



Written Statement of
Robbie Melton
Executive Director & CEO
Hawaii Technology Development Corporation
before the
House Committee on Economic Development & Business
Wednesday, March 21, 2018
10:50 a.m.
State Capitol, Conference Room 309

In consideration of
SB2904, SD1
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

Chair Evans, Vice Chair Keohokalole, and Members of the Committee on Economic Development & Business.

The Hawaii Technology Development Corporation (HTDC) **supports with comments** SB2904, SD1 that appropriates funds to HTDC for continuance of the Hawaii small business innovation research (HSBIR) program.

As part of HTDC’s vision to create 80,000 new innovation jobs in Hawaii earning \$80,000 or more by 2030, HTDC supports initiatives aimed at promoting technology and innovation jobs. HTDC has been providing Phase I matching grants to SBIR awarded companies since 1989 and started awarding Phase II and Phase III matching grants in FY16.

A summary of the awards made by the matching grant program is listed below:

	FY16	FY17	FY18*
Appropriation	\$2 MM	\$2 MM	\$1 MM
# of Applications	11	9	9
# of Awards	7	8	5
\$\$ Awarded	\$2 MM	\$1.9 MM	\$900 K
Federal SBIR \$\$ (match)	\$7.9 MM	\$10.9 MM	\$5.4 MM
Estimated New Jobs	17	70	15

* FY18 data through 12/31/17

This year with \$900,000 available, only 5 of 9 companies were funded. Every year, there have been more qualified applicants than available funds. Since the phase II and III program started in FY16, none of the applicants have received the full eligible amount.

Over time, the current phase II and III program is anticipated to generate the same type of metrics of success as the Phase I only matching program. For every dollar invested through the

Hawaii SBIR program, Hawaii companies have attracted over 20 federal dollars in return to the state, plus commercialization funding. HTDC believes the grant program provides leverage and positive economic development value for the State by supporting projects with vetted technology and backed with federal funds. The original draft of this bill appropriates \$2 million for the program.

HTDC agrees that this would be an appropriate amount for the program and support this initiative as long as it does not replace our priorities requested in the Executive Budget. HTDC **comments** that HB1958 HD1 **amends the SBIR program authorizing** HTDC to issue grants to phase III federal grant awardees of up to fifty percent of the amount of the award or contract **funded by the private sector or government sources** outside of the program. HTDC comments that this amendment offers HTDC greater flexibility in making awards to companies that are progressing toward commercialization. Thank you for the opportunity to offer these comments.



Written Statement of
DR. PATRICK K. SULLIVAN
PRESIDENT/CEO OCEANIT

Before the
HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS

March 21, 2018
10:15 a.m.

State Capitol, Conference Room 309

In Support of

**SB2904 RELATING TO THE HAWAII TECHNOLOGY
DEVELOPMENT CORPORATION**

To: Chair Cindy Evans, Vice Chair Jarrett Keohokalole and Members of the
Committee

From: Dr. Patrick K. Sullivan, President/CEO

Re: Testimony in Support of SB2904

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony **in support of SB2904**

The technology industry in Hawaii has grown over the past 12 years and has made significant strides towards achieving the goal of diversifying and stimulating Hawaii's economy. The continuation of the Small Business Innovation Research ("SBIR") grants is crucial to move the technology towards prototyping, customer interface, and commercialization,

The objectives of the SBIR grants are:

- To support economic growth and the diversification of our economy;
- To launch new ventures based on technology innovations; and
- To support the growth of the tech industry and the creation of intellectual property and innovation in the State.

We strongly urge you to support of SB2904 and we appreciate your continued support of the technology industry.



Statement of
Duke Hartman, P.E.
Vice President, Business Development
Makai Ocean Engineering, Inc.
before the
COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS
Wednesday, March 21, 2018
10:50 a.m.
State Capitol, Conference Room 309
In consideration of
SB2904-SD1
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.

Chair Evans, Vice Chair Keohokalole, and Members of the Committee on Economic Development & Business.

Makai Ocean Engineering, Inc. **STRONGLY SUPPORTS SB2904-SD1** that that appropriates funds to the Hawaii Technology Development Corporation (HTDC) for continuance of the small business innovation research (SBIR) program.

Makai Ocean Engineering, Inc. is a locally-owned and operated technology company based in Hawaii for over 44 years and an active participant in the Small Business Innovation Research (SBIR) grant program. The SBIR program consists of three phases that encourages early stage investment and innovation in technology. Phase 1 provides a very small amount of money that is barely enough for proof of concept research. However, it is the Phase 2 and 3 funding stages that really provide a “bridge” for companies to survive the “valley of death” between the idea and research stages of development, through prototyping to commercialization.

According to HTDC, for every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding. The Hawaii SBIR program supports projects with vetted technology backed with federal funds. The state matching funds are critical to winning later phase awards and getting some of the technologies to market. The Phase 2 and 3 SBIR matching grants assist companies with a more difficult, but also more commercially-promising stage of development than Phase 1. Carefully selected Phase 2 and 3 matching grants represent more of a “sure bet” in terms of a successful and highly leveraged investment in economic development for the State.

For example, Makai’s subsea cable laying software began as a Phase 1 SBIR (matched by State for \$20k in the year 2000) and then went on to Phase 2 and 3 and became the world’s #1 commercial cable laying software, with over \$35 million in commercial revenues and high tech jobs for Hawaii over the last 18 years. This is a direct multiplier of more than 1,500X for the State’s investment, not counting the indirect benefits of retaining some of the world’s best engineers in Hawaii and the additional technologies they have generated during this time.

Makai is currently working on a Phase 2 SBIR program focused on autonomous underwater vehicles, which could easily surpass the \$30 million cable laying software in terms of revenue to the



state. Our federal customer mentioned that the work we had performed on the underwater vehicle under the HTDC Hawaii State matching grant program was a key reason we were selected for an additional \$2.1 million project that is currently underway. Makai will be testing this underwater vehicle technology in Hawaiian waters in the summer of 2018, using local engineers and partnering with professors and undergraduate students at the College of Engineering and SOEST at the University of Hawaii at Manoa.

In addition, Makai and Referentia were two local companies honored with a national award, the SBIR Tibbetts Award at the Whitehouse in January, 2017. This award recognizes the very best SBIR companies in the country whose technologies have made a strong economic impact in terms of high paying jobs, and displaying success in **actually commercializing federal R&D from the SBIR program**. We need this HTDC administered program to make possible more national success stories by local SBIR companies. See the Governor's press release about awards here: <http://governor.hawaii.gov/newsroom/latest-news/dbedt-news-release-htdc-small-business-grantees-honored-with-national-tibbetts-award-at-the-white-house/>

This is why we **STRONGLY SUPPORT SB2904-SD1**, which would provide the state matching funds for Phases 2 and 3 of the federal SBIR program to enable companies to commercialize new technologies more effectively and provide highly-skilled professional jobs for our keiki here at home.

Makai also respectfully requests **correction of the effective date in Section 3** of the bill.

Thank you for the opportunity to offer these comments.

Smart Yields

Vincent Kimura, CEO
via Ryan Ozawa, Co-Founder & CMO
Impact Hub Honolulu
1050 Queen St.
Honolulu, HI 96814
ryan.ozawa@smartyields.com



19th February 2018

Rep. Cindy Evans, Chair; Rep. Jarrett Keohokalole, Vice Chair; and members of the Committee on Economic Development & Business:

Smart Yields supports SB2904 SD1, funding the continuance of the small business innovation research (SBIR) program under the Hawaii Technology Development Corporation (HTDC).

Smart Yields is an ag-tech startup based in Honolulu, with partners and clients in Asia as well as the mainland U.S. Our meetings with farmers and agricultural firms and associations of all sizes over the past few years have validated our vision for an innovative, sustainable future... but have also shown that the hardware and manufacturing side of any new solution is perhaps the most challenging.

Whether designing new sensors and control modules for irrigation, to developing new ways to monitor or mitigate threats like pests and invasive species in the field, SBIR funding provides companies like ours an important foundation upon which to build.

For every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding, according to HTDC. But the state matching funds are critical to winning later phase awards and getting these technologies to market.

Mahalo for your consideration!



Cindy Goldstein, PhD
Ag Matters, LLC
98-814 C Kaonohi St
Aiea, HI 96701

SB2904, SD1
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

House Committee on Economic Development & Business
Wednesday, March 21, 2018 at 10:50 a.m., Room 309

Chair Evans, Vice Chair Keohokalole, and Members of the House Committee on Economic Development & Business.

Position: SUPPORT

Ag Matters supports SB2904, S.D. 1 that appropriates funds to the Hawaii Technology Development Corp to continue the Small Business Innovation Research Program.

Ag Matters is an agricultural consulting company owned and operated by Dr. Cindy Goldstein, PhD. Ag Matters has carried out agricultural technology projects in Hawaii and written SBIR grants for businesses that develop and apply new technology to innovative agricultural projects.

Funded SBIR grants have included the application of new technologies and innovative approaches for local agriculture, with projects that benefit farms and farmers growing diversified agriculture crops in Hawaii. Jobs that are created as a result of SBIR innovation projects are well paid technical and professional positions, often including a research component where research assistants and technicians gain career skills and experience that allows them to continue to work in Hawaii making a good living wage.

Funding of HTDC that allows continued support of the Small Business Innovation Research program is a good investment for the growth of a technology based economy in Hawaii. SBIR grants enable more rapid development of innovative technology. The SBIR program provides critical funds across the State of Hawaii for startups and enables continued growth of existing businesses developing new technology.

Thank you for the opportunity to provide testimony in support of SB2904, S.D.1.



**PO Box 1095
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jim.wyban@gmail.com**

March 19, 2018

RE: SB2904, SD1 THAT APPROPRIATES FUNDS TO CONTINUE SBIR PROGRAM

Dear Committee:

I am writing to express my strong support of SB2904, SD1 that appropriates funds to the Hawaii Technology Development Corporation (HTDC) to continue the Hawaii Small Business Innovation Research (HSBIR) program.

I developed the World's first SPF shrimp broodstock company, High Health Aquaculture (HHA) based at NELHA in Kona. HHA was the beginning of what became a new industry in Hawaii – SPF Shrimp Broodstock, which exports more than \$20 M of product per year.

During my tenure at HHA, we received 9 SBIR grants from various federal agencies (NSF, USDA, DOC). For each of these we also received Hawaii SBIR matching grants. All of these greatly contributed to our IP development, which increased our company's value and success. This is a very valuable initiative that I strongly support.

After 20 years in business we sold HHA to an Asian multinational (SIS), which expanded the business and continues today.

I strongly support the Hawaii SBIR program and urge you to fund it.

Thanks,

Jim Wyban PhD

To: Chair Evans, Vice Chair Keohokalole, and Members of the Committee on Economic Development & Business

From: Alex Cabello, Chief Technology Officer, AlgorithmHub Inc.

Re: SB2904, SD1 RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

AlgorithmHub Inc., a Hawaii based startup, **strongly supports SB2904, SD1** that appropriates funds to the Hawaii Technology Development Corporation (HTDC) for continuance of the small business innovation research (SBIR) program.

We believe SB2904, SD1 is instrumental in helping high-tech companies grow and expand operations in Hawaii. Grants such as the Hawaii SBIR/STTR matching grant allow local companies to continue development of commercial technology and generate high paying STEM jobs.

AlgorithmHub Inc., in collaboration with the University of Hawaii Cancer, has been awarded an NIH STTR Phase I grant in August of 2017 focusing on improving the effectiveness of immunotherapy. Immunotherapy is a relatively new cancer treatment which trains a person's immune system to fight cancer. Immunotherapy is very effective when it works, but not everyone responds to it. AlgorithmHub and the University of Hawaii Cancer Center are developing software which analyzes data from tumor samples to predict the effectiveness of immunotherapy in new cancer patients. Through this analysis, we save lives by allowing patients to receive the best treatment and incentivizes insurance companies to cover the cost.

AlgorithmHub Inc. will be submitting an application for an NIH STTR Phase II grant in April 2018. If awarded, the Hawaii SBIR/STTR matching grant will help significantly to commercialize this revolutionary technology. Through successful commercialization, we project to create 40 new high paying jobs in the field of computer science, data science, and biology within 5 years. Furthermore, the technology will be instrumental in the fight against cancer.

Thank you for the opportunity to submit testimony.

A handwritten signature in black ink, appearing to read "Alex Cabello".

Alex Cabello
CTO, AlgorithmHub Inc.



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Executive Officers

Beau Oshiro, C&S Wholesale Grocers, *Chair*
John Erickson, Meadow Gold Dairies, *Immediate Past Chair*
Toby Taniguchi, KTA Superstores, *Vice Chair*
Lauren Zirbel, HFIA, *Executive Director*
Joe Carter, Coca-Cola Bottling of Hawaii, *Secretary / Treasurer*
Stan Brown, Acosta Sales & Marketing, *Advisor*
Paul Kosasa, ABC Stores, *Advisor*
John Shilf, Rainbow Sales & Marketing, *Advisor*
Barry Taniguchi, KTA Superstores, *Advisor*
Derek Kurisu, KTA Superstores, *Advisor*

TO:
Committee on Economic Development and Business
Rep. Cindy Evans, Chair
Rep. Jarrett Keohokalole, Vice Chair

FROM: HAWAII FOOD INDUSTRY ASSOCIATION
Lauren Zirbel, Executive Director

DATE: Wednesday, March 21, 2018
TIME: 10:50am
PLACE: Conference Room 414

RE: SB 2904 Relating to the Hawaii Technology Development Corporation

Position: Support

The Hawaii Food Industry Association is comprised of two hundred member companies representing retailers, suppliers, producers, and distributors of food and beverage related products in the State of Hawaii.

Small businesses are a vital part of our communities, our state, and our economy. The Hawaii Technology Development Corporation's Small Business Innovation Research Program is an important part of ensuring that Hawaii's small business sector continues, to innovate, develop, grow, and thrive. We urge you to vote yes on this measure and we thank you for the opportunity to testify.

Statement of
Nelson Kanemoto
President and CEO
Referentia Systems Incorporated
before the
House Committee on Economic Development & Business
Wednesday, March 21, 2018
10:50 a.m.
State Capitol, Conference Room 309

In consideration of
SB2904, SD1
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

Chair Evans, Vice Chair Keohokalole, and Members of the Committee on Economic Development & Business.

Referentia Systems Incorporated strongly **supports** SB2904, SD1 that appropriates funds to the Hawaii Technology Development Corporation (HTDC) for continuance of the small business innovation research (SBIR) program.

Referentia Systems is a technology company with headquarters in Honolulu, Hawaii. Over the past 15 years, HTDC's SBIR grant funding has supported and enabled Referentia to develop proprietary technologies that are being commercialized within the State and on the U.S. mainland through several technology spin-offs.

One such technology and spin-off is LiveAction Inc., www.liveaction.com, which, on the basis of the technology supported by SBIR funding, raised over \$30 million in Series A and B venture financing. Most recently, with SBIR funding from HTDC, Referentia developed an innovative time-series database and analytics platform, In2lytics, which is providing the Hawaiian Electric Companies the insight needed to incorporate more renewables into their grid.

The grant that we received from HTDC in 2017 significantly helped further develop and commercialize this product, helping Hawaii work towards the goal of 100% renewables. More importantly, the funding helped position our technology platform to be the back-end database for a U.S. mainland partner with 900 electric utility co-operative customers. This achieves the State's objectives of increasing technology exports to grow high-tech companies and jobs at home.

March 20, 2018

According to HTDC for every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding. The Hawaii SBIR program supports projects with vetted technology backed with federal funds. The state matching funds are critical to winning later phase awards and getting some of the technologies to market.

Thank you for the opportunity to offer these comments.

SB-2904-SD-1

Submitted on: 3/20/2018 8:51:04 AM

Testimony for EDB on 3/21/2018 10:50:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Randall Francisco	Individual	Support	No

Comments:



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www.spectrum-photonics.com

Statement of
Edward Knobbe
President
Spectrum Photonics
before the
House Committee on Economic Development & Business
Wednesday, March 21, 2018
10:50 a.m.
State Capitol, Conference Room 309

In consideration of
SB2904, SD1
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

Chair Evans, Vice Chair Keohokalole, and Members of the Committee on Economic Development & Business.

Spectrum Photonics **supports** SB2904 that appropriates funds to the Hawaii Technology Development Corporation (HTDC) for continuance of the small business innovation research (SBIR) program.

Spectrum Photonics' core business is largely based on intellectual property licensed from University of Hawaii. During the past 8 years we have received approximately \$13,000,000 in federal SBIR funds. It is these government-funded SBIR projects, in combination with the HSBIR matching grant funding, that has enabled Spectrum to win highly-competitive follow-on broad agency announcement (BAA) awards. Recent follow-on BAA contracts totaling more than \$28,000,000 in additional funding has been awarded since 2015, include \$3,000,000 from the Office of Scientific Development's Rapid Innovation Fund (RIF) program, \$4,500,000 of funding under the Next-Generation Chemical Detection (NGCD) program, \$3,600,000 under the Surface Contamination Detection (SCD) Stryker NBCRV sensor upgrade program, and \$16,900,000 under IARPA's Standoff ILLuminator for Measuring Absorbance and Reflectance Infrared Light Signatures (SILMARILS) program.

According to HTDC for every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding. The Hawaii SBIR program supports projects with vetted technology backed with federal funds. The state matching funds are critical to winning later phase awards and getting some of the technologies to market. While the HSBIR matching funds are relatively small percentage of Spectrum's total funds received, we are able to use these matching funds to much greater benefit, with regard to technology transition, than US government funds.

Thank you for the opportunity to offer these comments.



LATE

Statement of
LETIZIA DE LANNOY
Manager

Hawaii Evolutionary Development, LLC
(HIEvoDEvo)

before the

House Committee on Economic Development & Business

Wednesday, March 21, 2018

10:50 a.m.

State Capitol, Conference Room 211

In consideration of

SB 2904, SD1

**RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT
CORPORATION**

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FEIN 36-4683352

Chair Evans, Vice Chair Keohokalole, and Members of the Committee on Economic Development & Business.

HIEvoDevo **supports** SB2904, SD1 that appropriates funds to the Hawaii Technology Development Corporation (HTDC) for continuance of the small business innovation research (SBIR) program.

HIEvoDevo is developing HEDS, an engineering design software using a novel methodology to find optimal solutions. With the Hawaii SBIR matching funds HIEvoDevo has hired two software developers, contracted AlgorithmHub, a leading local startup in cloud services, and partnered with the US Air Force and a lead defense contractor to test and validate HEDS. The success of this partnership can result in new projects and consequently the hiring of additional engineers and software developers.

According to HTDC for every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding. The Hawaii SBIR program supports projects with vetted technology backed with federal funds. The state matching funds are critical to winning later phase awards and getting some of the technologies to market.

Thank you for the opportunity to offer these comments.



Nalu Scientific
Data Acquisition Systems

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Phone: +1 (888) 717-6484
info@naluscientific.com

March 20, 2018



Statement of
Isar Mostafanezhad, Ph.D.
Founder and CEO
Nalu Scientific, LLC

before the

House Committee on Economic Development & Business

Wednesday, March 21, 2018

10:50 a.m.

State Capitol, Conference Room 309

In consideration of

SB2904, SD1

RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

Chair Evans, Vice Chair Keohokalole, and Members of the Committee on Economic Development & Business.

Nalu Scientific, LLC **supports** SB2904, SD1 that appropriates funds to the Hawaii Technology Development Corporation (HTDC) for continuance of the small business innovation research (SBIR) program.

Nalu Scientific was founded in 2015 to commercialize high speed integrated circuits for US Department of Energy and its national labs. Since then we have been receiving steady support from the DOE SBIR program which has allowed us to grow to 7 full time employees. We have plans to even grow further and continue to provide technology and support to DOE and the national labs in their mission.

Being in Manoa, and having access to a subsidized facility, has been extremely helpful in our growth. Additionally, we have immensely benefited from various HTDC's programs. Suffice it to say that the idea to fund Nalu Scientific through the SBIR program was solidified at a workshop organized in June 2015 at MIC by the HTDC where avenues to seek Federal funding were discussed. We have also benefited from the matching funds grant program (HSBIR) administered through the Hawaii SBIR program of HTDC. Given high cost of doing business in Hawaii and the high risk- high reward nature of our innovation, these matching funds have been essential in helping us finish Phase I projects in time and bring in Phase II follow-on funding.

According to HTDC for every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding. The Hawaii SBIR program supports projects with vetted technology backed with federal funds. The state matching funds are critical to winning later phase awards and getting some of the technologies to market.

Thank you for the opportunity to offer these comments.

Isar Mostafanezhad, Ph.D.
Founder and CEO at Nalu Scientific, LLC



Chamber of Commerce HAWAII
The Voice of Business

**Testimony to the House Committee on Economic Development and Business
Wednesday, March 21, 2018 at 10:50 A.M.
Conference Room 309, State Capitol**

**RE: SENATE BILL 2904 SD1 RELATING TO THE HIGH TECHNOLOGY
DEVELOPMENT CORPORATION**

LATE

Chair Evans, Vice Chair Keohokalole, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** SB 2904 SD1, which appropriates funds to the High Technology Development Corporation for the Small Business Innovation Research Program.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The High Technology Development Corporation (HTDC) has offered assistance to SBIR awarded companies since 1989; as a result, Hawaii companies have attracted 20 federal dollars in return to the state plus commercialization funding for every dollar invested through this program. Although the federal SBIR grant program has increased efforts to move companies through grant awards to commercial product sales, funds have not been dedicated towards these efforts. This bill would allow HTDC to continue to provide the necessary support of a commercialization assistance program to all phases in the program.

We believe that this program is one of the key state components in diversifying Hawaii's economy and the continued development of an innovation economy. Thank you for the opportunity to testify.

LATE

SB-2904-SD-1

Submitted on: 3/21/2018 3:34:33 AM

Testimony for EDB on 3/21/2018 10:50:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	Oahu County Committee on Legislative Priorities of the Democratic Party of Hawai'i	Support	No

Comments: