

## II. Teaching, Research, and Health Care Excellence

### Values

- Pursuing excellence and innovation in the discovery, dissemination, integration, and application of knowledge for the benefit of the individual and of society.
- Providing high-quality educational programs, informed by research and clinical practice, to its undergraduate, graduate, and professional students.
- Providing leadership, as well as scholarship, in health-related, academic, and professional fields.

### Goals

- Exceed national and international benchmarks in research and education in academic, professional, and health care fields.
- Excel in the diagnosis, treatment, and prevention of disease and in health promotion.
- Integrate new discoveries with existing knowledge in outstanding educational programs to impart to students competencies, compassion, and the ability to engage in lifelong learning.
- Integrate new discoveries with existing knowledge to provide excellent and compassionate patient care.

### Priorities

- Increase success in securing sponsored funding.
- Recruit and retain a dedicated and diverse faculty and staff of the highest caliber, characterized by integrity, credibility, and competency, and recognized for exemplary performance, productivity, and vision.
- Enhance academic programs and create new programs as needed regionally or in the state for continued excellence.



## System Research Funding Trends 2002-2006

Table II-1

Total U. T. System Research and Research-Related Expenditures, FY 2002-2006					
	FY 02	FY 03	FY 04	FY 05	FY 06
Academic	\$459,852,291	\$480,941,798	\$495,039,869	\$572,277,724	\$614,860,654
Health-Related	896,756,996	970,691,322	1,046,463,612	1,114,736,515	1,225,503,486
Total	\$1,356,609,287	\$1,451,633,120	\$1,541,503,481	\$1,687,014,239	\$1,840,364,140

*Source: "Survey of Research Expenditures," Texas Higher Education Coordinating Board*

- In FY 2006, U. T. System health-related and academic institutions together generated research and research-related expenditures totaling more than \$1.8 billion. In the period from FY 2002 to FY 2006, this total has increased by 36 percent, and reflects an average annual increase of 7.9 percent.
- By comparison, national academic R&D increased by 10.1 percent from FY 2002 to FY 2003, and by 7.2 percent from FY 2003 to FY 2004 (the most recent years for which national data are available).
- Health-related institutions generate approximately two-thirds of total U. T. System research and research-related expenditures. (Nationally, medical sciences and biological sciences accounted for 51 percent of total R&D expenditures in FY 2004.)

Figure II-1

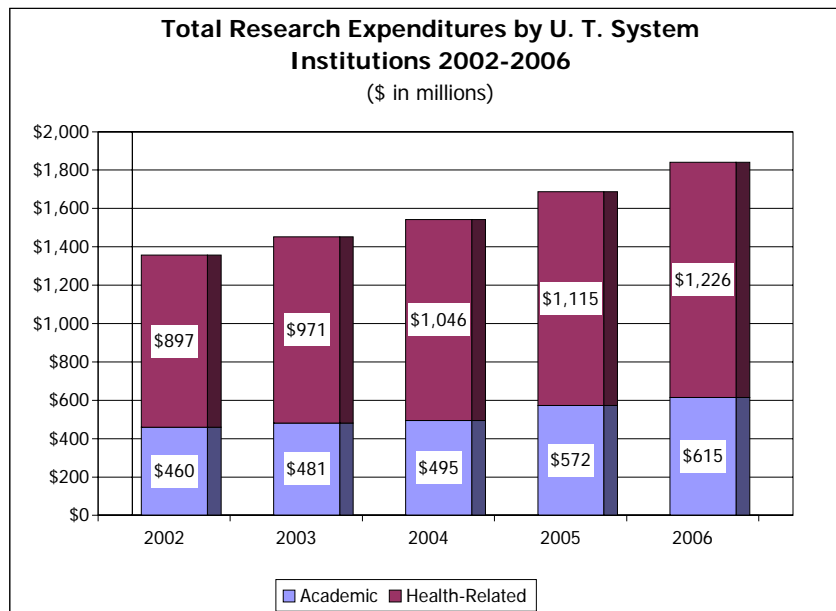
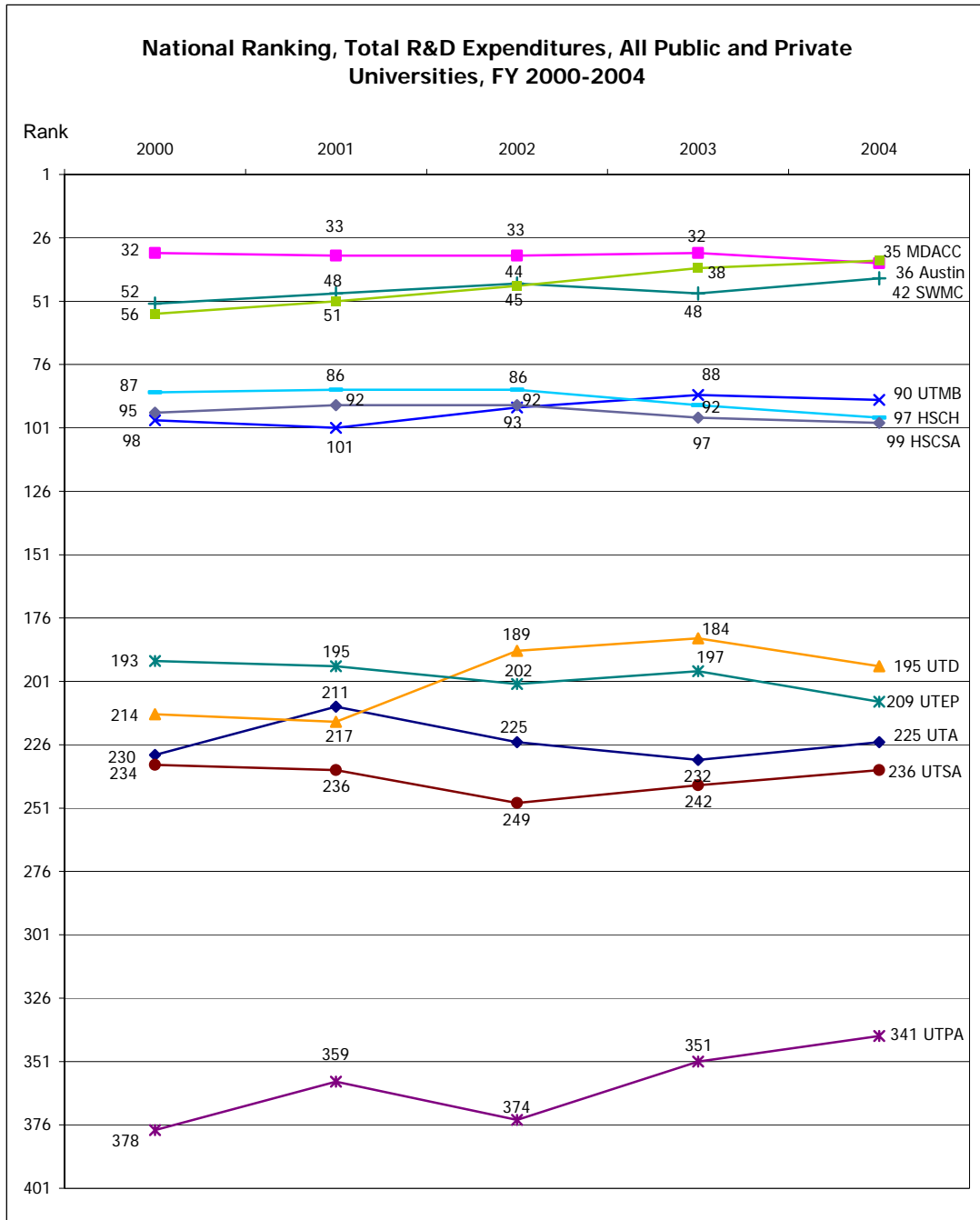


Figure II-2



- U. T. System institutions rank highly in terms of total research and development expenditures. The most recent ranking, based on an annual National Science Foundation Survey, covered the period through FY 2004, and included 601 public and private research universities.
- For the period in FY 2002 through 2004, the total R&D expenditures of three U. T. System institutions (U. T. Austin, U. T. Southwestern Medical Center, and U. T. M. D. Anderson Cancer Center) have been in the top 50 public and private universities.
- Three U. T. System institutions have been in the top 51 to 100 (U. T. Medical Branch, U. T. Health Science Center-Houston, and U. T. Health Science Center-San Antonio).

- Four U. T. System academic institutions (U. T. Dallas, U. T. El Paso, U. T. Arlington, and U. T. San Antonio) have been in the top 184 to 250; and one (U. T. Pan American) has been in the top 375.
- Within Texas, several U. T. System institutions were at the top of rankings in terms of research and research-related expenses in FY 2005.

**Table II-2**

**Top Texas Public Institutions in Research and Research-Related Expenditures, FY 2005**

Texas A&M	1*
UT Austin	2
UT M. D. Anderson	3
UT Southwestern	4
UT HSC-Houston	5
UT Medical Branch	6
UT HSC-San Antonio	7
University of Houston	8
Texas A&M University System HSC	9
Texas Tech	10
UT Dallas	11
UT El Paso	12
UT Arlington	13
UT San Antonio	14

\* Expenditures reported include Texas A&M Services.

Source: "Research Expenditures, September 1, 2004 - August 31, 2005," THECB report, July 2006

**Research Funding Trends: U. T. System Academic Institutions 2002-2006**

- In FY 2006, U. T. System academic institutions' research and research-related expenditures totaled \$615 million, a 7 percent increase over the previous year. Between 2002 and 2006, research and research-related expenditures have averaged a 7.6 percent annual increase.
- From FY 2002 to FY 2006, expenditures increased by 65 percent at U. T. Arlington, 358 percent at U. T. Brownsville, 57 percent at U. T. Dallas, 49 percent at U. T. El Paso, 161 percent at U. T. Pan American and U. T. San Antonio, 142 percent at U. T. Permian Basin, and 144 percent at U. T. Tyler.
- Among Texas public institutions, U. T. Austin ranked second in research and development expenditures in FY 2005. U. T. Austin expenditures comprised 17 percent of the total of Texas public institution research and research-related expenditures in 2005 of \$2.469 billion.

**Table II-3**

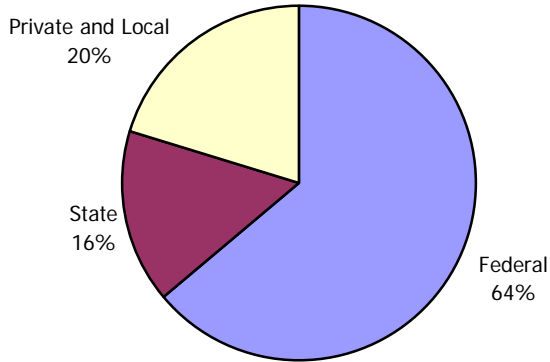
**Research Expenditures by Source FY 2006 – U. T. Academic Institutions**

	Federal	State	Private	Local	Total
Arlington	\$19,095,309	\$11,535,997	\$4,121,181	\$112,581	<b>\$34,865,068</b>
Austin	294,832,202	51,657,728	62,976,863	37,219,810	<b>446,686,603</b>
Brownsville	5,131,456	227,694	106,824	424,470	<b>5,890,444</b>
Dallas	19,953,502	14,594,192	6,530,530	2,007,012	<b>43,085,236</b>
El Paso	26,821,331	9,875,604	2,655,959	2,580,288	<b>41,933,182</b>
Pan American	4,237,445	2,039,063	483,903	30,181	<b>6,790,592</b>
Permian Basin	348,266	694,235	30,696	1,304,459	<b>2,377,656</b>
San Antonio	21,463,037	6,202,581	1,209,279	3,441,952	<b>32,316,849</b>
Tyler	438,123	197,916	237,769	41,216	<b>915,024</b>
<b>Total</b>	<b>\$392,320,671</b>	<b>\$97,025,010</b>	<b>\$78,353,004</b>	<b>\$47,161,969</b>	<b>\$614,860,654</b>

Source: "Survey of Research Expenditures," Texas Higher Education Coordinating Board

**Figure II-3**

**Sources of Research Support 2006**



- The federal government provides the majority of research and research-related funding – 64 percent.
- Private and local sources together provide the next largest proportion – 20 percent.
- Sixteen percent of research funds expended in 2006 came from state sources.

**Sponsored Revenue**

- Sponsored revenue is a more comprehensive measure of an institution’s overall success in securing funding to support research, public service, training, and other activities.
- From 2002 to 2006, sponsored revenue has increased by 33 percent at U. T. System academic institutions.

**Table II-4**

**Sponsored Revenue – U. T. Academic Institutions, FY 2002-2006**  
(\$ in thousands)

	FY 02	FY 03	FY 04	FY 05	FY 06
Arlington	\$33,812	\$38,347	\$41,516	\$52,795	\$50,114
Austin	356,624	369,278	383,632	408,557	438,478
Brownsville	59,308	59,448	67,575	75,024	79,683
Dallas	25,412	25,563	50,559	38,571	47,752
El Paso	64,340	68,710	73,454	74,340	78,674
Pan American	48,605	56,699	56,898	60,903	68,583
Permian Basin	4,274	4,699	5,063	5,326	5,671
San Antonio	42,053	53,798	56,832	64,476	73,237
Tyler	4,517	5,393	6,802	7,414	7,727
<b>Total Academic</b>	<b>\$638,945</b>	<b>\$681,935</b>	<b>\$742,331</b>	<b>\$787,406</b>	<b>\$849,919</b>

*Source: Exhibit B of Annual Financial Report*

**Table II-5**

**Sponsored Revenue by Source – U. T. Academic Institutions, FY 2006**

(\$ in thousands)

	Federal	State	Local	Private	Total
Arlington	\$41,889	\$6,077	\$180	\$1,968	<b>\$50,114</b>
Austin	328,722	46,625	2,524	60,607	<b>438,478</b>
Brownsville	32,874	2,983	43,257	569	<b>79,683</b>
Dallas	26,701	16,108	598	4,345	<b>47,752</b>
El Paso	62,612	12,009	1,043	3,010	<b>78,674</b>
Pan American	47,744	17,818	3	3,018	<b>68,583</b>
Permian Basin	5,125	503	8	35	<b>5,671</b>
San Antonio	60,454	10,945	438	1,400	<b>73,237</b>
Tyler	6,082	1,060	0	585	<b>7,727</b>
<b>Total</b>	<b>\$612,203</b>	<b>\$114,128</b>	<b>\$48,051</b>	<b>\$75,537</b>	<b>\$849,919</b>

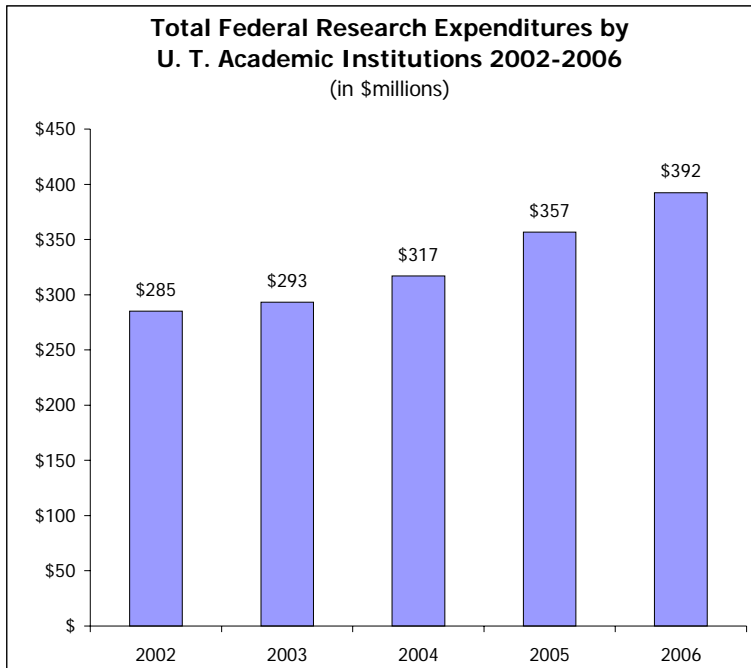
Source: Exhibit B of Annual Financial Report

- Federal funding continues to be the primary source of sponsored revenue to U. T. System academic institutions, accounting for 64 percent of all sponsored revenue.

**Federal Research Expenditures**

- Federal research expenditures are considered a national benchmark to measure institutional research competitiveness.

**Figure II-4**



- Continued increases in these funds are critical to the success of the academic institutions in the U. T. System.
- From 2002 to 2006, federal research expenditures for all academic institutions increased at every U. T. System academic institution, and on average, by almost 38 percent.

- At U. T. Arlington, federal research expenditures increased by 7 percent between FY 2005 and FY 2006 and by 141 percent since FY 2002.
- At U. T. Austin, the one-year increase was 9 percent and the five-year increase was 25 percent.
- At U. T. Brownsville, the one-year increase was 5 percent, and 472 percent over five years.
- U. T. Dallas remained stable over the past year, and increased 69 percent over five years.
- U. T. El Paso's federal research expenditures increased by almost 12 percent for FY 2005-06 and by more than a third since FY 2002.
- U. T. Pan American's federal expenditures increased 12 percent over the past year, and 204 percent over five years.
- Although U. T. Permian Basin's expenditures decreased from FY 2005 to FY 2006; since FY 2002, they have increased 152 percent.
- U. T. San Antonio increased its expenditures by 33 percent since the previous year and 181 percent over five years.
- U. T. Tyler's expenditures in FY 2006 increased by 205 percent over the past year and by 548 percent since FY 2002.

**Table II-6**

<b>Federal Research Expenditures by U. T. Academic Institutions</b>								
FY	2002	2003	2004	2005	2006	% change FY 05-06	% change FY 02-06	
Arlington	\$7,923,657	\$7,993,576	\$11,093,256	\$17,833,042	\$19,095,309	7.1%	141.0%	
Austin	235,436,101	240,537,689	249,014,154	269,612,823	294,832,202	9.4	25.2	
Brownsville	896,646	1,011,353	2,889,894	4,897,516	5,131,456	4.8	472.3	
Dallas	11,815,490	14,432,841	15,733,571	19,933,291	19,953,502	0.1	68.9	
El Paso	19,796,441	17,022,000	22,232,318	23,961,812	26,821,331	11.9	35.5	
Pan American	1,394,780	1,895,223	2,666,191	3,770,457	4,237,445	12.4	203.8	
Permian Basin	138,194	166,777	1,215,420	360,016	348,266	-3.3	152.0	
San Antonio	7,641,990	10,049,314	11,705,185	16,174,944	21,463,037	32.7	180.9	
Tyler	67,617	174,362	585,874	143,425	438,123	205.5	547.9	
<b>Total</b>	<b>\$285,110,916</b>	<b>\$293,283,135</b>	<b>\$317,135,863</b>	<b>\$356,687,326</b>	<b>\$392,320,671</b>	<b>10.0%</b>	<b>37.6%</b>	

*Source: "Survey of Research Expenditures," Texas Higher Education Coordinating Board*



## State Appropriated Research Funds in Relation to Research Expenditures

- This measure compares state appropriations for research with each institution's research funding. Research funds are appropriated in the first year of each biennium.

Table II-7

Appropriated Research Funds as a Percentage of Research Expenditures U. T. Academic Institutions						
	FY 2002			FY 2006		
	Research Expenditures	Appropriated Research Funds	Percent Approp. Research	Research Expenditures	Appropriated Research Funds	Percent Approp. Research
Arlington	\$21,072,964	\$2,561,199	12.2%	\$34,865,068	\$733,134	2.1%
Austin	366,355,359	12,630,501	3.4	446,686,603	1,034,104	0.2
Brownsville	1,286,638	0	0.0	5,890,444	0	0.0
Dallas	27,444,057	1,702,442	6.2	43,085,236	584,481	1.4
El Paso	27,328,772	424,756	1.6	41,933,182	228,501	0.5
Pan American	2,605,758	218,331	8.4	6,790,592	88,780	1.3
Permian Basin	980,905	175,000	17.8	2,377,656	0	0.0
San Antonio	12,402,017	98,000	0.8	32,316,849	116,000	0.4
Tyler	375,821	0	0.0	915,024	0	0.0
<b>Total</b>	<b>\$459,852,291</b>	<b>\$17,810,229</b>	<b>3.9%</b>	<b>\$614,860,654</b>	<b>\$2,785,000</b>	<b>0.5%</b>

Note: Research funds are only appropriated during the first year of the biennium; therefore, comparable data are not available for FY 2005.

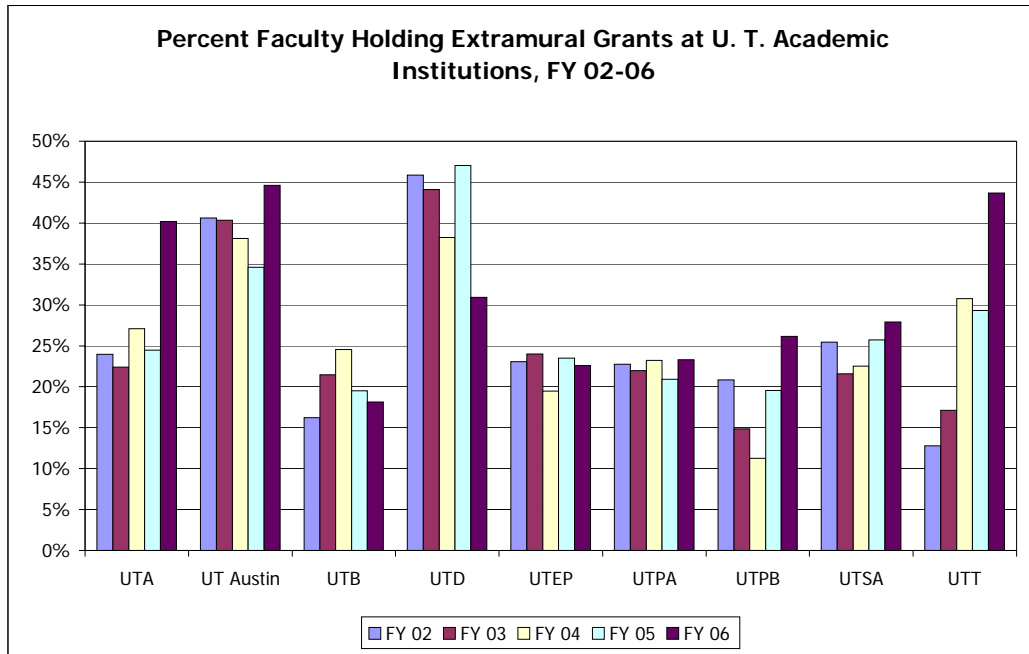
Source: THECB "Survey of Research Expenditures" and "Report of Awards -- Advanced Program/Advanced Technology Programs"

- State appropriations for research represent a comparatively small, but important, source of support at each institution. In 2006, these appropriations were less than one percent of all research expenditures, down from four percent and one percent over the previous two biennia.

## Faculty Holding Extramural Grants

- The number and percentage of faculty holding grants provide another measure of productivity which emphasizes success in obtaining an award rather than the size of the award (Table II-8, below). This is relevant particularly in humanities, arts, and some social science disciplines, where the number and size of grants are comparatively small.
- This measure includes extramural grants from all sources and of all types and is, therefore, broader than measures that address sponsored research activities.
- Many faculty hold more than one grant per year, either as principal investigator or as co-investigator. This productivity is reflected in the "total number of grants" rows.
- In response to the recommendations of the UT System's *Strategic Plan 2006-2015* released in fall 2006 ([www.utsystem.edu/osm/planning.htm](http://www.utsystem.edu/osm/planning.htm)) and the *Report of The Washington Advisory Group [WAG], LLC on Research Capability Expansion for The University of Texas System* (March 31, 2004), many U. T. System academic institutions are developing plans to strengthen support for research development (see [www.utsystem.edu/osm/wag](http://www.utsystem.edu/osm/wag) for more information on the WAG report).
- These plans are reflected in individual institution Compacts. Over the coming years, trends in faculty research productivity may be expected to improve as a result of these efforts, as the data below are beginning to illustrate.
- Over the past five years, at all nine U. T. System academic institutions there has been a gradual increase in the number of grants received, the number of faculty receiving grants, and/or the proportion of tenure/tenure track faculty who hold grants.

Figure II-5



- The growth has been uneven. This unevenness is due, at least in part, to institutions hiring significant numbers of new assistant professors who do not yet receive extramural grants. Campuses are investing in new or expanded offices of sponsored research to support faculty in competing successfully for external funding.
- The number of grants awarded to tenure/tenure-track faculty has increased since FY 2002 at U. T. Arlington, U. T. Austin, U. T. Brownsville, U. T. Dallas, U. T. Pan American, U. T. Permian Basin, U. T. San Antonio, and U. T. Tyler (by 169 percent).
- From FY 2002 to FY 2006, the number of faculty holding grants has increased at U. T. Arlington (by 85 percent), U. T. Austin, U. T. Brownsville, U. T. El Paso, U. T. Pan American, U. T. Permian Basin, U. T. San Antonio (by 53 percent), and U. T. Tyler (by 306 percent).
- Over this period, the proportion of tenure/tenure-track faculty holding grants increased substantially at U. T. Tyler (by 31 points) and U. T. Arlington (by 16 points). Four other institutions also increased the proportion of tenure/tenure-track faculty holding grants: U. T. Austin, U. T. Brownsville, U. T. Permian Basin, and U. T. San Antonio.

Table II-8

Faculty Holding Extramural Grants at U. T. Academic Institutions		FY 02	FY 03	FY 04	FY 05	FY 06
Arlington	# grants	210	183	268	210	282
	# T/TT faculty holding grants	114	108	133	123	211
	#FTE T/TT faculty	476	482	491	503	525
	% T/TT faculty holding grants	24%	22%	27%	24%	40%
Austin	# grants	2,285	2,494	2,538	2,643	2,590
	# T/TT faculty holding grants	630	649	647	604	773
	#FTE T/TT faculty	1,551	1,608	1,698	1,745	1,733
	% T/TT faculty holding grants	41%	40%	38%	35%	45%
Brownsville	# grants	36	47	56	50	51
	# T/TT faculty holding grants	36	47	55	46	47
	#FTE T/TT faculty	222	219	224	236	259
	% T/TT faculty holding grants	16%	21%	25%	19%	18%
Dallas	# grants	212	218	180	327	256
	# T/TT faculty holding grants	111	112	109	142	94
	#FTE T/TT faculty	242	254	285	302	304
	% T/TT faculty holding grants	46%	44%	38%	47%	31%
El Paso	# grants	244	180	222	218	241
	# T/TT faculty holding grants	89	97	80	102	101
	#FTE T/TT faculty	386	404	411	434	447
	% T/TT faculty holding grants	23%	24%	19%	24%	23%
Pan American	# grants	132	130	193	221	181
	# T/TT faculty holding grants	71	73	84	78	93
	#FTE T/TT faculty	312	332	362	373	399
	% T/TT faculty holding grants	23%	22%	23%	21%	23%
Permian Basin	# grants	28	15	16	10	29
	# T/TT faculty holding grants	15	11	8	17	23
	#FTE T/TT faculty	72	74	71	87	88
	% T/TT faculty holding grants	21%	15%	11%	20%	26%
San Antonio	# grants	208	165	207	178	212
	# T/TT faculty holding grants	86	87	93	114	132
	#FTE T/TT faculty	338	403	413	443	473
	% T/TT faculty holding grants	25%	22%	23%	26%	28%
Tyler	# grants	29	39	55	53	78
	# T/TT faculty holding grants	17	25	44	44	69
	#FTE T/TT faculty	133	146	143	150	158
	% T/TT faculty holding grants	13%	17%	31%	29%	44%

Note: For grants with multiple investigators, only the principle investigator is counted.

Source: U. T. System Academic Institutions; THECB for FTE faculty

## Research Expenditures per FTE Faculty — Academic Institutions

- The magnitude of research and research-related expenditures largely reflects the size and mission of each campus.
- The ratio of research expenditures to FTE faculty is a general indicator of the research productivity of the faculty and the mission of each campus.
- Over the past five years, this ratio has increased at all academic institutions, reflecting targeted investments in new faculty positions, research infrastructure, and support of grant proposal submissions.

Table II-9

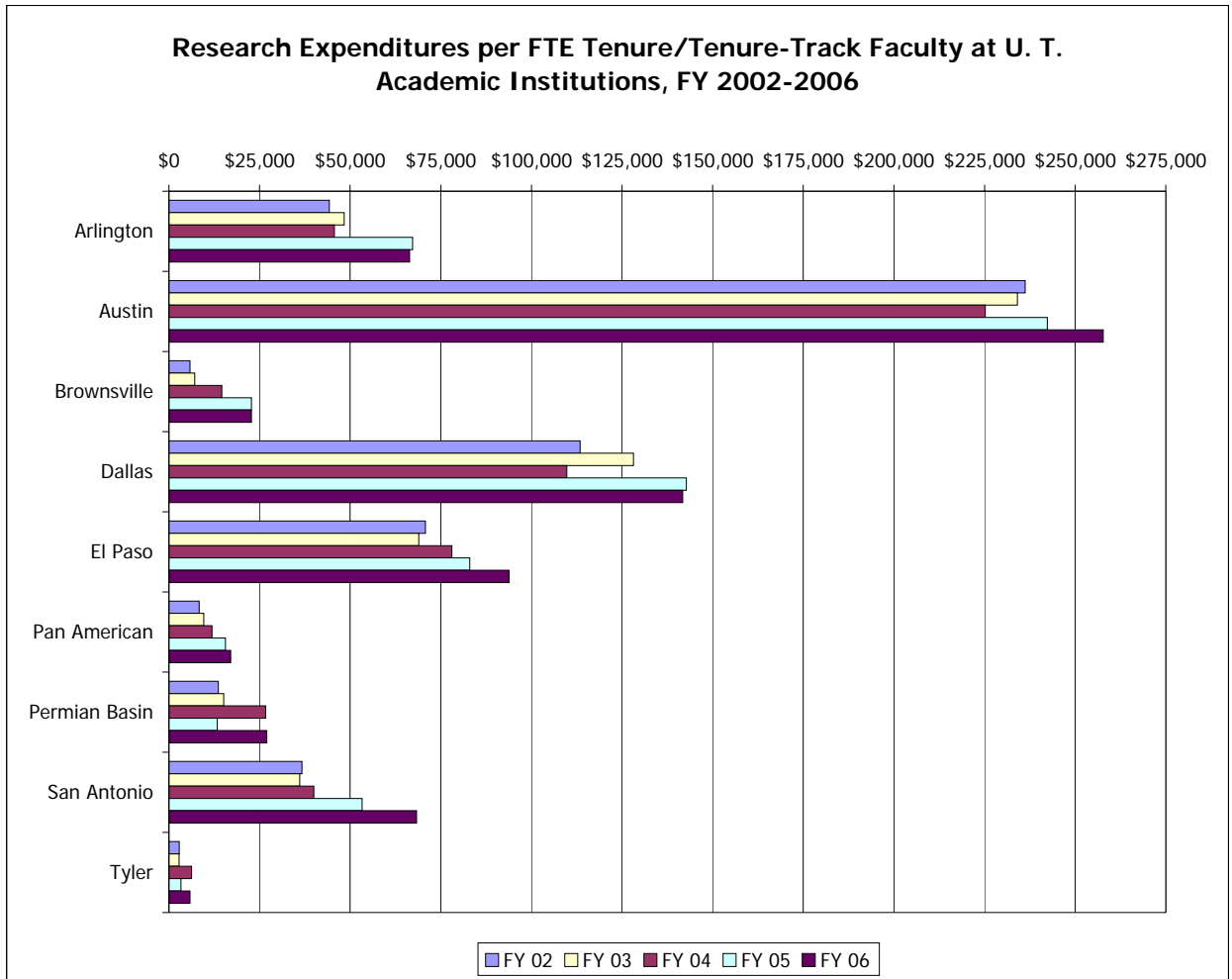
### Research Expenditures per FTE Tenure/Tenure Track Faculty at U. T. Academic Institutions FY 2002-2006

	FY 2002			FY 2003			FY 2004		
	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty
Arlington	\$21,072,964	476	\$44,271	\$23,314,938	482	\$48,371	\$22,417,130	491	\$45,656
Austin	366,355,359	1,551	236,206	376,403,651	1,608	234,082	382,391,771	1,698	225,201
Brownsville	1,286,638	222	5,796	1,558,306	219	7,116	3,273,326	224	14,613
Dallas	27,444,057	242	113,405	32,547,141	254	128,138	31,274,590	285	109,735
El Paso	27,328,772	386	70,800	27,847,152	404	68,929	32,067,735	411	78,024
Pan American	2,605,758	312	8,352	3,193,419	332	9,619	4,309,262	362	11,904
Permian Basin	980,905	72	13,624	1,118,184	74	15,111	1,895,564	71	26,698
San Antonio	12,402,017	338	36,692	14,547,732	403	36,099	16,516,457	413	39,991
Tyler	375,821	133	2,826	411,275	146	2,817	894,034	143	6,252

	FY 2005			FY 2006		
	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty
Arlington	\$33,826,960	503	\$67,250	\$34,865,068	525	\$66,410
Austin	422,867,712	1,745	242,331	446,686,603	1,733	257,753
Brownsville	5,374,665	236	22,774	5,890,444	259	22,743
Dallas	43,110,799	302	142,751	43,085,236	304	141,728
El Paso	36,013,585	434	82,981	41,933,182	447	93,810
Pan American	5,816,164	373	15,593	6,790,592	398	17,062
Permian Basin	1,160,694	87	13,341	2,377,656	88	27,019
San Antonio	23,605,844	443	53,286	32,316,849	473	68,323
Tyler	501,301	150	3,342	915,024	158	5,791

Source: Sponsored Research Expenditures from 2001-2005 Survey of Research Expenditures Submitted to the Texas Higher Education Coordinating Board; these include indirect costs and pass-throughs to institutions. FTE faculty from THECB.

Figure II-6



## Private Funding

Table II-10

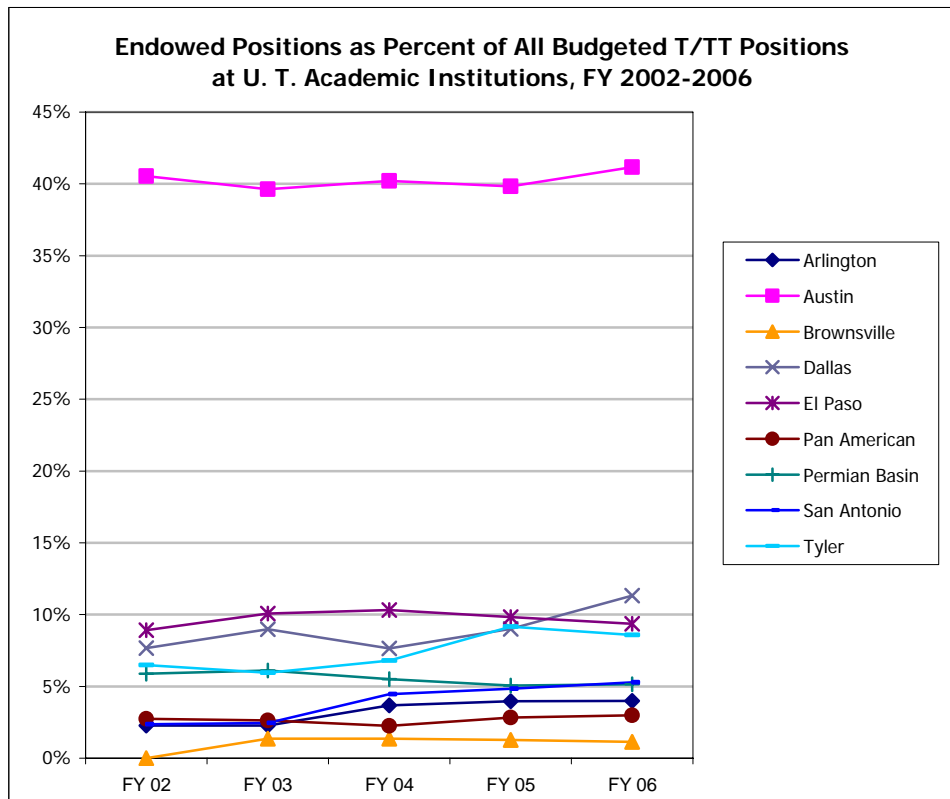
Endowed Faculty Positions at U. T. Academic Institutions					
	FY 02	FY 03	FY 04	FY 05	FY 06
Arlington Total Budgeted Endowed Professorships and Chairs	12	12	20	22	23
Number Filled	7	7	9	13	14
% of Total Budgeted T/TT Positions Endowed	2%	2%	4%	4%	4%
Austin Total Endowed Professorships and Chairs	725	731	738	747	770
Number Filled	565	590	598	586	609
% of Total Budgeted T/TT Positions Endowed	41%	40%	40%	40%	41%
Brownsville Total Budgeted Endowed Professorships and Chairs	--	3	3	3	3
Number Filled	--	2	3	3	3
% of Total Budgeted T/TT Positions Endowed	0%	1%	1%	1%	1%
Dallas Total Budgeted Endowed Professorships and Chairs	23	29	25	31	41
Number Filled	23	29	20	24	27
% of Total Budgeted T/TT Positions Endowed	8%	9%	8%	9%	11%
El Paso Total Budgeted Endowed Professorships and Chairs	38	44	46	46	47
Number Filled	26	38	35	35	33
% of Total Budgeted T/TT Positions Endowed	9%	10%	10%	10%	9%
Pan American Total Budgeted Endowed Professorships and Chairs	8	8	8	11	12
Number Filled	2	2	4	4	4
% of Total Budgeted T/TT Positions Endowed	3%	3%	2%	3%	3%
Permian Basin Total Budgeted Endowed Professorships and Chairs	5	5	5	5	5
Number Filled	5	4	5	5	5
% of Total Budgeted T/TT Positions Endowed	6%	6%	5%	5%	5%
San Antonio Total Budgeted Endowed Professorships and Chairs	10	11	20	25	29
Number Filled	6	6	7	8	20
% of Total Budgeted T/TT Positions Endowed	2%	2%	4%	5%	5%
Tyler Total Budgeted Endowed Professorships and Chairs	9	9	11	14	14
Number Filled	7	7	6	1	5
% of Total Budgeted T/TT Positions Endowed	6%	6%	7%	9%	9%

Source: U. T. System Academic Institutions

- Endowed professorships and chairs significantly supplement the faculty positions that institutions are able to support with state appropriations, tuition, grants, and other sources of funding.
- Endowed positions help institutions compete for, recruit, and retain top faculty. These hires, in turn, help institutions achieve excellence in targeted fields.
- These endowments reflect the specific fundraising environment for each institution, which are influenced by local and regional economic conditions.
- In response to the recommendations of the WAG report (see above, p. II-9, and compact initiatives), a number of institutions are increasing resources and plans to expand fundraising efforts. These plans are reflected in their institutional Compacts and may be expected, over time, to result in continued or even faster increases in the numbers of endowed positions on many U. T. System campuses.
- With the addition of U. T. Brownsville's three positions in 2003, every U. T. System academic institution now has endowed positions.

- From FY 2002 to FY 2006, U. T. Arlington nearly doubled the number of its endowed professorships and chairs.
- U. T. Dallas increased the number of its endowed positions by 78% from 2002 to 2006.
- At U. T. San Antonio, the number of endowed positions almost tripled from 2002 to 2006.
- From 2002 to 2006, U. T. Pan American and U. T. Tyler increased their endowed positions by 50 percent or more.
- From 2005 to 2006, the number of endowed positions and the percent of positions that are endowed increased or held steady at all nine U. T. System academic institutions.
- The majority of these positions are filled each year. Open positions provide flexibility or reflect the timing of making academic hires in a highly competitive environment. The openings may result from such situations as retirements, deaths, declined offers, or other circumstances that arise in a given academic year.

Figure II-7



## Faculty Awards and Honors

- The faculty of the U. T. System receives a wide range of honors and awards. Those listed here are perpetual, lifetime awards received by faculty members on or before September 1, 2006.

**Table II-11**

<b>Cumulative Honors at U. T. Academic Institutions</b>				
	<b>Total</b>	Arlington	Austin	Dallas
Nobel Prize	<b>4</b>		2	2
Pulitzer Prize	<b>20</b>		20	
National Academy of Sciences	<b>22</b>		20	2
National Academy of Engineering	<b>51</b>		50	1
American Academy of Arts and Sciences	<b>42</b>		41	1
American Law Institute	<b>25</b>		25	
American Academy of Nursing	<b>28</b>	13	15	

*Source: U. T. System Academic Institutions*

- Faculty at U. T. System academic institutions receive many other prestigious awards, honors, prizes, and professional recognitions. Additional information on specific honors is available in the Institutional Profiles, Section V.
- Noteworthy awards received in 2005-2006 are listed below.

**Table II-12**

<b>Faculty Awards Received at U. T. Academic Institutions, 2005-06</b>							
	UTA	Austin	UTB	UTD	UTPA	UTSA	UTT
Pulitzer Prize		1					
National Academy of Sciences		1					
National Academy of Engineering		1					
American Academy of Nursing			1				1
Fulbright American Scholars		1		1		1	
Guggenheim Fellows		2					
American Law Institute		1					
NSF CAREER awards (excluding those who are also PECASE winners)	1	15	1				
Sloan Research Fellows		4					
NEH Fellowships					1	2	

*Source: U. T. System Academic Institutions*



## Technology Transfer – System Overview

Table II-13

Aggregate U.T. System Technology Transfer, 2001-2005														
Total New Invention Disclosures					Total U.S. Patents Issued					Total Licenses & Options Executed				
2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
459	480	525	494	613	100	103	99	120	114	109	97	146	141	154
Start-up Companies Formed					Total Gross Revenue Received from Intellectual Property*									
2001	2002	2003	2004	2005	2001	2002	2003	2004	2005					
18	16	12	12	12	\$22,907,414	\$26,555,136	\$24,625,622	\$29,667,987	\$34,871,167					

\* The Texas Higher Education Coordinating Board includes reimbursed legal expenses, including patent prosecution costs, in its definition of gross revenue received from intellectual property. However, these expenses are generally excluded as an industry standard, such as reported by the Association for University Technology Managers.

Source: Texas Higher Education Coordinating Board Technology Development and Transfer Survey.

- From 2001 to 2005, the U. T. System increased the number of new invention disclosures (34%), U.S. patents, licenses and options executed, and gross intellectual property revenue (52%). The number of public start-up companies per year declined over this period.
- In 2005, the U. T. System institutions were issued a total of 261 patents, of which, 114 were U.S. patents and 147 were foreign patents. The large number of foreign patents reflects the global competitiveness of U. T. System research and innovation.
- According to the U.S. Patent and Trademark Office, when academic and health-related institution patents are combined, in 2005 the U. T. System ranked fourth, tied with Stanford University in number of patents issued (90). The University of California System topped the list, as it has for the past ten years, with 390 in 2005.
- The University of Texas was issued the highest absolute number of biotech patents in 2005 according to the Milken Institute. In addition, five University of Texas institutions rank in the top 100 on the Milken Institute Technology Transfer and Commercialization Index based on patents issued, licenses executed, licensing income, and startup data from the Association of University Technology Managers.

Table II-14

### Patents Issued by U.S. Patent and Trademark Office Top-Ranked Universities, 2001-2005

	2001		2002		2003		2004		2005	
	Rank	# Patents	Rank	# Patents	Rank	# Patents	Rank	# Patents	Rank	# Patents
U. of California	1	402	1	431	1	439	1	424	1	390
Massachusetts Institute of Tech.	2	125	2	135	3	127	3	132	2	136
California Institute of Tech.	3	124	3	110	2	139	2	135	3	101
University of Texas System	4	89	5	93	4	96	4	101	4	90
Stanford U.	5	84	4	104	5	85	6	75	4	90
U. of Wisconsin System	7	73	6	81	6	84	8	64	5	77
Johns Hopkins U.	6	80	6	81	7	70	5	94	6	71
U. of Michigan	--	--	12	47	8	63	7	67	6	71
University of Florida	--	--	--	--	--	--	13	41	7	64
Columbia U.	--	--	13	45	9	61	10	52	8	57
Georgia Institute of Technology	--	--	--	--	--	--	19	37	9	43
University of Pennsylvania	--	--	--	--	--	--	24	32	9	43
Cornell University	--	--	--	--	--	--	16	40	10	41

Source: United States Patent and Trademark Office Press Releases (4/6/2006, 3/18/2005, 2/9/2004, 2/26/2003), [www.uspto.gov](http://www.uspto.gov)

## Technology Transfer – U. T. System Academic Institutions

Table II-15

### Technology Transfer Trends at U. T. Academic Institutions

	Total New Invention Disclosures					Total U.S. Patents Issued					Total Licenses & Options Executed				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
Arlington	5	11	21	17	24	3	2	2	2	2	1	1	0	0	3
Austin	85	83	69	87	128	20	21	28	32	32	34	24	20	23	23
Dallas	16	12	33	26	18	5	5	6	5	7	6	0	2	2	1
El Paso	7	10	10	11	18	0	0	0	0	1	1	0	0	1	0
Pan American	0	0	0	3	7	0	0	0	0	0	0	0	1	1	0
San Antonio	4	4	2	5	16	1	1	0	1	1	0	0	0	0	0
<b>Total Academic Institutions</b>	<b>117</b>	<b>120</b>	<b>135</b>	<b>149</b>	<b>211</b>	<b>29</b>	<b>29</b>	<b>36</b>	<b>40</b>	<b>43</b>	<b>42</b>	<b>25</b>	<b>23</b>	<b>27</b>	<b>27</b>
	Start-up Companies Formed					Total Gross Revenue Received from Intellectual Property*									
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005					
Arlington	0	1	0	2	2	\$92,074	\$113,250	\$35,606	\$48,871	\$1,178,434					
Austin	11	4	6	6	6	\$2,768,769	\$5,008,592	\$4,301,165	\$5,405,328	\$7,736,796					
Dallas	0	0	0	0	0	\$241,799	\$47,971	\$149,093	\$110,904	\$3,325					
El Paso	0	0	0	0	0	\$750	\$750	\$30,150	\$16,633	\$67,852					
Pan American	0	0	0	0	0	\$0	\$0	\$2,500	\$2,500	\$0					
San Antonio	0	0	0	0	0	\$0	\$0	\$45,198	\$0	\$0					
<b>Total Academic Institutions</b>	<b>11</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>\$3,103,392</b>	<b>\$5,170,563</b>	<b>\$4,563,712</b>	<b>\$5,584,236</b>	<b>\$8,986,407</b>					

\* The Texas Higher Education Coordinating Board includes reimbursed legal expenses, including patent prosecution costs, in its definition of gross revenue received from intellectual property. However, these expenses are generally excluded as an industry standard, such as reported by the Association for University Technology Managers.

Source: Texas Higher Education Coordinating Board Technology Development and Transfer Survey.

- Technology transfer success begins with new invention disclosures; these should increase over time in order to increase the number of patents issued, licenses executed, and revenues received from licenses and options executed.
- Patents issued to U. T. Austin increased by 60 percent between 2001 and 2005.
- Gross revenue from intellectual property nearly tripled at U. T. Austin between 2001 and 2005. U. T. Arlington increased revenues from intellectual property by almost \$1.1 million.
- The pace of technology transfer is closely linked to economic and market factors, typically resulting in dramatic annual fluctuations. Increases in gross revenues since 2003 mirror national trends related to a recovery from difficult market conditions in the early 2000s.
- The commercialization capacity of U. T. System institutions is expected to improve as the U. T. System Office of Research and Technology Transfer assists institutions with implementing regional and centralized services.
- Large-scale multi-institutional research efforts based on university-government-industry partnerships, such as the Nanoelectronics Initiative, are expected to further contribute to technology transfer activities.
- Other U. T. System academic institutions, like U. T. El Paso, are in earlier stages of developing the necessary infrastructure to build technology transfer and commercialization programs.

## Faculty Headcount – U. T. System Academic Institutions

- Nationally, 39 percent of instructional faculty are women; most U. T. System academic institutions meet or exceed this figure (*Faculty Gender Equity Indicators 2006, AAUP*).

**Table II-16**

Tenure/Tenure-Track Faculty Headcount: Professors, Associate Professors, Assistant Professors, Instructors						
	Fall	2001	2002	2003	2004	2005
Arlington		525	524	532	543	567
Austin		1,833	1,904	1,897	1,926	1,921
Brownsville/TSC		222	219	225	236	262
Dallas		284	309	331	337	358
El Paso		426	437	441	468	495
Pan American		325	351	376	388	421
Permian Basin		78	80	79	94	93
San Antonio		421	450	449	516	549
Tyler		138	150	146	152	162

*Source: Texas Higher Education Coordinating Board and UTB/TSC*

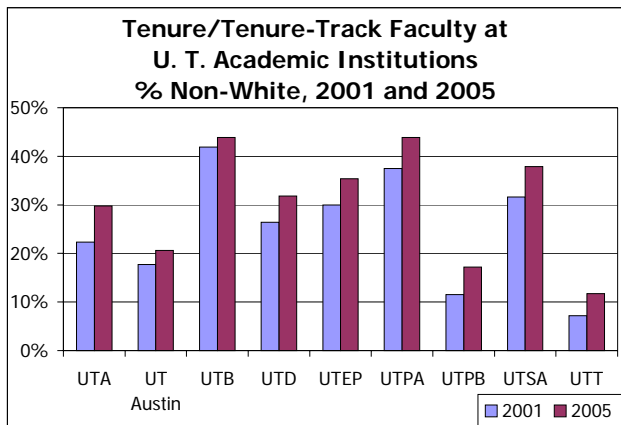
**Table II-17**

Headcount: All Instructional Staff*						
	Fall	2001	2002	2003	2004	2005
Arlington		1,216	1,255	1,302	1,365	1,410
Austin		3,308	3,418	3,342	3,420	3,561
Brownsville/TSC		466	495	526	558	638
Dallas		655	716	743	774	850
El Paso		923	956	919	997	1,118
Pan American		628	667	716	772	807
Permian Basin		139	158	192	212	216
San Antonio		999	1,089	1,159	1,312	1,401
Tyler		285	302	293	350	364

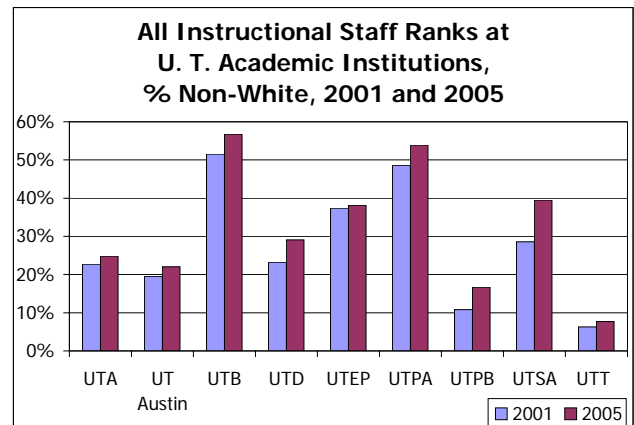
\*All Instructional Staff includes Professors, Associate Professors, Assistant Professors Instructors, Lecturers, Teaching Assistants, Visiting Teachers, and Special, Adjunct, and Emeritus faculty at the institution.

*Source: Texas Higher Education Coordinating Board and UTB/TSC*

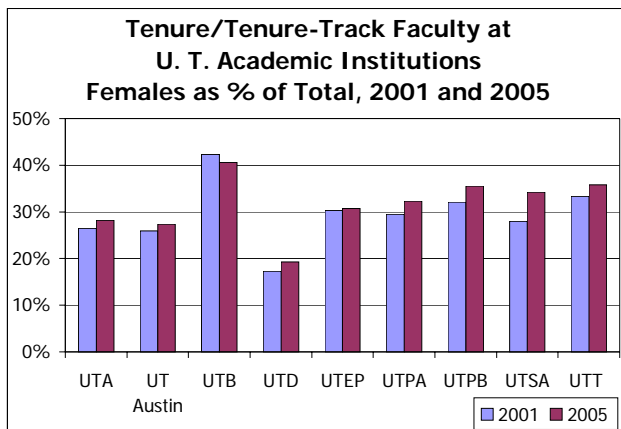
**Figure II-8**



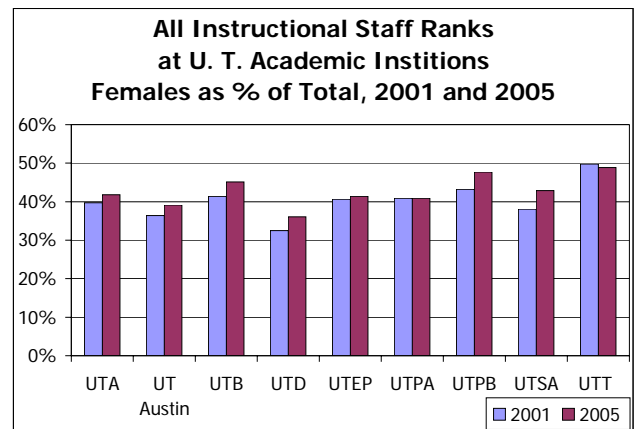
**Figure II-9**



**Figure II-10**



**Figure II-11**



## Staff Headcount

Table II-18

		AY	02-03	03-04	04-05	05-06	06-07
<b>Administrative, Other, Non-Faculty and Student Employee Headcount at U. T. Academic Institutions*</b>							
Arlington	Administrative		346	302	307	327	356
	Other, Non-Faculty		1,373	1,376	1,440	1,513	1,563
	Student Employees		1,737	1,724	2,145	2,112	2,139
Austin	Administrative		691	684	708	706	743
	Other, Non-Faculty		9,642	9,235	9,549	9,619	9,874
	Student Employees		8,948	8,853	9,058	9,179	9,596
Brownsville	Administrative		105	109	111	114	121
	Other, Non-Faculty		1,137	1,104	1,117	1,017	1,205
	Student Employees		N/A	N/A	N/A	212	199
Dallas	Administrative		123	101	103	110	122
	Other, Non-Faculty		1,281	1,341	1,384	1,530	1,624
	Student Employees		919	1,005	1,070	1,136	1,210
El Paso	Administrative		374	327	303	292	292
	Other, Non-Faculty		1,219	1,155	1,169	1,227	1,251
	Student Employees		1,772	1,638	1,815	1,882	2,016
Pan American	Administrative		84	82	80	89	108
	Other, Non-Faculty		1,366	1,434	1,453	1,495	1,727
	Student Employees		780	812	660	715	687
Permian Basin	Administrative		37	37	36	42	43
	Other, Non-Faculty		160	167	179	189	176
	Student Employees		201	210	260	229	239
San Antonio	Administrative		213	224	243	266	283
	Other, Non-Faculty		1,630	1,828	1,984	2,145	2,285
	Student Employees		648	731	894	993	1,030
Tyler	Administrative		40	37	40	43	46
	Other, Non-Faculty		246	261	293	296	336
	Student Employees		227	240	320	359	329

\*Administrative and other, non-faculty positions exclude faculty and do not entail significant direct instructional activities. Administrative includes executive, administrative and managerial positions which require performance of work directly related to management policies or general business operations of the institution, department or subdivision. Other, non-faculty includes other professional, technical, clerical, skilled crafts and service related positions. Student employees are those positions for which student status is a condition of employment.

Source: U. T. System Common Data Warehouse

Figure II-12

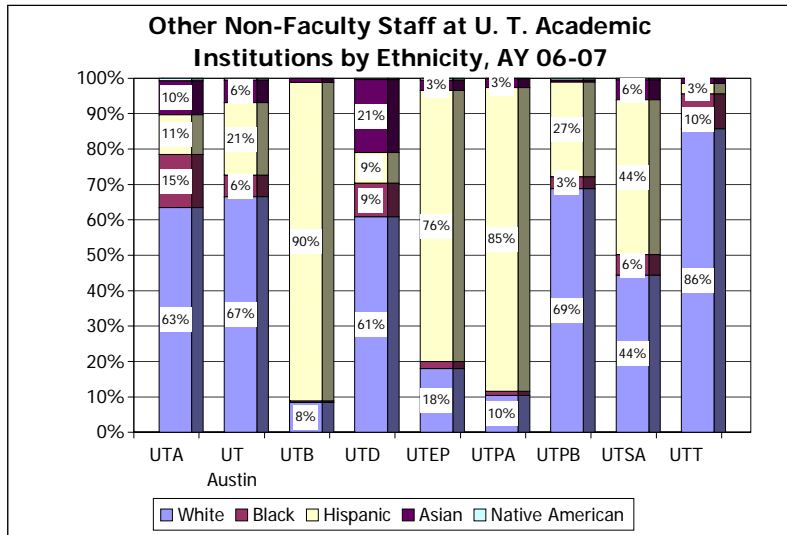


Figure II-13

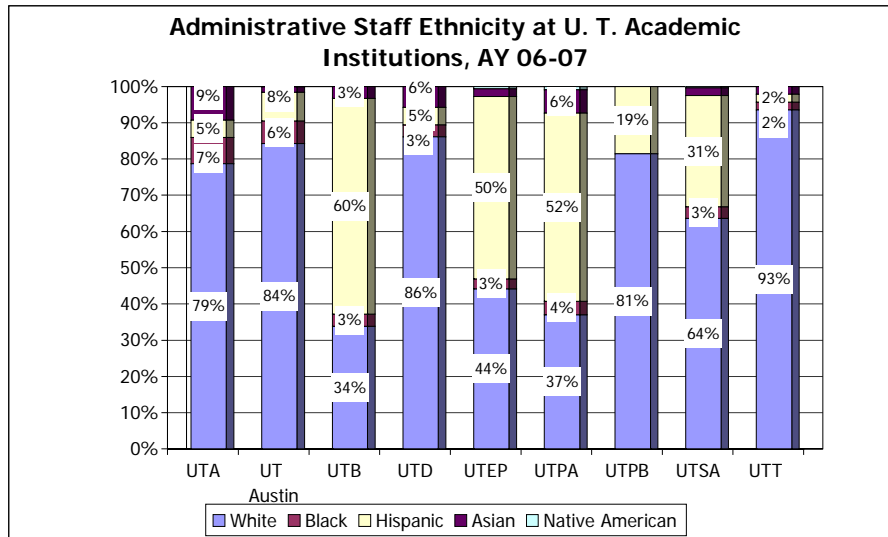
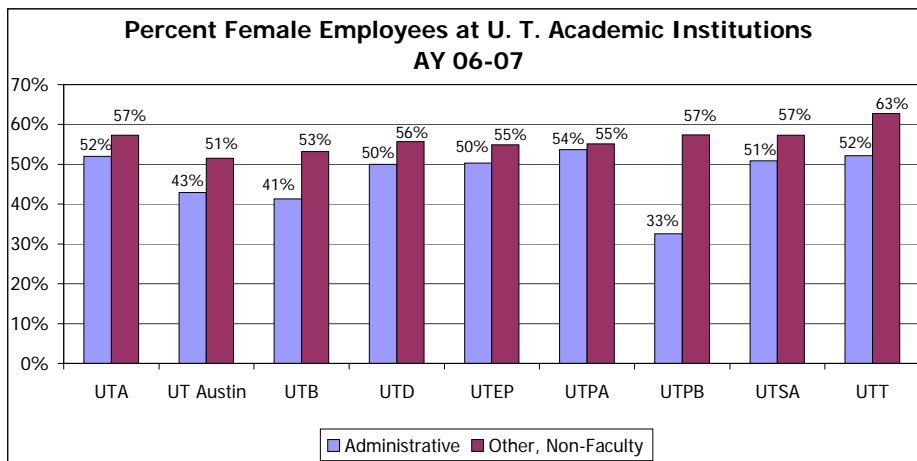


Figure II-14



## Student/Faculty Ratios

Table II-19

FTE Student / FTE Faculty Ratio at U. T. Academic Institutions		Fall	2001	2002	2003	2004	2005
Arlington	FTE Students		15,374	17,205	18,513	18,592	18,740
	FTE Faculty		752	782	834	866	891
	Ratio		20 to 1	22 to 1	22 to 1	21 to 1	21 to 1
Austin	FTE Students		43,758	45,815	45,248	44,570	43,966
	FTE Faculty		2,101	2,167	2,252	2,320	2,340
	Ratio		21 to 1	21 to 1	20 to 1	19 to 1	19 to 1
Brownsville	FTE Students*		5,838	6,319	6,758	7,262	7,878
	FTE Faculty**		348	359	378	403	437
	Ratio		17 to 1	18 to 1	18 to 1	18 to 1	18 to 1
Dallas	FTE Students		8,507	9,192	9,797	10,282	10,653
	FTE Faculty		380	424	468	489	509
	Ratio		22 to 1	22 to 1	21 to 1	21 to 1	21 to 1
El Paso	FTE Students		12,123	12,856	13,546	13,645	13,980
	FTE Faculty		651	678	656	711	721
	Ratio		19 to 1	19 to 1	21 to 1	19 to 1	19 to 1
Pan American	FTE Students		9,838	10,538	11,709	12,692	12,786
	FTE Faculty		476	511	556	616	628
	Ratio		21 to 1	21 to 1	21 to 1	21 to 1	20 to 1
Permian Basin	FTE Students		1,637	1,848	2,129	2,343	2,443
	FTE Faculty		99	106	118	133	134
	Ratio		17 to 1	17 to 1	18 to 1	18 to 1	18 to 1
San Antonio	FTE Students		14,347	16,002	18,316	19,565	20,501
	FTE Faculty		594	660	696	760	813
	Ratio		24 to 1	24 to 1	26 to 1	26 to 1	25 to 1
Tyler	FTE Students		2,502	2,862	3,390	3,891	4,323
	FTE Faculty		204	218	217	246	261
	Ratio		12 to 1	13 to 1	16 to 1	16 to 1	17 to 1

Note: FTE Student calculations include state-funded, non-state-funded and excess hours.

\*Includes students who matriculate through Texas Southmost College

\*\*Includes faculty in Master Technical Instructor ranks

Source: Texas Higher Education Coordinating Board

- Institutions must balance the advantages of smaller classes – a criterion that has an impact on their national rankings – with the efficiency that a higher student/faculty ratio may confer.
- The number of full-time-equivalent students and faculty has increased over the past five years at all nine U. T. System academic institutions.
- However, the number of students increased faster than faculty at many institutions over this time. Consequently, the ratio of FTE students to FTE faculty increased at five of the nine institutions, remained stable at U. T. El Paso, and declined slightly at U. T. Austin, U. T. Dallas and U. T. Pan American.

## Tenure/Tenure-Track Faculty Teaching Lower Division Courses

Table II-20

**Proportion of Lower Division Semester Credit Hours Taught by Tenure/Tenure-Track Faculty at U. T. Academic Institutions**

	Fall	2002	2003	2004	2005
Arlington		35.8%	35.2%	30.3%	27.4%
Austin		44.8	49.0	52.3	46.8
Dallas		27.2	26.9	29.3	27.5
El Paso		38.7	41.2	39.4	37.2
Pan American		44.4	47.4	42.3	45.6
Permian Basin		47.3	45.7	42.7	41.4
San Antonio		44.8	42.5	37.9	32.9
Tyler		73.0	63.0	56.3	52.4

Note: Brownsville data are not available.

Source: Texas Higher Education Coordinating Board

- This measure illustrates the proportion of lower-division semester credit hours taught by tenure/tenure-track faculty.
- Since 2002, the proportion of lower division semester credit hours taught by tenure/tenure-track faculty increased at U. T. Austin, U. T. Dallas and U. T. Pan American, but decreased at the other U. T. System academic institutions.
- Tenure and tenure-track faculty have responsibilities to teach, conduct research, and perform service on behalf of their institution. Once tenured, they become permanent members of an institution's faculty.

## Training Postdoctoral Fellows

Table II-21

Postdoctoral Fellows at U. T. Academic Institutions					
	FY 02	FY 03	FY04	FY05	FY06
Arlington	25	30	27	34	59
Austin	379	365	385	415	420
Brownsville	1	6	4	8	9
Dallas	49	39	56	36	56
El Paso	2	7	17	24	19
Pan American	--	1	2	2	2
Permian Basin	1	2	0	0	0
San Antonio	21	27	29	51	54

\*As at most universities, postdoctoral fellow positions are diverse. In the last year UTEP has made an effort to ensure that they are appointed in the proper categories, making it easier to track them.

*Source: U. T. System Academic Institutions*

- The number of postdoctoral fellows at an institution is one measure of the size and growth of its advanced research programs. Postdoctoral fellowships are typically funded by public grants or private gifts, so these positions demonstrate the impact of an institution's success in obtaining external funding to support its research programs.
- These numbers also indicate the service U. T. System academic institutions provide in preparing researchers who are likely to make the discoveries that advance fields in the future.
- Postdoctoral fellows have increased significantly over the past five years at most U. T. System academic institutions and dramatically at several: at U. T. Arlington by 136 percent; by 800 percent at U. T. Brownsville (since FY 02, the first year UTB had postdoctoral fellows); also by 850 percent at U. T. El Paso; and by nearly 160 percent at U. T. San Antonio.
- These changes reflect a growing emphasis on and success in acquiring research and external funding.



## Examples of Externally Funded Research Collaborations

- The U. T. System has made it a high priority to increase the research collaborations among U. T. System institutions as well as organizations outside of U. T. System.
- These collaborations achieve economies of scale and greatly improve the quality of research by leveraging faculty, external funding, and facilities resources beyond the scope that any individual institution could bring to bear on a research problem.
- The scope of U. T. System research is very large. Below are examples from each institution of current and high priority collaborative research projects.

**Table II-22**

<b>Examples of Research Collaborations – U. T. Academic Institutions</b>		
	Purpose and Outcomes	Collaborators
U. T. Arlington		
<b>Optical Imaging</b>	Applies optical imaging in medicine. Collaborations include image guided surgery for implantation of deep brain stimulators to treat Parkinson's disease as well as laparoscopic surgery for removal of gallstones. Additionally, optical imaging which diagnoses and guides the treatment of diabetic foot to prevent lower limb amputation is being investigated. A study of breast cancer tumor growth using optical imaging is underway. Other areas of collaboration include treatment of urinary incontinence; body reaction to implants such as breast implants; gene therapy; controlled drug release; characterization of corneal fibroblast; obesity and respiration; modeling of cerebral blood flow autoregulation; and magnetic anchoring of organs for minimally invasive surgery.  Collaborators: UTA, UTSWMC	
<b>Strategic Partnership for Research in Nanotechnology</b>	Fosters nanotechnology-based education and research, and university/industry technology transfer in Texas.	UTA, UT Austin, UTD, UTB, UTPA, Rice University, and the Air Force Materials Research Labs (Dayton, Ohio)
<b>Experimental High Energy Physics</b>	Designs, installs, and operates physics detectors; to analyze data from collisions at the world's highest energy particle colliders; to conduct an experimental study of the elementary particles that make up all known matter.	UTPA, Texas Tech University, SMU, Rice University, Fermi National Accelerator Lab
U. T. Austin		
<b>International Center for Nanotechnology and Advanced Materials (ICNAM)</b>	The International Center for Nanotechnology and Advanced Materials (ICNAM), a relatively new institute at UT Austin, was established to foster collaborations and cooperative research efforts with Latin American countries in the area of Engineering and Sciences. ICNAM has initiated major research programs and collaborations with the most prestigious Mexican Universities and research centers. Two dozen projects are currently in progress involving researchers in these institutions and UT Austin in areas of nanotechnology and advanced materials. In addition, numerous student and faculty exchanges have been undertaken between these universities and UT Austin. These collaborative efforts have the support of Conacyt, the Mexican science agency, an equivalent to the National Science Foundation, and have already produced a number of joint publications.	National Autonomous University of Mexico, the Autonomous University of Nuevo Leon, the Research Center in Applied Chemistry, the National Polytechnic Institute, the Research Center in Advanced Materials, and the Research Center in Science and Technology

<b>Examples of Research Collaborations – U. T. Academic Institutions</b>		
	Purpose and Outcomes	Collaborators
<b>South West Academy for Nanoelectronics (SWAN)</b>	<p>The semiconductor industry, which is based on conventional complementary metal oxide semiconductor field effect transistors (CMOSFETs), is at a crossroads, where there is no clear path to continued scaling of transistors. Therefore, UT Austin has established the South West Academy for Nanoelectronics (SWAN) program aimed at finding a replacement for the CMOSFET logic switch. SWAN is being led by UT Austin (PI: Sanjay Bnaerjee). This program is being initially funded for 2006-09 at a level of \$1.5 million by the Nano Electronics Research Corporation (NERC), a consortium of leading semiconductor companies in the U.S. (e.g., TI, AMD, Freescale, IBM, Intel and Micron). The State of Texas has provided matching funds of \$1.5 million for SWAN, as well as \$10 million to hire other researchers into the program. Furthermore, UT System and Texas nanoelectronics companies are each providing \$10 million, making SWAN a \$33 million endeavor. SWAN will complement similar centers on the East and West coasts. The SWAN research program is high risk, but potentially very high impact. It will require exploring radical replacements of CMOSFETs in which an electron charge is not used as the computational state variable. Concepts to be studied include using the spin of the electron or the electron wave function as possible bases for logic transistors. If successful, SWAN could lead the path to an entirely new class of transistors that are more scaleable, are faster, and consume far less power than metal oxide semiconductor field effect transistors.</p> <p>Collaborators: UT Dallas, TAMU, Rice University, NASA JSC, SEMATECH, Arizona State University, University of Notre Dame, and the University of Maryland</p>	
<b>Texas Advanced Computing Center (TACC)</b>	<p>TACC will host and manage one of the world's most powerful computers through a \$59 million, five-year grant from the National Science Foundation (NSF), the largest single NSF grant in the university's history. The computer will significantly increase the computing power and time available to academic researchers around the country who conduct research on subjects ranging from the birth of the universe to the working of molecules inside the body. TACC is collaborating with business and academia to deploy and support a world-class high performance computing system of unprecedented capacity and capability to empower the U.S. academic research community. The computer will be a part of TeraGrid, an NSF-sponsored network of high performance computers.</p>	<p>Sun Microsystems, Advanced Micro Devices Inc., the Cornell Theory Center at Cornell University and the Fulton High Performance Computing Institute at Arizona State University</p>
U. T. Brownsville		
<b>The International Virtual Data Grid Laboratory (iVDGL)</b>	<p>Provides an international Virtual-Data Grid Laboratory of unprecedented scale and scope, comprising heterogeneous computing and storage resources in the U.S., Europe and ultimately other regions linked by high-speed networks, and operates as a single system for the purposes of interdisciplinary experimentation in grid-enabled, data-intensive scientific computing.</p>	<p>Over 40 universities and laboratories in U.S., Europe, and Asia</p>
<b>Bahia Grande Restoration Project</b>	<p>Provides quantitative assessment of the recovery of the Bahia Grande (lower Laguna Madre) at the system level using integrated and comprehensive approaches and partnerships.</p>	<p>USFWS, UTPA, TAMU, Texas A&amp;M University-Corpus Christi, and Ocean Trust</p>
<b>Project EXPORT</b>	<p>Aims to build research capacity at UTB/TSC to promote participation and training in biomedical research among health disparity populations. The project encompasses research on health disparities in Hispanics, provides a source of data on Hispanic health, develops and evaluates intervention strategies for Hispanic cultures, evolves research collaborations with other Hispanic communities, and builds research capacity in South Texas LRGV. Has led to the creation of the first Hispanic Health Research Center in the nation, which serves as the hub of Project EXPORT at UTB/TSC.</p>	<p>School of Public Health and UTHSC-Houston</p>
U. T. Dallas		

<b>Examples of Research Collaborations – U. T. Academic Institutions</b>		
	Purpose and Outcomes	Collaborators
<b>Strategic Partnership for Research in Nanotechnology</b>	A consortium that collaborates on research projects, programs, conferences and the development of joint facilities and infrastructure to position the state as a center for education, research and development in the science of nanotechnology.	Rice University, UT Austin, UTA, "Nano on the Border" group
<b>Materials Science &amp; Engineering Collaboration</b>	Partnership that allows students enrolled at either institution to broaden their learning and research experiences by enrolling in courses shared by both institutions. This partnership will provide immediate program depth and expand research capabilities beyond what each institution could do alone.	UTA
<b>Institute of Biomedical Science &amp; Technology</b>	Provides novel diagnostics, treatments and cures for disease by integrating expertise in basic and applied biosciences to advance science, medical research and the development of bioengineering and biomedical products	Baylor Health Sciences Center, UTA, TAMU, TAMU Health Science Center, and UTB
U. T. El Paso		
<b>Advanced Research Cooperation in Environmental Health Program on Border Asthma</b>	To examine environmental correlates of asthma in children living in El Paso.	NIH, National Institute of Environmental Health Sciences, University of New Mexico
<b>U.S.-Mexico Border Interdisciplinary Research Training Project</b>	To examine minority health disparities and collaboratively train students entering the medical fields.	NIH-National Center on Minority Health and Health Disparities, Universidad Autónoma de Ciudad Juárez, Instituto Mexicano del Seguro Social
<b>Teachers for a New Era</b>	To improve teacher training programs and pupil learning in local communities by developing and applying knowledge in (a) evidence-based decision making, (b) teacher preparation, and (c) "clinical" training	Carnegie Corporation of New York, Annenberg Foundation, Ford Foundation, El Paso Community College, Local Public School Teachers and Administrators, Bank Street College of Education, Boston College, California State University-Northridge, Florida A & M University, Michigan State University, Stanford University, University of Connecticut, University of Virginia, University of Washington, University of Wisconsin-Milwaukee
U. T. Pan American		
<b>U. S. Hispanic Nutrition and Research Education Center</b>	Focuses on understanding how diet and nutrition, combined with genetic, social, psychological, socioeconomic, cultural and environmental factors, affect the health of the U.S. Hispanic population, especially in South Texas.	UTHSC-San Antonio, Regional Academic Health Center-Harlingen
<b>Advanced Process Technologies for Controlling Functional Nanostructures and Polymer/Nanotube Composites</b>	Investigates the composites for promising applications of nanotechnology such as photocells, photo detectors, electroluminescent displays, and EMI shielding.	Rice University

<b>Examples of Research Collaborations – U. T. Academic Institutions</b>		
	Purpose and Outcomes	Collaborators
<b>Rapid Response Manufacturing</b>	Based on the need for the development of educational as well as operational strategies and technologies that will facilitate the innovative process in the manufacturing sector, the focus of the efforts are to develop and implement strategies aimed at enhancing the competitiveness of North American Manufacturing through rapid response to consumer needs.	Michigan State University, Monterrey Tech (Instituto Tecnológico y de Estudios Superiores de Monterrey or ITESM)
U. T. Permian Basin		
<b>Center for Energy and Economic Diversification (CEED)</b>	Provides research, training, and technology transfer activities on issues facing the region's primary industry of energy.  Participated in FutureGen West Texas initiative, resulting in finalist bid for location of \$1 billion energy facility sponsored by DOE and FutureGen Alliance. Research on bio-mass conversion into fuel, CO <sub>2</sub> enhanced production and geosequestration, geological subsidence and collapse, geothermal research, and alternative energy technologies and economics.	U.S. Dept. of Energy, FutureGen Alliance, FutureGen Texas, The Welch Foundation, U.S. Geological Survey, Texas Bureau of Economic Geology, Texas State Energy Conservation Office, GeoPowering the West with SMU
<b>Bacterial heme transport and hemoglobin expression</b>	Research collaboration of Biology Associate Professor Douglas P. Henderson and Dr. John S. Olson of Rice University, leading to co-inventor patent application for making hemoglobin in bacteria for use as a blood substitute.	Rice University; NIH grant
<b>Impact of campaign contributions on Texas Supreme Court decisions</b>	Research collaboration of Political Science Associate Professor Craig F. Emmert and Dr. M.V. Hood, III of University of Georgia to study impact of campaign contributions on Texas Supreme Court decisions to grant review, on decision on the merits, and on the votes of individual justices.	University of Georgia; NSF grant
U. T. San Antonio		
<b>Future of the Region, Inc.</b>	The Center for Economic Development and the Future of the Region organization focuses on 47 county area of South Texas/Border Region which encompasses the population of 4 million. The focus is to provide research on multiple issues regarding economic development, workforce development, education, infrastructure development, healthcare, and environmental issues.	Center for Economic Development and the Future of the Region, Inc.
<b>San Antonio Life Sciences Institute (SALSI)</b>	Established in 2003 by Texas House Bill 1716 to 1) increase both UTSA and UTHSCSA research funding base; 2) encourage cross-campus programs; and 3) support acquisition of extramural, peer-reviewed research funding.	UTSA & UTHSCSA
<b>Center of Excellence in Biotechnology &amp; Bioprocessing Education &amp; Research (CEBBER)</b>	Purposes: 1) share laboratory facilities and expertise with the United States Air Force; 2) conduct research of common interest on identification of pathogens and vaccine development; and 3) conduct joint training on latest biotechnology processes and equipment.	UTSA & the 311th Human Systems Wing at Brooks City-Base
U. T. Tyler		
<b>Research collaboration of Biology professor Blake Bextin</b>	Genetic analysis and transmission of <i>Xylella fastidiosa</i> : the pathogenic bacteria causing Peirce's Disease in grapevines and other agriculturally important crop plants.	University of California, UH, TAMU, TAMU-Kingsville, North Dakota State University, Chaffy College, Oklahoma State University, and USDA-APHIS PPQ.
<b>Clinical research neuro-psychology service</b>	The current focus of the ongoing studies is to study the relationship between the loss of olfactory ability in older adults and the degree and type of dementia.	UTT, Center for Healthy Aging at UTHCT
<b>College of Nursing</b>	To determine the effect of a physical conditioning program on quality of life and health care costs in persons with cancer.	Cancer Foundation for Life

## Examples of Educational Collaborations

- The U. T. System encourages educational collaborations among U. T. System institutions as well as with organizations outside of U. T. System.
- These collaborations achieve economies of scale and help extend the scope and quality of educational programs by leveraging faculty and learning resources beyond the scope that any individual institution could bring to bear.
- Below are examples from each institution of current and high priority collaborative educational projects.

**Table II-23**

<b>Examples of Educational Collaborations – U. T. Academic Institutions</b>		
	<b>Purpose and Outcomes</b>	<b>Collaborators</b>
U. T. Arlington		
<b>The Texas TWO-STEP Projects</b>	Offers seamless transition pathways from high schools to community colleges and on to universities.  Collaborations: Dallas CCC District, Tarrant CCC District, Collin CCC District, TAMU-Commerce, Central Texas College, College of the Mainland, Grayson County College, Hill College, Howard College, Laredo College, McLennan College, Navarro College, Temple College, Tyler Jr. Colleges, TSTC Harlingen, North Texas College, Lee College, Vernon College, Weatherford College	
<b>Closing the Gap: Ethnic/Racial Diversity in Nursing</b>	To increase the number of underrepresented minorities enrolled and graduating with degrees in nursing.  Collaborators: Texas Health Resources, Parkland Health & Hospital System, Methodist Medical Center, Baylor University Medical Center, Baylor All Saints Medical Center at Fort Worth, Harris Methodist Fort Worth, John Peter Smith Health Network, Medical City of Dallas, Scottish Rite Hospital, Arlington Memorial, Medical Center of Arlington, Chi Eta Phi Sorority, Dallas Chapter of National Association of Hispanic Nurses, Star-Telegram	
<b>UT Arlington School of Social Work/West Texas A&amp;M University (WTAMU) Joint Degree Program</b>	Delivers graduate Social Work education in the Texas Panhandle leading to the Masters of Science in Social Work; meets the need for professionally trained master's level social workers in the Texas Panhandle and South Plains areas.	West Texas A&M University, Canyon
U. T. Austin		
<b>Vaughn Gross Center for the Reading and Language Arts</b>	Dedicated to scientifically based reading research, the Vaughn Gross Center for Reading and Language Arts at UT Austin provides leadership to state and national educators in the implementation of effective reading instructional practices through research and professional development. The Center was created in 1996 and is committed to providing leadership to educators in effective reading instruction through its diversified research and professional development projects. From translating research into practice to providing online professional development, the Center emphasizes scientifically based reading research and instruction. The Vaughn Gross Center is dedicated to improving reading instruction for all students, especially struggling readers, English language learners, and special education students. The Center obtains funding from many sources.  Collaborators: Texas Education Agency, Texas Family Literacy Center, and College of Education	
<b>School of Law Recruiting Initiatives</b>	Enhances School diversity and student opportunity. The South Texas Recruitment Program commits 15 offers of admission to five designated south Texas schools. The Institutes Program provides intensive pre-law programs to assist students with law school preparation. Historically Black Colleges and Universities (HBCU). Recruitment programs are reaching more potential students. Better prepared students are being enrolled.  Collaborators: UT System institutions, TAMU institutions, HBCU institutes	

<b>Examples of Educational Collaborations – U. T. Academic Institutions</b>		
	<b>Purpose and Outcomes</b>	<b>Collaborators</b>
<b>Texas Advanced Computing Center (TACC)</b>	<p>The Texas Advanced Computing Center (TACC) is a leading national center and currently houses the new Lonestar Dell supercomputer, one of the most powerful supercomputers in the world and more powerful than any computer system currently in the TeraGrid. Researchers at all of the UT System institutions will benefit from the same world-class computational resources and tremendous staff expertise that have accelerated numerous research programs over the past five years at UT Austin. In addition, Lonestar will support world class medical research across the UT System in cancer treatment, epidemiology, bioinformatics, and systems biology.</p> <p>Lonestar will also reach Texas institutions of higher learning outside the UT System through the Lonestar Education and Research Network (LEARN), a fiber optic communications network funded by the Texas legislature in 2004. The LEARN network provides high-speed connectivity among academic institutions as well as to research networks across the country. The network, including TACC, is intended to enhance Texas' research and economic competitiveness and provide state-of-the-art, cost-effective data communications that enable effective education of students around the state.</p> <p>Collaborators: UT System campuses (academic and health) and academic institutions and research networks across the country</p>	
U. T. Brownsville		
<b>Cooperative Doctoral Program in Education</b>	Increases access to doctoral education for residents in the Lower Rio Grande Valley, particularly Hispanics. Eighty-two EdD degrees have been awarded in the 17 years of this collaborative.	University of Houston
<b>Early Medical School Acceptance Programs (EMSAP) and Joint Admission Medical Program (JAMP)</b>	Provides underrepresented minorities access to medical schools through facilitated admissions programs.	UT Medical Branch at Galveston, Baylor College of Medicine, Texas Tech University Health Science Center, Texas A&M System Health Science Center, University of North Texas Health Science Center/Texas College of Osteopathic Medicine, UTHSC-Houston and UTHSC-San Antonio
<b>Pre-medical Opportunity Programs</b>	Helps disadvantaged and underrepresented minority students gain access to medical, dental, physician assistant, veterinary medicine, and pharmacy schools; provides assistance and support for pre-medical (MCAT) and pre-dental (DAT) admission test preparations; conducts summer camps for underrepresented minority high school students from rural areas pursuing health care careers; and provides underrepresented minority students paid summer internships and other enriching educational experiences through Medical School Familiarization Programs.	UTHSC-Houston, UTHSC- San Antonio, UTMB Galveston, UTHSC-San Antonio Dental School, UTHSC-Houston Dental Branch, UT Austin, Texas A&M-Corpus Christi, Texas Tech University Health Science Center and University of North Texas Health Science Center -Fort Worth
U. T. Dallas		
<b>Alliance for Medical Management Education</b>	Provides customized programs in leadership, strategy, and operational improvement for major integrated health systems; to conduct research on important operational and strategic issues in healthcare organizations.	UTSWMC
<b>Texas Homeless Education Assistance Program (THEAP)</b>	Provides instructional, health, social, and other services to homeless students and those at risk of homelessness; to enhance the academic, health, or social environment for all program participants. This program currently serves 347 students.	UT Austin/ Texas Homeless Education Office (THEO), Greenville ISD, McKinney ISD, Sherman ISD
<b>Callier Child Development Program</b>	Provides a demonstration model mainstream preschool for hearing impaired and like number of hearing children; provides a training site for new professionals.	UTSWMC, Dallas ISD Deaf Education Program

Examples of Educational Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
U. T. El Paso		
<b>Louis Stokes Alliance for Minority Participation</b>	To increase the number of undergraduate and graduate degrees in Science, Mathematics, Engineering and Technology through curriculum revision, student stipends, mentoring and summer research participation	9 UT System academic institutions, 8 community colleges
<b>NSF-ADVANCE: Institutional Transformation for Faculty Diversity</b>	A program dedicated to the recruitment, retention, and advancement of women and underrepresented minorities employed in academic science and engineering disciplines.	UC-Irvine, University of Colorado-Boulder, CUNY-Hunter College, Georgia Institute of Technology, University of Michigan, New Mexico State University, University of Puerto Rico-Humacao, University of Washington-Seattle, University of Wisconsin-Madison.
<b>NSF-BPC-A: Computing Alliance for Hispanic-Serving Institutions</b>	The project goals are to: 1) increase the number of Hispanic students who enter the professoriate in computing; 2) support the retention and advancement of Hispanic faculty in computing; and 3) develop and sustain competitive education and research programs at HSIs.	NSF, CSU Dominguez Hills, Florida International University, Hispanic Association for Information Technology Initiatives (HACU), New Mexico State University, TAMU-Corpus Christi, UH-Downtown, University of Puerto Rico-Mayaguez
U. T. Pan American		
<b>VaNTH Biomedical Engineering</b>	Develops learning modules for bioengineering based on effective learning theory.	MIT, Vanderbilt University, Northwestern University, UT Austin, Harvard, UTSA
<b>Hispanic Pharmacy Center of Excellence (HCOE)</b>	Remedies a severe shortage of Hispanic faculty members in College of Pharmacy throughout the country; educates students to understand demographic changes and health care realities of underserved and minority populations.	UT Austin, UTEP, UTHSCSA, Health Resources and Services Administration
<b>Undergraduate Research Training Program Focused on Plant Responses</b>	Provides research opportunities for undergraduate students in the sciences, especially biology.	Purdue University
U. T. Permian Basin		
<b>UT TeleCampus Distance Education Programs</b>	Provides innovative multi-campus online learning in Texas as well as throughout the world. UTPB delivered general education courses, criminal justice bachelor's, master's of kinesiology, MBA, and Superintendent certification programs online, in partnership with other UT System institutions. Collaborators: UT TeleCampus, UTA, UTB, UTD, UTEP, UTPA, UTSA, UTT	
<b>Direct Connect Community College programs</b>	Facilitates successful transfer of course work and completion of associate's degree and subsequent bachelor's degree. UTPB advising staff assisted entering CC students to plan for an associate's degree and subsequent UTPB bachelor's degree. Partnered with Howard College through Hispanic-Serving Institutions grant. Offered degree and teacher certification programs at the Midland College Teaching Site and at Andrews Business and Technology Center Collaborators: Howard College, Midland College, New Mexico Junior College, Odessa College, U.S. Department of Education, Andrews Business and Technology Center	

<b>Examples of Educational Collaborations – U. T. Academic Institutions</b>		
	Purpose and Outcomes	Collaborators
<b>International University Collaborations</b>	Provides educational and cultural opportunities for students at UT Permian Basin and at the partner institution in the State of Chihuahua, Mexico, through exchange programs and annual Language Institutes.	Universidad Autonoma de Chihuahua
	Provides courses in English and oil and gas accounting, as well as graduate education to visiting Chinese professionals from the oil field industry in Midland's sister city of Dongying, China	University of Petroleum of Sheng Li Oil Field, Applied Petroleum Technology Academy, Midland Chamber of Commerce
U. T. San Antonio		
<b>UTSA-Alamo Community College District Partnership</b>	Teams from both institutions are exploring collaborations, including having ACCD teach developmental courses for UTSA students; developing joint programs in international programs/foreign languages and biotechnology; and creating a deferred admission program allowing applicants to UTSA who do not meet admission requirements to begin at an ACCD college.	
	Collaborators: UTSA-Alamo Community College District Partnership	
<b>Prefreshman Engineering Program (PREP)</b>	PREP is an academic summer program to prepare middle and high school students in advanced studies leading to careers in science, technology, engineering and math. Since 1979, over 27,000 students have completed at least one summer of the program, 80% are minorities including 54% females. Of those completing the program, 99.9% graduate from high school, 96% go to college, 90% that go to college, graduate—78% are minorities, 50% majored in science, technology, engineering or math, and 74% of the science, technology, engineering, or math graduates are minorities.	
	Collaborators: St. Phillip's College, Palo Alto College, San Antonio College, Northwest Vista College; University of the Incarnate Word, Our Lady of the Lake University, St. Mary's University; UTA, UTB, UTEP, UH, TAMU-Laredo, Huston-Tillotson University, Del Mar College, UTPA, Texas Wesleyan University, Texas State Technical College, Texas Tech University, Community College of Denver, Inter American University of Puerto Rico, Hostos Community College (Jersey City, NJ), New Mexico State University, and Florida International University; Texas Department of Transportation and 43 Texas school districts.	
<b>BRIDGE Project</b> <a href="http://www.utsa.edu/bridge">www.utsa.edu/bridge</a>	BRIDGE (Bringing together Resources in Industry, Development, Government, and Education) seeks to advance education and training in San Antonio to support the city's economic development objectives. The method is to bring together numerous stakeholder groups to promote advances in Science, Technology, Engineering, and Mathematics in the San Antonio area, particularly in the alignment of workforce needs and education outcomes, as well as the alignment of curriculum throughout at K-16 system. The goals for 2006-07 are to focus on increasing student success in College Algebra, to recruit a significantly larger number of high school math and science teachers, and to engage math and science teachers with local business and industry through summer internships to explore problem solving outside the classroom.	
	Collaborators: Approximately ten school districts and nine higher education partners are involved in the effort to improve, attract, create and sustain businesses and industries with high paying jobs for San Antonio.	
U. T. Tyler		
<b>MBA Online</b>	Now serving about 400 students per semester. Each of the eight campuses not including UT Austin contributes two courses to the 16-course AACSB curriculum.	UTTC and all UT System institutions except UT Austin
<b>MS in Kinesiology</b>	Makes available a degree program not otherwise accessible.	UTTC
<b>MSN-Nurse Practitioner degree (Family, Pediatric, Geriatric)</b>	Increasing the number of advanced nurse practitioners in the region; to increase the quality of health care for residents of rural East Texas.	UTHCT, Texas Tech University Health Sciences Center School of Nursing



## Faculty Salary Trends

Table II-24

**Average Budgeted Salaries of Instructional Faculty by Rank  
at U. T. Academic Institutions**

FY	2002	2003	2004	2005	2006	average annual % change
<b>Professor</b>						
Arlington	\$78,030	\$80,475	\$80,498	\$86,074	\$88,835	3.3%
Austin	98,838	103,157	103,521	110,223	115,302	4.0
Brownsville*	58,771	59,984	61,517	66,808	69,594	4.3
Dallas	90,244	97,516	99,363	103,225	109,013	4.9
El Paso	73,133	75,139	76,147	83,174	84,310	3.7
Pan American	67,792	70,807	70,068	76,212	77,566	3.5
Permian Basin	65,918	69,375	72,830	73,657	74,298	3.1
San Antonio	79,785	85,104	90,687	93,204	101,126	6.1
Tyler	65,869	68,343	70,831	72,275	76,200	3.7
<b>Associate Professor</b>						
Arlington	\$57,277	\$60,165	\$60,633	\$65,192	\$67,232	4.1
Austin	63,502	65,913	64,965	70,348	73,211	3.7
Brownsville*	52,551	54,584	54,998	56,670	58,412	2.7
Dallas	67,436	72,634	72,494	80,141	83,943	5.7
El Paso	56,391	57,690	59,121	64,579	63,507	3.1
Pan American	56,850	59,877	59,394	65,365	68,084	4.7
Permian Basin	52,034	53,121	53,736	56,747	57,849	2.7
San Antonio	62,753	66,385	67,916	68,092	71,562	3.4
Tyler	52,014	53,598	53,956	58,284	59,991	3.7
<b>Assistant Professor</b>						
Arlington	\$52,274	\$55,632	\$56,417	\$59,669	\$62,411	4.5
Austin	59,919	61,674	62,510	67,009	70,838	4.3
Brownsville*	47,443	47,989	49,917	50,477	51,515	2.1
Dallas	74,716	74,351	74,210	79,449	82,054	2.4
El Paso	48,287	50,864	53,875	56,842	59,105	5.2
Pan American	48,214	51,357	50,633	53,465	54,136	3.0
Permian Basin	45,841	48,416	50,077	51,873	53,411	3.9
San Antonio	50,270	53,680	56,810	58,482	61,741	5.3
Tyler	48,216	47,435	46,917	51,227	54,171	3.1
<b>Instructor</b>						
Austin	\$45,807	\$58,090	\$44,143	\$47,377	\$45,868	1.7
Brownsville/TSC*	42,494	47,057	46,238	51,818	55,207	6.9
San Antonio	40,750	51,204	60,064	69,632	42,585	5.0

\* Salary information available for Brownsville faculty only

Source: Texas Higher Education Coordinating Board

Table II-25

Average Faculty Salaries in Public Universities, FY 2006				
Texas and the 10 Most Populous States				
	Professor	Associate Professor	Assistant Professor	Instructor
New Jersey	\$109,574	\$80,364	\$62,665	\$41,805
Pennsylvania	102,281	73,436	59,403	43,235
California	101,891	71,242	60,973	47,638
Michigan	100,541	71,178	59,257	40,388
Ohio	95,557	67,697	55,940	37,850
Illinois	95,219	67,744	58,214	36,114
New York	94,651	69,820	57,757	42,157
Florida	94,184	68,204	58,823	42,950
Georgia	93,917	65,442	55,457	38,230
N. Carolina	92,714	67,177	58,274	51,920
10 States Average	98,053	70,230	58,676	42,229
National Average	93,429	67,513	56,818	39,883
<b>Texas</b>	<b>\$95,970</b>	<b>\$67,173</b>	<b>\$59,187</b>	<b>\$40,118</b>

Includes all public four-year institutions (Carnegie Classifications I, IIA, and IIB).

Salaries adjusted to standard nine-month salary and excludes reporting categories with three or fewer individuals.

Source: THECB, based on American Association of University Professors Annual Salary

- Annualized average salaries are based on salaries for the fall of each year.
- To remain competitive, certain U. T. System academic institutions on average pay faculty slightly more than the average of four-year institutions in the most populous states.
- At U. T. Austin, U. T. Dallas, and U. T. San Antonio, the average salary of professors is higher than the national average and the 10 most populous state averages.
- The average salary for associate professors at U. T. Austin, U. T. Dallas, and U. T. San Antonio is higher than the 10 most populous state average and the national average. The average salary for associate professors at U. T. Pan American is higher than the national average, but lower than the average for the 10 most populous states.
- The average salary of assistant professors at U. T. Arlington, U. T. Austin, U. T. Dallas, U. T. El Paso, and U. T. San Antonio is higher than the national and 10 most populous states' averages.

Table II-26

U. T. Academic Institutions Average Tenure/Tenure-Track Faculty Salaries						
	FY 2002	2003	2004	2005	2006	Average Annual % Change
Arlington	\$64,379	\$66,985	\$66,726	\$70,956	\$72,816	3.2%
Austin	81,589	85,080	84,911	90,156	94,480	3.8
Brownsville*	50,894	52,401	53,957	55,748	57,571	3.1
Dallas	79,542	83,347	84,332	89,812	94,318	4.4
El Paso	58,732	60,749	62,244	67,032	67,784	3.7
Pan American	56,268	59,143	58,489	62,711	64,390	3.5
Permian Basin	52,380	54,196	56,641	58,566	59,447	3.2
San Antonio	63,115	67,026	70,567	72,211	76,420	4.9
Tyler	54,441	55,521	56,532	59,427	62,230	3.4

\* Salaries for faculty appointed by Texas Southmost College are excluded from this average.

Source: Texas Higher Education Coordinating Board

## II. Teaching, Research, and Health Care Excellence: U. T. System Health-Related Institutions

### Research Funding Trends 2002-2006 (all sources)

- In FY 2006, U. T. System health-related institution research and research-related expenditures totaled \$1.226 billion, almost a 10 percent increase over the previous year. From 2002 to 2006, research and research-related expenditures have increased 37 percent, an average of more than 8 percent per year.
- Among Texas public health-related institutions, U. T. System health-related institutions ranked first in research and development expenditures in FY 2005. These expenditures comprised 45 percent of the \$2.469 billion total in Texas public university and health-related institution research and research-related expenditures in 2005.

Table II-27

Total U. T. Health-Related Institution Research and Research-Related Expenditures FY 2002-2006					
	FY 02	FY 03	FY 04	FY 05	FY 06
Total Health-Related	\$896,756,996	\$970,691,322	\$1,046,463,612	\$1,114,736,515	\$1,225,503,486

Source: "Survey of Research Expenditures," Texas Higher Education Coordinating Board

- For FY 2005, five U. T. System health-related institutions are among the top 10 Texas public institutions in research expenditures: U. T. M. D. Anderson Cancer Center (3), U. T. Southwestern Medical Center (4), U. T. Health Science Center-Houston (5), U. T. Medical Branch (6), and U. T. Health Science Center-San Antonio (7). (See Table II-2, p. II-5.)

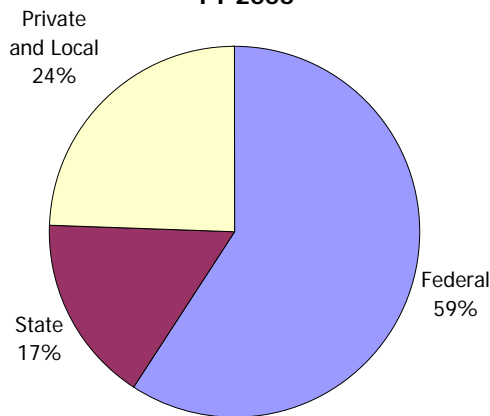
Table II-28

Research Expenditures by Source FY 2006 – U. T. Health-Related Institutions					
	Federal	State	Private	Local	Total
SWMC	\$196,622,021	\$33,939,533	\$88,927,678	\$13,766,930	<b>\$333,256,162</b>
UTMB	120,407,805	11,409,279	22,121,864	1,097,254	<b>\$155,036,202</b>
HSC-H	122,870,079	25,924,824	24,676,514	1,682,391	<b>\$175,153,808</b>
HSC-SA	95,110,395	7,693,871	25,479,033	11,495,433	<b>\$139,778,732</b>
MDACC	182,028,411	121,682,326	77,699,394	28,269,580	<b>\$409,679,711</b>
HC-T	6,512,656	2,474,104	1,591,328	2,020,783	<b>\$12,598,871</b>
<b>Total</b>	<b>\$723,551,367</b>	<b>\$203,123,937</b>	<b>\$240,495,811</b>	<b>\$58,332,371</b>	<b>\$1,225,503,486</b>

The THECB's definition of research expenditures includes indirect costs and pass-throughs to institutions of higher education.

Source: "Survey of Research Expenditures," Texas Higher Education Coordinating Board

**Figure II-15**  
**U. T. Health-Related Institutions Sources**  
**of Research Support**  
**FY 2006**



- The federal government provides the majority of research and research-related funding – 59 percent.
- Private and local sources provide the next largest proportion – 24 percent.
- Seventeen percent of research funds expended in 2006 came from state sources.

## Sponsored Revenue

**Table II-29**

<b>Sponsored Revenue – U. T. Health-Related Institutions, FY 2002-2006</b>					
(\$ in thousands)					
	FY 02	FY 03	FY 04	FY 05	FY 06
SWMC	\$314,345	\$337,979	\$381,945	\$386,234	\$406,202
UTMB	169,547	183,131	174,093	199,592	216,556
HSC-H	204,448	228,623	235,442	240,446	264,281
HSC-SA	156,520	162,337	163,255	170,069	187,065
MDACC	158,868	180,502	211,442	212,727	226,279
HC-T	5,740	11,897	11,479	15,143	16,978
<b>Total Health-Related</b>	<b>\$1,009,468</b>	<b>\$1,104,469</b>	<b>\$1,177,656</b>	<b>\$1,224,211</b>	<b>\$1,317,361</b>

*Source: Exhibit B of Annual Financial Report*

- Sponsored revenue is a more comprehensive measure of an institution's overall success in securing external funding to support research, public service, training, and other activities including some patient care activities.
- From 2002 to 2006, sponsored revenue has increased by 30.5 percent at U. T. System health-related institutions.

**Table II-30**

<b>Sponsored Revenue at U. T. Health-Related Institutions by Source, FY 2006</b>					
(\$ in thousands)					
	Federal	State	Local	Private	Total
SWMC	\$202,085	\$4,584	\$136,491	\$63,042	<b>\$406,202</b>
UTMB	123,613	35,299	2,433	55,211	<b>216,556</b>
HSC-H	138,554	18,247	86,015	21,465	<b>264,281</b>
HSC-SA	111,933	3,125	46,083	25,924	<b>187,065</b>
MDACC	182,969	524	0	42,786	<b>226,279</b>
HC-T	9,806	1,156	3,958	2,058	<b>16,978</b>
<b>Total</b>	<b>\$768,960</b>	<b>\$62,935</b>	<b>\$274,980</b>	<b>\$210,486</b>	<b>\$1,317,361</b>

*Source: Exhibit B of Annual Financial Report*

- Federal funding continues to be the primary source of sponsored revenue at U. T. System health-related institutions, accounting for 58 percent of all sponsored revenue.

**Federal Research Expenditures**

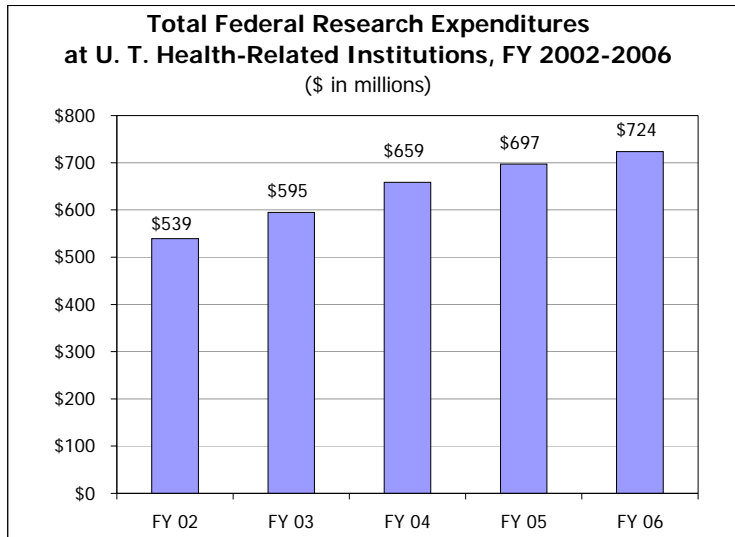
- Federal research expenditures are considered the national benchmark for research competitiveness at universities.
- From 2002 to 2006, these expenditures have increased by 34 percent at U. T. System health-related institutions.

**Table II-31**

<b>Federal Research Expenditures by U. T. Health-Related Institutions FY 2002-2006</b>							
FY	2002	2003	2004	2005	2006	% change FY 05-06	% change FY 02-06
SWMC	\$155,257,992	\$177,133,099	\$200,887,545	\$202,057,099	\$196,622,021	-2.7%	26.6%
UTMB	78,100,188	93,039,583	102,490,775	117,235,448	120,407,805	2.7	54.2
HSC-H	101,738,767	111,170,193	110,438,174	116,397,631	122,870,079	5.6	20.8
HSC-SA	83,760,708	86,854,337	89,661,741	95,125,850	95,110,395	0.0	13.6
MDACC	117,633,074	122,868,912	150,528,694	160,953,856	182,028,411	13.1	54.7
HC-T	2,783,554	3,493,251	4,659,021	4,956,399	6,512,656	31.4	134.0
<b>Total</b>	<b>\$539,274,283</b>	<b>\$594,559,375</b>	<b>\$658,665,950</b>	<b>\$696,726,283</b>	<b>\$723,551,367</b>	<b>3.9%</b>	<b>34.2%</b>

*Source: "Survey of Research Expenditures," Texas Higher Education Coordinating Board*

**Figure II-16**



- Continued increases in these funds are critical to the success of the health-related institutions in the U. T. System.

**Research Expenditures and State General Revenue**

- Comparing research expenditures to formula-derived general revenue illustrates the scope of research activities at health-related institutions and the leveraging effect of state support.

**Table II-32**

**Research Expenditures as a Percentage of Formula-Derived General Appropriations Revenue at U. T. Health-Related Institutions**

	FY	2002	2003	2004	2005	2006
SWMC	Research Expenditures	\$263,958,410	\$277,956,511	\$314,403,028	320,801,884	333,256,162
	Formula-Derived General Revenue	80,813,651	80,802,981	71,498,979	71,463,445	87,453,827
	Research Expenditures/GR	327%	344%	440%	449%	381%
UTMB	Research Expenditures	109,139,538	129,860,903	132,768,911	149,957,462	155,036,202
	Formula-Derived General Revenue	76,554,573	76,605,352	67,860,400	67,807,752	73,948,096
	Research Expenditures/GR	143%	170%	196%	221%	210%
HSC-H	Research Expenditures	140,827,726	152,117,064	150,220,206	156,519,695	175,153,808
	Formula-Derived General Revenue	110,145,604	110,149,899	99,859,199	99,905,775	105,437,018
	Research Expenditures/GR	128%	138%	150%	157%	166%
HSC-SA	Research Expenditures	112,232,653	119,279,555	124,912,722	134,058,535	139,778,732
	Formula-Derived General Revenue	99,975,785	100,068,763	89,333,722	88,514,960	95,285,587
	Research Expenditures/GR	112%	119%	140%	151%	147%
MDACC	Research Expenditures	262,144,960	282,260,250	313,916,355	341,978,679	409,679,711
	Formula-Derived General Revenue	24,230,050	24,230,050	24,307,634	24,257,992	28,737,913
	Research Expenditures/GR	1082%	1165%	1291%	1410%	1426%
HC-T	Research Expenditures	8,453,709	9,217,039	10,240,390	11,420,260	12,598,871
	Formula-Derived General Revenue	3,460,221	3,460,221	3,140,637	3,140,637	2,989,327
	Research Expenditures/GR	244%	266%	326%	364%	421%

Source: "Survey of Research Expenditures" submitted to the THECB; Formula-Derived General Revenue, Exhibit B of U. T. System Annual Financial Report, 2002-2006

- Between 2002 and 2006, the ratio of research expenditures to formula-derived general revenue has increased at each health-related institution.
- For four U. T. System health-related institutions – U. T. Southwestern Medical Center, U. T. Medical Branch, U. T. M. D. Anderson Cancer Center, and the U. T. Health Center-Tyler – research expenditures exceed by more than 200 percent the amount of formula-derived general revenue.

### **Faculty Holding Extramural Grants**

- In U. T. System health-related institutions, faculty of many appointment types hold extramural grants to conduct research.
- Table II-33 on the next page illustrates the contributions of both tenure/tenure-track and non-tenure-track faculty to research, as measured by the number of grants held and the proportion of faculty holding grants in a given year. This measure illustrates success irrespective of the dollar amount of a particular grant.
- The proportion of tenure/tenure-track faculty receiving grants has remained high at most institutions. The proportion has declined each year from FY 2002 to FY 2006 at U. T. Medical Branch and U. T. HSC-Houston. Although the proportion is down from FY 2002 levels at U. T. Southwestern, the institution did see an increase from FY 2005. The proportion has been particularly high at U. T. Southwestern Medical Center (75%) and U. T. M. D Anderson (67%), where it has increased over the past five years, from 29 percent in FY 2002.
- From FY 2002 to FY 2006, the proportion of non-tenure-track research faculty holding grants has increased at U. T. Medical Branch (from 20% to 70%), U. T. Health Science Center-Houston (from 29% to 40%), and U. T. Health Center-Tyler (from 66% to 79%).

Table II-33

Faculty Holding Extramural Grants (All Sources and Types) at U. T. Health-Related Institutions		FY 02	FY 03	FY 04	FY 05	FY06
SWMC	# Grants to T/TT faculty	861	846	882	880	907
	# T/TT faculty holding grants	323	282	257	264	284
	# FTE T/TT faculty	324	333	353	370	378
	% T/TT faculty holding grants	100%	85%	73%	71%	75%
	# NT research faculty holding grants	78	60	92	125	82
	# FTE NT research faculty	215	223	264	289	295
	% NT research faculty holding grants	36%	27%	35%	43%	28%
UTMB*	# Grants to T/TT faculty	782	721	513	517	421
	# T/TT faculty holding grants	263	240	244	217	211
	# FTE T/TT faculty	474	483	495	493	498
	% T/TT faculty holding grants	55%	50%	49%	44%	42%
	# NT research faculty holding grants	29	27	31	32	80
	# FTE NT research faculty	142	143	141	151	115
	% NT research faculty holding grants	20%	19%	22%	21%	70%
HSC-H****	# Grants to T/TT faculty	480	442	501	525	379
	# T/TT faculty holding grants	223	219	219	209	201
	# FTE T/TT faculty	394	425	459	442	433
	% T/TT faculty holding grants	57%	52%	48%	47%	46%
	# NT research faculty holding grants	29	34	50	39	42
	# FTE NT research faculty	100	110	108	98	105
	% NT research faculty holding grants	29%	31%	46%	40%	40%
HSC-SA**	# Grants to T/TT faculty	1,395	1,404	444	422	494
	# T/TT faculty holding grants	266	312	235	231	245
	# FTE T/TT faculty	545	524	512	532	496
	% T/TT faculty holding grants	49%	60%	46%	43%	49%
	# NT research faculty holding grants	100	99	55	57	51
	# FTE NT research faculty	100	105	161	176	167
	% NT research faculty holding grants	100%	94%	34%	32%	31%
MDACC***	# Grants to T/TT faculty	698	736	743	1,032	1,287
	# T/TT faculty holding grants	153	145	344	374	411
	# FTE T/TT faculty	529	557	563	584	615
	% T/TT faculty holding grants	29%	26%	61%	64%	67%
	# NT research faculty holding grants	54	57	47	69	61
	# FTE NT research faculty	248	269	263	317	302
	% NT research faculty holding grants	22%	21%	18%	22%	20%
HC-T	# Grants	33	34	37	48	43
	# NT research faculty holding grants	19	19	23	28	27
	# FTE NT research faculty	29	29	32	32	34
	% NT research faculty holding grants	66%	66%	72%	88%	79%

Notes:

For multi-investigator grants, only the principle investigator is counted.

Non-tenure-track research faculty excludes those appointed primarily to teach.

\*The apparent decline in FY04 is a result of the systems previously in place at UTMB. The prior system did not allow an unduplicated enumeration of grants and PI awardees.

\*\*The method of calculation changed after FY2001. Number decreased for 2004 because changes in the software used to track these data. Some closed-out grants were included in the total in 2003 which have not been eliminated. In this report for FY04, they have been, thus the big drop in number per total T/TT faculty.

\*\*\*"Tenure/tenure-track" equivalent faculty at MDACC are awarded seven-year term appointments, renewable through a formal promotion and reappointment process. A refinement in data collection resulted in the increase in number of grants to T/TT faculty in 2004.

\*\*\*\* HSC Houston FTE NT Research Faculty numbers have been restated from previous years to reflect budgeted totals.

Source: U. T. System Health-Related Institutions; THECB for FTE T/TT faculty



- Table II-34 illustrates the ratio of the dollar amount of external research expenditures to FTE faculty in a given year, illustrating success in terms of the amount of research funding faculty acquire.
- This ratio increased from FY 2002 to FY 2006 at all U. T. System health-related institutions.

**Table II-34**

**Research Expenditures per FTE Tenure/Tenure Track Faculty at U. T. Health-Related Institutions  
FY 2002-2006**

	FY 2002			FY 2003			FY 2004		
	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty
SWMC	\$263,958,410	324	\$814,686	\$277,956,511	333	\$834,704	\$314,403,028	353	\$890,660
UTMB	109,139,538	474	230,252	129,860,903	483	268,863	132,768,911	495	268,220
HSC-H	140,827,726	394	357,431	152,117,064	425	357,923	150,222,206	459	327,281
HSC-SA	112,232,653	545	205,931	119,279,555	524	227,633	124,912,722	512	243,970
MDACC	262,144,960	529	495,548	282,260,250	557	506,751	313,916,355	563	557,578
HC-T*	8,453,709	106	79,752	9,217,039	113	81,567	10,240,390	105	97,528

	FY 2005			FY 2006		
	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty	Research Expenditures	FTE T/TT Faculty	Ratio Exp Amt/ FTE T/TT Faculty
SWMC	\$320,801,884	370	\$867,032	\$333,256,162	378	\$881,630
UTMB	149,957,462	493	304,173	155,036,202	498	311,318
HSC-H	156,519,695	442	354,117	175,153,808	433	404,512
HSC-SA	134,058,535	532	251,990	139,778,732	496	281,812
MDACC	341,978,679	584	585,580	409,679,711	615	666,146
HC-T*	11,420,260	98	116,533	12,598,871	103	122,319

The THECB's definition of research expenditures includes indirect costs and pass-throughs to institutions of higher education.

\* HC-T does not have tenured or tenure-track faculty. Therefore, the HCT-T FTE figures represent non-tenured faculty.

Source: Research expenditures are from the Survey of Research Expenditures submitted to the Texas Higher Education Coordinating Board. FTE faculty from the THECB.

Private Funding

Table II-35

Endowed Faculty Positions at U. T. Health Institutions		FY 02	FY 03	FY 04	FY 05	FY 06
SWMC	Total Budgeted Endowed Professorships and Chairs	238	252	271	308	322
	Number Filled	217	221	235	250	263
	Endowed Positions as % of Budgeted T/TT Positions	70%	73%	76%	80%	77%
UTMB*	Total Budgeted Endowed Professorships and Chairs	110	127	138	143	152
	Number Filled	80	99	102	117	127
	Endowed Positions as % of Budgeted T/TT Positions	25%	27%	30%	31%	32%
HSC-H	Total Budgeted Endowed Professorships and Chairs	96	100	96	123	132
	Number Filled	75	76	73	83	85
	Endowed Positions as % of Budgeted T/TT Positions	22%	24%	24%	27%	30%
HSC-SA	Total Budgeted Endowed Professorships and Chairs	76	78	82	83	95
	Number Filled	49	52	58	66	76
	Endowed Positions as % of Budgeted T/TT Positions	13%	13%	15%	17%	18%
MDACC	Total Budgeted Endowed Professorships and Chairs	105	110	111	116	123
	Number Filled	80	87	88	89	97
	Endowed Positions as % of Budgeted T/TT Positions	20%	20%	19%	19%	19%
HC-T**	Total Budgeted Endowed Professorships and Chairs	33	33	37	21	22
	Number Filled	27	27	28	17	18
	Endowed Positions as % of Budgeted Positions	38%	41%	51%	26%	27%

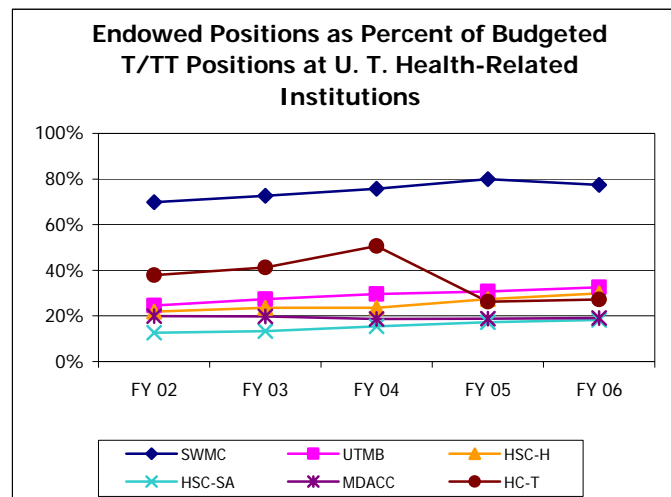
\*In 2004, UTMB refined its methodology to match budgeted and filled positions.

\*\*The Health Center-Tyler does not have tenure-track positions, and in 2005, it refined its methodology.

Source: U. T. Health-Related Institutions

- Endowed professorships and chairs significantly supplement those faculty positions that institutions support with State appropriations, tuition, grants, and other sources of funding. They help institutions compete for, recruit, and retain top faculty. These hires, in turn, help institutions achieve excellence in targeted fields.
- These endowments reflect each institution's specific fundraising environment, which is influenced by local and regional economic conditions.
- The majority of these positions are filled each year. Open positions provide flexibility, or reflect the timing of making academic hires in a highly competitive environment.
- Between 2002 and 2006, the number of endowed positions has increased at all but one of the U. T. System health-related institutions.
- U. T. Southwestern Medical Center has a very high proportion of endowed positions at 77 percent in 2006.

Figure II-17



## Faculty Awards and Honors

- The faculty of the U. T. System receive a wide range of honors and awards. Those listed here are perpetual, lifetime awards received by faculty members on or before September 1, 2006.

**Table II-36**

<b>Cumulative Honors at U. T. Health-Related Institutions</b>						
	<b>Total</b>	<b>SWMC</b>	<b>UTMB</b>	<b>HSC-H</b>	<b>HSC-SA</b>	<b>MDACC</b>
Nobel Prize	<b>5</b>	4		1		
National Academy of Sciences	<b>19</b>	17		2		
American Academy of Arts and Sciences	<b>17</b>	14		3		
American Academy of Nursing	<b>31</b>		6	12	13	
Howard Hughes Medical Institute Investigators	<b>10</b>	10				
Institute of Medicine	<b>29</b>	17	4	5	2	1
International Association for Dental Research	<b>37</b>			32	5	

*Source: U. T. System Health-Related Institutions*

- Faculty at U. T. System health-related institutions receive many other prestigious awards, honors, prizes, and professional recognitions. Additional information on specific honors is available in the Institutional Profiles, Section V.
- Noteworthy awards received in 2005-2006 include:

**Table II-37**

<b>Faculty Awards Received at U. T. Health-Related Institutions, 2005-06</b>						
	<b>Total</b>	<b>SWMC</b>	<b>UTMB</b>	<b>HSC-H</b>	<b>HSC-SA</b>	<b>MDA</b>
American Academy of Arts and Sciences	<b>2</b>	1	1			
American Academy of Nursing	<b>15</b>		2		11	2
Institute of Medicine	<b>3</b>	1		1	1	
International Association for Dental Research	<b>1</b>				1	
Fulbright American Scholars	<b>1</b>	1				
National Academy of Sciences	<b>3</b>	2		1		
National Institutes of Health (NIH) MERIT Award	<b>11</b>	1		5	5	
Pew Scholars in Biomedicine	<b>1</b>		1			

*Source: U. T. System Health-Related Institutions*

## Technology Transfer

Table II-38

### Technology Transfer Trends at U. T. Health-Related Institutions

	Total New Invention Disclosures					Total U.S. Patents Issued					Total Licenses & Options Executed				
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
SWMC	115	128	103	89	109	23	32	19	34	18	24	26	33	34	37
UTMB	76	70	48	63	62	8	4	4	6	18	17	16	19	15	20
HSC-H	30	44	67	43	49	10	5	12	12	8	10	7	22	22	36
HSC-SA	29	30	43	34	43	11	12	9	9	5	6	5	24	10	17
MDACC	92	86	126	115	139	19	20	19	19	22	10	18	24	33	17
HC-T	0	2	3	1	0	0	1	0	0	0	0	0	1	0	0
<b>Total</b>	<b>342</b>	<b>360</b>	<b>390</b>	<b>345</b>	<b>402</b>	<b>71</b>	<b>74</b>	<b>63</b>	<b>80</b>	<b>71</b>	<b>67</b>	<b>72</b>	<b>123</b>	<b>114</b>	<b>127</b>
	Start-up Companies Formed					Total Gross Revenue Received from Intellectual Property*									
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005					
SWMC	3	2	1	1	2	\$10,511,895	\$10,691,956	\$11,209,200	\$12,166,339	\$12,909,268					
UTMB	0	0	1	1	0	1,070,828	924,943	415,000	822,000	2,465,566					
HSC-H	2	1	1	0	1	889,836	1,599,603	1,482,193	2,563,981	3,984,599					
HSC-SA	0	2	0	0	1	2,406,751	2,433,549	2,500,657	2,404,207	1,937,790					
MDACC	2	6	3	2	0	4,924,712	5,734,522	4,439,860	6,061,846	4,563,272					
HC-T	0	0	0	0	0	0	0	15,000	65,378	24,265					
<b>Total</b>	<b>7</b>	<b>11</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>\$19,804,022</b>	<b>\$21,384,573</b>	<b>\$20,061,910</b>	<b>\$24,083,751</b>	<b>\$25,884,760</b>					

\* The Texas Higher Education Coordinating Board includes reimbursed legal expenses, including patent prosecution costs, in its definition of gross revenue received from intellectual property. However, these expenses are generally excluded as an industry standard, such as reported by the Association for University Technology Managers.

Source: Texas Higher Education Coordinating Board Technology Development and Transfer Survey.

- From 2001 to 2005, technology transfer activities increased among most U. T. System health-related institutions.
- New invention disclosures reached a five-year high in 2005, increasing almost 18 percent over 2001 despite decreases at U. T. Southwestern and U. T. Medical Branch. The number of disclosures increased at U. T. Health Science Center-Houston (63%), U. T. Health Science Center-San Antonio (48%), and U. T. M. D. Anderson (51%).
- The number of patents issued remained stable from 2001 to 2005, with increases at U. T. Medical Branch (125%) and U. T. M. D. Anderson.
- From 2001 to 2005, all institutions except U. T. Health Center-Tyler achieved an increase in the number of licenses and options executed; they more than doubled at U. T. Health Science Center-Houston and U. T. Health Science Center-San Antonio. Overall, the total number was up almost 90 percent.
- Gross revenue from intellectual property was up 31 percent from 2001 to 2005.
- The number of start-up companies was the only measure to decline from 2001 to 2005.
- In the most recent licensing survey by the Association of University Technology Managers, for FY 2004, U. T. Southwestern Medical Center was 19th nationally, with \$11.5 million in licensing income. New York University was first, with \$109 million.

## Faculty Headcount – U. T. System Health-Related Institutions

Table II-39

Tenure/Tenure-Track Headcount: Professors, Associate Professors, Assistant Professors, Instructors					
Fall	2001	2002	2003	2004	2005
SWMC	333	339	360	373	381
UTMB	479	488	500	500	501
HSC-H	399	431	474	460	446
HSC-SA	570	550	530	536	546
MDACC	548	576	565	585	616

Note: HC-T faculty do not have tenure-track appointments

Source: THECB and U. T. System Health-Related Institutions

Table II-40

Headcount: All Instructional Staff*					
Fall	2001	2002	2003	2004	2005
SWMC	1,483	1,536	1,599	1,704	1,737
UTMB	1,244	1,259	1,259	1,281	1,305
HSC-H	1,124	1,270	1,263	1,297	1,303
HSC-SA	1,664	1,709	1,715	1,774	1,844
MDACC	1,017	1,071	1,133	1,190	1,447
HC-T	112	119	110	107	106

\*All Instructional Staff includes Professors, Associate and Assistant Professors, Instructors, Lecturers, Teaching Assistants, Visiting Teachers, Clinical and Special, Adjunct and Emeritus faculty at the institution.

Source: THECB and U. T. System Health-Related Institutions

Figure II-18

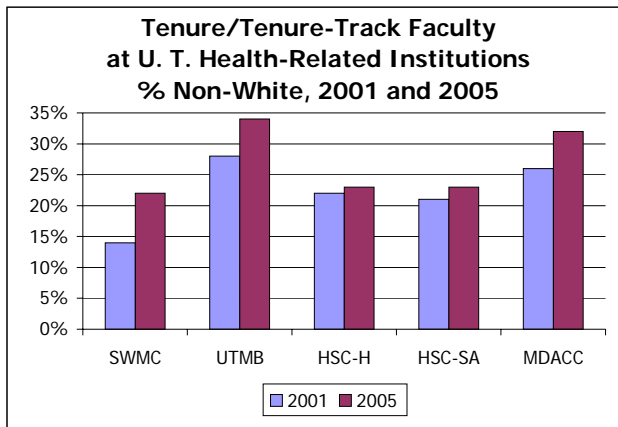


Figure II-19

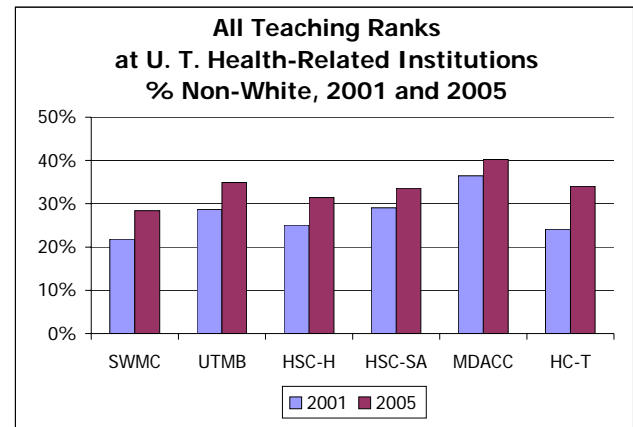


Figure II-20

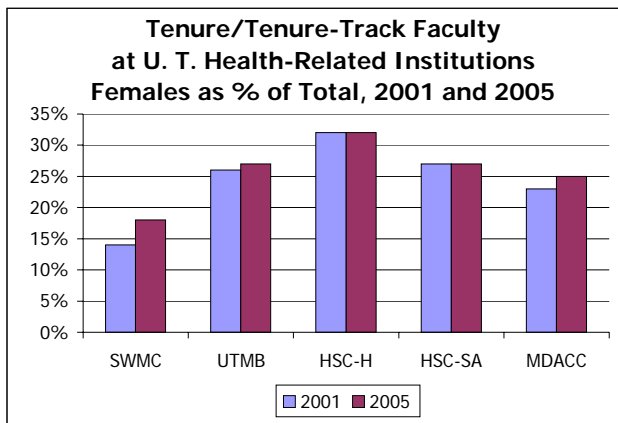
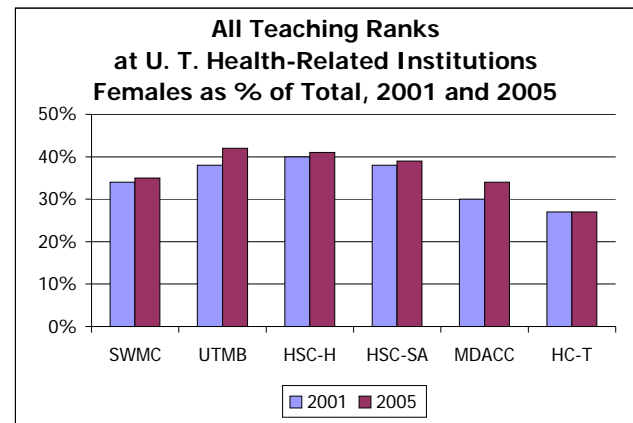


Figure II-21



## Staff Headcount – U. T. System Health-Related Institutions

Table II-41

		AY	02-03	03-04	04-05	05-06	06-07
<b>Administrative, Other, Non-Faculty and Student Employee Headcount at U. T. Health-Related Institutions*</b>							
SWMC <sup>1</sup>	Administrative		132	145	187	327	331
	Other, Non-Faculty		3,883	4,051	4,568	6,752	6,902
UTMB	Administrative		518	863	892	909	872
	Other, Non-Faculty		11,821	10,803	11,250	11,285	10,821
	Student Employees		400	416	421	442	450
HSC-H	Administrative		199	172	170	157	176
	Other, Non-Faculty		3,932	3,657	3,290	2,904	2,848
	Student Employees		465	438	436	400	398
HSC-SA	Administrative		126	125	133	140	145
	Other, Non-Faculty		3,090	3,009	3,053	3,037	3,088
	Student Employees		551	440	480	512	561
MDACC	Administrative		670	806	859	932	1,032
	Other, Non-Faculty		10,320	11,035	11,856	12,608	13,069
	Student Employees		280	318	356	359	400
HC-T	Administrative		76	80	50	46	37
	Other, Non-Faculty		1,041	1,062	1,110	1,035	836
	Student Employees		13	11	8	10	10

\*Administrative and other, non-faculty positions exclude faculty and do not entail significant direct instructional activities. Administrative includes executive, administrative and managerial positions which require performance of work directly related to management policies or general business operations of the institution, department or subdivision. Other, non-faculty includes other professional, technical, clerical, skilled crafts and service related positions. Student employees are those positions for which student status is a condition of employment.

<sup>1</sup> Increase in headcount at SWMC in 05-06 is attributable to the inclusion of administrative staff that occurred when the Zale Lipshy and St. Paul University Hospitals' employees were added to U. T. Southwestern's roster.

Source: U. T. System Common Data Warehouse

Figure II-22

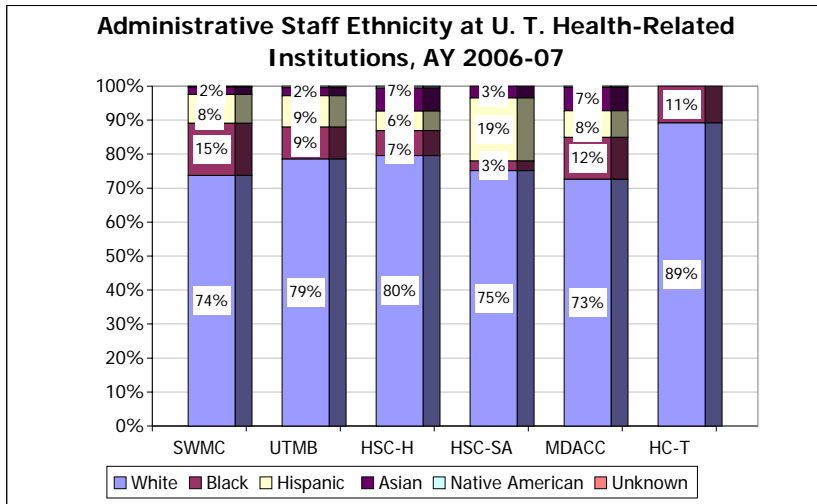


Figure II-23

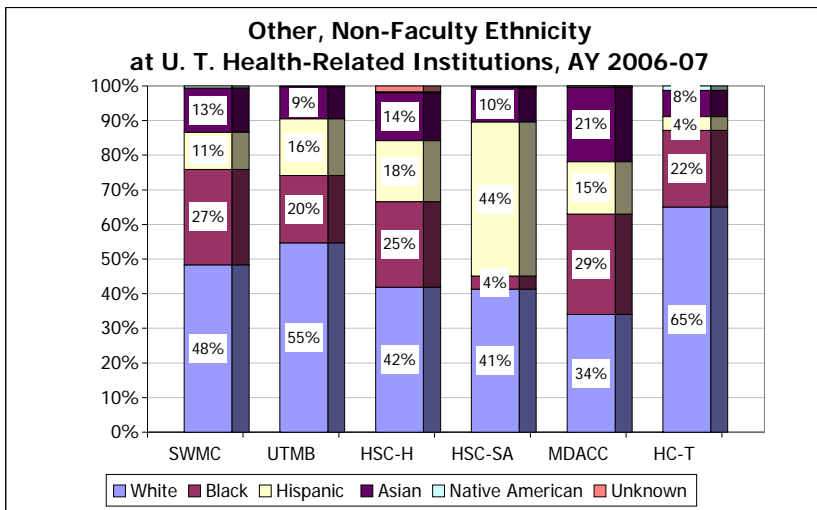
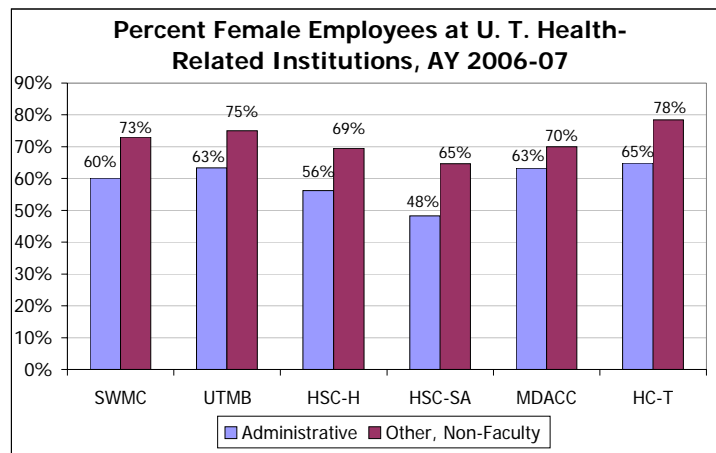


Figure II-24



## FTE Student/FTE Faculty Ratio – U. T. System Health-Related Institutions

Table II-42

		Fall	2002	2003	2004	2005
<b>FTE Student / FTE Faculty Ratio at U. T. Health-Related Institutions*</b>						
SWMC	FTE Students		1,613	1,744	1,988	2,035
	FTE Faculty		1,319	1,377	1,485	1,519
	Ratio		1.2 to 1	1.3 to 1	1.3 to 1	1.3 to 1
UTMB	FTE Students		1,809	1,820	1,882	1,957
	FTE Faculty		1,198	1,214	1,227	1,255
	Ratio		1.5 to 1	1.5 to 1	1.5 to 1	1.6 to 1
HSC-H	FTE Students		2,792	2,822	2,879	2,972
	FTE Faculty		1,140	1,127	1,163	1,161
	Ratio		2.4 to 1	2.5 to 1	2.5 to 1	2.6 to 1
HSC-SA	FTE Students		2,501	2,512	2,565	2,528
	FTE Faculty		1,182	1,190	1,245	1,237
	Ratio		2.1 to 1	2.1 to 1	2.1 to 1	2.0 to 1

\*M. D. Anderson Cancer Center admits a small number of Health Sciences undergraduates each year (86 FTE students in fall 2005). However, MDACC collaborates extensively with the Health Science Center-Houston to serve hundreds of students who rotate through their joint programs. In (Fall 2005) FY 2006, this included 539 graduate students shared with HSC-H, as well as 809 nursing students.

\*The Health Center-Tyler does not admit students.

Source: *THECB and U. T. System Health-Related Institutions*

- The low student-to-faculty ratio at health-related institutions reflects the necessity of close interaction between faculty and students in health education programs.
- U. T. System health-related institutions have increased the number of faculty to serve a growing student population and have maintained approximately the same student faculty ratio over the past four years.



## Graduate Medical Education

Table II-43

		AY 02-03	AY 03-04	AY 04-05	AY 05-06
<b>ACGME Accredited Resident Programs and Residents</b>					
SWMC	Accredited resident programs	78	79	77	77
	Number of residents in accredited programs	1,149	1,210	1,234	1,177
UTMB	Accredited resident programs	52	54	54	54
	Number of residents in accredited programs	543	551	553	549
HSC-H	Accredited resident programs	53	52	53	55
	Number of residents in accredited programs	761	735	780	778
HSC-SA	Accredited resident programs	53	54	53	51
	Number of residents in accredited programs	700	648	637	701
MDACC	Accredited resident programs	12	14	14	18
	Number of residents in accredited programs	100	103	100	107
HC-T	Accredited resident programs	2	2	2	2
	Number of residents in accredited programs	24	23	24	24

Source: U. T. System Health-Related Institutions

- The number of resident programs and number of residents in these programs is a measure of the contribution that U. T. System health-related institutions make to the education and development of medical professionals.

## Clinical and Hospital Care

- The following measures illustrate the scope of hospital and clinical care provided by U. T. System health-related institutions.
- In nearly every case, over the past five years the number of admissions, hospital days, and outpatient visits has increased.

Table II-44

<b>State-Owned Hospital Admissions by U. T. Health-Related Institution Faculty</b>					
	FY 01	FY 02	FY 03	FY 04	FY 05
SWMC**	n/a	n/a	n/a	n/a	7,832
UTMB	32,927	35,099	37,190	40,452	42,294
HCPC*	5,700	6,135	5,906	5,718	5,507
MDACC	18,604	18,781	19,430	20,608	20,728
HC-T	3,554	3,805	3,765	3,369	2,901
<b>Total Health-Related Institutions</b>	<b>60,785</b>	<b>63,820</b>	<b>66,291</b>	<b>70,147</b>	<b>79,262</b>

\* Harris County Psychiatric Center

\*\* SWMC admission data is for January 2005 to August 2005.

Source: U. T. Health-Related Institutions and Annual U. T. System Hospital Report

**Table II-45**

<b>State-Owned and Affiliated Hospital Days by U. T. Health-Related Institution Faculty</b>					
	FY 01	FY 02	FY 03	FY 04	FY 05
SWMC	399,136	411,288	407,991	418,638	429,146
UTMB	175,956	186,975	194,642	199,862	202,544
HSC-H	281,741	312,359	342,758	298,207	337,749
HSC-SA	224,311	202,000	224,366	228,213	259,763
MDACC	137,204	137,207	146,673	153,002	155,981
HC-T	29,451	29,021	26,942	24,789	19,090
<b>Total Health-Related Institutions</b>	<b>1,187,185</b>	<b>1,278,850</b>	<b>1,343,372</b>	<b>1,322,711</b>	<b>1,404,273</b>

*Source: Data submitted to the Legislative Budget Board*

**Table II-46**

<b>Outpatient Visits in State-Owned and Affiliated Facilities Treated by U. T. Health-Related Institution Faculty</b>					
	FY 01	FY 02	FY 03	FY 04	FY 05
SWMC	1,775,500	2,064,987	1,959,288	2,132,792	2,163,809
UTMB*	760,765	819,560	852,759	845,210	851,310
HSC-H	553,976	671,891	748,486	834,987	914,903
HSC-SA**	854,046	834,000	1,110,429	676,004	704,164
MDACC	469,068	471,728	537,822	610,329	767,909
HC-T	135,978	140,473	119,515	114,968	114,208
<b>Total</b>	<b>4,549,333</b>	<b>5,002,639</b>	<b>5,328,299</b>	<b>5,214,290</b>	<b>5,516,303</b>

\* UTMB figures do not include correctional managed care off-site visits.

\*\* UTHSCSA's figure for FY 04 and 05 represents a change in how outpatient visits are counted.

*Source: Data submitted to the Legislative Budget Board and Institutional Reports*

**Table II-47**

<b>Total Charges for Un-Sponsored Charity Care by Faculty in State-Owned and Affiliated Facilities at U. T. Health-Related Institutions</b>					
	FY 01	FY 02	FY 03	FY 04	FY 05
SWMC	\$234,938,900	\$256,968,945	\$281,998,363	\$312,465,011	\$324,443,991
UTMB	66,908,903	85,982,833	97,724,989	108,498,329	114,686,522
HSC-H	90,024,051	103,279,853	107,326,617	139,031,049	172,229,739
HSC-SA	60,602,900	70,149,189	77,586,366	85,647,220	98,545,392
MDACC	30,773,351	35,310,300	43,427,477	51,164,780	50,594,052
HC-T	4,992,457	5,405,720	6,814,083	7,008,950	8,695,101
<b>Total Health-Related Institutions</b>	<b>\$488,240,562</b>	<b>\$557,096,840</b>	<b>\$614,877,895</b>	<b>\$703,815,339</b>	<b>\$769,194,797</b>

*Source: Institutions' Annual Financial Reports*

- In FY 2005, U. T. System health-related institutions provided nearly 90 percent of the total charity care provided by public health-related institutions in Texas.

## **Patient Satisfaction**

- Patient satisfaction is an important component of the U. T. System health-related institutions' service and a valuable element in assessing the impact of their patient care.
- Each institution implements its own satisfaction rating system; these may focus on particular departments or on the overall operation.
- Satisfaction scores, summarized on the table on the next page, are generally very high and in most cases show improvement in the past year.
- Additional information about patient satisfaction is available from each institution.

Table II-48

Patient Satisfaction – U. T. Health-Related Institutions					
	Period of Survey	Overall Rating	Change from Previous Rating	Noteworthy Ratings	Comments
SWMC	July '05 – June '06	90.0%	.10 %	Substantial improvements in key clinical areas. Hospitals continue to maintain excellence (95 <sup>th</sup> percentile) where it exists and to improve in areas of opportunity.	Press Ganey Associates, Inc. surveys used to measure patient satisfaction.
UTMB	June 1 to August 31, 2006	87 <sup>th</sup> percentile ranking for University Hospital Consortium (UHC) hospitals	+ 1 percentile point	88% of the respondents rated their overall hospital stay as either good or very good.  Physician overall rating placed in the 93 <sup>rd</sup> percentile for hospitals over 600 beds	Patient satisfaction measuring is an ongoing process using Press Ganey Associates as the vendor.
HSC-H Harris County Psychiatric Center (HCPC)	Sep 2005 – Aug – 2006	Overall average score of 3.98 for hospital patient satisfaction. On a scale of 1 – 5. With 5 being the highest score.	Slight decrease in overall average from 4.01, for same reporting period last year.	Helpfulness of the Nursing and Medical staff and patient safety rated in the top five strengths for the reporting period.  Treatment Effectiveness continues to rate the highest across scales with an average score of 4.07.  As UTHCPC moves forward with best practices, we have incorporated the measurement of patient safety concerns. The average score for the patient's perception of safety was 4.16.	UT-HCPC measures patient satisfaction on a monthly basis. Because of the type of population we serve, clients are given the option of completing the survey, immediately before discharge. Our sample size is for the reporting period is 2,742 respondents.  Area for continued improvement is patient activities provided. Pilot plan implemented on one unit.
HSC-H Dental Branch Clinics	Spring 2006	excellent; 80 % very good; 15 %	Results are similar	Patient satisfaction is high, and consistent with previous surveys.	Ratings performed for each Dental Branch clinic.
HSC-H UT Physicians (Medical School)	FY 2006	UT Physicians Satisfaction with overall treatment = 98%  Would recommend to friends and family = 97%	Results are consistent with those previously observed.	Overall target was 85%	Areas for continued improvement: appointment wait times and parking.  A significant decline in satisfaction with ease of renewing prescriptions was observed in the 2 <sup>nd</sup> quarter. After management review, this is primarily attributed to new procedures in Medicare drug coverage. Once patients had their information processed, satisfaction levels returned to their previously observed levels.

**Patient Satisfaction – U. T. Health-Related Institutions**

	<b>Period of Survey</b>	<b>Overall Rating</b>	<b>Change from Previous Rating</b>	<b>Noteworthy Ratings</b>	<b>Comments</b>
HSC-SA (Dental School)	Jan-Mar 2006	99% of Patients believe care is timely and overall satisfaction of 4.7 on a 5 point Leikert Scale (5 = very satisfied)	Have not performed a second survey yet.	Patient satisfaction is good.	Patients are surveyed two times per year to see if they (1) believe timely care is provided and (2) if their needs have been met.
HSC-SA (School of Medicine)	2005-2006			UT Medicine (formerly University Physicians Group) will determine thresholds for various components of patient satisfaction. As of September 2006, thresholds have not yet been established.	UT Medicine is still conducting Press Ganey surveys only at the Diagnostic Pavilion practice site. A UT Medicine Patient Hotline was implemented August 2005. Signs posted throughout UT Medicine clinics lists the PT Hotline (English & Spanish). Patients can call to discuss various concerns or express favorable comments. A database and occurrence report was developed to augment the initiative. Quarterly reports are presented to the UT Medicine Quality Improvement Committee. Press Ganey has provided only one report in March 06 due to minimal response from pts.
MDACC	9/05-8/06	97% of patient's surveyed rated overall care as good, very good and excellent.	Improved from 96%	Top Priority Problem scores Inpatient-Continuity and transition: 27% improved from last year by 3%. Outpatient-Access: 23% improved from last year by 3%.	MDACC uses the NRC+Picker survey. Measuring negative responses as problem scores. 7,900 Patients surveyed, targeting 20 responses/month for each of 43 units. Results are viewed at the unit level.
HC-T Emergency Dept Inpatient Medical Practice	9/05-8/06	9/05 – 88.4 9/05 – 85.8 9/05 – 88.3	8/06 – 88.8 8/06 – 88.1 8/06 – 88.1	Emergency Dept -90% percentile for 2 of 4 quarters (nationwide).	Inpatient-modified distribution method to improve return rate and score validity. Medical Practice-hired consultant admin director-patient satisfaction is one of her primary goals.

**Examples of Externally Funded Research Collaborations – U. T. System Health-Related Institutions**

- The U. T. System has made it a high priority to increase the research collaborations among U. T. System institutions as well as outside organizations.
- These collaborations achieve economies of scale and greatly improve the quality of research by leveraging faculty, external funding, and facilities resources beyond the scope that any individual institution could bring to bear on a research problem.
- The scope of U. T. System research is very large. Below are examples from each institution of current and high priority collaborative research projects.

**Table II-49**

<b>Examples of Research Collaborations – U. T. Health-Related Institutions</b>		
	<b>Purpose and Outcomes</b>	<b>Collaborators</b>
U. T. Southwestern		
<b>Howard Hughes Medical Institute</b>	A medical research organization employing its own scientific teams who also serve as faculty at UT Southwestern; conducts research with scientific staff in HHMI laboratories across the U.S.; explains how the human body functions and why disease occurs.  Collaborators: Howard Hughes Medical Institute	
<b>Alliance for Cellular Signaling</b>	Studies the G-protein signaling systems; identifies signaling molecules; determines molecular pathways; determines the quantitative analysis of the flow of information through the system.	University of California – San Francisco, California Institute of Technology, University of California - Berkeley
<b>Collaborative University of Texas Metroplex Imaging Center</b>	The three institutions have together identified radiologic imaging as a high academic priority for development, with a special emphasis on neuro-imaging to study brain development, neurological diseases, and cognition. This collaborative effort will share expensive fMRI and PET scanning equipment in a new imaging and research facility that is physically located at UT Southwestern. Additionally, the three institutions will provide a broad array of scientific talent that includes radiologists, clinicians, scientists, computer scientists, physicists, and engineers.  Collaborators: UTA and UTD	
U. T. Medical Branch		
<b>Regional Center of Excellence in Biodefense and Emerging Infectious Diseases</b>	Provides access to state-of-the-art proteomics, genomics, standardized small animal, and non-human primate models of infectious diseases, and BSL-4 laboratory facilities, as well as crosscutting functions in computational biology and a streamlined process for translational development of vaccines and drugs leading to FDA approval.  Collaborators: 32 institutions in Texas, New Mexico, Oklahoma, Arkansas, and Louisiana including UT Health Center-Tyler, UT Health Science Center-San Antonio, UT Health Science Center-Houston, Texas A&M, University of Houston, Rice University, National Institutes of Health/NIAID, Macrogenics Co., University of New Mexico, Louisiana State University Health Science Center - Shreveport, and Oklahoma University	
<b>Galveston National Laboratory (GNL)</b>	State-of-the art BSL2 through BSL4 laboratory space designed and being constructed to support the research of the NIAID Biodefense Network. When completed, the GNL will meet critical, national needs related to the identification and validation of effective countermeasures for both naturally emerging infectious diseases and the threat of bioterrorism.  Collaborators: NIAID Biodefense Network members	

<b>Examples of Research Collaborations – U. T. Health-Related Institutions</b>		
	<b>Purpose and Outcomes</b>	<b>Collaborators</b>
<b>Keck Center for Computational and Structural Biology - Gulf Coast Consortia</b>	<p>This collaboration provides a world-class environment for research training and specialized shared facilities at the interface between biological and biomedical sciences and the computational and physical sciences. It brings together modern biological, physical, and computational sciences to address key problems in biology and biomedicine. The six institutions share seven training grants, including two recently awarded NIH Roadmap training grants. Shared facilities include high-field NMRs and an X-ray beamline. The Keck Center and Gulf Coast Consortia bring together computational, physical, and biological scientists in a stimulating and nurturing environment for the development and training of a new type of scientist—one who can incorporate theory, simulation, and experiments to expand the understanding of modern biological problems. Students are provided an intellectual environment for considering problems that transcend traditional disciplinary boundaries and training opportunities with mentors in different disciplines.</p> <p>Collaborators: Rice University, Baylor College of Medicine, UH, UTHSC-Houston, and UTMDA.</p>	
U. T. HSC-Houston		
<b>Center for Clinical and Translational Sciences</b>	The UT HSC-Houston will become home to one of the nation's first Centers for Clinical and Translational Sciences. The center – one of only twelve in the nation and the only one of its kind in Texas – will be designed to spur research innovation so that new treatments can be developed more efficiently and delivered more quickly to patients.	UTMDA, Memorial Hermann Healthcare System
<b>Gulf Coast Consortia</b>	The Gulf Coast Consortia (GCC) brings together the strengths of its six member institutions to build interdisciplinary collaborative research teams and training programs in the biological sciences at their intersection with the computational, chemical, mathematical, and physical sciences. The GCC's mission is to train the next generation of bioscientists and to enable scientists to ask and answer questions that cross scientific disciplines to address the challenging biological issues of our time and, ultimately, to apply the resulting expertise and knowledge to the treatment and prevention of disease. ( <i>from GCC web site</i> )	Baylor College of Medicine, Rice University, UH, UTMB, and UTMDA
<b>Michael and Susan Dell Center for Advancement of Healthy Living</b>	The new center will conduct research to better understand and influence behaviors and environmental conditions that affect healthy living. Initial research will focus on preventing childhood obesity and its effect on related chronic diseases such as Type 2 diabetes.	UT Austin, Texas Department of State Health Services
U. T. HSC-San Antonio		
<b>Department of Urology</b>	The Urinary Incontinence Treatment Network (UITN) is a group of urologists and urogynecologists from all over the country who are conducting research on the treatment of urinary incontinence, or accidental loss of urine. Currently the UITN is conducting two studies: 1) SISTER (Stress Incontinence Surgical Treatment Efficacy Trial) This study is comparing the long-term outcomes of two commonly performed surgeries for the treatment of stress urinary incontinence. 2) BE-DRI (Behavior Enhances Drug Reduction of Incontinence) This study will determine if the addition of behavioral treatment to drug therapy for the treatment of urge incontinence will make it possible to discontinue the drug and still maintain a reduced number of accidents. 3) TOMUS (Trial Of Mid Urethral Slings) This study is designed to compare the efficacy and safety of two minimally invasive procedures, the Tension Free Vaginal Tape procedure and the Trans-Obturator Tape procedure, for treatment of stress incontinence.	National Institute of Diabetes and Digestive and Kidney Diseases, National Institute of Child Health and Human Development, and nine participating university or hospital collaborators across the United States

<b>Examples of Research Collaborations – U. T. Health-Related Institutions</b>		
	<b>Purpose and Outcomes</b>	<b>Collaborators</b>
<b>The UTHSCSA National Center of Excellence in Women's Health</b>	The UTHSCSA's National Center of Excellence in Women's Health received its designation from the US DHHS in September 2004, and is one of only 21 centers in the nation. The goals of the Center of Excellence (CoE) are to eliminate disparities in women's health, improve access to health care services and promote multidisciplinary collaborations among biomedical and social scientists and clinicians by integrating the following components: clinical care, women's health research, community outreach, professional education, and leadership development	The CoE is a partnership between UTHSCSA, University Health System, UTSA Women's Study Institute and the San Antonio Metropolitan Health District.
<b>South Texas Pediatric Minority Based Community Clinical Oncology Program</b>	The goal of the South Texas Pediatric Minority-Based Community Clinical Oncology Program is to reduce the incidence, morbidity and mortality of cancer among Mexican-American children and adolescents residing in the service area. The primary means of accomplishing this goal is enrollment of subjects on cancer prevention, control and treatment protocols of the Children's Oncology Group (COG) and other approved research bases. The specific need for MB-CCOP support is to enable the pediatric oncology providers in the service area to reach out to the target population, whose access to state-of-the-art cancer treatment is often impeded by a combination of factors, including cultural and language barriers, low socioeconomic status, high rate of illiteracy, geographic dispersal and poor access to medical care.  Collaborators: CHRISTUS Santa Rosa Health Care; Methodist Children's Hospital; Driscoll Children's Hospital; and Wilford Hall Medical Center	
U. T. M. D. Anderson		
<b>Alliance for NanoHealth</b>	The Alliance for NanoHealth is the first wholly collaborative research endeavor aimed solely at bridging medicine and nanotechnology. Collaborative project categories include NanoScan (medical imaging), NanoDocs (combining medical diagnostics and therapeutics through smart nanomaterials), NanoSensors (detecting biological molecules), NanoMeds (pharmaceuticals developed by nanoscale control), NanoImplants (engineering implantable devices), NanoSynthesis (taking advantage of properties unique to the nanoscale, e.g., reaction kinetics, catalytic activity). The FY05 funds of \$2.2 M from DoD has been utilized to provide seed-level funding for innovative, inter-institutional, multi-disciplinary research collaborations amongst ANH members. FY07 request is pending. Funding agencies include NASA, Dept. of Defense, Dept. of Energy, Health Resources and Services Administration.  Collaborators: Rice University, UTHSC-Houston, UH, Baylor College of Medicine, UTMB, Texas A&M.	
<b>EXPORT: Excellence in Partnership for Outreach, Research, and Training in Health Disparities</b>	The primary research project is a molecular epidemiology study of genetic susceptibility and mutagenicity biomarkers for assessing exposure risks in children of migrant/seasonal farm workers.  Collaborators: Fort Bend Independent School District	
<b>Center for Clinical and Translational Research</b>	This is a five-year grant to enhance clinical and translational research, ultimately improving patient care and community health. The center – the only one of its kind in Texas – will be designed to spur research innovation so that new treatments can be developed more efficiently and delivered more quickly to patients. The CTSA program is an NIH Roadmap for Medical Research initiative and will be administered by the National Center for Research Resources, a component of the NIH.  Collaborators: UTHSC-Houston	



Examples of Research Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
U. T. HC-Tyler		
<b>Southwest Center for Agricultural Health, Injury Prevention, and Education</b> <a href="http://www.swagcenter.org">www.swagcenter.org</a>	<p>NIOSH-funded center that coordinates research, prevention/intervention, education, and outreach projects in U.S. Public Health Region VI related to agricultural health and injury prevention. The Center works to reduce illness and injury in agricultural settings through research to practice (r2p) by transferring research findings and information into effective prevention practices and products.</p> <p>Collaborators: National Institute for Occupational Safety and Health; National Center for Farmworker Health; UTHSC at Houston School of Public Health Brownsville Regional Campus; Texas A&amp;M University Health Sciences Center; West Texas A&amp;M University; Southeastern Louisiana University; University of New Mexico; Drexel University; Area Health Education Center</p>	
<b>Bioterrorism Training and Curriculum Development Program</b>	<p>Work with UTHSC-H School of Public health to develop curriculum and provide training throughout Texas.</p>	<p>UT HSC-Houston</p>
<b>Southwest Center for Pediatric Environmental Health (SWCPEH)</b> <a href="http://www.swcpeh.org">www.swcpeh.org</a>	<p>SWCPEH is one of thirteen Pediatric Environmental Health Specialty Units (PEHSUs) located throughout the United States, Canada, and Mexico. The eleven centers in the US are funded by the Association of Occupational and Environmental Clinics (AOEC) through a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR) and the US Environmental Protection Agency (EPA). The SWCPEH, based at UTHC-Tyler, provides services to health care providers, public health officials and the general public in EPA Region VI, which includes Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.</p> <p>The PEHSUs are a unique collaboration between occupational / environmental clinics and academic pediatric programs. This collaboration provides a forum for pediatricians and environmental health specialists to combine their expertise in addressing children's environmental exposures and diseases of suspected environmental origin. The mission of the PEHSU program is to: 1) reduce environmental health threats to children, 2) improve access to expertise in pediatric environmental medicine, and 3) strengthen public health prevention capacity. The primary means of accomplishing this mission include education, consultation, referral, advocacy, research, and networking.</p> <p>SWCPEH is one of just 15 organizations in the US to receive the first 2005 Children's Environmental Health Excellence Award. The award acknowledges SWCPEH's outstanding commitment to protecting children from environmental health risks. The SWCPEH also collaborated with other PEHSUs to develop a joint statement with the American Academy of Pediatrics entitled "Clinician Recommendations Regarding Return of Children to Areas Impacted by Flooding and/or Hurricanes."</p> <p>Collaborators: AOEC; EPA; ATSDR; University of New Mexico Health Sciences Center; West Texas Regional Poison Center at Thomason Hospital (El Paso)</p>	

## Examples of Educational Collaborations

- The U. T. System encourages educational collaborations among U. T. System institutions as well as with organizations outside of U. T. System. Below are examples from each institution of current and high priority collaborative research projects.

**Table II-50**

<b>Examples of Educational Collaborations – U. T. Health-Related Institutions</b>		
	Purpose and Outcomes	Collaborators
U. T. Southwestern		
<b>Graduate Medical Education (Residency Education Program)</b>	Improves the quality of health care in the United States by ensuring the quality of graduate medical education experiences for physicians in training.  Collaborators: Parkland Health and Hospital System, Children's Medical Center of Dallas, Dallas Veteran's Affairs Hospital, UT Southwestern Hospitals and Clinics, as well as approx. 20 other hospitals	
<b>Joint Program in Psychology</b>	Prepares students for careers as research and clinical psychologist.	UTD
<b>Joint Program In Biomedical Engineering</b>	Prepares students as biomedical engineers for careers in industry, hospitals, and research facilities.	UTA and UTD
U. T. Medical Branch		
<b>Pandemic Flu Primary Prevention Campaign</b>	The Pandemic Flu Primary prevention campaign is a new statewide AHEC Pubic Health Initiative. The AHEC Prevention Team (APT,) a statewide AHEC initiative with Primary support from East Texas AHEC to address urgent health literacy issues in Texas, is aggressively promoting its first campaign, Pandemic Flu Prevention. This APT initiative is designed to improve community health through education on healthy behaviors to prevent infection, including seasonal and pandemic flu. The APT Primary Prevention Campaign is addressing the potential regional public health issues arising from a possible flu pandemic by presenting an educational campaign designed to empower the public to take appropriate steps to improve its health and protect itself.  Colloaborators: UTMB's East Texas AHEC; Texas Tech Health Sciences Center's West Texas AHEC; UTHSCSA's South Texas AHEC, Oklahoma AHEC, Health Education Training Centers Alliance of Texas	
<b>Prematriculation Reinforcement Enrichment Program (PREP)</b>	The Prematriculation Reinforcement Enrichment Program (PREP) is an aggressive, intensive six-week program designed to provide accepted disadvantaged students with an academically enriching educational experience which will assure that 95% of the participants complete the first year medical school curriculum successfully and are promoted to the second year. Participants preview the first year course work, undergo reading and learning skills assessment, diagnostic testing, and develop a mentoring relationship with upperclassmen. PREP allows for a smoother transition and adjustment to the rigors of the medical school environment and provides a psychological boost to the individual participant.  Collaborators: UTPA, UTEP, UTB, Texas A&M International University, TAMU-Corpus Christi, and TAMU-Kingsville.	
<b>Regional Innovations in Nurse Education (RINE)</b>	Regionalize certain administrative, operational, and instructional functions and services and demonstrate that such consolidation will enhance educational effectiveness of faculty, improve student success, increase graduation rates, and free up faculty resources to increase enrollments in programs leading to initial RN licensure. The project will demonstrate that regionalizing selected functions currently performed separately is feasible and more efficient than current practice.  Collaborators: Partners include UT-HSC, Texas Woman's University, Alvin Community College, Lee College, Houston Community College, San Jacinto College, North Harris-Montgomery Community College District, Wharton County Jr College, Galveston College, and College of the Mainland	

<b>Examples of Educational Collaborations – U. T. Health-Related Institutions</b>		
	Purpose and Outcomes	Collaborators
U. T. HSC-Houston		
<b>Graduate School of Biomedical Sciences</b>	Offers joint MS and PhD degrees in 21 areas of study within the biomedical sciences.	UTMDACC
<b>School of Public Health Regional Campuses</b>	The four regional campuses in Brownsville, Dallas, El Paso, and San Antonio offer graduate level courses leading to a Master's Degree in Public Health in collaboration with the host UT campuses. Each regional campus is in a unique position of being able to focus on public health issues facing its local community.  Collaborators: UTB, UTEP, UTSA, UTHSCSA, UTSWMC	
<b>UT Biomedical Engineering Department</b>	The new, expanded department will foster interinstitutional collaborations by providing seed grants for new joint research incentives, facilitating multiinvestigator research and training-grant proposals, and offering special educational programs and internships, distance-learning classes, and teleconferences. Students will have the opportunity to pursue their studies at whichever institution best meets their tailored educational goals.  Collaborators: UT Austin, UTMDACC	
U. T. HSC-San Antonio		
<b>Border Oral health Care Access (BOHCA) Training Program/Gateway Community Health Center/Laredo, Texas</b>	Provide dental hygiene clinical training for dental hygiene senior students through a rotation program at Gateway Community Health Center in Laredo. The program greatly benefits Laredo area oral health by providing dental hygiene services to a special adult diabetic patient population who has not had access to care previously. Students gain clinical experience in dental hygiene assessment, treatment planning and providing preventative and therapeutic care for this special patient population.  Collaborators: Magda de la Torre, MPH, RDH Nita Wallace, PhD, RDH Courtney Pollard, BS, RDH Gateway Community Health Center and UTHSCSA School of Allied Health Sciences, Department of Dental Hygiene	
<b>Avanzar</b>	To provide peer mentoring to pre-nursing students to increase enrollments in BSN nursing programs  Collaborators: Dr. Norma Rogers, SON, Dr. Sara Oswalt, UTSA, Dr Allen Vince, Director of Health Professions, UTSA	
<b>Dental Early Admissions Program (DEAP)</b>	Allow qualified college students a mechanism for doing three college years and receiving transfer credit for the first year of dental school, so that they get a BS and a DDS in seven years, thus saving a year of college without giving up the bachelor's degree. Students in the program have increased contact with the Dental School while in college and take part in prematriculation orientation programs. Program helps assure diversity of many types in the Dental School class.  Collaborators: Abilene Christian University, University of the Incarnate Word, McMurry University, UTPA, Prairie View University, St. Mary's University, Sam Houston State University, UTSA, Texas State University, TAMU-Corpus Christi, TAMU-Kingsville, Texas Lutheran University, Texas Wesleyan University, West Texas A&M, Mary Hardin-Baylor University, Texas A&M International University, UTEP	
U. T. M. D. Anderson		
<b>M.I.D.A.S (Models of Implementation and Dissemination of Environmental Health and Science Across Subjects)</b>	Funding from the SEPA (Science Education Partnership Awards) Program of the NIH provided five years of support for the MIDAS Project. MIDAS seeks to improve the understanding of EHS by students and the entire educational community, including teachers, administrators, school nurses and parents, to enable them to make informed decisions about the environment and their health. Each year, MIDAS directly serves nearly 1300 students in grades 4-8 in the Bastrop ISD.	Bastrop ISD

<b>Examples of Educational Collaborations – U. T. Health-Related Institutions</b>		
	Purpose and Outcomes	Collaborators
<b>Science Educators Summer Educator Program in Biomedical Sciences</b>	<p>A collaborative program between UT GSBS at Houston and the School of Allied Health Sciences, several faculty members from both institutions participate in offering a graduate level course in Cell Biology in Biomedical Science. Since the program began in 1999, approximately 28 teachers participate in the program each year. The program is broadcast to UT Pan American so that those teachers that cannot travel to Houston can participate in the classes.</p> <p>Collaborators: UTHSC-Houston GSBS, UTPA</p>	
<b>HOPE: Health Observances and Public Education Partnership</b>	<p>The HOPE Partnership includes 8 current and former NIEHS Center COEPs and is funded by a SEPA grant. The project goals are to evaluate the impact and efficacy of a series of information dissemination mechanisms, including informal and formal K-12 science education, community forums and interactions with media and non-profit organizations.</p>	<p>NIEHS Center COEC at the University of Medicine and Dentistry of New Jersey (UMDNJ, SEPA grant)</p>
U. T. HC-Tyler		
<b>Joint Collaborations with Various Higher Educational Institutions for Clinical Rotations and Health Care Training</b>	<p>Allows students in nursing, allied health, and medicine to have clinical rotations at a health training hospital and outpatient facility. Internships in Public Affairs; Industrial and Systems Engineering; Dietetics; Physical Therapy Assistant; Medical Office Administration; Pharmacy. Residency programs in Pharmacy, Family Medicine and Occupational and Environmental Medicine</p> <p>Collaborators: Austin College; Harding University-Arkansas; Hardin-Simmons University; Iowa State University of Science &amp; Technology; Keiser College; Kilgore College; Louisiana State University; Northeast Texas Community College; San Joaquin Valley College Online; St. Petersburg College; Stephen F. Austin State University; TAMU; TAMU/Commerce; TAMU/Corpus Christi; Texas College of Osteopathic Medicine; Texas College; Texas Southern University; Texas Tech University Health Sciences Center; The University of Arkansas Medical School; University of Louisiana at Monroe; The University of Oklahoma at Tulsa; UT HSC-Houston; UTMB; Tyler Junior College; University of Louisiana; University of North Dakota; UNT; University of St. Francis at Albuquerque; USC; UTA; UTSWMC; UTT; Xavier University of Louisiana</p>	
<b>Family Residency Program</b> <a href="http://www.uthct.edu/fp">www.uthct.edu/fp</a>	<p>The mission of the Family Medicine Residency Program at Tyler is to train the future family physician in all aspects of the specialty of family medicine; to develop skills that enables the resident to practice compassionate medicine and communicate with the patient within the family dynamic; and to develop leadership that enables the resident to be a health advocate within the community and a quality mentor for future physicians. The UTHCT Family Medicine Residency Program prepares residents for the skilled practice of family medicine through a) patient-centered teaching from dedicated faculty in a professional academic environment; and b) encouragement of academic excellence and the achievement of the individual resident's optimum potential. All of the UTHCT residents are graduates of U.S. medical schools, thereby greatly increasing their chances of being licensed in Texas. The number of residents who have graduated from the UTHCT Family Medicine Residency program since its inception in 1987 is 111. Ninety have stayed in Texas. Sixty have remained in East Texas, serving in rural and underserved areas.</p> <p>Collaborators: Trinity Mother Francis Hospital system; East Texas Medical Center system; Smith County Medical Society and its members; Northeast Texas Public Health District; Hospice of East Texas; Bethesda Clinic; Texas Department of Health &amp; Human Services (Adult Protective Services &amp; Child Protective Services); Meals on Wheels; St. Paul's Children's Clinic; Teen Mania</p>	
<b>Occupational Medicine Residency Program</b> <a href="http://www.tiosh.org/residency.htm">www.tiosh.org/residency.htm</a>	<p>Offers academic and practicum training in occupational medicine. The residency program is one of three civilian programs in Texas and fewer than 35 in the United States accredited by the Accreditation Council for Graduate Medical Education.</p> <p>Collaborators: Stephen F. Austin State University; Texas Department of State Health Services Regions 4 &amp; 5N; Occupational Safety and Health Administration (OSHA)</p>	

## **Teaching, Research, and Health Care: Implications for Future Planning and Measures for Future Development**

### **Implications for Future Planning**

- The U. T. System will continue to emphasize the priority of research collaborations between academic and health-related institutions. These will be reflected in new patterns of joint grants.
- Private support for endowed faculty positions should be a System priority.
- The organization, support, goals, and pace of technology transfer require attention and further development and are connected to the economic impact that U. T. System institutions make on their communities.
- Efforts to bolster support for faculty research development should be reflected in increases over time in the number of grants received and the proportion of faculty receiving grants.

### **Measures for Future Development**

- Measures of faculty teaching excellence should be developed with academic and health-related institutions.
- Measures of technology transfer productivity should be refined.
- Faculty salary trend data for health-related institutions should be developed.
- Specific measures related to the 10-year U. T. System strategic plan will be refined, added, or eliminated.

