



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
House Committee on Higher Education and Technology
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HB 1931 – RELATING TO THE UNIVERSITY OF HAWAII

Chair Perruso, Vice Chair Kapela, and Members of the Committee:

Thank you for the opportunity to provide testimony in strong support of HB 1931. This measure is intended to enable a workforce development program under the new University of Hawai'i (UH) Space Sciences Initiative (SSI) as a long-term investment in our keiki and communities.

The Institute for Astronomy (IfA) hosts the State of Hawai'i's astronomy program via offices and labs located in Mānoa, Pukalani, and Hilo, and observatories on Haleakalā, Maunakea and Mauna Loa. IfA's mission is deeply embedded in our communities and dedicated to supporting world class research, education, and technology development. With that as background, SSI is an exciting opportunity to leverage multiple existing programs and resources intended to help train local students for careers in astronomy, aerospace and other STEM jobs across Hawai'i. In particular, communications and environmental monitoring increasingly rely on platforms deployed in earth orbit, and there are natural synergies between ground-based astronomy and other fields in terms of technology development and workforce training that have direct application in other important areas many of which directly impact Hawai'i. Examples include monitoring ocean health and fishing operations, predicting severe weather events, and communications for regions isolated by geography or extreme events.

Last year, in support of SSI, the Legislature approved funding for 10 engineering faculty positions within the College of Engineering and \$2M to conduct an architectural study for a building addition to IfA-Hilo that will increase capacity for designing/fabricating instruments, enable new technology development, and provide internships for students. While functioning as one team, half of the new engineering faculty will be located at the College of Engineering in Mānoa and half at IfA-Hilo on the UH Hilo campus. The latter will teach engineering classes for UH Hilo students as a pathway to acquiring degrees in several engineering fields via the College of Engineering. Also, we are now

advertising for those new engineering faculty positions and have formed 3 search committees to evaluate applicants, anticipating the first new faculty to arrive this fall. Moreover, we are in the process of drafting the high-level requirements for the IfA-Hilo building addition, working with UH Facilities to procure a local firm to generate designs and create a bid package for the new building. In addition, we are seeking Federal funds for the building addition, leveraging heavily the State's initial design study investment. Detailed planning is underway between the UH Hilo College of Natural and Health Sciences and UH Mānoa College of Engineering to include engineering classes/curricula at UH Hilo for future engineering students.

Discussions are also underway to provide overall administrative support for SSI within UH and advanced laboratory equipment to support SSI is being procured. Even with all of this activity, there remains an essential SSI component that needs to be sponsored and launched – a dedicated workforce development program designed to engage local schools, engineering/STEM firms, teachers, community organizations, etc. and establish a bridge between students and STEM jobs via SSI. That is the core intent of HB 1931. It is essential that we take an integrated K-career approach, partnering with schools while providing unique engineering internships and learning opportunities, all leading to rewarding STEM careers that diversify the State's economy and help keep our students in Hawai'i after they graduate. SSI is designed to leverage off existing investments including astronomy, aerospace, and STEM outreach programs, while augmenting and “rewiring” programs and resources within UH to serve as the platform for all of this activity.

IfA is thankful for the investments already made in SSI and committed to ensuring all of the effort and resources at work lead to long-term benefits for our local students and communities. We need to advance SSI on all fronts in parallel because designing each aspect of SSI affects the whole program, and it is most efficient to build-out all core SSI elements and infrastructure together to optimize the entire system SSI represents.

Thank you for the opportunity to provide testimony in support of this bill, provided that its passage does not impact priorities as indicated in our Board of Regents approved budget.