UNIVERSITY of HAWAI'I®
Ke Kulanui o Hawai'i

David Lassner
President

December 10, 2024

The Honorable Ronald D. Kouchi,
President and Members of the Senate
Thirty-Third State Legislature
Honolulu, Hawai'i 96813

The Honorable Nadine K. Nakamura, Speaker
and Members of the House of Representatives
Thirty-Third State Legislature
Honolulu, Hawai'i 96813

Dear President Kouchi, Speaker Nakamura, and Members of the Legislature:

For your information and consideration, the University of Hawai'i is transmitting one copy of the Annual Report on Technology Transfer Activities (Section 304A-121, Hawai'i Revised Statutes) as requested by the Legislature.

In accordance with Section 93-16, Hawai'i Revised Statutes, this report may be viewed electronically at: https://www.hawaii.edu/govrel/docs/reports/2025/hrs304a-121_2025_tech-transfer_annual-report_508.pdf.

Should you have any questions about this report, please do not hesitate to contact Stephanie Kim at (808) 956-4250, or via e-mail at scskim@hawaii.edu.

Sincerely,

David Lassner
President

Enclosure

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UNIVERSITY OF HAWAIʻI SYSTEM ANNUAL REPORT

REPORT TO THE 2025 LEGISLATURE

Annual Report on Technology Transfer Activities

HRS 304A-121

November 2024

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 2024.

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.

HRS §84-10 provides the ability for the University of Hawai'i to remain competitive and strengthen the local economy by shifting the responsibility of ethical oversight for UH-sponsored technology transfer activities from the State Ethics Commission to UH. HRS §84-10 was made permanent when the sunset provision was repealed by the State Legislature in 2024. The University of Hawai'i has implemented 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. This includes Board of Regents Policy 12.211 (*Ethical Guidelines in the Conduct of Technology Transfer Activities*), Executive Policy 12.206 (*Policy for Ethical Guidelines in the Conduct of Technology Transfer Activities*), and Administrative Procedure 12.206 (*Procedures to Manage Ethical Issues in Technology Transfer Activities Sponsored by the University*) and can be found at www.hawaii.edu/policy/.

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:

<u>Ongoing Initiatives</u>

- OIC/OTT continued its partnership with the Hawai'i Technology Development Corporation's (HTDC) Innovate Hawai'i to build the next generation of Small Business Innovation Research (SBIR) companies. As part of efforts to increase awareness of SBIR/Small Business Technology Transfer (STTR) programs and opportunities, OIC partnered with HTDC to host a series of in-person workshops on the SBIR/STTR programs, including one-on-one meetings with SBIR/STTR program representatives. OIC is also continuing to introduce the SBIR/STTR program and opportunities for UH

faculty/researchers and UH startups through meetings and information sessions, as well as working with HTDC to identify resources gaps. OIC is actively participating and supporting the Hawai‘i 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 48 invention disclosures, filed 17 U.S. non-provisional patent applications, received 5 U.S. patents, and executed 10 new license and option agreements. The inventions were generated by different units at UH: College of Education, College of Engineering, John A. Burns School of Medicine, Cancer Center, College of Natural Sciences, College of Tropical Agriculture and Human Resilience, College of Social Sciences, School of Ocean and Earth Sciences and Technology, the Daniel K. Inouye College of Pharmacy, UH Hilo Social Sciences Division and the Applied Research Laboratory at UH.

  OIC/OTT continues educational outreach on UH's technology transfer and entrepreneurial programs and resources to faculty, researchers and students at all UH campuses.

- OIC/OTT continues to expand its licensing program with biological materials and develop 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 representatives.

- 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.

- Hawai‘i Technology Innovation Development Ecosystem (HITIDE), the UH incubator program continues to provide tailored services and support for academic entrepreneurs in each cohort. New companies are admitted to HITIDE annually and receive instruction and coaching, and participate in value-adding activities (including the NSF i-Corps program) over two years. The fourth cohort is being selected now and is scheduled to start in 2025.

- 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.

- Medical Innovation and Design Hawai‘i (MIND Hawai‘i) 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 the UH Office of the Vice President for Research and Innovation showcased UH's continuing efforts to develop resilient and

sustainable place-based practices to ensure the availability of fresh water in Hawai‘i through collaboration with its industry and ‘āina-based community partners.

- OIC/OTT continues its Innovation Impact Challenge initiative. Programs and activities under this initiative include an innovation program series Pathways to Innovation and Entrepreneurship (formerly Hacking for Defense® and Hacking for Oceans), innovation challenges, HITIDE, and technology transfer services. The programs engage UH faculty, staff and students to enter the innovation and entrepreneurship ecosystem by providing opportunities to develop new technologies and turn them into commercial products; learn entrepreneurial skills, such as teamwork, communicating and problem solving; and create new businesses and jobs. Under a partnership between UH, NSIN and the Naval Facilities Engineering and Expeditionary Warfare Center (EXWC), a new challenge to address stewardship, sustainability and resiliency of Hawai‘i’s water resources. Through a competitive selection process, two proposals were selected – one from UH Mānoa’s Water Resources Research Center and one from UH Hilo’s Pacific Aquaculture & Coastal Resource Center.

- Faculty Fellows provides UH faculty members the opportunity to learn to incorporate innovation and entrepreneurial skills into curriculum, and build a community of practice at UH. The first cohort completed the program in Fall 2023, and with feedback from the first cohort, the program is being updated with enhanced content and delivery.

- Patents2Products (P2P) provides UH graduate students and postdocs an opportunity to develop entrepreneurial skills while advancing the development and commercial potential of UH technologies. UH innovations are advanced by translational activities including further research, product development and market definition. The second cohort includes fellows from the College of Tropical Agriculture and Human Resilience, Cancer Center, College of Engineering and the John A. Burns School of Medicine.

- National Science Foundation (NSF) Innovation Corps (I-Corps™) provides faculty, staff and students experiential training to advance research-based innovations by testing the market and developing a business strategy. UH is part of the NSF I-Corps Hub: Desert and Pacific Region, which includes eight other universities: Arizona State University, The University of Arizona, Northern Arizona University, University of California San Diego, San Diego State University (joined in 2024), University of Idaho, Boise State University and University of Nevada Las Vegas. Thirty-nine faculty and students from UH Mānoa, UH Maui College and UH Hilo completed the program. In addition, with support from OIC and the Hub, a UH Mānoa researcher successfully applied to the national NSF I-Corps TEAMS program.

- 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. Four UH students UH Mānoa students from various majors participated in the Hacking for Defense® and Capstone courses. Four UH students were selected as X-Force Summer 2024 Fellows.

- A partnership between OIC, NSIN and the Pacific Technology Cooperation Group provided an opportunity to extend the Pathways to Innovation and Entrepreneurship experiential learning program to middle and high school students. The pilot program provided hands-on learning about Unmanned Aerial Vehicles (UAV) and challenged participants to develop solutions for search and rescue operations.

- OIC organized a technology showcase as part of the 2024 Pacific Technology conference. The participants from the Pathways to Innovation, Patents2Products; the water resources innovation challenge, and HITIDE programs presented their research and technologies to conference attendees, which included representatives from U.S. Department of Defense agencies and Hawai‘i companies.

- Networking events organized by OIC supported its efforts to connect UH and local organizations. An event was held in January 2024 that included representatives from UH, HTDC, City & County of Honolulu, Elemental Impact (formerly Elemental Excelerator), National Security Innovation Network, National Oceanic and Atmospheric Administration, UH startups and UH Foundation.

- AquaHack workshops, a collaboration between UH and Hatch Blue, provided opportunities for local entrepreneurs, engineers, innovators and scientists to build relationships to generate new technologies and solutions to expand Hawai‘i’s economy to include coastal- and ocean-based industries.

- OIC collaborated with the U.S. Patent and Trademark Office to host a 3-day in-person Stakeholder Training on Examination Practice and Procedure (STEPP) program. Open to UH faculty, staff, students and the community, the program provided an opportunity to learn about the patent process. This also marked a return to an in-person format for the STEPP program.