing in Kansas, and in particular, in rural and underserved areas.

While the Salina and Wichita expansions generated a tremendous amount of interest, other developments also reflected the School of Medicine’s expanding excellence.

Many academic health centers are beginning to explore how students and patients could benefit from a more cohesive approach. In the fall of 2011, KU Medical Center launched an interprofessional student clinic on the Kansas City campus. Several times a week, third-year medical students, senior nursing students, sixth-year pharmacy students and KU law students work together as a team, with faculty supervision, diagnosing and recommending treatment to patients at the KU family medicine clinic. The goal is to teach students to work in health care teams while they are still in school, so that the commitment to interprofessionalism will carry over to their clinical practices.

Options such as the interprofessional clinic and a modern medical education curriculum are part of the reason the School of Medicine is on the rise. In fact, in 2011, U.S. News & World Report reported, in a first survey of this kind, that the KU School of Medicine was the nation’s most popular medical school. The ranking is based on the percentage of admitted students who opt to enroll in the program. At the KU School of Medicine, 176 – or 82.2 percent – of the 214 accepted students chose to attend the school in the academic year beginning in 2010.
BUILDING A WORLD-CLASS CANCER CENTER

This was a defining year for The University of Kansas Cancer Center, dedicated to advancing research, prevention and treatment of cancer. The cancer center’s year culminated in applying for National Cancer Institute designation.
The University of Kansas Medical Center has been working to eliminate the scourge of cancer for more than four decades. Since 2002, it has been the medical center’s goal to build a world-class cancer center that was worthy of applying for National Cancer Institute (NCI) designation. NCI-designated Cancer Centers are renowned for their scientific excellence and are a major resource for cancer discovery, prevention and treatment, while bringing significant economic development to their regions. After a decade of relentless effort, KU Medical Center and The University of Kansas Cancer Center applied for NCI designation in September 2011.

Even without applying for NCI designation, 2011 would have been a defining year for The University of Kansas Cancer Center.

In June, The University of Kansas Cancer Center and the Kansas City Cancer Center merged to create the region’s premier outpatient cancer care organization. More than 50 medical and radiation oncologists are now working in 12 locations throughout the greater Kansas City area and are conducting more than 300 clinical trials, including 35 therapeutic trials.

Over the past five years, the cancer center has recruited some of the country’s top cancer researchers. In 2011, two more nationally renowned cancer scientists joined the cancer center team. Raymond Perez, MD, a leading expert in early phase clinical trials, was recruited from Dartmouth’s NCI-designated Norris Cotton Cancer Center to direct the cancer center’s Phase 1 clinical trials program. Danny Welch, PhD, is now serving as the cancer center’s associate director of basic science and is leading the School of Medicine’s new Department of Cancer Biology. Welch, who is a top researcher on tumor progression, came to KU from the University of Alabama.

Among the cancer center’s research highlights was a new partnership with the National Institutes of Health and the Leukemia & Lymphoma Society to form The Learning Collaborative, an innovative model aimed at discovering and developing new drug therapies for rare blood cancers. The agreement was the first of its kind executed between the NIH and nonprofit partners.

Major funding attracted by the cancer center continued the momentum in building and sustaining a world-class cancer program:
• A $500,000 capstone gift from the Topeka-based Capitol Federal Foundation to KU Endowment fulfilled The University of Kansas Cancer Center’s goal of raising $61 million before applying for designation from the National Cancer Institute on Sept. 25, 2011.

• Don and Adele Hall, of Mission Hills, pledged $4.5 million for cancer prevention research, and $500,000 for KU’s Institute for Advancing Medical Innovation to boost the development of more effective drugs and treatments for pediatric cancer patients.

• The Kansas Bioscience Authority has now committed more than $50 million to the cancer center’s NCI designation effort. The funds have allowed KU to invest in basic research, clinical trials, faculty recruitment and major infrastructure improvements that have resulted in new state-of-the-art laboratories. KU has matched the KBA investment, bringing the combined total to more than $100 million.

• A $1 million gift from the Sprint Foundation created a new professorship in blood-related cancers at the cancer center. The hematology/oncology professor will lead a team of physician scientists in their cancer research and patient care.

This is a tough process and it is a difficult one, but you can’t even get into the game unless you get built to a certain level. And we’re getting into the game.

SAM BROWNBACK
KANSAS GOVERNOR
ON SEPT. 20, 2011, ON THE UNIVERSITY OF KANSAS CANCER CENTER’S APPLICATION FOR NCI DESIGNATION
The School of Medicine in 2011 solidified its growing reputation as a thriving center of translational research.
2011 was a defining year for the School of Medicine when it comes to translational research – which transforms laboratory discoveries into treatments and cures. In June, KU Medical Center received a $20 million Clinical and Translational Science Award (CTSA) from the National Institutes of Health. The five-year grant puts the medical center among an elite, 60-member group of universities collaborating on clinical and translational research. Launched by the NIH in 2006, the CTSA program goals are to speed laboratory discoveries into treatments for patients, to work with communities in clinical research efforts, and to train a new generation of researchers to bring cures and treatments to patients faster. With the grant, KU Medical Center consolidated its Heartland Institute for Clinical and Translational Research into a program called Frontiers, which will be the center of clinical and translational research for Kansas and the greater Kansas City region.

Scientists at KU have been doing translational research for years. For example, clinical trials are now being held for an ovarian cancer drug that KU researchers have reformulated so that it can be delivered in a patient’s abdomen instead of intravenously, which caused negative side effects. Other scientists have discovered that DHA, the omega-3 fatty acid common in fish oil, may help infants develop better attention skills. In part, as a result of this research, DHA is now added to many infant formulas.

The CTSA grant was just one of several major translational research gains in 2011. In May, KU Medical Center joined the NIH and the Leukemia & Lymphoma Society in a novel drug development partnership to accelerate the development of potential clinical therapies for rare blood cancers (see “Building a World-Class Cancer Center”). The Cooperative Research and Development Agreement’s (CRADA) first project focuses on further development of auranofin, an existing small molecule drug used to treat arthritis. Auranofin will be evaluated as a treatment for relapsed chronic lymphocytic leukemia (CLL) – one of the four major types of leukemia and one that typically affects older people. The goal is to accelerate the development of this drug and complete preclinical through clinical trial studies within two years.

KU Medical Center was also designated as an Alzheimer’s Disease Center by the NIH’s National Institute on Aging (NIA). The award came with a five-year, $6 million
grant and puts the medical center among an elite group of 29 institutions with the Alzheimer’s Disease Center designation. One of the KU Alzheimer’s Disease Center’s strengths is its pioneering work on the link between Alzheimer’s and brain energy metabolism, and specifically how mitochondria, the parts of cells that produce much of their energy, are defective in patients with Alzheimer’s disease. Scientists at KU Medical Center have also received international attention for research on how various lifestyle factors, including fitness and physical activity, affect normal aging and Alzheimer’s disease.

Another boost to the School of Medicine’s translational research efforts was the opening of the Bioscience & Technology Business Center on the KU Medical Center campus in September. The newly remodeled $6 million space is a business incubator specifically designed to spur entrepreneurship and commercialization of KU research. The facility has 30,000 square feet of office, lab and common meeting space, and was built on the KUMC campus to lure companies interested in collaborating with KU researchers. Three biotech companies have already set up shop in Bioscience & Technology Business Center space — Aptakon, OsteoGeneX and Orbis Biosciences.

The significance of the Frontiers program is that it will bring together all of the different area institutions that are involved in patient-oriented research.

MICHAEL ARTMAN, MD
PEDIATRICIAN-IN-CHIEF AT CHILDREN’S MERCY AND CHAIRMAN OF THE DEPARTMENT OF PEDIATRICS AT THE UNIVERSITY OF MISSOURI-KANSAS CITY SCHOOL OF MEDICINE, ONE OF KU MEDICAL CENTER’S FRONTIERS PARTNERS

Lauren S. Aaronson, PhD, RN, and Richard Barohn, MD, are the principal investigators for KU Medical Center’s Clinical and Translational Science Award (CTSA) grant.

Jeffrey Burns, MD, and Russell Swerdlow, MD, are co-directors of the University of Kansas Alzheimer’s Disease Center.
PROVIDING PATIENT CARE IN A STATE-OF-THE-ART ENVIRONMENT

A new Medical Office Building, incorporating the best ideas in modern health care, opened in 2011.
Over the years, the KU School of Medicine has earned a reputation as an outstanding provider of compassionate and innovative patient care. The last decade has been defined by the phenomenal growth and national recognition for the clinical excellence of the School of Medicine and The University of Kansas Hospital. Most recently, the 2011-12 U.S. News & World Report Best Hospitals list ranked KU Hospital, staffed with KU School of Medicine physicians, among the top 50 in six specialties – pulmonology, ear, nose and throat, gastroenterology, nephrology, cardiology and heart surgery, and cancer.

While the quality of patient care was the best in our region, many physician clinics were housed throughout the campus, some of them in spaces that were former academic offices or hospital units not built for state-of-the-art clinic operations.

All that changed when our new Medical Office Building opened in 2011.

Patients visiting KU Medical Center clinics for office visits and tests now receive their care in a building designed specifically for their needs. At 209,000 square feet and a cost of $85 million, the building has enhanced the patient experience, making it easier to access clinics and services. Parking is now easy for patients, thanks to the 600-car parking garage attached by a skywalk to the new facility.

The Medical Office Building houses 18 clinical departments, each with a set of subspecialities. There are 220 exam rooms, all equipped to handle electronic medical records. In addition to physician clinics, the building contains laboratory and radiology services.

For example, if a patient is experiencing a rotator cuff problem, he can be examined by one of the School of Medicine’s top-flight orthopedists in the new orthopedic wing on the first floor of the Medical Office Building. Because the department now has 16 exam rooms instead of the six it used to have, that patient won’t have to wait as long. If the doctor calls for an x-ray or MRI of the patient’s shoulder, instead of making an appointment for a later date – in another building – the patient can simply walk down the hall and have the x-ray or MRI immediately. And if the patient needs physical therapy for his shoulder ailment, KU’s physical therapy department is now just a couple of doors down the hall.
The new facility also provides an improved environment for teaching students and residents. By combining the clinics into one operation, it offers a more collaborative interaction among various clinical disciplines, which is the foundation of academic medicine. The Medical Office Building is the home of the new interprofessional student clinic, where medical students, senior nursing students, sixth-year pharmacy students and KU law students work together as a team, with faculty supervision, diagnosing and recommending treatment to patients at the KU family medicine clinic.

The University of Kansas Hospital, which developed the building, designed the project to meet Leadership in Energy and Environmental Design (LEED) “Silver” certification. LEED certification provides independent, third-party verification that a building was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. The Medical Office Building was the first structure on The University of Kansas Hospital’s campus to meet U.S. Green Building Council LEED Certification guidelines.

“\'I think the flow of the clinic is incredible — just having that consistency on each floor is going to be very helpful instead of navigating through the big maze on campus.\""

DANIELLE HARRISON
HUMAN RESOURCES ADMINISTRATOR FOR UNIVERSITY OF KANSAS PHYSICIANS
# BY THE NUMBERS

## NIH RANKINGS: PUBLIC MEDICAL SCHOOLS

### Fifth
- **ANATOMY AND CELL BIOLOGY**
- **15th**

### Sixth
- **FAMILY MEDICINE**
- **18th**

### Seventh
- **PREVENTATIVE MEDICINE AND PUBLIC HEALTH**
- **20th**

### Eighth
- **MOLECULAR AND INTEGRATIVE PHYSIOLOGY**
- **23rd**

### Ninth
- **ORTHOPEDICS**
- **25th**

### Tenth
- **OTOLARYNGOLOGY**
- **NEUROLOGY**

## REVENUE SOURCES: FY10-FY12

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**NOTES**

Ten departments in the School of Medicine - five clinical and five basic science - made the top 25 in National Institutes of Health funding in 2011.
KU School of Medicine Residents and Fellows: Where They Come From

2011 Arrivals

- **24%** KU School of Medicine Graduates
- **46%** of 50 Other Schools
- **30%** International Medical Graduates

KU School of Medicine-Wichita Residents and Fellows: Where They Come From

2011 Arrivals

- **26%** KU School of Medicine Graduates
- **51%** of 27 Other Schools
- **23%** International Medical Graduates
Even before the School of Medicine’s expansions in Salina and Wichita, KU was educating more doctors than most public and private medical schools in the country. According to the Association of American Medical Colleges, the average medical school enrollment in 2010 was 603. The KU School of Medicine had a total enrollment of 740 that year.

The large number of students the School of Medicine is training is particularly impressive when you compare it to states that have just one medical school, as in Kansas.
ABOUT THE SCHOOL

THE UNIVERSITY OF KANSAS SCHOOL OF MEDICINE

The School of Medicine is part of the University of Kansas Medical Center in Kansas City, Kan. It shares the campus with the Schools of Nursing and Health Professions, the Office of Graduate Studies, the Research Institute, several other research and clinical centers and The University of Kansas Hospital, the region’s leading academic hospital.

The School of Medicine–Wichita campus is located about 200 miles southwest of the Kansas City campus. Beginning in the fall of 2011, the Wichita school expanded its outstanding medical education program to a full four-year program.

The School of Medicine also opened a four-year medical education program in Salina in the fall of 2011. The Salina program admits students from rural areas who are more likely to practice in rural and underserved parts of the state.

OUR VISION

The University of Kansas School of Medicine will work with its partners to become the premier academic medical center in the region known for its excellent education, innovative scientific discovery, outstanding clinical programs and dedication to community service. It will be known as the place where everyone wants to come to learn, to teach, to conduct research and to receive his or her health care.

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