

UNIVERSITY OF HAWAI‘I SYSTEM REPORT



REPORT TO THE 2023 LEGISLATURE

Report on Technology Transfer Activities

HRS 304A-121

November 2022

REPORT TO THE LEGISLATURE ON TECHNOLOGY TRANSFER ACTIVITIES PURSUANT TO §304A-121, HAWAII REVISED STATUTES

Technology Transfer Activities of the University of Hawai'i through October 2022.

The University of Hawai'i (UH) is the primary public institution in the state conducting basic, academic, or sponsored research. Where appropriate to its mission and to the larger strategic initiatives of the State, UH commercializes inventions and discoveries produced by its faculty and staff by obtaining patents or other forms of protection for the intellectual property, licensing the intellectual property to commercial business, and providing administrative support to faculty who wish to start up their own companies to commercialize the discoveries, with UH retaining an equity interest in the private enterprise.

The pursuit of commercialization is designed to strengthen local economies by getting new ideas, inventions, and processes developed in a university to the private sector as effectively as possible. This technology transfer and commercialization effort occurs throughout the nation at other universities.

Many states have general conflict of interest laws that could potentially hinder timely and efficient commercialization. These laws, for example, may forbid equity participation in startup companies by state institutions, limit direct involvement by faculty in new business ventures, or may broadly and strictly prohibit use of public property--such as university equipment, facilities or support personnel--for private business purposes. In order to remain competitive for research funding and to strengthen their local economy, several other states have enacted specific exemptions to their ethics laws, or have created some form of "safe harbor" from specific sections of their respective ethics code, or have established parallel, but exempt institutions for their university researchers or research activities.

Act 38, HRS §84-10, as amended by Act 8, Special Session of 2021, provides this purpose for UH-sponsored technology transfer activities. Significantly, Act 38 does not exempt technology transfer activities from all ethical oversight; it shifts the responsibility from the State Ethics Commission to UH. The University of Hawai'i continues its work developing and implementing its own set of policies, procedures and guidelines to apply to technology transfer activities it sponsors, drawing from its existing compliance infrastructure, the State Ethics Code, and relevant federal conflict of interest and organizational conflict regulations.

Progress on Implementation of Regulatory and Compliance Framework

To fulfill the responsibilities conferred to the University of Hawai'i by Act 8, titled *Ethical Guidelines in the Conduct of Technology Transfer Activities*, the University of Hawai'i continues to update and revise its review processes to assure that technology transfer

activities are conducted ethically and in a manner that promotes public purposes and supports UH's core missions.

The University continues to provide guidance and information on Act 8 and the University's related policies and procedures to employees throughout the UH campuses. UH is collaborating with the State Ethics Commission to provide training to UH faculty and staff on the State Ethics Code and ethical issues in technology transfer activities.

The University's webpage addressing ethics and technology transfer activities contains a form for employees to request review of technology transfer activities that may be subject to Act 8, and resources and responses to frequently asked questions. Updates to the webpage are completed as new information and resources become available.

Technology Transfer and Commercialization Activities at the University of Hawai'i

Through the Office of the Vice President for Research and Innovation, the Office of Innovation and Commercialization (OIC), and the Office of Technology Transfer (OTT), UH supported and engaged in the following activities as part of its technology transfer program:

Ongoing Initiatives

- OIC/OTT continued its partnership with the Hawaii Technology Development Corporation, Innovate Hawaii to build the next generation of SBIR companies. OIC is increasing awareness of SBIR/STTR programs and opportunities with UH faculty/researchers, identifying UH startups and/ researchers interested in pursuing SBIR/STTR opportunities, identifying resources gaps for current UH startups and researchers seeking SBIR/STTR opportunities, and information sessions on SBIR/STTR programs. OIC is actively participating and supporting the Hawaii SBIR Program (HSBIR) which is administered by HTDC and provides matching grants to help Hawai'i companies further the development of new products to solve critical issues.

Ongoing OIC/OTT activities

- OTT received 33 invention disclosures, filed 12 U.S. non-provisional patent applications, received 11 U.S. patents, and executed 13 new license and option agreements. The inventions were generated by different units at UH: College of Engineering, John A. Burns School of Medicine, UH Cancer Center, College of Natural Sciences, College of Tropical Agriculture and Human Resources, School of Ocean and Earth Sciences and Technology, Water Resources Research Center, Pacific Disaster Center, College of Natural and Health Sciences and the Daniel K. Inouye College of Pharmacy.

OIC/OTT continues educational outreach on UH's technology transfer program and entrepreneurial resources and to faculty, researchers and students through meetings with UH Mānoa, UH Hilo, UH Maui College, Kapi'olani Community College, Leeward Community College, and Kaua'i Community College.

- OIC/OTT continues to expand its licensing program with biological materials and developing new partnerships in the area; and its Hi-Touch marketing of UH technologies through a contract with IN-PART to market and facilitate introductions between UH and industry professionals.
- Collaborative workspaces and the UH FabLab are available to UH faculty, staff and students to exchange ideas, work on projects and create prototypes. OIC also partners with HTDC for space at HTDC's Entrepreneurs Sandbox.
- UH reworked its accelerator program to address the unique needs of academic entrepreneurs. The program was renamed HITIDE and provides tailored services and support for each cohort participant. The first cohort launched in spring 2022 and the second cohort is set to start in the beginning of 2023.
- PACE (Pacific Asian Center for Entrepreneurship) sponsors innovation and entrepreneurship competitions for students, as well as workshops and mentorships to encourage innovation and entrepreneur activities
- MIND Hawai'i (Medical Innovation and Design) at UH Mānoa brings students and faculty from various fields to develop solutions to medical challenges and is supported by UH faculty and the community
- Water Resilience in Hawai'i conference hosted by UH highlighted UH's efforts to develop resilient and sustainable practices to ensure the availability of fresh water in Hawai'i through collaboration with its industry and community partners.
- OIC/OTT continues its Innovation Impact Challenge initiative. Programs and activities under this initiative include a hacking program series (Hacking for Defense and Hacking for Oceans), HITIDE, and technology transfer services. The programs introduce UH faculty, staff and students to innovation and entrepreneurship by providing opportunities to develop new technologies and turn them into commercial products; learn new skills, such as teamwork, communicating and problem solving; and create new businesses.
- National Security Innovation Network's (NSIN) [Hacking for Defense](#), [Capstone](#) and [X-Force Fellowship](#) programs rapidly address and solve national emerging threats and national security challenges. The UH Mānoa students from various majors participated in the Hacking for Defense and Capstone courses. Four UH Mānoa students were selected as X-Force Summer 2022 Fellows.

- OIC/OTT continues its membership in the Accelerating Solutions for Commercialization and Entrepreneurial Development (ASCEND) Hub that provides resources to help build an entrepreneurial culture at member institutions and support, educate and encourage researchers to commercialize their research in the biomedical area. The goal of this National Institutes of Health (NIH) sponsored program is to bridge the gap between NIH-funded research and improved healthcare solutions. The ASCEND hub includes members from Montana, Alaska, Nevada, New Mexico, Idaho and Wyoming. As part of the ASCEND hub, OIC/OTT developed and delivered a commercialization program for researchers, faculty and students.