Date

# MINUTES OF THE HOUSE APPROPRIATIONS COMMITTEE

The meeting was called to order by Chairman Melvin Neufeld at 9:00 A.M. on March 2, 2006 in Room 514-S of the Capitol.

All members were present except:

Representative Jerry Henry- excused Representative Harold Lane- excused

# Committee staff present:

Alan Conroy, Legislative Research Department
J. G. Scott, Legislative Research Department
Becky Krahl, Legislative Research Department
Matt Spurgin, Legislative Research Department
Debra Hollon, Legislative Research Department
Carolyn Rampey, Legislative Research Department
Jim Wilson, Revisor of Statutes
Mike Corrigan, Revisor of Statutes
Nikki Feuerborn, Administrative Assistant
Shirley Jepson, Committee Secretary

Conferees appearing before the committee:

Dr. Roy Jensen, Director, University of Kansas Cancer Center

# Others attending:

See attached list.

Attachment 1

Budget Committee report on State Department of Education

Attachment 2

Testimony and Information presented by Dr. Roy Jensen, Director,

University of Kansas Cancer Center

Representative Hutchins, Chair of the Education Budget Committee, presented the Budget Committee report on the Governor's budget recommendation for the State Department of Education for FY 2006 and moved for the adoption of the Budget Committee recommendation for FY 2006 (Attachment 1). The motion was seconded by Representative McLeland.

The Committee voiced concern with Item No. 3 because the project was over the \$250,000 limit set for review by the Joint Committee on Information Technology (JCIT). The Committee felt that JCIT has not met to consider a recommendation on the project and has the responsibility for coordination of information technology throughout the state agencies. The Budget Committee indicated that the Enterprise Data Warehouse project is a three-year project and will have a total cost of \$2.3 million.

Representative Gatewood moved to delete the funding in Item No. 3 and defer the issue to Omnibus. The motion was seconded by Representative Sharp. Motion failed.

Representative Gatewood moved to incorporate Item No. 3 into a proviso stating that no expenditures can be made for the database without first advising and consulting with the Joint Committee on Information Technology about the Database project. The motion was seconded by Representative Feuerborn. Motion withdrawn with approval of the second.

With regard to the proviso, Jim Wilson, Office of Revisor of Statutes, advised the Committee that the State Finance Council is the only committee or other body composed primarily of members of the legislature and the Governor that the Kansas Supreme Court has approved to be delegated final approval authority over such executive functions; further indicating that issue, under court and attorney general opinions, is that the proposed proviso would grant authority in violation of the separation of powers doctrine under the Kansas Constitution.

Representative Gatewood moved to add language to Item No. 3 of the Budget Committee report on the Department of Education for FY 2006 to indicate that JCIT shall review any expenditure for

# **CONTINUATION SHEET**

MINUTES OF THE House Appropriations Committee at 9:00 A.M. on March 2, 2006 in Room 514-S of the Capitol.

information technology over \$250,000 prior to the expenditure. The motion was seconded by Representative Feuerborn. Motion carried on a 9-8 vote.

Representative Hutchins moved to adopt the Budget Committee report on the State Department of Education for FY 2006 as amended. The motion was seconded by Representative McLeland. Motion carried.

Representative Hutchins, Chair of the Education Budget Committee, presented the Budget Committee report on the Governor's budget recommendation for the State Department of Education for FY 2007 and moved for the adoption of the Budget Committee recommendation for FY 2007 (Attachment 1). The motion was seconded by Representative McLeland.

Representative Landwehr moved to delete Item No. 7 and offer a suggestion that the agency secure funding from their member associations. The motion was seconded by Representative Bethell. Motion carried.

Representative McLeland moved to correct language in Item No. 6 removing "second year" and inserting "completion of the first year". The motion was seconded by Representative Hutchins. Motion carried on a 10-7 vote.

Representative Gatewood moved to add language to Item No. 6 of the Budget Committee report on the State Department of Education for FY 2007 to indicate that JCIT shall review any expenditure for information technology over \$250,000 prior to the expenditure. The motion was seconded by Representative Feuerborn. Motion carried.

Representative Gatewood moved to delete Item No. 5 and insert language to include a \$250,000 line item for school district accountability studies based on the prior year's expenditure. The motion was seconded by Representative Sharp. Motion failed.

Representative Sawyer moved to strike Item No. 4 and return to the Governor's recommendation. The motion was seconded by Representative Feuerborn. Motion failed on a 5-12 vote.

Representative Hutchins moved to strike the word "require" in Item No. 8 and insert the word "recommend". The motion was seconded by Representative Huy. Motion carried.

Representative Weber moved to add language in the Budget Committee report for the State Department of Education for FY 2007 to recommend the addition of \$300,000 to be used to provide training for local elected school board members to promote leadership, technology and cooperation across district lines. The motion was seconded by Representative Powell. Motion failed.

Representative Hutchins moved to adopt the Budget Committee report on the State Department of Education for FY 2007 as amended. The motion was seconded by Representative McLeland. Motion carried.

Chairman Neufeld recognized Dr. Roy Jensen who serves as Director of the University of Kansas Cancer Center and the Kansas Masonic Cancer Research Institute at the University of Kansas. Dr. Jensen presented an overview of the proposed University of Kansas Cancer Center (<u>Attachment 2</u>). Dr. Jensen stated that the cancer center is designed to serve all Kansans through a partnership with health care providers across the state to promote better health.

Dr. Jensen indicated that to receive National Cancer Institute (NCI) designation, there is a need for significant additional resources. The Governor's budget recommendations for FY 2007 includes a \$5 million appropriation for the Kansas University Cancer Center and is a critical element. Dr. Jensen stated that it is anticipated that this \$5 million funding will be an ongoing appropriation and is necessary in order to recruit top scientists to the Center. In addition the Cancer Center will aggressively seek support from federal government sources and investments from private donors. Dr. Jensen stated that accreditation by the National Cancer Institute will cost approximately \$45 - \$50 million and it is proposed that the application will be submitted in 2009. Dr. Jensen noted that

## CONTINUATION SHEET

MINUTES OF THE House Appropriations Committee at 9:00 A.M. on March 2, 2006 in Room 514-S of the Capitol.

there is a need for \$30 million in order to attract NCI funding; however, the \$5 million requested from the State cannot be counted as a part of this funding. The \$5 million from the State does demonstrate to NCI that the State is committed to the program.

Dr. Jensen felt that the Cancer Center will be valuable across the state in working to formulate an alliance to access best health care; promote health fairs to provide cancer education; and provide programs to insure local physicians have the benefits of research. Research at the Center will look at the geographic sections of the State and elements effecting the health of those residents.

Chairman Neufeld thanked Dr. Jensen for his testimony.

The meeting was adjourned at 11:00 a.m. The next meeting of the Committee will be held at 9:00 a.m. on March 3, 2006.

Melvin Neufeld, Chairman

# HOUSE APPROPRIATIONS COMMITTEE

March 2, 2006 9:00 a.m.

NAME	REPRESENTING
Bred Smoot	Ks Govtal Consulting
Mancy Lindberg	Ks Masonie Foundation
Dong Bowman	LCECOS
Courtney your	Rep. Lane
Paterry	DISC
Malle Salle	DIS(
Denie Moore	DISC
Rouhitelly	Dept of Education
Janet NOFF	Sext & Health & Enc.
Patrice OHara	Dept. of Heathand Environment
Catherine Odson	The University Daily Kansan
MARK BORANGEL	CAPTIOL STRATEGIOS
Jeremy Van Haselen	Kansas City Cancer Center
Kar Seeber	Sunhast From
Sandy Braden	GBBA
PAILIPA HURLEY	PAT, HURLEY & Co.
SUE JETERSON	1C-State
DICK CAVIER	Clubert Assoc.
Spit Linivo	16-State
Kari Bruffett	4. of Kansos Hospital Authority
BehOnnes	Halfler Government Delation.
Sara Turpmi	los Henry

# FY 2006 and FY 2007

# **EDUCATION BUDGET COMMITTEE**

# State Department of Education

Becky Hutchins Representative Becky Hutchins, Chair
Representative Bill Feuerborn
Lan Gordon
Representative Lana Gordon
Representative Bob Grant
Sun Duebut
Representative Steve Huebert
Bonnie He
Representative Bonnie Huy
Carl Chieffin
Representative Carl Krehbiel
Joe Mi Lelond
Representative Jee McLeland
Representative Tom Sawyer

HOUSE APPROPRIATIONS

DATE 3-02-2006 ATTACHMENT /

# **House Budget Committee Report**

Agency: State Department of Education Bill No. HB 2958 Bill Sec. 44

Analyst: Rampey Analysis Pg. No. Vol. II-771 Budget Page No. Vol. II-139

Expenditure Summary		Agency Estimate FY 2006	Re	Governor's ecommendation FY 2006	В	House udget Committee Adjustments
Operating Expenditures:						
State General Fund	\$	2,603,446,421	\$	2,596,791,293	\$	461,649
Other Funds		489,521,956		489,422,016		0
TOTAL	\$	3,092,968,377	\$	3,086,213,309	\$	461,649
FTE Positions		211.8		211.8		7.0
Non FTE Uncl. Perm. Pos.	<u></u>	51.2	-	51.2		0.0
TOTAL		263.0		263.0		7.0

# Agency Estimate

The State Department of Education estimates expenditures of \$3,092,968,377 for FY 2006, of which \$2,603,446,421 is from the State General Fund. Major items in the current year budget are the following:

- State General Fund savings of \$21,280,313 in general and supplemental general state aid, which the State Department requests be reappropriated for FY 2007.
- A requested supplemental appropriation of \$10,589,356 from the State General Fund for special education in order to fund excess costs at the statutory level of 89.3 percent.
- A requested supplemental appropriation of \$42,500 from the State General Fund for the Declining Enrollment State Aid Program.
- A requested supplemental appropriation of \$685,461 from the State General Fund for the Juvenile Detention Facilities Program.
- A requested supplemental appropriation of \$1,293,919 from the State General Fund for the Capital Outlay State Aid Program.

### Governor's Recommendation

The Governor recommends \$3,086,213,309 for FY 2006, of which \$2,596,791,293 is from the State General Fund. Major items in the Governor's recommendation include the following:

- The Governor lapses \$21,280,313 in State General Fund savings in general and supplemental general state aid.
- The Governor recommends requested supplemental appropriations from the State General Fund of \$10,589,356 for special education, \$42,500 for Declining

Enrollment State Aid, and \$685,461 for the Juvenile Detention Facilities Program. The Governor recommends a supplemental appropriation of \$1,197,016 from the State General Fund for the Capital Outlay State Aid Program, which is \$96,903 less than requested.

# **House Budget Committee Recommendation**

The House Budget Committee concurs with the recommendations of the Governor, with the following exceptions:

- 1. Reappropriate State General Fund savings of \$21,280,313 for general and supplemental general state aid to FY 2007 rather than lapse them.
- 2. Add \$96,903 from the State General Fund for the Capital Outlay State Aid Program in order to fully fund the program in FY 2006.
- 3. Add \$364,746 from the State General Fund to begin a three-year project to develop the Enterprise Data Warehouse, a project to integrate various databases within the Department, streamline federal reporting, decrease the reporting burden on schools, and position the Department to develop Growth Modeling, which involves tracking the academic progress of individual students longitudinally. Recommended funding includes salaries for 7.0 FTE positions.

# **House Budget Committee Report**

Agency: State Department of Education Bill No. HB 2968 Bill Sec. 34

Analyst: Rampey Analysis Pg. No. Vol. II-771 Budget Page No. Vol. II-139

Expenditure Summary	Agency Request FY 2007	Governor's commendation FY 2007	Budget C	use Committee tments
Operating Expenditures:				
State General Fund	\$ 2,754,407,016	\$ 2,672,394,934	\$ (	1,592,133)
Other Funds	476,159,763	484,705,656		(47,800)
TOTAL	\$ 3,230,566,779	\$ 3,157,100,590	\$ (	1,639,933)
FTE Positions	213.8	213.8		2.5
Non FTE Uncl. Perm. Pos.	 49.3	 49.3		0.0
TOTAL	263.1	263.1		2.5

# **Agency Request**

The State Department requests a total of \$3,230,566,779, of which \$2,754,407,016 is from the State General Fund. Major items include the following:

- \$56,114,000 from the State General Fund to increase Base State Aid Per Pupil (BSAPP) by \$98.
- \$10,000,000 from the State General Fund to increase the at-risk weighting from 0.193 to 0.211.
- \$323,071,024 from the State General Fund to fund special education excess costs at the statutorily-set level of 92 percent.
- \$8,500,000 from the State General Fund to fully fund the state's share of the Professional Development Program.
- \$109,388 from the State General Fund for 2.0 FTE Application Designer II positions to help develop the Enterprise Data Warehouse and Growth Modeling.
- \$99,300, of which \$26,367 is from the State General Fund, to replace seven vehicles.

### Governor's Recommendation

The Governor recommends a total of \$3,157,100,590, of which \$2,672,394,934 is from the State General Fund. Major items in the Governor's recommendation are the following:

• \$1,880,850,000 to fully fund general state aid at the current BSAPP rate. All funding is from the State General Fund except for \$5,304,045 which is from the Children's Initiatives Fund and is earmarked for programs for four-year-old at-risk children.

- \$323,071,024 to fund special education excess costs at the statutory level of 92.0 percent. Of the amount, \$1,225,000 is from the Children's Initiatives Fund and the remainder is from the State General Fund.
- \$3,000,000 from the State General Fund for the Professional Development Program.
- \$65,100, of which \$17,300 is from the State General Fund, to replace five vehicles with more than 100,000 miles. (The State Department requested funding for seven vehicles.)
- \$109,388 from the State General Fund, as requested, for two new positions.
- \$250,000 from the State General Fund to continue school district accountability studies.

# **House Budget Committee Recommendation**

The House Budget Committee concurs with the recommendations of the Governor, with the following exceptions and observations:

1. **FY 2007 Baseline Budget.** To establish a baseline FY 2007 budget, the FY 2006 budget, as approved by the 2005 Legislature, was adjusted to reflect salary adjustments (removal of the 27<sup>th</sup> payroll period funding included in FY 2006, annualization of the FY 2006 phased in 2.5 percent base salary adjustment and statutorily required adjustments for Kansas Public Employees Retirement System (KPERS) rates, KPERS death and disability insurance, and longevity). In addition, adjustments were made for required debt service payments, revenue transfers, and consensus items including school finance funding and caseload estimates for the Department of Social and Rehabilitation Services, the Department of Administration, the Department on Aging, and the Board of Indigents' Defense Services. Finally, adjustments were made for one-time items which impact specific agency budgets.

For the State Department of Education, the FY 2006 approved budget totaled \$3,052,052,980, including \$2,586,511,945 from the State General Fund. The approved budget was adjusted by an additional \$87,357,710, including \$82,720,925 from the State General Fund, to establish a baseline budget for FY 2007. The State General Fund adjustments included a reduction of \$112,168 for salary adjustments and an increase of \$82,833,093 for consensus estimates to fully fund school finance, special education, and KPERS-School.

2. Comparison of FY 2007 Baseline Budget to Governor's Recommendation. The table below reflects the difference between the Governor's recommendation and the baseline budget.

		SGF		All Funds		
Governor's Recommendation	\$	2,672,394,934	\$	3,157,100,590		
Baseline Budget	·	2,669,232,870		3,139,410,690		
Difference	\$	\$ 3,162,064		17,689,900	_	
	\$ <del>-1</del>		_		_	
Percent Difference		0.1%		0.6%		

The following table reflects items included in the Governor's recommendation which differ from the baseline budget.

	SGF			All Funds
Base Salary Adjustment	\$	149,477	\$	320,503
Professional Development		2,000,000		2,000,000
Vehicle Replacement (5)		17,300		65,100
2.0 FTE Positions		109,388		109,388
Juvenile Detention Facilities		685,461		685,461
Federal Food Assistance		0		11,453,315
State Assessments		0		3,462,365
Net Other Adjustments		200,438	_	(406,232)
TOTAL	\$	3,162,064	\$	17,689,900

- 3. Delete \$65,100, of which \$17,300 is from the State General Fund, recommended by the Governor to replace five vehicles and consider the State Department's request for a total of seven replacement vehicles in the Omnibus Bill.
- 4. Delete \$2,000,000 from the State General Fund recommended by the Governor for the Professional Development Program, and fund the program at the same level as in FY 2006 (\$1,000,000).
- 5 Delete \$250,000 from the State General Fund recommended by the Governor for ongoing school district accountability studies. (The funding was not requested by the State Department.)
- 6. Add \$375,167 from the State General Fund for the second year of a three-year plan to develop an Enterprise Data Warehouse which will be used to support Growth Modeling. The recommended amount of money augments the \$109,388 from the State General Fund recommended by the Governor for 2.0 FTE Application Developer II positions to implement, maintain, and link the State Department's numerous databases and would permit the State Department to add one additional position, for a total of 8.0 FTE positions in FY 2006 and FY 2007 combined.
- 7. Add \$300,000 from the State General Fund to continue the Kansas Academy for Leadership in Technology (KAL-Tech), which has been funded for the last four and one-half years with a grant from the Bill and Melinda Gates Foundation and federal funds. The State Department has held nine academies and trained more

than 1,400 superintendents and principals in best practices, innovation in school planning and improvement efforts, enhancing learning and student achievement, and the integration and effective use of information technologies. The recommended funding will allow the State Department to add 1.5 FTE positions to administer the academies and expand them to include teachers with leadership skills.

8. Require that funding generated by special education students age three to five be earmarked for early childhood programs for children with disabilities.

# Testimony Before the House Committee on Appropriations Presentation by Roy Jensen, M.D. Director, KU Cancer Center

# Thursday, March 2nd, 2006

Mr. Chairman and Members of the Committee:

My name is Roy Jensen and it is my privilege to serve as the Director of KU Cancer Center and the Kansas Masonic Cancer Research Institute at the University of Kansas Medical.

The KU Cancer Center and our partners are dedicated to ending suffering and death from cancer. Each day we work to understand how cancer develops and what we can do to prevent it. We work to improve the lives of those living with this disease and to support them and their families as they battle this terrible plague on humanity.

Cancer research is a tremendous intellectual challenge. But we pursue this work because like all of you we have lost friends and loved ones to cancer. Yes, cancer research is about genes and proteins and cells in a Petri dish, but when it is all said and done—our work is really about people. This work is vitally important because it gives us the chance to find new treatments, therapies and cures and in doing so allows us to extend, enrich and save people's lives. It is that aspect of the work in which we find our greatest satisfaction.

The design of our cancer center is not intended to create a fortress in Kansas City. Instead the heart of our center is designed around an alliance of health care providers from Johnson City to Johnson County, from Sharon Springs to Baxter Springs—and everywhere in between. We want Kansans, no matter where they live, to have access to world-class cancer care. Our center will provide patients with access to clinical trials through the Midwest Cancer Alliance. We will invite hospitals and other health care providers throughout the state to join as a member of this important component of our cancer center.

We also believe that the KU Cancer Center will lead in bioscience innovation. Teaming up with the nationally recognized excellence of the KU School of Pharmacy we are designing a powerhouse for drug discovery and development. These discoveries will seek to enhance treatments and help prevent disease but they will also have significant commercial benefits for the Kansas economy. We look forward to a collaboration with the Kansas Bioscience Authority, and appreciate their interest in our mission.

If our quest to achieve National Cancer Institute designation for our cancer center is to be successful we will need significant additional resources. As you know, the Governor's budget for the next fiscal year included a \$5 million appropriation for the KUCC that will provide some of the resources necessary to build the infrastructure needed for such a designation and to enable us stop to recruit top talent to crucial leadership posts within

**HOUSE APPROPRIATIONS** 

DATE 3-02-2003 ATTACHMENT 2 the center and to attract the best cancer doctors, scientists and researchers to our center. These funds will also be used to help design and deploy our statewide cancer alliance. This annual appropriation is the single most important step this legislature can take in support of the fight against cancer in Kansas and I personally appreciate the support of this committee in securing this crucial funding for our cancer center.

In addition to state appropriations we will aggressively be seeking support from federal government sources and investments from private donors. Obtaining National Cancer Institute designation is no easy task and the resources required to achieve this goal will be significant.

I am proud of my decision to return to Kansas. I have been welcomed warmly by my colleagues and made many new and valued friends. As I have shared our vision for a cancer center I have been enthusiastically received by legislators from throughout the state. I am impressed by your commitment to the greater good and your interest in helping us achieve something great for the Kansans we serve. I look forward to working with you during this legislative session as we advance the future of cancer care in Kansas and our region.

I encourage any effort you as legislators can take to support the KU Cancer Center and our work to end suffering and death from cancer in Kansas.

I have provided a copy of our KUCC legislative briefing book for each of you, which details the need for a comprehensive cancer center and the benefits to be obtained by investing in one. As you will note, applying for NCI comprehensive cancer center status requires a lengthy application process, evaluated by scientists and clinicians. I would like to take a moment to briefly review this publication for the committee and would be pleased to stand for any questions.

Respectfully submitted,

Roy Jensen, M.D. Director, Kansas Masonic Cancer Research Institute and The University of Kansas Cancer Center



550 North Hillside Wichita, Kansas 67214-4976 Telephone 316/962-2468

February 8, 2006

Roy Jensen, MD Director, University of Kansas Cancer Center and Kansas Masonic Cancer Research Institute 3901 Rainbow Blvd Kansas City, KS 66160

Dear Dr. Jensen:

I am writing to express my support of the University of Kansas Cancer Center in their efforts to pursue National Cancer Institute designation. As a part of this effort, Dr. Roy Jensen, Director of the Cancer Center, has a vision of creating a cancer center that would serve the entire State of Kansas. His efforts would include the establishment of a cancer alliance that would offer outreach and education programs throughout the state and a clinical trials network that would include qualified hospitals and physicians in Kansas.

To make this cancer center a reality, it will take an investment from the State of Kansas and I support all of the current efforts to provide direct state support to the University of Kansas Cancer Center.

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Sincerely.

David S. Nevill

President and Chief Executive Officer



Shaker R. Dakhil, M.D., F.A.C.P. Michael W. Cannon, M.D., F.A.C.P. David B. Johnson, M.D., F.A.C.P. Dennis F. Moore, Jr., M.D., F.A.C.P. Bassam I. Matta; M.D., F.A.C.P. William F., Jennings, M.D., F.A.C. Thomas F., Schulz, M.D. Dennis F., Moore, Sr., M.D., F.A.C.P. Nassim H., Nabbout, M.D. Pavan S., Beddy, M.D. Phu V. Truong, M.D.

818 North Emporia, #403 • Wichita, KS 67214 • (316) 262-4467 • FAX: (316) 262-3762 3243 E. Murdock, # 300 • Wichita, KS 67208 • (316) 262-4467 • FAX: (316) 681-2567 www.cancercenterofkansas.com

February 2, 2006

Feb 02 06 12:56p

Roy Jensen M.D.
Director, University of Kansas Cancer Center and
Kansas Masonic Cancer Research Institute
3901 Rainbow Blvd.
Kansas City, KS 66160

Dear Dr. Jensen:

I am writing to express my support for the University of Kansas Cancer Center in their efforts to pursue National Cancer Institute designation. I endorse your vision of creating a Cancer Center that would serve the entire State of Kansas. I understand your efforts to include the establishment of a cancer alliance that provides outreach and education programs throughout the state and a clinical trials network. The Cancer Center of Kansas has already an established network through out the state, which would be used as part of the alliance.

An investment from the State of Kansas will be necessary to make this Cancer Center a reality. I support all of the current efforts to provide direct state support to the University of Kansas Cancer Center.

Sincerely,

Shaker Dakhil, M.D. F.A.C.P.

President

Cancer Center of Kansas 818 N. Emporia, Ste 403 Wichita, KS 67214 505 S. Plummer Chanute, KS 66720 (620) 431-7580 FAX: (620) 431-6418

2020 Central Avenue Dodge City, KS 67801 (620) 227-1361 FAX: (620) 227-2488

700 W. Central El Dorado, KS 67042 (316) 889-0099 FAX: (316) 889-0096

750 Ave, D - West Kingman, K\$ 67068 (620) 532-3147 FAX: (620) 532-2281

315 W. 15th Street Liberal, KS 67905 (620) 629-6727 FAX: (620) 629-6729

720 Medical Center Drive Newton, KS 67114 / (316) 282-0888 FAX: (316) 282-0886

1902 South U.S. Hwy 59 Second Floor - South Parsons, KS 67357 (620) 421-2855 FAX: (620) 421-2868

124 Commodore, Suite A Pratt. KS 67124 (620) 450-1192 FAX: (620) 450-1371

600 S. Santa Fe, Suite E Salina, KS 67401 (785) 823-1521 FAX: (785) 823-0575

1323 N. A Street Wellington, KS 67152 (620) 326-7453 - Ext. 224 FAX; (620) 326-2254

1305 East 5th Winfield, KS 67156 (620) 221-6125 FAX: (620) 221-0440



929 North St. Francis Wichita, KS 67214-3882 Tel 316-268-5108 Fax 316-291-7363 Larry P. Schumacher President and Chief Executive Officer

February 1, 2006

Roy Jensen, M.D.
Director, University of Kansas Cancer Center and
Kansas Masonic Cancer Research Institute
3901 Rainbow Blvd.
Kansas City, KS 66160

Dear Dr. Jensen:

I am writing to express my support of the University of Kansas Cancer Center in their efforts to pursue National Cancer Institute designation. As a part of this effort, Dr. Roy Jensen, Director of the Cancer Center, has a vision of creating a cancer center that would serve the entire State of Kansas. His efforts would include the establishment of a cancer alliance that would offer outreach and education programs throughout the state and a clinical trials network that would include qualified hospitals and physicians in Kansas.

To make this cancer center a reality, it will take an investment from the State of Kansas, and I support all of the current efforts to provide direct state support to the University of Kansas Cancer Center.

Sincerely,

Larry P. Schumacher

President and CEO

Via Christi Wichita Health Network

# The University of Kansas School of Medicine-Wichita

Office of the Dean

February 3, 2006.

Marcia Nielsen, PhD, MPH Assistant Vice Chancellor for Health Policy Office of External Affairs University of Kansas Medical Center Murphy 1003B 3901 Rainbow Blvd., MS 3013 Kansas City, KS 66160

Dear Dr. Nielsen,

Wichita and Sedgwick County are in strong support of the University of Kansas Cancer Center (KUCC). We are extremely pleased that the center will truly be statewide.

Let us add our strong support for the budget recommendation of \$5 million from the Legislature during the 2006 session. The medical school campus in Wichita is very much a part of this evolving center. Currently, our Community Clinical Oncology Center (CCOP) in Wichita is the single largest group enrolling patients in National Cancer Institute (NCI) clinical cancer drug trials in Kansas. Dr. Shaker Dakhil and his 11 oncology KU faculty enroll 700-800 new patients in NCI clinical trials each year.

We are also very interested in Wichita being a part of the cancer prevention and control effort. Our faculty are proposing multiple ways in which we can play an active role in our statewide cancer center. We also hope to link with physicians all over the state who initially refer cancer patients to KUMC and to our CCOP and then care for these patients as they live in their various communities.

We are very enthusiastic about our evolving cancer center, and we will make every effort to assure that we eventually become a National Cancer Institute designated cancer center.

Sincerely,

S. Edwards Dismuke, MD, MSPH

Dean and Professor

# Bringing World-Class Cancer Care to America's Heartland

Legislative
Briefing
Book



February 2006

A Partnership for Life



# **Executive Summary**

ancer kills one out of every four Americans, making it the second most common cause of death in the United States<sup>1</sup>. In Kansas, more than 5,300 people die of cancer each year<sup>1</sup> with an overall cost in medical expenses and lost productivity to our State of \$1.6 billion annually<sup>2</sup>.

While these statistics are stark reminders of the magnitude of the impact of cancer, they fail to represent the real cost of cancer. The real cost includes the moms and dads stolen from their children, the children whose lives end far too soon and the family, friends and neighbors who are no longer with us. Behind each cancer statistic is a person — a person we have to remember as we wage the battle against this devastating disease.

# Cancer is a significant problem in Kansas — one that requires focused effort and a State-wide commitment to effectively address.

The University of Kansas (KU) wants to end cancer in Kansas and the Heartland Region through enhanced treatment, research, prevention and development of new therapeutics and diagnostics. The University of Kansas Cancer Center (KUCC) is the umbrella organization driving the cancer partnership between the University of Kansas, its Medical Center campuses in Kansas City and Wichita, the Kansas Masonic Cancer Research Institute, the University of Kansas Hospital, the Stowers Institute for Medical Research and the developing Midwest Cancer Alliance. KU's Cancer team includes biologists determining the causes of cancer and providing clues on potential new forms of therapy, pharmacists and chemists developing safer drugs with fewer side effects, and doctors and nurses treating cancer with new and improved therapies.

Despite all our efforts and investment to date, it is clear that the State of Kansas must take cancer research, prevention and care to the next level to ultimately defeat this devastating disease. Governor Sebelius' March 2005 Kansas Comprehensive Cancer Control and Prevention Plan lays out aggressive goals for reducing the burden of cancer on Kansas. The KUCC is prepared to make a significant contribution to achieving the Governor's goals through partnership with health care providers, researchers and communities across the State and Region.

The KU Cancer Center has already recruited Dr. Roy Jensen, a Kansas-born top-flight breast cancer researcher, to lead the KUCC's efforts. Dr. Jensen and his team of world-class researchers and physicians are building on the KUCC's existing strengths. They currently attract more than \$43 million in grant funding annually, and will soon implement the Midwest Cancer Alliance, which will reach Kansans throughout the State and Region battling cancer with comprehensive, state-of-the-art care. With all those elements in place, the KU Cancer Center plans to achieve National Cancer Institute (NCI) designation as a Comprehensive Cancer Center by 2015.

NCI designation will place the KU Cancer Center among a premier group of 61 U.S. cancer centers. This designation will enable far superior cancer research and care for Kansans and catapult the State



and Heartland Region ahead as a life sciences center of excellence. If the KUCC is awarded NCI designation as a Comprehensive Cancer Center, it will be a strong indicator that Kansas is making significant progress in battling this devastating disease, reducing the burden of cancer on the State and the Region, and helping Kansans to lead healthier, more productive, longer lives.

In addition to addressing a significant public health concern, the KUCC efforts to achieve NCI designation also will mean growth across a myriad of related segments of the Kansas economy. A recent study sponsored by the Kansas Technology Enterprise Corporation<sup>3</sup> evaluated the economic advantages of gaining NCI status at the KUCC. In addition to adding almost \$100 million in research funding, the report projects hundreds of millions of dollars in economic development from related construction activities, operations, licensing revenues and cancer mortality reductions.

In its effort to expand and advance the State and Region's comprehensive cancer diagnosis, treatment and prevention capabilities and reap the related public health and economic benefits, the KUCC seeks both a commitment to partnership and a commitment to support. With the right support from the State and our communities, Kansas will be home to a nationally-recognized comprehensive research, treatment and education center that will benefit all Kansans, as well as the entire Heartland Region.

# This Initiative Is the University of Kansas' Number One Priority.

### A COMMITMENT TO PARTNERSHIP

The KU Cancer Center brings together the resources of the University of Kansas Medical Center; the Kansas Masonic Cancer Research Institute; the University of Kansas School of Pharmacy, College of Liberal Arts and Sciences, and the Office of Therapeutics Discovery and Development; the Higuchi Biosciences Center; the University of Kansas Hospital; and the Stowers Institute for Medical Research.

The partnership will be extended to the State and Region's hospitals and physicians groups via the planned Midwest Cancer Alliance.

### A COMMITMENT TO SUPPORT

To achieve world-class status in cancer research and care, the KU Cancer Center requires an ongoing commitment from the State and surrounding communities.

Of particular importance to the NCI in considering a candidate for designation is ongoing dedicated funding from the State. An annual appropriation of \$5 million from the State of Kansas will be needed to achieve the KU Cancer Center's goals and contribute to the Governor's ambitious plans for combating cancer in the State.

To further demonstrate community support, the KU Cancer Center also plans to tap into regional and local funding sources including, but not limited to, those managed by local and regional philanthropic organizations and private donors.

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The purpose of this Legislative Briefing document is to provide the members of the Kansas Legislature and statewide stakeholders information on the current and planned cancer research, treatment and prevention capabilities and opportunities offered by the KUCC and its growing network of state-wide partners.

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# What is the University of Kansas Cancer Center?

xcellence in cancer research, education and patient care are top priorities for the University of Kansas (KU) and its Medical Center. Today, that commitment is embodied in the University of Kansas Cancer Center (KUCC) — the umbrella organization driving the cancer partnership between the University of Kansas, its Medical Center campuses in Kansas City and Wichita, the Kansas Masonic Cancer Research Institute, the Stowers Institute for Medical Research and the University of Kansas Hospital. Achieving designation as one of the National Cancer Institute's (NCI) Comprehensive Cancer Centers will be a strong indicator that KUCC's broad-based, comprehensive cancer team is delivering on its potential to be a premier research, treatment and education partnership benefiting all Kansans as well as the entire Heartland Region.

# KUCC'S HISTORY

KU's commitment to excellence in cancer research and care was strengthened by the creation of the Kansas Cancer Institute in 1996, first led by its founder, William R. Jewell, MD. In 2003, the Kansas Cancer Institute was renamed for the Kansas Masonic Foundation after its \$15 million pledge of support over five years — becoming the Kansas Masonic Cancer Research Institute (KMCRI). With the recruitment of Roy Jensen, MD to be its first full-time director in 2004, the KMCRI set a course for NCI designation and placed in motion the development of what has become the University of Kansas Cancer Center (KUCC).

## **KUCC Mission**

To build a world-class
Cancer Center that is
at the forefront of
discovery,
development and
implementation of
knowledge,
technology and novel
therapeutic agents for
the treatment and
prevention
of cancer.

# **KUCC PARTNERS**

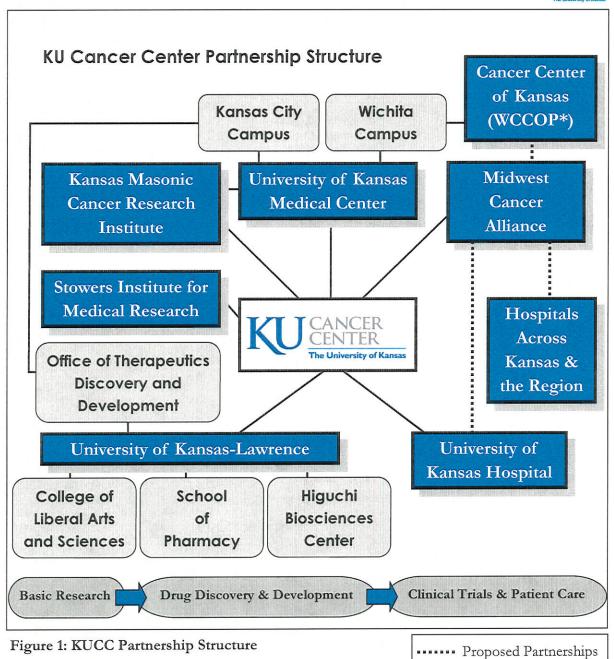
The KUCC is built on a unique partnership in cancer research, prevention and care that translates discoveries in basic research to improved cancer prevention and patient care across Kansas and the Heartland Region (See Figure 1). From the earliest stages of cancer research to delivery of novel therapeutic agents at the bedside and cancer prevention, KUCC is already demonstrating great promise as a candidate for the National Cancer Institute's sought-after Comprehensive Cancer Center designation.

### **Basic Research**

At the most basic levels of cancer research, the Kansas Masonic Cancer Research Institute, the Stowers Institute for Medical Research and the basic science departments at the University of

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Kansas' Lawrence campus are already partnering together to bring new ideas and discoveries in cancer research to patients. The Stowers Institute for Medical Research also has demonstrated a commitment to furthering basic research with a \$32 million endowment for the Associate Director of Basic Science position at the KUCC and a \$2 million Biomed Valley endowed professorship at the University of Kansas.

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<sup>\*</sup> Wichita Community Clinical Oncology Program



# **Drug Discovery and Development**

The University of Kansas' unique resources in drug discovery and development associated with the School of Pharmacy are a critical component of the KUCC's ability to create a seamless pipeline from discovery to the bedside. The School of Pharmacy is ranked third in the nation for federal grant research among Schools of Pharmacy. Its drug development program is a strong differentiator for KUCC. The ability to develop Phase I oncology agents and get them to Kansas patients sooner rather than later is considered a strength of the KUCC — a strength found in few academic medical centers nationwide.

"What distinguishes the KU Cancer Center is our ability to knit together the entire research process, from basic discovery to drug development to clinical trials. We can translate discoveries our scientists make in the laboratory into new drugs that can be rapidly tested in clinical trials."

Roy Jensen, MD
 Director, KUCC

## Clinical Trials

Improving access to clinical trials in Kansas is a key driver in the KUCC's plan for delivering comprehensive cancer care and achieving NCI designation. Along with selected sites across the State, the KU Medical Center's Wichita campus will be a key coordinator of Phase I clinical trials and the manager of the cancer informatics infrastructure for the KUCC. Increased access to clinical trials fits well with the expertise of the Kansas City Region's private bioscience sector (e.g., PRA International, Quintiles, Vince & Associates). It also means that Kansans with cancer will have access to novel therapeutic agents well before they reach the market — many of which will be developed by the KU School of Pharmacy. Doctors across Kansas and the Region, associated with the KUCC's Midwest Cancer Alliance, will have access to the information flowing from clinical trials to enhance their own care of patients.

### Outreach and Patient Care

KUCC is seeking to partner with the leaders in cancer care across the state of Kansas and Region to ensure that comprehensive cancer care is delivered in local communities as much as possible. Preliminary discussions are occurring with the KU Hospital, a leading provider of cancer care in the Kansas City region and a key contributor to the KUCC's quest for NCI designation, and the Cancer Center of Kansas/Wichita Community Clinical Oncology Program, a leading provider of cancer care and clinical trials in South Central Kansas. Hospitals and physician groups providing cancer care across the State and Region will have the opportunity to join the KUCC's Midwest Cancer Alliance and benefit from a broad-based cancer network. As part of KUCC's Midwest Cancer Alliance, these organizations along with other Kansas and Regional hospitals and physicians groups will have the opportunity to participate at many levels ranging from access to information, education and consultations to participation in clinical trials.

The Midwest Cancer Alliance will ensure delivery of state-of-the-art cancer treatments and prevention to Kansans in their own communities. Coordination of cancer patient care will be

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further enhanced by the KU Medical Center's Telehealth program, which is already enhancing the KUCC's reach to rural cancer patients and their doctors. The KUCC aims to help cancer patients across Kansas and the Region receive as much comprehensive care as close to home as possible.

# KUCC LEADERSHIP

At the helm of the KUCC is Roy Jensen, MD. Dr. Jensen was recruited in 2004 from the NCI-designated Vanderbilt-Ingram Cancer Center and is a nationally-recognized cancer researcher. A native of Gardner, Kansas, Dr. Jensen is a well respected breast cancer pathologist and was a key player in Vanderbilt's efforts to achieve NCI designation in 1995.



Roy Jensen, MD

Dr. Jensen's research is funded by the National Institutes of Health and focuses on the function of specific proteins that inhibit the growth of tumors in breast disease. His collaborative research efforts have resulted in several patents involving the detection, diagnosis and treatment of pre-invasive breast cancer.

Dr. Jensen began his career with an associate's degree from Neosho Community College in Chanute, Kansas, where he played basketball. He continued with his bachelor's degree in chemistry and biology from Pittsburg State University and earned his medical degree from Vanderbilt University. After serving as a biotechnology fellow with the National Cancer Institute, he returned to Vanderbilt University Medical Center and the Vanderbilt-Ingram Cancer Center, where he became a leading breast cancer pathologist and researcher.

Dr. Jensen is currently building a team of top cancer scientists to lead the oncology research areas. Recruitment for a number of positions, which will be key to gaining NCI designation for the University of Kansas, is underway.

The cancer program leaders include long-time contributors to the KU Cancer programs such as Carol Fabian, MD, and Edward Ellerbeck, MD, who direct the Cancer Risk Assessment, Prevention and Control Program. Both are examples of top cancer researchers/clinicians that are making a difference in cancer research and patient care.

In addition, the newly launched Office of Therapeutics Discovery and Development (OTDD) recently recruited as its first Director, Scott Weir, PhD, who brings 20 years of drug development expertise including Marion Laboratories, Marion Merrell Dow, Hoechst Marion Roussel, Aventis, Quintiles and Aptuit, LLC. The role of the Office of Therapeutics Discovery and Development will be to translate discoveries from within the University of Kansas and Stowers Institute for Medical Research into potential drug products.



# CURRENT RESEARCH FUNDING

The KUCC's 116 members currently garner more than \$43 million annually in grant funding, of which \$13.7 is cancer related research. While the current level of annual funding is notable and represents more than one-third of the total life sciences research funding received by KU and its Medical Center, the KUCC aims to add at least another \$57 million per year of research funding by its Cancer Center members. This will bring the total annual research funding to more than \$100 million by 2015. A three-fold increase in annual research funding is typical of academic cancer centers once they are designated by the National Cancer Institute.

Table 1: KUCC Annual Research Grant Funding (Direct and Indirect Costs) (as of 12/05)

Sources		ual Total
National Cancer Institute (NCI) grants	\$	6,363,918
Non-NCI cancer related grants	\$	7,360,905
Other peer reviewed grants (e.g., other National Institutes of Health, National Science Foundation)	\$	20,099,026
Non-peer reviewed grants (e.g., pharmaceutical/biotech companies, private foundations)	\$	9,490,538
Total All Grant Funding Sources — KUCC Members	\$	43,314,387

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# What Is the Current Status of Cancer in Kansas?

ancer is a significant problem in Kansas. In the next year, more than 12,900 new cancer cases will be diagnosed in Kansas and more than 5,300 Kansans will die from the disease<sup>1</sup>. It is the second leading cause of death in Kansas after heart disease<sup>3</sup>. In Kansas, cancer causes 15 deaths per day and accounts for 22 percent of all deaths<sup>2,3,4</sup>. Currently, more than 95,000 Kansans live with cancer<sup>5</sup>, and an estimated 45 percent of men and 41 percent of women in Kansas will be diagnosed with cancer during their lifetime<sup>6</sup>. With the aging of the Kansas population, cancer is expected to be a significant health issue for the State for years to come if cancer research, care and prevention are not advanced.

Kansans battling and succumbing to cancer have an \$1.6 billion annual impact on the Kansas economy — a cost of \$4.4 million per day<sup>1,3</sup>. This economic impact is due to lost productivity related to illness and premature death and direct medical costs. While cancer death rates are declining nationally, the number of annual new cancer cases in the United States is projected to double from 1.3 million to 2.5 million between 2000 and 2050 due to the aging and growth of the U.S. population<sup>7</sup>. In Kansas, the cancer mortality rate is decreasing (-0.5% annually), but at only half the rate of the United States (-1.1% annually)<sup>8</sup>.

Table 2: Estimated Economic Cost of Cancer 2004<sup>1,3</sup>

	Kansas (Estimated)	United States (Reported)
Annual Death Rate (all cancer sites, age adjusted, 1998-2002)	189.0 per 100,000	197.8 per 100,000
Lost productivity due to premature death	\$870 million	\$103.5 billion
Direct medical cost	\$590 million	\$69.4 billion
Lost productivity due to illness	\$140 million	\$16.9 billion
Total	\$1.6 billion \$4.4 million per day	\$189.8 billion \$520 million per day

Kansas' annual death rate per 100,000 (age adjusted) is 189.0 for the rate period of 1998-20028. While below the U.S. annual death rate per 100,000 (age adjusted) of 197.8 (1998-2002), there are 28 Kansas counties that have death rates that exceed the national average (see Figure 3, Table 3), and in a number of cases, those counties are experiencing rising cancer death rates (See red text on Table 3). Only 18 of Kansas' 105 counties meet the National Cancer Institute's 2010 Healthy People Objective of 159.9 cancer deaths per 100,000.

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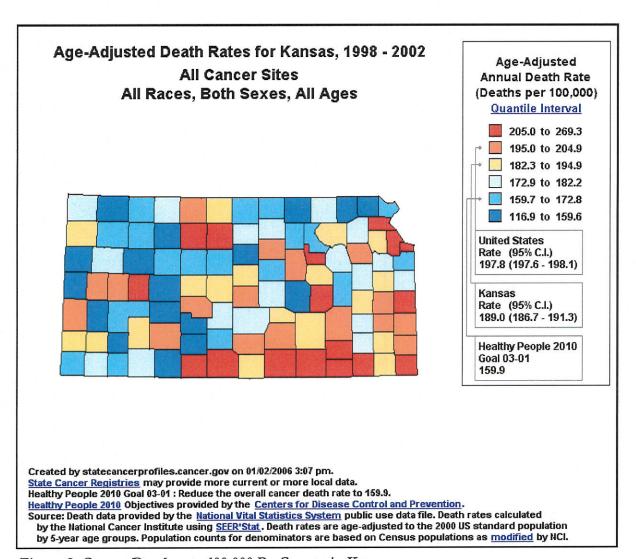


Figure 2: Cancer Deaths per 100,000 By County in Kansas; Source: National Cancer Institute, State Cancer Profiles<sup>8</sup>



Table 3: Kansas Counties with Annual Cancer Death Rates Greater than U.S. Rate; Death Rate Report for Kansas by County, death years through 2002, all cancer sites<sup>8</sup>

County	Annual Death Rate per 100,000 (1998-2002)	Average Deaths per Year	Recent Trend	Recent Annual % Change in Death Rates
U.S.	197.8	551,100	Falling	-1.1
Kansas	189.0	5,296	Falling	-0.5
Elk	269.3	16	Rising	+2.2
Chautauqua	242.6	19	Rising	+2.1
Wyandotte	236.1	343	Stable	+0.3
Barber	228.0	20	Stable	+0.9
Geary	228.0	48	Stable	+0.5
Atchison	221.6	46	Stable	+0.3
Lane	219.3	7	Stable	+1.2
Chase	216.6	9	Rising	+2.2
Sumner	216.6	67	Stable	+0.5
Montgomery	213.4	107	Stable	+0.5
Linn	209.9	28	Stable	+0.1
Osborne	209.6	17	Rising	+2.2
Cherokee	208.6	55	Stable	+0.7
Cowley	208.1	91	Rising	+0.8
Comanche	205.9	9	Stable	+1.0
Rooks	205.7	18	Stable	+1.1
Leavenworth	205.0	116	Falling	-3.3
Allen	204.9	39	Stable	+0.1
Bourbon	204.3	42	Stable	+0.0
Greenwood	204.0	25	Rising	+1.5
Anderson	203.5	24	Stable	+0.9
Dickinson	202.5	55	Stable	+0.7
Hamilton	202.5	7	Stable	-0.6
Pawnee	202.2	19	Rising	+2.1
Sedgwick	201.3	829	Stable	0.0
Kingman	199.7	25	Stable	+0.8
Crawford	198.9	90	Stable	0.0
Wichita	198.5	6	Stable	+0.3

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# Types of Cancer Afflicting Kansans

According to the Kansas Cancer Registry<sup>4</sup>, the top cancers that afflict Kansans and cause 66 percent of the cancer deaths are: lung and bronchus, colorectal, female breast, pancreas, prostate, non-Hodgkin's lymphoma and leukemia (See Figure 4). Lung and bronchus cancers are of particular concern because they represent almost 30 percent of the Kansas cancer deaths.

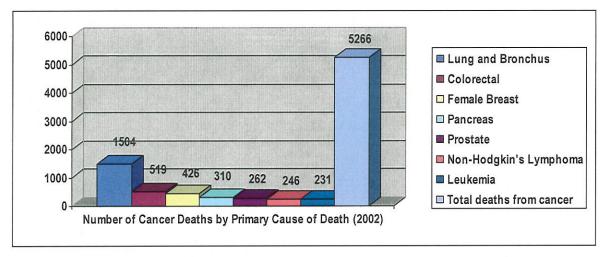


Figure 4: Number of Cancer Deaths by Primary Cause of Death (2002)<sup>4</sup>; Source: Kansas Cancer Registry (2003)

Cancers highlighted in the March 2005 Kansas Comprehensive Cancer Control and Prevention Plan <sup>3</sup> as requiring attention by the State include breast, cervical, colorectal, lung, prostate and skin.

Breast cancer is the most frequently diagnosed cancer among women in Kansas, and it is the second leading cause of cancer death among women, accounting for approximately 400 deaths annually<sup>4,9</sup>. A key early detection opportunity in Kansas is increasing the number of women receiving mammograms. In Kansas from 2000-2002, 24 percent of women who were 40 years of age and older had not had a mammogram in the past two years<sup>3</sup>.

While cervical cancer accounts for only about two percent of all cancers in Kansas women, there are opportunities to improve screening for this type of cancer, in particular, in women living in rural areas with an annual income of less than \$20,000.

The third leading cause of cancer death in Kansas is colorectal cancer. In 2002, 311 female and 276 male Kansans died due to colorectal cancer<sup>9</sup>. Screening for colorectal cancer is considered a key opportunity to improving the survivability of this cancer.

Lung cancer is the leading cause of cancer death for both men and women in Kansas<sup>2</sup>. In 2002, 623 female and 856 male Kansans died due to lung/bronchus cancer<sup>9</sup>. The prognosis for lung cancer is poor with only 14 percent of diagnosed patients surviving five years after diagnosis. Tobacco use is a significant risk factor for developing lung cancer. According to the *Kansas* 



Comprehensive Cancer Control and Prevention Plan, improved screening for lung cancer is not as likely an opportunity for improvement as prevention<sup>3</sup>.

Prostate cancer, which primarily afflicts males over the age of 50 years, caused 312 deaths in Kansas in 2002. African-American male Kansans experience a higher age-adjusted incidence rate of prostate cancer (221 per 100,000) versus white male Kansans (153 per 100,000)<sup>3</sup>.

As many as 12,000 new cases of skin cancer are diagnosed annually in Kansas, although data are limited in availability due to reporting deficiencies related to skin cancer<sup>3</sup>. In 2002, 36 male and 21 female Kansans died due to skin cancer<sup>9</sup>.

# FOCUS AREAS FOR CANCER IN KANSAS

While Kansas' cancer mortality rate is decreasing overall (-0.5%), it is not decreasing at the national rate (-1.1) and there are a number of cancers whose death rates are on the rise. The National Cancer Institute reported that in 2002 the following cancers were experiencing rising trends in Kansas: esophagus (females and males); liver and bile duct (females and males); melanoma of the skin (males); and non-Hodgkin's lymphoma (males) (see Table 4). NCI rated these cancers as either 2, 3, or 4 on a scale of 1 (highest) to 9 (lowest) priority.

Table 4: Top Priority Cancers; Death Rate/Trend Comparison by state, Death years through 2002, Kansas vs. U.S., All races, Both sexes<sup>9</sup>

Cancer Site	Priority Index	Recent Trend	KS vs. US rate	Deaths per year 2002	Recent Annual % Change in Death Rates
Esophagus (Female)	2	Rising	Similar	24	+1.6
Liver & Bile Duct (Females)	2	Rising	Similar	39	+1.7
Liver & Bile Duct (Males)	2	Rising	Similar	80	+4.1
Melanoma of the skin (Males)	2	Rising	Similar	36	+1.6
Non-Hodgkin's Lymphoma (Males)	3	Rising	Similar	115	+1.2
Esophagus (Males)	4	Rising	Below	73	+1.9

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# CANCER CARE DISPARITIES

The Kansas Comprehensive Cancer Control and Prevention Plan identifies a number of disparity issues and differences in the burden of cancer because of age, sex, socio-economic, race/ ethnicity and geography. These issues include lack of screening and often the inability to pay for medical care.

# Cancer Care and the Growing Senior Population

In 2000, Kansans 65 years and older made up 16.9 percent of the state population<sup>10</sup>. By 2030, seniors are expected to account for 20.2 percent of the Kansas population, compared to 12.7 percent for the United States<sup>10</sup>. With more than 50 percent of cancer diagnoses occurring after the age of 60, preventing, treating and curing cancer will be top priorities for Kansas<sup>7</sup>. Of the more than 11,000 cancer cases diagnosed in 2002, more than 6,700 (~59 percent) occurred in those 65 and older.

Kansas' rural counties have significant concentrations of elderly people, making the growing need for cancer outreach to rural areas also a priority. Based on the 2000 Census data, 63 of the 105 counties in Kansas rank in the top quarter of the nation's counties in terms of population older than 65<sup>11</sup>. All but one of these counties are rural (See Figure 5).

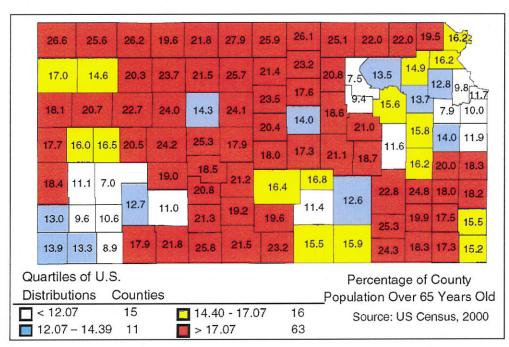


Figure 5: Concentration of Kansas Population Over 65 Years by County<sup>11</sup>



# Socioeconomic/Financial Status

According to the Kansas Comprehensive Cancer Control and Prevention Plan, the financial burden of cancer is staggering for both the State and cancer patients and their families. Kansas currently bears the annual burden of \$1.6 billion due to cancer. Individuals of low income and from ethnic populations feel the biggest impact. More than 10 percent of all Kansans under the age of 65 years are without health insurance<sup>12</sup>. Changes in insurance coverage and cost of co-pays may be an additional barrier to screening and early detection of cancer.

# Race/Ethnicity

Minority and ethnic populations in Kansas represent a small portion of the population, but have a disproportionate amount of the cancer diagnosis and mortality rates. In the Kansas population, 90 percent are white, 6.4 percent are African-American, 2.2 percent are Asian and 1.1 percent are American Indian. Ethnicity breaks out as 92.4 percent non-Hispanic and 7.6 Hispanic<sup>13</sup>.

A particularly alarming cancer mortality rate is found in the Kansas African-American population (See Figure 6). According to the National Cancer Institute, African-American Kansans have a significantly higher cancer

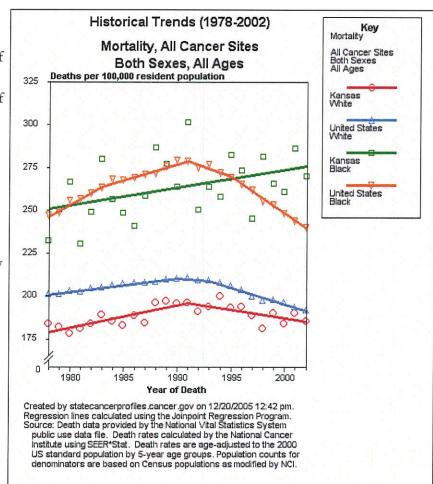


Figure 6: National Cancer Institute, State Cancer Profiles<sup>8</sup>

mortality rate than white Kansans. Kansas is the 49th highest ranking state in African-American male mortality from cancer after the District of Columbia (51) and Oklahoma (50). According to the National Cancer Institute, in 2002, there were 370.2 cancer deaths per 100,000 for African-American males in Kansas.

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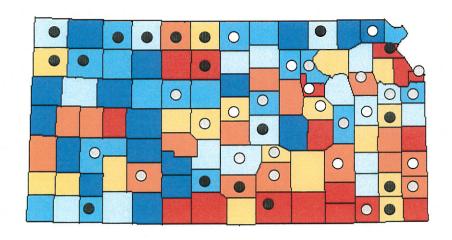


When compared to the U.S. African-American male population, the rate at which African-American male Kansans are dying from cancer is much higher and on an increasing trend. This is particularly disturbing because the rate of cancer mortality in African-American men in the United States, while still higher than the national rate, is falling sharply, and Kansas' rate continues to rise indicating a disparity in cancer care and prevention for the African-American community in Kansas.

For African-American female Kansans, Kansas ranks 39th highest at 205.6 per 100,000 deaths and the rate is "stable." This is significantly higher than the cancer mortality rates for white female Kansans at 158.2 per 100,000 deaths from cancer in 2002, which meets the NCI 2010 Health People Objective.

# WHERE KANSANS RECEIVE CANCER CARE

Cancer treatment in the State of Kansas can be found throughout the State with the most comprehensive treatment centers found primarily in Kansas City, Overland Park, Topeka, Wichita and in the following counties: Barton, Crawford, Ellis, Finney, Ford, Harvey, Lyon, Montgomery, Reno, Riley and Saline (See Figure 7). However, none of these sites offers NCI-designated comprehensive cancer care. Kansans seeking that level of treatment must leave the State.



- Locations offering only oncology and chemotherapy services.
- O Locations where oncologists visit but no treatment is available.
- O Locations offering comprehensive cancer treatment including oncology, chemotherapy and radiation services.

Age-Adjusted Annual Death Rate (Deaths per 100,000) Quantile Interval 205.0 to 269.3 195.0 to 204.9 182.3 to 194.9 172.9 to 182.2 159.7 to 172.8 116.9 to 159.6 **United States** Rate (95% C.l.) 197.8 (197.6 - 198.1) Kansas Rate (95% C.I.) 189.0 (186.7 - 191.3) Healthy People 2010 Goal 03-01 159.9

Figure 7: Cancer Treatment Locations In the State of Kansas<sup>2</sup>

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# ACCESS TO COMPREHENSIVE CANCER CARE

Kansans are currently underserved by comprehensive cancer centers. As a result, many Kansans are faced with choosing comprehensive cancer treatment far from home. When a Kansan leaves the state for a NCI-designated Comprehensive Cancer Center, they often go to the University of Texas—MD Anderson Cancer Center in Houston, TX or Rochester, MN's Mayo Clinic Cancer Center — more than 700 miles away from home for many Kansans.

The closest NCI-designated cancer centers are located in St. Louis, MO at the Washington University Siteman Cancer Center, near Denver, CO at the University of Colorado Cancer Center and the University of Nebraska Eppley Cancer Center in Omaha, NE (See Figure 8). As a result, most Kansans must travel a minimum of 200 miles to access comprehensive care, and many Kansans must travel many more miles.

As a region, the Midwest is underserved by NCI-cancer centers in comparison to the East and West Coasts. Achieving NCI designation as a Comprehensive Cancer Center at the University of Kansas Cancer Center will mean that the more than 23 million people living in Kansas and the surrounding Heartland states of Colorado, Oklahoma, Arkansas, Missouri, Iowa and Nebraska will have another outstanding cancer treatment option closer to home.

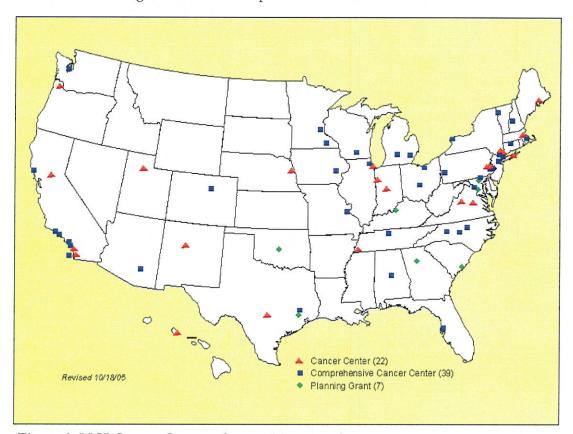


Figure 8: NCI Cancer Centers; Source: National Cancer Institute14



# Why Become a Comprehensive Cancer Center?

# BENEFITS OF COMPREHENSIVE CANCER CENTER STATUS

Bringing the level of care offered by a NCI-designated Comprehensive Cancer Center to Kansas means many things to many people. Whether you are a patient, a physician, a hospital delivering cancer care, a research institution or a community, access to a Comprehensive Cancer Center is a benefit.

# For Cancer Patients

- Increases access to advanced cancer care and therapies.
   NCI status ensures that cancer patients in the state and region will have all the benefits of the National Cancer Program, including increased access to clinical trials and novel treatments long before they are available on the market.
- Advancing comprehensive treatment at home.
   Cancer patients may only have to travel as far as their local community oncologist to receive the latest in cancer treatments if their local hospitals and physician groups are part of the KUCC's Midwest Cancer Alliance.
- Offers multidisciplinary care for every diagnosis. The KUCC's team approach to cancer care is already well known in the region. NCI-status will help the KUCC to take its patient care to the next level because of the expansion of collaborative research, prevention and care programs. This means that patients, no matter their diagnosis, will have state-of-the-art care and better survival prospects.
- Enables immediate state-of-the-art care to patients for whom standard therapy has failed. When standard cancer therapies fail, patients often seek care at Comprehensive Cancer Centers where more advanced and novel techniques are being employed. Kansas cancer patients will no longer have to seek that kind of care out-of-state if KUCC achieves NCI status.
- Allows access to comprehensive care in rural areas. The KUCC already utilizes the nationally recognized Telehealth Program at the KU Medical Center to reach patients and their doctors in rural areas with exceptional care. In FY 2005, KUCC conducted 310 Tele-oncology consultations primarily to two locations Hays and Horton. With the growth of the KUCC and the implementation of the Midwest Cancer Alliance, the Tele-oncology will reach even more rural Kansans.

# **BENEFITS**

- Lives saved through better cancer care
- More accessible care across the State
- Greater research funding
- Commercialization opportunities
- Jobs



## For Physicians

- Increases access to clinical trial information and the latest advances in care. Physician groups and hospitals joining the Midwest Cancer Alliance will be able to participate in and have access to information generated by the KUCC's clinical trials. As the number of clinical trials conducted in Kansas increases, more Kansans will be able to participate in those trials and gain the benefits of access to novel therapeutics before they reach the market.
- Improves ability to treat patients in their own communities. A fundamental belief of the KUCC is that the majority of cancer care should be delivered at the community level. The Midwest Cancer Alliance will help optimize the speed of delivery of new targeted diagnostics, therapies and preventatives to patients.
- Improves the network of research and clinical oncologists sharing information and best practices. The more oncologists can share best practices and information, the better for their practices and ultimately their patients.
- Increases access to consultative services. The KUCC will provide consultative services for the entire spectrum of patient care services in medical, surgical and radiation oncology via the Midwest Cancer Alliance. Assistance in developing programs will include cancer committees, tumor registry, cancer conferences, psychosocial support, community outreach and oncology nursing care standards.

# For Hospitals

- Increases ability to recruit and retain outstanding cancer physicians and nurses. Ensures that the best and brightest medical and nursing students in oncology can have rewarding, high quality careers in Kansas.
- Keeps cancer referrals in the region. Reduces the need for cancer patients to seek cancer care in other states.
- Provides better coordination with cancer treatment and prevention programs. Allows for the development and coordination of programs with local and state agencies, thus reducing the overall cancer burden in this part of the Midwest.
- Improves outcomes for patients. Oncologists who know more and have access to the latest treatment methods can help their patients survive longer.
- Recognizes strengths of cancer programs throughout the State by partnering with
  existing cancer programs. The KUCC's Midwest Cancer Alliance will build on the existing
  strengths in the cancer programs across Kansas and the Region to ensure that the best cancer
  care is delivered to patients.



#### For Research Institutions

- Increases ability to recruit and retain world-class cancer researchers. NCI designation sends a message to the world's scientists that Kansas is a great place to conduct research, whether they focus on cancer or other health areas.
- Enhances research opportunities. NCI designation fosters broad-based cancer research and creates a seamless pipeline for discoveries emanating from the KU School of Pharmacy—ranked third in the nation in relation to federal research grants to Schools of Pharmacy. This, in turn, will speed the development, testing and marketing of new cancer drugs and therapies.
- Increases funding for research efforts. Most NCI-designated Cancer Centers experience a significant increase in research funding following designation. It is expected that within five years of designation KUCC members' total research grants will exceed \$100 million.
- Makes possible higher impact, paradigm changing research projects. With recognition and steady funding from NCI, more far-reaching research projects are possible. The ongoing funding from NCI frees up resources for pilot projects that are otherwise difficult to launch.
- Builds on regional strengths in pharmaceutical development. Increases the chances that Kansans may be treated with drugs developed through the KUCC. The synergy between the KU Medical Center and the KU School of Pharmacy links patients and providers with the University's unique resources in cancer drug discovery and drug development.

#### For Kansas Communities

- Builds on regional strengths in the biosciences. The Kansas City Area Life Sciences Institute identified cancer and clinical trial management as strengths in its report produced by New Economy Strategies, Inc. in 2004<sup>15</sup>. From the KU School of Pharmacy to the regional life sciences companies focused on clinical trial management (e.g., PRA International, Quintiles, Vince & Associates), a greater focus on getting Phase I oncology agents to the market will help economic growth in our communities.
- Promotes the bi-state academic enterprise. As documented by the Blue Ribbon Task Force
  Report<sup>16</sup>, commissioned by the Greater Kansas City Community Foundation, investing in
  basic, translational and clinical research at the KU Medical Center represents the greatest
  opportunity to expand the national research presence of the Kansas City Metropolitan area and
  grow the State's economy.
- Spurs growth of biosciences sector and related economic development. The impact of
  achieving Comprehensive Cancer Center status also can spark entrepreneurial opportunities
  and related economic development in the bioscience and pharmaceutical industries in Kansas
  and the region.



- Reduces "brain drain" from Kansas. Our brightest students will choose to stay in Kansas to pursue their talents in cancer research and care, as well as other areas of the biosciences.
- Increases the flow of federal research dollars to region. Most NCI-designated cancer centers increase their funding from NCI, the National Institutes of Health and other resources by at least three fold. KUCC is projecting a \$57 million increase in research funding for its members within the next 10 years bringing KUCC's total annual grant funding to more than \$100 million.
- Creates jobs. According to the U.S. Department of Commerce, for every \$1 million in research funding, 41 jobs are created. When the KUCC achieves its goal of \$100 million in annual research funding by 2015, it will mean creating more than 2,300 jobs in the region. Those additional workers will need houses, cars, groceries and the other necessities of life meaning potentially billions of dollars in economic impact to the State and Heartland Region.

### BENEFITS OF NCI DESIGNATION

Attaining NCI designation is a prestigious "good housekeeping" seal of approval indicating that a cancer center has achieved the highest standards in cancer research and care. It also increases access to cutting edge clinical trials and special grant funding mechanisms. In addition, having NCI designation increases a cancer center's ability to recruit world-class researchers and physicians.

# WHAT IS THE NATIONAL CANCER INSTITUTE?

The National Cancer Institute (NCI) is a program of the National Institutes of Health (NIH), within the U.S. Department of Health and Human Services (HHS). The NCI, established under the National Cancer Act of 1937, is the Federal Government's principal agency for cancer research and training.

The National Cancer Act of 1971 broadened the scope and responsibilities of the NCI and created the National Cancer Program. The National Cancer Program conducts and supports research, training, health information dissemination and other programs with respect to the cause, diagnosis, prevention and treatment of cancer, rehabilitation from cancer and the continuing care of cancer patients and the families of cancer patients.

NCI supports major academic and research institutions throughout the United States to sustain broad-based, coordinated, interdisciplinary programs in cancer research. NCI-designated institutions are characterized by scientific excellence and capability to integrate diverse research approaches to focus on the problems of cancer. NCI accredits and designates cancer centers that:

• Conduct outstanding cancer research focused on translating discoveries into better cancer treatments and tools for cancer diagnosis and prevention.



- Provide outstanding, state-of-the-art cancer care to their patients.
- Effectively reach out to their regional communities to form partnerships for cancer education and prevention.

NCI grants two types of designations — Cancer Center and Comprehensive Cancer Center. Cancer Centers have scientific agendas that are primarily focused on basic, population sciences, or clinical research, or any two of the three components. Comprehensive Cancer Centers integrate research activities across three major areas: laboratory, clinical and population-based research. Comprehensive Cancer Centers have extensive ancillary cancer-related activities such as outreach, education and information dissemination.

As of October 2005, there are 39 Comprehensive Cancer Centers and 22 Cancer Centers in 32 states and the District of Columbia. Seven cancer centers are known to be actively seeking NCI designation in the next few years. The KUCC is projecting a course that would seek Cancer Center status in the next five years and Comprehensive Cancer Center Status by 2015.

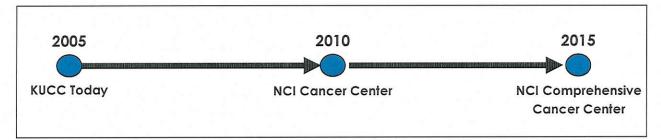


Figure 9: Estimated Timeline for Achievement of NCI Cancer Center and Comprehensive Cancer Status for the KUCC



## REQUIREMENTS FOR NCI DESIGNATION

Gaining NCI designation is an extremely competitive process. Even the most renowned U.S. cancer research institutions like MD Anderson and the Mayo Clinic consider recognition and funding from NCI to be a "hard-won" prize, and one they continually work to maintain. The closest regional candidate is the University of Oklahoma's Cancer Center, which is expected to file for NCI designation in the near future.

# **NCI Comprehensive Cancer Center Designation Criteria**

#### I. Cancer Focus

The existence of a clearly defined scientific focus on cancer research must be demonstrated by the Center's grants and contracts, structure and objectives of its programs and by the nature of collaborations between fundamental researchers and others who are more directly concerned with cancer applications.

#### **II. Institutional Commitment**

A strong commitment from the parent institution is critical and must include recognition of the Cancer Center as a formal organizational component with sufficient space, positions and discretionary resources to ensure organizational stability and fulfillment of objectives; the Cancer Center director should have comparable authority to other organizational units within the institution; and the parent institution also should provide assurance of its continuing support with a well-defined plan.

#### III. Center Leadership

The director must be a highly qualified scientist and administrator with leadership experience and with the authority to manage the center on a full-time basis.

#### IV. Interdisciplinary Coordination and Collaboration

There must be research activity in a variety of disciplines and a high degree of coordination, interaction and collaboration among Cancer Center members.

#### V. Facilities

Facilities dedicated to the Center's shared resources, the conduct of research and the administrative activities must be appropriate and adequate for the task.

#### VI. Organizational Capabilities

Joint initiatives must be promoted as well as collaborations and interactions within and among the Cancer Center's programmatic elements. The organizational arrangements must take maximum advantage of the parent institution's capabilities in cancer research. Most successful Centers have external advisory committees that provide the director independent input.



## I. CANCER FOCUS

## **NCI Criteria and Essential Characteristics**

Research, clinical, prevention and outreach activities must be cancer specific; minimum of three research programs with minimum of three researchers with peer reviewed funding; overall program must have a minimum of \$4 million NCI funding.

## **KUCC Today**

**Research Programs**: The KUCC has research strengths in cancer biology, cancer prevention, risk assessment and early detection, drug discovery and development and clinical research.

Cancer Center Membership: KUCC currently has 116 members, who are cancer researchers and physicians. KUCC's members bring in more than \$43 million in annual grant funding.

NCI Funding: KUCC members currently receive \$6.4 million in NCI funding.

**Drug Development**: KUCC researchers in cooperation with Lawrence, Kansas-based CritiTech, Inc., will begin trials of Nanotax®, a new formulation of Taxol®, a drug used for the treatment of ovarian and breast cancer, in the near future.

**Cancer Information Service**: NCI selected KMCRI as one of four organization to operate its cancer information service (1-800-4CANCER), a \$16 million contract over five years awarded in 2005.

# What KUCC Needs to be Ready for NCI Designation

- Advance the KUCC's research programs by recruiting senior scientists with cancer research funding.
- Add an additional 20 Cancer Center members over the next three years.
- Attract an additional \$30 million in NCI research funding within the next 10 years.
- Fully implement the Midwest Cancer Alliance across the State and region.



## II. INSTITUTIONAL COMMITMENT

#### **NCI Criteria and Essential Characteristics**

Space, resources, organizational status and state funding must be significant and ongoing.

## **KUCC Today**

The University of Kansas and its regional partners have made a significant contributions to the development of the KUCC, including:

- The Kansas Masonic Foundation pledged \$15 million over five years (FY 2005-2009) to
  provide support for the shared resources for areas such as the clinical trials office and the pilot
  project program for new ideas and investigators.
- The University of Kansas Medical Center has committed \$16.4 million over five years in the form of Dr. Jensen's professorship, lab, equipment and personnel costs, support for other cancer faculty and part of the Lied Biomedical Research Building renovation (FY2005-2009).
- The University of Kansas-Lawrence has committed \$16.5 million to support the construction of the Structural Biology Center (Phase III+).
- The University of Kansas Hospital has committed \$15 million over five years (FY2005-2009) for renovation of cancer patient care sites and \$1.5 million over three years for infrastructure costs related to the quest for NCI designation (FY 2005-2007).
- The Stowers Institute for Medical Research has endowed with \$32 million the Associate
  Director of Basic Science position at the KUCC and has provided another \$2 million for the
  Biomed Valley Endowed Professorship at the University of Kansas (Ongoing).

# What KUCC Needs to be Ready for NCI Designation

Ongoing funding that includes endowed professorships, operating funds and research seminar series are considered important aspects of the NCI application. In addition, state funding of \$5 million annually will be key, as will increased support from the KUCC partners and the private foundations, companies and private donors in and around Kansas.



## III. CENTER LEADERSHIP

### **NCI Criteria and Essential Characteristics**

Highly qualified scientist/administrator in a leadership position; full-time commitment; control appointments; peer review; cancer-related recruitment; space; and resources.

# **KUCC Today**

In 2004, Roy Jensen, MD, was hired as the first full-time Director of KMCRI and to lead the effort for NCI designation for the developing KUCC. Dr. Jensen is not only an expert in breast cancer research based on his experience from NCI-designated Vanderbilt University, but also a native Kansan.

# What KUCC Needs to be Ready for NCI Designation

To support the efforts of Dr. Jensen, additional staff members identified for recruitment are:

- Deputy Director (estimated hire Fall 2006).
- Director of Therapeutics Discovery and Development (completed).
- Associate Director of Basic Sciences (estimated hire Fall 2006).
- Assistant Director of Basic Science (KU-Lawrence) (estimated hire Fall 2006).
- Executive Director CTO/Affiliate Network (estimated hire Spring 2006).



## IV. INTERDISCIPLINARY COORDINATION AND COLLABORATION

#### **NCI Criteria and Essential Characteristics**

Creative, interactive research; multidisciplinary involvement; outreach and interactions with others.

## **KUCC Today**

The KUCC Partnership between the KU Medical Center, the Kansas Masonic Cancer Research Institute, the University of Kansas-Lawrence, the Stowers Institute for Medical Research and the University of Kansas Hospital is unique and one that involves a multidisciplinary approach. The KUCC's four cancer programs are well defined with strong leadership. These programs are already fostering collaborations, and the first shared resources are in development.

Current collaborative activities include: research retreats, a seminar series, journal clubs and programmatic meetings.

# What KUCC Needs to be Ready for NCI Designation

- Increase the number of collaborative grants and publications between KUCC partner organizations.
- Launch new pilot projects.
- Utilize the Telehealth program even more by expanding its cancer consultations to all Midwest Cancer Alliance members.
- Fully integrate all partner institutions into the scientific programs of the Cancer Center.



## V. FACILITIES

#### **NCI Criteria and Essential Characteristics**

Adequate facilities dedicated to cancer research activities; proximity of shared resources.

## **KUCC Today**

The KUCC currently utilizes approximately 35,000 sq. ft. of laboratory space and 10,000 sq. ft. of office space. The addition of the Westwood campus in 2005 will add 46,000 sq. ft. for clinical and office space. KU Medical Center also has committed to renovating the Lied Biomedical Research building to house the Cancer Center, which will mean adding space for 20 principal investigators in 2007.

# What KUCC Needs to be Ready for NCI Designation

- An additional 33,000 sq. ft. of lab space on KU-Lawrence campus.
- Endowed research laboratories at the KU Medical Center campus.

## VI. ORGANIZATIONAL CAPABILITIES

#### NCI Criteria and Essential Characteristics

Promote joint initiatives, collaborations and interactions among members; External Advisory Board; Internal Advisory Committee; process for determining membership.

# **KUCC Today**

The following organizational capabilities have been launched since 2004: the External Advisory Board; Membership Committee and a process for determining membership; Cancer Center Senior Leadership Committee; and the Cancer Committee (Internal Advisory).

# What KUCC Needs to be Ready for NCI Designation

Improved and expanded infrastructure for collaboration.



### WHY KUCC IS AN EXCELLENT CANDIDATE

The KUCC's partnership structure and access to the vast resources within the University of Kansas system make it well on its way to fulfilling the NCI's six criteria. However, many areas must be expanded and improved to gain this coveted designation.

## **Key KUCC Initiatives**

Under Dr. Roy Jensen's leadership, the following initiatives have begun in anticipation of applying for NCI status:

- Creating a Midwest Cancer Alliance of providers across the state to ensure that all Kansans have greater access to the best in cancer therapies and prevention as close to home as possible.
- Increasing federal research funding for cancer research by at least \$40 million in five years.
- Improving coordination of Phase I clinical trials, including a unique role for KU Medical Center's Wichita campus and the affiliated Wichita Community Clinical Oncology Program, which includes Via Christi Regional Medical Center and Wesley Medical Center and their partners.
- Focusing on the development and delivery of novel therapeutics to the bedside to improve cancer care for Kansans.
- Gaining federal support for a cancer informatics infrastructure based in Wichita.
- Building a state-of-the-art Cancer Research Center and recruiting a critical mass of talented research faculty.

# Why KUCC Is a Strong NCI Designation Candidate

- KU Cancer Center partnership structure.
- Planned state-wide outreach via the Midwest Cancer Alliance.
- Drug development program at KU School of Pharmacy.
- Relationship with Stowers Institute for Medical Research.
- Cancer prevention program.
- Growing NCI/NIH grant funding.
- Recruitment of leadership; strong program leaders.
- Kansas' cancer mortality rate (-0.5%) is not dropping as fast as the U.S. rate (-1.1%).
- Cancer mortality among African-American male Kansans is high and on the rise.



#### **KUCC Midwest Cancer Alliance**

A key component of the KUCC plan for achieving Comprehensive

Cancer Center status is the development of the Midwest Cancer Alliance

— a network of hospitals and physician groups across the State and region focused on improving cancer care and prevention. The purpose of the Midwest Cancer Alliance is to optimize the development and speed the delivery of newly developed targeted diagnostics, therapies and prevention strategies to patients across Kansas and the Heartland region.

The Midwest Cancer Alliance plans to build on the successes of other programs across the state, such as the Wichita Community Clinical Oncology Program. It also will ensure that advanced cancer care reaches rural communities in Kansas, allowing cancer patients to be treated by their local community oncologists and reducing travel time and costs for cancer care. It will spread the benefits of NCI designation to the entire state, and help cancer patients to receive more comprehensive care in their home communities.

Other benefits of the Midwest Cancer Alliance will be improved access to clinical trials and research results, multidisciplinary oncology teams and second opinions. It is expected that the Midwest Cancer Alliance will increase the sharing of best practices and resources among the state's oncologists and improve access to professional education and training for cancer care practitioners.

The Midwest Cancer Alliance is currently in development. The recruitment process for hospital and physician group partners began in late 2005.

# Kansas Telehealth Program

The Kansas Telehealth program, led by oncologist Gary Doolittle, MD, is a key aspect of the KUCC's ability to reach cancer patients in distant rural communities (See Figure 10). One of the top programs nationally, the Kansas Telehealth Program treats 3,500 patients annually, of which 310 were cancer consultations. Use of the Telehealth Program is expected to expand with the KUCC's growing capabilities.

The KU Medical Center has demonstrated a commitment to providing its services and expertise to patients across the state. While many aspects of this care can be accomplished through satellite institutions, modern health care techniques allow for the use of broadband technology, digital storage devices, real-time video and other innovations to bring health care to rural and underserved patients throughout Kansas and the Region. For nearly 15 years, KU Medical Center has researched and developed Telemedicine and Telehealth initiatives, while also providing superior medical access to many regions of the vastly rural Kansas landscape through its nationally-respected Telehealth program. The capabilities of KU Medical Center's Telehealth program offer great promise for providing care to even more communities and citizens of Kansas.



Tele-oncology, or the provision of cancer care via telemedicine technology, is another hallmark of KU Medical Center and is consistent with the broader goal of achieving NCI designation. Hundreds of cancer patients in Kansas have received diagnosis, treatment and follow-up consultations via Telehealth, thereby reducing unneeded stress on the patient and providing more timely interventions. Cancer physicians around the state have also been able to participate in live Tumor Board and Journal Club discussions from the convenience of their own facilities, thus keeping them current and improving their patients' treatment. Other promising tele-oncology services include a Breast Cancer/Genetic Risk assessment project, statewide clinical trials opportunities for cancer patients and tele-pathology.

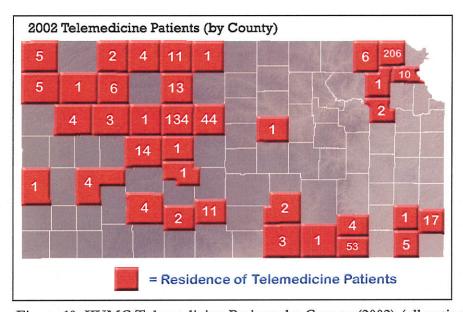


Figure 10: KUMC Telemedicine Patients by County (2002) (all patients)<sup>17</sup>



# What Investment Is Needed?

key consideration for the National Cancer Institute is the investment being made in the cancer center of interest by the State and local community. KUCC is fortunate to be off to a great start in terms of institutional and philanthropic investment, but still has a long way to go before NCI designation will be granted.

To be considered a serious candidate for NCI designation, KUCC must receive significant, ongoing support from many sources. In addition to demonstrated success at obtaining external funding, another important funding source will be the State General Fund. All public NCI-designated centers receive ongoing support from their respective States.

Funding commitments from KUCC's partners (e.g., KU Hospital Cancer Center, Stowers Institute for Medical Research) and private philanthropic sources also are needed to demonstrate the local community's support. It is expected that additional federal dollars will be garnered as the state and local commitment to fund the KUCC grows and the KUCC has greater research capacity.

## **DESIRED STATE OF KANSAS INVESTMENT**

To be successful in gaining NCI designation, ongoing, dedicated support from the State of Kansas is critical. A significant commitment from the State will demonstrate the requisite dedication needed to ensure long term success for a Comprehensive Cancer Center at the University of Kansas. For Kansas to achieve its vision of creating a world-class cancer research, treatment and prevention center, a \$5 million ongoing appropriation (adjusted for inflation) from the State will be needed beginning in FY 2007. This investment represents slightly more than the economic burden imposed by cancer on the state every 24 hours (\$4.4 million).

This important State financial commitment will be used to fund a portion of the Center's ongoing annual management and infrastructure expenses. Table 5 shows the expected allocations of the \$5 million annually.

Additional funding for infrastructure beyond the state contribution will be provided by other public and private grants, private donations, KU operating budget and other sources.

"My dream for this medical center, for this community and for our State is to provide this region with the Comprehensive Cancer Center its citizens deserve....
My dream for Kansas is nothing short of ending suffering and death from cancer....
Within our grasp are the tools and talent necessary....

It is the University's number one priority."

 Robert Hemenway, PhD, Chancellor, University of Kansas University of Kansas Convocation, September 2005



Table 5: Allocation of State Investment Request

Investment Area	Annual Investment Requested
Office of Therapeutics Discovery and Development	\$ 391,000
Office of Clinical Trials and Midwest Cancer Alliance	\$ 1,275,000
Pilot projects prior to grant funding	\$ 320,000
Start-up funds for newly recruited researchers/clinicians	\$ 800,000
Post-doctoral researchers	\$ 218,000
Shared Resources for research technology support	\$ 686,000
Scientific Advisory Board	\$ 25,000
Director and senior leadership team	\$ 826,000
Administrative support	\$ 459,000
State Funding Requested (Adjusted for inflation annually)	\$ 5,000,000



# What Are the Economic Benefits of this Initiative?

A chieving NCI designation as a Comprehensive Cancer Center will mean many things for the KUCC, the State and the Heartland Region. First and foremost, it will mean that the State of Kansas has reduced the burden of cancer on its citizens and its economy by investing in the advancement of the State's research, prevention and care capabilities. It also will mean growth across a myriad of related segments of the State and Region's economies.

In a recent study sponsored by the Kansas Technology Enterprise Corporation<sup>18</sup>, the Perryman Group (TPG) evaluated the potential impact of an enhanced emphasis on cancer research and care and gaining NCI status at the KU Cancer Center. Specifically, TPG evaluated the economic advantages occurring from the direct activity associated with an increase in research and clinical operations, as well as the notable societal gains brought on by reducing cancer mortality.

TPG predicts that improving the research and treatment capabilities and capacities in Kansas will improve outcomes for cancer patients in the State and surrounding Heartland Region. With greater access to clinical trials and emerging treatment options, and closer proximity to a Comprehensive Cancer Center, Kansans will improve their chances of preventing and surviving cancer, which will result in improved health and quality of life.

In their economic impact modeling, TPG expects the enhanced emphasis on cancer research and treatment to lead to the following benefits (See page 34 for TPG's term definitions):

• \$136 million in aggregate research funding<sup>18</sup>, representing an increase of almost \$100 million over 2005 levels (measured in constant 2005 dollars) (See Figure 11).

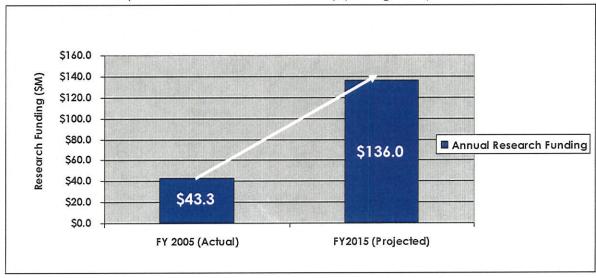


Figure 11: KUCC FY 2005 Research Funding and TPG FY 2015 Research Funding Projections



- Employment of some 1,360 people in research activities by 2015, as well as additional staffing for clinical research programs and administrative programs.
- Addition of 726,000 square feet of research space devoted to cancer by 2015 (2005 research space is 94,000 square feet).
- Total economic impact of research and clinical facilities construction and operations through 2015 is expected to be (monetary values are given in constant 2005 dollars):

Table 6: Total Economic Impact of Construction and Operations<sup>18</sup>

Total Economic Impact	Construction Year 1-10 (through 2015) State of Kansas	Operations By Year 10 (2015) State of Kansas
Total Expenditures	\$1,642.419 million	\$741.935 million
Gross Product	\$748.124 million	\$443.641 million
Personal Income	\$477.363 million	\$293.960 million
Retail Sales	\$182.404 million	\$87.819 million
Person-Years of Employment	11,256	6,199

Increased licensing revenues and encouragement of a greater presence in the biotechnology
fields, will result in the following secondary economic development (monetary values are given
in constant 2005 dollars):

Table 7: Increased Licensing Revenues<sup>18</sup>

Increased Licensing Revenues	By Year 10 (2015) State of Kansas
Total Expenditures	\$406.436 million
Gross Product	\$144.411 million
Personal Income	\$85.680 million
Retail Sales	\$32.607 million
Permanent Jobs	1,816



Reducing cancer mortality rates drives significant economic activity resulting in the following:

Table 8: Total Economic Impact of Cancer Mortality Reductions<sup>18</sup>

Cancer Mortality Reductions	Over 5 years (2011-2015) State of Kansas
Total Expenditures	\$98.816 million
Gross Product	\$46.339 million
Personal Income	\$27.824 million
Retail Sales	\$11.694 million
Person-Years of Employment	680

• The estimated societal gains from a Comprehensive Cancer Center in Kansas and other investments in cancer research and treatment are expected to be more than \$751 million over five years (2011- 2015) just based on the amount people are willing to "pay" for greater life expectancy. These numbers do not capture the social benefits of reductions in pain, suffering and family hardship<sup>18</sup>.

#### TPG Definitions<sup>18</sup>

**Total Expenditures**: The most comprehensive measure of economic activity, "Total Expenditures" incorporates every dollar that changes hands in any transaction. For example, a farmer sells wheat to the miller for \$0.50; the miller then sells flour to a baker for \$0.75; the baker, in turn, sells bread to the consumer for \$1.25. The "Total Expenditures" recorded in this instance would be \$2.50 — the cumulative of the all the transactions. This measure reflects the overall interplay of all industries in the economy, and some key fiscal variables such as sales taxes are linked to aggregate spending.

**Gross Product**: The regional equivalent of Gross Domestic Product, "Gross Product" is the most commonly reported statistic regarding national economic performance —he value of all final goods produced in a given region for a specific time period. It can be viewed as the sum of the value-added by each of the related transactions. For example, the sum of the value added by the farmer (\$0.50); the miller (\$0.25) and the baker (\$0.50), which equals \$1.25, or the final value of the bread.

**Personal Income**: As the income received by individuals, "Personal Income" can be in the form of wages, salaries, interest, dividends, proprietors' profits or other sources.

**Retail Sales**: The component of Total Expenditures that occurs in retail outlets (e.g., general merchandise stores, automobile dealers and service stations, building materials stores, food stores, drugstores, restaurants), "Retail Sales" are a commonly used measure of consumer activity.

**Permanent Jobs** and **Person Years of Employment**: The full time equivalent jobs generated by an activity, excluding those that are temporary by nature, "Permanent Jobs" indicate ongoing employment over multiple years, while "Person Years of Employment" indicates only a person working for a year. Construction jobs are typically measured in "Person Years of Employment" since they are tied to the construction project rather than an ongoing position.



# Conclusion

ancer is a significant problem in Kansas, and one that will not be resolved without a specific plan of action and without significant State and local investments in cancer research, treatment and prevention. Kansas' cancer mortality rate is not falling as fast as the nation, and in some populations and some counties, there is a rising rate of cancer that far exceeds national levels. In addition, Kansas cancer patients have limited access to experimental, state-of-the art treatments because the State does not have a NCI-designated Comprehensive Cancer Center.

The goal of the KUCC is to change that. There is a plan in place and KUCC seeks to build the right team, which will lead the effort in conducting research, treating, preventing and, hopefully, curing cancer across the State. The Governor's March 2005 Kansas Comprehensive Cancer Control and Prevention Plan lays out aggressive goals for reducing the burden of cancer on Kansas. One of the key ways Kansas can achieve these goals is by setting a course for National Cancer Institute designation for the KU Cancer Center.

The KU Cancer Center and its partners already have many of the pieces in place to deliver advanced cancer care across the State. In particular, the KUCC's four program areas, its drug development pipeline emanating from the KU School of Pharmacy, its world-class researchers associated with the Kansas Masonic Cancer Research Institute, use of the KU Medical Center's Telehealth program, and its relationship with the Stowers Institute for Medical Research are all contributing to the growth of the KUCC.

However, to meet the Governor's goal of reducing cancer mortality and improving treatment and prevention across the State, attaining NCI Comprehensive Cancer Center status for the KUCC will be important. Achieving NCI status will be an indicator that the KUCC is conducting the world-class research and delivering advanced care through its partner network that befits national recognition. For Kansans, it will mean access to comprehensive care in the State and more advanced care in their own communities via the KUCC's Midwest Cancer Alliance.

Now is the time for the State to commit financially to ensure that the resources are in place to achieve those goals. A \$5 million annual investment (adjusted for inflation) is a small price to pay to reduce the \$1.6 billion annual cost of battling cancer in Kansas, and to gain even a fraction of the potential economic benefits expected from the effort to build KUCC into a Comprehensive Cancer Center.

This is the right State investment, at the right time, with the right team.



# Glossary

**Cancer**: A general term for more than 100 diseases in which abnormal cells grow out of control. Also used to refer to a malignant tumor or cancerous tumor.

Clinical Trials: Clinical trials are research studies in which people volunteer to participate. They are a means of developing new treatments and medications for diseases and conditions. There are strict rules for clinical trials, which are monitored by the National Institutes of Health and the U.S. Food and Drug Administration. Clinical trials are usually done in three phases (See page 41). Clinical trial research seeks to improve treatment for the population as a whole. The benefits to individual patients are limited; however, experimental therapies provided in clinical trials are often the last resort for patients who have exhausted all other treatment options.

Malignant: Cancerous.

National Cancer Institute (NCI): Established in 1937, the National Cancer Institute began by administering a fellowship program, as well as conducting cancer research within its intramural program. It became officially part of the National Institute of Health in 1944 when the NIH was still singular. The *Journal of the National Cancer Institute* published its first issue in 1940. In 1972, the status of NCI was elevated to a bureau-level organization in accordance with the expanded responsibilities bestowed on it by the National Cancer Act of 1971.

National Institutes of Health (NIH): The NIH, now one of the world's foremost biomedical centers, had a humble origin. It started in 1887 as a one-room laboratory conducting bacteriological research within the Marine Hospital at Stapleton, Staten Island, New York. This laboratory, called the Laboratory of Hygiene, moved to Washington, D.C., in 1891. With the Ransdell Act of 1930, it was renamed the National Institute of Health. In 1938, construction began for new buildings for NIH in Bethesda, Maryland, on the 45 acres of land donated by the Wilson family. In 1948, with the creation of the National Heart Institute, the NIH officially became plural, the National Institutes of Health, and by 1950 it had seven institutes and one division under its wing. Since then, the NIH has seen rapid growth, especially in its extramural program which administers the process of awarding grants to researchers around the world. Currently it is composed of 27 institutes and centers.

**Oncologist**: A doctor who specializes in the diagnosis, treatment and rehabilitation of individuals suffering with cancer.

**Oncology**: The branch of medicine that deals with tumors, including study of their development, diagnosis, treatment and prevention.



#### Phase I, Phase II and Phase III Studies:

Phase I: Phase I clinical trials test the safety of treatments on a small number of patients, typically those that do not respond to other treatments. The Phase I study is used to learn the "maximum tolerated dose" of a drug that does not produce unacceptable side effects. Patient volunteers are followed primarily for side effects, and not for how the drug affects their disease. The first few volunteer subjects receive low doses of the trial drug to see how the drug is tolerated and to learn how it acts in the body. The next group of volunteer subjects receives larger amounts.

**Phase II**: Phase II clinical trials assess the effectiveness of treatments and usually involve a larger groups of people. The Phase II study involves a drug whose dose and side effects are well known. Many more volunteer subjects are tested, to define side effects, learn how it is used in the body and learn how it helps the condition under study.

Phase III: Phase III clinical trials provide in-depth information about the effectiveness and safety, by comparing experimental treatment with standard protocols. Phase III trials usually involve several thousand patients nationwide. Randomized clinical trials, considered the "gold standard" of scientific research, involve study participants who are randomly assigned to different treatment groups and then compared. The Phase III study compares the new drug against a commonly used drug. Some volunteer subjects will be given the new drug and some the commonly used drug. The trial is designed to find where the new drug fits in managing a particular condition.



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