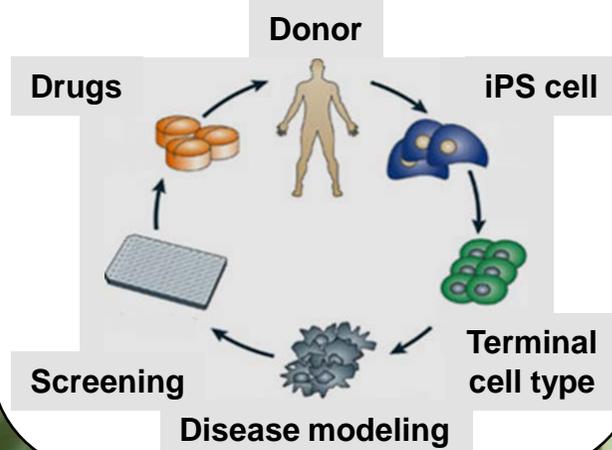


David Mann, Coby Carlson, Natsuyo Aoyama, Jun Wang,  
Arne Thompson, Blake Anson, and Vanessa Ott  
Cellular Dynamics International, Madison, WI USA

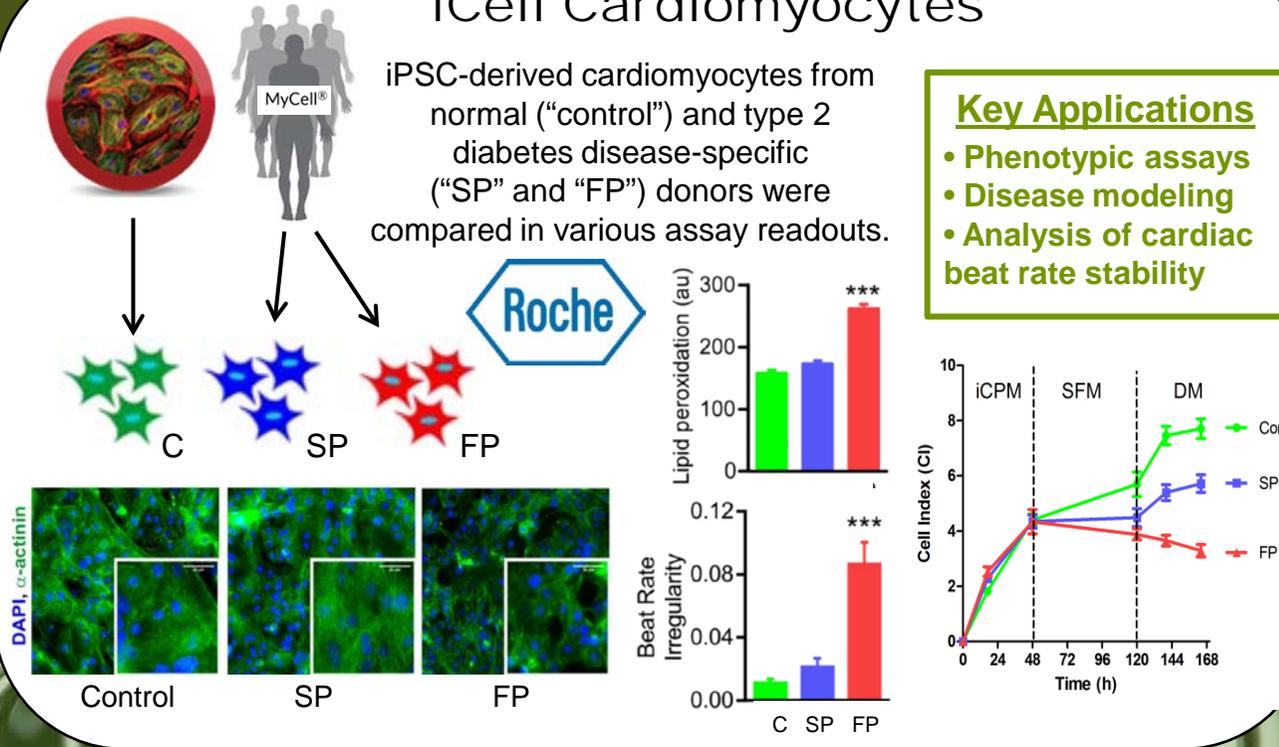


## Overview

iPSC technology can be used to model human diseases (ie. "disease in a dish") that cannot be studied using conventional cell lines, primary cells, or animal models. This approach can further be used to screen for novel drugs and therapeutics.



## iCell Cardiomyocytes



## Looking Ahead

**Working toward a disease model for diabetes.** We are developing various cell-based assays with iCell® Products that will enable the study of diabetes in different human and donor-specific cell types.

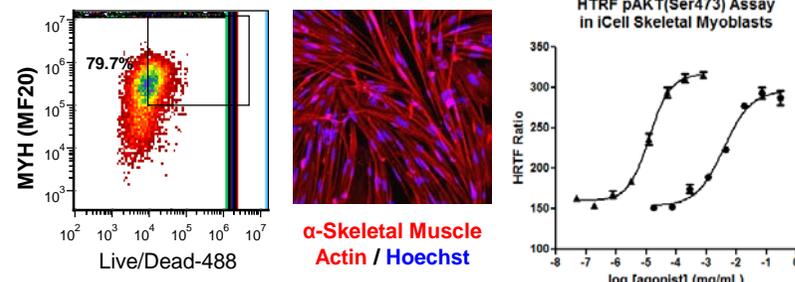
We have employed **multiple assay readouts** to interrogate signaling events and cellular responses that are related to key aspects of disease state and progression.

**Disease and Diversity Panel.** Not all studies requiring human cells can be accomplished from a limited set of normal, healthy donors. Thus, CDI is currently building a collection of terminally differentiated cell types from iPSC donors of diverse ethnic or disease populations. This means more controls and more disease-specific cell types to choose from.

The use of iPSCs to create first-in-class medicines shows much promise. iCell Products, like the ones featured here, have been used in both drug discovery and disease modeling. This "disease in a dish" approach will play a pivot role in studying the etiology of human diseases such as diabetes.

## iCell Skeletal Myoblasts

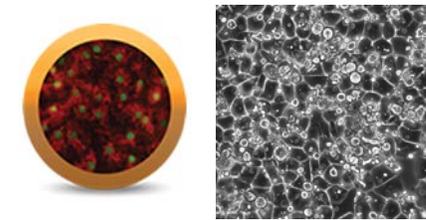
These physiologically relevant cells differentiate rapidly into multi-nucleated myotubes with high purity (MF20).



### Key Applications

- Disease modeling
- Glucose uptake and transporter studies
- HTS-compatible assays

## iCell Hepatocytes



Cryopreserved hepatocytes (iPSC-derived) can be utilized in numerous assay formats to investigate glucagon- and insulin-mediated responses.

### Key Applications

- Glucose regulation
- Disease modeling
- Anti-diabetic drug screening assays

