Texas Tech: Transforming Education and Scholarship through Innovation as a National Research University

M. Duane Nellis, President
Board of Regents
October 9, 2015
Core Strategies

• Enhanced faculty support and strategic hiring

• Additional catalysts for positive faculty success and research growth

• Catalysts for faculty recognition and dialogue

• Enhanced facility development and utilization

• Expanded economic prosperity and innovation
Promote Faculty Success & Increase National Prominence

Enhanced Faculty Support and Strategic Hiring

- **University cluster initiative**
  - Six new faculty hires starting in FY2015 have been credited with more than $5.5 million in new proposals

- Over 300 new faculty members in last three years

- Hiring 31 new research professors linked to current institutional research cluster success

- Presidents’ Collaborative Initiative

- Creating discretionary funds for highly successful competitively funded faculty

- Developing incentive salaries for competitively funded research faculty
Promote Faculty Success & Increase National Prominence

Enhanced Faculty Support

• Hiring grant proposal writers for colleges that would work with faculty on budget development and proposal writing to facilitate greater proposal submissions (with college matching funds)

• Examining faculty workload issues to identify needs/barriers to increased external funding proposals as it relates to ease of pre and post award processes
Promote Faculty Success & Increase National Prominence

Additional Catalysts for Positive Faculty Success and Research Growth

Facilitating multidisciplinary and multi-institutional collaborations, strategic research advancement

- Institutional collaboration with federal labs and industry
- Facilitating large-scale proposal development
- Swift Critique Appraisal & Notation (SCAN) Session
- Where appropriate, working with consultants for major proposal preparation/advocacy
- Scholarship catalyst programs in the social sciences and humanities including creation of Humanities Center
- Early investigator faculty proposal development workshops
Catalysts for Recognition and Dialogue

• **Targeted External Faculty Awards Program**
  ✓ Increases recognition of distinguished faculty, and national and international visibility of TTU

• **Faculty Research Club**
  ✓ Provides a social setting to stimulate interdisciplinary research collaborations
Improve Research Infrastructure

Enhanced Facility Development and Utilization

• Experimental Science Building I fully utilized
• Experimental Science Building II under development
• Innovation Hub at the Research Park open
• East Loop Research Building
• Reese Technology Center
Improve Research Infrastructure

• Renovations for designated research space along the Engineering Key are underway

• Renovate existing creative scholarship space

• Shared Core Facility
  ✓ Cutting-edge research requires expensive instrumentation
  ✓ About $70 million in instrumentation on campus currently
  ✓ Plans for more effective core equipment utilization
Expand Economic Prosperity and Innovation

Innovation and Economic Engagement

• Innovation and Economic Prosperity University Designation

• NSF I-Corps Node with UT, A&M and Rice

• Entrepreneurial Cluster
  ✓ Director, Translational Research & Entrepreneurship
  ✓ Director, Innovation Hub and Research Park
  ✓ Director, Office of Research Commercialization

• Lubbock Angel Network and other investors

• New entrepreneurship classes taught in multiple areas including business, engineering and music
Total Research Expenditures

- FY2013: $137,563,730
- FY2014: $153,728,769
- FY2015: $157,745,568
Federal Funding Landscape

• Federal agency funding is flat nationally

• Texas Tech’s competitive federal research funding increased by 15% from FY2013-FY2015

• Federal agencies are primarily funding multi-investigator/multi-institution proposals
Federal Appropriations Strategy

Strategically coupling TTU’s research strengths with current national priorities

• New federal appropriations requests process
  ✓ Input from deans on their areas of national prominence
  ✓ Compare with opportunities & priorities of Texas delegation
  ✓ Develop requests and communications materials
  ✓ Linking lead faculty to D.C.
Federal Research Expenditures: Our competitive federal research is expanding rapidly.

- **Total Federal**: $29,968,704
  - **ARRA**: $844,812
  - **EARMARK**: $3,592,734
  - **COMPETITIVE**: $25,531,158

- **Total Federal**: $28,831,118
  - **ARRA**: $754,820
  - **EARMARK**: $1,308,813
  - **COMPETITIVE**: $26,767,485

- **Total Federal**: $33,137,056
  - **ARRA**: $239,080
  - **EARMARK**: $78,678
  - **COMPETITIVE**: $32,819,299

15% increase from 2012 to 2014.
Federal Research Proposals = Sustainable Growth

Total Federal $254,191,769
ARRA 10,000
EARMARK 455,145
COMPETITIVE 253,726,624

Total Federal $226,634,076
EARMARK 418,001
COMPETITIVE 226,216,075

EARMARK 370,662
COMPETITIVE 436,343,245

Total Federal $436,713,907

9.3%
# Commercialization

## TTU System

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<th>Fiscal Year</th>
<th>2011</th>
<th>2012</th>
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<td>Gross Rev from Licensing</td>
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* Since the Office of Research Commercialization was previously at the System level, older records are not broken out by institution prior to 2014.