



UNIVERSITY OF HAWAII SYSTEM Legislative Testimony

Testimony Presented Before the
House Committee on Economic Revitalization, Business, & Military Affairs Committee
February 17, 2009 at 8:30 a.m.

by
James R. Gaines
Vice President for Research, University of Hawaii

HB610: RELATING TO SCIENCE AND TECHNOLOGY

The University of Hawaii opposes HB610

The University of Hawaii (UH) supports the intent of this bill, to establish a task force to develop the Hawaii state Science and Technology Plan (STP), however this bill would duplicate efforts already underway.

UH has taken the initiative to fast track a statewide STP because of the requirements of the National Science Foundation's Experimental Program to Stimulate Competitive Research (EPSCoR), of which Hawaii is a recipient. From the most recent EPSCoR proposal solicitation the requirement for a STP is clear:

"Essential to EPSCoR's goal of enhancing the competitive position of jurisdictions' research and research-based education in science and engineering is a well-designed State-wide Science and Technology initiative or plan (S&T Plan). This S&T Plan establishes state-wide goals and objectives, and provides a framework that guides the jurisdiction's utilization of resources from EPSCoR and other stakeholders to achieve them. Each jurisdiction must establish and utilize an EPSCoR governing committee that works closely with leaders in academe, government, and the private sector. The committee will identify potential R&D improvement strategies and activities that are consistent with the S&T plan and most likely to advance the further development of a nationally competitive academic R&D capability. Once in place, this academic R&D capability is expected to provide a key ingredient for a definitive innovation and commercialization strategy to stimulate the jurisdiction's economic development, including a diverse well-prepared STEM enabled workforce." (From NSF EPSCoR Research Infrastructure Improvement Program Solicitation, NSF 08-587)

An external EPSCoR Monitoring and Assessment Panel conducted a review of the Hawaii EPSCoR Project in March 2008 and concluded that it would take an active intervention for Hawaii EPSCoR to be in substantial compliance with the expectations of the NSF and the requirement for Hawaii to develop a statewide STP. Therefore, in the fall of 2008, the co-Chairs of the Statewide EPSCoR Committee established a special subcommittee to draft a Hawaii State STP for review by the full statewide committee prior to submission to both the Governor and Legislature no later than November 2009.

Through the NSF EPSCoR program, Hawaii has received over \$35M in direct and co-funded support since 2001. The majority of these funds were competitively awarded to the University of

Hawaii however several awards were made to private companies and non-profits (i.e Bishop Museum). Currently the UH has 2 EPSCoR proposals under consideration by the NSF; A Research Infrastructure Improvement proposal for \$4M/y for 5 years (\$20M) and a \$2M/y for 3 year (\$3M to Hawaii) Cyberinfrastructure partnership proposal with the University of Alaska.

In addition, Following the release of the Hawaii Science & Technology Council's report, INNOVATION AND TECHNOLOGY IN HAWAII: An Economic and Workforce Profile ([http://www.hiscitech.org/ data/n_0001/resources/live/Innovation+Tech+Hawaii+Report+Sept30.pdf](http://www.hiscitech.org/data/n_0001/resources/live/Innovation+Tech+Hawaii+Report+Sept30.pdf)), in October 2008, UH also convened a stakeholder group to address the first recommendation of that work, to "develop and implement a strategic plan, then monitor progress in achieving greater development of technology and innovation in the state, in collaboration with private- and public-sector stakeholders." This group, working across a number of science and technology sectors in Hawaii, is soliciting funding from external agencies to develop a detailed STP for the state. However because federal funding sources have been in transition since this group was convened, it is also working in parallel with the EPSCoR effort and will pursue new funding opportunities that are becoming available under the new administration in Washington..

The UH respectfully asks that this bill be deferred until the present efforts can present the results of their work to the legislature towards the end of 2009.

LATE TESTIMONY

From: Dr. Michael P. Crosby [mpcrosby@hawaii.edu]
Sent: Tuesday, February 17, 2009 9:07 AM
To: Rep. Angus McKelvey; Rep. Isaac W. Choy
Cc: 'Gaines, James'; Rose Tseng; maurice kaya; Kevin Kelly; Liz Corbin; 'Gerald De Mello'; Jacqueline L Sales-Iyo
Subject: LATE TESTIMONY testimony regarding HB610
Attachments: 021609 mpc hb610 testimony.doc

Aloha Chair McKelvey and Vice-Chair Choy,
Attached, please find my testimony offered regarding HB610.
Mahalo
michael

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**Testimony Presented Before the
House Committee on Economic Revitalization, Business, & Military Affairs
February 10, 2009 at 3:45pm
by
Michael P. Crosby
Interim Vice Chancellor for Research, University of Hawai'i at Hilo**

Representative Angus L.K. McKelvey
Chair
Committee on Economic Revitalization, Business, & Military Affairs

Representative Isaac W. Choy
Vice-Chair
Committee on Economic Revitalization, Business, & Military Affairs

Aloha mai kakou,
My name is Michael Crosby. I currently serve as the Interim Vice Chancellor for Research at the University of Hawai'i (UH) at Hilo, while on a 2-year leave of absence from my position as the Executive Director for the National Science Board in Washington, DC. The testimony I provide here is in my capacity as the Co-Chair of a Special Sub-committee of the Hawai'i Statewide EPSCoR Committee. I support the intent of HB610: "Hawai'i State Science and Technology Task Force", which seeks to establish a task force to develop the Hawaii state science and technology plan, and appropriates funds to support this effort. However, I respectfully request that the House Committee on Economic Revitalization, Business, & Military Affairs (EBM) consider the potential for achieving its worthy goal by utilizing the recently established Hawaii Statewide EPSCoR Committee's Special Sub-committee for development of a Science and Technology Strategic Plan for the State of Hawai'i.

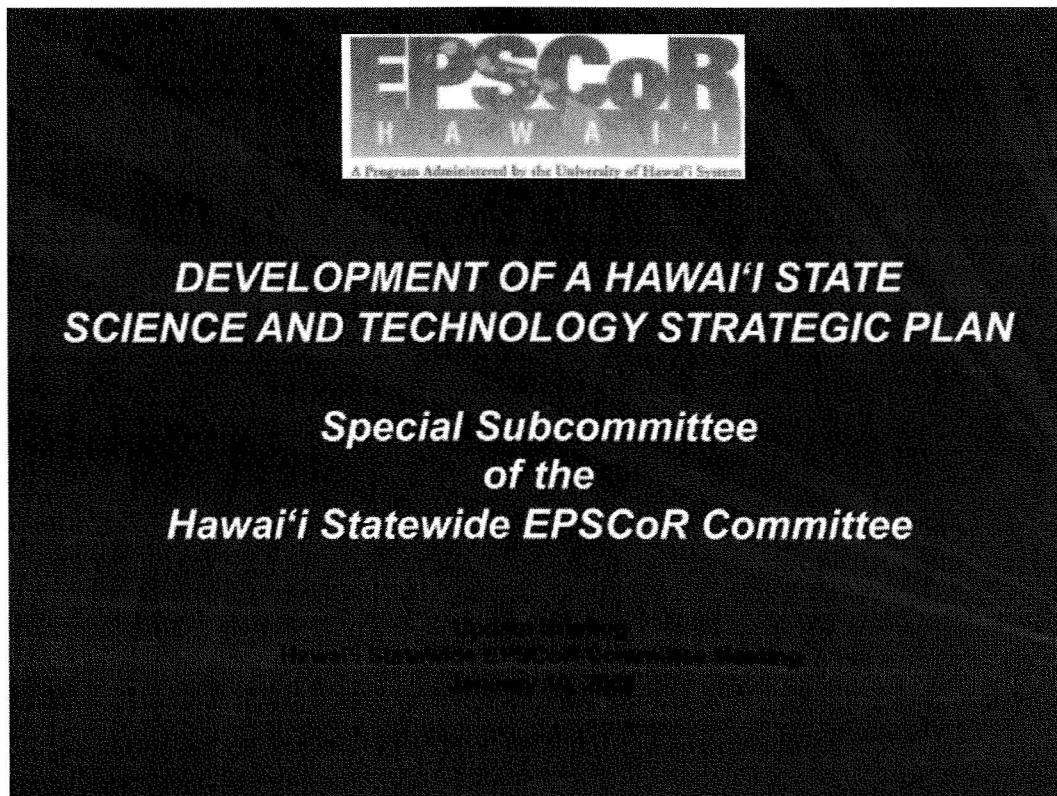
A significant vehicle for increasing science, technology, engineering and mathematics (STEM) in Hawai'i has been the Experimental Program for the Stimulation of Competitive Research (EPSCoR) Program. Under the guidance of a Statewide EPSCoR Committee that is co-chaired by UH Hilo Chancellor Rose Tseng and Maurice Kaya, along with the EPSCoR principal investigator, UH System Vice President for Research Jim Gaines, the EPSCoR Program has spawned numerous STEM research and capacity building grants totaling approximately \$170M to our State from external funding entities. In November 2008, the EPSCoR Statewide Committee established a Special Sub-Committee that will develop a Science and Technology (S&T) Strategic Plan for the State of Hawai'i, which will help establish a new course for expanding our State's S&T-based economic foundation.

As I read the HB610, I am struck by the degree to which the Hawai'i Legislature and the Hawai'i Statewide EPSCoR Committee seem to be in synchrony regarding the absolute imperative for establishing a statewide S&T Strategic Plan that can form a foundation for the future economic well being and quality of life for our State. HB610 describes a Task Force that seems a near absolute reflection of the recently established EPSCoR Special

Sub-committee, from participants to goals. The EBM Committee may wish to consider utilizing this already established Special Sub-Committee to achieve EBM goals in a more cost effective manner under the auspices of the Statewide EPSCoR Committee, and in close consultation with the legislature. The goal of the Statewide EPSCoR Committee is to provide a final plan for legislative consideration before the end of 2009.

Attached to this testimony is a set of slides that were used as part of a presentation to the Statewide EPSCoR Committee in early January 2009 to provide an overview of the Special Sub-committee for creation of an S&T Strategic Plan for the State of Hawai'i.

Mahalo nui loa for providing me an opportunity to provide comments regarding HB610.





It is essential for Hawai'i to develop and implement a statewide S&T strategic plan in order to achieve a level of research competitiveness that will fulfill the goals of our state to expand its S&T economic foundation.



“Each jurisdiction must establish and utilize an EPSCoR governing committee that works closely with leaders in academe, government and the private sector. The committee will identify potential R&D improvement strategies and activities that are most likely to advance the development of a nationally competitive academic R&D capability.”

(From NSF EPSCoR Research Infrastructure Improvement Proposal Solicitation NSF 05-589)



“Essential to EPSCoR’s goal of enhancing the competitive position of jurisdictions’ research and research-based education in science and engineering is a well-designed State-wide Science and Technology initiative or plan (S&T Plan). This S&T Plan establishes state-wide goals and objectives, and provides a framework that guides the jurisdiction’s utilization of resources from EPSCoR and other stakeholders to achieve them.”

(From NSF EPSCoR Research Infrastructure Improvement Program Solicitation, NSF 08-587)



An external EPSCoR Monitoring and Assessment Panel conducted a review of the Hawai’i EPSCoR Project in March 2008 and concluded that –

It would take an active intervention for Hawai’i EPSCoR to be in substantial compliance with the expectations of the NSF and the requirement for Hawai’i to develop a statewide S&T strategic plan.



Therefore, the co-Chairs of the Statewide EPSCoR Committee, in consultation with the Executive Committee and in accordance with the by-laws, established a special subcommittee to draft a Hawai'i State S&T strategic plan for review by the full statewide committee prior to submission to both the Governor and Legislature no later than November 2009.



SUBCOMMITTEE MISSION AND GOAL

Interface with the Legislature, the Governor's Office, the STEM research, education and economic development communities, the S&T industry and other stakeholders, as well as identify best practices from other states with respect to development of a Statewide S&T Strategic Plan.

Draft plan completed and presented to full Statewide EPSCoR Committee by October 2009.



Co-Chairs of the Subcommittee

Michael Crosby, UH Hilo Interim Vice Chancellor for Research
Elizabeth Corbin, DBEDT Manager, Science and Technology Branch
Kevin Kelly, UH System Managing Director, EPSCOR

DBEDT: Mary Lou Kobayashi, DBEDT Chief Planner
Bob Shore, DBEDT Research and Economic Analysis Division

EDBs: Jackie Hoover, Hawaii Island EDB

John Strom, Enterprise Honolulu

Leslie Wilkins, Maui EDB

Mattie Yoshioka, Kauai EDB

Private Sector, Education/Industry Partners:

Lisa Gibson, Hawaii Science and Technology Council

Neil Hannahs, Kamehameha Schools

Karl Hess, Hawaii Innovation Council

Yuka Nagashima, HTDC

Executive Secretary – Terrilani Chong, UH Hilo



Help to drive the process, but does not seek to reinvent any already existing work nor to replace or supplant any existing bodies of processes.

Existing foundation includes, *inter alia*:

- HSTC report on technology sectors
- State's Innovation Initiative
- 2050 Sustainable Hawai'i Report
- 1980's Strategic Plan developed by the State
- HSTC Life Science Road Map
- CEDs for each county into the statewide EDA document (2005, updated yearly)
- West Virginia S&T Strategic Plan as a "peer" model for Hawai'i.



Upcoming or in-process documents that can also be used to guide this process:

- Innovation Council Report - synthesizes prior reports. This document already exists but an update is imminent.
- Innovation Indicators report
- Emerging Industries Benchmark Report
- Renewable Energy Strategic Plan - prepared at county level and rolled up to state level
- CEDS report being re-written this year
- National Governors' Association and State Science & Technology Institute both provide a national perspective.



***DEVELOPMENT OF A HAWAII STATE
SCIENCE AND TECHNOLOGY STRATEGIC PLAN***

***Special Subcommittee
of the
Hawai'i Statewide EPSCoR Committee***