

"Emerging Research Universities"

**UNIVERSITY OF NORTH TEXAS** 

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"The need for leaders to solve the complex problems of the modern world requires a new paradigm for the research university itself - one in which industry, academe, and governments work together in effective partnership."

- President Emeritus of MIT Charles M. Vest, "MIT: The Path to Our Future"





### The Role of a Research University

- Creation of new knowledge and its dissemination for a better quality of life is the critical mission of a research university.
- At UNT, we strive to accomplish this through research, scholarship, and creative activities that engage faculty, research scientists, graduate and undergraduate students, and external collaborative partners to their fullest potential.





#### UNT

- Founded in 1890 as a Normal School
- Fully reaffirmed accreditation by SACS Dec 2006
- 99 bachelor's, 104 master's, 49 doctoral programs
- 34,153 students in fall of 2007
- Recognized as one of "America's 100 Best College Buys"
- Carnegie Research University/High Research Activity (RU/H)
- Top Ten Nationally for Transfer Students
- Top 50 nationally for graduating Hispanic and African American Students
- Top Distance Education Provider in Texas among 4-year Institutions
- Produces almost 200 doctoral degrees each year





### **UNT's Key Research Areas**

- Traditional Areas of Strength:
  - Music
  - Visual Arts and Design
  - Education and Learning Technologies
- Emerging Areas of Strength:
  - Bio/Nano Devices and Systems
  - Computational Chemistry
  - Materials Science
  - Renewable Energy
  - Human Health and Sustainable Environment
  - Plant Biology
  - Developmental Physiology and Genetics
  - Technology and the Arts





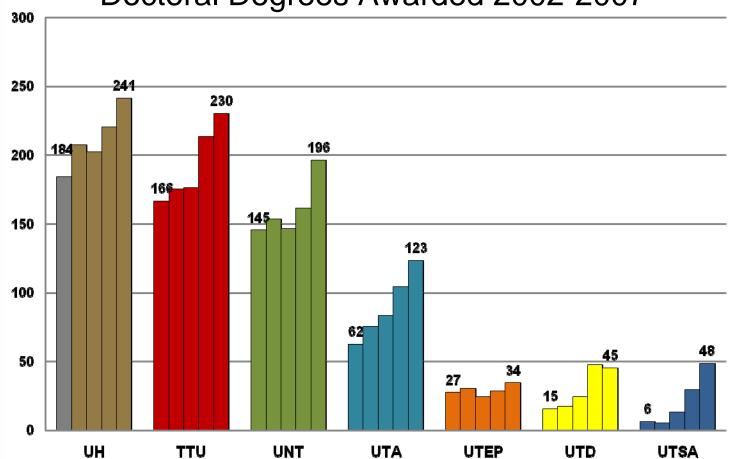
### **UNT Discovery Park**

- 285 Acres
- 4.2 Miles North of Campus
- College of Engineering
  - Center for Advanced Research and Technology (CART)
  - NUCONSTEEL
  - PACCAR, Inc.
- Computing and Information Technology Center
- School of Library and Information Sciences
- Learning Technologies Department
- Development of Discovery Park—one of four top priorities for the Denton Economic Development Partnership
- Advisory Council for the Park

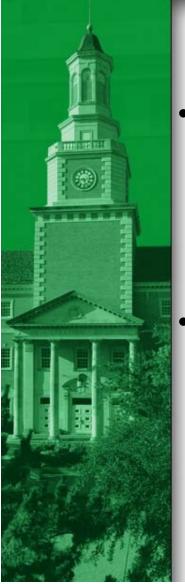




### Emerging Research Institutions Doctoral Degrees Awarded 2002-2007







### **UNT and Other Important State Goals**

UNT aspires to emerge as a major research university that
is nationally and internationally recognized for its research
in the fine arts to technology, life science to human
health, and music to entrepreneurship.

UNT is accomplishing these goals without sacrificing other important state goals, such as those identified in *Closing* the Gaps.





#### **Carnegie Research Universities Classification**

- The Carnegie Foundation for the Advancement of Teaching classifies major research universities (those that award at least 20 doctoral degrees a year) in three categories:
  - RU/VH: Research Universities (very high research activity)
  - RU/H: Research Universities (high research activity)
  - DRU: Doctoral/Research Universities
- UNT is one of the six public Carnegie High Research Activity Universities in Texas and awarded almost 200 doctoral degrees in 2007.





Hire highly accomplished faculty, including senior faculty members

Significantly expand research facilities

Increase funding for research equipment and research clusters

Increase the number of competitive graduate stipends and fellowships

Develop Discovery Park

Improve Faculty-Student Ratio





### **Proposed Criteria for "Tier One" Status**

- Research, instructional, and training grants
- Percentage of faculty involved in funded research (federal, state and industry) and creative activities
- Number of doctoral programs
- Annual doctoral production
- Growth in endowment and private contributions
- Contribution to workforce development
- Contribution to economic development of the region and the state
- International outreach (globalization of education)

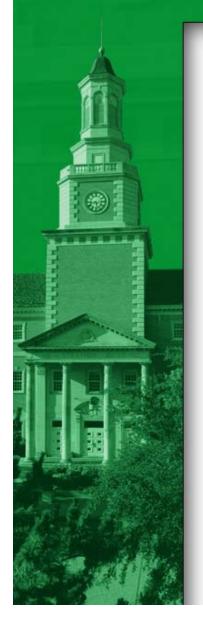




## **UNT's Competitive Advantages** for Achieving "Tier One" Status

- One of the most comprehensive universities of the state
- Large number of doctoral programs and doctoral production of almost 200 per year
- Strong contribution to workforce development in DFW
- Growth in Total Endowment (almost 250% growth from 2002-2007)
- Extensive international reach
- UNT Discovery Park





## Recommendations for State Assistance in Developing More "Tier One" Universities

- Increase Research Incentive Funding
- Match Private Funds for Endowed Faculty Positions
- Match Private Funds for Doctoral Fellowships

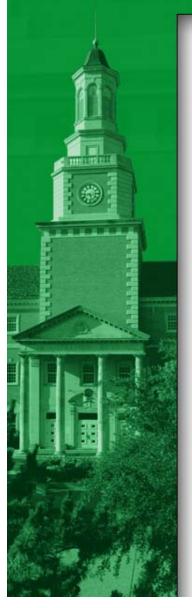




### **Increase Research Incentive Funding**

- Research Development Fund
  - Appropriations for the Seven Emerging Research Universities averaged \$4.5M for FY06-07 Biennium
  - Increase this amount by \$100M
- New research incentive funds focused on discovery, real world applications, and commercialization of State needs:
  - Nanotechnology
  - Modeling and Simulation of Materials
  - Plant Biology
  - Information Technology and Web Security
  - Computational Chemistry





### **Endowed Faculty Chair Matching Funds**

- Create a 1:1 Endowed Chair Matching Fund Program
- Emerging Research Universities: Raise \$750,000 and the State adds \$750,000 to support an endowed chair
- Proposed Guidelines:
  - No more than 5 awards to any single university during a biennium.
  - Total gift must be given; pledges and bequests don't count.
  - Gift must be in cash or in securities, stock, etc. that can be liquidated.
  - The endowed chair position must be advertised as soon as the match is received and filled as soon as possible.

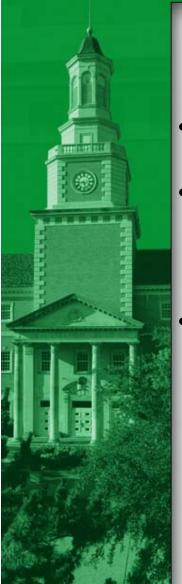




### **Doctoral Fellowship Matching Fund**

- Recruitment of senior faculty researchers requires recruitment of top doctoral students.
- Successful research programs require doctoral-level research assistants.
- Success in recruiting the best and the brightest of doctoral students requires competitive levels of funding for multiple years.
- Texas must compete in a national market at the doctoral level and we need the resources to compete against other states.
- Therefore, Texas should develop a matching fund program for Doctoral Fellowships.





### **Doctoral Fellowship Matching Fund**

- Create a 1:1 Doctoral Fellowship Matching Fund Program
- Proposed Doctoral Fellowship Program for Emerging Research Universities: Raise \$250,000 and the State adds \$250,000 to support an endowed fellowship.
- Proposed Guidelines:
  - No more than 8 awards to any single university during a biennium.
  - Total gift must be given; pledges and bequests don't count.
  - Gift must be in cash or in securities, stock, etc. that can be liquidated.





We've accomplished a lot.

We've more to do.

UNT is on the move.

# WE SEEK YOUR SUPPORT AND CONTINUED PARTNERSHIP.

