COMMITTEE MEETING MINUTES

OF THE BOARD OF REGENTS

OF

THE UNIVERSITY OF TEXAS SYSTEM

February 17-18, 2011

Austin, Texas

Minutes of Committee meetings are taken as a convenience for research purposes and may be verified by recordings kept in the Office of the Board of Regents or webcasts available at http://www.utsystem.edu/bor/meetings/minutes.htm.

/s/ Carol A. Felkel Secretary to the Board of Regents September 7, 2011

MINUTES

U. T. System Board of Regents Audit, Compliance, and Management Review Committee February 17, 2011

The members of the Audit, Compliance, and Management Review Committee of the Board of Regents of The University of Texas System convened at 10:44 a.m. on Thursday, February 17, 2011, in the Board Meeting Room on the 9th Floor of Ashbel Smith Hall, The University of Texas System, 201 West Seventh Street, Austin, Texas, with the following participation:

Attendance
Regent Pejovich, presiding
Vice Chairman Foster
Regent Hall

Absent Regent-Designate Cranberg*

Also present were Chairman Powell, Vice Chairman Hicks, Vice Chairman Dannenbaum, Regent Gary, Regent Kalkwarf, Regent Stillwell, and General Counsel to the Board Frederick.

In accordance with a notice being duly posted with the Secretary of State and there being a quorum present, Committee Chairman Pejovich called the meeting to order.

1. <u>U. T. System: Report on the Fiscal Year 2010 Annual Financial Report,</u> including the report on the U. T. System Annual Financial Report Audit

Committee Meeting Information

Presenter(s): Mr. Randy Wallace, Associate Vice Chancellor - Controller and Chief Budget Officer;

Mr. Charles Chaffin, Chief Audit Executive

Status: Reported/Discussed

This item was for consideration during a joint meeting of this Committee and the Finance and Planning Committee (see Committee Minutes for the Joint Meeting).

2. U. T. System: Report on clinical trial billing process

Committee Meeting Information

Presenter(s): Kenneth I. Shine, M.D., Executive Vice Chancellor for Health Affairs; Dr. Charles M. Ginsburg, Senior Associate Dean for Academic Administration, U. T. Southwestern Medical Center

Status: Reported/Discussed

Follow-up action: Regent Hall suggested exploring opportunities to partner with companies to do a contingency.

^{*}Regent-Designate Cranberg had not yet taken the oath of office.

Discussion at meeting:

In reply to a question from Vice Chairman Dannenbaum about the regulatory compliance environment, Dr. Shine answered that according to the Texas Legislature, private insurers in Texas should be willing to pay for the usual and customary care for an individual in a clinical trial. He added that the federal law now says that federal payors will also pay for the usual and customary care of an individual during clinical trials. He said federal grant money is at times used to pay for care that is ordinarily paid for by an insurance company, but Dr. Ginsburg is working to educate investigators at the U. T. System institutions that they can enhance overall revenues legally and appropriately by using the grant money for medication and associated tests and bill the insurers for the usual and customary care.

Regent Gary asked how much it is worth to collect what is due, and Dr. Shine answered that Dr. Ginsburg is working on that matter, but there is reason to believe it could be a substantial amount of money. Dr. Shine noted the purchase of MDAuditTM software that reviews clinical billing.

Board Chairman Powell asked why technology-savvy institutions purchase software and systems without fully vetting whether or not they interface, and Dr. Ginsburg acknowledged the different system/software architectures, saying the field is still at the embryonic stage with intellectual demands outstripping the actual market. Committee Chairman Pejovich asked if vendors are contractually being required to stand by their statements that systems interface, and Dr. Shine responded affirmatively. Chairman Powell said his experience is that one needs to see the systems working together before a product is purchased, and Dr. Ginsburg replied that oftentimes a portion of two systems do indeed work together. Dr. Shine noted the different software packages purchased by the health institutions and the priority the U. T. System places on resolving the interface matter.

In response to a question from Regent Hall regarding opportunities to partner with companies to do a contingency, Mr. Richard St. Onge, Associate Vice Chancellor for Health Affairs, described the Systemwide contract with Huron Consulting Group [Effort Certification and Reporting Technology (ECRT)] and efforts to get Huron to coinvest in customizing the program. Regarding contingencies, Regent Hall asked if private entities actually participate in additional revenues that are recovered, and he gave the example of oil and gas companies that aggressively mine files for underpayments. Dr. Shine said there are several collection vendors who share in the profit of collection, but it has been limited to that. He added that Regent Hall's idea is intriguing.

3. <u>U. T. System: Report on the Systemwide internal audit activities, including the status of the information security program audits; and Internal Audit Department reports for U. T. Brownsville and U. T. San Antonio</u>

Committee Meeting Information

Presenter(s): Ms. Norma Ramos, Director of Internal Audit, U. T. Brownsville; Mr. Richard Dawson, Executive Director of Audit, Compliance, and Risk Services, U. T. San Antonio; Mr. Charles Chaffin,

Chief Audit Executive

Status: Reported/Discussed

Discussion at meeting:

Committee Chairman Pejovich expressed appreciation that students are getting hands-on experience in the Student Employment Initiative program at U. T. Brownsville. With Regent Pejovich's encouragement and the University administration's support, Ms. Ramos said more students may be admitted to the successful program.

Regent Kalkwarf asked about the size of the Audit Department at U. T. San Antonio, and Mr. Dawson responded there are five staff members. Regent Kalkwarf then asked if the size has remained constant over the past 10-20 years, and Mr. Dawson replied affirmatively.

4. <u>U. T. System: Discussion and appropriate action related to delegation of authority to select and negotiate with vendor to provide consulting services related to information security compliance effectiveness reviews and execute related agreements</u>

Committee Meeting Information

Presenter(s): Mr. Barry Burgdorf, Vice Chancellor and General Counsel

Status: Approved

Motion: Made, seconded, and carried unanimously

Discussion at meeting:

Mr. Burgdorf said there have been security breaches, and the Board of Regents asked him to look at the matter and determine the status. Mr. Burgdorf said the U. T. System is organized in its response, but the desire is to ensure that information security Systemwide is at a state-of-the-art level in regard to preventative measures going forward. He described the selection process for a vendor to begin by March 1, 2011, noting the criteria for a) recognition that the U. T. System is unique with 15 different institutions, and b) an individualized report to be given to each institutional president and information technology (IT) officers that outlines a to-do list and ways to strategically attack IT security measures on campus, and to do that within the context of a system, so advice to each campus is useful.

RECESS TO EXECUTIVE SESSION

At 11:40 a.m., the Committee recessed to Executive Session pursuant to *Texas Government Code* Section 551.074 to consider the matter listed on the Executive Session agenda as follows:

Personnel Matters Relating to Appointment, Employment, Evaluation, Assignment, Duties, Discipline, or Dismissal of Officers or Employees – *Texas Government Code* Section 551.074

U. T. System: Discussion with institutional auditors and compliance officers concerning evaluation and duties of individual System Administration and institutional employees involved in internal audit and compliance functions

RECONVENE IN OPEN SESSION

The Executive Session ended at 11:45 a.m., and the Committee reconvened in Open Session to adjourn. No action was taken on the item discussed in Executive Session.

ADJOURNMENT

Committee Chairman Pejovich adjourned the meeting at 11:45 a.m.

MINUTES

U. T. System Board of Regents Finance and Planning Committee February 17, 2011

The members of the Finance and Planning Committee of the Board of Regents of The University of Texas System convened at 9:38 a.m. on Thursday, February 17, 2011, in the Board Meeting Room on the 9th Floor of Ashbel Smith Hall, The University of Texas System, 201 West Seventh Street, Austin, Texas, with the following participation:

Attendance
Vice Chairman Foster, presiding
Regent Gary
Regent Hall
Regent Pejovich

Absent Regent-Designate Cranberg*

Also present were Chairman Powell, Vice Chairman Dannenbaum (Items 2-6), Vice Chairman Hicks, Regent Kalkwarf, Regent Stillwell, and General Counsel to the Board Frederick.

In accordance with a notice being duly posted with the Secretary of State and there being a quorum present, Committee Chairman Foster called the meeting to order.

1. <u>U. T. System Board of Regents: Discussion and appropriate action related to approval of *Docket No. 145*</u>

Committee Meeting Information

Presenter(s): Committee Chairman Foster

Status: Discussed

Discussion at meeting:

Remarks by Committee Chairman Foster:

• As the members of this Committee know, it is my custom to highlight significant contracts on the docket and invite questions. The Richards Group contract at U. T. M. D. Anderson Cancer Center, which is Item 1 on Docket Page 43, is such a contract. However, we have an Executive Session item scheduled for later today that I believe will benefit and make more productive any discussion about The Richards Group contract, so my recommendation is that we defer questions and comments, if any, until after the Executive Session. (Note: no action was taken on the item from the Board's Executive Session.)

^{*}Regent-Designate Cranberg had not yet taken the oath of office.

- I call your attention to the following larger contract items in the Docket:
 - Item 1 on Docket Page 6 relates to a contract between U. T. Austin and The Stage Alliance for up to \$2,500,000 for the initial term to provide stagehands on an as-needed basis.
 - Item 1 on Docket Page 16 is a contract between U. T. Dallas and Follett Higher Education Group valued at approximately \$4 million for a license agreement to Follett to operate the U. T. Dallas Bookstore. The agreement was competitively bid and has been reviewed by the Office of General Counsel's Real Estate Office.
 - Item 1 on Docket Page 26 relates to an Alamodome License Agreement between U. T. San Antonio and the City of San Antonio for approximately \$1.8 million for U. T. San Antonio Intercollegiate Football Games for six regular season home games with estimated attendance between 10,000 and 15,000 people.
 - Item 2 on Docket Page 26 is a \$1 million Licensed User Agreement between U. T. San Antonio and Ticketmaster for U. T. San Antonio Intercollegiate Athletic Sporting Home Events.

2. <u>U. T. System: Key Financial Indicators Report and Monthly Financial</u> Report

Committee Meeting Information

Presenter(s): Dr. Scott C. Kelley, Executive Vice Chancellor for Business Affairs

Status: Reported/Discussed

Discussion at meeting:

Dr. Kelley mentioned the efforts by U. T. Medical Branch – Galveston (UTMB) to generate resources toward revenue-generating activities and managing expense. He said there was an opportunity to restructure after Hurricane Ike, although efforts were already underway before the storm. With additional help from the Texas Legislature, UTMB was able to generate a positive net operating margin, including covering the depreciation expense, last year (2010) for the first time in recent history. He explained that this year, with correctional managed care and other concerns the institution is working through and the givebacks set aside from 2010 for 2011, UTMB will continue to try to erase the projected deficit over time.

3. <u>U. T. System: Report on the Analysis of Financial Condition for Fiscal Year 2010</u>

Committee Meeting Information

Presenter(s): Mr. Randy Wallace, Associate Vice Chancellor - Controller and Chief Budget Officer

Status: Reported/Discussed

4. <u>U. T. System: Approval of additional aggregate amount of \$9,558,000 of Revenue Financing System Equipment Financing for Fiscal Year 2011 and resolution regarding parity debt</u>

Committee Meeting Information

Presenter(s): Mr. Philip R. Aldridge, Vice Chancellor for Finance and Business Development

Status: Approved

Motion: Made by Regent Gary, seconded by Regent Pejovich, and carried unanimously

5. <u>U. T. System Board of Regents: Approval of a new investment strategy</u> <u>for debt proceeds, including amendments to the Separately Invested</u> <u>Funds Investment Policy Statement</u>

Committee Meeting Information

Presenter(s): Mr. Philip R. Aldridge, Vice Chancellor for Finance and Business Development

Status: Approved

Motion: Made by Regent Gary, seconded by Regent Pejovich, and carried unanimously

Discussion at meeting:

Mr. Bruce Zimmerman, Chief Executive Officer and Chief Investment Officer for The University of Texas Investment Management Company (UTIMCO), noted the policy was approved by the UTIMCO Policy Committee and the UTIMCO Board a couple of weeks ago. He said the guidelines are straightforward. Regent Gary remarked that UTIMCO has the staffing and capacity to invest the funds according to the new guidelines, and Mr. Zimmerman clarified there would be no additional costs this year and slight cost implications in the future. Committee Chairman Foster said these are proceeds that will be needed later and there is no risk tolerance. Mr. Aldridge said there may be opportunities for more significant returns later.

6. <u>U. T. System Board of Regents: The University of Texas Investment Management Company (UTIMCO) Performance Summary Report and Investment Reports for the guarter ended November 30, 2010</u>

Committee Meeting Information

Presenter(s): Mr. Bruce Zimmerman, Chief Executive Officer and Chief Investment Officer, UTIMCO

Status: Reported/Discussed

Future action: Mr. Al-Johar, Longhorns for Investing Responsibly at U. T. Austin, said he hopes a member of the Committee will meet with the group to discuss the organization's

proposal and how it can be moved forward.

Discussion at meeting:

Mr. Zimmerman reported the following figures for December 2010 and January 2011:

- For December, endowments were up another 3.4%; up 14.8% for the calendar year. The Intermediate Term Fund (ITF) was up 3.3%; 13% for the calendar year.
- For January, endowments were up .36%; ITF up .23%
- For fiscal year to date through January 2011, endowments are up 10.8% and the ITF is up 9.3%.
- Total assets as of January 30, 2011, are just over \$26 billion, with the Permanent University Fund (PUF) at \$12 billion, Permanent Health Fund (PHF) at \$984 million, Long Term Fund (LTF) at \$5.84 billion, and ITF at \$4.6 billion.
- As a high-water mark, at the end of January, UTIMCO is \$.98 investment return on the dollar; the S&P 500 is \$.88 on the dollar.

Mr. Mishal Al-Johar, a graduate student at U. T. Austin representing the organization, Longhorns for Investing Responsibly, had requested to address the Board on investment policies and returns. Mr. Al-Johar spoke about desiring a change in UTIMCO's investment policy to be more consistent with the U. T. System mission statement and the Texas Constitution. He said the proposal has the unanimous support of the Student Government and the Graduate Student Assembly. His handout titled "Proposal for Implementation of Responsible Investing at The University of Texas Investment Management Company" was distributed to members of the Committee and other members of the Board in attendance and is set forth on Pages 6 - 9. Mr. Al-Johar said he hopes a member of the Committee will meet with the group to discuss the proposal and how it can be moved forward.

ADJOURNMENT

Committee Chairman Foster recessed the meeting at 10:25 a.m. for the joint meeting with the Audit, Compliance, and Management Review Committee (see separate Committee Minutes).

Proposal for Implementation of Responsible Investing	
at The University of Texas Investment Management Compan	У

LONGHORNS FOR INVESTING RESPONSIBLY

Authored by: Ben Snyder, Mishal Al-Johar, Pace Davis,

Richard Fischer, Caitlin Eaves, Isaac Kalish

February 17, 2011

OBJECTIVE

We propose, with the unanimous support of The University of Texas at Austin Student Government and Graduate Student Assembly, and with the endorsement of the 2010 Clinton Global Initiative University, that UTIMCO implement a policy for investing responsibly consistent with The University of Texas System mission statement.

SPECIFIC RECOMMENDATIONS

Adoption of a prudent investing policy consistent with the UT System mission statement

The UT System mission statement calls for its institutions "to cultivate in students the ethical and moral values that are the basis of a humane social order" and to "render service to the public that produces social benefits." Furthermore, the Texas Constitution (Article VII, Section 11b) calls for the UT System Board of Regents to adhere to a prudent investment standard. The investment policies of many major universities, including Harvard University and the University of Florida, include policies for socially responsible investing. However, current UTIMCO policy explicitly requires social concerns to be disregarded when making investment decisions. When compared to the policies of other universities, current UTIMCO policy does not follow the "prudent investment standard" required by the Texas Constitution.

We recommend that UTIMCO change its policies for the Permanent University Investment Fund by removing the statement that UTIMCO

"shall not invest the PUF so as to achieve temporal benefits for any purpose including use of its economic power to advance social or political purposes"

and include a statement to the effect that UTIMCO

"shall invest the PUF to maximize financial return, while also considering investments in line with its values that will not jeopardize or negatively affect this end."

For example, United Technologies has been documented by human rights organizations such as Amnesty International and Oxfam as a participant in the illicit arms trade in Sudan and Uganda, countries where major war crimes have been committed nearly continuously for the past decade. These activities may be highly profitable for the university financially but are not socially profitable when considering the UT System mission to "cultivate ethical and moral values that are the basis of a humane social order."

NATIONAL TRENDS

Major universities across the country have already implemented responsible investing policies including:

Public Institutions

The University of Florida

The University of Minnesota

The University of Washington

The University of Wisconsin

The University of Vermont

Private Institutions

Harvard University

Stanford University

Brown University

Columbia University

Massachusetts Institute of Technology (MIT)

The University of Pennsylvania (UPenn)

Dartmouth College

Duke University

Amherst College

Tufts University

Swarthmore College

Wesleyan University

Williams College

We propose that UTIMCO adopt responsible investing as official policy, considering new investments under this policy and including social responsibility in the evaluation of current investment performance. UTIMCO was originally modeled after the investment management companies of Harvard University and Stanford University and it would be prudent to follow their example and implement a similar policy for investing responsibly. For example, the University of Florida has a policy for investing that incorporates socially-motivated restrictions on investments where they concern actions that are directly detrimental to the missions of its clients and to consider socially and environmentally responsible investment alternatives.

MINUTES U. T. System Board of Regents Academic Affairs Committee February 17, 2011

The members of the Academic Affairs Committee of the Board of Regents of The University of Texas System convened at 2:17 p.m. on Thursday, February 17, 2011, in the Board Meeting Room on the 9th Floor of Ashbel Smith Hall, The University of Texas System, 201 West Seventh Street, Austin, Texas, with the following participation:

<u>Attendance</u>

Vice Chairman Hicks, presiding Vice Chairman Foster Regent Hall Regent Pejovich Regent Stillwell

Also present were Chairman Powell, Vice Chairman Dannenbaum, Regent Gary, Regent Kalkwarf, and General Counsel to the Board Frederick.

In accordance with a notice being duly posted with the Secretary of State and there being a quorum present, Committee Chairman Hicks called the meeting to order. During the meeting, he quoted a statistic that 1 out of every 283 people in the State of Texas is an employee of The University of Texas System and 1 out of every 117 Texans is a student at a U. T. System institution.

1. U. T. Arlington: Authorization to enter into a memorandum of understanding with the City of Arlington to create and operate a community garden on approximately 0.49 of an acre of land west of and adjacent to U. T. Arlington's Environmental Center at 406 Summit Avenue, Arlington, Tarrant County, Texas, in support of the institution's sustainability initiative; and finding of public purpose

Committee Meeting Information

Status: Approved via consent agenda

Motion: Made, seconded, and carried unanimously

2. U. T. Austin: Authorization to purchase approximately 3.78 unimproved acres located in Austin, Travis County, Texas, near University Club

Drive and approximately 0.2 of a mile north of the University of Texas

Golf Club in Steiner Ranch, to be more particularly described as the Tennis Master Unit of the Steiner Ranch Master Unit No. 8 Master

Condominiums, together with an undivided interest in the common elements, from Taylor Woodrow Communities/Steiner Ranch, Ltd., a Texas limited partnership, for a price not to exceed fair market value as determined by independent appraisals for use as the site of an indoor and outdoor tennis facility and related facilities

Committee Meeting Information

Presenter(s): Ms. Florence Mayne, Executive Director of Real Estate; Executive Vice President and

Provost Steven Leslie, U. T. Austin

Status: Approved

Motion: Made by Vice Chairman Foster, seconded by Regent Stillwell, and carried unanimously

3. <u>U. T. El Paso</u>: Authorization to establish a Doctor of Nursing Practice (DNP) degree within the School of Nursing

Committee Meeting Information

Presenter(s): President Diana S. Natalicio, U. T. El Paso; Executive Vice Chancellor for Academic

Affairs David B. Prior **Status:** Approved

Motion: Made by Vice Chairman Foster, seconded by Regent Stillwell, and carried unanimously

4. <u>U. T. El Paso: Authorization to establish a Ph.D. degree in Ecology and Evolutionary Biology (Deferred)</u>

Committee Meeting Information

Status: Deferred

5. <u>U. T. Dallas: Request to approve renaming of the Multipurpose and</u> Administration Building as the Administration Building

Committee Meeting Information

Status: Approved via consent agenda

Motion: Made, seconded, and carried unanimously

6. <u>U. T. San Antonio: Request to approve renaming of the Physical Science Laboratory and the Life Science Laboratory as the Science Research Laboratories</u>

Committee Meeting Information

Status: Approved via consent agenda

Motion: Made, seconded, and carried unanimously

7. <u>U. T. System Board of Regents: Amendment to the Regents' Rules and Regulations</u>, Rule 40601, Section 1.3 to add Subsection (I) to reflect the creation of the University College at U. T. Arlington

Committee Meeting Information

Presenter(s): President James D. Spaniolo, U. T. Arlington

Status: Approved

Motion: Made, seconded by Regent Stillwell, and carried unanimously

Discussion at meeting:

Vice Chairman Foster asked if this is a new program and if there would be associated costs. President Spaniolo explained the new College is not a new degree-granting college, but is an administrative reorganization to centralize services for students. He said the name "University College" brings stature and significance to the entity. A University Studies interdisciplinary degree program will be incorporated into the College, and no additional costs will be incurred. Committee Chairman Hicks summarized by saying the University College is a repackaging of services the University is already providing.

8. <u>U. T. Arlington: Approval of acceptance of gift of outdoor art</u>

Committee Meeting Information

Status: Approved via consent agenda

Motion: Made, seconded, and carried unanimously

9. <u>U. T. Austin: Approval of acceptance of gift of outdoor art</u>

Committee Meeting Information

Status: Approved via consent agenda

Motion: Made, seconded, and carried unanimously

10. <u>U. T. Austin: Request to use the previously approved conditional allocation of \$15 million from Permanent University Fund Bond Proceeds to finish out space in the Norman Hackerman Building</u>

Committee Meeting Information

Presenter(s): Executive Vice President and Provost Steven Leslie, U. T. Austin

Status: Approved

Motion: Made by Regent Stillwell, seconded by Regent Pejovich, and carried unanimously

Discussion at meeting:

Provost Leslie described the previously approved funding for a federally-funded energy proposal that was not successful due in part to the geographical separation of the partners for the commercialization aspect of the project.

Vice Chairman Foster cautioned the use and spending of Permanent University Fund (PUF) funds. Chancellor Cigarroa provided assurance that the intent for use of the money has not changed since the project was initially approved (March 3, 2010), and he noted that private funds are needed before the PUF money is distributed.

Provost Leslie described the additional hubs that are expected. In response to questions from Regent Hall and Regent Stillwell, Provost Leslie said the future issue for hubs will be to consolidate more tightly around commercialization. Vice Chairman Hicks noted that Vice Chairman Dannenbaum will be spending time on this initiative as Chairman of the Board's Technology Transfer and Research Committee.

11. <u>U. T. Pan American: Approval to establish the U. T. Pan American Development Board</u>

Committee Meeting Information

Presenter(s): President Robert S. Nelsen, U. T. Pan American

Status: Approved

Motion: Made by Regent Pejovich, seconded by Regent Hall, and carried unanimously

Additional discussion at meeting:

Committee Chairman Hicks asked the presidents to comment on initiatives of which they are the most proud and which are the most challenging.

President Daniel, U. T. Dallas

Successes:

- ability to recruit top faculty; has never seen a better recruiting year; sitting on an enormous competitive advantage
- strong enrollment growth
- building partnerships with U. T. Southwestern Medical Center and U. T.
 Arlington in the biomedical engineering field in the Metroplex

Challenges:

- managing explosive enrollment growth
- improving efficiency and productivity
- private fundraising and philanthropy

Regent Hall suggested leveraging alumna into an integral part of the future of the University, and he asked presidents to give advice to Regents on what they are encountering.

Vice Chairman Dannenbaum spoke about the University of Houston's proposed reallocation of the disbursement rate of State funds.

Regent Kalkwarf asked the presidents to identify the competitive advantages of the U. T. System institutions and how to continue those advantages. President Romo, U. T. San Antonio, spoke about collaborations such as joint degree programs with the U. T. Health Science Center – San Antonio and partnerships with the military such as in cybersecurity. He noted recent meetings held by the San Antonio community with members of the Legislature related to the community's desire for a Tier One University. Dr. Romo described challenges for the institution related to endowment levels and the number of Ph.D. candidates.

ADJOURNMENT

Committee Chairman Hicks adjourned the meeting at 2:59 p.m.

MINUTES

U. T. System Board of Regents Facilities Planning and Construction Committee February 17, 2011

The members of the Facilities Planning and Construction Committee of the Board of Regents of The University of Texas System convened at 3:06 p.m. on Thursday, February 17, 2011, in the Board Meeting Room on the 9th Floor of Ashbel Smith Hall, The University of Texas System, 201 West Seventh Street, Austin, Texas, with the following participation:

Attendance
Regent Gary, presiding
Vice Chairman Dannenbaum
Vice Chairman Hicks
Regent Stillwell

Absent
Regent-Designate Cranberg*

Also present were Chairman Powell, Vice Chairman Foster, Regent Hall, Regent Kalkwarf, Regent Pejovich, and General Counsel to the Board Frederick.

In accordance with a notice being duly posted with the Secretary of State and there being a quorum present, Committee Chairman Gary called the meeting to order. The PowerPoint presentation concerning all items is set forth on Pages 4 - 13.

1. <u>U. T. Austin: High Performance Computing Facility Expansion - Amendment of the FY 2011-2016 Capital Improvement Program to include project (Preliminary Board approval)</u>

Committee Meeting Information

Presenter(s): Mr. Michael O'Donnell, Associate Vice Chancellor for Facilities Planning and

Construction **Status:** Approved

Motion: Made by Vice Chairman Hicks, seconded by Regent Stillwell, and carried unanimously

Discussion at meeting:

<u>Reference</u>: November 11, 2010 Minute Order regarding approval of \$23 million from the Available University Fund (AUF) to support Systemwide computing capabilities, including completion of 10-gigabyte connectivity through the 15 campuses and the U. T. System data centers, additional high performance computing capacity, and pilot projects on shared data storage in support of research.

^{*}Regent-Designate Cranberg had not yet taken the oath of office.

In response to a question from Regent Dannenbaum about incorporating into the NSF grant the previously approved project to support Systemwide computing capabilities approved on November 11, 2010, Chancellor Cigarroa said the allocation of funds and support provided to improve connectivity between Lonestar and the U. T. System campuses will be an important part of the grant proposal and will allow connectivity with other institutions of higher education in Texas such as has been done with Texas Tech. Executive Vice President and Provost Steven W. Leslie described the proposal as an important resource for all U. T. System institutions, for Texas, and for the nation.

2. <u>U. T. Austin: U. T. Academy of Music - Amendment of the FY 2011-2016</u>

<u>Capital Improvement Program to include project (Preliminary Board approval)</u>

Committee Meeting Information

Presenter(s): Mr. Michael O'Donnell, Associate Vice Chancellor for Facilities Planning and

Construction **Status:** Approved

Motion: Made by Vice Chairman Hicks, seconded by Regent Stillwell, and carried unanimously

Discussion at meeting:

Committee Chairman Gary commented that the project will be funded entirely by gifts.

3. <u>U. T. Brownsville: Biomedical Research Facility II - Amendment of the FY 2011-2016 Capital Improvement Program to include project (Preliminary Board approval)</u>

Committee Meeting Information

Presenter(s): Mr. Michael O'Donnell, Associate Vice Chancellor for Facilities Planning and

Construction

Status: Approved

Motion: Made by Vice Chairman Hicks, seconded by Regent Stillwell, and carried unanimously

4. <u>U. T. Permian Basin: Falcon's Nest Addition, Buildings 7-12 - Amendment of the FY 2011-2016 Capital Improvement Program to include project; approval of design development; appropriation of funds and authorization of expenditure; approval of evaluation of alternative energy economic feasibility; and resolution regarding parity debt (Final Board approval)</u>

Committee Meeting Information

Presenter(s): Mr. Michael O'Donnell, Associate Vice Chancellor for Facilities Planning and

Construction **Status:** Approved

Motion: Made, seconded by Regent Hicks, and carried unanimously

Future actions:

 Report on actual costs savings at the May 2011 meeting and determine if the contingency funds are needed.

2. Look at contracting and developing specifications for cost savings for future projects.

Discussion at meeting:

Vice Chairman Dannenbaum asked about common roof space in terms of a firewall, and Mr. O'Donnell responded there will be six separate roofs and fire protection. Regent Dannenbaum also asked about an alternative for steel, and Mr. O'Donnell explained the cost per square foot is as low as possible. Committee Chairman Gary said he had visited the site and the design/landscape called for the kind of configuration that is proposed.

Committee Chairman Gary commented that \$6 million for 24 units is high although \$120 per square foot is in line. Saying the specs could be driving up the cost, Regent Gary said he wants to look more into the soft costs that could result in cost savings. He also asked about the contracting method of competitive sealed proposal versus construction manager-at-risk for control and cost savings. Mr. O'Donnell explained the soft cost (cost of construction to total project cost) is inflated due in part to a contingency that includes reworking of the parking lot, straightening of a road, running additional utilities to the site, and the proximity to a drainage area. Mr. O'Donnell agreed some savings will be had in contingencies and in reviewing specs going forward. He added the decision for a competitive sealed proposal was based on having an existing design in place that was advanced and on the size of construction that would not require a manager on board. He noted, however, the advantage of the construction manager-at-risk method.

Committee Chairman Gary recommended the project be approved with the requirement that the project be discussed in May 2011 to report on actual cost savings and determine if the contingency funds are needed.

ADJOURNMENT

Committee Chairman Gary adjourned the meeting at 3:27 p.m.

Agenda Items

Mr. Michael O'Donnell, Associate Vice Chancellor

U. T. System Board of Regents' MeetingFacilities Planning and Construction CommitteeFebruary 2011



U. T. Austin High Performance Computing Facility Expansion

 The Total Project Cost is \$56,000,000 with funding of \$55,000,000 from Unexpended Plant Funds and \$1,000,000 from the Available University Fund.

Investment Metrics:

- Leverage existing systems to compete for National Science Foundation grant of \$54,000,000 over next four years with potential for renewal.
- Maintain computing capacity at the highest levels to remain competitive in one of the University's highest strategic priorities.
- Continue to recruit the best faculty and graduate students.
- Increase national and international exposure by retaining the Top 10 ranking in supercomputing systems.

Addition to FY 2011-2016 CIP

U. T. AustinU. T. Academy of Music

- The Total Project Cost is \$20,000,000 with funding from Gifts.
- Investment Metrics:
 - By 2015
 - The combined total enrollment of all current programs is approximately 330 students. It is projected that within the next five years, more than 2,000 children and adults will be enrolled.
 - Current enrollment provides approximately \$120,000 in financial aid to graduate students who teach. Revenue from the proposed Academy is expected to increase financial aid for graduate students to more than \$900,000, and pedagogical benefits to graduate students would increase proportionally.

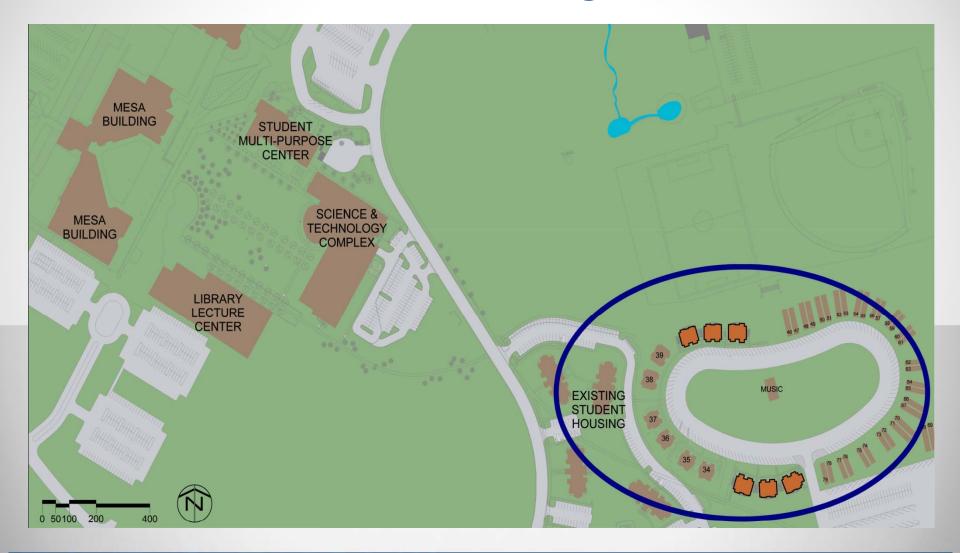
Addition to FY 2011-2016 CIP

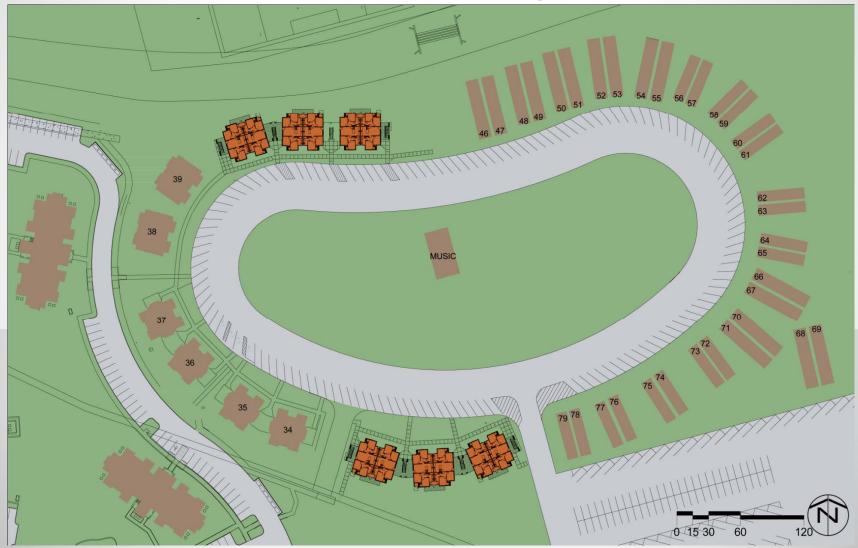
U. T. Brownsville Biomedical Research Facility II

- The Total Project Cost is \$4,753,676 with funding of \$3,993,085 from Grants and \$760,591 from Higher Education Assistance Funds.
- Investment Metrics:
 - By 2013
 - Increase research by expanding infrastructure laboratories from 16 to 22, adding 8,452 gross square feet
 - Increase external funding by \$1.5 million on research expenditures
 - Increase retention by providing approximately 12 part-time positions for students
 - Increase productivity in research by recruitment of two professors

Addition to FY 2011-2016 CIP











The Total Project Cost is \$6,000,000 with funding from Revenue Financing System Bond Proceeds.

Investment Metrics:

- By 2012
 - Increase in recruitment by 50 out-of-area students by Fall opening
 - Obtain 100% occupancy with 96 students
 - Increase meal plan utilization in new Student Multipurpose Center by 25%

U. T. System FY 2011-2016 Capital Improvement Program

Additions to the CIP
Design Development Approval
Total Change in CIP this Meeting

\$ 80,753,676 <u>6,000,000</u> \$ 80,753,676

\$ 86,753,676

This represents a 1.1% increase for a total of \$7.8 billion.

MINUTES

U. T. System Board of Regents Health Affairs Committee February 18, 2011

The members of the Health Affairs Committee of the Board of Regents of The University of Texas System convened at 8:38 a.m. on Friday, February 18, 2011, in the Board Meeting Room on the 9th Floor of Ashbel Smith Hall, The University of Texas System, 201 West Seventh Street, Austin, Texas, with the following participation:

Attendance

Regent Stillwell, presiding Vice Chairman Foster Vice Chairman Dannenbaum Regent Gary Regent Hall

Also present were Chairman Powell, Vice Chairman Hicks, Regent Kalkwarf, Regent Pejovich, and General Counsel to the Board Frederick.

In accordance with a notice being duly posted with the Secretary of State and there being a quorum present, Committee Chairman Stillwell called the meeting to order.

1. <u>U. T. Southwestern Medical Center – Dallas: Authorization to change the official name of the institution to The University of Texas Southwestern Medical Center</u>

Committee Meeting Information

Presenter(s): President Daniel K. Podolsky, M.D., U. T. Southwestern Medical Center - Dallas

Status: Approved

Motion: Made, seconded by Regent Gary, and carried unanimously

2. U. T. M. D. Anderson Cancer Center: Authorization to acquire approximately 1.22 acres of unimproved land adjacent to the northeasterly property line of the institution's Michale E. Keeling Center for Comparative Medicine and Research, located in the Isaac Harris Survey, Abstract No. 38, Bastrop County, Texas, from Griffin Industries, Inc., a Kentucky corporation, in exchange for approximately 1.22 acres of unimproved land bounded on the south side by Farm to Market Road 2336 and located in the north corner of a 373.99-acre tract in the Isaac Harris Survey, Abstract No. 38, Bastrop County, Texas, conveyed to the Board of Regents by deed recorded in Volume 235, Page 799, Deed Records of Bastrop County, Texas, to enable the institution to better manage its campus land

Committee Meeting Information

Presenter(s): Ms. Florence Mayne, Executive Director of Real Estate; John Mendelsohn, M.D.,

President, U. T. M. D. Anderson Cancer Center

Status: Approved

Motion: Made by Regent Dannenbaum, seconded by Regents Gary and Foster, and carried

unanimously

3. U. T. Health Science Center – San Antonio: Authorization to accept a gift of the surface estate only of approximately 3.8305 unimproved acres, being Lot 3, Block 23, Laredo Airport, City of Laredo, Webb County, Texas, from the City of Laredo for use for future programmed expansion of The University of Texas Health Science Center Regional Campus and as the site of a proposed outpatient medical clinic to be operated by the United States Department of Veterans Affairs (VA); authorization to enter into an option to ground lease and a ground lease of the 3.8305 acres for the proposed VA clinic; and finding of public purpose

Committee Meeting Information

Presenter(s): Ms. Florence Mayne, Executive Director of Real Estate; William L. Henrich, M.D., President, U. T. Health Science Center – San Antonio; Kenneth I. Shine, M.D., Executive Vice Chancellor for Health Affairs

Status: Approved

Motion: Made by Regent Dannenbaum, seconded by Regent Hall, and carried unanimously

Discussion at meeting:

Dr. Shine explained the public purpose served by using the land in the way that is proposed. He said U. T. will have academic appointments for many of the physicians who work in the facility. Medical students and residents will rotate through the facility, and the VA has committed to the support of a total of 27 residency positions in South Texas.

Committee Chairman Stillwell asked if the VA side of the transaction requires anything further from the VA, and Ms. Mayne said everyone is ready to sign up. If approved by the City Council next week, the VA is expected to sign the next day.

Regent Kalkwarf expressed support for the recommendation. Regent Dannenbaum asked if there is an environmental report on the land, and Ms. Mayne responded affirmatively. He also asked about the gift of public property, and Dr. Shine responded the public purpose for the use of the land can be justified.

4. U. T. Medical Branch – Galveston: Authorization to acquire the 50% undivided interest of The Sealy & Smith Foundation, and/or its subsidiary, Magnolia Holding Company, both Texas nonprofit corporations, in and to 0.3697 of an acre, being all of Lot 2 and a portion of Lots 3 through 5, Block 667, and the abandoned right-of-way of Avenue A, Galveston, Galveston County, Texas, for use as a portion of the site of the planned clinical services building for the John Sealy Hospital

Committee Meeting Information

Presenter(s): Ms. Florence Mayne, Executive Director of Real Estate; David L. Callender, M.D.,

President, U. T. Medical Branch - Galveston

Status: Approved

Motion: Made by Regent Dannenbaum, seconded by Regent Hall, and carried unanimously

Discussion at meeting:

Ms. Mayne and Dr. Shine answered Regent Hall's questions about the contributions to the project by The Sealy & Smith Foundation.

5. <u>U. T. Medical Branch – Galveston: Approval to establish a Doctor of Nursing Practice (DNP) degree program and submit the proposal to the Texas Higher Education Coordinating Board for review and appropriate action</u>

Committee Meeting Information

Presenter(s): Kenneth I. Shine, M.D., Executive Vice Chancellor for Health Affairs;

David L. Callender, M.D., President, U. T. Medical Branch – Galveston

Status: Approved

Motion: Made by Regent Gary, seconded by Regent Dannenbaum, and carried unanimously

Discussion at meeting:

Vice Chairman Foster pointed out that a similar DNP degree program at U. T. El Paso was considered in the Academic Affairs Committee (Item 3).

Dr. Pamela Watson, Dean of the School of Nursing, answered questions about the program.

Chancellor Cigarroa asked about the demand for nurses in the next 10-15 years, and Dr. Shine said the anticipated shortage by 2020 is 38,000 nurses in Texas alone. He said the vacancy of nurses has dropped during the economic downturn but he anticipates it to go back up again. With the average age of nurses at 50, he noted the retirement of nurses will lead to nationwide shortage. Dr. Shine and Dr. Callender spoke about the shortage of physicians and primary care physicians, saying that nurses can help fill the gap, especially if they have an Advanced Practice degree.

Dr. Callender replied to a question from Regent Dannenbaum about the strategic plan for nursing by saying the institution is looking at adding levels of service in the health system where there are existing gaps, particularly by augmenting the ability to provide care and better access to care. He said the role of a staff nurse in a hospital is a different role. President Callender summarized by saying a lot more people are needed to step into all of the gaps to provide nursing services in the years ahead. Dr. Shine spoke about the future demand for better educated nurses and about the issue of not being able to matriculate the pool of qualified candidates due to restrictions in the faculty:student ratio. He said efforts to increase the number of faculty members and their salaries would be valuable.

6. <u>U. T. System: Quarterly report on health matters, including accountable care organizations and Cancer Prevention and Research Institute of Texas (CPRIT) awards</u>

Committee Meeting Information

Presenter(s): Kenneth I. Shine, M.D., Executive Vice Chancellor for Health Affairs

Status: Reported/Discussed

Discussion at meeting:

Dr. Shine commented on the following:

- Dr. Kaiser's departure from the presidency of U. T. Health Science Center Houston effective April 1, 2011; Giuseppe Colasurdo, M.D., Dean of the Medical School, has been appointed Interim President for a minimum of one year; thus the presidential search would start in April 2012.
- Status of CPRIT funding; Vice Chairman Dannenbaum encouraged appropriate efforts to work cooperatively with CPRIT especially on commercialization opportunities to plough funding back into the enterprise. Dr. Shine noted that Mr. Bryan Allinson, Executive Director of Technology Commercialization and Advisory Services at U. T. System, has recently been hired.
- A conference on workforce issues will be held on February 28.

Dr. Mendelsohn, President, U. T. M. D. Anderson Cancer Center, spoke about

- third-party payors for managed care lowering the amounts they pay for service, thus lowering reimbursements
- reduced Medicare and Medicaid payments being proposed by the government
- required free or discounted care
- State legislative reductions in the formula (as all institutions have to face)

 an initiative to cut patient care costs by 20% over the next five years, which will involve changing the incentives for health care reimbursement that currently incentivize providers to do more and may be unsustainable

Dr. Podolsky, President, U. T. Southwestern Medical Center, spoke about

- the provision of uncompensated care
- the need to reengineer care on the premise of delivering high quality care at a rate not greater than the current Medicare reimbursement rate

ADJOURNMENT

Committee Chairman Stillwell informally adjourned the meeting at 9:30 a.m. for a continuation of the Special Health Affairs Committee meeting (see separate Minutes).

MINUTES

U. T. System Board of Regents Special Health Affairs Committee Meeting February 18, 2011

The members of the Health Affairs Committee of the Board of Regents of The University of Texas System convened at 9:32 a.m. on Friday, February 18, 2011, in the Board Meeting Room on the 9th Floor of Ashbel Smith Hall, The University of Texas System, 201 West Seventh Street, Austin, Texas, with the following participation:

<u>Attendance</u>

Regent Stillwell, presiding Vice Chairman Foster Vice Chairman Dannenbaum Regent Gary Regent Hall

Also present were Chairman Powell, Vice Chairman Hicks, Regent Kalkwarf, Regent Pejovich, and General Counsel to the Board Frederick.

In accordance with a notice being duly posted with the Secretary of State and there being a quorum present, Committee Chairman Stillwell called the meeting to order.

U. T. System: Discussion featuring research opportunities, accomplishments, and challenges at U. T. Southwestern Medical Center and U. T. Health Science Center – Tyler

Committee Meeting Information

Presenter(s): Kenneth I. Shine, M.D., Executive Vice Chancellor for Health Affairs; President Daniel K. Podolsky, M.D., U. T. Southwestern Medical Center; Kirk A. Calhoun, M.D., President, U. T. Health Science Center – Tyler

Status: Discussed

Future action: Suggest future discussion topics to Regent Stillwell or Vice Chairman Dannenbaum

Discussion at meeting:

Dr. Podolsky reviewed a handout set forth on Pages 4 - 27 and described life-changing medical discoveries at the institution. He said 20th century medicine was largely about treating symptoms, and 21st century medicine has provided the opportunity to anticipate the development of disease and intervene in ways that are more effective and more cost effective. He also noted the economic side of the discoveries, including receipt of out-of-state grants, creation of biotech companies, and issuance of patents. He noted there are greater achievements ahead in genetics and bioengineering and in degree programs in collaboration with U. T. Arlington and U. T. Dallas.

Regent Stillwell asked if there is support from drug companies for research, and Dr. Podolsky said yes, there is support in clinical trials/clinical investigation and in the commercialization of sponsored research for the translation of basic discoveries. He added that basic breakthroughs have largely been funded through public sources and private philanthropy, particularly for initial pilot projects where federal support is not necessarily available.

Regent Gary asked about the possibilities of collaborating with international competitors in research, and Dr. Podolsky explained the situation in question, saying the researcher is of Chinese origin, and he returned to China to head up a new Institute with enormous resources, with which U. T. Southwestern might develop collaborations. Dr. Podolsky pointed out the intellectual connection has not been lost.

Regent Hall asked about stumbling blocks to commercialization. Dr. Podolsky answered that "Big Pharma" is struggling with its own model. Commenting that there may not be sufficient business focus and venture capital in a particular geographical area, President Podolsky mentioned the need to develop a culture, with biotechnology as a catalyst.

Dr. Calhoun then spoke about the following:

- the special qualities of U. T. Health Science Center Tyler, including the dissemination of knowledge in training health care professionals and in research and distribution of new knowledge
- the research component is tied up in faculty, facilities, and funding
- research has focused on the Texas Institute of Occupational Safety and Health; tuberculosis (the institution was formerly the state's TB hospital), other pulmonary diseases and infectious diseases; atypical microbacteria disease, and lung diseases
- the need for focus, facilities, quality faculty, and funding, and to hear from the Regents what they would like the future to be.

Committee Chairman Stillwell requested that topics for future Committee discussions be given to him or to Committee Vice Chairman Dannenbaum.

Vice Chairman Dannenbaum and President Mendelsohn spoke about interactions with insurance companies to control costs of medicine. Dr. Mendelsohn also noted the federal mandate to do so.

Saying there are a number of HVAC companies located in the Tyler area, Regent Gary asked Dr. Calhoun about collaboration on proprietary research in air quality. Dr. Calhoun spoke about a collaborative program on indoor air quality with U. T. Tyler.

Dr. Shine observed that 21st century research is a team activity, expensive, and high tech. There is an increasing amount of collaboration and sharing of information, people, and resources that will continue to be required. The U.S. has prospered enormously from outside talent, but the rest of the world is catching up, and the U.T. System can no longer assume that it can recruit, train, and then retain the best and brightest.

ADJOURNMENT

Committee Chairman Stillwell adjourned the meeting at 10:33 a.m.

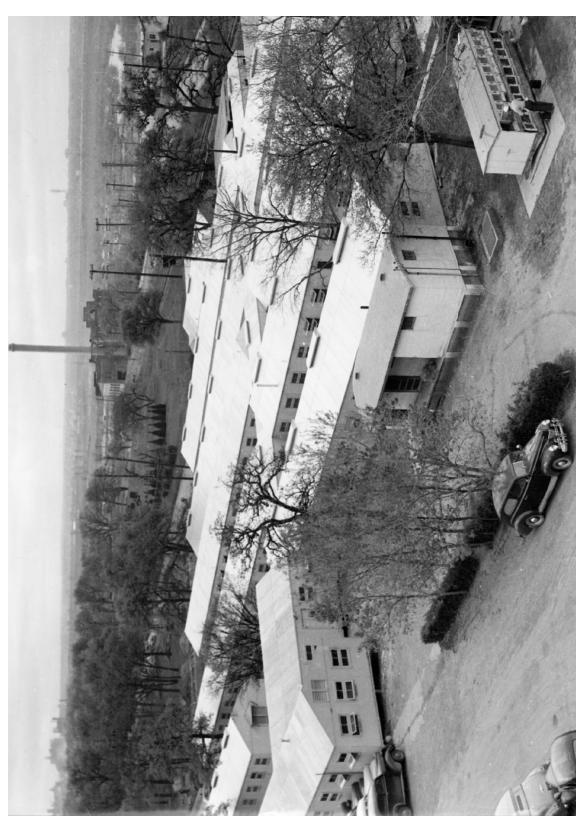
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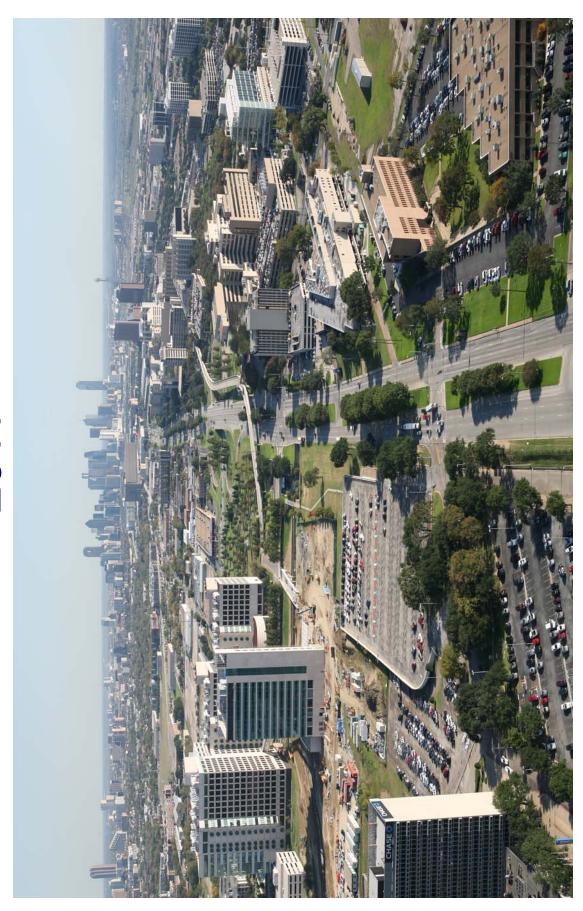
U. T. Southwestern Medical Center: Research Overview

Daniel K. Podolsky, M.D. President

Special Meeting of the Health Affairs Committee U. T. System Board of Regents February 18, 2011







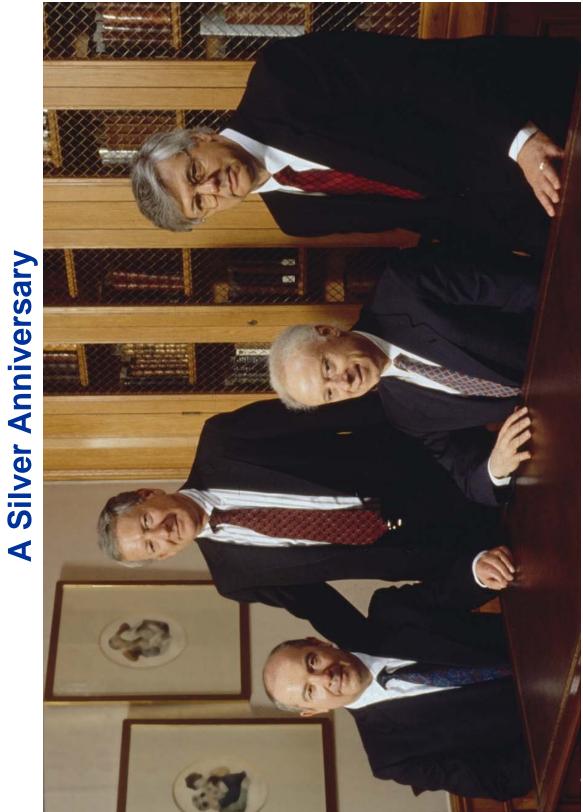
Research Landscape

Potential to Transform Health and

21st Century	21st Century	Intervene before symptoms appear and preserve normal function for as long as possible	Understanding preclinical molecular events and ability to detect patients at risk	Orders of magnitude more effective
Medicine in the 21st Century	20th Century	Treat disease when symptoms appear and normal function is lost	Did not understand the molecular and cellular events that lead to disease	Expensive in financial and disability costs







A Nationally Honored Faculty U. T. Southwestern:

National Academy of Sciences

Brown, M.S. Cobb, M.H.

Estabrook, R.W. Deisenhofer, J.

Gilman, A.G.

Goldstein, J.L.

Hobbs, H.H.

Mangelsdorf, D.J. McKnight, S.L.

Olson, E.N.

Russell, D.W.

Takahashi, J.S. Uhr, J.W.

Unger, R.H. Vitetta, E.S.

Wang, X.

Wilson, J.D.

Yanagisawa, M.

Institute of Medicine

Anderson, R.J. Brown, M.S.

Estabrook, R.W. Foster, D.W.

Gant, N.F.

Goldstein, J.L. Gilman, A.G.

Grundy, S.M. Hobbs, H.H.

Lister, G.

McKnight, S.L. Olson, E.N.

Podolsky, D.K. Seldin, D.W. Parada, L.F.

Famminga, C.A.

Wildenthal, C.K. Wilson, J.D.

Howard Hughes Medical Institute

Deisenhofer, J. Chen, Z.

Grishin, N.V.

Hooper, L.V. Hobbs, H.H.

Jiang, Y.

Mangelsdorf, D.J. Levine, B.

Takahashi, J.S. Rosen, M.K.

Yanagisawa, M. Wang, X.



U. T. Southwestern Research Expertise High Impact Across Broad Spectrum of **Important Unmet Needs**

Understanding the genetic and molecular basis of diseases

Obesity, Cholesterol, Metabolism, and Diabetes Examples:

Neurodegenerative Diseases and Mental Illness

Cellular Signaling

Cancer Biology and Therapeutics

Sickle Cell Disease

Heart Disease and Stroke

Gulf War Illness

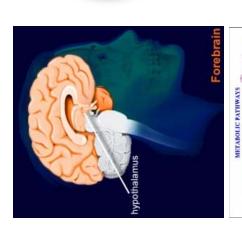
Drug Addiction

At the forefront of technology

Example: Advanced Medical Imaging

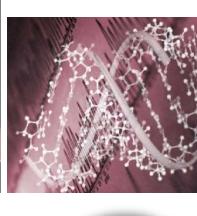


Center for Obesity, Diabetes and Metabolism Research



- for drug targets food metabolism Brain regulation of appetite and

of food metabolism - for drug targets Molecular biology by organs



Genetic differences in appetite control - for drug targets and metabolism

Intervention Surgical

metabolism products Measurement of using advanced imaging – not biopsies

Nutrition, fitness, and educational outreach





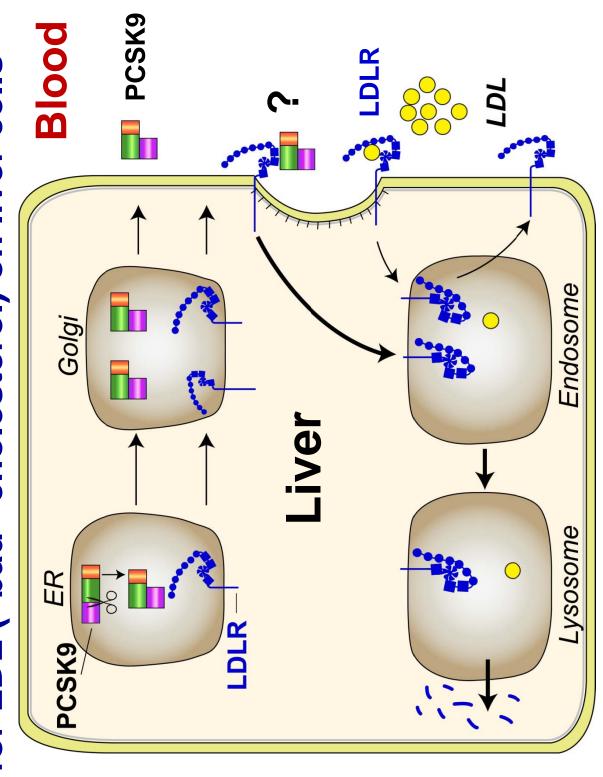


essential for combating the spiraling and costly epidemic of diabetes and obesity Uniquely positioned with world-renowned researchers and facilities in all fields

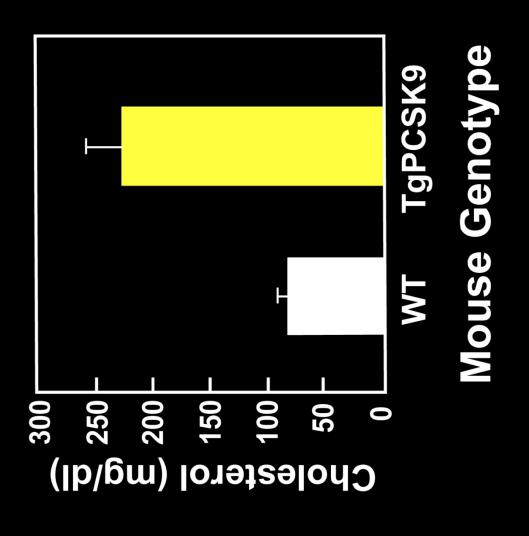
PCSK9: A Protein that Regulates Plasma Cholesterol Levels

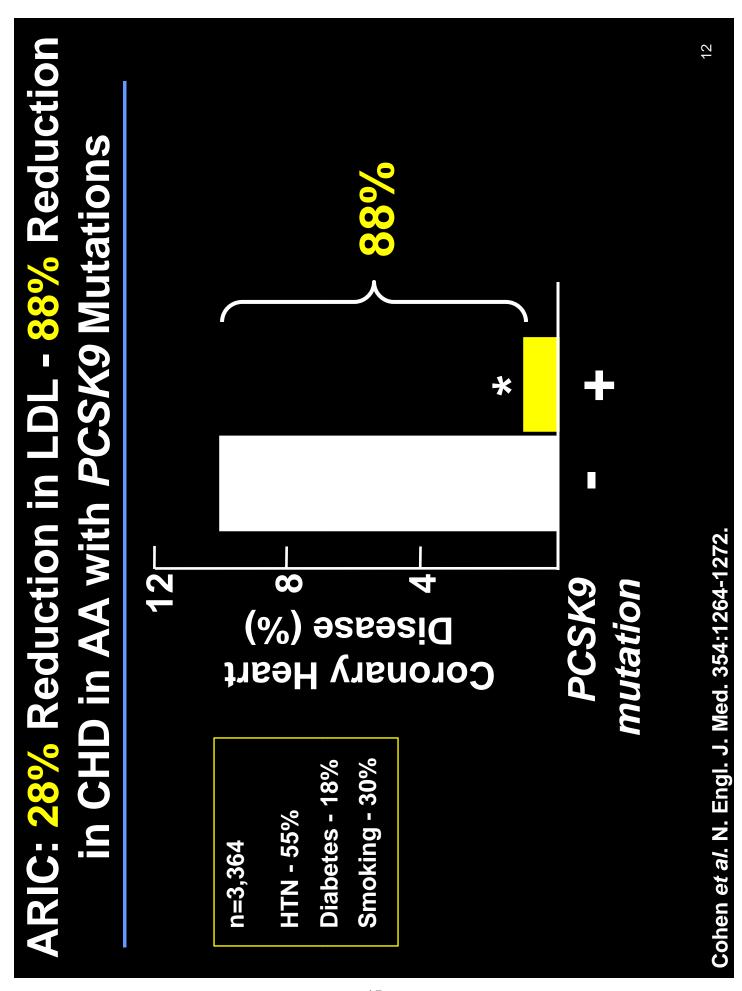
PCSK9: proprotein convertase subtilisin/kexin-type 9 serine protease C-terminal C-terminal Catalytic domain Catalytic domain Prodomain **Autocatalytic** cleavage Prodomain SP

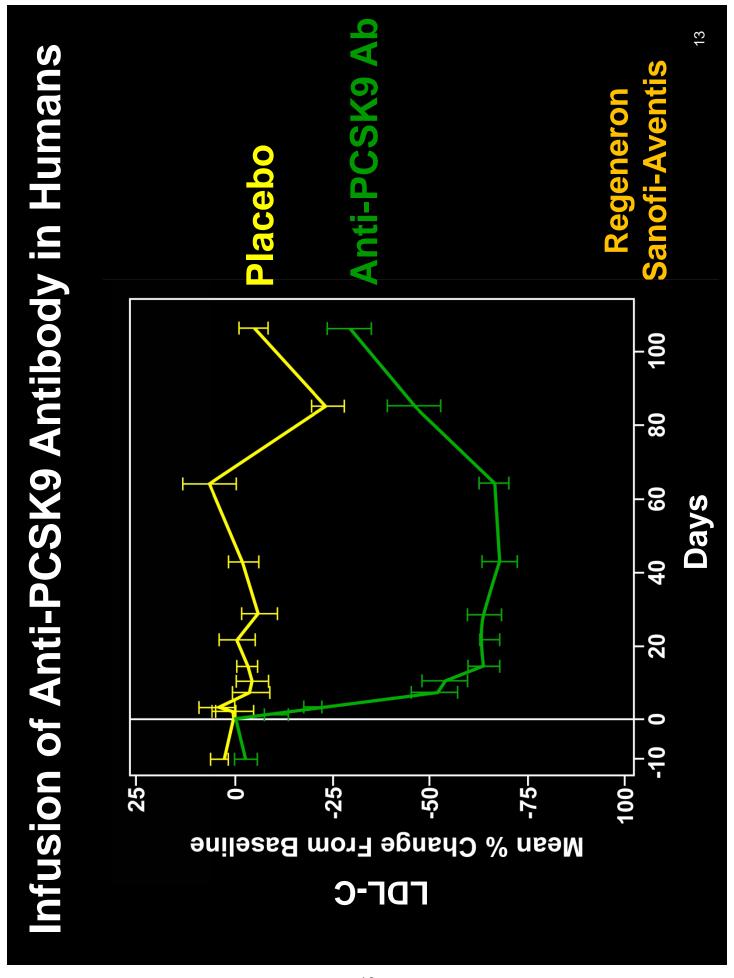
PCSK9: Secreted protein that blocks the receptor for LDL ("bad" cholesterol) on liver cells



SK9 Increases lasma Cholestero High Levels of







Translation: New Targets Measures of Success-

- Hypercholesterolemia (PCSK9)
- Hypertriglyceridemia (ANGPTL 3 and 4)
- Obesity (GOAT)
- Fatty Liver/cirrhosis (PNPLA3)
- Type II diabetes (FGF21)
- Type I diabetes (Leptin)

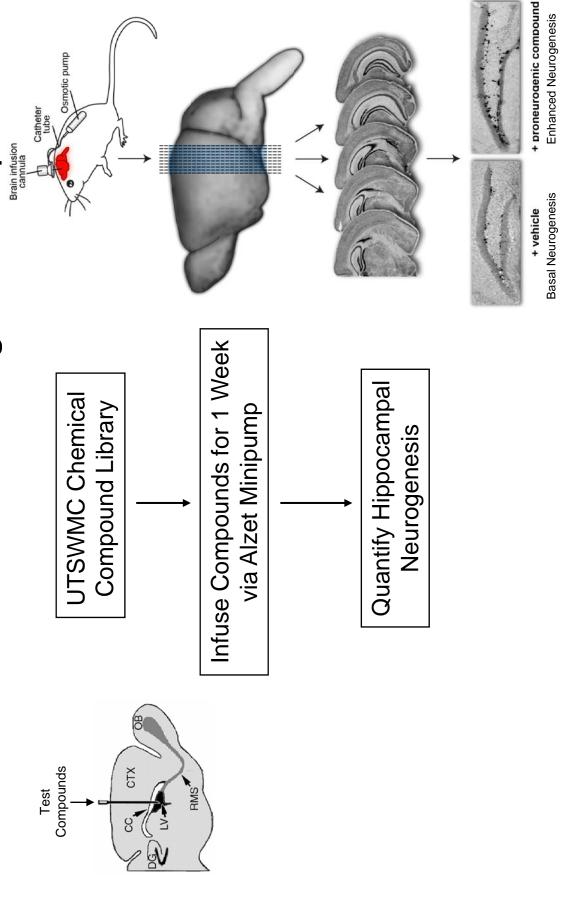
SOUTHWESTERN MEDICAL CENTER

A Rising Tide in an Aging Population Neurodegenerative Diseases –

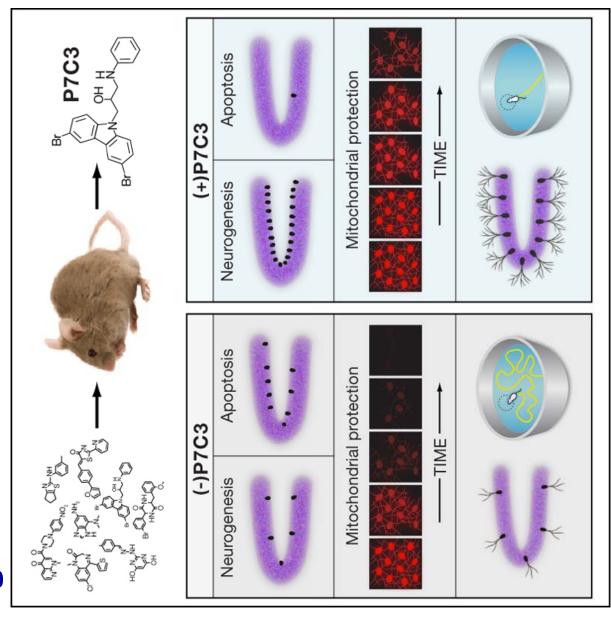
- Alzheimer's Disease
- Huntington's Disease
- ALS (Lou Gehrig's Disease)
- Parkinson's Disease

Nerve Regeneration - Searching for an Elusive Switch

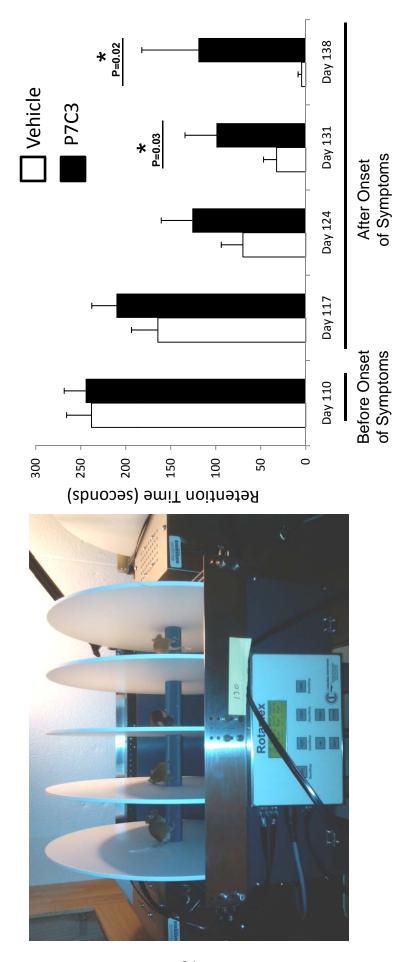
In vivo Screen For Proneurogenic Compounds

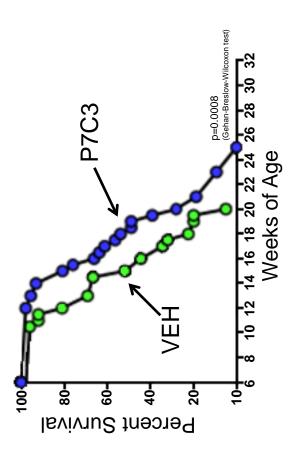


Regeneration of Neurons in the Brain P7C3 – A Novel Compound Promotes



"Amyotrophic Lateral Sclerosis" in Mice P7C3 Treatment Improves



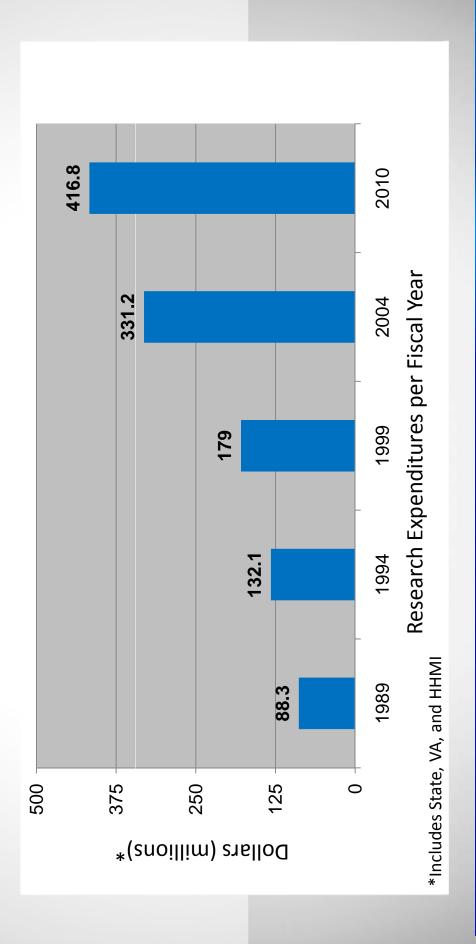


UT SOUTHWESTERN MEDICAL CENTER

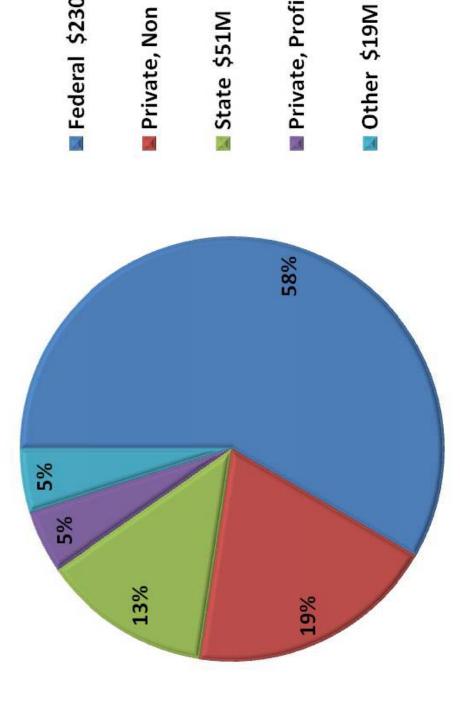
U. T. Southwestern Research

➤ 9% per year compounded growth in last two decades

➤ Made possible through new space and recruitment of preeminent scientists



Research Support: Synergistic Sources U.T. Southwestern



■ Federal \$230M

Private, Non Profit \$75M

■ State \$51M

Private, Profit \$19M

Experienced 9% per year compounded growth in the last two decades

*Exclusive of VA & HHMI



Research as Engine for Economic Development

\$337 million/year brought to Texas in external research grants 4,000 high-skill scientific jobs, over 11,000 jobs total Other economic development from UTSW research:

- 7 start-up biotech companies formed since 2000 that have raised over \$500 million in financing
- 546 US patents issued through FY10 naming UTSW faculty as inventors
- 576 discoveries licensed since 1985 to companies for development
- \$132 million in revenues generated
- Resulted in widely-used drugs such as Citracal®, Urocit-K® and Tenecteplase®, and of TRUFIL DCS ORBIT® for aneurysms
- BioCenter opened in 2010 with 100K sq ft for industrial partners and incubation, financed with technology transfer revenue



Future Directions

- Real-time Genetics
- Host and Environment: Microbiome-Immunity
- Bioengineering (with U. T. Dallas and U. T. Arlington)
- Science of Health Care Delivery
- Research in our U. T. Southwestern Health Embedding Clinical and Health Sciences System



Challenges

- Changing scale of life science:
- Teams
- Infrastructure (Computing)
- Cost
- Opportunity outstripping funding
- Global competition
- Retention and Recruitment
- Models of translation to commercialization

