



31 March 2008

To: House Committee on Finance

Hon, Karen Awana	Hon. Sharon Har	Hon. Bob Nakasone
Hon. Della Au Belatti	Hon. Jon Karamatsu	Hon. Karl Rhoads
Hon. Tom Brower	Hon. Michael Magaoay	Hon. Roland Sagum, III
Hon. Mele Carroll	Hon. Joey Manahan	Hon. James Tokioka
Hon. Faye Hanohano	Hon. John Mizuno	Hon. Colleene Meyer
Hon, Kymberly Pine	Hon, Gene Ward	

I am writing to you in support of SB2891, SD1, HD1 (HSCR 1332-08) being heard by the Finance Committee which extends current state funding for the Pacific International Space Center for Exploration Systems (PISCES). PISCES shows promise of playing a major role in the expansion of UH Hilo's ability to provide high quality education to the citizens of our state. In all fairness, I must alert you to the fact that I am Deputy Director of PISCES and admittedly have a vested interest in its continued success. However, I am writing to you as Chairman of the Department of Physics and Astronomy at UH Hilo. In addition, as a former elected member of the Hawai'i State Board of Education, I am well acquainted with the importance of providing our youngsters with the opportunity to develop their strengths so that they can find their future here in Hawai'i, rather than being forced to seek employment elsewhere. PISCES helps us to do that.

PISCES combines exciting, culturally sensitive research and development with an elaborate K-12 and Higher Education outreach program. Its underlying premise is to support the development of sustainable human habitats that will enable us to live for long periods on Mars and the moon. This involves engineering and science projects associated with Robotics, the production of useful materials from the soil, the sociology of persons living together in small, confined groups, the protection of human biological systems from ultra-violet light and other space dangers, etc. We believe that Hawai'i is the world's most perfect site for this work.

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UH Hilo is the ideal site for such a program. It has a long history of concentrating on undergraduate, culturally-sensitive education for our young people. In keeping with this, PISCES is already supporting two courses for students interested in space. The first one is completely subscribed and we expect similar student interest in the other. PISCES is committed to emphasizing the University of Hawai'i as a *system* and is working with faculty members at several of UH Manoa's colleges to be sure that students throughout the state can benefit from its educational programs without having to move from one island to the other. A coordinated K-12 program of space-related instructional modules is already being developed and will be made available to the children of our state without additional costs to the already-strapped schools.

PISCES' sensitivity to its hosts in evident in the establishment of a local advisory group to make sure that our scientific activities have support *before*, not after, they are begun. A distinguished panel of Big Islanders will assist us and make sure that PISCES respects our history and culture.

During the last year's legislative session, PISCES was fortunate to receive bipartisan support for a state appropriation to begin its work. In the few months since that
appropriate was implemented, PISCES has already received two NASA grants totaling
\$640,000, written proposals for several more similar grants, and entered into a
Memorandum of Understanding with Colorado School of Mines both to increase its
ability to conduct its work and to improve opportunities for our students. Word is
beginning to get out and we are starting to receive unsolicited inquiries from outside
agencies asking whether PISCES would be available to collaborate and offering
additional support funds. This represents the beginning of the 'leverage' which we
believe made PISCES so attractive to last year's legislature.

Clearly, the state's limited resources will not permit indefinite state support for PISCES, no matter how successful it may be. But this second year is a critical time in the development of PISCES and continued support for another year or so is clearly indicated. Put directly, PISCES has done what it said it was going to do and deserves your support. It has attracted many hundreds of thousands of outside dollars, begun programs both in research/development and in community outreach/education, strengthened UH Hilo's ability to serve the students of our state, and brought nationally-respected scientists and educators to Hawai'i. We urge your continued support.

Robert A. Fox. Ph.D.

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Deputy Director

Pacific International Space Center for Exploration Systems