

The University of Kansas Medical Center



The University of Kansas Medical Center Research Institute, Inc.

**EXTRAMURAL FUNDING FOR FISCAL YEAR 2008
(7/1/2007 – 6/30/2008)**

Summary

January 2009

To the Greater Kansas City Community:

We are pleased to provide the annual report of all extramural sponsored program activities for Fiscal Year 2008 (7/1/2007 – 6/30/2008) at the University of Kansas Medical Center (KUMC), which includes the School of Allied Health, the School of Medicine – Kansas City, the School of Medicine – Wichita, the School of Nursing, and the KUMC Research Institute, Inc.

This Annual Report includes information on grants, contracts, cooperative agreements, and other submissions and awards to inform you of the scope of research and other sponsored activities supported by the extramural funding community.

We would like to extend our thanks to all of those who have worked to provide the information contained in this report. A special thanks goes to the KUMC Office of Planning and Analysis for providing the statistics and report design.

The KUMC Research Institute, Inc. remains committed to the growth and development of the KUMC biomedical research enterprise through its support of its faculty and staff, and is an important partner in achieving the goals of the ten year strategic vision.

<http://www.kumc.edu/evc/TheTimeIsNow.pdf>

If you have questions regarding any information provided in the report, please contact the Research Institute at (913) 588-5436.

Sincerely,

Gregory S. Kopf, Ph.D.
Associate Vice Chancellor for Research Administration – KUMC
Executive Director – KUMC Research Institute, Inc.

About the KUMC Research Institute

The University of Kansas Medical Center Research Institute, Inc. (KUMCRI) is a not-for-profit organization established to promote and support medical research. Created by the University of Kansas Medical Center (KUMC) in 1992, the Research Institute administers funded research projects on behalf of KUMC. The mission of KUMCRI is to support and enhance the research efforts of the KUMC faculty and staff for the benefit of the public.

The Research Institute's objectives are to:

- Serve KUMC by promoting and operating at the highest level of administrative and financial honesty and integrity;
- Foster individual and consortia partnerships between KUMC researchers and national, regional, and local research bio-medical communities;
- Enhance revenue to researchers and the university through the transfer of research discoveries and other special information to the private sector; and
- Facilitate cooperative research interactions domestically and internationally between the KUMC and corporations and with other research centers throughout Kansas and the greater Kansas City metropolitan area.

Research Programs

Overview

Research programs at KUMC include a wide range of areas such as: cancer, neuroscience, kidney/bone research, reproductive sciences, aging, maternal fetal, child health, ophthalmology/bioengineering, orthopedics/bioengineering, diabetics, cardiovascular, immunology/virology, integrative medicine, obesity, personalized medicine, public health, and liver/gastroenterology. The KUMCRI is in partnership with all of these programs.

Cancer

Cancer research is the number one priority of the university and includes research directed at understanding the causes of cancer, providing clues regarding potential new forms of therapy, developing new therapeutics with enhanced efficiency and fewer side effects, and developing new cancer diagnostic and tumor imaging agents.

Neuroscience

Neuroscience research encompasses several areas including the study of development of the nervous system; understanding demyelinating diseases; understanding and improving recovery of function following peripheral and central nervous system injury and stroke; motor and cognitive defects associated with HIV; neurophysiological, behavioral and molecular measures of early development; central mechanisms of hearing; the study of neurotransmitters; female pain; diabetic neuropathy and; neuroplasticity.

Kidney/Bone Research

The Kidney Institute at the University of Kansas Medical Center performs research in several areas. Polycystic Kidney Disease (PKD) research is a major interest area that studies kidney cell proliferation with a long-term goal of finding a treatment for PKD that will alleviate the suffering of patients impacted by the disease. Researchers are studying molecular mechanisms of polycystin-1 and normal and abnormal development of the kidney. Researchers also study the metabolic regulation of minerals in bones and kidney.

Reproductive Sciences

Research at the University of Kansas Center for Reproductive Sciences includes the investigation of fertility, infertility, and diseases of the reproductive system. Knowledge of reproductive processes is gained through basic and clinical research encompassing a wide range of scientific and clinical pursuits. Specific focus areas include male fertility; female reproductive cycle; fertilization, implantation, and pregnancy; analysis of complex neural networks controlling hormone secretion reproduction and behavior and; cancers of the reproductive system.

Aging

The University of Kansas Medical Center faculty is engaged in research addressing a variety of problems related to aging, ranging from social concerns to cellular biology. Areas of research at the Landon Center on Aging includes diseases of old age such as stroke and cancer; health care technology as it pertains to the elderly including mechanical, biomechanical, and biomedical engineering; social issues of aging such as the needs of caregivers and end of life issues; health policy and health services for the elderly; cognition and aging; brain plasticity and repair; and communication. These projects are conducted in an interdisciplinary setting. For example, the Brain Aging Project investigates a series of lifestyle issues that impact brain aging in addition to looking at the structure of the brain itself and how it changes with age.

Maternal Fetal Biology

Scientists in The Institute of Maternal Fetal Biology investigate genes and proteins and their involvement in regulating maternal adaptations to pregnancy, immunology, placental biology, and fetal development. Special topics of investigation include preeclampsia, early pregnancy loss, intrauterine growth restriction, blood cell formation in the fetus (anemias and thalassemias), sexual development, maternal substance abuse, factors leading to birth defects, pulmonary development, and mechanisms of lung injury.

Child Health

Research teams provide assistance to families, teachers, doctors and others who work with them. Professionals, along with the family, develop a thorough understanding of the child's strengths and needs. Many children have developmental and/or behavioral challenges that are often puzzling to families, teachers or physicians. The goal is to accurately diagnose the problem, understand the reasons and recommend the most effective treatments.

Ophthalmology/Bioengineering

Research in this area is emerging around the concept of a Center for Ophthalmic Engineering with an emphasis on optics, refractive surgery, intraocular approaches and biomechanics of the eye. Many conditions of the eye including glaucoma, retinal and neurophthalmic diseases, as well as tissue engineering and genetic determinants of ocular physiology and pathology can be explored using engineering principles.

Orthopedics/Bioengineering

The Orthopedic Research Center includes specimen dissection preparation, a machine shop, a wet lab, a biomechanical lab, a molecular biology lab, and a computer lab for computational biomechanical analysis. Molecular and cellular studies are identifying site-specific molecular targets regulating cartilage cell differentiation and the function of bone morphogenetic proteins. Additional studies include the role of bone sialoproteins in osteogenesis. Gait simulation research is directed at improving hip replacement procedures and walking.

Diabetes

The mission of the Diabetes Institute is to promote optimal health and wellbeing through the diagnosis, treatment, cure and prevention of diabetes and its complications. The research component of the Institute is split into three divisions: 1) basic science aimed at discovering mechanisms; 2) healthcare delivery encompassing clinical outcomes, educational research and epidemiology and; 3) translational research focused on applying the basic and clinical studies to the clinic and/or community setting. Diabetes research ranges from basic and behavioral science fields to clinical outcomes research and translational research. Topics include beta cell function, diabetic neuropathies, and heart disease.

Cardiovascular

Research on the cardiovascular system includes basic studies related to integrins and vascular endothelial growth factor, and their roles in heart development as well as clinical studies that assess the effects of various drugs on the improvement of heart function.

Immunology/Virology

Research in immunology and virology include identification of immune correlates of protection against pulmonary and systemic bacteria, assessment of the molecular mechanisms of virus-induced cell death, proliferation linked to neurological disorders, leukemia and some cancers, molecular aspects of HIV pathogenesis, vaccine

development related to HIV, effects of drugs on immune parameters associated with HIV infection, and T cell homeostasis.

Integrative Medicine

This is an emerging program that investigates the effects of bioidentical hormones on heart disease risk and associated parameters, as well as breast health, bone density and uterine morphology during menopause. Additional studies are examining the effects of vitamins on effectiveness of cancer chemotherapy.

Obesity

The Obesity program includes scientists at KU Medical Center, KU Lawrence, and Children's Mercy Hospitals and Clinics. The Center focuses on fighting the regional and national epidemic of obesity in children and adults. Obesity causes and/or impacts all chronic diseases, thus physical activity, nutrition and weight management research is critical to our understanding obesity.

Personalized Medicine (Clinical Pharmacology)

This program investigates novel methods to determine variations in drug metabolism by humans since not all people respond similarly to drugs. This research provides insights into potential drug interactions in patients that take multiple drugs. Additional studies include the study of the effects of apheresis (removal of extremely high lipids from the blood) on cardiovascular risks and microvascular flow which can induce improvement in several disease states.

Public Health

The mission of the emerging public health program is to improve health and health services delivery. This is accomplished through 1) training and education of our health care professionals (i.e., doctors, nurses, and administrators); 2) provision of services that assess health needs; and 3) research that promotes health, prevents disease and improves health care delivery.

Liver/Gastroenterology

Liver research at KUMC occurs largely within the Liver Center. Major emphasis is given to metabolic syndrome which is a combination of medical disorders that increase the risk of heart disease, stroke, and diabetes. Alteration in liver function has a role in development of metabolic syndrome. Other areas of focus are studies directed at understanding the progression of fatty liver to liver cancer; genetic and epigenetic factors that contribute to liver cancer and metabolic diseases; individual differences in liver metabolism of drugs (pharmacogenomics); mechanisms of alcoholic liver disease and factors for alcohol abuse; and discovery of new drugs and diagnostic methods to prevent and treat liver cancer and metabolic diseases. The Liver Center also includes research on gastrointestinal disorders and treatment. Active clinical and translational research occurs in the areas of Barrett's esophagus and gastrointestinal-esophageal reflux disease (GERD), GI cancer prevention, GI motility, and advanced endoscopic techniques.

University Administration

Robert E. Hemenway, Ph.D.

Chancellor

Richard Lariviere, Ph.D.

Provost and Executive Vice Chancellor, KU Lawrence Campus

Barbara F. Atkinson, M.D.

Executive Vice Chancellor, KU Medical Center

Research Administration

Paul F. Terranova, Ph.D.

Vice Chancellor for Research, KU Medical Center
President, KUMCRI

Gregory S. Kopf, Ph.D.

Associate Vice Chancellor for Research Administration, KUMC
Executive Director, KUMCRI

Jim Baxendale, MBA

Executive Director, KU Center for Technology Commercialization

Steven Geiger, MBA

Sr. Deputy Director and Chief Financial Officer, KUMCRI

Cydney Boler, JD

Director, Corporate Counsel and Contracts Office, KUMCRI

Mei-Shya Chen, MBA

Director, Sponsored Programs Administration, KUMCRI

Diana Naser, RN, MS, CCRP

Executive Director, Clinical Research Administration, Clinical Research Development Office

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KUMC Research Awards FY 2008 (Detailed Listing)

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School of Medicine – Wichita	SOM-W 55-56
School of Nursing	SON 57-58

O v e r v i e w

Awards

- In FY 2008, extramural awards (all sources) totaled \$97,949,693, an increase of \$4,842,697 (5.2%) from FY 2007's total of \$93,106,996.
- Total awards for the KUMC schools for FY 2008 were: School of Medicine - \$74,923,514 (School of Medicine – Kansas City has awards totaling \$73,619,724 and School of Medicine – Wichita's awards totaled \$1,303,790), School of Allied Health - \$2,301,436, and School of Nursing - \$6,194,332.
- Seven departments each received awards totaling over \$5 million in FY 2008.
- Nineteen principal investigators each received awards totaling over \$1 million in FY 2008.
- In FY 2008, the Research Institute managed a total of 1,222 grants and clinical trials, an increase of 6.6% from 1,146 managed in FY 2007.

Proposals

- In FY 2008, 683 proposals (both standard grants and clinical trials) were submitted, a 4.9% increase from the 651 proposals submitted in FY 2007. Grant dollars requested in FY 2008 totaled \$347,617,674, an increase of 24.1% from the \$280,153,027 requested in FY 2007.
- As of 10/20/2008, 43% of the 683 proposals submitted during FY 2008 had already been funded. Forty-six percent were pending, under review, or under development. The remaining proposals were not funded (8%) or withdrawn (2%).

Clinical Research Dollars Contracted and Received

Contracted dollars in FY 2008 for Clinical Research totaled \$18,448,573, an increase of \$704,754 (4.0%) from FY 2007. Revenue increased from \$5,311,751 in FY 2007 to \$5,332,992 in FY 2008, an increase of \$21,241 (0.4%). The ratio of contracted dollars to revenue in the same fiscal year decreased from 0.30 in FY 2007 to 0.29 in FY 2008.

Expenditures

- Total extramural expenditures for FY 2008 were \$84,408,913, an increase of 5.0% from the \$80,388,712 expended in FY 2007.

Extramural Awards

FY 2008 Extramural Awards Summary (Figure 1 and Table 1)

In FY 2008, extramural awards (all sources including KUEA funds) totaled \$97,949,693, an increase of \$4,842,697 (5.2%) from \$93,106,996 in FY 2007. Total extramural grant awards increased \$2,461,905 (3.1%) during this period from \$80,479,776 to \$82,941,681. Clinical Trials revenue increased \$450,427 (6.2%) from \$7,237,369 in FY 2007 to \$7,687,796 in FY 2008. Revenues from Technology Development increased \$33,549 (18.0%) from \$186,885 to \$220,434. Money from the Wichita Medical Practice Association and the KU Endowment Association increased from \$5,202,966 in FY 2007 to \$7,099,782 in FY 2008, a growth of \$1,896,816 (36.4%). (See Figure 1 below and Table 1, next page)

**Figure 1
FY 2007 and FY 2008 Extramural Award Summary
(Million \$)**

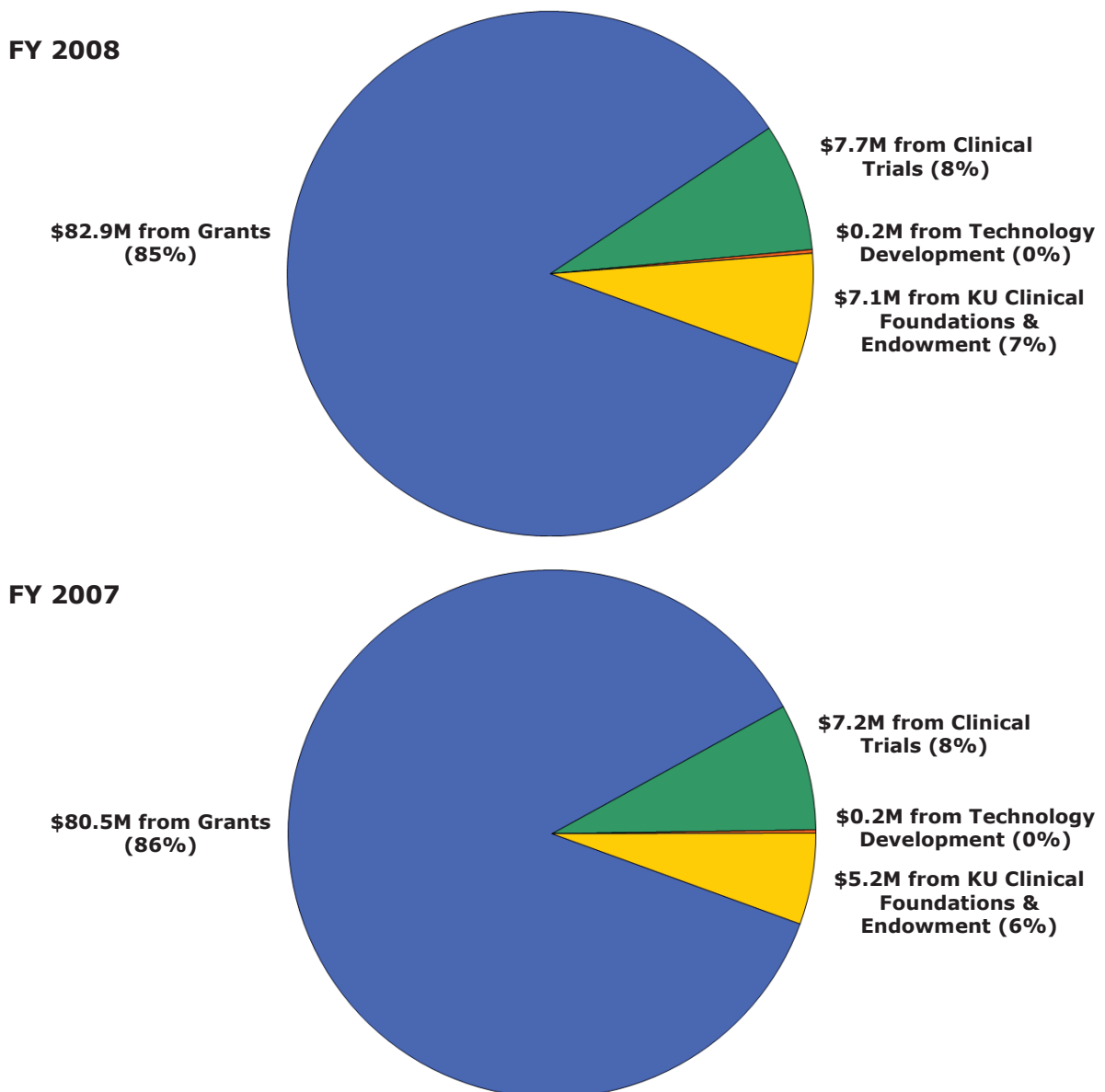


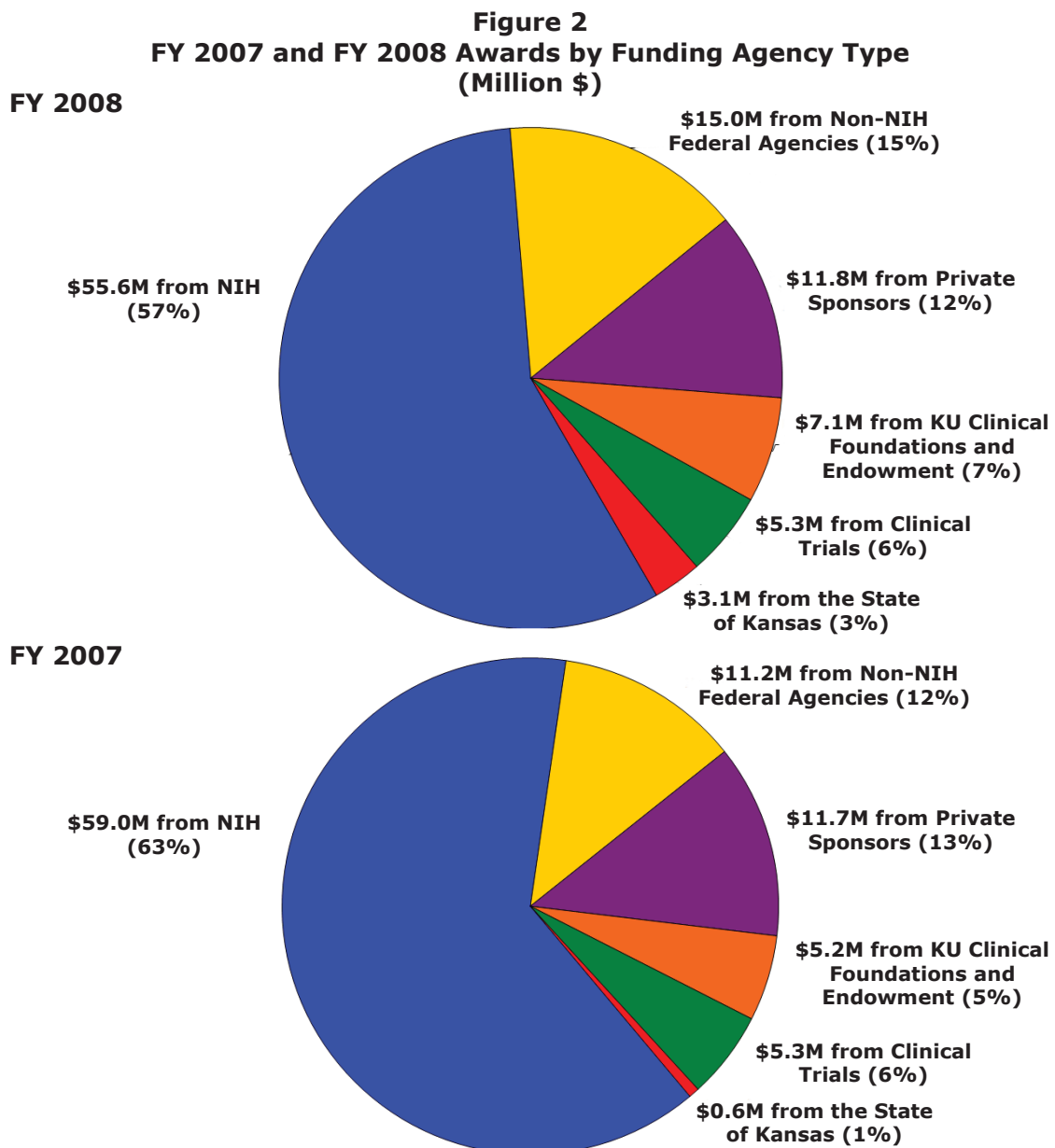
Table 1
The University of Kansas Medical Center
Summary of Awards from All Sources for FY 2007 – FY 2008

	<u>FY 2007</u>	<u>FY 2008</u>
<u>KUMC Research Institute Managed</u>		
Grants	80,479,776	82,941,681
Clinical Trials	7,237,369	7,687,796
Technology Development	186,885	220,434
Total KUMC (University) and KUMC Research Institute	87,904,030	90,849,911
Additional Sources of Extramural Awards Not Administered Through KUMC (University) or Research Institute		
<u>KU Endowment Association</u>		
Allied Health	22,947	
Medicine	3,880,503	5,320,112
Nursing	3,489	466,000
<u>Medical Practice Association – Wichita</u>		
Grants	1,263,117	1,293,761
Clinical Trials	32,910	19,909
Total Other Sources of Extramural Funding	5,202,966	7,099,782
Total of All Awards	93,106,996	97,949,693

FY 2008 Awards by Funding Agency Type (Figure 2)

In FY 2008, funding from all agencies totaled \$97,949,693, an increase of \$4,842,697 (5.2%) from \$93,106,996 in FY 2007. NIH funding decreased \$3,448,295 (5.8%) during this period from \$59,031,598 to \$55,583,303. Increases from FY 2007 to FY 2008 were seen in all other sponsor groups. Non-NIH federal funding increased \$3,859,759 (34.5%) from \$11,178,532 in FY 2007 to \$15,038,291 in FY 2008. Award funding from the state of Kansas more than tripled to \$3,056,505 in FY 2008 (374.8% increase) from the \$642,363 awarded in FY 2007. Funding from the KU Endowment and the Wichita Medical Practice Association increased by \$1,896,816 (36.4%); private award funding increased by \$99,034 (0.8%); and clinical trial revenue increased by \$21,241 (0.4%).

Details of FY 2008 departmental awards by funding agency is presented in Table 2.



**Table 2
FY 2008 Awards by Funding Agency Type**

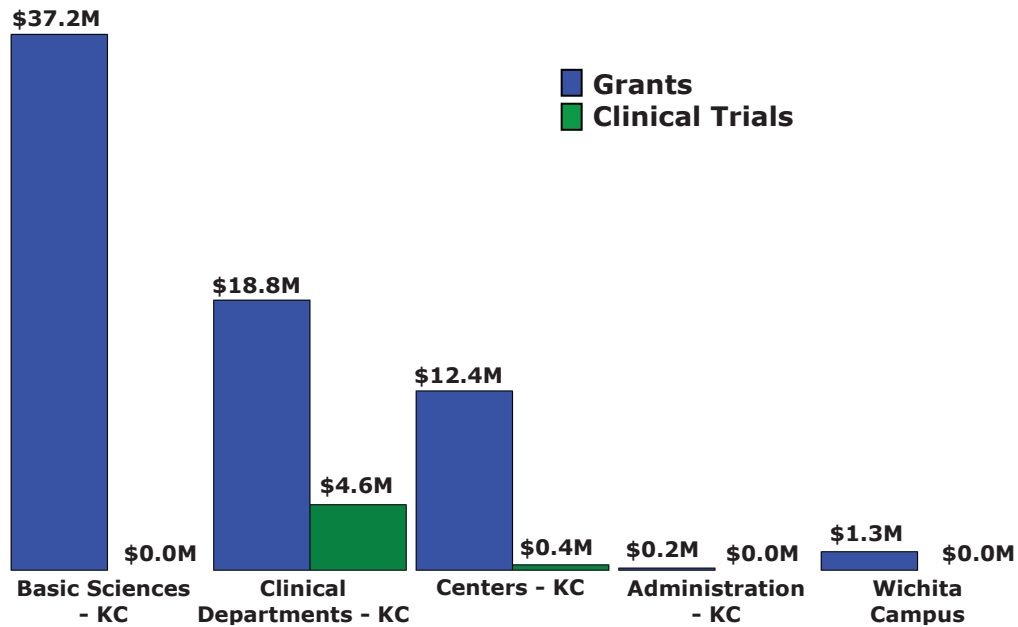
	National Institutes of Health (Direct & Subcontract Awards)	Other Federal Agencies	State of Kansas	Private /Other Grant Awards	Clinical Trials	TOTAL	Number of Awards
KUMC Administration							
Center for Telemedicine and TeleHealth		1,364,281	96,092	225,440		1,685,813	7
Continuing Education		4,000				4,000	1
Dykes Library	136,088	60,000	150,000			346,088	3
Medical Center Police				3,233		3,233	1
Research Administration		3,000,000	2,000,000	378,434		5,378,434	4
Student Services		13,061				13,061	2
KUMC Administration Total	136,088	4,441,342	2,246,092	607,107		7,430,629	18
School of Allied Health							
Clinical Laboratory Sciences	112,007					112,007	1
Dietetics & Nutrition	1,339,977	7,534		15,134	363,261	1,725,906	11
Hearing & Speech	2,254			93,652		95,906	2
Nurse Anesthesia Education		16,046				16,046	1
Occupational Health				32,119		32,119	1
Physical Therapy & Rehabilitation Sciences	76,194		55,000	181,395	6,863	319,452	8
Allied Health Total	1,530,432	23,580	55,000	322,300	370,124	2,301,436	24
School of Medicine – Kansas City Campus							
Administration		138,836		22,000		160,836	2
Basic Science Departments							
Anatomy & Cell Biology	10,734,597			723,277		11,457,874	27
Biochemistry & Molecular Biology	2,235,199	136,904		196,500		2,568,603	17
Biostatistics	213,046					213,046	4
Healthy Policy & Management	13,324	208,198				221,522	5
Microbiology, Molecular Genetics & Immunology	5,102,546	8,144		122,464		5,233,154	14
Molecular & Integrative Physiology	5,130,391			761,282		5,891,673	33
Pharmacology, Toxicology, & Therapeutics	6,808,517			486,379		7,294,896	30
Preventive Medicine	2,432,041	1,028,408	11,940	892,565		4,228,875	22
Basic Science Total	32,669,661	1,381,654	11,940	3,182,467		37,245,722	152
Clinical Departments							
Anesthesiology					38,550	38,550	3
Family Medicine	493,220	341,545	16,000	19,941		870,706	7
Internal Medicine	4,998,456			754,891	2,587,383	8,476,809	135
Neurology	1,512,044	349,130		356,271	1,473,289	3,690,734	87
Obstetrics & Gynecology	300,220	581,873		35,000	60,877	977,970	11
Ophthalmology		82,657				82,657	1
Otorhinolaryngology	500,699				5,300	505,999	4
Pathology & Laboratory Sciences	2,016,592			460,695		2,477,287	19
Pediatrics	520,055	3,424,136	284,286	679,861	59,776	4,968,114	42
Psychiatry & Behavioral Sciences	340,415			7,500	145,812	493,727	9
Radiology					1,200	1,200	1
Surgery General	169,050			45,000	149,336	363,386	8
Surgery Neurosurgery				10,000	39,744	49,744	7
Surgery Orthopedics	69,941				20,040	89,981	2
Surgery Urology	121,963	258,797		65,000	7,175	452,935	9
Total Clinical Departments	11,042,655	5,038,138	300,286	2,434,159	4,588,482	23,403,720	345
Centers							
Cancer Center	169,833	137,545		38,053	214,733	560,164	36
Center for Child Health and Development		1,010,264	388,823		975	1,400,062	8
Center on Aging	2,144,401	752,511	45,600	679,234		3,621,746	17
General Clinical Research Center	2,155,745			152,400		2,308,145	3
Hoglund Brain Imaging Center	625,259			612,745		1,238,004	13
Institute of Molecular and Outcomes Research	1,038,411			376,560		1,414,971	4
KS Intellectual & Dev Disab Res Center	1,956,296	99,000				2,055,296	5
Kidney Institute				50,000		50,000	1
Mid-America Cardiology				2,380	158,678	161,058	20
Centers Total	8,089,945	1,999,320	434,423	1,911,372	374,386	12,809,446	107
School of Medicine – KC Campus Total	51,802,261	8,557,948	746,649	7,549,998	4,962,868	73,619,724	606
School of Medicine – Wichita Campus							
Family & Community Medicine – Wichita		98,812		8,000		106,812	2
Internal Medicine – Wichita		147,294		55,122		202,416	3
Obstetrics & Gynecology – Wichita	233,750	22,924				256,674	2
Preventive Medicine – Wichita		417,175	8,764	251,977		677,916	11
Psychiatry – Wichita	59,972					59,972	1
School of Medicine – Wichita Campus Total	293,722	686,205	8,764	315,099		1,303,790	19
School of Medicine (KC & Wichita) Total	52,095,983	9,244,153	755,413	7,865,097	4,962,868	74,923,514	625
School of Nursing	1,820,800	1,329,216		3,044,316		6,194,332	22
Other Sources of Extramural Funding							
KU Endowment Association				5,320,112		5,786,112	
Medical Practice Association – Wichita				1,293,761	19,909	1,313,670	
Other Sources of Extramural Funding Total				6,613,873	19,909	7,099,782	
TOTAL	55,583,303	15,038,291	3,056,505	18,452,693	5,352,901	97,949,693	689

FY 2008 Awards by School

School of Medicine

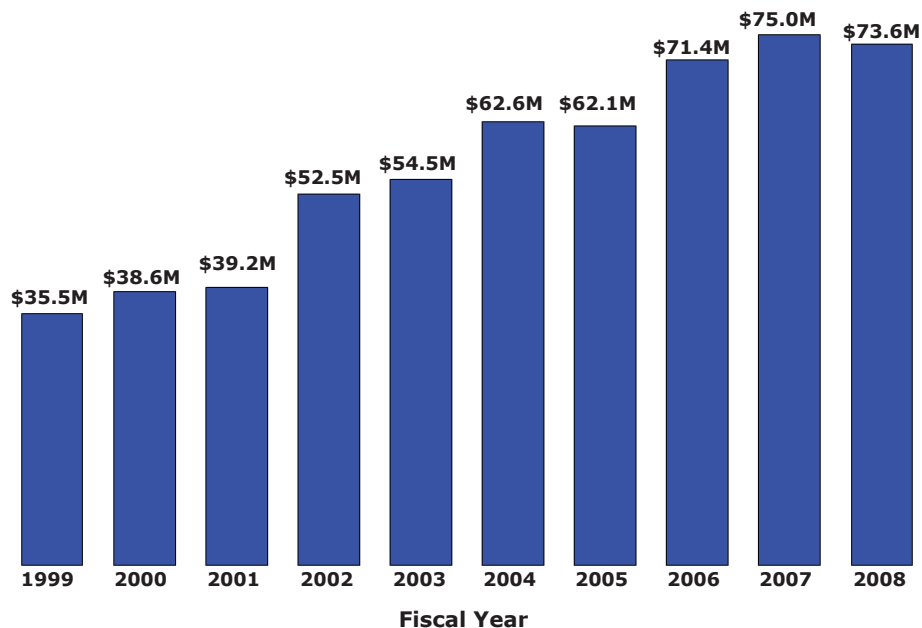
Awards for the School of Medicine for FY 2008 totaled \$74,923,514, a 1.6% decrease from the \$76,111,590 awarded in FY 2007 (see Figure 3).

Figure 3
School of Medicine Awards for FY 2008 by Grants and Clinical Trials
(Million \$)



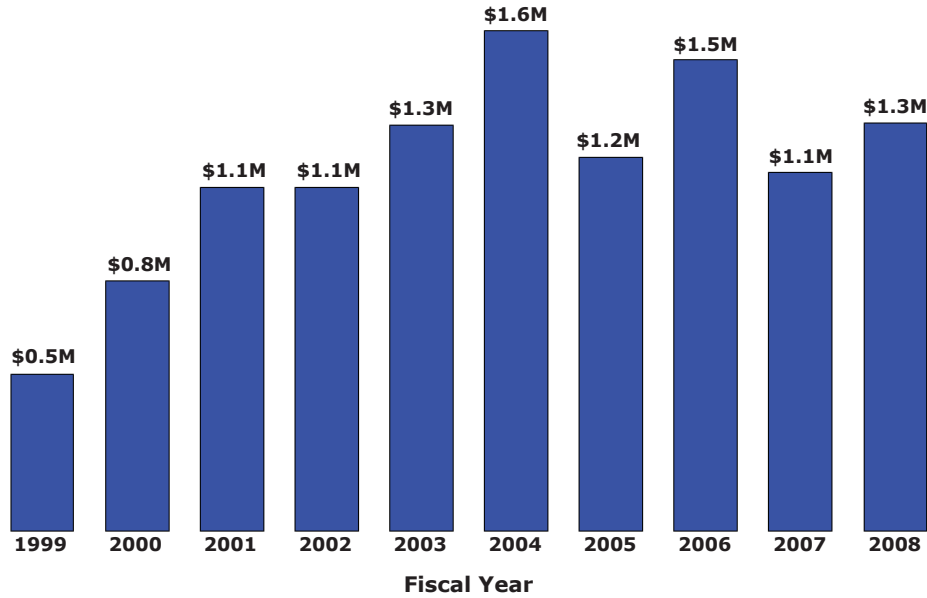
Research grant awards for FY 2008 for the **School of Medicine's Kansas City Campus** had a total dollar value of \$73,619,724, a 1.8% decrease from the \$74,962,968 awarded for FY 2007 (see Figure 4).

Figure 4
School of Medicine - KC Awards for FY 1999 - FY 2008
(Million \$)



Awards for the **School of Medicine's Wichita Campus** totaled \$1,303,790 for FY 2008, a 13.8% increase from the \$1,148,622 in awards for FY 2007 (see Figure 5).

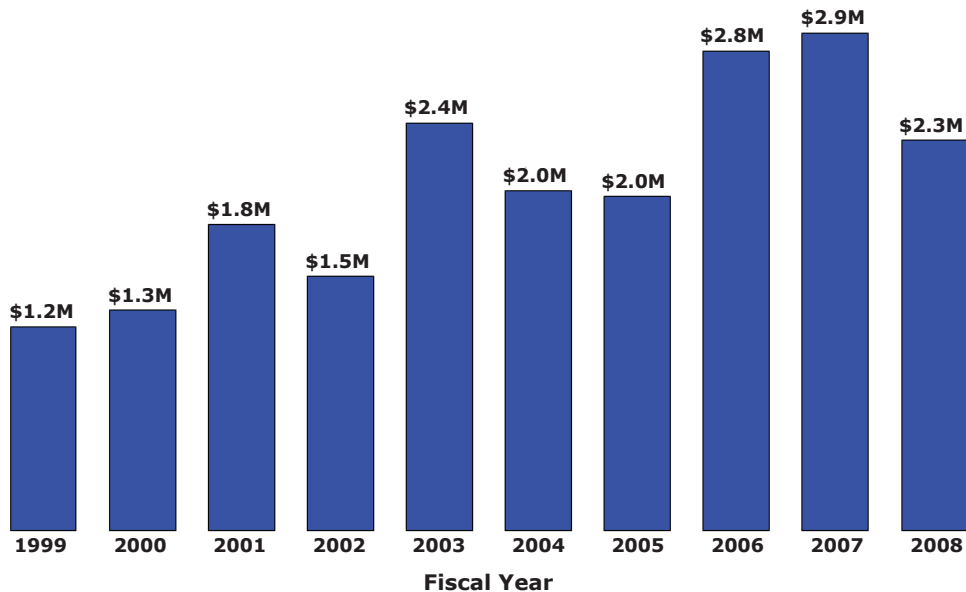
Figure 5
School of Medicine – Wichita Awards for FY 1999 - FY 2008
(Million \$)



School of Allied Health

Total awards for the School of Allied Health in FY 2008 were \$2,301,436, an 18.6% decrease from the \$2,931,613 awarded in FY 2007 (see Figure 6).

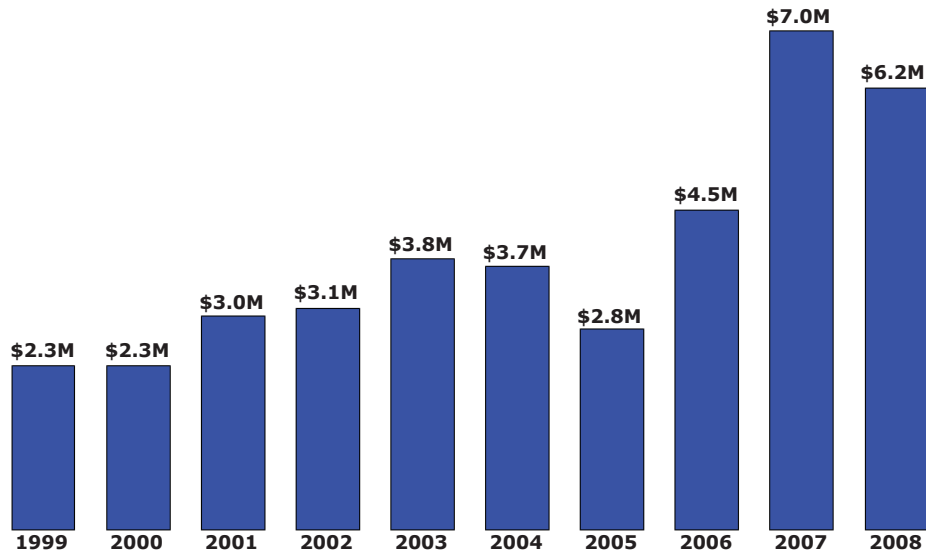
Figure 6
School of Allied Health Awards for FY 1999 - FY 2008
(Million \$)



School of Nursing

Total awards for the School of Nursing in FY 2008 were \$6,194,332, a 38.0% decrease from the \$6,998,422 in awards for FY 2007 (see Figure 7).

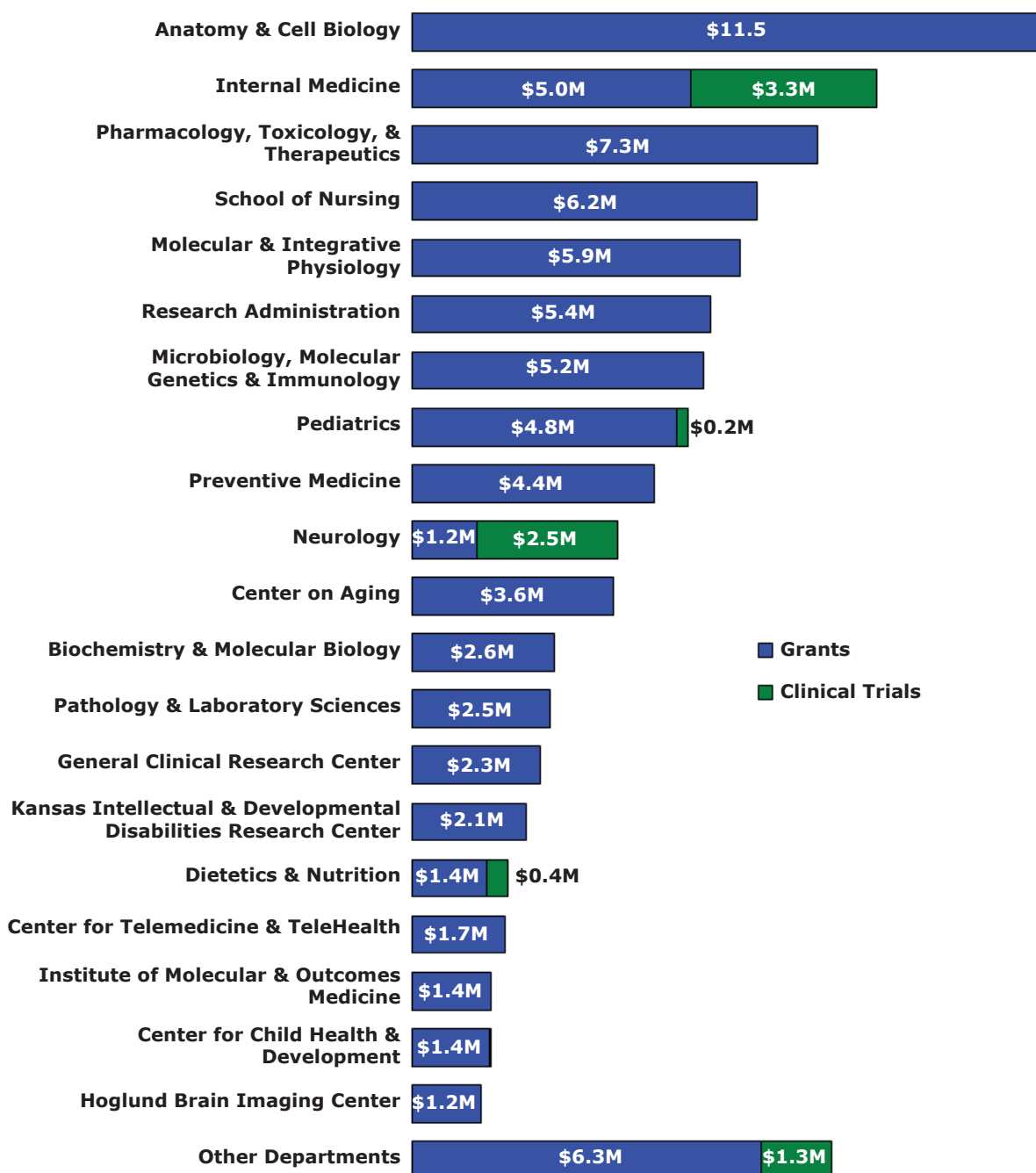
Figure 7
School of Nursing Awards for FY 1999 – FY 2008
(Million \$)



Departments with Highest Total Award Dollars

Twenty departments (including the School of Nursing, which is not broken down into departments) had at least \$1 million in FY 2008 awarded dollars. The top four departments account for \$33.3 million in awards: Anatomy & Cell Biology (\$11.5M); Internal Medicine (\$8.3M); Pharmacology, Toxicology, and Therapeutics (\$7.3M); and the School of Nursing (\$6.2M) (see Figure 8).

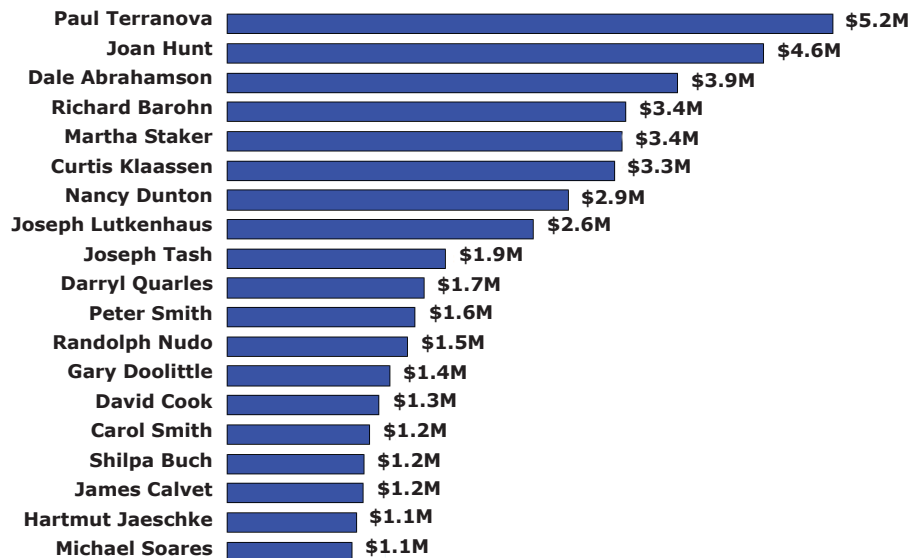
Figure 8
Departments, Centers and Institutes with Highest Total Award Dollars in FY 2008
(Million \$)



Principal Investigators with Highest Total Award Dollars

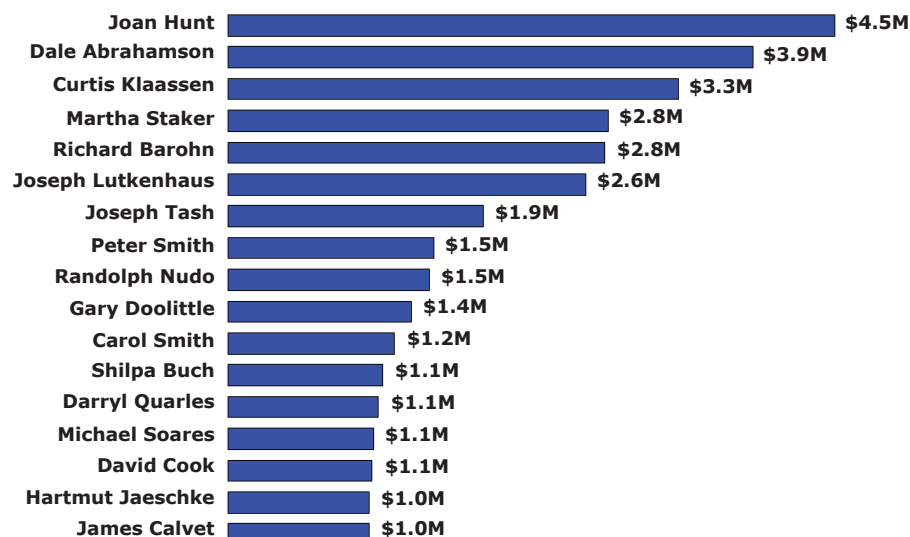
Nineteen principal investigators had total award dollars over \$1 million for FY 2008, including six principal investigators with total extramural funds in excess of \$3 million: Paul Terranova, Joan Hunt, Dale Abrahamson, Richard Barohn, Martha Staker, and Curtis Klaassen. These principal investigators and their total award amounts are listed in Figure 9, below.

Figure 9
Principal Investigators with FY 2008 Extramural Awards Totaling Over \$1M (Million \$)



The seventeen principal investigators with Department of Health and Human Services (DHHS) award dollars totaling at least \$1 million are listed in Figure 10, below.

Figure 10
Principal Investigators with FY 2008 Department of Health and Human Services Awards Totaling at Least \$1 Million (Million \$)



NIH Rankings

The latest NIH rankings are for FY 2007. NIH rankings for the three KUMC schools for FY 2001 - FY 2007 compared with all institutions in those categories are depicted in Table 4, below. (Note: All figures listed below reflect the Federal Fiscal Year, which runs from October 1 through September 30. KUMC's Fiscal Year is from July 1 through June 30.)

NIH rankings for FY 2007 for KUMC are as follows:

- The KUMC School of Allied Health ranked 7th among all institutions with \$2.1 M from six NIH awards.
- The KUMC School of Medicine ranked 68th among all institutions with \$45.4M from one hundred ten NIH awards.
- The KUMC School of Nursing ranked 34th among all institutions with \$1.3M from three NIH awards.

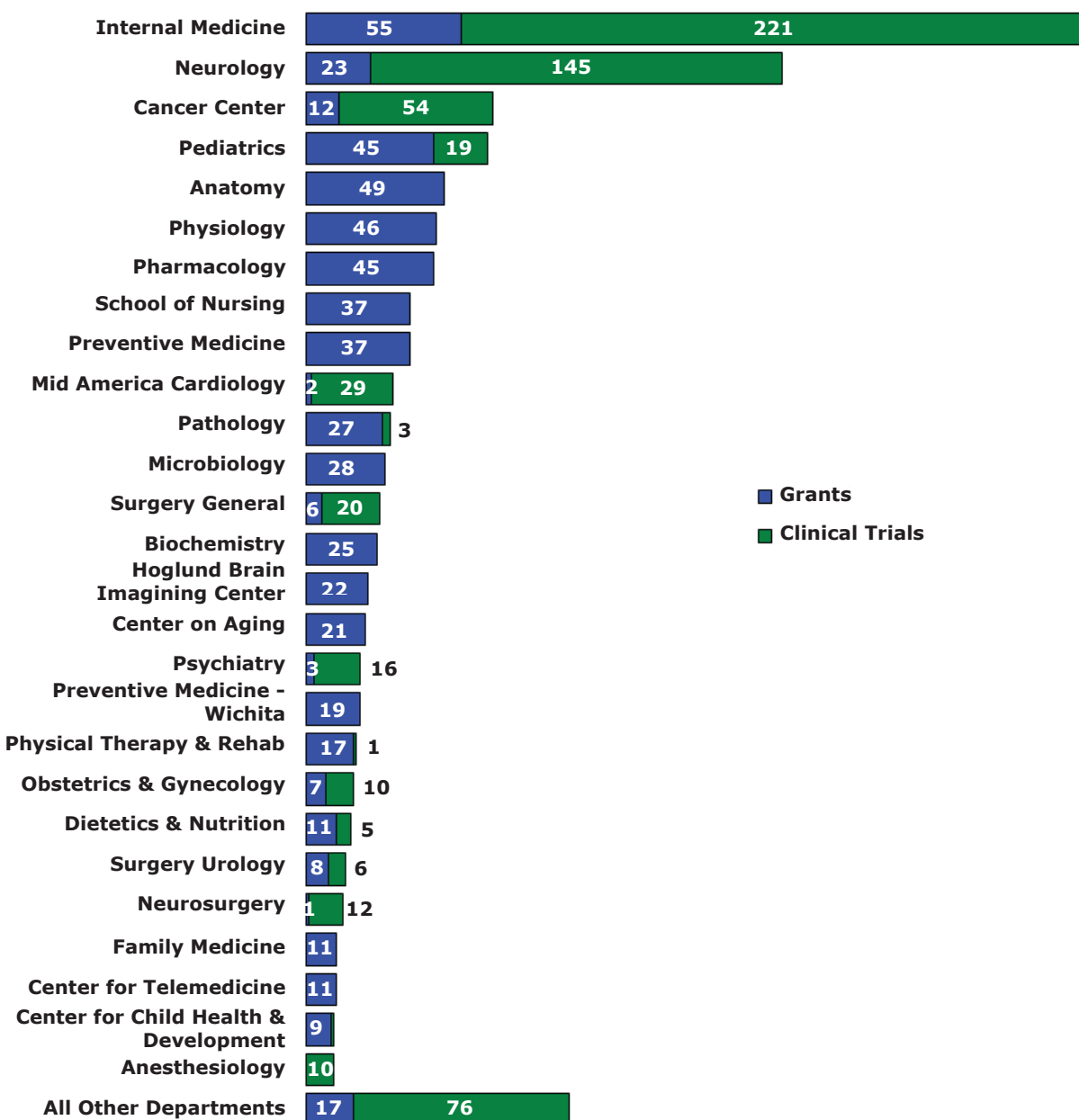
Table 3
NIH Ranking by School, Federal FY 2001 – FY 2007

	Total # of NIH Awards	Total NIH \$ Awarded	School Rank (all institutions)
School of Allied Health			
2001	1	\$0.247M	21
2002	1	\$0.247M	26
2003	4	\$0.569M	15
2004	5	\$0.599M	17
2005	6	\$1.050M	14
2006	7	\$1.613M	8
2007	6	\$2.056M	7
School of Medicine			
2001	104	\$32.300M	71
2002	99	\$34.759M	73
2003	95	\$36.537M	74
2004	84	\$34.292M	77
2005	85	\$33.412M	81
2006	95	\$36.884M	75
2007	110	\$45.350M	68
School of Nursing			
2001	2	\$0.651M	40
2002	3	\$1.282M	33
2003	4	\$1.666M	24
2004	4	\$1.489M	29
2005	3	\$0.924M	40
2006	6	\$2.168M	19
2007	3	\$1.309M	34

Awards (Grants and Clinical Trials) Managed in FY 2008

The Research Institute managed 594 grants and 628 clinical trials (total of 1,222 active awards) during FY 2008. Figure 11, below, shows the number of grants and clinical trials managed by departments (for departments with 10 or more managed grants). Two departments lead in terms of managed awards, Internal Medicine with 221 and Neurology with 145, due to open clinical trials. The 27 departments with the highest number together account for 92% (1,129) of all managed awards. The remaining 34 departments together account for a total of 17 active grants and 76 clinical trials.

Figure 11
Grants and Clinical Trials Managed by the Research Institute During FY 2008
by Department

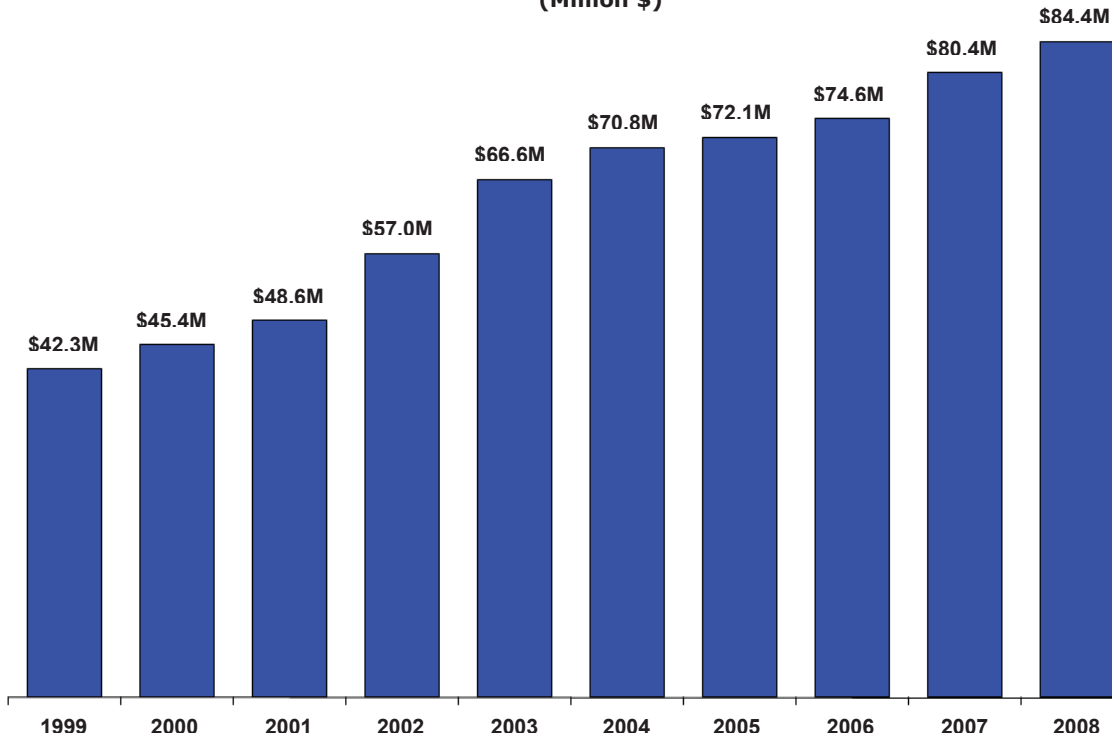


Ex t r a m u r a l E x p e n d i t u r e s

Extramural Expenditures

Total extramural expenditures for FY 2008 were \$84,408,913, an increase of 5.0% from the \$80,388,712 expended in FY 2007. (See Figure 12) Expenditures have doubled in the ten years since FY 1999. (Note: These amounts include funds on deposit with the Research Institute and KUMC, but do not include other Institution expenditures.)

Figure 12
Total Extramural Expenditures, FY 1999 – FY 2008
(Million \$)



Expenditures by Funding Source

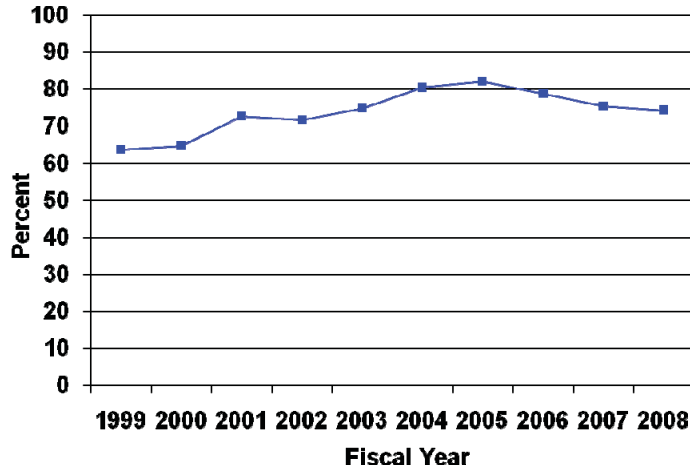
Table 4 shows total extramural expenditures by funding source for the ten years ending with FY 2008.

Table 4
Total Extramural Expenditures by Funding Source, FY 1999 - FY 2008
(Thousand \$)

Fiscal Year	Federal Government	State & Local Governments	Industry	Not-for-Profit & Other	Total
FY 2008	62,765	592	5,019	16,033	84,409
FY 2007	60,653	94	5,532	14,109	80,388
FY 2006	58,785	125	5,452	10,201	74,563
FY 2005	59,176	34	5,273	7,606	72,089
FY 2004	56,997	201	3,761	9,862	70,821
FY 2003	49,863	2,639	5,461	8,599	66,562
FY 2002	40,865	3,391	3,573	9,190	57,019
FY 2001	35,338	2,890	1,589	8,782	48,599
FY 2000	29,389	3,564	7,861	4,615	45,429
FY 1999	26,944	2,713	7,710	4,930	42,297

Federal funds comprised 74.3% of the total extramural expenditures for FY 2008. This percentage has generally increased between FY 1998 and FY 2005, but has declined in the three most recent fiscal years. See Figure 13, below.

Figure 13
Federal Funds as a Percent of Total Extramural Expenditures, FY 1999 - FY 2008

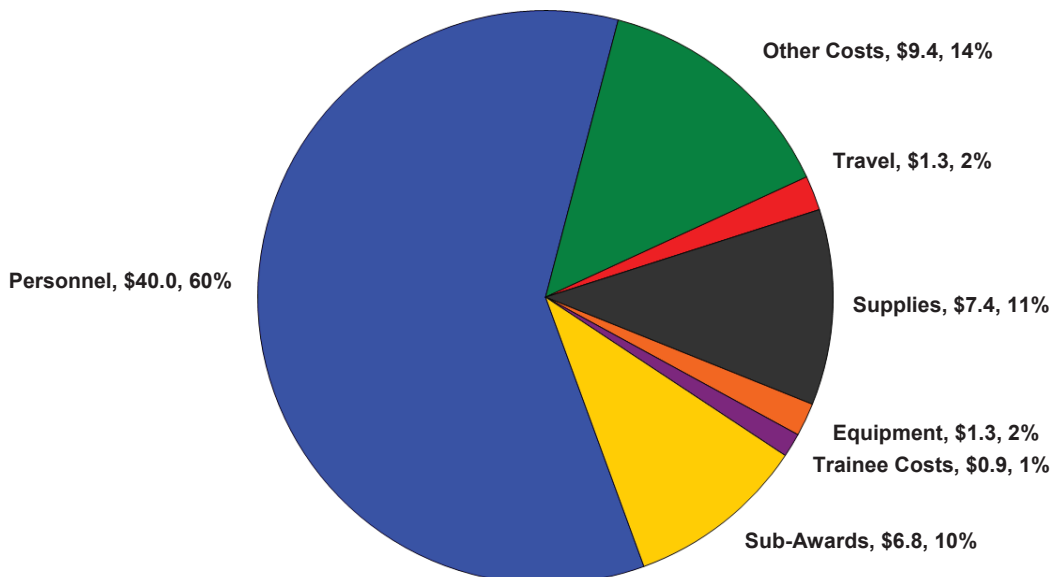


Direct and Indirect Costs

For FY 2008, direct costs totaled \$67,021,312 (79.4%) and indirect costs totaled \$17,387,600 (20.6%).

The categories of direct costs are detailed in Figure 14. Personnel costs accounted for over half (60%) of direct expenditures in FY 2008. Supplies, sub-awards, equipment, travel, and trainee costs accounted for 26% (11%, 10%, 2%, 2%, and 1%, respectively). A variety of other costs comprised the remaining 14%.

Figure 14
FY 2008 Direct Costs by Category





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