

The University of Texas Health Science Center at Houston (UTHealth)

Texas Senate Committee on Health and Human Services
Interim Charge #11: Human Stem Cell Research

1. What kind of human stem cell research is being conducted at your institution?

Scientists at The University of Texas Health Science Center at Houston are on the forefront of basic, translational and clinical stem cell research. They are developing novel therapies designed to: generate heart cells for repair from heart failure, myocardial infarction and aortic aneurysms; generate lung cells for lung repair from diseases such as respiratory distress syndrome, emphysema and genetic defects such as cystic fibrosis and surfactant protein deficiency; repair traumatic brain injuries especially for wounded soldiers and children; repair the brain from stroke or other injuries in the neurological system; grow new bone; regenerate teeth; and staunch the spread of cancer cells.

2. How many research projects involving human stem cells are currently being conducted?

In FY 2009, 8 grant funded projects. Researchers may have additional projects not recorded through the grant system.

3. What is the total amount spent on these human stem cell research projects?

For FY 2009, it is estimated that research expenditures on human stem cell projects was roughly \$3.25 million.

4. How much General Revenue do you spend on all research each fiscal year?

Research expenditures made from State sources totaled approximately \$22.8 million in FY 2009. Please note that in FY 2009, total research expenditures from all (e.g., federal, state, private) sources of funds were \$220 million, so roughly 10% of research expenditures were funded through State sources for 2009.

5. How much General Revenue do you spend on human stem cell research each fiscal year

Total estimated expenditures from state funding for FY 2009 is \$280,000; this represents somewhat less than 10% of the funding spent on human stem cell research with over 90% of the funding from federal and private dollars.

6. What factors would need to be considered to determine how much of the total cost of these human stem cell efforts is spent on actual human stem cell research, and how much of the spending comes from state funds?

Research projects, including human stem cell research projects, include direct costs (such as faculty and scientist salary and specific lab/equipment) as well as

indirect costs of general research support (such as depreciation on facilities, administrative support, library, and other institutional support expenditures). One hundred percent of direct costs allocated to a research project would be considered to be spent on said research project.

Approximately 90% of human stem cell research is funded from federal or private sources; 10% from state sources.

7. If the state is attempting to collect data on what human stem cell research is being funded by the state, do you have recommendations on how to achieve this?

UTHealth recommends that the Legislature consider the potential difficulty in easily obtaining thorough information for any type of research given the nature of scientist-driven research and potential significant changes to current automated accounting and research systems.