



TEXAS A&M

HEALTH SCIENCE CENTER



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HEALTH  
SCIENCE  
CENTER

*Bringing Learning to Life*

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Graduate Studies**

**Senate Committee on Health & Human Services Testimony  
March 10, 2010**

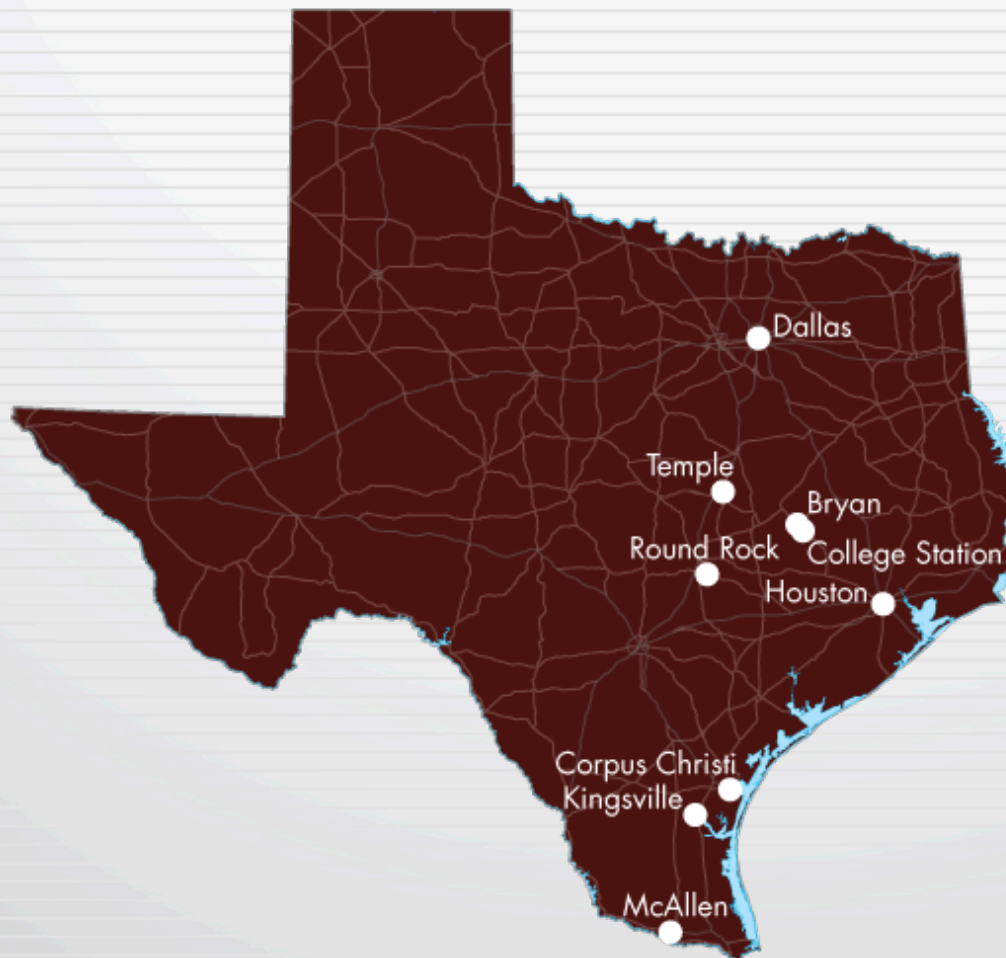


## **Our Commitment to Superior Science**

According to the Texas Higher Education Coordinating Board's Research Expenditures Report for FY2009, the Texas A&M Health Science Center ranks 10th among all higher education institutions in total research expenditures and 7th in the ratio of federal funds to state-appropriated dollars.

## A “Virtual University” for Texas

- Operating as a unified university across campuses
- Providing a cost-efficient solution to the healthcare workforce shortage



### HSC Colleges

- Baylor College of Dentistry
- College of Medicine
- College of Nursing
- Graduate School of Biomedical Sciences
- Institute of Biosciences & Technology
- Irma Lerma Rangel College of Pharmacy
- School of Rural Public Health

# Senate Committee on Health and Human Services

- Interim Charge #11: Human Stem Cell Research
  1. Kinds of human stem cell research being conducted
  2. Number of current research projects
  3. Funding
  4. Total expenditures for all research
  5. General revenue funding (state)
  6. Determination of total vs state funding
  7. Recommendations on collecting data on state funding for human stem cell research

# Kinds of Stem Cell Research

- There are two generic types of stem cells:
  - *Embryonic stem cells* are obtained from an early developing embryo
  - *Adult stem cells* are obtained from tissues and organs such as bone marrow, fat tissue, and tooth pulp
- **There is no human embryonic stem cell research currently being conducted at Texas A&M Health Science Center**
- There are many studies of embryonic stem cells ongoing at the TAMHSC using the mouse as a model

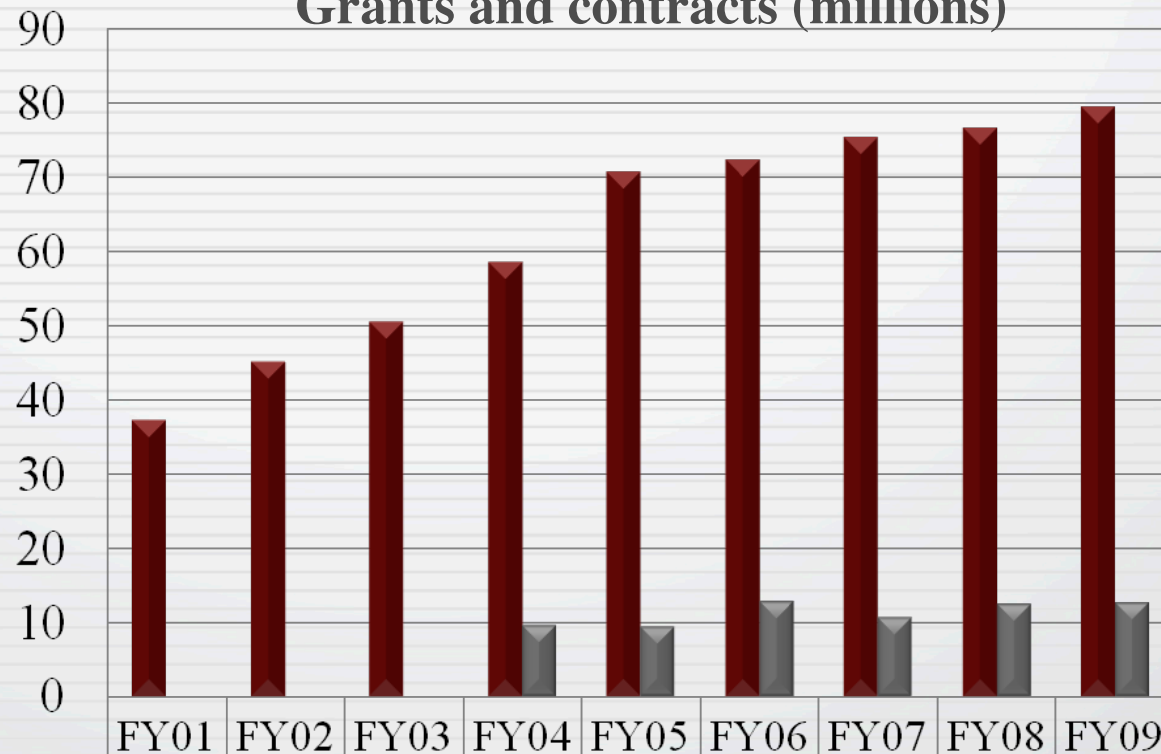
## Number of Projects of *Adult* Human Stem Cells & Funding\*

\* TAMHSC has no projects using embryonic human stem cells

Projects	Source	Total Funds
Adult stem cells for repair of cardiac damage (Prockop- COM Temple)	NIH	\$444,632
Homing and differentiation of adult stem cells to lung (Prockop-COM Temple)	Tulane/ NIH	\$787,519
Preparation and distribution of adult stem cells (Prockop-COM Temple)	NIH	\$2,214,752
Nanostructured peptide hydrogels and stem cells for dentin-pulp regeneration (D'Souza-BCD Dallas)	NIH	\$75,000
Mesenchymal stem cells acquire characteristics of cells in the periodontal ligament in vitro (Kramer-BCD Dallas)	HSC	\$20,000
		<b>\$3,541,894</b>

## Total & State Appropriated Research Expenditures Grants and contracts (millions)

State Appropriations  
 spent on human stem  
 cell research: \$0



■ Total Exp	37.3	45.1	50.4	58.5	70.7	72.3	75.4	76.5	79.5
■ State Exp				9.5	9.4	12.8	10.6	12.4	12.5

Source: THECB

## Factors to Consider in Determination of Total vs State Funding

- Primary funding agency (source of funds)
  - Federal/private vs state: The total cost of human stem cell research would be reflected most closely in the costs attributable to research grants involving human stem cells from all sources. The state funds would be a subset of that amount.



## Recommendations for Gathering Information on State Funding of Human Stem Cell Research

- TAMHSC requires all external research grants be approved through a grant routing form signed by institutional officials prior to submission.
- Among other things, the form is used to ensure that: a) there has been review and approval from appropriate compliance committees (e.g., animals, humans, biosafety, etc.); b) space is available for the research program; c) indirect costs are appropriate; and d) time/effort is approved. Officials also use the grant routing form to review the subject matter, source of research materials, and source of funds for all projects.
- Questions could be inserted in the grant routing form to track whether or not human stem cells are being proposed for use.
- This information could be relayed to the state by the Vice President of Research, as requested.