## California Institute for Regenerative Medicine Meeting of the Independent Citizens Oversight Committee

# DRAFT Long-Term Objectives for Discussion with the ICOC on August 1 and 2, 2006

Presented below for discussion is a draft of the long-term objectives for the CIRM strategic plan, which were developed based on discussions with the ICOC held on June 1-2, 2006:

#### **CLINICAL: Proposed Long-Term Objectives**

- > To have, in early stage clinical trials, new therapies based on stem cell research for several diseases.
- > To establish "proof-of-principle" for stem cell therapy in humans for several diseases.
- > To demonstrate a level of success for stem cell therapy that will attract the large investment from others that will be necessary to bring stem cell therapies to patients.
- To develop approaches that will address immune rejection of transplanted tissue.
- ➤ To use stem cell and related research to develop new therapies and cures that are effective, safe, and affordable.
- ➤ Catalyze participation/efforts of private and public organizations in the development of new therapies and cures for currently incurable diseases
- ➤ Improve the California health care system and reduce the long term burden of chronic disease

## TRANSLATIONAL: Proposed Long-Term Objectives

- > To establish "proof of principle" for stem cell therapy in preclinical models in a variety of diseases.
- To develop the use of stem cells for toxicity testing and drug discovery.
- ➤ To demonstrate the usefulness of disease-specific stem cells in target identification and discovery of therapeutics.

➤ To develop procedures for large-scale production of stem cells and their derivatives that will ensure their safety and efficacy.

### **BASIC SCIENCE: Proposed Long-Term Objectives**

- > To have a thorough understanding of the factors regulating stem cell self-renewal and differentiation.
- To understand the early steps of stem cell differentiation in vivo and in vitro.
- ➤ To develop methods for creating and maintaining stem cell lines with a variety of genotypes in an efficient and reproducible manner.
- ➤ To produce disease-specific stem cell lines to understand the mechanisms of disease.

#### **INFRASTRUCTURE: Proposed Long-Term Objectives**

- ➤ To generate a skilled workforce for stem cell research in California through training programs and recruitment.
- > To create facilities, technology cores, networks, and infrastructure that will support basic and clinical stem cell research in California.
- ➤ To create collaborative research, clinical and interdisciplinary networks and infrastructures.
- > To contribute to the public understanding of and education in stem cell science and its application.
- > To contribute to the international dialogue pertaining to medical and ethical standards for stem cell research.
- > To foster/facilitate international collaboration to further stem cell research and understanding.