



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
Wednesday, February 5, 2025 at 2:00 p.m.

By

Doug Simons, Director
Institute for Astronomy

And

Brennon T. Morioka, Dean
College of Engineering

And

Michael Bruno, Provost
University of Hawai'i at Mānoa

HB 563 – RELATING TO THE UNIVERSITY OF HAWAII'S SPACE SCIENCE AND ENGINEERING INITIATIVE

Chair Garrett, Vice Chair Amato, and Members of the Committee:

It is a pleasure to provide testimony in **strong support** of HB 563 which is intended to enable a workforce development program under the new University of Hawai'i Space Sciences and Engineering Initiative (SSEI) as a long-term investment in STEM education for our keiki and workforce development for our communities.

In 2023, in support of SSEI, the Legislature approved funding for 10 engineering faculty positions within the College of Engineering and \$2M to conduct an architectural study for a new engineering support facility building next to Institute for Astronomy at Hilo (IfA-Hilo) to house SSEI and 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 University of Hawai'i at Hilo (UH Hilo) campus. The latter will teach pre-engineering classes for UH Hilo students as a pathway to acquiring degrees in several engineering fields via the College of Engineering. To date 5 of these faculty positions have been filled while we are finalizing the recruitments for three others to start in the Fall of 2025. For the first time, pre-engineering classes are being offered at UH Hilo for students as part of this exciting new program. Excellent progress has been made designing the new SSEI building. Joint administrative support for SSEI via UH Hilo, College of Engineering and the Institute for Astronomy has been established, startup funds provided by the legislature have been used to acquire equipment for SSEI, and the first Federal grant proposals from SSEI faculty have been submitted.

Even with this flurry of activity, there remains an essential SSEI component that needs to be strengthened 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 SSEI. That is the core intent of HB 563. It is essential that we take an integrated K-career approach on Hawai'i Island like we are with O'ahu

school complexes, partnering with schools while providing unique engineering internships and learning opportunities, all leading to rewarding higher paying STEM careers that diversify the State's economy and helps keep our students in Hawai'i after they graduate. SSEI is designed to leverage off of existing investments including astronomy, aerospace, advanced manufacturing, and other existing STEM outreach programs, while augmenting and "rewiring" programs and resources within the University of Hawai'i (UH) to serve as the platform for all of this activity.

UH is thankful for the investments already made by the State Legislature in SSEI and is 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 SSEI on all fronts in parallel, including and in particular our means to reach into elementary, middle, and high schools to connect and inspire local students to participate in SSEI. Without a dedicated workforce program that links K-12 students with SSEI and ultimately higher paying jobs here in Hawai'i, the vision of SSEI will not be fully realized.

We appreciate the opportunity to provide our testimony in strong support and respectfully ask for your favorable consideration, provided its adoption does not impact priorities as indicated in our Board of Regents Approved Budget. Thank you for the opportunity to testify on this measure.