



Catholic Foundation

1988 - 2016

American Heart Association

Cloning Research

The American Heart Association **supports cloning research** because it could lead to new procedures and techniques to reverse degenerative heart disease. For example, it may help generate new, healthy heart tissue, valves and other vital tissues and structures.

The cloning research we fund includes those involving human DNA sequences and cell lines and animals. We *don't* support cloning to create human beings and cloning to create humans or embryos for research material. They are strictly prohibited under our guidelines.

http://www.heart.org/HEARTORG/Conditions/Research-Topics_UCM_438796_Article.jsp#.VtdMW2X2bcs

Juvenile Diabetes Research Foundation

<http://jdrf.org/clinical-trials-connection/>

Yan Hang

Project Title: Identifying Molecular and Physiological Stimuli for Promoting Functional Beta Cell Regeneration

Institution: Stanford University

3145 PORTER DRIVE, PALO ALTO, CA, United States, 94304-1234

Project Duration: 01-May-2014 to 30-April-2017

Project grant award: \$163,968.00*

Grant Key: 3-PDF-2014-196-A-N

Description of Project

In type 1 diabetes mellitus, insufficiency of insulin-producing pancreatic beta cells results in a failure to maintain appropriate blood glucose levels. While advances in insulin replacement therapies have enhanced care of patients with type 1 diabetes, daily administration of insulin still has drawbacks and importantly it does not yet replace the innate physiological, regulated function of healthy beta cells. Hence, beta cell replacement or regeneration has been proposed as a therapy for diabetes. Attempts at generating beta cells from **human embryonic stem cells** have been successful in producing cells that express insulin and markers of beta cell differentiation. However, these cells are not functionally mature until months after transplantation into rodent hosts. Methods for producing fully functional human beta cells in vitro are currently lacking.