

Written Statement of **ROBBIE MELTON Executive Director & CEO** High Technology Development Corporation before the **HOUSE COMMITTEE ON FINANCE** Tuesday, February 25, 2014 11:15 a.m. State Capitol, Conference Room 308 In consideration of

HB 2282 HD1 RELATING TO HIGH TECHNOLOGY.

Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee on Finance.

The High Technology Development Corporation (HTDC) **supports** HB 2282 HD1 relating to High Technology. HTDC has been assisting Phase I SBIR awarded companies since 1989 and continues to do so each year. For every dollar invested through this program, Hawaii companies have attracted 16 federal dollars in return to the state, plus commercialization funding. The federal SBIR grant program has increased their efforts to move companies through grant awards to commercial product sales. However, the federal SBIR program has not dedicated additional funds towards these efforts. HB 2282 HD1 allows HTDC the opportunity to further assist these companies in the SBIR path to commercialization. Along with the matching grant funding, HTDC comments that companies require the support of a commercialization assistance program. For clarification, the Hawaii Capital Revolving Loan fund mentioned in the bill was repealed. HTDC respectfully requests the correction of the defective effective date.

Thank you for the opportunity to offer these comments.

Written Statement of Yukiyo T Sala Ohana investment works LLC Manager before the HOUSE COMMITTEE ON FINANCE Tuesday, February 25, 2014 State Capitol, Conference Room 308 In consideration of 11:15 a.m. HB 2282 HD1 RELATING TO HIGH TECHNOLOGY.

Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee on Ohana investment works LLC respectfully submit testimony in supports HB 2282 HD1 relating to The High Technology Development Corporation (HTDC) has been assisting Phase I SBIR awarded companies since 1989 and continues to do so each year. For every dollar invested through this program, Hawaii companies have attracted 16 federal dollars in return to the state,

Broadening the existing SBIR program to include Phase II or Phase III stages will support a high technology transfer bridge to manufacturing which will support our local tech industry and

HTDC has helped my company through Hawaii SBIR.

Thank you for the opportunity to offer testimony in support of this bill.



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Before the HOUSE COMMITTEE ON FINANCE February 25, 2014 11:15 a.m. State Capitol, Conference Room 308 In Support of HB 2282 RELATING TO HIGH TECHNOLOGY

To: Chair Sylvia Luke, Vice Chairs Scott Nishimoto and Aaron Ling Johanson and Members of the Committee

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

Re: Testimony in Support of HB2282

Honorable Chair, Vice-Chairs and Committee Members:

Thank you for the opportunity to submit testimony in support of HB2282

The tech industry in Hawaii has grown over the past 10 years and has made significant strides toward achieving the goal of diversifying Hawaii's economy. Many companies compete for federal support through the Small Business Innovation Research ("SBIR") grant program, which encourages and funds early stage ideas and innovations.

As a local diversified science and engineering company with capabilities/facilities in advanced technology, life sciences, information systems, aerospace and energy Oceanit supports HB2282 and the White Paper attached hereto.

Specifically, we support the objectives of this bill which:

- Acts as a bridge across the "valley of death" and to assist in commercializing research discoveries for societal benefit;
- Supports economic growth and the diversification of our economy;
- Will allow companies to launch new ventures based on technology innovations; and
- Supports the growth of the tech industry and the creation jobs and innovation in the State of Hawaii.

We strongly urge you to support HB2282.

WHITE PAPER High Technology Transfer Bridge (HTTB) 11/6/13 ver.

Background

The technology industry in Hawaii has grown over the past 10 years and has made strides towards achieving the goal of diversifying Hawaii's economy and in establishing the feasibility and desirability of growing this industry to become the "third pillar" (with tourism and the military) of our economy.

Early stage support has been made available to "start up" companies, through state support of "accelerators". These accelerators provide mentoring and modest financial support to kick start a business.

Other companies that are developing cutting edge technologies rely on federal support through the Small Business Innovation Research ("SBIR") grant program, which encourages and funds early stage ideas and innovations. The technology risk level for these programs are often high and untested. Great ideas emerge from this early stage funding, and these ideas and technologies are vetted and competed at a national level. However, with the level of funding that is provided in a SBIR Phase I grant, there is barely enough money to demonstrate proof-of-concept for a technology. The follow-on funding that is required is essential to move the technology towards prototyping, customer interface and development.

HTTB would fill this critical "gap" in funding by supplementing the SBIR program, a program that has been tested by time. This funding gap (aka known as the "valley of death") is an acute problem in Hawaii due to our immature capital market support. Investment capital for technology in Hawaii faces critical challenges because this industry is still in the early stages of development in Hawaii, and there is a general lack of historical investment into this arena. This creates tremendous hurdles to the evolution of this industry.

Over the last several years, much attention was given to the development of software start-ups and social media as an industry. This has been an attractive industry as it requires little to no start-up capital and has low barriers to entry. Today, the leading tech arenas in the nation have found that the need to support "hard tech" is still required in order to maintain a vital, stable and critical part of the economic infrastructure. This industry is in flux, and most in Silicon Valley would agree that the days of these easy start-ups are gone. The focus is once again on developing cutting edge technology – development that requires longer timeframes, and significantly more capital investment.

Proposed Solution

The proposed solution leverages the Hawaii Technology Development Corporation's (HTDC) grant program, which has been in place since 1983. The purpose of the program has been to match SBIR Phase I grants. Phase I grants cover early stage ideas and technology development. Proposal topics are developed by agencies to address areas of national need. Proposals are vetted nationally and are extremely competitive. Ideally, a successful Phase I project will be able to show "proof of concept". More often than not - this usually means proof on paper – there is not enough funding in these early stage grants to actually develop or test a prototype.

This proposal would broaden the existing program by adding a matching grant component to mid- to later- stage funding at the SBIR Phase 2 or Phase 3 stages to support the development of working prototypes that stem out of these technologies. This would fill a large gap in the technology development process and would promote the maturation and commercialization of novel technologies.

The objectives of HTTB are:

- To act as a bridge across the "valley of death" and to assist in commercializing research discoveries for societal benefit;
- To support economic growth and the diversification of our economy,
- To launch new ventures based on technology innovations;
- To support the growth of the tech industry and the creation of intellectual property and innovation in the State.



23 February 2014

Growth of the state's technology sector is an important component of a plan to achieve diversification of Hawaii's economy. The most cost-effective method for stimulating growth in the technology sector is through the founding and maturation of Hawaii-based small businesses. The federal government provides early-stage research and development funds for small businesses through the Small Business Innovation Research ("SBIR") program. Implementation of a state-sponsored matching incentive program, designed to augment all three phases of the federal SBIR program, will significantly accelerate the rate at which small businesses can develop and commercialize new technologies.

The highly competitive SBIR program makes non-dilutive seed funds available to small businesses in a purposefully structured, multi-phase programmatic structure aimed at developing and commercializing early stage innovations. Spectrum Photonics has benefitted significantly from this program, with more than \$5,000,000 in federal SBIR funds contracted since 2009. These SBIR funds, in turn, have helped to make our technologies competitive for follow-on federal acquisition programs and commercialization opportunities such as the Rapid Innovation Fund (RIF) program. These funds are primarily used to provide employee salaries, serving as a basis for continuing and future economic development.

Phase I SBIR awards are generally only sufficient to conduct a paper study or to conduct a primitive proof-of-concept experiment. Phase II project awards, while more substantial, are typically only sufficient to assemble and conduct limited testing of a first generation brassboard capability. Additional follow-on funding is essential to move the technology beyond the initial prototype towards field demonstrations, customer interface, and beta-stage development. From an economic development perspective, the return on State investment may be maximized by leveraging the federal Phase II and Phase III SBIR program awards with an incentive matching program aimed at shortening product development cycle times.

The Hawaii Technology Development Corporation's grant program, which has been in place since 1983, has been used to match SBIR Phase I contracts. It has been effective in helping to secure Phase II awards for grant recipients. HB 2282 will fill critical follow-on funding needs by supplementing all three phases of the federal SBIR program. By adding matching funds to Phase II and Phase III SBIR contracts, HB 2282 will significantly enhance the output of the SBIR project deliverables by facilitating critical supporting efforts aimed at maturing and commercial transition of novel technologies. The bill will directly leverage competitively-awarded federal R&D awards, accelerate growth of Hawaii's tech industry, and will help to create new jobs and increased innovation in the State of Hawaii.

We strongly urge you to support of HB2282.

Sincerely,

Edward T. Knobbe, Ph.D. President and CEO Spectrum Photonics, Inc.



PO Box 700697 Kapolei, HI 96709 (808)497-0144 smurphy@gsellc.com

February 23, 2014

To:	27 th Legislature, 2014
	Hawaii State Capitol
	Honolulu, HI 96813

Subject: Testimony in support of bill HB2282

Dear Legislators:

This letter is in support of HB2282, relating to the Small Business Innovation Research ("SBIR") grant program

My company Guide Star Engineering is reliant on technical and engineering talent in order to survive and grow. The technology industry in Hawaii has grown over the past decade and the SBIR program has contributed to expanding and growing Hawaii's economy.

Having said that the level of funding that is provided in the SBIR Phase I is barely enough money to meet program goals. Additional funding, that is concurrent with Phase I execution, is required and essential to move the technology towards prototyping, technology development and commercialization.

HB2282 will supplement the SBIR program and leverage the Hawaii Technology Development Corporation's (HTDC) grant program, which has been in place since 1983. The purpose of the program has been to match SBIR Phase I grants to cover early stage ideas and technology development. HB2282 would broaden the existing program by adding a matching grant component to SBIR Phase II or Phase III grants to support the development of working prototypes that stem out of these technologies.

Moreover as stated earlier the bill will support the growth of the tech industry and will create jobs in the State of Hawaii.

I strongly urge you to support HB2282.

Sincerely,

Seibert L. Murphy CEO Guide Star Engineering, LLC



February 24, 2014

Rep. Sylvia Luke, Chair Rep. Scott Y. Nishimoto, Vice Chair Rep. Aaron Ling Johanson, Vice Chair Finance Committee Hawaii House of Representatives

Re: HB 2282 HD1 In Support

Dear Chair Luke, Vice Chair Nishimoto and Vice Chair Johanson,

I respectfully submit my support of HB2282 HD1.

At HealthTech Apps, inc., we design apps that save lives and save money. This legislation is important in helping expand the capability of technology research and development firms, like HealthTech Apps, inc., to commercialize promising technology. The Small Business Innovation and Research (SBIR) program phases I,II,III are an important vehicle to jump start technology innovations in our State. More importantly, matching federal SBIR contracts are an efficient way to scale innovations creating jobs and increasing tax revenue to benefit Hawaii taxpayers.

Thank you for your kind support of HB2282 HD1.

Best regards, Noe Foster Co-founder and Chief Designer HealthTech Apps, inc.

> 1164 Bishop Street . Suite 1503 Honolulu . Hawaii 96813 t: 808. 585.1564 HealthTechApps.com

Written Statement of

Dr. Jana Bogs Director Beyond Organic Consulting, Inc.

before the HOUSE COMMITTEE ON FINANCE Tuesday, February 25, 2014 11:15 a.m. State Capitol, Conference Room 308 In consideration of

HB 2282 HD1 RELATING TO HIGH TECHNOLOGY.

Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee on Finance.

Beyond Organic Consulting, Inc. respectfully submit testimony in **supports** HB 2282 HD1 relating to High Technology.

The High Technology Development Corporation (HTDC) has been assisting Phase I SBIR awarded companies since 1989 and continues to do so each year. For every dollar invested through this program, Hawaii companies have attracted 16 federal dollars in return to the state, plus commercialization funding.

Broadening the existing SBIR program to include Phase II or Phase III stages will support a high technology transfer bridge to manufacturing which will support our local tech industry and diversify Hawaii's economy.

HTDC has helped my company through Hawaii SBIR an award of \$3,000 to help get a grant proposal written.

My company will use SBIR money to perform research on growing high quality food with a clear marketing edge which will help farmers and provide excellent food for our people.

Thank you for the opportunity to offer testimony in support of this bill.

Testimony in Support of HB2282



To: House Committee on Economic Development & Business

Dear Chair Tsuji, Vice Chair Ward, and Members of the Committee:

This letter is to provide my support for HB2282 regarding increasing the scope of the Hawaii Technology Development Corporation's SBIR matching program to include phase 2 and 3.

TeraSys Technologies has received, to date, almost 40% of our revenue through the Small Business Innovative Research (SBIR) program, totaling \$2.8M over the past 6 years. We have received a total of \$120K through the HTDC SBIR matching grant program. TeraSys has been successful in securing \$2.5M in phase 2 funding, representing a 20X return on investment from the HTDC SBIR matching funds received by TeraSys.

What has proven elusive to us so far, however, is to reach the "holy grail" of the SBIR program which is to secure a phase III large scale commercial order. One of the greatest hurdles in securing a phase 3 contract is the often cited "funding valley of death" which occurs between phase 2 and phase 3. This valley of death is aptly named, since many companies simply "die" attempting to reach phase III because there are very few bona fide sources of funding that can bridge the gap between phase 2 and phase 3.

Typically, the phase 2 results are the first demonstration of a working prototype which provides the customer with the confidence that the research is successful. However, entering into a phase 3 contract requires a working product which is a large step from successful research. Very few funding sources exist for performing the packaging, optimization, and feature development necessary to turn applied scientific research into a fully functional product, hence the phrase funding valley of death. Initiatives such as HB2282 are critical in filling this gap to enable the true commercialization of SBIR funded research.

HB 2282 would broaden the existing program by adding a matching grant component to mid- to later- stage funding at the SBIR Phase 2 or Phase 3 stages to support the development of working prototypes that stem out of these technologies. This would fill a large gap in the technology development process and would promote the maturation and commercialization of novel technologies. In addition, the bill will support of the growth of the tech industry and the creation of jobs and innovation in the State of Hawaii.

We strongly urge you to support of HB2282 and thank you for your time and attention,

Mahalo Nui Loa,

Kevin Miyashiro President

Digitally signed by Kevin Miyashiro:A0109690000132483F4D070000E350 DN: c=US, o=U.S. Government, ou=ECA, ou=IdenTrust, ou=TERASYS TECHNOLOGIES LLC, cm=Kevin Miyashiro:A01096900000132483F4D070000E350 Date: 2014.02.03 19:33:24 - 1000'

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 24, 2014 11:00 AM
То:	FINTestimony
Cc:	akrucky@tissuegenesis.com
Subject:	Submitted testimony for HB2282 on Feb 25, 2014 11:15AM

HB2282

Submitted on: 2/24/2014 Testimony for FIN on Feb 25, 2014 11:15AM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing	
Anton Krucky	Tissue Genesis, Inc.	Support	No	

Comments: As an innovative company striving to bring our products to market, additional support to SBIR Phase II would be extremely beneficial to our company and allow us to move to the manufacturing and sale cycle, meaning more new revenue to the state and additional jobs.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: Sent:	Ronald Weidenbach <hawaiifish@gmail.com> Monday, February 24, 2014 11:31 AM</hawaiifish@gmail.com>
То:	FINTestimony
Cc:	estralita.w@gmal.com
Subject:	Testimony in strong support of HB2282 HD1, Tuesday 2/25 11:15 AM, Rm 308

Dear House Finance Chair, Vice Chair and Committee members,

I just learned of tomorrow's hearing so please excuse the rushed nature of this email testimony in strong support of HB2282 HD1. Hawaii Fish Company, co-owned and managed by Ron and Estralita Weidenbach, Hawaii's oldest aquafarm founded and in continuous operation since 1978, has been an active participant in and supporter of the Federal and Hawaii SBIR programs since their inception. During this time period we have been awarded five USDA/SBIR Phase I grants and two Phase II grants, commercializing both with in-house funds, and being honored the U.S. Small Business Administration's Tibbits Award as a national model of excellence for the SBIR program. We currently have one Phase I and one Phase II proposals under review, and are preparing another Phase II proposal for submission this week. However, in all cases we have had to make significant personal contributions to the research effort in terms of time, travel, materials, and equipment due to grant budget limitations and restrictions. Of particular importance for Phase II grantees is the urgent need to protect resultant Intellectual Property (IP) which is not an allowable grant expense with such Federal funds. The proposed Hawaii SBIR Phase II would address this urgent need and help support our State's innovative technology sector which crosses all production arenas and islands. Please pass HB2282 HD1.

Thank you for the opportunity to testify in strong support of this important bill.

Aloha, Eon and Estralita Weidenbach, Hawaii Fish Company

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 24, 2014 10:58 AM
То:	FINTestimony
Cc:	2kimino@gmail.com
Subject:	*Submitted testimony for HB2282 on Feb 25, 2014 11:15AM*

HB2282

Submitted on: 2/24/2014 Testimony for FIN on Feb 25, 2014 11:15AM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
kimberly ino	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 24, 2014 11:12 AM
То:	FINTestimony
Cc:	lucas@kaulana.net
Subject:	Submitted testimony for HB2282 on Feb 25, 2014 11:15AM

HB2282

Submitted on: 2/24/2014 Testimony for FIN on Feb 25, 2014 11:15AM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
C. Kaui Lucas	Individual	Support	No

Comments: If Hawaii is to grow the kind of meaningful jobs, not base pay military tourist industry, we NEED this kind of research funding. aloha, Kaui Lucas

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