

UNIVERSITY OF HAWAI'I SYSTEM

TESTIMONY

HB 1648 Relating to Stem Cell Research

Testimony Presented Before the House Committee on Health and Committee on Higher Education

February 10, 2005

by

T. Samuel Shomaker, M.D., J.D. Acting Dean, John A. Burns School of Medicine University of Hawai`i at M~noa

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HOUSE COMMITTEE ON HEALTH AND COMMITTEE ON HIGHER EDUCATION

Thursday, February 10, 2005 State Capitol, Conference Room 309, 2:10 p.m.

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HB 1648 RELATING TO STEM CELL RESEARCH

Chairs Arakaki and Waters, Vice Chairs Green and Shimabukuro and Committee members.

HB1648 presents the State of Hawaii with a unique opportunity to become a leader in medical research regarding human stem cells. As you have no doubt heard from stories in the popular media, stem cells offer the potential of unique cures to human diseases. The research technique that is the foundation of all stem cell research is cloning and the State is fortunate to have the scientists who developed the most important cloning techniques working right here in our State. Professor Ryuzo Yanagimachi, Ph.D., the founder of Hawaii's Institute for Biogenesis Research (IBR) at the John A. Burns School of Medicine (JABSOM), and a researcher at the medical school for almost 40 years, proved in his laboratory that cloning was reproducible if it was done by his method. Dr. Yanagimachi's laboratory stunned the world by cloning 50 mice, and by cloning clones of clones. Thus, of the two world leaders in cloning technology, we have one working here in Hawaii!

It is important to be clear on the current possibilities for human stem cell research. Cures are only visions right now, and we must develop the techniques and research to do this. But this dream will never go forward until the research begins. Most scientists in the biomedical field agree that human stem cell research holds the promise of allowing a patient's own cells to replace damaged tissue without fear of rejection. This is the first promise. The second promise is that it holds the possibility of allowing physicians to regrow tissue that is diseased. But we need to learn the secrets of unlocking the information contained within human stem cells to build a new kidney, for example, or replace the islet cells in the human pancreas that are destroyed in diabetes.

Although we are supportive of the intent of HB 1648, the bill does not provide funding to establish the stem cell research institute. JABSOM would be unable to move ahead with the creation of this institute without an appropriation of new funding over and above that requested in the Board of Regents' approved budget for the University. If those funds are made available, JABSOM would enthusiastically embrace the challenge of developing a world-class stem cell research institute.

Thank you for the opportunity to testify.