

CIRM hiPSC Initiative - Update

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CIRM hiPSC Initiative

CIRM Mission: Accelerating stem cell treatments to patients with unmet medical needs

Goal: Create a human iPSC bank to accelerate therapeutic discovery

- ~ \$32 MM Budget
- ICOC approval March 2013
- Awarded November 2013



CIRM hiPSC Initiative

Tissue Collection from 3000 Tissue Donors



hiPSC Generation



CIRM hiPSC Bank



Disease modeling

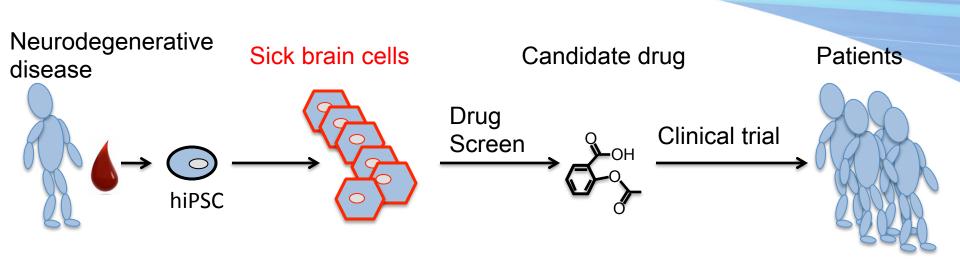
Target discovery

Drug discovery and development





Rationale for hiPSC Banks



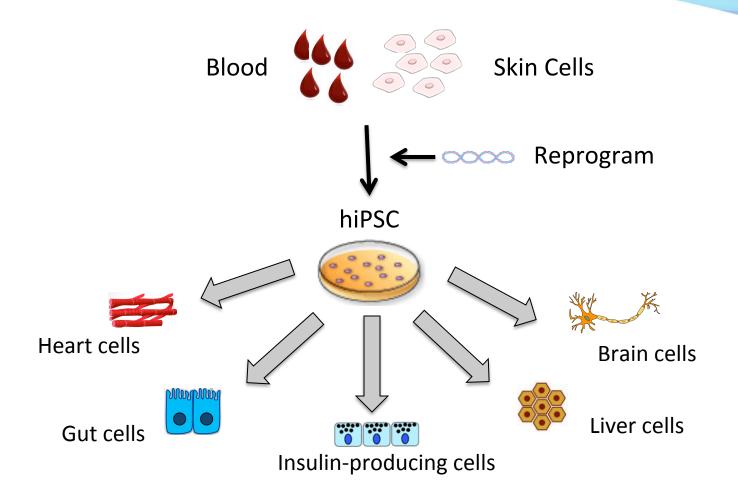
hiPSC bank

Understanding human disease

Drug development



hiPSC Bank: Broad Application to Many Human Diseases





CIRM hiPSC Initiative: Tissue Collection

Tissue Collector	Institution	Disease	# Donors
Joseph Gleeson	UCSD	Neurodevelopmental Disorders - epilepsy - autism - cerebral palsy	550
Joachim Hallmayer	Stanford	Idiopathic Autism	300
Joseph Wu	Stanford	Cardiomyopathies	680
Jacquelyn Maher	UCSF	Viral Hepatitis Nonalcoholic Steatohepatitis	186
Brigitte Gomperts	UCLA	Idiopathic Pulmonary Fibrosis	250
Douglas Galasko	UCSD	Alzheimer's Disease	385
Kang Zhang	UCSD	Blinding Eye Diseases - age-related macular degeneration - primary open angle glaucoma - proliferative diabetic retinopathy	650



CIRM hiPSC Initiative: hiPSC Generation and Banking

hiPSC Generation

Thomas Novak, Cellular Dynamics International

hiPSC Bank

Dorit Berlin,
Coriell Institute for Medical Research



Buck Institute, Novato, CA



CIRM hiPSC Initiative Status and Timeline

