
Developing a personalized approach to beta cell replacement for patients with a genetic form of diabetes

Grant Award Details

Developing a personalized approach to beta cell replacement for patients with a genetic form of diabetes

Grant Type: Inception - Discovery Stage Research Projects

Grant Number: DISC1-08868

Project Objective: To determine the functional requirement for NEUROGENIN3 in the differentiation, maintenance, function, and survival of human pancreatic endocrine cells.

Investigator:

| | |
|---------------------|------------------------------------|
| Name: | Senta Georgia |
| Institution: | Children's Hospital of Los Angeles |
| Type: | PI |

Disease Focus: Diabetes, Metabolic Disorders

Human Stem Cell Use: iPS Cell

Cell Line Generation: iPS Cell

Award Value: \$179,995

Status: Closed

Progress Reports

Reporting Period: Year 2

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Grant Application Details

Application Title: Developing a personalized approach to beta cell replacement for patients with a genetic form of diabetes

Public Abstract:**Research Objective**

To correct a gene mutation in a patient's stem cells and produce functional replacement cells for the patient to cure their diabetes.

Impact

WE expect that this project can serve as a model for developing new treatments for patients with certain forms of genetic diabetes.

Major Proposed Activities

- To understand how the patient's gene mutation affects the differentiation, function, and survival of stem cell derived insulin cells
- To correct the patient's mutation in stem cells, then generate new insulin cells and test if they are fully functional.

Statement of Benefit to California:

California is already a leader in advancing stem cell technology. If we are successful, we believe that California can become the center for patients with certain forms of diabetes to come to for treatment.

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