Texas AgriLife Research

Senate Finance Committee
For the 2010 – 2011 Biennium

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Interim Director
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Who We Are

• One of four state agriculture agencies under the auspices of the Vice Chancellor for Agriculture within The Texas A&M System
• Only state agency charged with conducting research in agriculture, natural resources, & life sciences
• Have statewide presence and focus
• Most scientists have joint appointment with TAMU, Texas Tech, or other universities
• Charged with fulfilling the research component of the land grant mission

Core Research Mission

• Conduct basic and translational research for the benefit of consumers and the agriculture industry in order to:
  ▸ Improve environmental quality and preserve our natural resources
  ▸ Enhance competitiveness and prosperity of agricultural industries and communities
  ▸ Improve public health & well-being

(Science Roadmap, 2005)
**Selected Research Highlights**

- **Environment**
  - Developed technologies that save 0.5M acre-feet/year of water from Edwards Aquifer
  - Developed preventative measures for golden algae control in lakes

- **Ag Competitiveness**
  - Developed new wheat varieties
  - Developing strategies for emerging diseases (e.g. Citrus Greening, Pierce’s Disease, and Zebra Chip)

- **Health**
  - Discovered compounds from animal research used in human clinical trials for arthritis, MS, and hepatitis
  - Developed and delivered food safety training
  - Developed healthier fruits and vegetables

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**Fiscal Highlights**

- **General Revenue funding** = $59.8M (FY08) and $55.6M (FY09) (does not include other funds)
  - Increase over last biennium
    - Funding for bioenergy and distiller’s grains
      - ROI on bioenergy $ > 10:1
    - Funding for salaries and O&M
      - Serves as base for salary and operating expenses, and allows us to effectively leverage funds

- **Contract and grant awards (FY08)** = $94M
  - Increased by 70% from FY02

- An investment of GR funding in AgriLife Research has positive economic impact on the state
Economic Value of Research

- Agricultural research results in $3.6B/year of direct economic benefit to Texas
- Majority of benefits is accrued by consumers
- Economic impacts of specific technologies are large (e.g. new irrigation techniques and new plant varieties)

Exceptional Item (1)

#1 Enhancing Research Capacity and Increasing Return on Investment ($16M for biennium) – Top Priority

- attract and/or develop new, young scientists
- increase programmatic impacts
- support & train graduate students
- upgrade lab space; purchase new equipment
Exceptional Items (2-4)

#2 Safe and Healthy Food for Texas ($8M)
- Food safety
  - quantify impact of key food pathogens
  - determine efficacy of existing and novel management techniques to minimize food hazards
- Healthy foods
  - optimize healthy compounds in foods to reduce disease risk

#3 Equipping Texas to Participate in Potential Carbon Economy ($6M)
- Develop management practices to reduce carbon emissions and sequester carbon
- Quantify carbon sources
- Develop information for sound carbon-trading guidelines

#4 New Technologies to Sustain Texas Water Quality and Quantity ($4M)
- Detect and model water contaminants
- Develop management practices to reduce loadings into water
- Improve agricultural and urban water use efficiency
- Address Storm Water issues

Summary

- Investments in AgriLife Research yield significant return and are of great value to Texas (environment, agricultural competiveness, and health)

- Our exceptional items are focused on timely and relevant issues to Texans (research capacity, food safety, carbon, and water)

- There is a significant and real need for capacity investment to retain and recruit talented scientists, who serve as our ‘engine’