

**63 O.S. 1-270.2**  
**Annual Stem Cell Research Report**  
**December 2018**



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# Human Embryo – Stem Cell Research – Reporting System

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### Introduction

HB 3126 Advancement in Stem Cell Cures and Therapies Act was enacted into law in November 2008. This legislation was authored in the House by Representatives Enns, Cox, Dank, Faught, McAffrey, McDaniel (Jeannie), Renegar, Rousselot, Sears, Steele, Shelton, and in the Senate by Senator Crain.

This bill was enacted to encourage stem cell research in the state of Oklahoma because stem cells are recognized to have great potential for treatment of life-threatening and debilitating diseases.

The bill defines “human embryo” as a “living organism of the species *Homo sapiens* at the earliest stage of development, including the single-cell stage that is not located in the body of a woman.” It also provides for research on human tissue regeneration and human disease using adult stem cells and stem cells obtained from umbilical cord blood and amniotic fluid to be conducted in the state provided that the research is performed safely and ethically, using only embryonic stem cell lines created prior to August 1, 2001, and in accordance with federal law as it existed on November 1, 2007. The bill states when research is performed in accordance with the Advancement in Stem Cell Cures and Therapies Act, no person or governmental body shall “restrict public funds designated for the stem cell research or obstruct or provide disincentives for the stem cell research.” In addition, the Oklahoma State Department of Health (OSDH) shall establish a reporting system which collects information regarding all activities carried out.

The OSDH established rules (Title 310, Chapter 551 Subchapter 3 and Subchapter 5) in March 2009 to assist organizations engaged in stem cell research with reporting requirements. The OSDH provides an annual report to the Governor, President Pro Tempore of the Senate and Speaker of the House. The University of Oklahoma Health Sciences Center and the Oklahoma Medical Research Foundation are currently the only institutions in the state of Oklahoma engaging in stem cell research.

# Stem Cell Research Report 2018

Provider

Project

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Board of Regents  
of the University  
of Oklahoma  
Health Sciences  
Center

Multicenter Safety Study of Unlicensed, Investigational Cryopreserved Cord Blood Units (CBUs) Manufactured by the National Cord Blood Program (NCBP) and Provided for Unrelated Hematopoietic Stem Cell Transplantation of Pediatric and Adult Patients

Expression Patterns of Stem Cell Marker Doublecortin and CaM Kinase-like-1 (DCAMKL-1) in Human Pancreatic Adenocarcinoma

Transplantation of Umbilical Cord Stem and Progenitor Cells

Research Sample Repository for Allogeneic Hematopoietic Stem Cell Transplantation and Marrow Toxic Injuries

A Research Database for Hematopoietic Stem Cell Transplantation and Marrow Toxic Injuries

A Trial of Tandem Autologous Stem Cell Transplants +/- Post Second Autologous Transplant Maintenance Therapy Versus Single Autologous Stem Cell Transplant Followed by Matched Sibling Non-Myeloablative Allogeneic Stem Cell Transplant for Patients with Multiple Myeloma

Bioengineering of the Human Umbilical Vein for Tissue Engineering Nerves and Tendons

Establishment of Adenoid Cystic Carcinoma Stem Cell Lines: Role of c-MYB and Wnt Pathway in Cell Line Maintenance

Assessment of Allogeneic Hematopoietic Stem Cell Transplantation in Medicare Beneficiaries with Myelodysplastic Syndrome and Related Disorders

Doublecortin-Like Kinase-1 as a Marker and Indicator of Treatment Response for Intestinal Stem Cells in Barrett's Esophagus and Progression to Esophageal Adenocarcinoma

Pancreatic Stem Cells and Cancer

Targeting the Cancer Stem Cells in Oral Cancer

Epigenetic Regulation of Mitochondrial Biogenesis in Diabetes During Pregnancy

A Multi-Center, Phase III, Randomized Trial of Reduced Intensity Conditioning (RIC) and Transplantation of Double Unrelated Umbilical Cord Blood (dUCB) versus HLA-Haploidentical Related Bone Marrow (Haplo) for Patients with Hematologic Malignancies

Documentation of Novel Keratoconus Markers: In Vitro and In Vivo

Provider

Project

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If the Male Partner has Low Strict Kruger Morphology, Should the Couple Still Undergo Intrauterine Insemination Versus Move on to In Vitro Fertilization?

A Randomized Double-Blind Phase III Study of Ibrutinib During and Following Autologous Stem Cell Transplantation Versus Placebo in Patients with Relapsed or Refractory Diffuse Large B-Cell Lymphoma of the Activated B-Cell Subtype

Mechanisms of Fetal Mitochondrial Programming in Maternal Diabetes: Role of AMPK and miR-130b

The Gastrointestinal Stem Cell Response to Injury

Oklahoma  
Medical Research  
Foundation

Genetic and Molecular Characterization of Rare Genetic Disorders

Human Model Systems Core

Generation, Maintenance, Differentiation, and Utilization of Inducible Pluripotent Stem Cell (iPSC) Lines

Studies in Neuronal, Myocardial and Muscle Disorders using Previously Collected Samples

Transancestral Fine Mapping and Functional Dissection of Autophagy-related SLE Risk Loci