

# Creating cures and prosperity

How the KU Cancer Center creates healthy communities and drives the Kansas economy



The University of Kansas Cancer Center is working toward a world without cancer. In addition to conducting research and providing outstanding patient care for Kansans, the cancer center creates jobs and prosperity for our state. Few other initiatives have as much potential to simultaneously drive public health and economic development benefits.

## Growing the economy

The cancer center's pursuit of National Cancer Institute designation continues to produce huge economic benefits for Kansas. Since 2007, NCI investments have created \$930 million in economic activity and 1,830 jobs. Through 2016, those figures grow to \$2.02 billion and 2,559 jobs.

The cancer center's economic benefits extend statewide, thanks to the center's role in the Midwest Cancer Alliance, a network of 20 hospitals and healthcare organizations throughout Kansas and western Missouri.

## Leveraging state investments

The State of Kansas and the Legislature have been key supporters of the pursuit of NCI designation since 2007. The state investment of \$5 million annually was the "first money in" and enabled the cancer center to recruit and support leaders like Dr. Roy Jensen, build the Midwest Cancer Alliance and support the cancer clinical trials office.

Since 2007, the cancer center has leveraged the state investment into \$475 million in total contributions — a 13-to-1 return on the state investment.

## Securing external research funds

One reason the cancer center is a great return on investment for Kansas is because it attracts external research funds, often from federal agencies. In 2012, the center's NCI grant funding grew 34 percent to \$13.9 million, with total extramural funding reaching \$56 million.

## Turning discoveries into startup companies

Cancer center researchers have created the following five companies:

**Cancer Survivorship Training Inc.** provides online and mobile resources and education to health care professionals to help them better treat and advise cancer survivors. The company was launched by KU researcher Jennifer Klemp. Visit [www.cancersurvivorshiptraining.com](http://www.cancersurvivorshiptraining.com).

# \$2.02B

Economic benefit from 2007-2016, including \$930M so far

# 2,559

New jobs from 2007-2016, including 1,830 so far

# 13-to-1

Investment leveraged per dollar from the Kansas Legislature and Department of Commerce

# \$56M

Extramural research funding for the cancer center in 2012

# 5

Startup companies created by cancer center-affiliated researchers

# 20

Hospitals and organizations in the Midwest Cancer Alliance

# 27

The cancer center's U.S. News & World Report ranking, up 10 places from the previous year

**CritiTech** makes nanoparticles of existing drugs to enhance their delivery and effectiveness. The company has a cancer drug called Nanotax in Phase I human clinical trials. KU researchers Val Stella, Bala Subramaniam and Katherine Roby are actively engaged in the company. Visit [www.crititech.com](http://www.crititech.com).

**CyDex Pharmaceuticals** is best known for Captisol, a compound that binds with pharmaceutical products to improve stability and solubility. CyDex was acquired by Ligand Pharmaceuticals in 2011, resulting in a new Ligand office in Lawrence. CyDex was founded by KU researcher Val Stella. Visit [www.ligand.com/cydex](http://www.ligand.com/cydex).

**Savara Pharmaceuticals** is developing pulmonary drugs to treat serious and life-threatening conditions. In 2012, the company announced that it had raised \$8.6 million in the first closing of a Series B financing round. Savara was based off technologies developed by KU's Cory Berkland. Visit <http://savarapharma.com>.

**HylaPharm** is producing technology that delivers chemotherapy drugs directly to cancer cells in tumors and nearby lymph nodes while limiting drug exposure in kidneys, nerves and auditory organs. Limiting exposure in these surrounding areas enables targeted treatments with fewer side effects. Visit [www.hylapharm.com](http://www.hylapharm.com).

Overall, there are 24 startup companies created from KU research, many of which are connected to the cancer center through the KU School of Pharmacy and KU Medical Center.

## Providing patient care, access to clinical trials

More than economic benefits, NCI designation for the cancer center means Kansans don't have to travel out of state for advanced care or clinical trials. Put simply — it means life-changing care, close to home.

In the past year, the cancer center grew its clinical trials portfolio by 40 percent. Of those trials, the number of new trials sponsored by pharmaceutical companies increased 230 percent. Last year, the cancer center enrolled 422 patients in clinical trials, an increase of 80 percent from 2012 and 494 percent from 2006.

Meanwhile, the cancer center had 247,611 outpatient visits for the year ending June 2013, an increase of 256 percent over the previous two years.

## What comes next?

Kansans deserve advanced care, close to home. That's why the cancer center achieving National Cancer Institute designation in 2012 was such an important milestone. The quest for this designation took nearly a decade and required unprecedented support from donors, policymakers, businesses and communities.

Now we must focus on our ultimate goal: achieving Comprehensive Cancer Center status, which would produce additional economic benefits and healthcare access for Kansas. Achieving this highest level of designation requires additional depth of research in three areas: basic laboratory, clinical and prevention, control and population-based research. Designated centers must also conduct substantial interdisciplinary research that bridges these areas while demonstrating effectiveness in serving the region and the broader population. In other words, **our research efforts must be wider, deeper and larger**. State support is essential to these efforts.

**40%**

Increase in **clinical trials** in our portfolio from 2012 to 2013

**230%**

Increase in new clinical trials sponsored by pharmaceutical companies from 2012 to 2013