Background

The Midwest Stem Cell Therapy Center (MSCTC) was created by the Kansas Legislature in the 2013 session, with a state appropriation of approximately $1.1 million to fund start-up costs. Private-sector funding will also be accepted through the KU Endowment Association.

The law creating the center took effect on July 1, 2013. KU Medical Center Executive Vice Chancellor Douglas Girod, M.D. appointed Buddhadeb Dawn, M.D., to serve as the center’s executive director. A 14-member advisory board will also be convened, with members appointed by the governor, the House, the Senate, the Board of Regents and several other stakeholder entities throughout the state.

Adult stem cell treatments have been used clinically to successfully treat leukemia and related bone/blood cancers using bone marrow transplantation. KU Medical Center has been involved in research using the solid part of the umbilical cord (Wharton’s jelly). Besides KU Medical Center, other institutions around the state have also initiated adult stem cell research projects. However, before the MSCTC, there was no systematic mechanism for Kansans to receive adult stem cell therapy (other than bone marrow transplants for a few conditions) in the state or in the region, nor was there a coordinated center to translate basic stem cell research findings into clinical applications. There is also a lack of knowledge among the public as well as medical professionals about adult stem cell therapeutic options, currently available or in development, that could benefit Kansans and other patients in need.

In addition to bone marrow transplantation, additional therapies with adult stem cells – including organ repair – have been the focus of intense attention in the scientific community in recent years. If adult stem cell therapy is proven effective, many patients may benefit. Kansas is well-positioned contribute to this burgeoning new field of medicine. Kansas has the opportunity to focus on development of specific areas of adult stem cell research and patient treatment, with the potential to become a world leader in patient therapies for specific diseases or conditions.

Proposed activities and duties

SB 199 directs the Midwest Stem Cell Therapy Center to:

1. Focus on activities that would advance adult, cord blood and related stem cell and non-embryonic stem cell research and therapies for patient treatment;
2. Serve as a core facility to produce clinical grade stem cells from adult tissues, cord blood, and related materials for use in clinical trials and therapies;

3. Partner and collaborate with the Blood and Marrow Transplant Center of Kansas to foster a regional network of physicians trained in adult, cord blood and related stem cell therapy applications;

4. Create and maintain a database resource for physicians and patients that provides a comprehensive global list of available stem cell clinical trials and therapies;

5. Initiate clinical trials with adult, cord blood, and related stem cells; and

6. Inform the public on available adult, cord blood, and related stem cell therapeutic options.

**Midwest Stem Cell Therapy Center Fund to support MSCTC activities**

The bill has also established the Midwest Stem Cell Therapy Center Fund (Fund) in the state treasury. Expenditures from the Fund could be made for the purposes of furthering the goals and mission of the Center and for other purposes as may be specified with regard to any grant, gift, contribution, or bequest. The expenditures are required to be authorized by the director and made upon warrants of the Department of Administration’s Director of Accounts and Reports issued pursuant to vouchers approved by the director of the Center. The bill requires the director of Accounts and Reports, on or before the tenth of each month, to transfer from the State General Fund to the Fund, the interest earnings based on the average daily balance of moneys in the Fund for the preceding month and the new earnings rate for the Pooled Money Investment Portfolio for the preceding month.

The bill also requires fees received for core charges for cell processing and manufacturing, clinical trials, and similar service charges be paid to KUMC Research Institute, Inc., or the University of Kansas Endowment, as determined by the director. The University of Kansas Endowment Association is permitted to accept gifts directly designated for the benefit of the Midwest Stem Cell Therapy Center consistent with its corporate purpose as a nonprofit charitable corporation whose mission seeks the advancement of the University of Kansas.

The bill states all funds and facilities of the Center must be dedicated to treatments and research with adult, cord blood and related stem cells and non-embryonic stem cells. The bill specifically prohibits the use of funds or facilities involving embryonic or fetal tissue cells.

**Advisory Board**

The bill establishes the Advisory Board, which will serve in an advisory role to the Center’s director. Board members’ duties could include fund raising, public speaking, and other public relations activities to advance public awareness of successful adult, cord blood and related stem
The Board is required to meet at least four times each year and will be authorized to meet upon the call of the chairperson. The Board will be composed of the following 14 members (staggered terms of service requirements noted):

- A representative of the patient community appointed by the Governor
- A representative of the physician community appointed by the Governor
- A representative of the University of Kansas appointed by the Board of Regents
- A representative of Kansas State University appointed by the Board of Regents
- A representative of KUMC appointed by the Executive Vice Chancellor
- A representative of the Institute for Advancing Medical Innovation appointed by the Institute’s director
- A representative of the University of Kansas Cancer Center appointed by the Cancer Center’s director
- A representative of the University of Kansas Hospital Authority appointed by the Authority’s board of directors
- A member of the House of Representatives appointed by the Speaker of the House
- A member of the Senate appointed by the Senate President
- A person with a nationally respected reputation representing the physician community appointed by the Speaker of the House
- A person with a nationally respected reputation representing the scientific community appointed by the Senate President
- A member of the executive branch of the state agencies appointed by the Governor
- A member representing the Blood and Marrow Transplant Center of Kansas appointed by the Chief Executive Officer of Via Christi Health

The Center’s director will serve as an *ex officio* member of the Board. Advisory Board members may serve for only three consecutive terms and its members will serve without compensation. The bill provides for Board vacancies and appointments of successor members. The Governor will appoint the Board chairperson.

**Participating in Clinical Research**

Several clinical trials involving adult stem cell therapy are currently underway at the University
of Kansas Medical Center. These include:

   Principal investigators are:
   Joseph McGuirk, D.O.
   Sunil Abhyankar, M.D.
   Omar Aljitawi, M.D.
   Siddhartha Ganguly, M.D., FACP
   Tara Lin, M.D.

   For more information, contact: Dr. Joseph McGuirk at (913) 588-6030, or via kucancercenter.org/clinicaltrials.

2. A study on the use of stem cells for cardiac tissue regeneration.
   Principal investigator: Buddhadeb Dawn, M.D.

   For more information, contact: Caroline Murray, 913-588-9679.