

TEXAS TECH UNIVERSITY
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER
LUBBOCK, TEXAS

MINUTES OF THE BOARD OF REGENTS
OF
TEXAS TECH UNIVERSITY

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VOLUME III

TEXAS TECH UNIVERSITY
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

MINUTES OF THE BOARD OF REGENTS
OF
TEXAS TECH UNIVERSITY

AUGUST 14, 1998

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Minutes

Board of Regents
August 14, 1998

M128/H81

The Board of Regents of Texas Tech University met in regular session on Friday, August 14, 1998 at approximately 8:30 a.m. in Room 201 in the Board of Regents suite on campus. The following regents were present: Mr. Edward E. Whitacre, Jr., Chairman; Mr. J. Robert Brown; Mr. John W. Jones; Dr. Nancy E. Jones; Dr. Carl E. Noe; Mr. James E. Sowell; Mr. J. Michael Weiss and Mr. Alan B. White. The following officials and staff were present: Mr. John T. Montford, Chancellor; Mr. James L. Crowson, Deputy Chancellor; Dr. Donald R. Haragan, President, TTU; Dr. David R. Smith, President, TTUHSC; Ms. Cathy Allen, Vice Chancellor for Cultural Diversity; Mr. Pat Campbell, Vice Chancellor and General Counsel; Ms. Ronda Johnson, Vice Chancellor for Institutional Advancement; Mr. Doug Mann, Vice Chancellor, Facilities Planning and Construction; Dr. John Opperman, Vice Chancellor for Administration and Finance; Mr. Mike Sanders, Vice Chancellor for Governmental Relations; Mr. William G. Wehner, Vice Chancellor for Special Projects; Mr. Ben Lock, Executive Assistant to the Chancellor; Dr. John Burns, Provost, TTU; Mr. Jim Brunjes, Vice President for Fiscal Affairs, TTU; Mr. Richard Butler, Vice President for Operations and Student Support Services, TTUHSC; Mr. Elmo Cavin, Vice President for Fiscal Affairs, TTUHSC; Dr. Robert H. Ewalt, Vice President for Student Affairs, TTU; Mr. Glen Provost, Vice President for Health Policy and Planning, TTUHSC; Dr. David Schmidly, Vice President for Research and Dean of the Graduate School, TTU; Dr. Leonel Vela, Vice President for Rural and Community Health, TTUHSC; Dr. Michael R. Heintze, Vice President for Enrollment Management; Gene West, Acting Vice President for Operations; Dr. John R. Abernathy, Dean, College of Agricultural Science and Natural Resources; Dr. Paul Brooks, Dean of Allied Health, TTUHSC; Dr. Elizabeth Haley, Dean, College of Human Sciences; Dr. Dudley McCauley, Assistant Dean for Finance and Administration, TTUHSC Amarillo; Dr. Frank Newton, Dean, School of Law; Ms. Theresa Drewell, Assistant Vice Chancellor, Facilities Planning and Construction; Ms. Jacqueline Garcia, Assistant Vice Chancellor for Administration and Finance, TTU; Mr. Ed McGee, Assistant Vice Chancellor for Investments, TTU; Mr. James Laible, Associate Vice President for Managed Care/Hospital Relations, TTUHSC; Dr. Robert Sweazy, Associate Vice President for Research, TTU; Mr. Steve Pruitt, Associate Vice President for Business Affairs and Comptroller, TTU; Dr. Timothy Floyd, School of Law; Ms. Frances Grogan, Director, Office of Internal Audit, TTU; Dr. Margaret Lutherer, Director, News and Publications, TTU; Ms. Kerry Billingsley, Director, Quality Service; Ms. Penny Harkey, Budget Director, TTUHSC; Ms. Elizabeth McClendon, Office of the General Counsel; Dr. Elizabeth Hall, Department Chairperson, Health, Physical Education and Recreation; Mr. Wayne Robins, Administrator of Regulatory Compliance; Mr. Artie Limmer, Assistant Director and Manager of Photographic Services, News and Publications; Ms. Carol Phillips, Office of the Deputy Chancellor; Mr. Gary Scharrer, *El Paso Times*; and Mrs. Marcie Johnston, Executive Director to the Board of Regents.

Secretary's Note: Other than for the Board members and the senior officers of the Office of the Chancellor and the Offices of the Presidents of Texas Tech University and Texas Tech University Health Sciences Center, attendance at the meeting was verified only by a sign-in sheet.

- M129/H82 Chairman Whitacre called the meeting of the Board of Regents to order at 8:30 a.m. and then called on Dr. David Smith who gave the invocation.
- M130/H83 Chairman Whitacre called on Chancellor Montford who, speaking from the materials attached hereto as Attachment No. M1/H1, introduced Dr. Paul Brooks, Dean of Allied Health, and law school students Shelley Hallman, Scott Mayo and Mike Murray who recently won the American Bar Association National Appellate Advocacy Competition. Chairman Whitacre then called on Dr. Don Haragan who introduced Dr. Michael Heintze, the newly appointed Vice President for Enrollment Management at Texas Tech University.
- M131/H84 At approximately 8:37 a.m., Chairman Whitacre announced a closed session of the Board by making the following statement: "The Board of Regents of Texas Tech University will now convene into Executive Session as authorized by Chapter 551 of the *Texas Government Code*."
- M132/H85 At the conclusion of its closed session, the board reconvened into open session at 10:35 a.m. for the purpose of convening into meetings of the Board's standing committees. Chairman Whitacre announced the locations of simultaneous committee meetings as follows: the Academic, Clinical and Student Affairs Committee, Room 104; the Finance and Administration Committee, Room 206; and the Facilities Committee, Room 201.
- M133/H86 Chairman Whitacre announced at 11:25 a.m. that the Board of Regents would reconvene into its second open session, for the purpose of considering reports of its standing committees, meeting as a Committee of the Whole, and conducting other business.
- M134/H87 Regent Alan White moved that the minutes of the June 19, 1998 meeting be approved. Regent Carl Noe seconded the motion, and the motion passed unanimously.
- CW98 Chairman Whitacre announced the following: "The Board of Regents will now consider three items as a Committee of the Whole. For the purpose of facilitating action on items to be considered, I will ask Regent White to preside over the Committee of the Whole."
- CW99 Regent White called on Deputy Chancellor Jim Crowson who presented the item regarding authorization for the Office of the Chancellor to revise the amount of matching funds from Texas Tech University Health Sciences Center for the Texas Tech University Boulevard and to proceed with the project per prior approval. Discussion by the Board followed the presentation. At the conclusion of the discussion, Regent White moved approval of the following resolution:
- "RESOLVED, that the revised project budget for the construction of Texas Tech University Boulevard is established at \$9,000,000, including \$7.2 million coming from federal funds and \$1.8 million from Texas Tech University Health Sciences Center."*
- Regent Brown seconded the motion, and the motion passed unanimously.
- CW100 Regent White called on Deputy Chancellor Jim Crowson who presented the item concerning the appointment of members to the Board of Directors of Texas Tech Foundation, Inc. Discussion by the Board followed the presentation. At the conclusion of the discussion, Regent White moved approval of the following resolution:
- "RESOLVED, that the Board of Regents of Texas Tech University appoints the individuals on the list attached hereto as Attachment No. CW1"*

to the Board of Directors of Texas Tech Foundation, Inc. for the term indicated."

Regent Noe seconded the motion, and the motion passed unanimously.

- CW101 Regent White called on Deputy Chancellor Jim Crowson who presented the item concerning the extension of the authority granted by the Board of Regents of Texas Tech University at its June 19, 1998 meeting to the Board of Regents Pricing Committee from 5:00 p.m., Monday, August 31, 1998 to 5:00 p.m., Monday, November 30, 1998. Discussion by the Board followed the presentation. At the conclusion of the discussion, Regent White moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University extends the authority of the Board of Regents Pricing Committee to negotiate with the senior managing underwriter the most advantageous terms for the issuance, sale and delivery of Board of Regents of Texas Tech University Revenue Financing System Refunding bonds, Sixth Series (1998), from 5:00 p.m., Monday, August 31, 1998 to 5:00 p.m., Monday, November 30, 1998."

Regent Nancy Jones seconded the motion, and the motion passed unanimously.

- CW102 Regent White presented the following motions on matters discussed in Executive Session.

- CW103 Based upon the record and discussion in Executive Session, Regent White moved approval of the following resolution:

"RESOLVED, the Board accepts and adopts the recommendation of the School of Allied Health Hearing Committee and University Administration in the appeal of Kenneth Utzinger."

Regent Nancy Jones seconded the motion, and the motion passed unanimously.

- CW104 Based upon the record and discussion in Executive Session, Regent White moved approval of the following resolution:

"RESOLVED, that the settlement of the appeal of Joseph Miller's non-reappointment in the Department of Pharmacology, School of Medicine, be resolved within the parameters discussed in Executive Session."

Regent Jim Sowell seconded the motion, and the motion passed unanimously.

- CW105 At the conclusion of the meeting of the Committee of the Whole, the Board considered reports from its standing committees.

- M135/H88 Chairman Whitacre called on Regent Noe, Chair, to give the report of the Academic, Clinical and Student Affairs Committee.

TTU Action Items

- M136 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University approves the program for an Environmental Toxicology Master of Science Degree in the College of Arts and Sciences and authorizes the Office of the Chancellor to cause a proposal to be submitted to the Texas Higher Education Coordinating Board seeking its approval for such a program."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M137 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University approves the program for an Environmental Toxicology Doctor of Philosophy Degree in the College of Arts and Sciences and authorizes the Office of the Chancellor to cause a proposal to be submitted to the Texas Higher Education Coordinating Board seeking its approval for such a program."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M138 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University approves the new program for a Master of Social Work Degree in the College of Arts & Sciences and authorizes the Office of the Chancellor to cause a proposal to be submitted to the Texas Higher Education Coordinating Board seeking its approval for such a program."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M139 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University modifies the Charles Sanders Peirce Professorship in Philosophy so that it is now the Charles Sanders Peirce Professorship and is now a university-wide interdisciplinary professorship."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M140 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes a leave of absence without pay for Richard Lewis Peterson, Briscoe Professor of Bank Management, College of Business Administration, for the period January 15, 1999, through May 31, 1999. The purpose of this leave is to complete a textbook on Financial Institutions, Markets, and Money."

"RESOLVED, that the Board of Regents of Texas Tech University authorizes a leave of absence with pay for Elaine Jarchow, Dean, College of Education, for the period September 1, 1998, through May 31, 1999. The purpose of this leave is to help with the implementation of a Women's University in Saudi Arabia. The university will be reimbursed for its payment from the Texas International education Consortium.

"RESOLVED, that the Board of Regents of Texas Tech University authorizes a revised leave of absence without pay for Robert D. Owen, Associate Professor, Department of Biological Sciences, College of Arts & Sciences, for the period January 15, 1999, through December 31, 1999 instead of the originally approved dates of September 1, 1998 through May 31, 1999. The purpose of this leave is to serve as Coordinator in development and implementation of a master's degree program in biology at the Universidad Nacional de Asuncion-Paraguay.

"RESOLVED, that the Board of Regents of Texas Tech University authorizes establishment of the Cotton Economics Research Institute.

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the division of the Institute for Management and Leadership Research into the Center for Health Care Strategy and the Institute for Leadership Research.

"RESOLVED, that the Board of Regents of Texas Tech University authorizes establishment of the MRI Petrophysical Applications Center.

"RESOLVED, that the Board of Regents of Texas Tech University authorizes establishment of the Virginia Murray Sowell Center for Research and Education in Visual Impairment."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

TTUHSC Action Items

H89

Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University approves the appointment with tenure of Wayne J. Daum, M.D., as professor in the Department of Orthopaedic Surgery in the School of Medicine effective the date of employment."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

H90

Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to review and approve a contract between Texas Tech University Health Sciences Center and the Immigration Naturalization Services and the related subcontract to

provide psychiatric services to federal detainees for the period October 1, 1998 through September 30, 1999."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- H91 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to approve an amendment to the agreement for consulting services between Texas Tech University Health Sciences Center and Jack C. Vowell from August 16, 1998 through December 31, 1998."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- H92 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to execute an agreement between Texas Tech University Health Sciences Center and Hendrick Medical Center, Abilene, Texas, for the period August 1, 1998 through August 31, 1999 to establish a telecommunications network to support the academic and clinical activities essential in a One/Two Family Practice Residency Training Program affiliated with Texas Tech University Health Sciences Center."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- H93 Upon recommendation of the Academic, Clinical and Student Affairs Committee, Regent Noe moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University ratifies the agreement between Texas Tech University Health Sciences Center and the University of Texas at El Paso to implement an Early Decision to Medical School Program, effective September 1, 1998."

Discussion by the Board followed the presentation. The motion passed unanimously.

- M141/H94 Regent Noe brought to the attention of the Board an item of interest for and on behalf of Texas Tech University Health Sciences Center regarding the operation of a teaching/nursing facility on the Health Sciences Center campus as a major foundation for a health aging program. The item was reviewed by the committee. Regent Noe asked for questions. There were none.

- M142/H95 Regent Noe brought to the attention of the Board the information items that had been reviewed by the committee and asked for questions relating to such items. There were none. The information items relating to the Academic, Clinical and Student Affairs Committee are included as Attachment M2/H2.

- M143/H96 Chairman Whitacre called on Regent White, Chair, to give the report of the Finance and Administration Committee.

TTU Action Items

- M144 Regent White presented the item and called on Chancellor Montford who, speaking from the materials attached hereto as Attachment M1, made comments on the budget. Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University approves the FY 1999 Operating Budget for Texas Tech University and that the Board of Regents of Texas Tech University appropriates the fund balances of income generating accounts for specific activity usually supported by the accounts unless otherwise appropriated by the Board of Regents."

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the president, in consultation with the Office of the Chancellor, to approve the appropriate adjustments to close Texas Tech University's accounting records for FY 1998 and to open Texas Tech University's accounting records for FY 1999."

Discussion by the Board followed the presentation. The motion passed unanimously.

- M145 Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to execute an agreement with Chaparral Graphics Group, Inc. for printing of The University Daily for the period September 1, 1998, through August 31, 2001."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M146 Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas University ratifies the budget and salary adjustments attached hereto as Attachment No. M2."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M147 Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolution:

"RESOLVED, that in accordance with Texas Government Code, Sec.2103.061, the Board of Regents of Texas Tech University ratifies the administrative actions relating to finance as follows:

- (1) *To authorize the Chancellor to designate officers and employees of the university to approve all travel of employees of Texas Tech University, except to countries outside the United States other than United States possessions, Canada and Mexico, provided that such travel contributes to the mission of the university and is in accordance with current travel regulations and who may further delegate their authority, effective September 1, 1998 through August 31, 1999.*
- (2) *To authorize the Chancellor to designate officers and employees of the university to approve official travel reimbursement from State appropriations and all other funds for officers and employees of Texas Tech University provided that the purpose of the travel and the reimbursement for such are in accordance with state travel regulations, other statutory requirements, or other action promulgated by this board, effective September 1, 1998, and to continue until such time as they are separated from the university or assigned other responsibilities.*
- (3) *To authorize the Chancellor to designate officers and employees of the university to approve and pay all accounts covering expenditures for state-appropriated funds and all other university-controlled funds, effective September 1, 1998 and to continue until such time as they are separated from the university or assigned other responsibilities.*
- (4) *To sign checks drawn on the revolving fund and all other checking accounts of the university in any depository bank, except the University's Cashier's Account in the American State Bank, Lubbock, Texas, effective September 1, 1998, and to continue until such time as they are separated from the university or assigned other responsibilities, and further provided that any mechanically signed check of \$10,000 or more shall be reviewed and manually signed by one of the employees listed who may sign:*

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for
Administration and Finance
Donald R. Haragan, President
Jim Brunjes, Vice President for Fiscal Affairs
Steve R. Pruitt, Associate Vice President for
Business Affairs and Comptroller
Gloria J. Hale, Assistant Vice President for Human
Resources
Charlie L. Stallings, Assistant Comptroller
Carole Wardroup, Director of Accounting Services*

*Ted W. Johnston, Manager of Grants and Contracts
Accounting
Deana Miller, Assistant Director of Accounting
Services*

- (5) *To sign and/or countersign cashier's checks drawn on the university's Cashier's Account in the American State Bank, Lubbock, Texas, effective September 1, 1998 and to continue until such time as they are separated from the university or assigned other responsibilities, and further provided that any mechanically signed check of \$10,000 or more shall be reviewed and manually signed by one of the employees listed who may sign or counter-sign:*

Employees who may sign or countersign:

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for
Administration and Finance
Donald R. Haragan, President
Jim Brunjes, Vice President for Fiscal Affairs
Steve R. Pruitt, Associate Vice President for
Business Affairs and Comptroller
Gloria J. Hale, Assistant Vice President for Human
Resources
Charlie L. Stallings, Assistant Comptroller
Carole Wardroup, Director of Accounting Services
Ted W. Johnston, Manager of Grants and Contracts
Accounting
Deana Miller, Assistant Director of Accounting
Services*

Employees who may countersign only:

*James E. Meiers, Director of Student Business
Services
Robert Fisher, Manager of Student Business
Services*

- (6) *To authorize transfer by wire or other means, of funds between Texas Tech University depositories, effective September 1, 1998 and to continue until such time as they are separated from the university or assigned other responsibilities:*

Employees who may authorize or counter-authorize:

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for Administration and
Finance
Donald R. Haragan, President
Jim Brunjes, Vice President for Fiscal Affairs
Steve R. Pruitt, Associate Vice President for
Business Affairs and Comptroller*

*Charlie L. Stallings, Assistant Comptroller
Carole Wardroup, Director of Accounting Services
Edmund W. McGee, Assistant Vice Chancellor for
Investments
Winnie Long, Manager of Cash Management*

- (7) *To authorize and approve the sale, purchase and transfer of stocks, bonds, and other securities which are owned or controlled by Texas Tech University provided such action is approved by any two of the individuals listed below, effective September 1, 1998, and to continue until such time as they are separated from the university or assigned other duties or responsibilities:*

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for Administration
and Finance
Donald R. Haragan, President
Jim Brunjes, Vice President for Fiscal Affairs
Steve R. Pruitt, Associate Vice President for
Business Affairs and Comptroller
Charlie L. Stallings, Assistant Comptroller
Edmund W. McGee, Assistant Vice Chancellor for
Investments*

However, for all instruments contributed to the university one of the two required signatures must be from one of the following:

*Ronda J. Johnson, Vice Chancellor for Institutional
Advancement
Greg Teeter, Legal Counsel for Institutional
Advancement."*

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

TTUHSC Action Items

H97

Regent White presented the item and called on Chancellor Montford who, speaking from the materials attached hereto as Attachment H1, made comments on the budget. Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University approves the FY 1999 Operating Budget for Texas Tech University Health Sciences Center, and that the Board of Regents appropriates the fund balances of income generating accounts for specific activity usually supported by the accounts unless otherwise appropriated by the Board of Regents.

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the president, in consultation with the Office of the Chancellor,

to approve the appropriate adjustments to close the Health Sciences Center's accounting records for FY 1998 and to open the Health Sciences Center's accounting records for FY 1999."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

H98 Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University accepts the artwork with an appraised value of \$67,400 donated to the Preston Smith Library of the Health Sciences by Dr. and Mrs. C.L. Montgomery of Lubbock, Texas."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

H99 Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University approves and ratifies the budget adjustments attached hereto as Attachment No. H2."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

H100 Upon recommendation of the Finance and Administration Committee, Regent White moved approval of the following resolution:

"RESOLVED, that in accordance with Texas Government Code, Sec. 2103.061, the Board of Regents of Texas Tech University ratifies the administrative actions relating to finance as follows:

- (1) To authorize the Chancellor to designate officers and employees of the Health Sciences Center to approve all travel of employees of Texas Tech University Health Sciences Center, except to countries outside the United States other than United States' possessions, Canada and Mexico, provided that such travel contributes to the mission of the Health Sciences Center and is in accordance with current travel regulations and who may further delegate their authority, effective September 1, 1998, through August 31, 1999.*
- (2) To authorize the Chancellor to designate officers and employees of the Health Sciences Center to approve official travel reimbursement from state appropriations and all other funds for officers and employees of Texas Tech University Health Sciences Center provided that the purpose of the travel and the reimbursement for such are in accordance with state travel regulations, other statutory requirements, or other action promulgated by this board,*

effective September 1, 1998, and to continue until such time as they are separated from the Health Sciences Center or assigned other responsibilities.

- (3) *To authorize the Chancellor to designate officers and employees of the Health Sciences Center to approve and pay all accounts covering expenditures for State-appropriated funds and all other Health Sciences Center-controlled funds, effective September 1, 1998, and to continue until such time as they are separated from the Health Sciences Center or assigned other responsibilities.*
- (4) *To sign checks drawn on the revolving fund and all other checking accounts of the Health Sciences Center in any depository bank, except the Health Sciences Center's Cashier's Account in the American State Bank, Lubbock, Texas, effective September 1, 1998, and to continue until such time as they are separated from the Health Sciences Center or assigned other responsibilities, and further provided that any mechanically signed check of \$10,000 or more shall be reviewed and manually signed by one of the employees listed who may sign:*

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for Administration and Finance
David R. Smith, M.D., President
Elmo M. Cavin, Vice President for Fiscal Affairs
Michael Crowder, Associate Vice President for Business Affairs
Douglas Moore, Director of Accounting Services
JoAnna Marshall, Assistant Director of Accounting Services
Lisa Cook, Accounting Group Supervisor
Tami James, Accounting Group Supervisor
Jim Brunjes, Vice President for Fiscal Affairs, TTU
Steve R. Pruitt, Associate Vice President for Business Affairs and Comptroller, TTU
Gloria J. Hale, Assistant Vice President for Human Resources, TTU
Carole Wardroup, Director of Accounting Services, TTU
Marilyn P. Bell, Director of Payroll, TTU
Deana Miller, Manager of Accounting Business Services, TTU*

- (5) *To sign checks drawn on the Health Sciences Center's Cashier's Account in the American State Bank, Lubbock, Texas, effective September 1, 1998, and to continue until such time as they are separated from the Health Sciences Center or assigned other responsibilities, and*

further provided that any mechanically signed check of \$10,000 or more shall be reviewed and manually signed by one of the employees listed who may sign or counter-sign:

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for
Administration and Finance
David R. Smith, M.D., President
Elmo M. Cavin, Vice President for Fiscal
Affairs
Michael Crowder, Associate Vice President
for Business Affairs
Douglas Moore, Director of Accounting
Services
JoAnna Marshall, Assistant Director of
Accounting Services
Lisa Cook, Accounting Group Supervisor
Tami James, Accounting Group Supervisor*

- (6) *To authorize transfers, by wire or other means, of funds between Texas Tech University Health Sciences Center depositories, effective September 1, 1998, and to continue until such time as they are separated from the Health Sciences Center or assigned other responsibilities:*

Employees who may authorize or counter-authorize:

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for Administration and
Finance
David R. Smith, M.D., President
Elmo Cavin, Vice President for Fiscal Affairs
Michael Crowder, Associate Vice President for
Business Affairs
Douglas Moore, Director of Accounting Services
Jim Brunjes, Vice President for Fiscal Affairs, TTU
Steve R. Pruitt, Associate Vice President for
Business Affairs and Comptroller, TTU
Charlie L. Stallings, Assistant Comptroller, TTU
Carole Wardroup, Director of Accounting Services,
TTU
Edmund W. McGee, Assistant Vice Chancellor for
Investments
Winnie Long, Manager of Cash Management*

- (7) *To authorize and approve the sale, purchase and transfer of stocks, bonds, and other securities which are owned or controlled by the Health Sciences Center provided such action is approved by any two of the individuals listed below, effective September 1, 1998, and to continue until such time as they are*

separated from the Health Sciences Center or assigned other duties or responsibilities:

*John T. Montford, Chancellor
James L. Crowson, Deputy Chancellor
John Opperman, Vice Chancellor for
Administration and Finance
David R. Smith, M.D., President
Elmo M. Cavin, Vice President for Fiscal
Affairs
Michael Crowder, Associate Vice President
for Business Affairs
Douglas Moore, Director of Accounting
Services
Edmund W. McGee, Assistant Vice
Chancellor for Investments*

However, for all instruments contributed to the Health Sciences Center one of the two required signatures must be from one of the following:

*Ronda J. Johnson, Vice Chancellor for
Institutional Advancement
Greg Teeter, Legal Counsel for Institutional
Advancement."*

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M148/H101 Regent White brought to the attention of the Board an item of interest that had been reviewed by the committee and asked for questions relating to such items. There were none.
- M149/H102 Regent White brought to the attention of the Board the information items that had been reviewed by the committee and asked for questions relating to such items. There were none. The items relating to the Finance and Administration Committee are included as Attachment M3/H3.
- M150/H103 Chairman Whitacre called on Regent Sowell, Chair, to give the report of the report of the Facilities Committee.

TTU Action Items

- M151 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to approve and submit the Facilities Construction and Deferred Maintenance Master Plan (also known as the Five-Year Campus Master Plan Update) to the Texas Higher Education Coordinating Board as the approved Master Plan for Texas Tech University."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M152 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to select an architect for the project, to establish a planning budget, and to develop a schematic design for a new Fine Arts Complex.

"RESOLVED, that the planning budget for a Fine Arts Complex is established at \$50,000."

Opportunity for discussion by the Board followed the presentation. The motion passed with Regent Weiss voting "no."

- M153 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to hire a consultant to assist in the preparation of a Request for Qualification ("RFQ") and, upon evaluation, a Request for Proposal ("RFP") for a firm to fund, design, build, operate and maintain a hotel and conference center on campus.

"RESOLVED, that the consultant budget to develop an RFP for a firm to fund, design, build, operate and maintain a hotel and conference center on campus is established at \$75,000.

"RESOLVED, that Texas Tech University expects to pay expenditures in connection with hiring a consultant to assist in the preparation of a Request for Qualifications ("RFQ"), and preparation of a Request for Proposal ("RFP") for a firm to fund, design, build, and operate and maintain a hotel and conference center on campus prior to the issuance of obligations to finance the project.

"RESOLVED, that Texas Tech University finds, considers, and declares in accordance with Treasury Regulations, Section 1-150-2, its intention to be reimbursed for original expenditures advanced in connection with the hiring of a consultant to assist in the preparation of a Request for Qualifications ("RFQ"), and preparation of a Request for Proposal ("RFP") for a firm to fund, design, build, and operate and maintain a hotel and conference center on campus with an aggregate maximum principal amount expected to be \$75,000."

Discussion by the Board followed the presentation. The motion passed with Regent Weiss voting "no."

- M154 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to select an architect for the project; to establish a planning budget; and to develop a schematic design for the relocation of the Women's Gym and Dance Studio.

"RESOLVED, that the planning budget for the development of a schematic design for the relocation of the Women's Gym and Dance Studio is \$50,000."

Discussion by the Board followed the presentation. The motion passed with Regent Weiss voting "no."

M155 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to select an architect for the project; to establish a planning budget; and to develop a feasibility study for the adaptive reuse of Weeks Hall.

"RESOLVED, the planning budget for the feasibility study for the adaptive reuse of Weeks Hall is \$50,000.

"RESOLVED, that Texas Tech University expects to pay expenditures in connection with the feasibility study for the adaptive reuse of Weeks Hall prior to the issuance of obligations to finance the project.

"RESOLVED, that Texas Tech University finds, considers, and declares in accordance with Treasury Regulations, Section 1-150-2, its intention to be reimbursed for original expenditures advanced in connection with the feasibility study for the adaptive reuse of Weeks Hall with an aggregate maximum principal amount expected to be \$50,000."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

M156 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to establish a project budget and select an engineer for Phases I and II of the campus irrigation system.

"RESOLVED, the budget for Phases I and II of the campus irrigation system is established at \$65,000."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

M157 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to purchase the Glenna Goodacre 'Park Place' sculpture, to establish a project budget, to approve the design, and to proceed with documents and with the awarding of a construction contract for site development associated with the sculpture.

"RESOLVED, that the project budget for the Park Place Sculpture site work be established at \$261,810.

"RESOLVED, that Texas Tech University expects to pay expenditures in connection with the purchase of the Glenna Goodacre 'Park Place' sculpture, for the design, preparation of documents, and for the site development associated with the sculpture prior to the issuance of obligations to finance the project.

"RESOLVED, that Texas Tech University finds, considers, and declares in accordance with Treasury Regulations, Section 1-150-2, its intention to be reimbursed for original expenditures advanced in connection with design, preparation of documents, and for the site development associated with the 'Park Place' sculpture with an aggregate maximum principal amount expected to be \$261,810."

Discussion by the Board followed the presentation. The motion passed unanimously.

M158

Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolutions:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to proceed with the project; to establish a project budget; to authorize preparation of documents for submittal to the Texas Higher Education Coordinating Board for review and approval; and upon approval and identification of funding, to proceed with contract documents, with the receipt of bids, and with the awarding of a construction contract for a new women's softball field.

"RESOLVED, that the project budget for a new women's softball field is established at \$2,500,000.

"RESOLVED, that Texas Tech University expects to pay expenditures in connection with the design, planning, acquisition and construction of a new women's softball field prior to the issuance of obligations to finance the project.

"RESOLVED, that Texas Tech University finds, considers, and declares in accordance with Treasury Regulations, Section 1-150-2, its intention to be reimbursed for original expenditures advanced in connection with a new women's softball field with an aggregate maximum principal amount expected to be \$2,500,000."

Opportunity for discussion by the Board followed the presentation. The motion passed with Regent Weiss voting "no."

- M159 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to cause schematic designs to be developed for a new Athletic Training/Rehabilitation Building and an Athletic Hall of Fame Building."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

TTUHSC Action Item

- H104 Upon recommendation of the Facilities Committee, Regent Sowell moved approval of the following resolution:

"RESOLVED, that the Board of Regents of Texas Tech University authorizes the Office of the Chancellor to approve and submit the Facilities Construction and Deferred Maintenance Master Plan (also known as the Five-Year Campus Master Plan Update) to the Texas Higher Education Coordinating Board as the approved Master Plan for Texas Tech University Health Sciences Center."

Opportunity for discussion by the Board followed the presentation. The motion passed unanimously.

- M160/H105 Regent Sowell brought to the attention of the Board two items of interest that were reviewed by the committee. One item concerned the planned demolition of the observatory and barracks, and the other concerned the siting of a teaching/nursing facility. Regent Sowell asked for questions. There were none.
- CW106 At the conclusion of the consideration of standing committee reports, Chairman Whitacre called for presentation of the remaining agenda items.
- CW107 Chairman Whitacre called on Vice President for Enrollment Management, Dr. Michael Heintze, who reported on enrollment management activities.
- CW108 Chairman Whitacre called on Dr. David Schmidly who, speaking from the materials attached hereto as Attachment No. CW2, reported on top tier research university status.
- CW109 Chairman Whitacre called on Deputy Chancellor Crowson to present several items. Deputy Chancellor Crowson noted future meeting dates of November 13, 1998; February 12, 1999; May 14, 1999; and August 13, 1999.
- CW110 Deputy Chancellor Crowson discussed retreat information including location and said that we would be back with more information on that issue at a later date.
- CW111 Deputy Chancellor Crowson discussed location of future meetings outside of Lubbock.
- CW112 Deputy Chancellor Crowson announced the kick-off of the Dallas Campaign on Friday, September 11.
- CW113 Chairman Whitacre called on Chancellor Montford who gave the Chancellor's Report.

CW114 Chairman Whitacre adjourned the meeting at 12:01 p.m.

Attachments

M1/H1	Introductions; Item M130/H83
M2/H2	Academic, Clinical and Student Affairs Committee Information Items; Item M142/H95
M3/H3	Finance and Administration Committee Information Items; Item M149/H102

CW1	Board of Directors of Texas Tech Foundation, Inc.; Item CW100
CW2	Vice President Schmidly's Report; Item CW108

M1	Chancellor's Remarks; Item M144
M2	Budget and Salary Adjustments; Item M146

H1	Chancellor's Remarks; Item H97
H2	Budget Adjustments; Item H99

I, James L. Crowson, the duly appointed and qualified Assistant Secretary of the Board of Regents, hereby certify that the above and foregoing is a true and correct copy of the Minutes of Texas Tech University Board of Regents meeting on August 14, 1998.

James L. Crowson
Assistant Secretary

SEAL

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER BUDGET ADJUSTMENTS (5/1/98 - 6/30/98)

	Source of Funds		Expense	Remarks
	Other	Income		
<u>BOARD APPROVAL OF BUDGET ADJUSTMENTS</u>				
GENERAL DESIGNATED FUNDS				
Managed Care - Lubbock	968,793		968,793	Budget of fund balance for advertising, equipment and construction. To provide operating costs for the remainder of FY 1998.
Texas Tech Medical Center - Southwest	210,120	29,880	240,000	
TOTAL GENERAL DESIGNATED FUNDS	1,178,913	29,880	1,208,793	
RATIFICATION OF SALARY INCREASES OF 10% OR MORE				
	CURRENT SALARY	NEW SALARY	% INCREASE	Equity Adjustment
Azikiwe Nwosu - Internal Medicine - El Paso	101,699	120,000	18.0%	

Chancellor John T. Montford
Board of Regents Meeting
August 14, 1998, Friday

Introductions

I. Paul Brooks- Dean of Allied Health

Dr. Brooks comes to Texas Tech from Our Lady of the Lake University in San Antonio. He is actually coming home to Tech; he served as Regional Dean of Allied Health in Odessa before going to San Antonio. Dr. Brooks holds a doctorate in health administration from the University of Iowa.

II. Larry Hovey- Acting Dean of the College of Education.

Dr. Hovey serves as Associate Dean in Education and will also serve as dean while Elaine Jarchow is on leave developing a new university for women in Saudi Arabia.

III. Jeff Melton- Assistant Vice Chancellor for Institutional Advancement for Southeast Texas.

Jeff joins the Horizon Campaign staff from Odessa College where he served as Special Assistant to the President and Director of Institutional Advancement. Jeff is now at the Austin Regional Center. He has a marketing degree from TCU and a master's degree from Texas Tech.

- IV. Winners of the American Bar Association National Appellate Advocacy Competition. In the final round, Texas Tech faced the defending champions from South Texas School of Law. The competition was held August 6-8, with preliminaries at the New England School of Law, and the final at Harvard.

Shelley Hallman

Scott Mayo

Mike Murray

I would now like to call on President Haragan to introduce the new Vice President for Enrollment Management and the new Associate Athletic Director for Compliance.

TEXAS TECH UNIVERSITY
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER
Lubbock, Texas

Academic, Clinical and Student Affairs Committee

FOR BOARD INFORMATION

TEXAS TECH UNIVERSITY

None

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

1. Affiliation Agreements, April 25, 1998 – June 22, 1998.
2. Contracts renewed per *Board Policy 04.05 4.d.*, April 25, 1998 to June 22, 1998.
3. School of Medicine Faculty Employment Contracts.

[The above referenced information items are on file in the Board of Regent's office.]

TEXAS TECH UNIVERSITY
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER
Lubbock, Texas

Finance and Administration Committee

FOR BOARD INFORMATION

TEXAS TECH UNIVERSITY

1. Summary of Revenues and Expenditures by Budget Categories, Fiscal Year 1998, May 31, 1998.
2. Report of Official Travel, Cumulative by Fiscal Quarter, Fiscal Year 1998.
3. Budget Adjustments of \$100,000 or more for Supplemental Awards or Renewals of Research and Other Sponsored Projects, May 1, 1998 through June 30, 1998.

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

1. Summary of Revenue by Budget Category and Expenditures by Budget Category, Fiscal Year 1998, May 31, 1998.
2. Report of Official Travel, Cumulative by Fiscal Quarter, Fiscal Year 1998.

[The above referenced information items are on file in the Board of Regent's office.]

TEXAS TECH FOUNDATION, INC.
BOARD OF DIRECTORS
APPOINTMENTS
AUGUST 6, 1998

Terms Expiring August 31, 2001

Ed Benninger
Leonard Childress
Craig Dearden
Curtis Griffith
David Hirschfeld
Edith Kidd
Ethel McLeod
Jack Miller
Jerry Smith
Margaret Talkington

TEXAS TECH UNIVERSITY RESEARCH HIGHLIGHTS



June 18, 1998 to August 14, 1998

Prepared by

Vice President for Research and Graduate Studies

Dean of the Graduate School

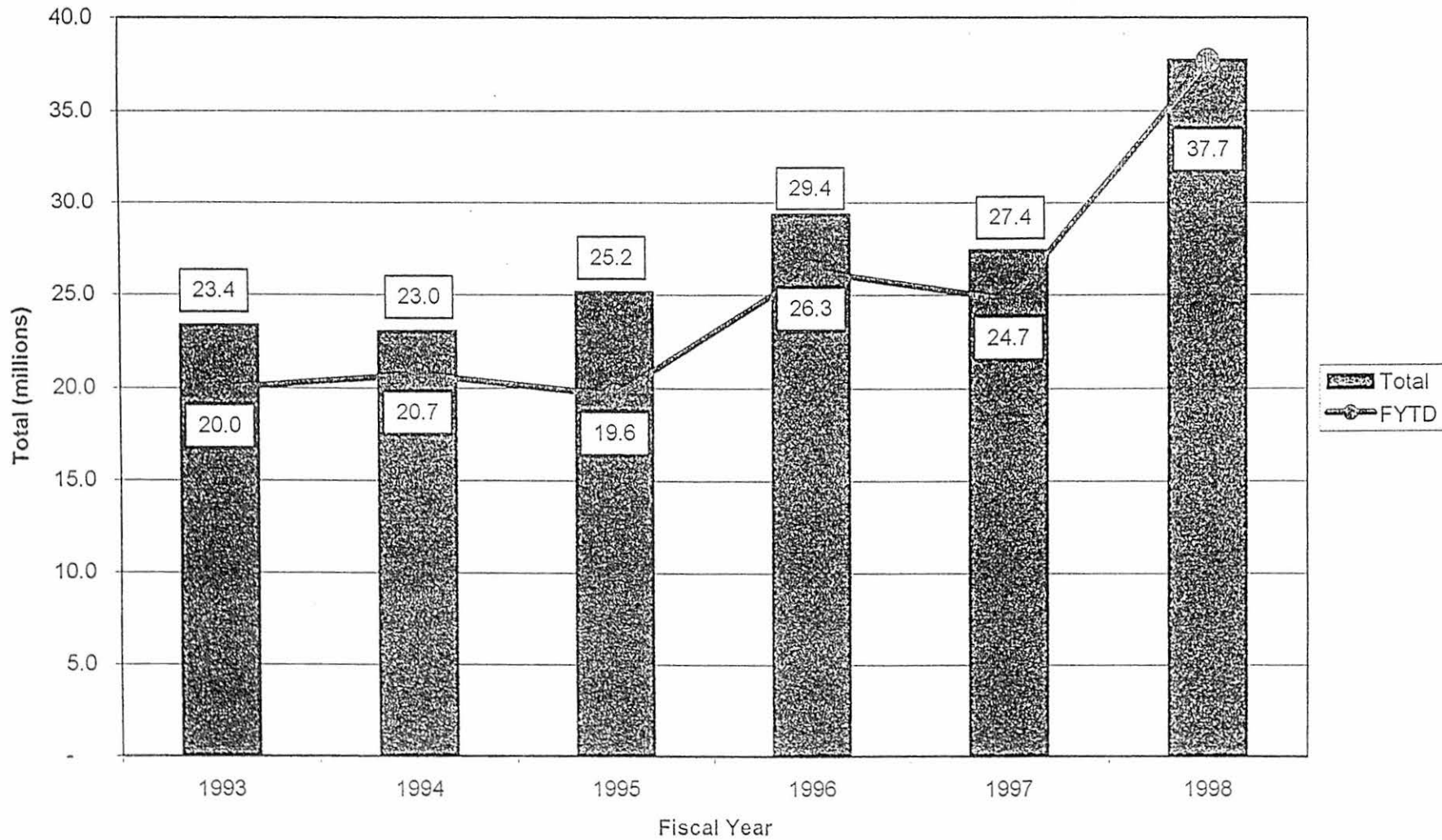
Office of Research Services

Texas Tech University Research Highlights

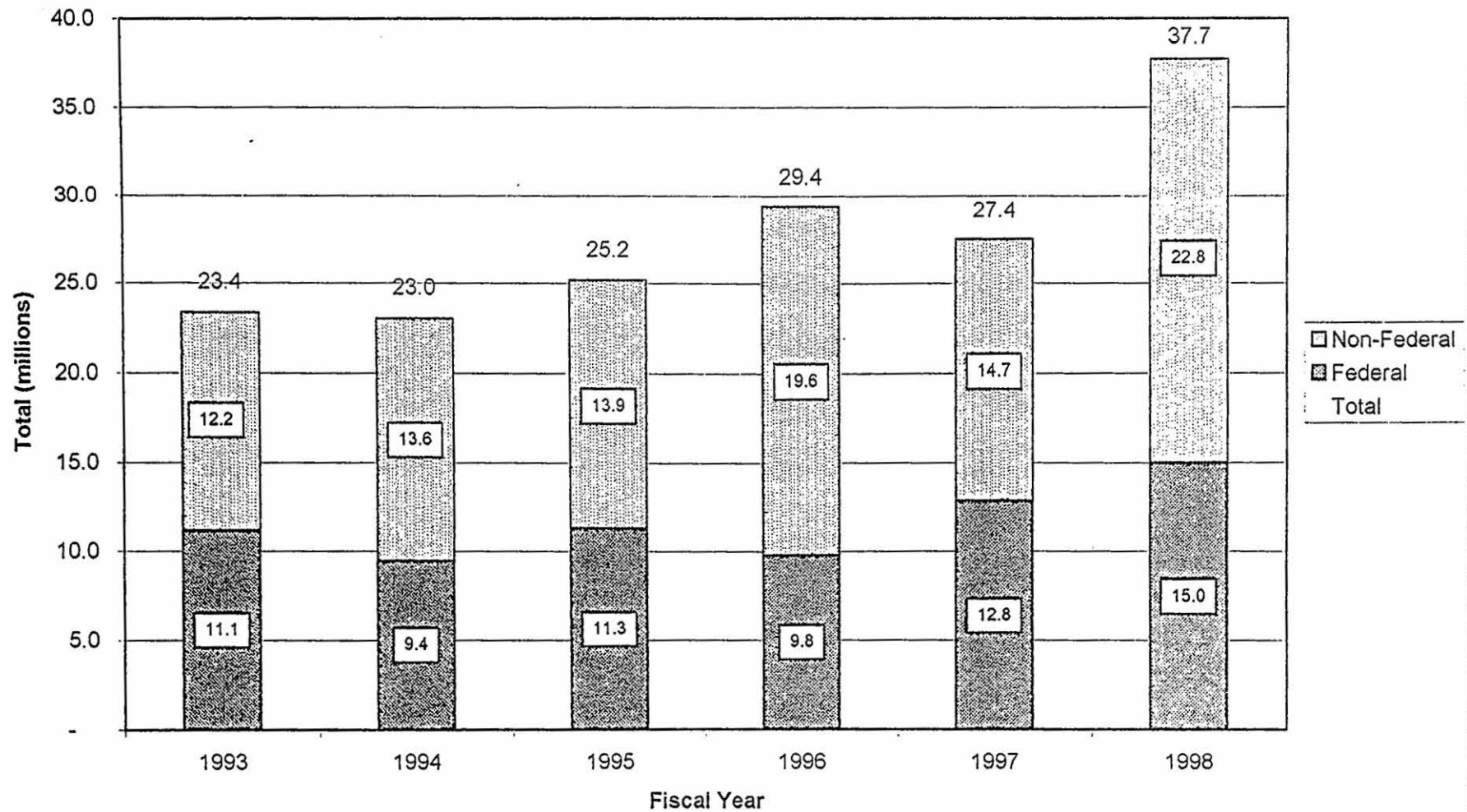
June 18, 1998 to August 14, 1998

- ◆ **Sponsored research awards for FY98 continue to set records.**
- ◆ **Federal Initiatives are highly successful.**
- ◆ **Excellent relationship is evolving with NASA/Johnson Space Center.**
- ◆ **All line items fare well in Coordinating Board review.**
- ◆ **New Director of Technology Transfer and Intellectual Property will begin work in September.**

Texas Tech University Sponsored Programs
Total Funding and
Fiscal Year-to-date, 9/1/97 - 8/31/98



Texas Tech University Sponsored Programs
Federal and Non-Federal Funding
Fiscal Year-to-date, 9/1/97 - 8/31/98



FEDERAL INITIATIVES

PROJECT	AGENCY	FY98	FY99	
			House	Senate
Cotton	Ag	200,000	200,000	300,000
Environment	DoD	2,000,000 *	3,000,000	0
Wind	Commerce	3,800,000	2,000,000	1,800,000
Texas Tech Boulevard	ISETEA	-0-	7,600,000	7,600,000
TOTALS		\$6,000,000	\$12,800,000	\$9,700,000
GRAND TOTALS		\$15,700,000 -- \$18,800,000		

* -- line item veto but funding restored.

Selected Press Clippings
featuring research
sponsored at

Texas Tech University

June 19, 1998 to August 13, 1998

Federal funds flow to Tech wind research

By KARA ALTENBAUMER
Avalanche-Journal

Texas Tech's Wind Engineering Research Center was awarded a \$3.6 million federal grant Tuesday for a move to Reese Center and research into shelters for children and the elderly.

The money, from the U.S. Commerce Department National Institute of Standards and Technology, will go toward funding a 16-member team of engineers, architects, meteorologists and economists who will work on a five-year wind research project at Reese.

The group's primary focus will be developing wind shelters for nursing homes, day care centers and schools,

said Kishor Mehta, wind center director. The group also hopes to develop shelters for mobile homes, though Mehta said researchers are not sure how feasible that goal is.

"What we want to achieve is life safety for people," Mehta said. "But our basic goal is to reduce the effects of wind storms on people's lives."

The wind center, which opened in 1988, tackles issues related to tornadoes, hurricanes and other high-wind phenomena. Employees at the center have marketed shelters and continue to study storms and how they affect various types of construction.

Wind research efforts also will be aimed at mitigating disturbances caused by wind storms.

"Wind storms disrupt communities completely because of the infrastructure like utilities being down or roadways that are covered in debris," Mehta said. "What can be done in these situations? Is there something we can do to continue services like newspapers and television towers?"

Researchers also hope to reduce damage inside buildings. They are interested in developing roofing and insulation methods and products that may help protect furniture, equipment and computers, Mehta said.

Tuesday's grant comes after a push from Tech and its representatives in Washington, D.C. Wind research is one of several projects Tech has set aside for a national funding goal, said

Keith Williams, press secretary for U.S. Rep. Larry Combest, R-Lubbock, one of the backers of the project.

Combest said the grant shows that Tech's research is "competitive and widely recognized with respect and research dollars."

The \$3.6 million, which will be awarded in August, brings Tech's 1998 total for federal research dollars to \$14.2 million, said Tech spokeswoman Margaret Lutherer. That's slightly more than one-third of the way toward Tech's goal of the \$40 million in federal funds needed to be a top research university.

Tech's research funding from all sources is slightly more than \$35 million for the year.

Tech team has design on new computer hardware



A-J Photo/James Granger

Texas Tech professor John Antonio, seated, is heading up a computer research team that is designing hardware that crosses the boundary into software. His team members are, from left, Jack West, Jeff Muehring and Brian Veale.

By KARA ALTENBAUMER
Avalanche-Journal

Texas Tech professor John Antonio compares his computer research to making a bus into 10 sedans for a trip to the grocery store and then putting it back together again for a longer trip.

Antonio and his team of graduate students are working to design computer hardware that crosses the boundary into software. They are working with computer chips that change shape and design based on what tasks they need to perform.

"You could take a bus to the grocery store, but it might be an overkill to consume all that power," Antonio said. "It makes more sense to take all the rubber and metal and chop it up into 10 sedans so 10 families can go to the store.

"Reconfigurable chips allow you to slice and dice the silicon into the pieces you need."

Antonio's \$1 million research project, funded by the Defense Department, is seeking to make computer parts for aircraft radar.

Small military planes like fighter jets and unmanned surveillance

planes need radar that can take in "a firehose of information" very fast, but without using much power.

Antonio's job is to make computer chips that run like buses when the task is big, but have the gas mileage of a sedan for smaller tasks.

And the chips have to consume as little power as possible.

Because of public concern over defense spending, Tech's research is part of a commercial-off-the-shelf initiative, which seeks to use commercial vendors in defense contracts.

"It's like trying to make fast cars using commodity parts instead of high-end parts," Antonio said. "We're trying to find that sweet spot, that trade-off point. I like to think of us as Indy car drivers."

Tim Osmulski, a May computer science grad who worked on the project, said it addresses an area of computer technology that's been ignored. "People have been much more concerned with speed than power," he said.

"Computers are going faster, and they're going to take more and more power," he said. "We're running into an edge."

Antonio pointed out that defense technology often makes its way to the commercial market, which could mean big bucks for Tech. He cited the Internet as an example.

"People are so creative," he said. "So many devices have computing devices in them. Some entrepreneur will find out how to sell it.

"Philosophically, (the research) is very exciting. You've got hardware that's malleable. People can take that and run with it.

"It opens up a whole dimension of possibilities."

Plus, being able to work with a project that combines hardware and software offers a higher level of training for researchers, said Jeff Muehring, a doctoral student working on the project.

"Usually you only get to keep up with one," he said. "It blends electrical engineering, computer engineering and computer science."

Antonio's group has another 18 months to work on the project until the Defense Department's deadline. "By the end of the project, we'll have something to show. We have bits and pieces now," he said.

Tech's weather research aims to make big splash

By KARA ALTENBAUMER
Avalanche-Journal

Texas Tech researchers believe they can boost cotton yield 20 to 50 percent by providing producers with pinpoint weather information from a system that eyes the small picture rather than the large.

In August, the Texas Department of Economic Development will decide whether to give Tech \$2 million in grant money to fund West Texas MesoNet - a network of weather tracking and monitoring stations located in every county across the region.

The stations would record data on wind, temperature, humidity and barometric pressure up to the first mile of the atmosphere. They also would measure soil temperature and moisture. Weather data would be transmitted to a control station at Reese Center.

MesoNet has the potential to make an impact in agriculture, weather prediction and utility usage, all of which have a stake in more accurate weather data, said Tim Doggett, a geosciences professor at Tech who is heading up the project.

"There are a lot of different components of our local economy that depend on weather data,

like knowing when to apply pesticides or when to water," he said. "At billions of dollars, it doesn't take a fraction of a percent to make an impact."

MesoNet would be able to give more accurate small-scale weather data and predictions than the National Weather Service, Doggett said. "Meso-scale" is a weather term that refers to small-scale data.

Loren Phillips, a meteorologist with the National Weather Service in Lubbock, said analysts there look at the big picture for South Plains weather more than at individual communities.

"The more observations we have available, we're able to analyze the smaller-scale features better," he said. "We do have satellite and radar observation, but that doesn't measure surface temperature and moisture."

"Our forecasts go out to the public, so anything that helps us improve our projections helps everyone."

For farmers, MesoNet would provide surface data that the weather service does not provide - such as soil temperature and moisture. Such data would assist farmers in knowing when and where to irrigate according to soil conditions rather than

See MESONET 13A

MesoNet system holds promise for South Plains

Continued from Page One
atmospheric conditions.

"With agriculture being such a big part of our community, anything that can make it more efficient helps," Doggett said.

As for utility companies, knowing where hot spots are and having more precise predictions for storms would enable them to prepare for potential power outages and high-use times. For instance, utility companies would be able to have workers available in precise locations to repair power lines before a storm ever starts, Doggett said.

Even trucking companies have been known to use this type of data for scheduling around storms, Doggett said.

"Everybody has a use for this data," he said. "It elevates (Tech) to be in the leadership role in this situation."

While Tech works on the West Texas version of MesoNet, Texas A&M University is working to expand the project statewide. It hopes to have funding in about a year to bring MesoNet to every county in Texas.

Working in conjunction with A&M also could raise public awareness of Tech as an agricultural university, similar to the familiarity Texans have with A&M's Agricultural Extension Service, Doggett said.

"The two biggest universities with a meteorological thrust are Texas A&M and Texas Tech. It's

a natural partnership for us to do this," said Gary Sickler, who heads A&M's MesoNet project. "Certainly anything that Texas Tech is able to accomplish while we're trying to get full funding is just gravy."

The data would be available online for free. The project has been in the works for about a year, but, Doggett said, researchers want to make sure they can still fund MesoNet five years down the road.

The project already has received some federal money for programs that transfer technology from researchers to consumers. State funding for Tech would come from money designated for communities affected by military base closures. Lubbock lost Reese Air Force Base in October 1997.

Doggett said MesoNet also may be able to draw big companies that use this kind of data to the area, such as weather instrument manufacturers. Tech is already talking to a French company that does work in Austin, he said.

Kevin Walker, business liaison for the city, said Lubbock officials are helping Tech with its grant application.

"I think it's a worthwhile project that could be really useful to West Texas," he said. "Hopefully, success here would be able to spread this across the state."

The Dallas Morning News

Dallas, Texas, Sunday, July 19, 1998

Stupid weather

Studies on heat and brain function show now probably a good time to take thoughts indoors

By Michael E. Young
Staff Writer of The Dallas Morning News

Feeling a little, well, slow these days? Having a hard time remembering your Social Security number, or even your name?

Blame it on the unrelenting heat.

Besides making us sticky, cranky and generally uncomfortable, it turns out that the blast-furnace temperatures of summer have other side effects: They make us dumb. Clumsy, too.

Study after study proves it, though in this heat, reading about

"perceptual motor performance" and "the effect of thermal level on mental/cognitive tasks" might be beyond us, especially with the mercury well above "30-33 C Wet Bulb Glow Temperature."

Let's just say that when the heat index climbs higher than your skin temperature, your body's cooling system overloads.

Or in the words of Ronnie Moore, manager at Dykes Insulation in Dallas, "You get kind of a numbness in your head."

Basically, the combination of high temperatures and humidity —

DEGREES OF DISCOMFORT	
101	o Saturday's high in Dallas
26	Number of days 100° or above
13	Number of 100° days in a row
102	o Sunday's expected high
HOTTEST SUMMER: 1980	
31	Number of days 100° or above as of July 18
69	Total number of days 100° or above
Complete weather, Page 36A	
Related coverage, Pages 29A, 37A	

the definition of Texas in the summertime — keeps perspiration from evaporating, robbing it of its ability to cool the body. Even the super-heated breeze can't help.

Stuck without a way to properly cool itself, the body starts slowing down various physiological processes, said Michael C. Meyers, an asso-

ciate professor of sports physiology at the University of Houston.

"The body works at an optimal temperature within a range, and if you aren't properly acclimatized, when you take it out of that range, you get a delay in [physical and mental] responses," Dr. Meyers. Please see HIGH on Page 25A.

High temperatures seem to make thought processes go a bit slower

Continued from Page 1A.

said.

"That's why if athletes are going to run the Boston Marathon at noon, they need to train at noon. They can't train at 7 o'clock in the evening."

Dr. Jerry D. Ramsey, a professor of industrial engineering at Texas Tech University, said studies show that the ability to react and perform simple tasks slips when the temperature reaches above a certain threshold — 30-33 degrees Celsius, or roughly 86 to 91 Fahrenheit.

Cognitive abilities — our mental processes — are less affected by temperatures and, in many people, actually improve when it's hot, at least to a certain point, Dr. Ramsey said.

"There are many instances in which a person is going to do better mental work because they're in a more active state," he said. "They're annoyed [by the heat], they're alert."

But if the mercury reaches more extreme levels, 95 degrees and hotter, the body can't control its temperature without help.

"A person involved in heavy work, or doing difficult mental work, starts getting to that hot, flustered stage," Dr. Ramsey said. "They need relief, or that's when you get heat-related illness."

At the very least, he said, the heat saps our strength. And when people are fatigued, they don't think as quickly or work as well.

So what about roofers and land-

scapers and road crews who broil all day long? How do they function in that heat?

It's simple, the scientists say. They're used to the heat. They're acclimatized.

"A human being is good at handling the heat if they know what to do about it as far as acclimatization and fluids and diet," Dr. Ramsey said. "And they have to be aware of the symptoms of heat illness so they can do something if they feel it coming on."

Of course, it isn't easy acclimating your body to the temperatures some people face.

Mr. Moore, the insulation contractor, said crews blowing in attic insulation see temperatures of 140 degrees and higher.

"It's nasty," he said. "I've never been a roofer, so I don't know about that, but putting in attic insulation is the hottest job I've ever had."

And there are other jobs almost as bad, like road building.

It's been so hot in the construction zones along Interstate 30 that contractors have cut the workweek to five days from six and start the day at 6 a.m. and stop at 3 p.m. instead of the more typical 7 a.m. to 5 p.m.

The crews might be used to the heat, said Larry Tegtmeyer, project engineer with the Texas Department of Transportation, "but by the time they get to Friday, they need a couple of days off."

Even the farmers who bring their produce to the Dallas Farmers

Market complain about the heat, said Julian Flores, who works there.

"Now, I'm in administration, so I spend a good deal of time indoors, but I do have to be outdoors, too," he said.

Does that bother him?

"No," Mr. Flores said, "it's easy for us. We know we're going back inside."

And what about the rest of us, who spend our days toiling in the great indoors, drinking only when we're thirsty and nudging the thermostat if we're warm?

Take the doctors' advice: Stay inside.

"When it's above 100 degrees outside, it's extremely stressful," Dr. Ramsey warned.

"From what I see, people who work in an office environment yearn to be outside in the summertime, no matter how hot it is," Dr. Meyers said. "They think they're missing something cooped up inside. They're not."

So we shouldn't trek into the back yard on Sunday afternoon, fire up the chain saw and attack next winter's pile of firewood?

"Exactly," Dr. Meyers said. "When we're used to being indoors, we're more sensitive to external stimuli. We won't like wearing sticky clothing. We don't like the heat and the perspiration. We get cranky and that alters our work habits."

"Our attitudes deteriorate."

And, perhaps, that's no time to be holding a chain saw.

Weeping when we're happy or sad is something only humans can do. But what are the hows and whys behind our wails? Here, the whole sob story

A GOOD CRY

there was a time when I cried daily. I had taken a stressful job where twenty other jobs were riding on how well I performed. The pressure would build all morning, through the early afternoon. Finally, at about two-thirty, I would close my office door and put my face in my hands. The tears would flow; my chest would heave with sobs. I

was crying because I wasn't sure I could live up to everyone's expectations—especially my own. Crying because I longed for my old lightness of spirit. Crying because I felt exhausted and old beyond my years. I would wallow in self-pity for about five minutes, then—as if I had finished my coffee break and was putting away my cup—I'd dry my eyes and reapply my makeup. Like

Holly Hunter's character in *Broadcast News*, who scheduled a good cry into her day, I emerged from these sessions better able to face the day's dramas.

I was always baffled as to why this was so, but then, much about crying is baffling.

"Thousands of songs have been composed about tears; almost every movie worth remembering stimulates their flow," says Jeffrey Kottler, Ph.D., professor of counseling at Texas Tech University, in Lubbock, and author of *The Language of Tears* (Jossey-Bass, 1996). "Yet few people understand their own tears, much less those of others."

We live in an emotional era. Consider our president, who seizes every opportunity to emote aqueously, or the worldwide weep week last September that followed Princess Diana's death. When even the stiff-upper-lipped British behave like guests on *Sally Jessy Raphael*, it's high time we took a good, hard look at this whole boo-hoo business. (continued)

Tears for every season, and reason: Britons grieve the death of a princess; a new mom weeps as her newborn wails; skater Tara Lipinski brings home the gold at fifteen; a Frenchman mourns the fall of his homeland to Germany in 1940; Bill Clinton feels his constituents' pain; Lou Gehrig bids his fans farewell at Yankee Stadium in 1939; actor Ving Rhames declares that he's not worthy of his Golden Globe; Holly Hunter has her daily cry in *Broadcast News*

According to a study by Ad Vingerhoets, Ph.D., at Tilburg University, in the Netherlands, the top five reasons people cry are:

- 1) Tragic events that befall them
- 2) Funerals
- 3) Loss of a relationship
- 4) Sad movies
- 5) Despair

A GOOD CRY

Continued from page 98

produces .033 fluid ounces. Much of that will drain into the nose, but any fluid that the ducts can't handle will accumulate in what are rather poetically called lacrimal lakes—triangular spaces at the inner and outer corners of the eye. When they can't hold anymore, the tears spill over your eyelid and run down your face.

SURVIVAL OF THE WETTEST

Kottler believes that tears have endured because they are an effective form of communication. The fittest of the species "include those who are most skilled at direct and indirect means to get their needs met," he says. Frey thinks the explanation is closer to an old Yiddish saying: "What soap is to the body, tears are to the soul." He proposes that "perhaps people feel better after crying because tears remove chemicals that build up as a result of emotional stress." That would include feelings of exultation as well as sadness.

Frey has also found in tears a substance called leucine-enkephalin, one of those blessed brain chemicals known as endorphins. As an alternative to the "shedding bad chemicals" theory, he suggests that crying may ease stress because we absorb the endorphins through our nose. "There may be something in tears that is self-medicating," he says. This could explain why many people (85 percent of women and 75 percent of men) feel better after a good cry.

Crying also has a mind-clearing effect. In a study at Case Western Reserve University, in Cleveland, thirty men and women were shown either a filmed comedy routine or the deathbed scene from *Terms of Endearment*. Half were told to suppress all emotions; the rest were urged to let loose. After watching the tapes, all the subjects tried to solve anagram puzzles. Those who suppressed their feelings solved only 38 percent; subjects who expressed feelings solved 56 percent. •

THE CRYING YEARS

INFANTS Babies can't talk, so they cry to express wants and fears: hunger, a diaper that needs changing, a desire to be held. But crying does more than ensure that no one forgets about the baby. "Crying remains the infant's main form of exercise," says Jeffrey Kottler. "It generates warmth, increases lung capacity, burns off energy, increases alertness and discharges tensions." The average two-week-old cries two hours per day. Crying peaks at six weeks (about three hours a day). By six months, babies are down to about an hour of daily wailing. **TODDLERS** The "Terrible Twos" actually start around fifteen months. Tantrums common at this stage are usually caused by developmental frustrations, and the conflict between toddlers' desire to be

autonomous and their physical limitations. **SCHOOL AGE** A child's awareness of death at about age three can create new fears that provoke crying. Many fears are fueled by media images—from violent cartoons to the evening news. Pressures at school can cause older kids to cry; social interactions—being excluded from baseball, say—become a major source of tears as well. **PRETEEN TO TEEN YEARS** Up until age twelve, the research shows, boys and girls cry about equally. During preadolescence, however, boys experience a radical falling-off in crying, partly because of social norms ("boys don't cry") and partly because of hormonal differences that kick in at this age. Tear triggers are school pressures, social frustrations and clashes with parents.



CRYING and the GENDER GAP

- Eighty percent of men say they don't cry, while the same percentage of women say they do.
- Women cry an average of 5.3 times per month, versus 1.4 times for men.
- Of men who cry, 75 percent get just watery eyes, while half of all women report that their tears regularly spill down their cheeks.
- Only 15 percent of men who cry say they sob, versus 65 percent of women who do the heavy breathing, the wailing, the works.
- Females are eight times more likely than males to cry when they are yelled at.
- Women are nine times more likely to cry at sentimental occasions.
- Thirty-six percent of men cry over movies, TV shows or books, versus 27 percent of women.

Much of the crying gender gap results from societal norms. But physiology and hormones are factors, too. William Frey found that under a microscope, the secretory cells of the lacrimal glands are dissimilar in men and women. "Structural differences very likely result in functional differences," says Frey. But hormones (surprise, surprise) may be even more important. Women

THE HORMONE CONNECTION

have 50 to 60 percent higher levels of prolactin than men, which may lower the threshold for "tearing," explains Frey. "Even if men and women have similar strong emotional reactions to something, a woman is more apt to shed tears."

With hormones playing such a role, shouldn't pregnant women be blubbering messes? Yet Frey's research shows them to have no greater propensity for tears than nonpregnant women. However, researchers have documented something that many of us have known all along: We're more likely to get weepy—usually over silly things—before our periods.



SCIENTIFIC RESEARCH: AN INVESTMENT IN AMERICA'S FUTURE

The Science Coalition
1317 F Street, NW
Washington, DC 20004
202.662.3716
Email: tscadmin@conx.com
Website: www.sciencecoalition.org

The last several decades have been shaped in many ways by the advancements of basic research. Cellular phones, the Internet and computers – innovations that most could not imagine living without – were all made possible through basic research conducted at American universities. Other important discoveries such as the polio vaccine, heart pacemaker, cancer therapies, and the Richter scale all have foundations in basic research. This research has not only significantly improved our quality of life, but is also a driving force behind our economic strength – creating jobs, spawning new businesses and industries, increasing worker productivity, and training the next generation's workforce.

INSIDE

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With the dawn of the next millennium rapidly approaching, the role of scientific research is increasingly more important. If the past is any indication, the advancements of scientific research will play a pivotal role in strengthening our economy, protecting our ability to compete globally and improving our quality of life as we move into the future. Enjoying support from both sides of the aisle and from many sectors of American society – people are realizing funding for basic research is a critical investment in our future.



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MORE VOICES OF SUPPORT

"Basic research programs are fundamental to our future national security as well as the health of our economy...such programs make a significant contribution to the national economy by educating new generations of scientists and engineers and by helping to build and maintain a university research infrastructure that is the envy of the world."

- A bipartisan group of U.S. Senators in a Congressional Letter, May 21, 1998

"America's long-standing endowment of basic research has been overwhelmingly successful, providing American society not only with the fruits of new knowledge, but also with the practical benefits of economic growth and improvements in the welfare of its citizens."

- Committee for Economic Development (CED),
"America's Basic Research: Prosperity Through Discovery", 1998

"In a world where imagination is only one small step of reality, a relentless focus on the future — and targeted investments in research and development — are the best ways for America to succeed."

- Vice President Al Gore, press release, January 29, 1995

"We have prosperity today because the United States has a technological advantage over other countries. We need to invest in science if we want to keep that advantage."

- Rep. F. James Sensenbrenner, Jr. (R-WI), Chairman of the House Science Committee, press release, March 5, 1998

"As a medical scientist, a researcher, a former university faculty member, a current university Trustee, and a life-long explorer in the quest for new knowledge, I believe, as you do, that America's strategy of federally supported university-based research has produced a wealth of benefits for all Americans. It's not only expanded our scientific and academic national base, but increased the economic vitality of our Nation, raised the standard of living all Americans enjoy, and produced a highly-educated workforce that has made us a leader in today's global economy. In fact, in economic terms alone, the return on our federal investment has been huge. As much as one half of all U.S. growth is a result of the technical progress we've achieved through research."

- Sen. Bill Frist (R-TN), remarks to the Association of American Universities, June 2, 1998

"...Publicly funded science has shown to be surprisingly important to the innovation system...If you believe as I do, that our current prosperity, intellectual leadership in science and medicine and the growth of entire new industries are directly linked to investments made 30 years ago, then you have got to ask where will this country be 30 years from now?"

- Senator Joseph Lieberman (D-CT), statement of introduction for the National Research Investment Act of 1993, October 22, 1997

"Boosting the strength of our R&D infrastructure is crucially important to the future health and prosperity of...every American. The scientific, technical, and medical advances of the past 40 years have dramatically improved our standard of living. If we are to maintain these advances into the future, we cannot afford to stand still. It is clear that if we want to create the kind of high-paying, high-technology jobs that will ensure a decent standard of living for American workers, we will need a much stronger commitment to investing in research and development."

- Senator Jeff Bingaman (D-NM), statement of introduction for the National Research Investment Act of 1993, October 22, 1997

"The importance of this investment in basic research cannot be exaggerated... the federal investment in basic science is a major contributor to industrial innovation in the United States."

- Sen. Jim Jeffords (R-VT), floor statement,
the National Science Foundation Authorization Act of 1998, May 12, 1998

"...the Southern Governors' Association calls upon the President and the Congress to remain committed to protecting our nation's health and economic future by sustaining crucial investment in science and engineering research within the federal government..."

- Southern Governors' Association, Resolution Regarding the Federal Government's Commitment to Science and Engineering Research, Sponsored by Governors Zell Miller of Georgia and Paul Patton of Kentucky, Approved July 30, 1997

"All Americans will reap enormous personal, societal and economic benefits from a federal commitment to, and sustained investment in, medical research... The APA [American Paralysis Association] and CRF [Christopher Reeve Foundation] believe that the only way to achieve this goal is to give the highest national priority to federal support of the NIH's unparalleled basic and applied research programs."

- Christopher Reeve, statement, March 19, 1998

"...federal investments in scientific research and education are critical to America's future and should be increased. We are determined to see that the nation remains committed to these investments."

- A bipartisan group of 15 urban mayors, letter to Congress, July 3, 1997

"Scientific history shows that many of the discoveries we value today came not from inventors chasing profits but rather from scientists stumbling upon practical applications in pursuit of larger understanding... That's because basic researchers are free to see things that applied researchers, focusing narrowly on a single goal, do not. The White House and Congress need to see it all, coordinate it well and fund the best of science."

- Los Angeles Times, editorial, January 11, 1998

(continued on back page)

"We must seize this moment to strengthen our nation for the new century by expanding our commitment to discovery - increasing our support for science, pressing our progress in the war against cancer and other diseases..."

Today, the store of human knowledge doubles every five years. Soon, every child will be able to stretch a hand across a computer keyboard and reach every book ever written, every painting ever painted, every symphony ever composed. We'll be able to carry all the phone calls on Mother's Day on a single strand of fiber the width of a human hair...

And I think it is important to remember, as Americans tend to focus on the health miracles that can come from scientific progress, that advances in health research and prevention and treatment depend upon the entire scientific enterprise, including engineering efforts."

- President Clinton, Speech at AAAS, February 13, 1998

POLLS: PUBLIC OPINION

Board Minutes
August 14, 1998
Attachment CW2, page 18
Item CW108

Fifty percent of American adults believe providing financial support for scientific research should be a major emphasis of the federal government.

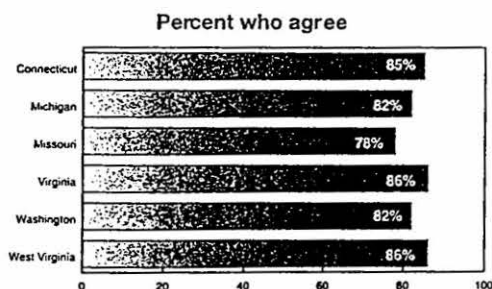
"For each of the following, please tell me if it should be a major emphasis of the federal government, a minor emphasis, or not an emphasis at all. Providing financial support for research that universities and private companies think is important."

Major emphasis	50%
Minor emphasis	39%
Not emphasis at all	9%
Don't know	3%

Institute for Social Inquiry/Roper Center, University of Connecticut poll for the National Science and Technology Medals Foundation. Telephone survey of 1,000 national adults.

People are realizing the numerous benefits of basic research. In a recent poll in six key states, more than three-quarters of citizens support funding for basic research – even if the results aren't immediate.

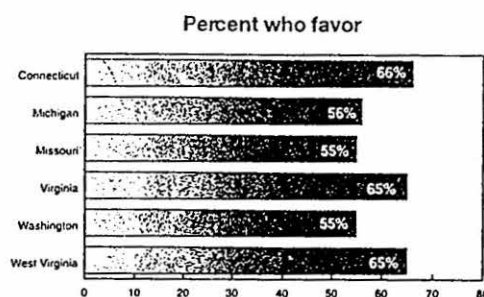
"Do you agree or disagree that even if it brings no immediate benefits basic science research should be supported by the federal government?"



These polls were commissioned by Research!America and conducted by Charlton Research Company. Louis Harris and Associates provided consultation on the survey questions. In each state, 800 adults were surveyed by telephone. The theoretical sampling error is +/-3.5%.

People agree that funding for scientific research should be increased. A majority of citizens in six key states favor doubling the nation's spending on government sponsored medical research over the next five years.

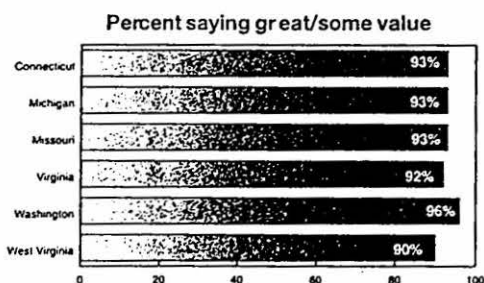
"There is a proposal to double our total national spending on government sponsored medical research over the next five years. Do you favor or oppose this idea?"



These polls were commissioned by Research!America and conducted by Charlton Research Company. Louis Harris and Associates provided consultation on the survey questions. In each state, 800 adults were surveyed by telephone. The theoretical sampling error is +/-3.5%.

The public recognizes the value of applications of basic research. For example, more than two-thirds of citizens in six states believe that clinical research is valuable.

"How do you perceive the value of clinical research?"



These polls were commissioned by Research!America and conducted by Charlton Research Company. Louis Harris and Associates provided consultation on the survey questions. In each state, 800 adults were surveyed by telephone. The theoretical sampling error is +/-3.5%.

People recognize scientific research at our nation's universities directly benefits them. For example, a recent poll of Virginians found that they agree scientific research at Virginia's public universities benefits them.

Scientific research in Virginia's public universities personally benefits you.

Strongly agree	28.9%	Strongly disagree	5.5%
Somewhat agree	42.0%	Don't know	11.3%
Somewhat disagree	12.3%		

Annual Quality of Life in Virginia survey conducted by the Center for Survey Research at Virginia Tech. Supported by the Virginia Agricultural Experiment Station; the Lord Fairfax, New River Valley, and Fifth Planning District Commissions; New Century Council; West Point Public Schools; and Virginia Tech's Extension division and College of Agriculture and Life Sciences. Telephone survey of 1,168 Virginians with a plus or minus 2.9 percent margin of error.

MORE VOICES OF SUPPORT

(continued)

"Since the end of World War II the basic research conducted at American university laboratories has been a national strength. The myriad results of that research have generated a nearly endless list of advances for humanity...This work has improved our lives and our society dramatically. It is imperative that the federal government continue to fund basic research at levels adequate to support scientists whose discoveries, perhaps unclaimed today, could shape the 21st Century."

- James L. Merz, Vice President for Graduate Studies and Research and the Frank M. Freimann Professor of Electrical Engineering at the University of Notre Dame, op-ed, South Bend Tribune, May 17, 1998

"America has re-emerged as the global leader in technology-driven commerce. America would not have regained its competitive advantage without a strong federal commitment to research and development in independent university and medical labs across the country...If the country's labs slow down, so will the engine of economic growth...The federal government must continue making smart investments in research and development."

- The National Business Coalition for Federal Research, public statement, May 1997

"Our continued economic and political leadership in the world depends upon technical superiority and a scientifically sophisticated work force. The country simply cannot do without basic research and training. Given that basic research is a long-term investment with guaranteed but unspecifiable payoffs, the citizenry as a whole is the beneficiary and thus the logical patron."

- Thomas D. Pollard, President of the Salk Institute for Biological Studies and Chairman of the Commission on Life Sciences at the National Research Council, op-ed, San Diego Union-Tribune, April 14, 1998

"...I believe we are on the edge of a revolution in our understanding of the human being that will be profoundly greater than everything we learned in the first couple thousand years of science. In the next 30 to 50 years the level of knowledge we will have, the level of detail we will have, our diagnostic capacities, and frankly our solution capacities will explode. This requires a great deal more investment in basic science. And it must be broadly invested, not just narrowly invested. A lot of things like Magnetic Resonance come out of physics instead of health care. There are a lot of things happening across the whole base of the scientific world."

- Speaker Newt Gingrich, remarks, November 17, 1997

"I have always felt that our strength as a nation depends upon our unflagging determination to discover new frontiers - whether they be on Mars or in a single strand of DNA."

- Judith Rodin, President of University of Pennsylvania, testimony before the U.S. Senate Subcommittee on Science, Technology, and Space, April 28, 1998

"Higher standards of living, additional jobs, better wages are all dependent on increased productivity. Gains in technology are one of the major factors in higher productivity and technology requires large and consistent investments in basic research. Federal government-funded research has been a key driver of advances in technology. This is a critical investment in the future of our country."

- Peter Lynch, member of the Board of Trustees of the Fidelity Group of Funds, remarks, June 23, 1998

"...most economists agree that at least half of the total growth in the U.S. economy since the end of World War II is attributable to scientific and technological innovation. Much of the impetus for that growth has derived directly from university-based research, paid for in large measure by the federal government. Computers, telecommunications, biotechnology, and most of the other hot industries in our regional economy all have their roots on campus."

- Charles Vest, President of Massachusetts Institute of Technology, keynote address at the Meredith and Grew Annual Seminar, February 11, 1998

"...today's high-tech industry is based on the research of yesterday, and that research was funded at a time when high-tech industry made up a much smaller fraction of our GDP than it does today. Since high-tech industry is a much larger fraction of GDP today than yesterday, and will be even larger tomorrow, the fraction of the federal budget invested in long-term research should also be larger."

- Burton Richter, Nobel Laureate and Director of the Stanford Linear Accelerator Center, remarks, Senate forum, February 25, 1998

"Our laboratory studies that are now moving into clinical trials have been built on 25 years of virtually uninterrupted support from the National Cancer Institute. Getting to these results would be so much harder today, because a young researcher's chance of receiving the necessary stream of support has been greatly reduced by lower funding levels. Without government to take the risk on early unproved work we stand to lose so many important discoveries."

- Dr. Judah Folkman, renowned Harvard University cancer researcher, remarks, June 23, 1998

THE SCIENCE COALITION

The Science Coalition is an alliance of more than 400 organizations, institutions and individuals including Nobel Laureates, businesses, non-profit health organizations, medical groups, health care providers, scientific societies, and public and private universities. The coalition's mission is to sustain the federal government's historic commitment to university-based scientific research.

FY 1999 OPERATING BUDGET HIGHLIGHTS

Texas Tech University Health Sciences Center

- The FY99 operating budget has increased by \$6.6 million to \$311 million, a 2.1% increase over FY98. This increase allows a 3% average merit salary increase for faculty and staff.
- The \$2.5 million increase in the E&G budget provides funding for:
 - the third class of Pharmacy School students in Amarillo;
 - tuition revenue bond debt service for Amarillo and Midland projects; and
 - the physician associate and cardiology residency programs in Midland.
- The \$2.8 million increase in designated funds is a result of additional practice plan income due to the El Paso clinic expansion and Nursing and Pharmacy contract income.
- The \$1.3 million increase in current restricted funds is due to an increase in the TDCJ contract account.

FY 1999 OPERATING BUDGET HIGHLIGHTS

Board Minutes
August 14, 1998
Attachment M1, page 2
Item M144

Texas Tech University

- The FY99 operating budget has increased by approximately \$23 million to \$333 million, a 7.4% increase over FY98. This increase allows a 3% average merit salary increase for faculty and staff.
- Of the \$5.2 million increase in the E&G Budget, 30% went to faculty salaries and 25% of the increase went to staff salaries.
- Other increases in the E&G budget:
 - tuition revenue bond debt service for English/Phil./Education complex;
 - the hiring of new faculty;
 - enrollment management services;
 - the honors college, and
 - research.
- The auxiliary budget increased by about \$4.9 million. This includes \$2.5 million for Housing & Dining related to the new Carpenter/Wells complex and other upgrades, and \$1.5 million for athletics. Since the NCAA sanctions did not include another bowl sanction this year, our athletic department budget will be on a much better footing. We had reduced our FY98 budget due to the NCAA problems.
- Spending from designated funds will increase by \$6.3 million, funded primarily from student fee increases in institutional tuition (formerly the general use fee: \$34 to \$36 per semester credit hour), and from the new \$2 per semester credit hour library fee. These fees will help pay for:
 - an increase for New Student Relations;
 - an increase for the Teaching, Learning, & Technology Center;
 - a match for a Howard Hughes grant for undergraduate research; and
 - an increase for student services.
- Spending from current restricted funds will increase by almost \$6 million for scholarships, research, and other endowments.

TEXAS TECH UNIVERSITY - BOARD RATIFICATION ITEMS (May 1, 1998 - June 30, 1998)

NO.	ACTIVITY	SOURCE OF FUNDS		EXPENSE	REMARKS
		OTHER	INCOME		
LM01332	Glenna Goodacre Sculpture		200,000	200,000	Gift provided for the Glenna Goodacre Sculpture
SM03217	Football		210,000	210,000	Transfer funding from fund balance to support coach's contract
SM03593	Physical Plant		125,000	125,000	Transfer funding from the 3720 fund balance to provide for the purchase of grounds maintenance equipment

TEXAS TECH UNIVERSITY - BOARD RATIFICATION ITEMS (May 1, 1998 - June 30, 1998)

NO.	ACTIVITY	SOURCE OF FUNDS		EXPENSE	REMARKS
		OTHER	INCOME		
Salary Increases of 10% or more:		CURRENT SALARY	NEW SALARY	% INCREASE	
	Per Annum				
	Carla Mckeown	\$23,196	\$28,700	24%	Promotion to Editorial Adviser
	Jeffrey Mitchell	\$39,393	\$54,000	37%	Salary increase for Golf Coach
	Jere Mayfield	\$30,838	\$40,128	30%	Promotion to Director of Publication and Electronic Media Production
	Suzanne Logan	\$56,897	\$79,524	40%	Promotion to Associate Vice Provost
	Kay Simonton	\$32,063	\$36,432	14%	Promotion to Associate Director of Student Services
	Birgit Rahman	\$32,000	\$40,128	25%	Promotion to Director of Community Outreach
	Kefalari Thomas	\$34,116	\$44,220	30%	Promotion to the Director of Extended Learning and Accounting Services
	Bettye Griggs	\$42,756	\$48,744	14%	Promotion to the Director of Extended Studies and Student Records
	Mark Griffith	\$31,992	\$40,128	25%	Promotion to Director of Marketing for Continuing Education
	Judy-Ann D'Mello Stout	\$21,768	\$31,992	47%	Promotion to Coordinator of Distance Learning Activities
	Paulo Peres	\$40,128	\$50,000	25%	Promotion to Project Manager within the Facility Planning area
	Robert Cameron	\$34,116	\$43,120	26%	Promotion to Project Manager within the Facility Planning area

**TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER
FY 1999 OPERATING BUDGET
PRESENTATION TO THE BOARD OF REGENTS
AUGUST 14, 1998**

The HSC Operating Budget has increased over \$6.5 million from FY 1998 to FY 1999. This increase has allowed for a 3% salary increase for both faculty and staff.

Changes in Educational and General funds account for 38% of the increase. The general revenue appropriations for the Pharmacy School have increased by over \$450,000 to provide the necessary funding to educate the 3rd class of students that will be entering this fall. The 75th Legislature provided TTUHSC with \$32.5 million of tuition revenue bond authority. The appropriations to pay for these tuition revenue bonds have increased by \$1,147,000 in 1999. During FY 1998, TTUHSC received several Texas Higher Education Coordinating Board advanced technology and advanced research grants. This grant funding has increased by \$610,000 in 1999. In addition, the local E&G income made up primarily of tuition and fees has increased due to the increase in tuition rates and the continued growth of the Pharmacy School. This funding has been used to provide funding for the merit increases.

Designated Fund increases account for 42% of the overall increase. This change is a result of increases in practice plans due to the El Paso clinic expansion in the past several years and increased contract income in the Nursing and Pharmacy income plans.

Increase in contractual income, including income for services provided to our affiliated teaching hospitals, account for the remaining 20% of the budget increase.

NOTE: The faculty merit increase has been rounded up to 3% from 2.5%.
After you state the E&G increase of Pharmacy, TRB and ATP/ARP, there is still about \$300,000 to explain. There are increases in fund balance, transfers from GUF or local E&G. Any of these could be used in the explanation. The two reasons for these increases are the merit and funding of Allied Health in Odessa.

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER BUDGET ADJUSTMENTS (5/1/98 - 6/30/98)

	Source of Funds		Expense	Remarks
	Other	Income		
<u>BOARD APPROVAL OF BUDGET ADJUSTMENTS</u>				
GENERAL DESIGNATED FUNDS				
Managed Care - Lubbock	968,793		968,793	Budget of fund balance for advertising, equipment and construction. To provide operating costs for the remainder of FY 1998.
Texas Tech Medical Center - Southwest	210,120	29,880	240,000	
TOTAL GENERAL DESIGNATED FUNDS	1,178,913	29,880	1,208,793	
RATIFICATION OF SALARY INCREASES OF 10% OR MORE				
	CURRENT SALARY	NEW SALARY	% INCREASE	Equity Adjustment
Azikiwe Nwosu - Internal Medicine - El Paso	101,699	120,000	18.0%	