



UNIVERSITY OF HAWAI'I SYSTEM

TESTIMONY

SB 2818, AUTHORIZING THE ISSUANCE OF GENERAL OBLIGATION BONDS AND
MAKING AN APPROPRIATION FOR A REGIONAL BIO-CONTAINMENT LABORATORY
FACILITY

Testimony Presented Before the
SENATE COMMITTEE ON MEDIA, ARTS, SCIENCE AND TECHNOLOGY

February 7, 2006

by

T. Samuel Shomaker, MD, JD
Interim Dean
John A. Burns School of Medicine

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State Capitol, Conference Room 016, 1:30

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LABORATORY FACILITY

Chair Fukunaga, Vice Chair Ige and Committee members.

Thank you for this opportunity to express support for SB 2818, which provides state matching funds to support construction of a regional bio-containment laboratory in Honolulu.

A grant of \$25 million was received by the University of Hawaii in September, 2005 from the National Institute of Allergy and Infectious Diseases, National Institutes of Health, to construct a regional bio-containment lab (RBL) here. The NIH award is contingent upon the State of Hawaii contributing matching funds of \$12.5 million.

This facility will be part of the NIH network of 15 laboratories nationwide to conduct research on infectious diseases that have potential for use by bioterrorists. The ultimate goal of this network of laboratories is to develop

national laboratory capacity to provide early detection, and support rapid response to epidemic infectious disease, whether the result of natural or intentional causes.

Honolulu International Airport has been identified as one of 25 central airports in the Global Airport Network System, which means that Hawaii is highly vulnerable to the importation of exotic infectious diseases. More than 2 million visitors arrive annually in Honolulu from Asia, which is the source of origin of most of the important exotic diseases that have caused global or regional epidemics in the past 15 years. With the demographic, societal and economic changes in many Asian countries, and with globalization, Hawaii is at high risk for epidemic disease caused by exotic pathogens introduced from Asia.

Currently, Hawaii has neither the laboratory nor the rapid response capacity to deal with epidemics of exotic infectious diseases. Laboratory diagnosis of suspected exotic disease agents must now be sent to the mainland, which requires weeks to obtain the results. If the agent happens to be highly transmissible like avian influenza, those weeks waiting for a laboratory diagnosis will result in thousands of new cases, geographic spread of the disease, and possibly many deaths before an effective emergency response can be mounted to control the epidemic. This scenario underscores the need to have the laboratory capacity and capability in Hawaii to support an early warning epidemic disease surveillance system, as well as to guide the emergency response to control newly imported pathogens.

Only the University of Hawaii's John A. Burns School of Medicine currently has biosafety-3 level laboratories, including a very small facility at Leahi Hospital and a 2,000-square-foot BSL-3/Animal BSL-3 laboratory on the new Kaka'ako campus. Unfortunately, these laboratories are not adequate to support the early warning disease detection surveillance needed to protect Hawaii.

The proposed Pacific RBL will be a larger facility with approximately 25,000 square feet of laboratory space designed to work on a number of BSL-3 pathogens. In addition to supporting the surveillance system mentioned above, the proposed RBL will help protect and grow the economy of Hawaii in the following ways:

1. It will protect the tourism industry by enabling early detection and control of imported exotic pathogens.
2. It will stimulate infectious disease research in Hawaii, resulting in a significant increase in federal research funding.
3. It will be a major driving force for development of a biotechnology industry in Hawaii.
4. It will bring world-class scientific expertise and increased prestige to Hawaii.

5. All of the above will result in new, high-paying jobs for Hawaii.

It should be noted that the PacRBL will be a very safe laboratory. It will be designed and constructed according to rigorous federal, state and university standards. No infectious diseases have been known to escape from any existing biosafety laboratories in the US. The facility will be built to have laboratories within laboratories, with redundant air filtration. All work on infectious agents will be approved and supervised by the UH Institutional Biosafety Committee, as well as overseen by NIAID, NIH.

The timeline for the new PacRBL has been set by NIH; they require that the laboratory be functional and certified by September, 2010. To meet this timeline, the University of Hawaii must move quickly to initiate the construction process. Therefore, it is critical that the State matching funds be appropriated without delay.

Thank you for this opportunity to testify on this important issue.