

UNIVERSITY OF HAWAI'I SYSTEM

Legislative Testimony

Testimony Presented Before the Senate Committees on Higher Education and Health January 29, 2009 at 1:15pm by James R. Gaines Vice President for Research, University of Hawai'i

INFORMATIONAL BRIEFING – Regional Biosafety Laboratory in Kaka'ako

The Pacific Regional Biosafety Laboratory (PacRBL) will be a federally-funded Biosafety Level 3 (BSL3) lab for research and diagnostics on infectious diseases. It would be one of only 13 such regional labs in a new National Institutes of Health (NIH) network, and the only lab in this network west of Fort Collins, Colorado. NIH awarded grants for these labs in 2004 and 2005, and there are no plans to offer additional construction grants in the future.

The PacRBL will support research on a range of infectious diseases, including tuberculosis, dengue fever, and others that could threaten public health in Hawaii, the U.S., and the rest of the world. The PacRBL will focus on emerging infectious diseases from East and Southeast Asia, and particularly on 'zoonotic' diseases that originate in animals and can potentially jump species to threaten humans.

In 2005, the NIH awarded UH with a \$25 million grant to design and build the PacRBL. The State matched this amount with \$12.5 million. The proposed site was moved from Aiea to the JABSOM campus in Kakaako in 2006, but initial attempts to design a suitable lab within the grant budget were not successful. The NIH provided \$7.5 million in additional funds in late 2007 that the State matched with an additional \$2.5 million in the 2008 session. This brought the total project budget to \$47.5 million, including \$32.5 million in federal funds and \$15 million in State funds.

UH selected a new architectural team for the project in July, 2008 and requested the State's funding in August, 2008. UH requested the entire amount, which includes \$12.5 million in General Funds and \$2.5 million in General Obligation bond funds. Due to the current financial shortfalls, the State did not release any of these monies to UH and recently returned our allocation request with "No Action". Instead, the Executive Budget for the University of Hawaii proposes giving UH the "option" to include the \$12.5 million in our capital improvements budget for fiscal years 2010-2011.

As President McClain testified before the Senate Higher Education committee on January 15, the overall annual CIP allocation in the executive budget is \$75 million per year, for a total of \$150 million – well below our \$350 million CIP request for health and safety and capital renewal and deferred maintenance, and far below over overall \$600-million-plus request. The Executive Budget's proposed amount would not permit UH to make any progress in addressing our deferred maintenance backlog. Adding the required RBL match funding compounds the

problem. UH would prefer that the Legislature add \$12.5 million in RBL funding to our overall CIP request, and increase the level of funding above that specified in the Executive Budget so that we can simultaneously access the Federal matching funds for the RBL, and make progress on our deferred maintenance backlog.

NIH requires that the full \$15 million of State funding be available for the PacRBL in order to proceed with the project. The design process is estimated to last about 12 months and could begin once the full funding is secured. Construction would take about 18 months.

The PacRBL is an extremely important project for Hawaii for several reasons cited briefly here first and explained in more detail thereafter. First, it would be a key public health asset in the continuous battle against infectious diseases. Second, it would support the growth of research on infectious diseases at UH, and be an invaluable resource for local biotech companies such as Hawaii Biotech. Third, the PacRBL would help stimulate new partnerships between UH and global leaders in infectious disease detection and research. Finally, the degree of State to Federal financial leverage on this project makes it extremely beneficial to Hawaii during the current recession.

PacRBL as a Public Health Asset

Globalization has increased the potential for infectious diseases to spread rapidly. The SARS experience in 2002 illustrated how swiftly infectious disease can spread across the world, and how severe its impacts can be to public health and local economies. If Hawaii had suffered the same SARS infection rates as Toronto did, the tragic local loss of life would have been accompanied by a steep downturn in tourism for a prolonged period. As was the case in Toronto, public fear would drastically reduce discretionary travel for many months afterward. Hawaii lacks suitable facilities to respond to a major outbreak. As State Dept. of Health Director Dr. Chiyome Fukino and UH Medical School Professor Dr. Duane Gubler note, 'Biosafety Level 3 lab space in the state is inadequate to support the type of disease detection system needed, posing a true threat to our well-being.' *(Honolulu Advertiser, May 6, 2007)*. The lack of adequate facilities literally makes Hawaii a sitting duck against infectious diseases entering the State through any of the millions of travelers arriving here annually from all parts of the world. The PacRBL would help Hawaii's public health officials to more rapidly and effectively detect, identify, and contain introduced pathogens before they could spread throughout the community.

Supporting the Growth of Research in Infectious Diseases at UH and local biotech companies

Since 2003, UH faculty received about \$2.5 million of grants annually for infectious disease research. These funding levels were achieved with relatively limited facilities to support such work, thus curtailing the type and scale of research projects we could do. The PacRBL would enable UH to compete for a much wider range of grants within NIH's \$3 billion annual funding stream for research on infectious diseases. The PacRBL would also be a highly important asset to recruit star faculty to UH.

Hawaii Biotech also has a range of R&D projects that require the use of BSL3 facilities, which they outsource to a labs on the mainland. The PacRBL would enable Hawaii Biotech and other companies needing access to BSL3 labs to conduct more of their specialized R&D in Hawaii.

Stimulating Development of New Global Partnerships

The federal Centers for Disease Control (CDC) is considering establishing an office in Hawaii to support their operations Asia and the Pacific. The PacRBL would be an extremely important facility for use by the CDC, and could strengthen UH's ability to partner with them and other

leading institutions in infectious disease research. Likewise, the new Duke University/National University of Singapore program in infectious disease research has invited UH to be a partner in their efforts to develop a global center of excellence for research and training for infectious diseases throughout the Asia-Pacific Region. The PacRBL would enable UH to play a significant role in this and other partnerships.

Significance of State-Federal Funding Leverage

The PacRBL would be a substantial construction project for the state in these lean economic times. The federal government would spend \$2.17 for every dollar the State spends to build the PacRBL. This leverage is extremely advantageous when considering the multiplier effects of construction projects. Using DBEDT's standard Final-Demand multipliers for construction, we estimate that between \$4.50 to \$6.21 of total economic output would be generated for every State dollar spent to build the PacRBL.

In summary, we believe the PacRBL is a vitally important project for the UH and State that will pay significant economic dividends during our protracted recession, and serve as a crucial research and public health asset for decades to come. We urge the State to release the full \$15 million it pledged for the project as soon as possible, alternatively, release the \$2.5 million in CIP funding already approved, while the Legislature includes \$12.5 million in additional funding in the FY 2010-11 biennium budget.