



UNIVERSITY OF HAWAI'I SYSTEM

TESTIMONY

HB247 – RELATING TO BIOPROSPECTING

Testimony Presented Before the
House Committees on
Economic Development & Business Concerns
Agriculture

February 17, 2005

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Chairs Herkes and Abinsay, Vice-chairs Wakai and Tsuji, and members of the joint committees, thank you for the opportunity to testify on behalf of the University of Hawaii on HB247HD1. As many of you are aware, the University supports the formation of a commission or designation of the legislative reference bureau (LRB) to study the issues related to maintaining Hawaii's biodiversity, including the conservation and sustainable use of Hawaii's natural resources, the role of research in identifying, sustaining, and conserving those resources, as well as the equitable sharing of benefits that may arise from commercializing discoveries that may result from those research efforts. However HB247HD1 departs significantly from language that was developed and agreed upon by many stakeholders over the past two legislative sessions and in its current form, the University can no longer support this bill as it will significantly impact the teaching and research efforts of the university system.

Some areas of concern to the University include Section 1, numbers 9 and 10, where the language of the legislative findings attempts to legitimize unsupported and undocumented allegations that the University is somehow complacent in its obligations to the state with respect to its handling of research materials that may have come from state lands and waters. Specifically, the University has never claimed exclusive ownership or control of any materials found on state lands or in

state waters, nor has it ever sold, or suggested it had the right to sell, any such exclusive ownership rights. The statement in number 10 that the University may not have protected the state's resources is blatantly false and the suggestion that the UH is conducting such activities without the knowledge of the legislature is simply not true.

Interest and ownership in materials and associated intellectual property is always retained by the University when materials are sent by the University to other institutions or to collaborating partner companies under Material Transfer Agreements. This policy and the other terms of these agreements are significantly more stringent than any policy or similar controls the state currently has for access to its biological or genetic resources. The University's authority to enter into agreements, including Material Transfer Agreements and commercialization agreements in collaboration with its research partners can be found in Hawaii Revised Statutes §304-2(3). Furthermore, HRS §304-6.5 specifically refers to the use of Material Transfer Agreements in the context of granting statutory authority to the University to indemnify collaborating institutions. Finally HRS §304-8.92 specifically authorizes the University to establish a fund into which the proceeds from the commercial exploitation of inventions and intellectual property developed at the University can be deposited and used to "develop technologies which have potential commercial value, support the administration of technology transfer activities, and facilitate economic development through education and research undertaken at the University."

These sections of the Hawaii Revised Statutes, passed by this very legislature, are evidence of acknowledgement that the UH engages in such activities with the full knowledge and support of the legislature.

Furthermore, it is not the University that controls access to the natural resources of the state of Hawaii. Accordingly, we find the language targeting only the

University in items 9 and 10 of Section 1 offensive, especially given that there are companies and individuals actively bioprospecting in Hawaii who would not be affected by this legislation. Thus, this legislation does nothing to maintain Hawaii's biodiversity or promote the sustainable development of the State's natural resources where these companies or individuals are assigned. It would be fair to suggest that these collectors have no intention of sharing any future benefits with the state at all, yet the policies and regulations affecting their access to the State's natural resources go unchallenged.

We believe the stated purpose of the bill in HB247HD1 is now flawed. While the University does not license or sell (except in very rare instances) exclusive rights and title to its intellectual property we find that the charge to the LRB is confusing. Benefits to be shared do not arise from research alone. Research results in discoveries that are beneficial to greater scientific understanding and that allow us to address many of society's thorniest problems in new ways. Occasionally, such discoveries result in inventions that may, with considerable investment of time, money, and effort, become useful products or services. These inventions, which represent the University's intellectual property (IP) bring investment dollars to the University and it is those dollars that actually develop a product that may lead to financial benefits that may be shared. In the mean time, there are the benefits of continued research by the faculty and of new and exciting educational opportunities to the students of Hawaii. But until the research results in a discovery that may attract the investment dollars needed to become a potential product and that product is licensed to a manufacturer who sells it commercially, there are no dollars to share.

We agree that development of Hawaii's biological resources should be environmentally sustainable, culturally sensitive; and also, if for commercial purposes, economically feasible. However, comprehensive strategies necessary to meet these goals can only be developed through continued research (environmental, cultural, economic), which requires substantial research funding.

Therefore, unless the state is prepared to invest in the research needed to develop these resources, the best outcome from the LRB should be a comprehensive policy that addresses the issues associated with access to Hawaii's natural resources, and the state's ability to control access to, and retain an interest in, such materials that are found to have economic benefits that can be reasonably exploited. To ask the LRB to define a strategy for the development of the biological resources, without the necessary understanding that can only come through continued research, is meaningless.

Throughout HB247HD1 there are references to "intellectual knowledge". This term is confusing because it can be construed to mean either Intellectual Property, "*A product of the intellect that has commercial value, including copyrighted property such as literary or artistic works, and ideational property, such as patents, appellations of origin, business methods, and industrial processes.*" or Indigenous Knowledge, "*knowledge unique to a given culture or society, that has and continues to develop over time and is based on experience, often tested over centuries of use, adapted to local culture and environment, dynamic and changing.*" The LRB should use the appropriate definition for each instance of 'intellectual knowledge'.

The University respectfully suggests that, in exploring relevant issues and developing appropriate policies, the LRB be instructed to look at the responsible regulation of biotechnology only as it relates to bioprospecting. The field of biotechnology is so broad and touches so many areas of research and manufacturing outside the purview of bioprospecting, that we feel the legislature would be best served, and the broader biotechnology community would be more receptive to such policies, by inserting such a restriction.

One of the University's primary concerns is the language restricting its ability to enter into commercialization agreements and licensing of its intellectual property. While the primary goal of research is to create new knowledge, it sometimes

leads to the discovery of new genes or molecules that can be commercialized and used in the public domain to improve the human condition, whether through the creation of more nutritious foods that can be grown with less water and fewer pesticides, the development of more efficient industrial processes that reduce pollution and preserve our environment, or the creation of novel drugs that cure the currently incurable diseases. While the specific intent of university biological research is not necessarily to search for commercially viable and exploitable biomaterials, the results of publicly funded research are intended, and often do, become products and services that benefit the citizens of our state and our country.

It is also through the creation of new knowledge, the education of our students, and the transfer of new technologies to the private sector that new ideas are brought forth and translated into new companies that provide opportunities to the state. The state's investment in the development of a biotechnology sector could be negatively impacted by the restrictions in this bill and investment in our growing biotechnology industry could diminish if it became known that in Hawaii the state does not support the commercial development of its university's research. Few technology companies would choose to start their businesses here if they could not take advantage of research collaborations with the only major research university in the region. A prohibition on the right to benefit from commercialization would not only extinguish economic diversification into the life sciences in Hawaii, it could drive the best and brightest of our future life science industry leaders to pursue their ideas in places where they are embraced, nurtured, and rewarded.

To be clear, the University of Hawaii recognizes the need for the state to develop policies and legislation related to the conservation, sustainable use, and development of its genetic and biological resources, including the recognition of the rights of indigenous people and the equitable sharing of benefits from discoveries or inventions made with their assistance, and it is prepared to

participate in earnest in the development of such policy and law. However, to place restrictions only on the University, which has been granted the authority by the legislature to enter into agreements affected by this proposed legislation, may significantly diminish the ability of the institution to license its intellectual property as provided for under various state and federal laws.

In closing, the University of Hawaii urges these committees to revert to the original language of this HB247 and its companion senate bill SB 484 to either form a commission or instruct the LRB to bring forth new policy and legislation to address this important issue. The University is also supporting the formation of a commission as described in SB1692 which was passed out of a triple senate committee hearing on February 10, 2005.

Thank you for the opportunity to provide testimony on this bill.