



UNIVERSITY OF HAWAI'I SYSTEM

TESTIMONY

HCR146 – REQUESTING A STUDY ON BIOPROSPECTING

Testimony Presented Before the
House Committee on
Higher Education

Rep. Tommy Waters, Chair
Rep. Maile S.L. Shimabukuro, Vice Chair

March 31, 2005

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Interim Vice President for Research
University of Hawaii

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Chair Waters, Vice-chair Shimabukuro, and members of the committee, thank you for the opportunity to testify on behalf of the University of Hawaii on HCR146. As many of you are aware, the University supports a study by Legislative Reference Bureau (LRB) on the issues surrounding bioprospecting in Hawaii including the equitable sharing of benefits such activities may bring to the state. As we have stated in previous testimony on this topic, this study should address issues related to maintaining Hawaii's biodiversity, including the conservation and sustainable use of Hawaii's natural resources and the role of research in identifying, sustaining, and conserving those resources.

I am disturbed however by the language in HCR146 that attempts to legitimize false 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. Statements suggesting that the University may not have protected the state's resources in its material transfer agreements and that the UH is conducting such activities without the knowledge of the legislature are simply not true.

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). 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 legislature, are evidence of acknowledgement that the UH engages in such activities with the full knowledge and support of the legislature.

We find the language suggesting that the University is transferring the title and ownership of Hawaii's natural resources especially offensive given that bioprospecting by the private sector is actively and legally taking place in Hawaii without any involvement by the University. This situation has transpired because the state has failed to properly secure access to its natural resources and has not developed policies whereby the state may share in benefits of commercialization of those resources. These two areas should be the focus of the LRB study.

Interest and ownership in materials and associated intellectual property is always retained by the University when materials are sent 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. Moreover, it is not the University that controls access to the natural resources of the state of Hawaii. Access to those resources are controlled through the Department of Land and Natural Resources

(DLNR). I believe that it is the LRB's duty in the course of their study to determine if a review of "public agencies and entities' procedures" is warranted.

In HCR146 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 be instructed to 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.

In the spirit of cooperation and timeliness, the University suggests that the instruction to the RLB to compile an inventory of current biotechnology research projects and activities be revised to focus only on bioprospecting activities. The current instructions are so broad and the number of projects so large and dynamic, that it would be unrealistic to conclude that any such inventory would be accurate or current.

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. The University is prepared to participate in earnest in the development of such policy and law, however, the negative language regarding the University's material transfer policies and authority (by the legislature) to enter into agreements contaminates the focus of the effort to develop sound policy with respect to bioprospecting.

I would be remiss not to touch on the long timeframe the generation of any financial "benefits" will involve. Once an interesting gene or molecule is discovered, it is only through years of research and development that it might become something of interest to private industry. The private sector may license the discovery and will invest the money needed to develop a product. This investment can range from thousands to tens of millions of dollars depending on the product. Many products are abandoned during the development cycle and the "home run" products are rare. But after more years of development, the company may finally bring the discovery to market and it is only then, when the product is actually sold, that any revenue might be generated.

Given the above scenario, it is imperative that the legislature understand that the scope of the LRB study should focus on maintaining Hawaii's biodiversity, including access to and the conservation and sustainable use of Hawaii's natural resources. Hawaii has the most unique biodiversity in a given area than is found anywhere on Earth. This means that the probability of finding that "home run" gene or molecule is greater here than almost anywhere else and that we, as stewards of our land, need to preserve that biodiversity for future generations.

In closing, I urge legislature to remove the two sections erroneously referring to the University's authority and policy and, in addition to studying benefit sharing, instruct the LRB to bring forth new policy and legislation to address the

conservation and sustainable use of Hawaii's natural resources in the context of the bioprospecting issue.

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