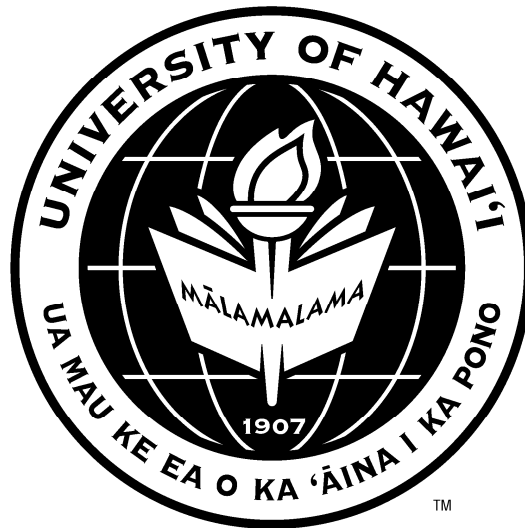


UNIVERSITY OF HAWAI‘I SYSTEM REPORT



REPORT TO THE 2022 LEGISLATURE

Report on Technology Transfer Activities

HRS 304A-121

December 2021

**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 2021.

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 1) obtaining patents or other forms of protection for the intellectual property, 2) licensing the intellectual property to commercial business, and 3) 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 at a university to the private sector efficiently. 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 to develop and implement its own set of policies, procedures and guidelines that 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.

Because of its importance to the success of University of Hawai'i's current and future commercialization efforts to help diversify and bolster the state's economy, UH and its supporters from the local business and innovation community will be working with the Legislature to remove the June 30, 2024 sunset provision of Act 38 and the related Act 39, covering the innovation and commercialization initiative, in the upcoming session.

Progress on Development and Implementation of Regulatory and Compliance Framework

To fulfill the responsibilities conferred to the University of Hawai'i by Act 38, titled *Ethical Guidelines in the Conduct of Technology Transfer* Activities, the UH Board of Regents approved Regents Policy 12.211 on August 20, 2020 and the UH President approved Executive Policy 12.206 in December 2020. This Executive Policy sets forth UH's policies related to ethical issues in technology transfer activities. Administrative Procedure 12.206 was approved in January 2021. This Administrative Procedure describes the procedures to manage ethical conflicts in technology transfer activities sponsored by UH.

The University of Hawai'i is also updating its review processes for its employees 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 of Hawai'i continues to provide guidance and information on Act 38 and its related policies and procedures to employees throughout the UH System campuses. Additionally, 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 of Hawai'i's [webpage](#) addressing ethics and technology transfer activities contains a form for employees to request a review of technology transfer activities that may be subject to Act 38, 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:

Entrepreneurship

UH's accelerator was paused due to the COVID pandemic and restrictions.

Ongoing Initiatives

- OIC/OTT continued its partnership with the Hawaii Technology Development Corporation, Innovate Hawaii to build the next generation of SBIR companies. With support from HTDC Innovate Hawaii, OIC further developed the program through a series of virtual sessions to increase awareness of SBIR/STTR programs and opportunities with UH faculty/researchers, identifying UH startups and/ researchers interested in pursuing SBIR/STTR opportunities, and identifying

resources gaps for current UH startups/ and researchers seeking SBIR/STTR opportunities. OIC and HTDC also collaborated on a survey of Hawaii's SBIR/STTR ecosystem to further understand current issues in participating in SBIR/STTR programs. The information will be used to efficiently and strategically direct available resources to address these issues.

- Office of Indigenous Innovation (OII) continues its mission to serve as a catalyst, convener and pathway to encourage innovation applying ancestral knowledge and systems to respond to contemporary challenges. Collaborations with UH offices and community organizations resulted in the second cohort of the (K)new Futures program; hosting a National Science Foundation Accelerator workshop for local and international practitioners and academics to develop the foundation for investment in culturally rooted and community derived Blue Economy initiatives; and a National Institutes of Health grant to establish the Center of Indigenous Innovation and Health Equity to help identify and support potential areas of research for community derived health interventions.

Ongoing OIC/OTT activities

- OTT received 63 invention disclosures, filed 13 U.S. non-provisional patent applications, received 6 U.S. patents, and executed 9 new license and option agreements. The inventions were generated by different units at UH Mānoa: College of Engineering, College of Education, 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, Institute for Astronomy, Hawai'i Data Science Institute and UH Hilo's College of Agriculture, Forestry & Natural Resource Management.

OIC/OTT continues educational outreach on UH's technology transfer program and entrepreneurial resources and to faculty, researchers and students through online meetings (e.g. Zoom) with UH Mānoa, UH Hilo, UH Maui College, UH West O'ahu, Kapi'olani Community College, Leeward Community College, and Kaua'i Community College.

- OIC/OTT conducts presentations on intellectual property to classes in the College of Engineering, John A. Burns School of Medicine and the Shidler College of Business.
- OIC/OTT continues its Lab Ambassadors program (connecting OTT directly with UH research laboratories using liaisons in the laboratories to assist in the commercialization process); Biological materials licensing program through its partnership with Kerafast; 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 UH iLab, sPACE and the UH FabLab are available to UH students to exchange ideas, work on projects and create prototypes.
- The Pacific Asian Center for Entrepreneurship (PACE) 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
- OIC/OTT continues its Innovation Impact Challenge program with partners Hawaiian Telcom, Hawaiian Electric Industries and Diamond Head Bakery. This University + Industry collaboration is to inspire cross-disciplinary teams to develop novel ideas that will address local challenges and have potential broader impacts and applications to communities across the country. This program is focused on finding solutions to identified challenges and building a business around those solutions.
- National Security Innovation Network's (NSIN) [Hacking for Defense](#) and [X-Force Fellowship](#) programs rapidly address and solve national emerging threats and national security challenges. Working with the UH Mānoa College of Engineering, the Hacking for Defense program launched in spring 2021. Three UH Mānoa students were selected as X-Force Summer 2021 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.