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 2001-2005

Table II-1

Total U. T. System Research and Research-Related Expenditures, FY 2001-2005

	FY 01	FY 02	FY 03	FY 04	FY 05
Academic	$405,150,305	$459,852,291	$480,941,798	$495,039,869	$572,277,724
Health-Related	758,730,912	896,756,996	970,691,322	1,046,463,612	1,114,736,515
Total	$1,163,881,217	$1,356,609,287	$1,451,633,120	$1,541,503,481	$1,687,014,239

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

- In FY 2005, U. T. System health-related and academic institutions together generated research and research-related expenditures totaling almost $1.7 billion. In the period from FY 2001 to FY 2005, this total has increased by 45 percent, and reflects an average annual increase of 10 percent.
- By comparison, national academic R&D increased by 10.9 percent from FY 2001 to FY 2002, and by 10.2 percent from FY 2002 to FY 2003 (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 one-half of total R&D expenditures in FY 2003.)

Figure II-1

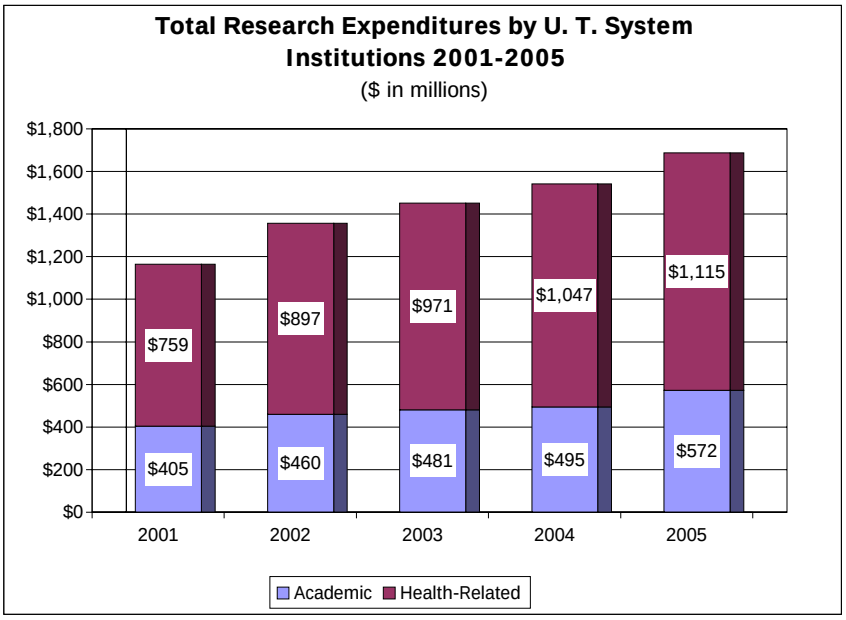
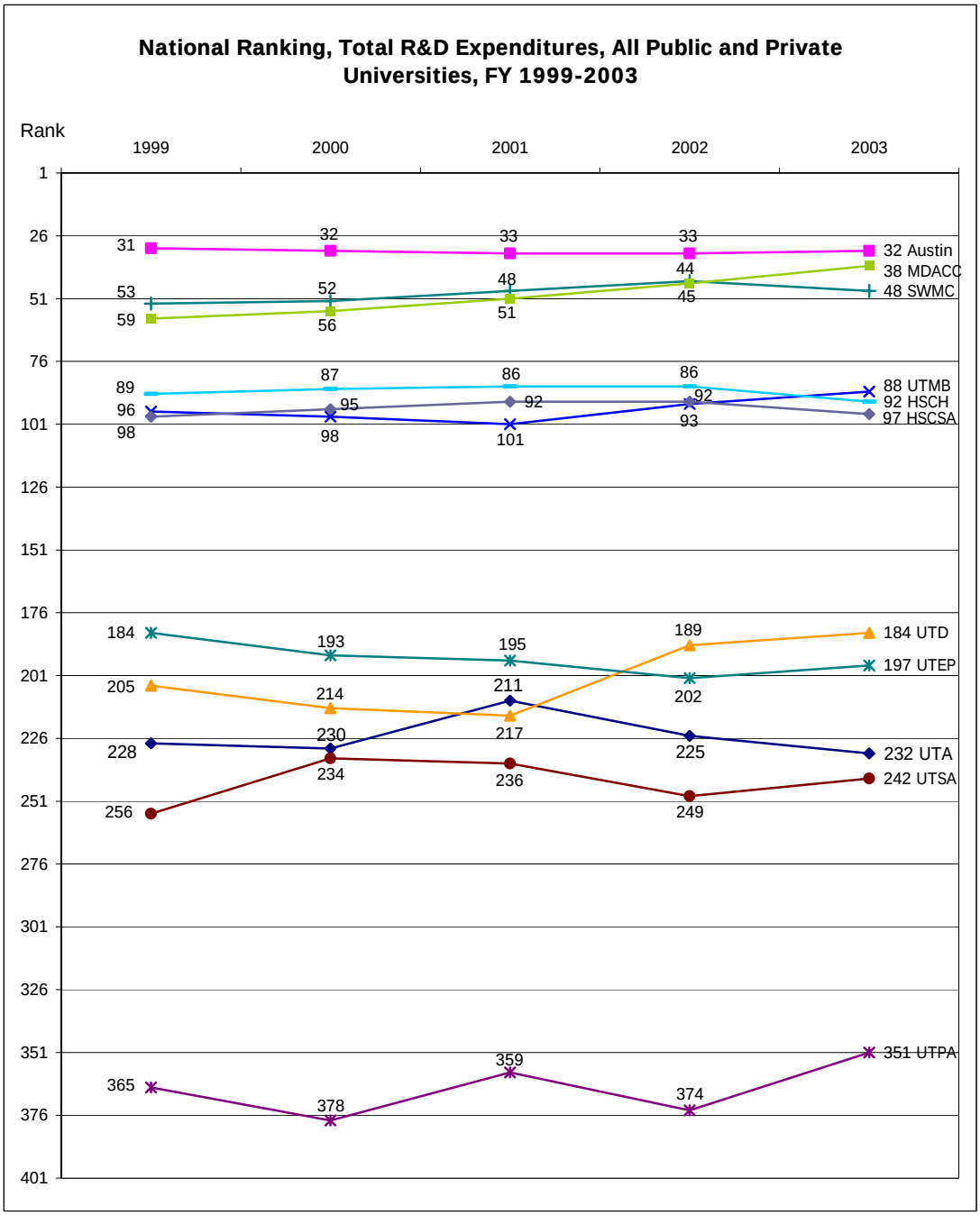


Figure II-2



- 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 2003, and included 617 public and private research universities.
- For the period in FY 2002 and 2003, 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. Health Science Center-Houston, U. T. Medical Branch, 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 204 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 2004.

Table II-2

Top Texas Public Institutions in Research and Research-Related Expenditures, FY 2004

Texas A&M	1*
UT Austin	2
UT Southwestern	3
UT M. D. Anderson	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 University	10
UT El Paso	11
UT Dallas	12
UT Arlington	13

* Expenditures reported includes Texas A&M Extension Services.

Source: "Research Expenditures, September 1, 2003 - August 31, 2004," THECB report, April 2005

Research Funding Trends: U. T. System Academic Institutions 2001-2005

- In FY 2005, U. T. System academic institutions' research and research-related expenditures totaled $572 million, a 16 percent increase over the previous year. Between 2001 and 2005, research and research-related expenditures have averaged a 10 percent annual increase.
- From FY 2003 to FY 2005, expenditures increased by 51 percent at U. T. Arlington, 64 percent at U. T. Brownsville/TSC, 38 percent at U. T. Dallas, 35 percent at U. T. Pan American, and 43 percent at U. T. San Antonio.
- Among Texas institutions, U. T. Austin ranked second in research and development expenditures in FY 2004. These expenditures comprised almost 19 percent of the total of Texas public institution research and research-related expenditures in 2004 of $2.253 billion.

Table II-3

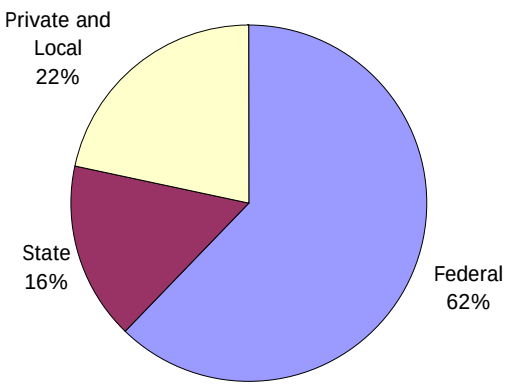
Research Expenditures by Source 2005 – U. T. Academic Institutions

	Federal	State	Private	Local	**Total**
Arlington	$17,833,042	$12,344,019	$3,491,846	$158,053	**$33,826,960**
Austin	269,612,823	46,242,063	63,943,277	43,069,549	**422,867,712**
Brownsville/TSC	4,897,516	--	60,137	417,012	**5,374,665**
Dallas	19,933,291	16,689,781	4,765,439	1,722,288	**43,110,799**
El Paso	23,961,812	8,810,215	2,159,756	1,081,802	**36,013,585**
Pan American	3,770,457	1,401,987	619,835	23,885	**5,816,164**
Permian Basin	360,016	586,641	36,178	177,859	**1,160,694**
San Antonio	16,174,944	5,024,344	1,123,424	1,283,132	**23,605,844**
Tyler	143,425	116,196	200,365	41,315	**501,301**
Total	**$356,687,326**	**$91,215,246**	**$76,400,257**	**$47,974,895**	**$572,277,724**

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

Figure II-3

Sources of Research Support 2005



- The federal government provides the majority of research and research-related funding – 62 percent.
- Private and local sources together provide the next largest proportion – 22 percent.
- Sixteen percent of research funds expended in 2005 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 2001 to 2005, sponsored revenue has increased by 52 percent at U. T. System academic institutions.

Table II-4

Sponsored Revenue – U. T. Academic Institutions, FY 2001-2005
($ in thousands)

	FY 01	FY 02	FY 03	FY 04	FY 05
Arlington	$28,285	$33,812	$38,347	$41,516	$52,795
Austin	294,052	356,624	369,278	383,632	408,557
Brownsville/TSC	56,888	59,308	59,448	67,575	75,024
Dallas	15,717	25,412	25,563	50,559	38,571
El Paso	50,457	64,340	68,710	73,454	74,340
Pan American	31,773	48,605	56,699	56,898	60,903
Permian Basin	3,831	4,274	4,699	5,063	5,326
San Antonio	31,912	42,053	53,798	56,832	64,476
Tyler	5,555	4,517	5,393	6,802	7,414
Total Academic	**$518,470**	**$638,945**	**$681,935**	**$742,331**	**$787,406**

Source: Exhibit B of Annual Financial Report

Table II-5

Sponsored Revenue by Source – U. T. Academic Institutions, FY 2005

($ in thousands)

	Federal	State	Local	Private	**Total**
Arlington	$39,912	$7,362	$47	$5,474	**$52,795**
Austin	304,840	39,782	1,874	62,061	**408,557**
Brownsville/TSC	33,058	2,260	39,417	289	**75,024**
Dallas	27,379	6,242	696	4,254	**38,571**
El Paso	59,644	8,998	1,156	4,542	**74,340**
Pan American	43,807	15,712	0	1,384	**60,903**
Permian Basin	4,474	800	16	36	**5,326**
San Antonio	54,100	8,331	453	1,592	**64,476**
Tyler	5,316	1,592	8	498	**7,414**
Total	**$572,530**	**$91,079**	**$43,667**	**$80,130**	**$787,406**

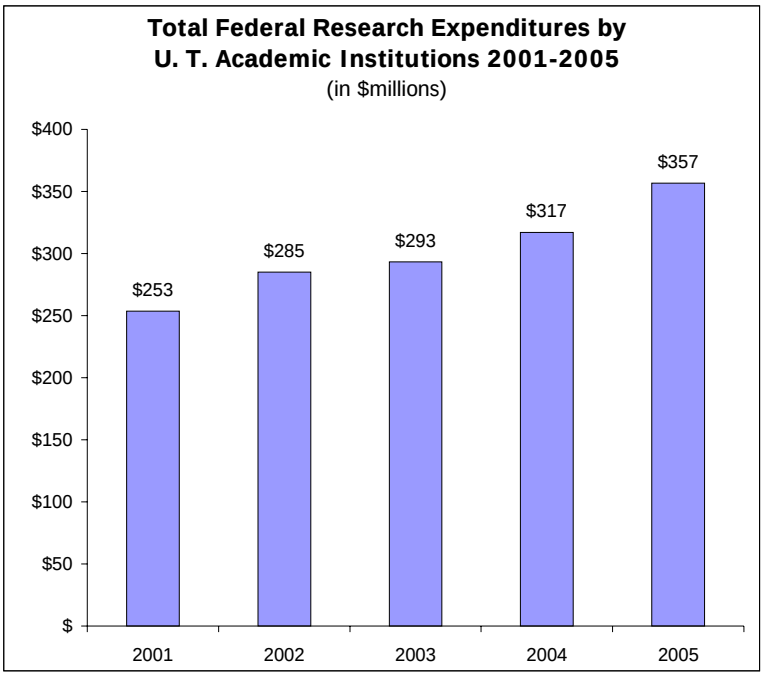
Source: Exhibit B of Annual Financial Report

- Federal funding continues to be the primary source of sponsored revenue to U. T. System academic institutions.

Federal Research Expenditures

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

Figure II-4



- Continued increases in these funds are critical to the success of the academic institutions in the U. T. System.
- From 2001 to 2005, federal research expenditures for all academic institutions increased at every U. T. System academic institution, and on average, by 41 percent.

- At U. T. Arlington, federal research expenditures increased by 61 percent between FY 2004 and FY 2005, and by 93 percent since 2001.
- At U. T. Brownsville, the one-year increase was 70 percent, and 712 percent over five years.
- U. T. Dallas increased these expenditures 27 percent over the past year, and 127 percent over five years.
- U. T. Pan American's federal expenditures increased 41 percent over the past year, and 185 percent over five years.
- Although U. T. Permian Basin's expenditures decreased from FY 2004 to FY 2005, since FY 2001, they have increased 144 percent.
- U. T. San Antonio increased is expenditures by 38 percent since the previous year, and 101 percent over five years.
- U. T. Tyler's expenditures in FY 2005 decreased over FY 2004, but increased 115 percent since FY 2001.

Table II-6

Federal Research Expenditures by U. T. Academic Institutions

FY	2001	2002	2003	2004	2005	% change FY 04-05	% change FY 01-05
Arlington	$9,224,210	$7,923,657	$7,993,576	$11,093,256	$17,833,042	60.8%	93.3%
Austin	202,440,085	235,436,101	240,537,689	249,014,154	269,612,823	8.3	33.2
Brownsville/TSC	602,856	896,646	1,011,353	2,889,894	4,897,516	69.5	712.4
Dallas	8,781,295	11,815,490	14,432,841	15,733,571	19,933,291	26.7	127.0
El Paso	22,872,682	19,796,441	17,022,000	22,232,318	23,961,812	7.8	4.8
Pan American	1,324,426	1,394,780	1,895,223	2,666,191	3,770,457	41.4	184.7
Permian Basin	147,629	138,194	166,777	1,215,420	360,016	-70.4	143.9
San Antonio	8,032,790	7,641,990	10,049,314	11,705,185	16,174,944	38.2	101.4
Tyler	66,827	67,617	174,362	585,874	143,425	-75.5	114.6
Total	**$253,492,800**	**$285,110,916**	**$293,283,135**	**$317,135,863**	**$356,687,326**	**12.5%**	**40.7%**

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 2000			FY 2004		
	Research Expenditures	Appropriated Research Funds	Percent Approp. Research	Research Expenditures	Appropriated Research Funds	Percent Approp. Research
Arlington	$14,552,315	$1,825,604	13%	$22,417,130	$966,140	4%
Austin	295,901,287	12,119,570	4	382,391,771	4,352,519	1
Brownsville/TSC	299,359	63,097	21	3,273,326	0	0
Dallas	15,923,269	1,516,610	10	31,274,590	585,737	2
El Paso	27,784,046	381,069	1	32,067,735	267,042	1
Pan American	2,175,562	400,157	18	4,309,262	0	0
Permian Basin	811,973	0	0	1,895,564	15,000	1
San Antonio	10,613,082	109,800	1	16,516,457	148,618	1
Tyler	210,747	0	0	894,034	0	0
Total	**$368,271,640**	**$16,415,907**	**4%**	**$495,039,869**	**$6,335,056**	**1%**

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

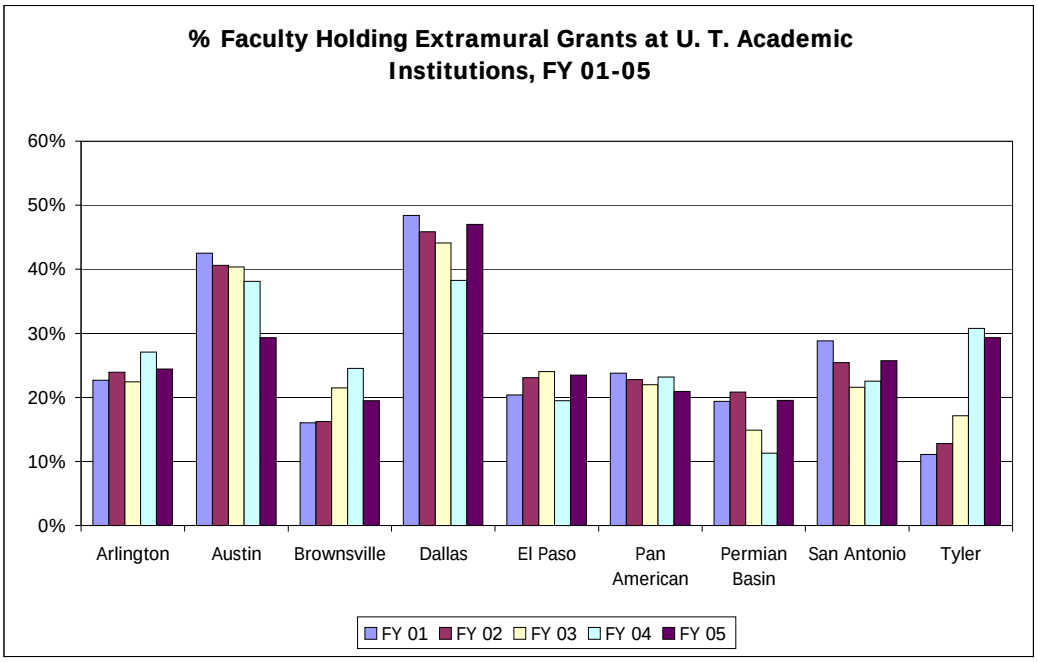
Source: THECB "Survey of Research Expenditures" and "Report of Awards -- Advanced Program/Advanced Technology Programs"

- State appropriations for research represent a comparatively small, but important, source of support at each institution. In 2004, these appropriations were one percent of all research expenditures, down from four 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 *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/ipa/wag/homepage.htm for more information on this 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 2001 at U. T. Arlington, U. T. Austin, U. T. Brownsville/TSC, U. T. Dallas, U. T. Pan American (by 69 percent), U. T. San Antonio, and U. T. Tyler (by 141 percent).
- From FY 2001 to FY 2005, the number of faculty holding grants has increased at U. T. Arlington, U. T. Brownsville/TSC, U. T. Dallas, U. T. El Paso, U. T. Pan American, U. T. Permian Basin, U. T. San Antonio, and U. T. Tyler (by 214 percent).
- Over this period, the proportion of tenure/tenure-track faculty holding grants has increased at five institutions: U. T. Arlington, U. T. Brownsville/TSC, U. T. El Paso, U. T. Permian Basin, and U. T. Tyler (by 164 percent).

Table II-8

Faculty Holding Extramural Grants at U. T. Academic Institutions

		FY 01	FY 02	FY 03	FY 04	FY 05
Arlington	# grants	164	210	183	268	210
	# T/TT faculty holding grants	105	114	108	133	123
	#FTE T/TT faculty	463	476	482	491	503
	% T/TT faculty holding grants	23%	24%	22%	27%	24%
Austin	# grants	2,332	2,285	2,494	2,538	2,643
	# T/TT faculty holding grants	640	630	649	647	512
	#FTE T/TT faculty	1,506	1,551	1,608	1,698	1,745
	% T/TT faculty holding grants	42%	41%	40%	38%	29%
Brownsville	# grants	34	36	47	56	50
	# T/TT faculty holding grants	34	36	47	55	46
	#FTE T/TT faculty	212	222	219	224	236
	% T/TT faculty holding grants	16%	16%	21%	25%	19%
Dallas	# grants	246	212	218	180	327
	# T/TT faculty holding grants	121	111	112	109	142
	#FTE T/TT faculty	250	242	254	285	302
	% T/TT faculty holding grants	48%	46%	44%	38%	47%
El Paso	# grants	229	244	180	222	218
	# T/TT faculty holding grants	77	89	97	80	102
	#FTE T/TT faculty	378	386	404	411	434
	% T/TT faculty holding grants	20%	23%	24%	19%	24%
Pan American	# grants	131	132	130	193	221
	# T/TT faculty holding grants	67	71	73	84	78
	#FTE T/TT faculty	282	312	332	362	373
	% T/TT faculty holding grants	24%	23%	22%	23%	21%
Permian Basin	# grants	19	28	15	16	10
	# T/TT faculty holding grants	13	15	11	8	17
	#FTE T/TT faculty	67	72	74	71	87
	% T/TT faculty holding grants	19%	21%	15%	11%	20%
San Antonio	# grants	170	208	165	207	178
	# T/TT faculty holding grants	81	86	87	93	114
	#FTE T/TT faculty	281	338	403	413	443
	% T/TT faculty holding grants	29%	25%	22%	23%	26%
Tyler	# grants	22	29	39	55	53
	# T/TT faculty holding grants	14	17	25	44	44
	#FTE T/TT faculty	126	133	146	143	150
	% T/TT faculty holding grants	11%	13%	17%	31%	29%

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

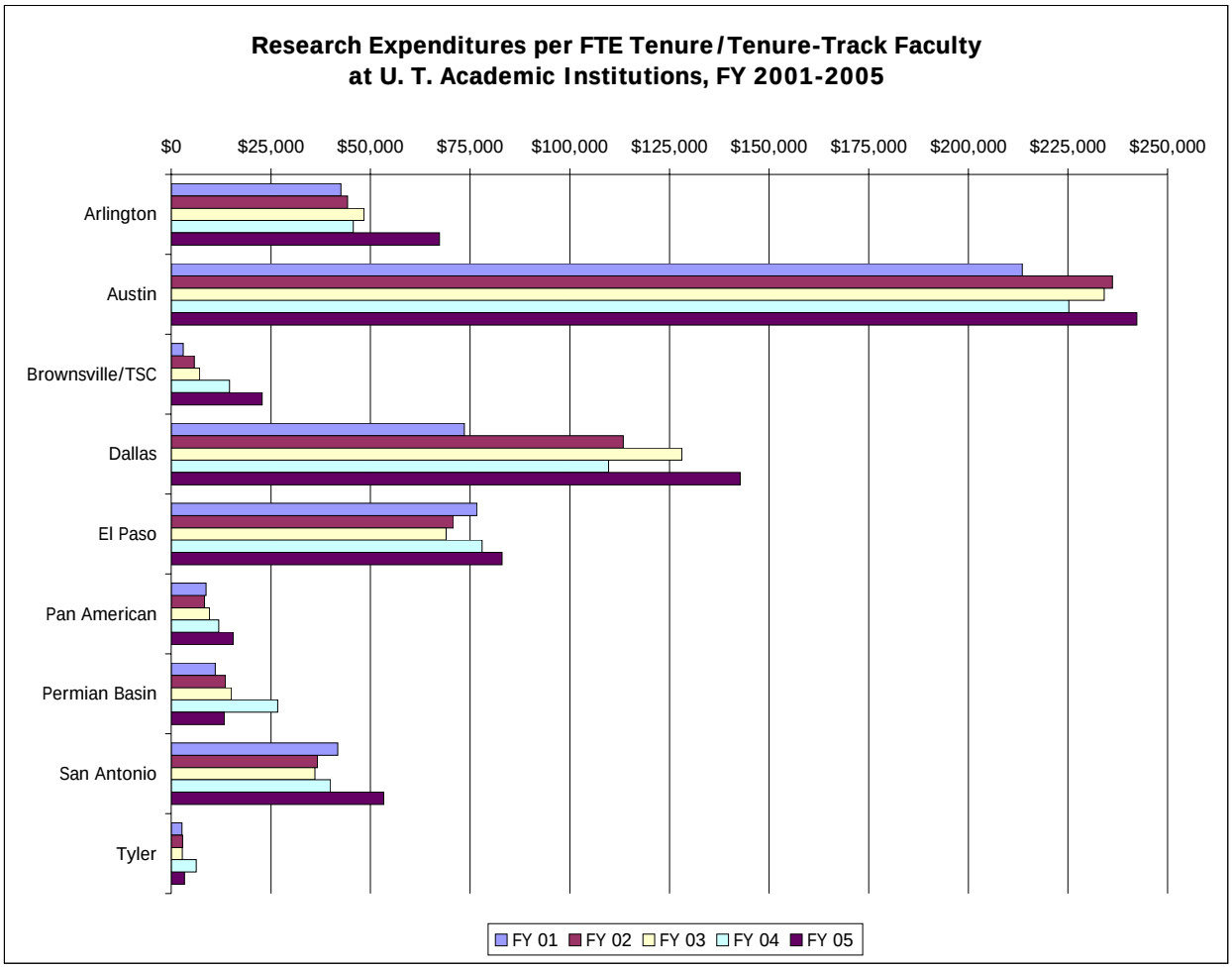
Research Expenditures per FTE Tenure/Tenure Track Faculty at U. T. Academic Institutions
FY 2001-2005

	FY 2001			FY 2002			FY 2003		
	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	$19,966,034	469	$42,572	$21,072,964	476	$44,271	$23,314,938	482	$48,371
Austin	321,580,736	1,506	213,533	366,355,359	1,551	236,206	376,403,651	1,608	234,082
Brownsville	635,365	212	2,997	1,286,638	222	5,796	1,558,306	219	7,116
Dallas	18,531,582	252	73,538	27,444,057	242	113,405	32,547,141	254	128,138
El Paso	29,003,608	378	76,729	27,328,772	386	70,800	27,847,152	404	68,929
Pan American	2,601,598	299	8,701	2,605,758	312	8,352	3,193,419	332	9,619
Permian Basin	737,853	67	11,013	980,905	72	13,624	1,118,184	74	15,111
San Antonio	11,751,323	281	41,820	12,402,017	338	36,692	14,547,732	403	36,099
Tyler	342,206	126	2,716	375,821	133	2,826	411,275	146	2,817

	FY 2004			FY 2005		
	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	$22,417,130	491	$45,656	$33,826,960	503	$67,250
Austin	382,391,771	1,698	225,201	422,867,712	1,745	242,331
Brownsville	3,273,326	224	14,613	5,374,665	236	22,774
Dallas	31,274,590	285	109,735	43,110,799	302	142,751
El Paso	32,067,735	411	78,024	36,013,585	434	82,981
Pan American	4,309,262	362	11,904	5,816,164	373	15,593
Permian Basin	1,895,564	71	26,698	1,160,694	87	13,341
San Antonio	16,516,457	413	39,991	23,605,844	443	53,286
Tyler	894,034	143	6,252	501,301	150	3,342

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


Research Expenditures per FTE Tenure/Tenure-Track Faculty
at U. T. Academic Institutions, FY 2001-2005
$0
$25,000
$50,000
$75,000
$100,000
$125,000
$150,000
$175,000
$200,000
$225,000
$250,000
Arlington
Austin
Brownsville/TSC
Dallas
El Paso
Pan American
Permian Basin
San Antonio
Tyler
FY 01
FY 02
FY 03
FY 04
FY 05

Private Funding

Table II-10

Endowed Faculty Positions at U. T. Academic Institutions

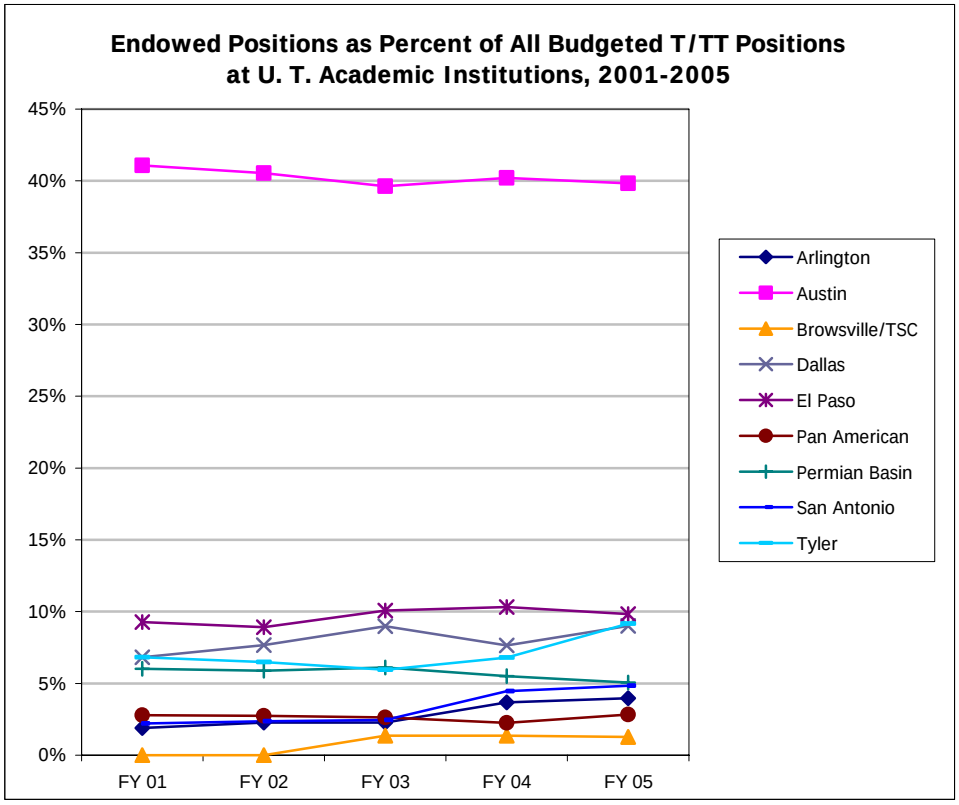
		FY 01	FY 02	FY 03	FY 04	FY 05
Arlington	Total Budgeted Endowed Professorships and Chairs	10	12	12	20	22
	Number Filled	5	7	7	9	13
	% of Total Budgeted T/TT Positions Endowed	2%	2%	2%	4%	4%
Austin	Total Endowed Professorships and Chairs	715	725	731	738	747
	Number Filled	540	565	590	598	586
	% of Total Budgeted T/TT Positions Endowed	41%	41%	40%	40%	40%
Brownsville	Total Budgeted Endowed Professorships and Chairs	--	--	3	3	3
	Number Filled	--	--	2	3	3
	% of Total Budgeted T/TT Positions Endowed	0%	0%	1%	1%	1%
Dallas	Total Budgeted Endowed Professorships and Chairs	20	23	29	25	31
	Number Filled	20	23	29	20	24
	% of Total Budgeted T/TT Positions Endowed	7%	8%	9%	8%	9%
El Paso	Total Budgeted Endowed Professorships and Chairs	38	38	44	46	46
	Number Filled	29	26	38	35	35
	% of Total Budgeted T/TT Positions Endowed	9%	9%	10%	10%	10%
Pan American	Total Budgeted Endowed Professorships and Chairs	8	8	8	8	11
	Number Filled	2	2	2	4	4
	% of Total Budgeted T/TT Positions Endowed	3%	3%	3%	2%	3%
Permian Basin	Total Budgeted Endowed Professorships and Chairs	5	5	5	5	5
	Number Filled	5	5	4	5	5
	% of Total Budgeted T/TT Positions Endowed	6%	6%	6%	5%	5%
San Antonio	Total Budgeted Endowed Professorships and Chairs	9	10	11	20	25
	Number Filled	6	6	6	7	8
	% of Total Budgeted T/TT Positions Endowed	2%	2%	2%	4%	5%
Tyler	Total Budgeted Endowed Professorships and Chairs	9	9	9	11	14
	Number Filled	6	7	7	6	1
	% of Total Budgeted T/TT Positions Endowed	7%	6%	6%	7%	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/Texas Southmost College's three positions in 2003, every U. T. System academic institution now has endowed positions.

- From FY 2001 to FY 2005, U. T. Arlington more than doubled the number of its endowed professorships and chairs.
- U. T. El Paso increased the number of its endowed positions by over 21% from 2001 to 2005.
- At U. T. San Antonio, the number of endowed positions almost tripled from 2001 to 2005.
- From 2001 to 2005, U. T. Tyler increased its endowed positions by more than 50 percent.
- From 2004 to 2005, 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, 2005.

Table II-11

Cumulative Honors at U. T. Academic Institutions

	Total	Arlington	Austin	Dallas
Nobel Prize	**4**		2	2
Pulitzer Prize	**19**		19	
National Academy of Sciences	**21**		19	2
National Academy of Engineering	**50**		49	1
American Academy of Arts and Sciences	**42**		41	1
American Law Institute	**23**		23	
American Academy of Nursing	**25**	12	13	

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 2004-2005 are listed below.

Table II-12

Faculty Awards Received at U. T. Academic Institutions, 2004-05

	Total	UTA	Austin	UTD	UTEP	UTPA
National Academy of Sciences	**1**		1			
National Academy of Engineering	**4**		4			
American Academy of Arts and Sciences	**4**		4			
American Academy of Nursing	**1**	1				
American Association for Advancement of Science Fellows	**2**		1		1	
American Council of Learned Societies Fellows	**1**		1			
Fulbright American Scholars	**8**	1	4	2		1
Guggenheim Fellows	**1**		1			
National Institutes of Health (NIH) MERIT	**1**			1		
NSF CAREER awards (excluding those who are also PECASE winners)	**16**	1	9	6		
Sloan Research Fellows	**2**		2			
NEH Fellowships	**5**		2	2	1	

Source: U. T. System Academic Institutions

Technology Transfer – System Overview

Table II-13

Aggregate U. T. System Technology Transfer, 2001-2004

Total New Invention Disclosures				Total Patents Issued				Total Licenses & Options Executed			
2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
455	476	523	486	99	102	99	119	109	97	152	140

Public Start-up Companies Formed				Total Gross Revenue Received from Intellectual Property			
2001	2002	2003	2004	2001	2002	2003	2004
18	16	12	12	$22,907,414	$26,555,136	$24,579,924	$29,668,635

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

- From 2001 to 2004, the U. T. System has increased the number of new invention disclosures, patents issued, licenses and options executed, and gross intellectual property revenue. The number of public start-up companies per year declined over this period.
- According to the U.S. Patent and Trademark Office, when academic and health-related institution patents are combined, in 2004 the U. T. System ranked fourth in number of patents issued (101). The University of California System topped the list, as it has for the past ten years, with 424 in 2004.
- In the most recent (FY 2004) Association of University Technology Managers' survey of university licensing, U. T. Southwestern Medical ranked 19, with $11.5 million in licensing fees. With gross intellectual property revenue in FY 2004 of $29.7 million, the U. T. System as a whole would have placed 11.

Table II-14

Patents Issued by U.S. Patent and Trademark Office
Top-Ranked Universities, 2002-2004

	2001		2002		2003		2004	
	Rank	# Patents	Rank	# Patents	Rank	# Patents	Rank	# Patents
U. of California	1	402	1	431	1	439	1	424
California Institute of Tech.	3	124	3	110	2	139	2	135
Massachusetts Institute of Tech.	2	125	2	135	3	127	3	132
University of Texas System	4	89	5	93	4	96	4	101
Johns Hopkins U.	6	80	6	81	7	70	5	94
Stanford U.	5	84	4	104	5	85	6	75
U. of Michigan	--	--	12	47	8	63	7	67
U. of Wisconsin System	7	73	6	81	6	84	8	64
U. of Illinois System	--	--	--	--	20	39	9	58
Columbia U.	--	--	13	45	9	61	10	52

Source: United States Patent and Trademark Office Press Releases (3/18/05, 2/9/2004, 2/26/2003), www.uspto.gov

Technology Transfer – U. T. Academic Institutions

Table II-15

Technology Transfer Trends at U. T. Academic Institutions

	Total New Invention Disclosures				Total Patents Issued				Total Licenses & Options Executed			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
Arlington	5	11	21	17	3	2	2	2	1	1	0	0
Austin	85	83	69	87	20	21	28	32	34	24	20	23
Dallas	16	12	33	26	5	5	6	5	6	0	2	2
El Paso	7	10	10	11	0	0	0	0	1	0	0	1
Total Academic Institutions	**113**	**116**	**133**	**141**	**28**	**28**	**36**	**39**	**42**	**25**	**22**	**26**

	Public Start-up Companies Formed				Total Gross Revenue Received from Intellectual Property			
	2001	2002	2003	2004	2001	2002	2003	2004
Arlington	0	1	0	2	$92,074	$113,250	$35,606	$48,871
Austin	11	4	6	6	$2,768,769	$5,008,592	$4,301,165	$5,408,476
Dallas	0	0	0	0	$241,799	$47,971	$149,093	$110,904
El Paso	0	0	0	0	$750	$750	$30,150	$16,633
Total Academic Institutions	**11**	**5**	**6**	**8**	**$3,103,392**	**$5,170,563**	**$4,516,014**	**$5,584,884**

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 almost two-thirds between 2001 and 2004, to 32.
- Gross revenue from intellectual property doubled at U. T. Austin between 2001 and 2004.
- However, the pace of technology transfer has been comparatively slow over the past three years due to a combination of factors including recent economic downsizing which reduced the amount of venture activity and product innovation.
- The development associated with major investments, like U. T. Austin's and U. T. Dallas's Strategic Partnership for Research in Nanotechnology (see examples of research collaborations, p. II-25-28) and the establishment of a U. T. System Office of Research and Technology Transfer, are expected to help reverse this trend.
- 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, 38 percent of instructional faculty are women; most U. T. System academic institutions meet or exceed this figure (*Chronicle of Higher Education*, 12.3.04).

Table II-16

Tenure/Tenure-Track Faculty Headcount: Professors, Associate Professors, Assistant Professors, Instructors

Fall	2000	2001	2002	2003	2004
Arlington	535	525	524	532	543
Austin	1,800	1,833	1,904	1,897	1,926
Brownsville/TSC	208	222	219	225	236
Dallas	279	284	309	331	337
El Paso	410	426	437	441	468
Pan American	317	325	351	376	388
Permian Basin	73	78	80	79	94
San Antonio	405	421	450	449	516
Tyler	131	138	150	146	152

Source: Texas Higher Education Coordinating Board and UTB/TSC

Table II-17

Headcount: All Instructional Staff*

Fall	2000	2001	2002	2003	2004
Arlington	1,192	1,216	1,255	1,302	1,365
Austin	3,265	3,308	3,418	3,342	3,420
Brownsville/TSC	449	466	495	526	558
Dallas	596	655	716	743	774
El Paso	867	923	956	919	997
Pan American	738	628	667	716	772
Permian Basin	146	139	158	192	212
San Antonio	949	999	1,089	1,159	1,312
Tyler	257	285	302	293	350

*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

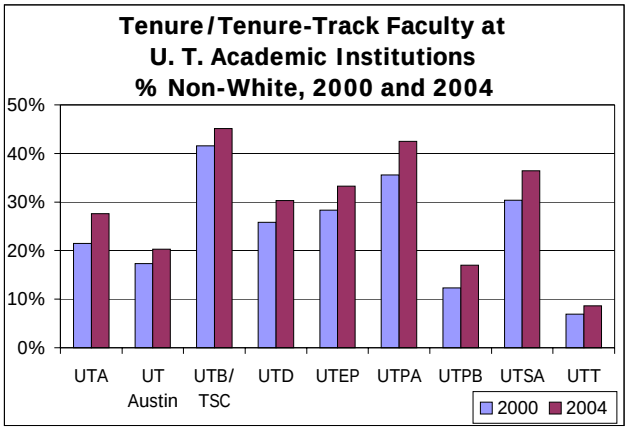


Figure II-9

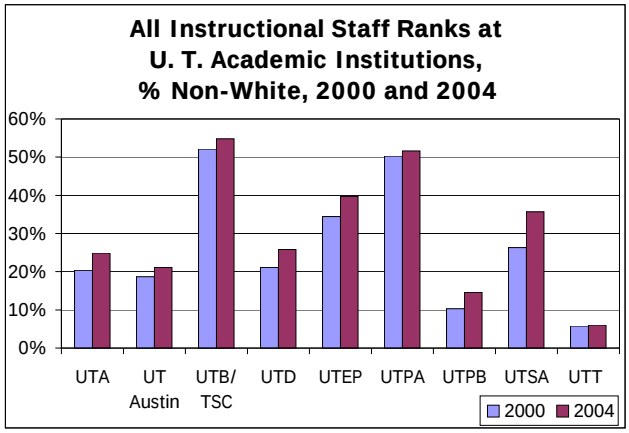


Figure II-10

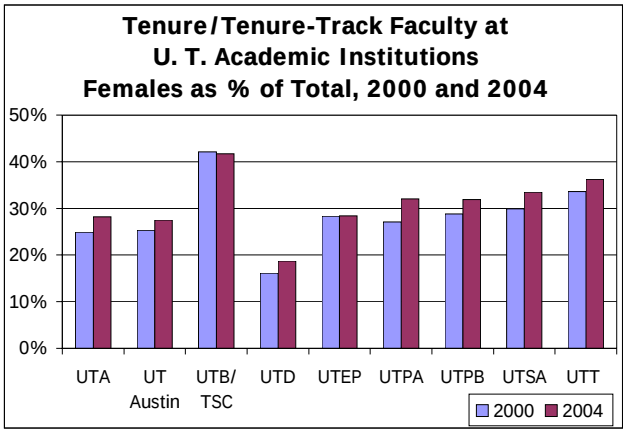
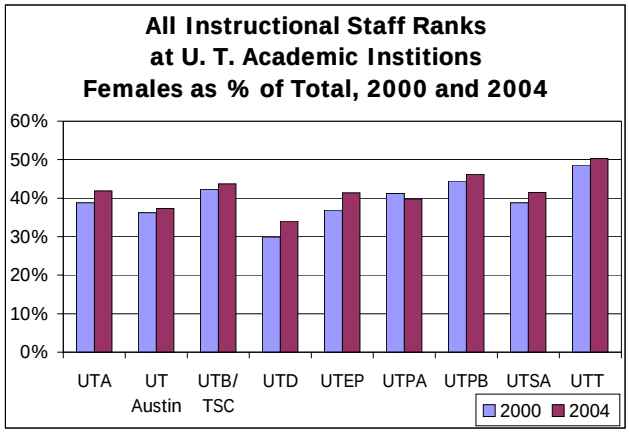


Figure II-11



Staff Headcount

Table II-18

Administrative, Other Non-Faculty and Student Employee Headcount at U. T. Academic Institutions*

	AY	01-02	02-03	03-04	04-05	05-06
Arlington	Administrative	206	346	302	307	327
	Other, Non-Faculty	2,014	1,373	1,376	1,440	1,513
	Student Employees	1,026	1,737	1,724	2,145	2,112
Austin	Administrative	664	691	684	708	706
	Other, Non-Faculty	9,647	9,642	9,235	9,549	9,619
	Student Employees	8,676	8,948	8,853	9,058	9,179
Brownsville/TSC	Administrative	93	105	109	111	114
	Other, Non-Faculty	1,187	1,137	1,104	1,117	1,017
	Student Employees	1	N/A	N/A	N/A	212
Dallas	Administrative	111	123	101	103	110
	Other, Non-Faculty	1,179	1,281	1,341	1,384	1,530
	Student Employees	456	919	1,005	1,070	1,136
El Paso	Administrative	377	374	327	303	292
	Other, Non-Faculty	1,198	1,219	1,155	1,169	1,227
	Student Employees	1,672	1,772	1,638	1,815	1,882
Pan American	Administrative	76	84	82	80	89
	Other, Non-Faculty	1,521	1,366	1,434	1,453	1,495
	Student Employees	601	780	812	660	715
Permian Basin	Administrative	37	37	37	36	42
	Other, Non-Faculty	146	160	167	179	189
	Student Employees	165	201	210	260	229
San Antonio	Administrative	189	213	224	243	266
	Other, Non-Faculty	1,562	1,630	1,828	1,984	2,145
	Student Employees	616	648	731	894	993
Tyler	Administrative	36	40	37	40	43
	Other, Non-Faculty	231	246	261	293	296
	Student Employees	173	227	240	320	359

*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

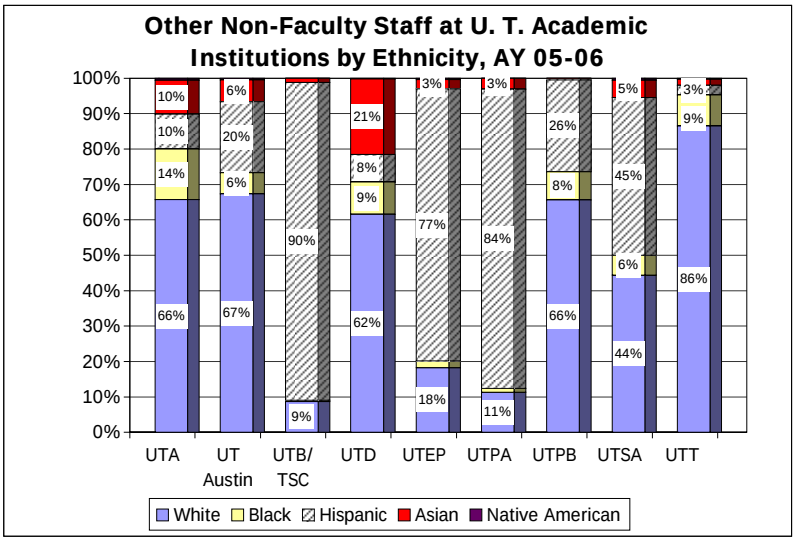


Figure II-13

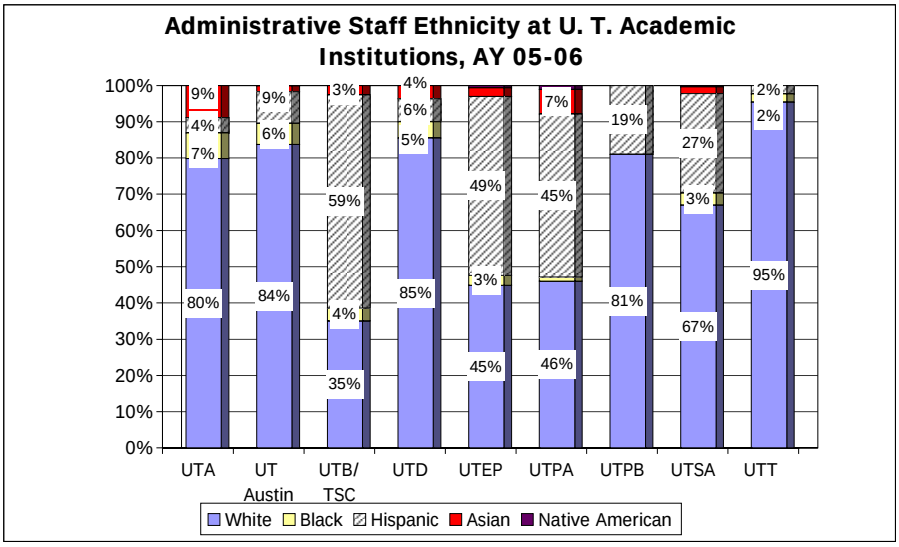
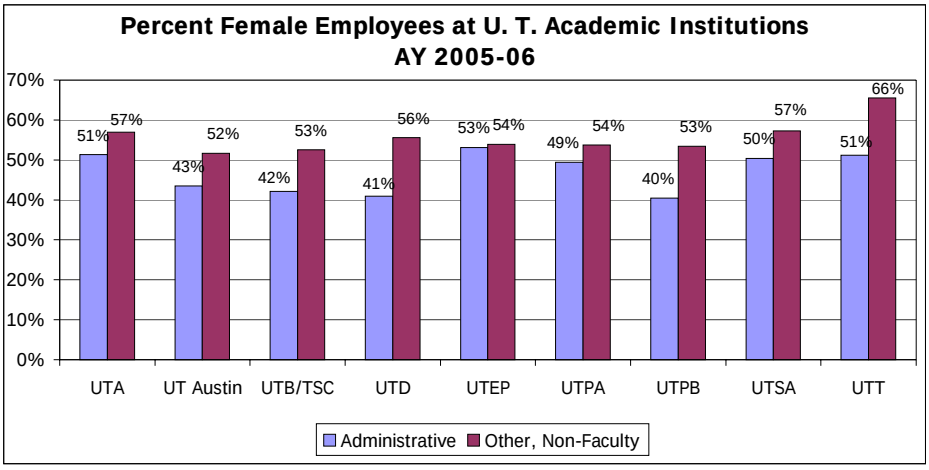


Figure II-14



Student/Faculty Ratios

Table II-19

FTE Student / FTE Faculty Ratio at U. T. Academic Institutions

	Fall	2000	2001	2002	2003	2004
Arlington	FTE Students	14,386	15,322	17,160	18,467	18,592
	FTE Faculty	722	752	782	834	866
	Ratio	20 to 1	20 to 1	22 to 1	22 to 1	21 to 1
Austin	FTE Students	42,772	43,629	45,700	45,144	44,572
	FTE Faculty	2,035	2,101	2,167	2,252	2,320
	Ratio	21 to 1	21 to 1	21 to 1	20 to 1	19 to 1
Brownsville/TSC	FTE Students*	5,796	5,838	6,319	6,758	7,262
	FTE Faculty**	325	348	359	378	403
	Ratio	18 to 1	17 to 1	18 to 1	18 to 1	18 to 1
Dallas	FTE Students	7,404	8,507	9,192	9,797	10,282
	FTE Faculty	374	380	424	468	489
	Ratio	20 to 1	22 to 1	22 to 1	21 to 1	21 to 1
El Paso	FTE Students	11,270	12,087	12,816	13,497	13,645
	FTE Faculty	618	651	678	656	711
	Ratio	18 to 1	19 to 1	19 to 1	21 to 1	19 to 1
Pan American	FTE Students	9,179	9,821	10,521	11,689	12,692
	FTE Faculty	470	476	511	556	616
	Ratio	20 to 1	21 to 1	21 to 1	21 to 1	21 to 1
Permian Basin	FTE Students	1,554	1,637	1,847	2,129	2,343
	FTE Faculty	92	99	106	118	133
	Ratio	17 to 1	17 to 1	17 to 1	18 to 1	18 to 1
San Antonio	FTE Students	13,274	14,264	15,934	18,203	19,565
	FTE Faculty	529	594	660	696	760
	Ratio	25 to 1	24 to 1	24 to 1	26 to 1	26 to 1
Tyler	FTE Students	2,316	2,502	2,862	3,390	3,891
	FTE Faculty	194	204	218	217	246
	Ratio	12 to 1	12 to 1	13 to 1	16 to 1	16 to 1

*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 has increased faster than for faculty at most institutions. As a result, the ratio of FTE students to FTE faculty has increased slightly at seven institutions. It has remained stable at U. T. Brownsville/TSC.
- Reflecting its strategic plan, the ratio of FTE students to FTE faculty has declined at U. T. Austin.

Tenure/Tenure-Track and Professional Faculty Teaching Lower Division Courses

Table II-20

Faculty Teaching Lower Division Semester Credit Hours at U. T. Academic Institutions

	Faculty Rank	AY 00-01	AY 01-02	AY 02-03	AY 03-04	AY 04-05
Arlington	Tenure/Tenure-Track	40.0%	40.3%	36.8%	36.1%	31.6%
	Professional	49.1	51.2	53.8	56.0	59.6
Austin	Tenure/Tenure-Track	48.2	46.0	45.6	49.3	52.4
	Professional	32.3	35.2	36.2	33.6	29.7
Brownsville/TSC*	Tenure/Tenure-Track	64.7	71.0	64.4	59.4	57.9
	Professional	35.3	29.0	35.6	40.6	42.1
Dallas	Tenure/Tenure-Track	35.6	33.3	29.8	29.6	30.8
	Professional	60.4	63.1	65.9	65.8	63.0
El Paso	Tenure/Tenure-Track	47.7	40.1	39.3	41.9	40.1
	Professional	48.6	54.6	55.9	54.2	53.2
Pan American	Tenure/Tenure-Track	45.8	46.6	45.4	48.0	43.0
	Professional	51.9	48.8	52.3	49.0	54.5
Permian Basin	Tenure/Tenure-Track	64.2	67.8	51.2	48.0	47.2
	Professional	32.8	31.6	46.9	50.3	50.7
San Antonio	Tenure/Tenure-Track	44.1	44.4	45.6	43.1	38.5
	Professional	53.1	53.9	52.4	54.2	59.1
Tyler	Tenure/Tenure-Track	73.9	66.3	71.5	62.4	57.9
	Professional	26.1	33.7	26.9	36.3	40.6

*TSC data not included.

Source: Texas Higher Education Coordinating Board

- This measure illustrates the distribution of lower-division teaching between tenure/tenure-track and professional faculty. Teaching by both groups is necessary to cover all scheduled classes within the resources available to each institution.
- Professional faculty include instructors who bring special expertise but are not on tenure track: adjuncts, those with special appointments, visiting professors, emeritus professors, and lecturers; this group excludes teaching assistants.
- Since 2000, the proportion of tenure/tenure-track faculty teaching lower division semester credit hours has decreased at every U. T. System academic institution except U. T. Austin. At U. T. Austin, where the proportion began to increase again in 2004, the campus goal is to have at least 60 percent of undergraduate courses taught by tenure/tenure-track faculty.
- 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 01	FY 02	FY 03	FY04	FY05
Arlington	25	25	30	27	34
Austin	390	379	365	385	415
Brownsville/Texas Southmost	0	1	6	4	8
Dallas	41	49	39	56	36
El Paso	3	2	7	17	24
Pan American	--	--	1	2	2
Permian Basin	0	1	2	0	0
San Antonio	18	21	27	29	51

*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 36 percent; by 700 percent at U. T. Brownsville/Texas Southmost College (since FY 02, the first year UTB/TSC had postdoctoral fellows); also by 700 percent at U. T. El Paso; and nearly tripled 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

Examples of Research Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
U. T. Arlington		
Optical Imaging	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: UT Arlington, UTSWMC Dallas	
Strategic Partnership for Research in Nanotechnology	Fosters nanotechnology-based education and research, and university/industry technology transfer in Texas.	UT Arlington, UT Austin, UT Dallas, UT Brownsville, UT Pan American, Rice University, and the Air Force Materials Research Labs (Dayton, Ohio)
Experimental High Energy Physics	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.	UT Pan American, Texas Tech University, Southern Methodist University, Rice University, Fermi National Accelerator Lab
U. T. Austin		
College of Pharmacy	The College of Pharmacy and The University of Texas Health Science Center at San Antonio is conducting a three-year, $2 million grant from the United States Department of Health and Human Services to establish the College of Pharmacy Hispanic Center of Excellence. In addition, the college collaborates with the M.D. Anderson Cancer Center Science Park at Smithville in the conduct of a Joint National Institutes of Health (NIH) Center Grant.	M.D. Anderson Cancer Center Science Park at Smithville
School of Nursing	The University of Texas at Austin's School of Nursing is partnering with the University of New Mexico's Department of Nursing in the Southwest Partnership Center for Nursing Research on Health Disparities in the United States. The goals of the Center are (1) to increase the capacity and productivity of nurses conducting research to reduce and eliminate health disparities among rural, low-income Mexican Americans and American Indians, and (2) to prepare and mentor novice nurse researchers who are members of minority ethnic groups to gain proficiency in planning and implementing research, and in evaluating and disseminating their findings. Collaborators: University of New Mexico Department of Nursing	

Examples of Research Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
Vice President for Research	UT Austin has entered into a Memorandum of Understanding (MOU) with Sandia National Laboratories (PI is Dr. Juan Sanchez). The purpose of the MOU is to provide a basis for interactions between UT Austin faculty and staff and Sandia researchers on joint research projects and short term research projects. Sandia and UT Austin will focus on the following areas: 1) collaboration between Sandia staff and UT Austin faculty, staff and students; 2) participation of UT Austin students, post-docs, faculty and staff in large scale US Department of Energy projects located at Sandia; 3) projects that require a range of capabilities not available at either institution alone; 4) access to funding resources not normally available to either party along; 5) involvement of Sandia staff in teaching university courses and in directing graduate students; 6) opportunities for short-term personnel exchanges; 7) availability of technical training and job-related continuing education for Sandia staff; and 8) opportunities for collaborative use of specialized research equipment. Specific areas of focus include materials science and engineering research; nanoscale science, engineering and technology; chemical and biochemical sensors; computational science and engineering; homeland security and countermeasures; hypervelocity impact physics; and other joint projects. Collaborators: Sandia National Laboratories	
U. T. Brownsville		
The International Virtual Data Grid Laboratory (iVDGL)	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.	Over 40 universities and laboratories in U.S., Europe and Asia
Bahia Grande Restoration Project	Provides quantitative assessment of the recovery of the Bahia Grande (lower Laguna Madre) at the system level using integrated and comprehensive approaches and partnerships.	USFWS, UT Pan American, Texas A&M University, Texas A&M University-Corpus Christi and Ocean Trust
Project EXPORT	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.	School of Public Health and UTHSC-Houston
U. T. Dallas		
Strategic Partnership for Research in Nanotechnology	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, UT Arlington, “Nano on the Border” group
Materials Science & Engineering Collaboration	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.	UT Arlington
Institute of Biomedical Science & Technology	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, UT Arlington, Texas A&M, Texas A&M Health Science Center and UT Brownsville

Examples of Research Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
U. T. El Paso		
Texas Engineering and Technical Consortium: Launching the Texas Engineering Education Pipeline	Collaborative research with Engineering and Education partners to increase retention of undergraduate students in engineering, utilizing innovative pedagogical strategies and studying long- and short-term impacts on student retention.	UTEP Colleges of Engineering and Education, Baylor University, Lamar University, Prairie View A&M University, Rice University, Southern Methodist University, St. Mary's University of San Antonio, Texas A & M University, UT Arlington, UT Austin, UT San Antonio
Fund for the Improvement of Post-Secondary Education (FIPSE) – Latino Student Success at Hispanic–Serving Institutions	The project developed tools that help institutions assess the effectiveness of existing resource and strategies in retaining and graduating Latino Students and identify commonalities through NSSE data, IPEDS data, self-reported institutional data, and Title V grants.	California State University Los Angeles, California State University Dominguez Hills, CUNY Lehman College, CUNY New York City College of Technology, UTSA
National Science Foundation-ADVANCE Transformation for Faculty Diversity	A program dedicated to the recruitment, retention, and advancement of women and underrepresented minorities employed in academic science and engineering disciplines.	University of California-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
U. T. Pan American		
U.S. Hispanic Nutrition and Research Education Center	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
Advanced Process Technologies for Controlling Functional Nanostructures and Polymer/Nanotube Composites	Investigates the composites for promising applications of nanotechnology such as photocells, photo detectors, electroluminescent displays, and EMI shielding.	Rice University
Rapid Response Manufacturing	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 Tecnólogico y de Estudios Superiores de Monterrey or ITESM)
U. T. Permian Basin		
Center for Energy and Economic Diversification (CEED)	Provides research, training, and technology transfer activities on issues facing the region's primary industry of energy, including research on bio-mass conversion into fuel, energy security, and alternative energy technologies and economics.	U.S. Dept. of Energy, The Welch Foundation

Examples of Research Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
Technical Investigation of Subsidence and Collapse in Winkler County (CEED)	Addresses concerns regarding potential health and safety, damage to various facilities and infrastructure and threat to the quality of municipal water supplies.	U.S. Geological Survey, Texas Bureau of Economic Geology
Bacterial heme transport and hemoglobin expression	Research collaboration of Biology 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
U. T. San Antonio		
Future of the Region, Inc.	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.
San Antonio Life Sciences Institute (SALSI)	-Established in 2003 by Texas House Bill 1716 -Purposes: 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
Center of Excellence in Biotechnology & Bioprocessing Education & Research (CEBBER)	-Established in 2004 -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		
Launching the Texas Engineering Education Pipeline: Deploying the Infinity Project Statewide	Helps educators deliver a maximum of engineering exposure with a minimum of training, expense, and time; to help students see the real value of math and science and its varied applications to high tech engineering.	UT Austin, UT Dallas, UT Arlington, SMU, Rice, Baylor, Texas Instruments
College of Nursing	The Aging RN Workforce: To decrease risks of injury/illness in RNs and other personnel via environmental interventions. Grant pending for this project; pilot project initiated Fall 2005	UTHC-Tyler medical staff, Mother Frances Hospital, East Texas Medical Center, Good Shepherd Medical Center, Longview Regional Medical Center, Laird Hospital
College of Nursing	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

Examples of Educational Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
U. T. Arlington		
The Texas TWO-STEP Projects	Offers seamless transition pathways from high schools to community colleges and on to universities. Collaborators: Dallas County Community College District, Tarrant County College District, Collin County Community College District, Texas A & M University-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	
Closing the Gap: Ethnic/Racial Diversity in Nursing	To increase the number of underrepresented minorities enrolled and graduating with degrees in nursing.	Texas Health Resources, St. Paul Hospital, Zale Lipshy University Hospital, Parkland Health & Hospital System, Methodist Medical Center, Harris Methodist Fort Worth Hospital, John Peter Smith Health Network, North Texas Division of HCA, Medical City of Dallas
UTA School of Social Work/West Texas A&M University (WTAMU) Joint Degree Program	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 area.	West Texas A&M University, Canyon
U. T. Austin		
College of Pharmacy Partnerships and Cooperative Pharmacy Program	Supports professional and graduate education and training. Cooperative Pharmacy Program with Hispanic Serving Institutions and the Joint Pharm. D. Program. Strengths of these partnerships lead to establishment of the College of Pharmacy Hispanic Center of Excellence in September 2003. The cooperative program provides the Doctor of Pharmacy degree opportunities for South Texas institutions, graduates of the cooperative programs, and pharmacy professionals to meet the needs of the state, especially in traditionally underserved areas.	UT El Paso, UT Pan American, UTHSC-San Antonio, M.D. Anderson Cancer Center Science Park

Examples of Educational Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
Vaughn Gross Center for the Reading and Language Arts	Dedicated to scientifically based reading research, the Vaughn Gross Center for Reading and Language Arts at The University of Texas at 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	
School of Law Recruiting Initiatives	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.	UT System Institutions, Texas A&M Institutions, HBCU Institutes.
U. T. Brownsville		
Cooperative Doctoral Program in Education	Increases access to doctoral education for residents in the Lower Rio Grande Valley, particularly Hispanics. Eighty-two Ed.D. degrees have been awarded in the 17 years of this collaborative.	University of Houston
Health Careers Opportunity Program (HCOP) and Joint Admission Medical Program (JAMP)	Provides underrepresented minorities access to medical schools through facilitated admissions programs (**E**arly **M**edical **S**chool **A**cceptance **P**rograms).	UTMB 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
Pre-medical Opportunity Programs	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		
Alliance for Medical Management Education	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.	UT Southwestern Medical Center
Urban Collaborative for Educational Leadership	Provides a "grow-your-own" principal preparation program to help prepare a diverse group of individuals to serve as principals with partner ISDs; will certify approximately 20 new principals each year for the participating ISDs.	Dallas ISD, Richardson ISD, UT Arlington

Examples of Educational Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
Dallas Cochlear Implant Program	Diagnoses the needs and prospects of deaf children for cochlear implants; to carry out research and apply treatment on correction of profound hearing loss in children.	UT Southwestern Medical Center Children's Medical Center
U. T. El Paso		
UTEP/UT Austin Cooperative Pharmacy Program	Improving pharmacy manpower deficiencies of the region; offers pharmacy as a career opportunity for El Paso students; provides research opportunities for an underserved, understudied border population.	UT Austin, UT Pan American, UT San Antonio, many healthcare organizations in the area
Project Podemos	Development of effective models of parental engagement strategies through engagement of faculty, schools, and communities with pre-service teacher education students as action researchers.	AACTE (American Association of College Teacher Education), MetLife, UNT, UCF, USF, UI.
Title V Grant-EPCC/UTEP Transfer Program	A program to develop the transfer infrastructure to enable EPCC students to self-direct their transfer to UTEP, to develop a Transfer Center at EPCC's Valle Verde campus, to expand the Transfer Center at UTEP, and to develop Transfer Seminars and a communication plan to recruit and inform EPCC students about UTEP.	El Paso Community College
U. T. Pan American		
VaNTH Biomedical Engineering	Develops learning modules for bioengineering based on effective learning theory.	MIT, Vanderbilt University, Northwestern University, UT Austin, Harvard, UT San Antonio
Hispanic Pharmacy Center of Excellence (HCOE)	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, UT El Paso, UTHSC-San Antonio, Health Resources and Services Administration
Undergraduate Research Training Program Focused on Plant Responses	Provides research opportunities for undergraduate students in the sciences, especially biology.	Purdue University
U. T. Permian Basin		
UT TeleCampus Distance Education Programs	Delivers courses and degree programs to students throughout Texas and to sites throughout the world; delivers coursework leading to Certification as a Superintendent for educational administrators located in Texas as well as throughout the world.	UT TeleCampus, UT Arlington, UT Brownsville, UT Dallas, UT El Paso, UT Pan American, UT San Antonio, UT Tyler
Regional Community College Collaborations	Provides advising staff to assist entering Odessa College students to plan for an associate's degree and subsequent UTPB bachelor's degree. Expands educational opportunities for the citizens of Midland and surrounding area with the offering of UTPB degrees and teacher certification programs at the Midland College Teaching Site. Provides collaborative program funding through a Hispanic-Serving Institutions grant partnership with Howard College.	Odessa College Midland College Howard College

Examples of Educational Collaborations – U. T. Academic Institutions		
	Purpose and Outcomes	Collaborators
International University Collaborations	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. 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	Universidad Autonoma de Chihuahua University of Petroleum of Sheng Li Oil Field, Applied Petroleum Technology Academy, Midland Chamber of Commerce
U. T. San Antonio		
UTSA-Alamo Community College District Partnership	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 biotechnololgy; and creating a deferred admission program allowing applicants to UTSA who do not meet admission requirements to begin at an ACCD college.	UTSA-Alamo Community College District Partnership
Prefreshman Engineering Program (PREP)—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; The University of Texas at Arlington, The University of Texas at Brownsville, The University of Texas at El Paso, University of Houston, Texas A&M University at Laredo, Huston-Tillotson University (Austin), Del Mar College (Corpus Christi), University of Texas Pan American (Edinburgh), Texas Wesleyan University (Fort Worth), Texas State Technical College (Harlingen), Texas Tech University (Lubbock), Community College of Denver, Inter American University of Puerto Rico, Hostos Community College (Jersey City, NJ), New Mexico State University (Las Cruces, NM), and Florida International University (Miami, FL); Texas Department of Transportation, and 43 Texas school districts.	
Bridge Project	BRIDGE seeks to advance education and training in San Antonio to support the city's economic development objectives. Our purpose is to bring together numerous stakeholder groups to promote advances in Science Technology, Engineering and Mathematics (STEM) in the San Antonio area. The main goals of the project are to create seamless K-16 system of education, where curriculum and instructional goals, particularly with STEM related programs. http://www.utsa.edu/bridge/	Approximately ten school districts and eight higher education partners are involved in this effort to improve, attract, create and sustain businesses and industries with high paying jobs for San Antonio.
U. T. Tyler		
MS in Environmental and Occupational Therapy	Proposed degree to meet the critical needs for Occupational Health and Public Health degrees for medical residents and other students.	UTHC-Tyler Dept. of Occupational Health
MBA On-Line	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.	UT TeleCampus and all UT institutions except UT Austin
MSN-Nurse Practitioner degree (Family, Pediatric, Geriatric)	Increasing the number of advanced nurse practitioners in the region; to increase the quality of health care for residents of rural East Texas.	UTHC-Tyler, Texas Tech University Health Sciences Center School of Nursing

Contextual Measure: Faculty Salary Trends

Table II-24

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

FY	2001	2002	2003	2004	2005	average annual % change
Professor						
Arlington	$75,217	$78,030	$80,475	$80,498	$86,074	3.5%
Austin	94,286	98,838	103,157	103,521	110,223	4.0
Brownsville/TSC*	56,812	58,771	59,984	61,517	66,808	4.2
Dallas	86,456	90,244	97,516	99,363	103,225	4.6
El Paso	67,855	73,133	75,139	76,147	83,174	5.3
Pan American	66,451	67,792	70,807	70,068	76,212	3.5
Permian Basin	65,532	65,918	69,375	72,830	73,657	3.0
San Antonio	72,701	79,785	85,104	90,687	93,204	6.4
Tyler	62,891	65,869	68,343	70,831	72,275	3.5
Associate Professor						
Arlington	$55,091	$57,277	$60,165	$60,633	$65,192	4.3
Austin	60,670	63,502	65,913	64,965	70,348	3.8
Brownsville/TSC*	50,970	52,551	54,584	54,998	56,670	2.7
Dallas	63,332	67,436	72,634	72,494	80,141	6.1
El Paso	51,468	56,391	57,690	59,121	64,579	5.9
Pan American	55,757	56,850	59,877	59,394	65,365	4.1
Permian Basin	49,698	52,034	53,121	53,736	56,747	3.4
San Antonio	56,991	62,753	66,385	67,916	68,092	4.6
Tyler	50,422	52,014	53,598	53,956	58,284	3.7
Assistant Professor						
Arlington	$49,269	$52,274	$55,632	$56,417	$59,669	4.9
Austin	57,569	59,919	61,674	62,510	67,009	3.9
Brownsville/TSC*	47,007	47,443	47,989	49,917	50,477	1.8
Dallas	67,561	74,716	74,351	74,210	79,449	4.2
El Paso	46,981	48,287	50,864	53,875	56,842	4.9
Pan American	47,060	48,214	51,357	50,633	53,465	3.3
Permian Basin	41,935	45,841	48,416	50,077	51,873	5.5
San Antonio	46,289	50,270	53,680	56,810	58,482	6.0
Tyler	45,184	48,216	47,435	46,917	51,227	3.3
Instructor						
Austin	$40,033	$45,807	$58,090	$44,143	$47,377	6.1
Brownsville/TSC*	41,453	42,494	47,057	46,238	51,818	5.9
San Antonio	40,100	40,750	51,204	60,064	69,632	15.1

* Salary information available for Brownsville faculty only

Source: Texas Higher Education Coordinating Board

Table II-25

Average Faculty Salaries in Public Universities, FY 2005
Texas and the 10 Most Populous States

	Professor	Associate Professor	Assistant Professor	Instructor
New Jersey	$106,596	$77,547	$61,261	$41,741
California	98,195	69,320	58,611	40,636
Michigan	96,627	68,954	57,071	38,649
Pennsylvania	101,690	72,253	58,926	42,256
New York	92,572	68,850	56,678	42,776
Ohio	92,831	66,232	54,454	37,224
Illinois	92,408	65,813	56,310	36,107
Florida	88,926	64,381	55,817	40,074
N. Carolina	90,425	65,558	57,199	49,581
Georgia	90,860	63,437	53,124	37,527
10 States Average	95,517	67,974	56,921	39,427
National Average	90,153	65,302	54,920	38,642
Texas	**$91,529**	**$64,400**	**$56,026**	**$39,512**

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 and U. T. Dallas, the average salary of professors is higher than the national average and the 10 most populous state averages. At U. T. San Antonio, it is higher than the national average.
- 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. At U. T. Pan American, it is slightly above the national average.
- The average salary of assistant professors at U. T. Arlington, U. T. Austin, U. T. Dallas, and U. T. San Antonio is higher than the national and 10 most populous states' averages. At U. T. El Paso, it is higher than the national average.

Table II-26

U. T. Academic Institutions Average Tenure/Tenure-Track Faculty Salaries

FY	2001	2002	2003	2004	2005	average annual % change
Arlington	$62,367	$64,379	$66,985	$66,726	$70,956	3.3%
Austin	78,326	81,589	85,080	84,911	90,156	3.6
Brownsville/TSC*	49,933	50,894	52,401	53,957	55,748	2.8
Dallas	74,651	79,542	83,347	84,332	89,812	4.8
El Paso	55,131	58,732	60,749	62,244	67,032	5.0
Pan American	55,513	56,268	59,143	58,489	62,711	3.1
Permian Basin	49,551	52,380	54,196	56,641	58,566	4.3
San Antonio	58,038	63,115	67,026	70,567	72,211	5.6
Tyler	52,426	54,441	55,521	56,532	59,427	3.2

* Salary information for Brownsville faculty only

Source: Texas Higher Education Coordinating Board

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

Research Funding Trends 2001-2005 (all sources)

- In FY 2005, U. T. System health-related institution research and research-related expenditures totaled $1.115 billion, a 6.5 percent increase over the previous year. From 2001 to 2005, research and research-related expenditures have increased 47 percent, an average of nearly 12 percent per year.
- Among Texas health-related institutions, U. T. System health-related institutions ranked first in research and development expenditures in FY 2004. These expenditures comprised more than 49 percent of the $2.253 billion total in Texas public university and health-related institution research and research-related expenditures in 2004.

Table II-27

Total U. T. Health-Related Institution Research and Research-Related Expenditures FY 2001-2005

	FY 01	FY 02	FY 03	FY 04	FY 05
Total Health-Related	$758,730,912	$896,756,996	$970,691,322	$1,046,463,612	$1,114,736,515

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

- For FY 2004, five U. T. System health-related institutions are among the top 10 Texas public institutions in research expenditures: U. T. Southwestern Medical Center (3), U. T. M. D. Anderson Cancer 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 2005 – U. T. Health-Related Institutions

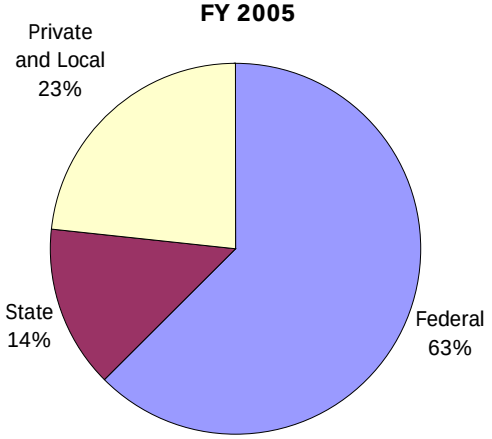
	Federal	State	Private	Local	**Total**
SWMC	$202,057,099	$24,387,086	$82,773,473	$11,584,226	**$320,801,884**
UTMB	117,235,448	11,684,693	20,624,026	413,295	**$149,957,462**
HSC-H	116,397,631	14,387,016	22,877,956	2,857,092	**$156,519,695**
HSC-SA	95,125,850	4,805,126	24,433,128	9,694,431	**$134,058,535**
MDACC	160,953,856	99,676,919	69,828,395	11,519,509	**$341,978,679**
HC-T	4,956,399	2,594,710	833,377	3,035,774	**$11,420,260**
Total	**$696,726,283**	**$157,535,550**	**$221,370,355**	**$39,104,327**	**$1,114,736,515**

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 2005



- The federal government provides the majority of research and research-related funding – 63 percent.
- Private and local sources provide the next largest proportion – 23 percent.
- Fourteen percent of research funds expended in 2005 came from state sources.

Sponsored Revenue

Table II-29

Sponsored Revenue – U. T. Health-Related Institutions, FY 2001-2005

($ in thousands)

	FY 01	FY 02	FY 03	FY 04	FY 05
SWMC	$280,848	$314,345	$337,979	$381,945	$386,234
UTMB	125,397	169,547	183,131	174,093	199,592
HSC-H	267,262	204,448	228,623	235,442	240,446
HSC-SA	116,495	156,520	162,337	163,255	170,069
MDACC	126,920	158,868	180,502	211,442	212,727
HC-T	7,190	5,740	11,897	11,479	15,143
Total Health-Related	**$924,112**	**$1,009,468**	**$1,104,469**	**$1,177,656**	**$1,224,211**

Source: Exhibit B or 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 2001 to 2005, sponsored revenue has increased by 32.5 percent at U. T. System health-related institutions.

Table II-30

Sponsored Revenue at U. T. Health-Related Institutions by Source, FY 2005

($ in thousands)

	Federal	State	Local	Private	**Total**
SWMC	$208,901	$6,498	$116,371	$54,464	**$386,234**
UTMB	121,697	31,519	1,822	44,554	**199,592**
HSC-H	140,784	9,451	73,045	17,166	**240,446**
HSC-SA	112,500	2,466	40,948	14,155	**170,069**
MDACC	162,993	9	0	49,725	**212,727**
HC-T	6,930	1,039	5,822	1,352	**15,143**
Total	**$753,805**	**$50,982**	**$238,008**	**$181,416**	**$1,224,211**

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.

Federal Research Expenditures

- Federal research expenditures are considered the national benchmark for research productivity at universities.
- From 2001 to 2005, these expenditures have increased by over 55 percent at four U. T. System health-related institutions.

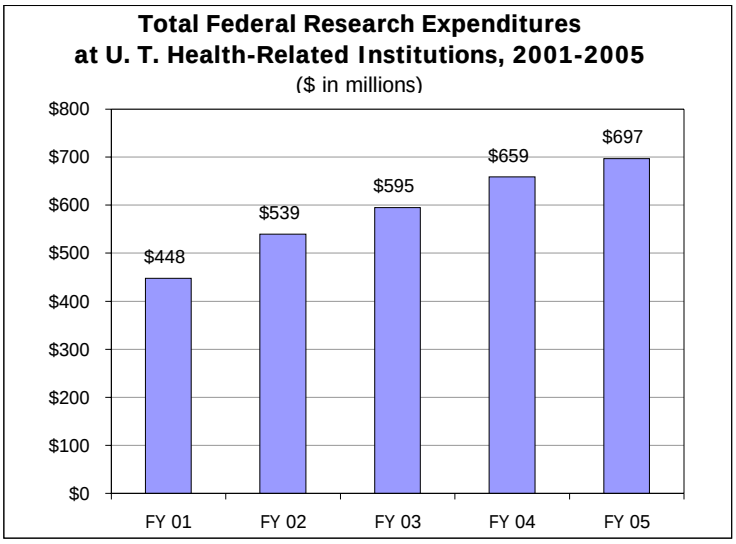
Table II-31

Federal Research Expenditures by U. T. Health-Related Institutions FY 2001-2005

FY	2001	2002	2003	2004	2005	% change FY 04-05	% change FY 01-05
SWMC	$131,820,109	$155,257,992	$177,133,099	$200,887,545	$202,057,099	0.6%	53.3%
UTMB	63,274,494	78,100,188	93,039,583	102,490,775	117,235,448	14.4	85.3
HSC-H	91,267,003	101,738,767	111,170,193	110,438,174	116,397,631	5.4	27.5
HSC-SA	66,852,477	83,760,708	86,854,337	89,661,741	95,125,850	6.1	42.3
MDACC	91,543,036	117,633,074	122,868,912	150,528,694	160,953,856	6.9	75.8
HC-T	3,063,099	2,783,554	3,493,251	4,659,021	4,956,399	6.4	61.8
Total	**$447,820,218**	**$539,274,283**	**$594,559,375**	**$658,665,950**	**$696,726,283**	**5.8%**	**55.6%**

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 2001	2002	2003	2004	2005
SWMC	Research Expenditures	$222,378,235	$263,958,410	$277,956,511	$314,403,028	320,801,884
	Formula-Derived General Revenue	77,985,287	80,813,651	80,802,981	71,498,979	71,463,445
	Research Expenditures/GR	285%	327%	344%	440%	449%
UTMB	Research Expenditures	91,088,019	109,139,538	129,860,903	132,768,911	149,957,462
	Formula-Derived General Revenue	75,036,601	76,554,573	76,605,352	67,860,400	67,807,752
	Research Expenditures/GR	121%	143%	170%	196%	221%
HSC-H	Research Expenditures	128,161,248	140,827,726	152,117,064	150,220,206	156,519,695
	Formula-Derived General Revenue	102,213,193	110,145,604	110,149,899	99,859,199	99,905,775
	Research Expenditures/GR	125%	128%	138%	150%	157%
HSC-SA	Research Expenditures	97,638,253	112,232,653	119,279,555	124,912,722	134,058,535
	Formula-Derived General Revenue	97,667,518	99,975,785	100,068,763	89,333,722	88,514,960
	Research Expenditures/GR	100%	112%	119%	140%	151%
MDACC	Research Expenditures	210,236,589	262,144,960	282,260,250	313,916,355	341,978,679
	Formula-Derived General Revenue	21,422,773	24,230,050	24,230,050	24,307,634	24,257,992
	Research Expenditures/GR	981%	1082%	1165%	1291%	1410%
HC-T	Research Expenditures	9,228,568	8,453,709	9,217,039	10,240,390	11,420,260
	Formula-Derived General Revenue	3,373,683	3,460,221	3,460,221	3,140,637	3,140,637
	Research Expenditures/GR	274%	244%	266%	326%	364%

Source: "Survey of Research Expenditures" submitted to the THECB; Formula-Derived General Revenue, Exhibit C of U. T. System Annual Financial Report (2000-2001) and Exhibit B of AFR for 2002-2004.

- Between 2001 and 2005, 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 but is declining somewhat at most institutions. The proportion has been particularly high at U. T. Southwestern Medical Center (71%) and U. T. M. D Anderson (64%), where it has increased over the past five years, from 28% in FY 2001.
- From FY 2001 to FY 2005, the proportion of non-tenure-track research faculty holding grants has increased at U. T. Southwestern Medical Center, U. T. Health Science Center-Houston, U. T. M. D. Anderson Cancer Center, and U. T. Health Center-Tyler.

Table II-33

Faculty Holding Extramural Grants (All Sources and Types)
at U. T. Health-Related Institutions

		FY 01	FY 02	FY 03	FY 04	FY 05
SWMC	# Grants to T/TT faculty	703	861	846	882	880
	# T/TT faculty holding grants	303	323	282	257	264
	# FTE T/TT faculty	313	324	333	353	370
	% T/TT faculty holding grants	97%	100%	85%	73%	71%
	# NT research faculty holding grants	61	78	60	92	125
	# FTE NT research faculty	209	215	223	264	289
	% NT research faculty holding grants	29%	36%	27%	35%	43%
UTMB*	# Grants to T/TT faculty	730	782	721	513	517
	# T/TT faculty holding grants	250	263	240	244	217
	# FTE T/TT faculty	496	474	483	495	493
	% T/TT faculty holding grants	50%	55%	50%	49%	44%
	# NT research faculty holding grants	32	29	27	31	32
	# FTE NT research faculty	154	142	143	141	151
	% NT research faculty holding grants	21%	20%	19%	22%	21%
HSC-H	# Grants to T/TT faculty	408	480	442	501	525
	# T/TT faculty holding grants	196	223	219	219	209
	# FTE T/TT faculty	429	394	425	459	442
	% T/TT faculty holding grants	46%	57%	52%	48%	47%
	# NT research faculty holding grants	31	29	34	50	39
	# FTE NT research faculty	122	132	141	146	127
	% NT research faculty holding grants	25%	22%	24%	34%	31%
HSC-SA**	# Grants to T/TT faculty	1,233	1,395	1,404	444	422
	# T/TT faculty holding grants	292	266	312	235	231
	# FTE T/TT faculty	310	545	524	512	532
	% T/TT faculty holding grants	94%	49%	60%	46%	43%
	# NT research faculty holding grants	86	100	99	55	57
	# FTE NT research faculty	91	100	105	161	176
	% NT research faculty holding grants	95%	100%	94%	34%	32%
MDACC***	# Grants to T/TT faculty	671	698	736	743	1,032
	# T/TT faculty holding grants	145	153	145	344	374
	# FTE T/TT faculty	510	529	557	563	584
	% T/TT faculty holding grants	28%	29%	26%	61%	64%
	# NT research faculty holding grants	38	54	57	47	69
	# FTE NT research faculty	231	248	269	263	317
	% NT research faculty holding grants	16%	22%	21%	18%	22%
HC-T	# Grants	30	33	34	37	48
	# NT research faculty holding grants	13	19	19	23	28
	# FTE NT research faculty	26	29	29	32	32
	% NT research faculty holding grants	50%	66%	66%	72%	88%

Notes:

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

Non-tenture-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.

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.

Table II-34

Research Expenditures per FTE Tenure/Tenure Track Faculty at U. T. Health-Related Institutions
FY 2001-2005

	FY 2001			FY 2002			FY 2003		
	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	$222,378,235	313	$710,474	$263,958,410	324	$814,686	$277,956,511	333	$834,704
UTMB	91,088,019	496	183,645	109,139,538	474	230,252	129,860,903	483	268,863
HSC-H	128,161,248	429	298,744	140,827,726	394	357,431	152,117,064	425	357,923
HSC-SA	97,638,253	310	314,962	112,232,653	545	205,931	119,279,555	524	227,633
MDACC	210,236,589	510	412,229	262,144,960	529	495,548	282,260,250	557	506,751
HC-T*	9,228,568	118	78,208	8,453,709	106	79,752	9,217,039	113	81,567

	FY 2004			FY 2005		
	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	$314,403,028	353	$890,660	$320,801,884	370	$867,032
UTMB	132,768,911	495	268,220	149,957,462	493	304,173
HSC-H	150,222,206	459	327,281	156,519,695	442	354,117
HSC-SA	124,912,722	512	243,970	134,058,535	532	251,990
MDACC	313,916,355	563	557,578	341,978,679	584	585,580
HC-T*	10,240,390	105	97,528	11,420,260	98	116,533

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

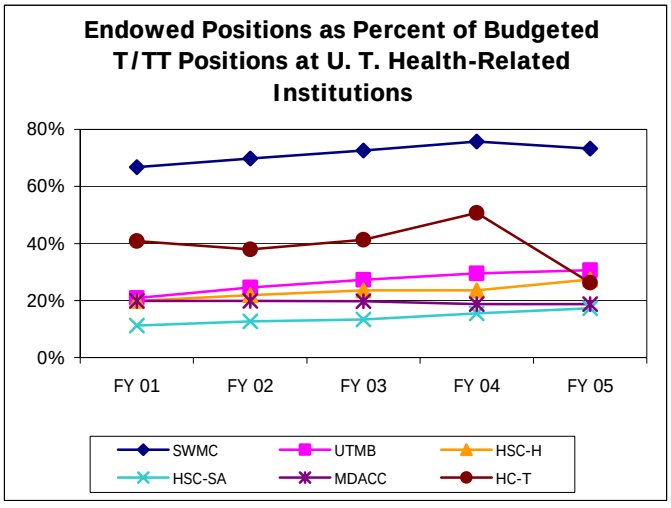
		FY 01	FY 02	FY 03	FY 04	FY 05
SWMC	Total Budgeted Endowed Professorships and Chairs	223	238	252	271	282
	Number Filled	201	217	221	235	231
	Endowed Positions as % of Budgeted T/TT Positions	67%	70%	73%	76%	73%
UTMB*	Total Budgeted Endowed Professorships and Chairs	102	110	127	138	143
	Number Filled	80	80	99	102	117
	Endowed Positions as % of Budgeted T/TT Positions	21%	25%	27%	30%	31%
HSC-H	Total Budgeted Endowed Professorships and Chairs	89	96	100	96	123
	Number Filled	68	75	76	73	83
	Endowed Positions as % of Budgeted T/TT Positions	20%	22%	24%	24%	27%
HSC-SA	Total Budgeted Endowed Professorships and Chairs	70	76	78	82	83
	Number Filled	41	49	52	58	66
	Endowed Positions as % of Budgeted T/TT Positions	11%	13%	13%	15%	17%
MDACC	Total Budgeted Endowed Professorships and Chairs	101	105	110	111	116
	Number Filled	76	80	87	88	89
	Endowed Positions as % of Budgeted T/TT Positions	20%	20%	20%	19%	19%
HC-T**	Total Budgeted Endowed Professorships and Chairs	31	33	33	37	21
	Number Filled	29	27	27	28	17
	Endowed Positions as % of Budgeted Positions	41%	38%	41%	51%	26%

*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, 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 2001 and 2005, the number of endowed positions has increased at all U. T. System health-related institutions except U. T. Health Center - Tyler.
- U. T. Southwestern Medical Center has a very high proportion of endowed positions, which increased from 67% in 2001 to 73% in 2005.

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, 2005.

Table II-36

Cumulative Honors at U. T. Health-Related Institutions

	Total	SWMC	UTMB	HSC-H	HSC-SA	MDACC
Nobel Prize	**5**	4		1		
National Academy of Sciences	**16**	15		1		
American Academy of Arts and Sciences	**15**	13		2		
American Academy of Nursing	**31**		6	14	11	
Howard Hughes Medical Institute Investigators	**15**	15				
Institute of Medicine	**26**	17	2	4	2	1
International Association for Dental Research	**39**			35	4	

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 2004-2005 include:

Table II-37

Faculty Awards Received at U. T. Health-Related Institutions, 2004-05

	Total	SWMC	UTMB	HSC-H	HSC-SA
American Academy of Arts and Sciences	**1**	1			
American Academy of Nursing	**2**			1	1
Howard Hughes Medical Institute Investigators	**2**	2			
Institute of Medicine	**1**				1
International Association for Dental Research	**1**				1
Fulbright American Scholars	**4**	1	2	1	
National Institutes of Health (NIH) MERIT Award	**8**	2		5	1
Pew Scholars in Biomedicine	**1**			1	
Robert Wood Johnson Policy Fellows	**1**		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 Patents Issued				Total Licenses & Options Executed			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
SWMC	115	128	103	89	23	32	19	34	24	26	33	34
UTMB	76	70	48	63	8	4	4	6	17	16	19	15
HSC-H	30	44	67	43	10	5	12	12	10	7	29	22
HSC-SA	29	30	43	34	11	12	9	9	6	5	24	10
MDACC	92	86	126	115	19	20	19	19	10	18	24	33
HC-T	0	2	3	1	0	1	0	0	0	0	1	0
Total Health-Related Institutions	**342**	**360**	**390**	**345**	**71**	**74**	**63**	**80**	**67**	**72**	**130**	**114**

	Public Start-up Companies Formed				Total Gross Revenue Received from Intellectual Property			
	2001	2002	2003	2004	2001	2002	2003	2004
SWMC	3	2	1	1	$10,511,895	$10,691,956	$11,209,200	$12,166,339
UTMB	0	0	1	1	$1,070,828	$924,943	$415,000	$822,000
HSC-H	2	1	1	0	$889,836	$1,599,603	$1,482,193	$2,563,981
HSC-SA	0	2	0	0	$2,406,751	$2,433,549	$2,500,657	$2,404,207
MDACC	2	6	3	2	$4,924,712	$5,734,522	$4,441,860	$6,061,846
HC-T	0	0	0	0	$0	$0	$15,000	$65,378
Total Health-Related Institutions	**7**	**11**	**6**	**4**	**$19,804,022**	**$21,384,573**	**$20,063,910**	**$24,083,751**

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

- From 2001 to 2004, technology transfer activities increased modestly among most U. T. System health-related institutions.
- From 2001 to 2004, the number of new invention disclosures decreased at U. T. Southwestern and U. T. Medical Branch. The number increased at U. T. Health Science Center-Houston, U. T. Health Science Center-San Antonio, U. T. M. D. Anderson, and U. T. Health Center-Tyler. From 2003 to 2004, however, the total declined, although the number increased at U. T. Medical Branch.
- The number of patents issued increased by more than 12 percent from 2001 to 2004.
- From 2001 to 2004, most institutions achieved an increase in the number of licenses and options executed; they more than doubled at U. T. Health Science Center-Houston and more than tripled at U. T. M. D. Anderson Cancer Center.
- 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. Health-Related Institutions

Table II-39

Tenure/Tenure-Track Headcount: Professors, Associate Professors, Assistant Professors, Instructors

Fall	2001	2002	2003	2004
SWMC	333	339	360	373
UTMB	479	488	500	500
HSC-H	399	431	474	460
HSC-SA	570	550	530	536
MDACC	548	576	565	585

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
SWMC	1,483	1,536	1,599	1,704
UTMB	1,244	1,259	1,259	1,281
HSC-H	1,124	1,270	1,263	1,297
HSC-SA	1,664	1,709	1,715	1,774
MDACC	1,017	1,071	1,133	1,190
HC-T	112	119	110	107

*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

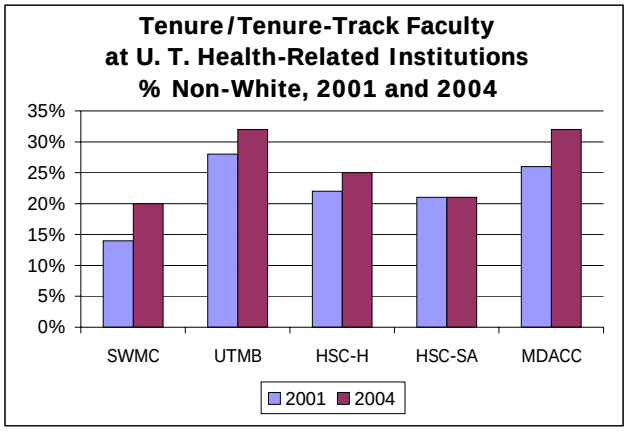


Figure II-19

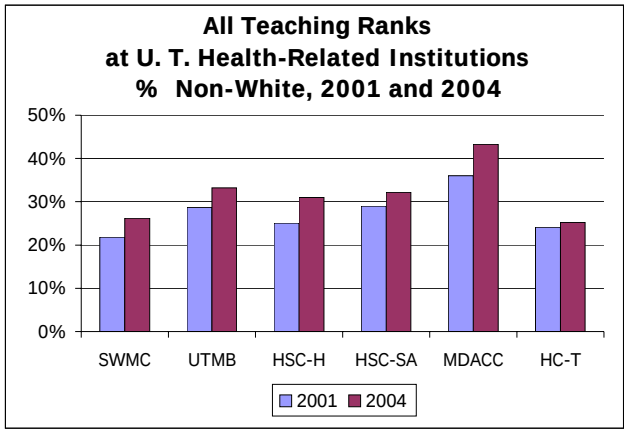


Figure II-20

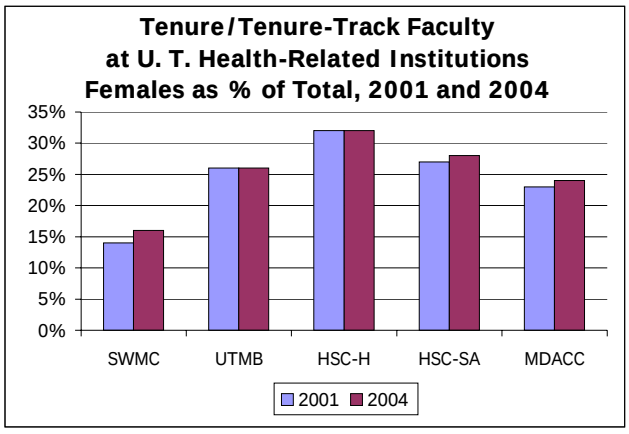
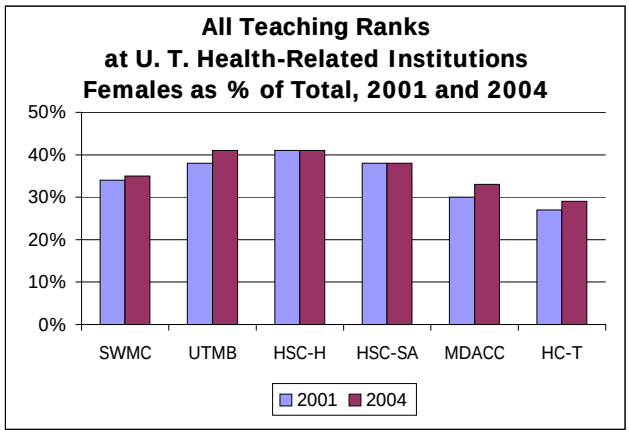


Figure II-21



Staff Headcount – U. T. Health-Related Institutions

Table II-41

Administrative, Other, Non-Faculty and Student Employee Headcount at U. T. Health-Related Institutions*

	AY	01-02	02-03	03-04	04-05	05-06
SWMC[1]	Administrative	124	132	145	187	327
	Other, Non-Faculty	3,697	3,883	4,051	4,568	6,752
UTMB	Administrative	609	518	863	892	909
	Other, Non-Faculty	11,534	11,821	10,803	11,250	11,285
	Student Employees	245	400	416	421	442
HSC-H	Administrative	182	199	172	170	157
	Other, Non-Faculty	3,783	3,932	3,657	3,290	2,904
	Student Employees	457	465	438	436	400
HSC-SA	Administrative	126	126	125	133	140
	Other, Non-Faculty	2,995	3,090	3,009	3,053	3,037
	Student Employees	607	551	440	480	512
MDACC	Administrative	626	670	806	859	932
	Other, Non-Faculty	9,709	10,320	11,035	11,856	12,608
	Student Employees	252	280	318	356	359
HC-T	Administrative	63	76	80	50	46
	Other, Non-Faculty	1,095	1,041	1,062	1,110	1,035
	Student Employees	14	13	11	8	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.

[1] 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

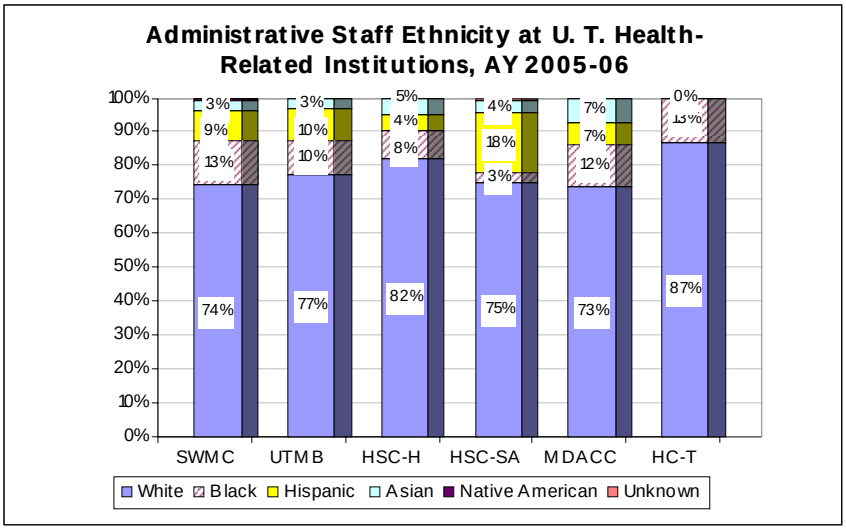


Figure II-23

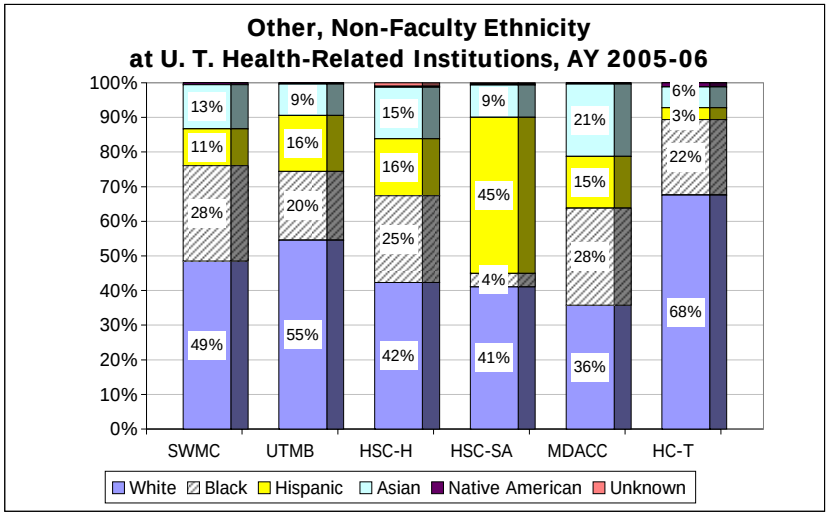
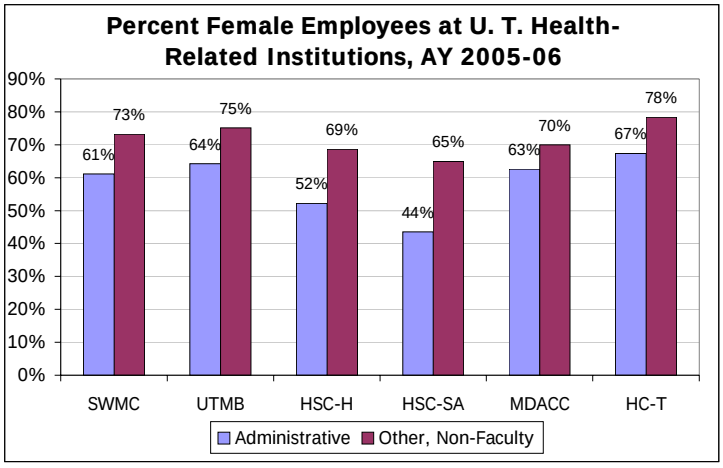


Figure II-24



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

Table II-42

FTE Student / FTE Faculty Ratio at U. T. Health-Related Institutions*

	Fall	2001	2002	2003	2004
SWMC	FTE Students	1,517	1,613	1,744	1,988
	FTE Faculty	1,263	1,319	1,377	1,485
	Ratio	1.2 to 1	1.2 to 1	1.3 to 1	1.3 to 1
UTMB	FTE Students	1,758	1,809	1,820	1,882
	FTE Faculty	1,178	1,198	1,214	1,227
	Ratio	1.5 to 1	1.5 to 1	1.5 to 1	1.5 to 1
HSC-H	FTE Students	2,690	2,792	2,822	2,879
	FTE Faculty	1,012	1,140	1,127	1,163
	Ratio	2.7 to 1	2.4 to 1	2.5 to 1	2.5 to 1
HSC-SA	FTE Students	2,516	2,501	2,512	2,565
	FTE Faculty	1,188	1,182	1,190	1,245
	Ratio	2.2 to 1	2.1 to 1	2.1 to 1	2.1 to 1

*M. D. Anderson Cancer Center admits a small number of Health Sciences undergraduates each year (69.74 FTEs in fall 2004). However, MDACC collaborates extensively with the Health Science Center-Houston to serve hundreds of students who rotate through their joint programs. In FY 2004, this included 514 graduate students shared with HSC-H, as well as 305 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 continue to serve students in approximately the same proportions over the past four years.

Graduate Medical Education

Table II-43

ACGME Accredited Resident Programs and Residents

		AY 02-03	AY 03-04	AY 04-05
SWMC	Accredited resident programs	78	79	77
	Number of residents in accredited programs	1,149	1,210	1,234
UTMB	Accredited resident programs	52	54	54
	Number of residents in accredited programs	543	551	553
HSC-H	Accredited resident programs	53	52	53
	Number of residents in accredited programs	761	735	780
HSC-SA	Accredited resident programs	53	54	53
	Number of residents in accredited programs	700	648	637
MDACC	Accredited resident programs	12	14	14
	Number of residents in accredited programs	100	103	100
HC-T	Accredited resident programs	2	2	2
	Number of residents in accredited programs	24	23	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 institution faculty.
- In nearly every case, over the past four years the number of admissions, hospital days, and outpatient visits has increased.

Table II-44

State-Owned Hospital Admissions by U. T. Health-Related Institution Faculty

	FY 00	FY 01	FY 02	FY 03	FY 04
UTMB	32,505	32,927	35,099	37,190	40,452
MDACC	17,497	18,604	18,781	19,430	20,608
HC-T	3,714	3,554	3,805	3,765	3,369
HCPC*	5,186	5,700	6,135	5,906	5,718
Total Health-Related Institutions	**58,902**	**60,785**	**63,820**	**66,291**	**70,147**

*Harris County Psychiatric Center

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

Table II-45

State-Owned and Affiliated Hospital Days by U. T. Health-Related Institution Faculty

	FY 00	FY 01	FY 02	FY 03	FY 04
SWMC	379,770	399,136	411,288	407,991	418,638
UTMB	170,797	175,956	186,975	194,642	199,862
HSC-H	248,045	221,127	243,315	273,499	230,959
HSC-SA	123,266	224,311	202,000	224,366	228,213
MDACC	131,788	137,204	137,207	146,673	153,002
HC-T	29,802	29,451	29,021	26,942	24,789
Total Health-Related Institutions	**1,083,468**	**1,187,185**	**1,209,806**	**1,274,113**	**1,255,463**

Source: Data submitted to the Legislative Budget Board

Table II-46

Outpatient Visits in State-Owned and Affiliated Facilities Treated by U. T. Health-Related Institution Faculty

	FY 00	FY 01	FY 02	FY 03	FY 04
SWMC	1,528,751	1,775,500	2,064,987	1,959,288	2,132,792
UTMB*	754,538	760,765	819,560	852,759	845,210
HSC-H	838,448	553,976**	671,891	748,486	834,987
HSC-SA	915,725	854,046	834,000	1,110,429	1,070,608
MDACC	448,690	469,068	471,728	537,822	610,329
HC-T	132,772	135,978	140,473	119,515	114,968
Total	**4,618,924**	**4,549,333**	**5,002,639**	**5,328,299**	**5,608,894**

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

** The decrease from previous years is due to centralization of patient activity/billing.

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

Table II-47

Total Charges for Un-Sponsored Charity Care by Faculty in State-Owned and Affiliated Facilities at U. T. Health-Related Institutions

	FY 00*	FY 01	FY 02	FY 03	FY 04
SWMC	$211,953,613	$234,938,900	$256,968,945	$281,998,363	$312,465,011
UTMB	61,596,586	66,908,903	85,982,833	97,724,989	108,498,329
HSC-H	82,152,677	90,024,051	103,279,853	107,326,617	139,031,049
HSC-SA	60,729,594	60,602,900	70,149,189	77,586,366	85,647,220
MDACC	25,524,441	30,773,351	35,310,300	43,427,477	51,164,780
HC-T	3,261,170	4,992,457	5,405,720	6,814,083	7,008,950
Total Health-Related Institutions	**$445,218,081**	**$488,240,562**	**$557,096,840**	**$614,877,895**	**$703,815,339**

*Figures represent the amount reported in the AFR and care provided by institution faculty as part of University Care Plus.

Source: Institutions' Annual Financial Reports

- In FY 2004, 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 at U. T. Health-Related Institutions

	Period of Survey	Overall Rating	Change from Previous Rating	Noteworthy Ratings	Comments
SWMC	June 2004 - June 2005	90.8%	UT Southwestern is now using Press Ganey Inc., a new measurement tool so we cannot accurately compare these results with last year's data.		New score is based on Press Ganey satisfaction measures. New data will allow us to measure patient satisfaction more accurately and address opportunities to improve our services in a more timely fashion.
UTMB	9.1.04-8.31.05	87.8% overall patient satisfaction for hospital 92.4% for outpatient areas (results are tabulated as the percentage of respondents who rate a given item "good" or "very good")	+ 6.81% for hospital + 7.7% for outpatient areas	Inpatient psychiatric areas received the 2004 Press Ganey Compass Award based on their overall patient satisfaction improvement.	UTMB routinely assesses patient satisfaction using the Satisfaction Measurement designed and analyzed by the national healthcare industry satisfaction and measurement improvement company, Press Ganey Associates, Inc.
HSC-H Harris County Psychiatric Center (HCPC)	Sep 2004 – May 2005	Overall average score of 4.01 for hospital patient satisfaction. On a scale of 1 – 5. With 5 being the highest score.	Increase from 3.97 for same reporting period last year.	Helpfulness of the Nursing, Social Workers and Medical staff have rated in the top five strengths for the past 4 quarters. Treatment Effectiveness continues to rate the highest across scales with an average score of 4.13. 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 4.21.	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 average quarterly sample size is 696 respondents.
HSC-H Dental Branch Clinics	Spring 2005	Dental Branch 80% excellent; 13.5% very good	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 2005	UT Physicians Satisfaction with overall treatment = 98% Would recommend to friends and family = 96%	97% rating in previous quarter; 95% rating in previous quarter	Overall target was 85%	Areas for continued improvement: reaching clinics by telephone; appointment wait times; parking.

	Period of Survey	Overall Rating	Change from Previous Rating	Noteworthy Ratings	Comments
HSC-SA (Dental School)	09/01/04-08/31/05	Overall satisfaction = 4.8 on 5 scale	Results similar to previous year	Patient satisfaction is high and consistent with previous surveys	
HSC-SA (School of Medicine)	2005, Q1, Q2	97.5% satisfaction with rehab team	95% rating in 2003	High satisfaction Rehab Medicine - First Quarter Satisfaction – 97% Second Quarter Satisfaction – 98%	Affiliated hospitals have ongoing patient satisfaction review processes in place. University Physicians Group has established the Patients First HOTLINE which allows patients to call directly to UPG Pt SVS for concerns Threshold for Rehab Medicine – 90%. Any area showing 10% dissatisfaction is reviewed in detail. Survey based on CMS CAHPS Hospital Survey with modifications made frequently to provide more evidence based responses.
MDACC	FY05: 2nd Quarter	Top Priority Problem Areas: Inpatient: Continuity and transition: 30% problem score Outpatient: Access: 26% problem score			MDACC uses the NRC+Picker survey which measures negative responses. The higher the score the bigger the issue. Surveys sent to 4,000 patients, targeting 20 responses/month for each of 38 units. Results are reviewed at the unit level
HC-T	FY05: 9.1.04-8.31.05	FY04: 88.9 FY05: 90.0 (Scale 1-100)	Increase of (+) 2.0	Inpatient: (+) 0.6 Emergency Care: (+) 4.1 Outpatient: (+) 1.8	Overall, all patients types surveyed showed an improvement during FY05 as compared to FY04. The ER ranked in/above the 95th percentile nationally for 2 consecutive quarters.

Examples of Externally Funded Research Collaborations – U. T. 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

Examples of Research Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
U. T. Southwestern		
Howard Hughes Medical Institute	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.	Howard Hughes Medical Institute
Alliance for Cellular Signaling	Studies the G-protein-rr signaling systems; identifies signaling molecules; determines molecular pathways; determines the quantitative analysis of the flow of information through the system.	Aventis Pharmaceuticals, Salk Institute for Biological Studies, Barbraham Institute – UK, California Institute of Technology (HHMI), Stanford University, and University of Michigan
Collaborative University of Texas Metroplex Imaging Center	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.	UT Dallas and UT Arlington
U. T. Medical Branch		
Texas Telehealth Disparities Network	The primary purpose is to reduce disparities in health through the development of a telehealth network in three distinct and geographically distant areas of Texas: Galveston County, Brownsville (Cameron County), and Tyler (Smith County). The secondary purpose is to determine if the appropriate use of telehealth can reduce health disparities and improve access to care. The outcomes include developing community-based coalitions in each site, assisting coalitions in developing successful community plans that include a telehealth application, developing a network for testing best practices in telehealth applications, and establishing telehealth delivery projects in Tyler and Galveston County. Funded through HRSA grant in the amount of $361,718.	Partners include UT-Brownsville with its academic partner, Texas Southmost College, and UTHC-Tyler.

Examples of Research Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
Keck Center for Computational and Structural Biology - Gulf Coast Consortia	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.	There are over 200 current faculty mentors from more than a dozen departments across UTMB and the other five participating institutions, Rice University, Baylor College of Medicine, University of Houston, UTHSC-Houston, and UT M.D. Anderson Cancer Center.
Regional Center of Excellence in Biodefense and Emerging Infectious Diseases	The Regional Center of Excellence 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. It also provides crosscutting functions in computational biology and a streamlined process for translational development of vaccines and drugs leading to FDA approval.	Partners include 32 entities in Texas, New Mexico, Oklahoma, Arkansas, and Louisiana including UTHC-Tyler, UTHSC-San Antonio, UTHSC-Houston, Texas A&M, University of Houston, Rice University, National Institutes of Health/NIAID, MacroGenics Inc., University of New Mexico, Louisiana State University Health Science Center at Shreveport, and University of Oklahoma.
U. T. HSC-Houston		
The Gulf Coast Consortia	An interdisciplinary training program of excellence in computational and structural biology that will increase the number and quality of applicants and expands the number of students involved, both as trainees and participants.	UT MD Anderson, UT Medical Branch at Galveston, Baylor College of Medicine, Rice University, University of Houston, W.M. Keck Foundation
UT-TORCH	An interdisciplinary research training program providing opportunities for faculty, postdoctoral trainees, DDS/PhD students, PhD students, and DDS students; trainees may choose from three core foci—biometics (development, genetics, bioengineering); molecular pathology (immunology, infectious diseases, cancer); patient oriented research and health informatics.	UT MD Anderson, Baylor College of Medicine, Rice University, Texas A & M Institute of Biosciences and Technology
NanoHealth Alliance	Creates a collaborative program that has the potential to greatly enhance our ability to diagnose, treat, and prevent disease at the molecular level.	UT MD Anderson, Baylor College of Medicine, Rice University, University of Houston

Examples of Research Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
U. T. HSC-San Antonio		
The UTHSCSA National Center of Excellence in Women's Health	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.	University Health System, UTSA Women's Study Institute, San Antonio Metropolitan Health District
Genotyping of M. tuberculosis using SSRs	Purpose is to develop and test RB DNA fingerprinting methods for tracking transmission of disease within the human population.	Public Health Research Institution, Lawrence Livermore National Lab, Baylor College of Medicine
Pesticide Exposure and Antioxidant Status During Pregnancy Among Hispanic Women at the U.S.-Mexico Border	The specific aims of this study are (a) to document the nature and level of exposure to pesticides and herbicides in the homes of pregnant Hispanic women residing at the U.S.-Mexico Border, (b) to evaluate the antioxidant status of these women during the third trimester of pregnancy and (c) to determine whether there appears to be a relationship between antioxidant status of these women and pesticide levels measured in the air and dust of their homes.	Department of Environmental Health Sciences at the Mailman School of Public Health, Columbia University
U. T. M. D. Anderson		
Alliance for NanoHealth	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 Alliance received federal funding of $6.4M in FY05 and an FY06 request is pending. Funding agencies include NASA, Dept. of Defense, Health Resources and Services Administration (HRSA).	UTMDACC, Rice University, UTHSC-Houston, Univ. of Houston, Baylor College of Medicine, Texas Heart Institute.
Cancer in Minority Populations	With NCI funding, MDACC and the University of Puerto Rico are studying cancer-related issues in the Hispanic population. The focus is on research and other areas including diversity training, physician education and community outreach. The first research projects will address the molecular epidemiology of head and neck cancer, breast cancer and acute promelocytic leukemia. This collaboration allows PRCC faculty to be on the inside of the latest medical techniques and technology, while MDACC faculty open a new door to dealing with cancer-related issues in the Hispanic population .	Minority Institution Cancer Center Partnership, University of Puerto Rico
Center for Biomedical Engineering	Initiates and nurtures synergistic collaboration among biomedical engineers, life scientists, and clinicians to catalyze the innovative development of clinically translatable strategies, and provide multidisciplinary education and training of the next generation of scientist in biomedical engineering. This ongoing collaboration is investigating moving forward with a joint Department of Biomedical Engineering.	UT Austin, UTHSC-Houston

Examples of Research Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
U. T. HC-Tyler		
Structure and Function of SRP RNA	Advances the understanding of the basic process of protein transport across biological membranes.	UTHSC-San Antonio
Southwest Center for Agricultural Health, Injury Prevention, and Education http://www.swagcenter.org/	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.	National Institute for Occupational Safety and Health, National Center for Farmworker Health, UTHSC at Houston School of Public Health Brownsville Regional Campus, Texas A&M University Health Sciences Center, West Texas A&M University, Southeastern Louisiana University, University of New Mexico, Drexel University, Area Health Education Center
Bioterrorism Training and Curriculum Development Program	Work with UTHSC-H School of Public health to develop curriculum and provide training throughout Texas.	UT HSC-Houston

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

Examples of Educational Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
U. T. Southwestern		
Graduate Medical Education (Residency Education Program)	Improves the quality of health care in the United States by ensuring the quality of graduate medical education experiences for physicians in training.	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
Joint Program in Psychology	Prepares students for careers as research and clinical psychologist.	UT Dallas
Joint Program In Biomedical Engineering	Prepares students as biomedical engineers for careers in industry, hospitals, and research facilities.	UT Arlington
U. T. Medical Branch		
Early Medical School Acceptance Program (EMSAP)	The objective of the EMSAP is to increase the number of bilingual and bicultural physicians in Texas by offering outstanding high school students an opportunity to compete more effectively in gaining admission into UTMB and/or other medical schools. A maximum of 30 high school students (five from each of the university partners) are accepted each year and are offered conditional acceptance to UTMB's School of Medicine. One hundred and thirty students have participated in this program since its inception in 1998.	UT-Brownsville, UT-El Paso, UT-Pan American, Texas A&M International University at Laredo, Prairie View A&M, and Texas Southern University.
Accelerated Baccalaureate Second Degree Nursing Program Expanded	The accelerated baccalaureate nursing program has increased enrollment on each campus by 50%. It is uniquely designed to deliver a professional nursing education program in three semesters to students with previous degrees. The program takes into consideration the academic accomplishments of applicants, builds on strengths, and prepares students both for entry into practice and for graduate nursing education. Students engage in the full scope of professional nursing education using innovative teaching approaches that combine online learning, distance technology, informatics, face-to-face seminars for synthesis, and intensive clinical experiences with faculty and expert preceptors. Faculty from the partnering institutions participate in the implementation of courses designed to move the students rapidly through the program, supervise clinical experiences, and evaluate the process and outcomes of this unique collaboration. Outcomes of the innovative teaching methods and resources used in this program are being studied by faculty from both schools.	UTHSC-Houston School of Nursing.
Texas Statewide Bioterrorism Continuing Education (BCE)	This is a HRSA funded project that provides high quality, standardized continuing education (CE) about bioterrorism and other public health emergencies to an interdisciplinary group of health professionals and other community members by teaching participants to recognize, report, manage, and work together as a team should a bioterrorism event or other public health emergency occur.	UTHSC-Houston, UTHSC-San Antonio, UTSWMC-Dallas, UTHC-Tyler.

Examples of Educational Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
U. T. HSC-Houston		
Graduate School of Biomedical Sciences at Houston	Offers graduate programs with a greater critical mass of faculty and students; to provide high quality research training to a large number of students in a wide variety of areas in a cost effective manner.	UT MD Anderson, Texas A&M University Health Science Center, Institute of Biosciences and Technology
Collaborative Doctoral Degree in Nursing Program	Provides access to the Doctor of Science in Nursing program via distance education to UT El Paso.	UT El Paso
Educational Scholars Fellowship Program (ESFP)	Offers a two year fellowship program designed to expand teaching knowledge, skills and attitudes of participating faculty and enhances the educational mission of the three schools involved. The ESFP also collaborates with the University of Houston by providing coursework for the Master of Health Science Education degree offered the University of Houston.	Baylor College of Medicine, UT Dental Branch and Medical School at Houston, U of Houston
U. T. HSC-San Antonio		
South Texas Doctoral Bridge Program	NIH-funded program for underrepresented minority students to obtain an M.S. degree at the collaborating institutions so as to prepare them for matriculation in a Ph.D. program at a doctoral-granting institution.	University of Incarnate Word, UT Pan American, Texas State University at San Marcos
Dental Early Admissions Program (DEAP)	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.	Abilene Christian University, University of the Incarnate Word, McMurray University, UT Pan American, Prairie View University, St. Mary's University, Sam Houston State University, UT San Antonio, 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, UT El Paso
Collaborative Program in Physician Assistant Studies	To increase access to Physician Assistant Education in Laredo, Texas.	Texas A&M University in Laredo
U. T. M. D. Anderson		
Graduate Medical Education	MDACC participates in the training of residents and fellows by providing rotations in all Divisions.	UTHSC-Houston, UTHSC-San Antonio, UTMB, Baylor, UT Dental Branch, Texas Heart Institute, VA Hospital
Doctoral Degrees	Graduate School of Biomedical Sciences – joint degree granting.	UTHSC-Houston
U. T. HC-Tyler		
Joint Collaborations with Various Higher Educational Institutions for Clinical Rotations and Health Care Training	Allows students in nursing, allied health, and medicine to have clinical rotations at a health training hospital and outpatient facility. Collaborators: UT Tyler, Kilgore College, Tyler Junior College, University of North Texas, Texas College of Osteopathic Medicine, University of North Dakota, St. Petersburg College; The University of Arkansas Medical School; Harding University-Arkansas; UT Southwestern; Hardin-Simmons University; Stephen F. Austin State University; Texas A&M University; Louisiana State University; Texas College; Texas Southern University; Texas Tech University; University of Louisiana; The University of Texas Medical School at Houston; The University of Oklahoma	

Examples of Educational Collaborations – U. T. Health-Related Institutions		
	Purpose and Outcomes	Collaborators
Occupational Medicine Residency Program http://www.tiosh.org/residency.htı	Offers academic and practicum training in occupational medicine. The residency program is one of three (3) civilian programs in Texas and fewer than 35 in the United States and Canada accredited by the Accreditation Council for Graduate Medical Education.	Stephen F. Austin State University, Texas Department of State Health Services Regions 4 & 5N, Occupational Safety and Health Administration (OSHA)
UTHCT Community Outreach and Health Disparities	UTHCT's Community Outreach and Health Disparities Department participates in various health educational activities in collaboration with other institutions/organizations, such as: 1) to offer a course on health disparities; 2) to offer lecture series on health disparities; and 3) to offer annual health disparity conference.	MD Anderson, UTMB, as well as the Texas Department of State Health Services, East Texas Medical Center, Trinity Mother Frances Hospital, North East Texas Public Health District

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.
- Measures of information technology resources to support teaching and research should be developed.
- Faculty salary trend data for health-related institutions should be developed.