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By

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HB 1625 HD1 – RELATING TO THE UNIVERSITY OF HAWAII

Chair Luke, Vice Chair Nishimoto, and Members of the Committee on Finance:

The University of Hawai'i (UH) does not support HB 1625 proposed HD1, which would require that an Organized Research Unit (ORU) of UH be primarily funded through the receipt of extramural funds and moneys transferred from the University of Hawaii research and training revolving fund; provided that the ratio of this sum to the sum of annual expenditures of state moneys shall be equal to or greater than five-to-one.

The University of Hawai'i opposes this measure because of its profound impact on the research and educational missions of the University and by extension, its impact to our State and the nation. Despite the changes made to the original bill, the proposed bill will have severe negative consequences and is in our view unnecessary

According to UH Executive Policy 12.213, "Establishment and Review of Organized Research Units", Organized Research Units "benefit the State of Hawaii directly through programs of applied research, extension service, and training in areas which meet community and regional human and economic needs". Further, "ORUs are normally established and maintained only in areas where the University has intrinsic research advantages or particular capabilities to respond to special needs". With regard to financial sustainability, the policy states: "In most cases, funding is obtained from both State and Federal sources, the ratio of external to core funding is greater than one, and more than one external funding source is involved".

By all of these expectations and measures, the UH ORUs have been remarkably successful:

1. They have provided distinct human and economic benefits to our community. For example, the School of Ocean and Earth Sciences and Technology, home to most of the UH ORUs, was recently celebrated by the Hawai'i Tourism Authority, Meet Hawai'i, and the state's tourism industry leaders as the 'Elele Organization of the Year for its outstanding work in helping to bring potentially more than \$100 million in convention business to the state. Researchers at the Hawaii Natural Energy Institute (HNEI) develop and evaluate novel renewable energy technologies. Importantly, the HNEI, like the other UH ORUs, is conducting R&D efforts that have real and lasting impact to our citizens, in this case helping to solve the State's critical energy needs. The Institute hosts an array of public-private partnerships to solve real-world problems in areas that range from battery technology and

alternative fuels, to the development of energy grid technology to increase the integration of renewable energy sources. The University of Hawaii Center on Aging continues to lead interdisciplinary efforts in research, educational programs and service to enhance the well-being of our older adults. The Center is conducting significant and impactful externally-supported projects that include the Hawaii Alzheimer's Disease Initiative, aimed at strengthening Hawaii's "dementia capability" through professional training, caregiver education, and new services for persons with dementia and their caregivers.

- 2. These and other activities at the UH ORUs leverage the existing, multi-disciplinary expertise at the University, as well as our unique location and environment to conduct research and training that could not possibly be performed anywhere else on earth.
- 3. The ORUs have significantly contributed to a remarkable increase in the externally-supported research at UH. The extramural funding at the University of Hawai'i at Mānoa has increased from \$193 million in FY01 to more than \$300 million presently. Although the UH Executive Policy mentioned earlier sets the expectation for the ratio of external to core funding as greater than one, the ORUs have consistently outperformed this expectation. For example, if we examine the numbers from FY11 through FY15, the ratio described in the proposed legislation ranged from 4.7 to 6.0 at the School of Ocean and Earth Sciences and Technology, which incudes most of the UH ORUs, and 7.2 to 10.1 at the UH Cancer Center. I should mention that the John A. Burns School of Medicine has never been regarded as an ORU at UH.

As stated in the UH Strategic Directions, 2015-2021, the goal of the Hawai'i Innovation Initiative is to "Create more high-quality jobs and diversify Hawai'i's economy by leading the development of a \$1 billion innovation, research, education and training enterprise that addresses the challenges and opportunities faced by Hawai'i and the world." The UH ORUs have the primary role in this initiative. We are committed to ensuring that the work of the ORUs is sustainable, and further that they continue to address the most challenging problems of our time while also educating and inspiring students to achieve their full potential.

Let me end by returning to a phrase that appears here in my testimony as well as in the proposed legislation: "Research and Training". The ORUs, by virtue of the leading-edge nature of their research, the real-world impact of their work, and the passion and expertise of their faculty and research staff, are among the most exciting and effective places of learning that I have encountered in my 30 years as an educator and researcher. Undergraduate and graduate students participate in research projects here, in some of the most advanced research enterprises in the world, alongside many of the world's leading scholars. To the extent that the aim of the proposed legislation is to increase the involvement of ORU faculty in the UH educational mission and the participation of UH undergraduate students in the ORU research mission, I am supportive. This is in fact a primary goal of our ongoing research strategic planning process.