



Pacific International
Space Center for
Exploration Systems

PISCES BOARD OF DIRECTORS

Henk Rogers, Chair
Senate Nominee
Term: 2014 – 2018

Vacant
Ex-Officio, Executive Director,
PISCES
Term: 2013 –

Kim Binsted
Senate Nominee
Term: 2016 – 2020

Luke Flynn
Governor Nominee
Term: 2016 – 2019

Galen Ho
Governor Nominee
Term: 2013 – holdover

David Lassner
Ex-Officio, President of the
University of Hawai'i
Designated Alternate,
Donald Straney
Vice President for Academic
Planning and Policy,
University of Hawaii System
Term: 2013 –

Luis Salaveria
Ex-Officio, Director, DBEDT
Designated Alternate
Mary Alice Evans
Deputy Director, DBEDT
Term: 2015 – 2018

Patrick Sullivan
House Nominee
Term: 2014 – 2018

Vacant, House Nominee
Term: 2015 - 2019

Statement of
Henk Rogers
Chair

Pacific International Space Center for Explorations Systems (PISCES),
Board of Directors

Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557

RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR EXPLORATION SYSTEMS (PISCES)

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women’s STARS Program.

Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women’s STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Aloha,

Henk Rogers

Statement of
Raphael Feldman
Affiliation: SpinLaunch
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

As a representative of SpinLaunch, and having worked directly with PISCES, I can attest to their stellar commitment to developing and nourishing a diversity of educational and economic growth and opportunity in Hawaii, particular in tech-fields like aerospace development. This organization should be provided the funds necessary to keep PISCES programs alive and flourishing to continue providing opportunities for Hawaii youth to advance in STEM related areas.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Raphael Feldman
2/15/18



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

Before the
HOUSE COMMITTEE ON FINANCE

February 16, 2018

3:00 p.m.

State Capitol, Conference Room 308

In Consideration of

**HB2557 RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Sylvia Luke, Vice Chair Ty J.K. Cullen and Members of the Committee

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

Re: Testimony in Support of HB2557

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony **in support of HB2557**

I am a Board Member for PISCES, I want to submit my support for HB2557. The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women's STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

HB-2557-HD-1

Submitted on: 2/14/2018 2:29:28 PM

Testimony for FIN on 2/16/2018 3:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
William Walter	W. H. Shipman, Limited	Support	No

Comments:

For decades youth from the Island of Hawaii have been faced with either taking jobs below their capability or move to another island or the mainland to find such jobs. Not only are there a dearth of jobs, there are too few opportunities for internships. PISCES has been successful in finding new opportunities for Island business and in providing internships that open the horizons of our Island youth. Where there is measurable success we need to continue to support the organizations that involved. PISCES is one such example - please support financing this operation.

Statement of
Joseph Campagna
CEO
Global Ground Systems LLC
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

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HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Joseph Campagna, 02/14/2018



HB-2557-HD-1

Submitted on: 2/15/2018 11:50:12 AM

Testimony for FIN on 2/16/2018 3:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	OCC Legislative Priorities Committee, Democratic Party of Hawaii	Support	No

Comments:

**PRESENTATION OF THE
OAHU COUNTY COMMITTEE ON LEGISLATIVE PRIORITIES**

DEMOCRATIC PARTY OF HAWAII

TO THE COMMITTEE ON FINANCE

THE HOUSE OF REPRESENTATIVES

TWENTY-NINTH LEGISLATURE

REGULAR SESSION OF 2018

Friday, February 16, 2018

3:00 p.m.

Hawaii State Capitol, Conference Room 308

RE: Testimony in Support of HB 2557 HD1 RELATING TO THE
PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS

To the Honorable Sylvia Luke, Chair; the Honorable Ty J.K. Cullen, Vice-Chair and the Members of the Committee on Judiciary:

Good afternoon. My name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") Legislative Priorities Committee of the Democratic Party of Hawaii. Thank you for the opportunity to provide written testimony on House Bill No. 2557 HD1 relating to DBEDT; PISCES; Appropriation; and Workforce Development.

The OCC Legislative Priorities Committee is in favor of House Bill No. 2557 HD1 and supports its passage.

House Bill No.2557 HD1 is in alignment with the Platform of the Democratic Party of Hawai'i ("DPH"), 2016, as it appropriates money to the Department of Business, Economic Development, and Tourism to support the internship and economic development programs of the Pacific International Space Center for Exploration Systems.

The DPH Platform states that "[w]e recognize that the responsible use and development of technology in all its manifestations offers immense potential for our community, government, including institutions of higher education and business sectors. We encourage synergistic research, development, commercialization and educational programs to promote technological proficiency and innovation. In particular, we support Science, Technology, Engineering and Math (STEM) initiatives in our public, private and charter schools as these prepare the next generation to address the needs of our state. We also support programs that facilitate incubator, i.e. start-up, opportunities for new and promising technologies, and encourage the local retention of our intellectual resources. (Platform of the DPH, P. 3, Lines 149-156 (2016)).

Given that House Bill No. 2557 HD1 appropriates money to the Department of Business, Economic Development, and Tourism to support the internship and economic development programs of the Pacific International Space Center for Exploration Systems, it is the position of the OCC Legislative Priorities Committee to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,

/s/ **Melodie Aduja**

Melodie Aduja, Chair, OCC Legislative Priorities Committee

Email: legislativepriorities@gmail.com, Tel.: (808) 258-8889

Statement of
Matthias Kusch
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women's STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Statement of
Jack Andersen
Student
Hawaii Community College

Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

Last summer, PISCES offered me the opportunity to participate in their robotics internship. I was able to do work in my aspiring profession, without compromising my schedule during the regular semester. If PISCES did not have the funding to carry out this internship, I would not have had a summer occupation to exercise my skills.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Jack Andersen
02/14/2018

A handwritten signature in black ink, appearing to read 'Jack Andersen', with a long horizontal flourish extending to the right.

Statement of
Pearl T. Hwang, PE, LEED AP
(private citizen)
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation.

My son was one of them. He is passionate about robotics and curious about space exploration. The summer internship in 2015 at PISCES after his freshman year in college was one unusual opportunity to go to the Big Island. He was able to apply his multidisciplinary skills in robotics engineering and helped building a Mars rover prototype at PISCES. This experience not only solidified his passion in science and technology, it also made him appreciate more the geology, the weather, and culture of Hawaii.

In 2016, my son got a summer internship in California with Honeybee Robotics who was a collaborator with PISCES in its rover design. He then went to work for Festo Robotics in the summer of 2017 as an industrial product design engineer. After college graduation in 2018, he plans to come back to visit PISCES, where he got started with his series of engineering internships. He will be bringing a high school friend to introduce his friend to this unique space center.


PISCES also offers the Women's STARS Program to high school girls. This program provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

While I don't have any first-hand experience with this program, as a woman engineer myself who also have two distance teenage nieces living in Kona, HI, a program like STARS that is designed specifically to nurturing the interests of girls in STEM is more than necessary.

PISCES is not only valuable in providing internships and opportunities to the younger generation in Hawaii, it is also a hub for the national and international science and engineering community in space exploration. Its network will benefit the HI and its people in years to come. Programs at PISCES are outreaches to provide a strong imprint of appreciation to what the Big Island, Hawaii has to offer in its geology formation that simulates the Moon and Mars, as well as being in the forefront of astrophysics research.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing and sincerely hope that this will be a long-term commitment from the HI government to the PISCES programs.

Mahalo,

 2/15/2018
Pearl T. Hwang, PE, LEED AP

Statement of
Philippe Giguère
Associate professor
Laval University, Quebec City, Quebec Canada
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

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Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women's STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,



Philippe Giguère, February 15th.

Statement of
Claudia Ziroli Coyl
President, Hawaiian EDucational Pursuits, Llc./ Hawaiian EDventures

Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

As an educator and provider of student educational travel programs to local and international students, I am proud and grateful to work with the PISCES team of educators to provide educational programs for my students. The work that PISCES is doing in research and development of off-Earth technologies is so exciting to students- creating enthusiasm for international students thinking about attending UHH and studying astronomy, geophysics, mathematics and all related fields.

PISCES provides unique opportunities to Hawaii's youth in advancing their careers into STEM related areas. There are few options on the island of Hawaii for students to work on their technical skills. Working with and through PISCES supports and encourages students to pursue scientific educational goals.

PISCES has demonstrated value through its Workforce Development Programs by better preparing Hawaii's youth to meet the demands of the STEM market place.

PISCES STARS program provide high school girls with a fresh perspective of potential careers in various STEM related fields and exposes them to women who have succeeded in those fields.

PISCES Internship program exposes university students to real hands on projects in careers with high demand and introduces them to a network of experts in those fields that allows the interns to create a valuable network for their future.

PISCES interns have gone on to find high paying employment with reputable firms in technology.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,
Claudia Ziroli Coyl
Hawaiian Educational Pursuits, Llc./ Hawaiian EDventures

Statement of
Nyra Dee
Public High School Science Teacher and Dept. Chair
Hilo High School
Before the
Committee on Finance
Friday, February 16th, 2018 at 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

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HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Nyra Dee

Nyra Dee
15Feb2018

HB-2557-HD-1

Submitted on: 2/15/2018 9:50:27 AM

Testimony for FIN on 2/16/2018 3:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Madhu Thangavelu	Individual	Support	No

Comments:

Statement of

Madhu Thangavelu

Conductor, ASTE527 Graduate Space Concepts Studio

Department of Astronautical Engineering, Viterbi School of Engineering

and the School of Architecture

University of Southern California, Los Angeles, CA 90089

Before the

Committee on Finance

Friday, February 16th, 2018 @ 15:00

State Capitol, Conference Room 308

In consideration of

HB2557

RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR EXPLORATION SYSTEMS (PISCES)

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

I have been watching the steady growth of projects at PISCES and I think such activities are key to inspiring the next generation of policy makers, thinkers and doers to anticipate and be ready to solve the problems facing humanity now as well as those that will be thrust upon us, with little time to react and respond effectively, in this 21st century.

The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women's STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Madhu Thangavelu

Madhu Thangavelu

February 15th 2018

Statement of
Tracee Fukunaga
Renewable Energy Administrator
Hawai'i Electric Light Company
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

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During my time at PISCES, I have gained valuable skills that are needed in the STEM workforce. Hawaii is lacking opportunities in the STEM fields compared to other mainland states, which is discouraging for hopeful engineers- and scientists-to-be. Internship programs, such as PISCES, help bring the talented, local young adults back to the State of Hawaii and give them a unique experience they wouldn't be able to get anywhere else.

Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women's STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed, which is very important in male dominated fields.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Tracee Fukunaga



HB-2557-HD-1

Submitted on: 2/15/2018 10:37:24 AM

Testimony for FIN on 2/16/2018 3:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sherrell Watson	Individual	Support	No

Comments:

I, Sherrell Watson, a Real Estate Salesperson, strongly support HB2557 for continued PISCES funding. There are so few opportunities for engineering and science students to learn from hands-on experience in Hawaii, and particularly the Big Island. I have personally witnessed these students eagerly explaining & showing off their projects within PISCES to young kids and their parents at local science fairs.

I understand PISCES also targets high school girls with the Women's STARS program who are interested in STEM by putting them together with successful female scientists and providing them with the encouragement and mentorship they need to succeed. I applaud their efforts to give these young women the confidence to pursue their dreams in science and technology.

In closing, I strongly support the passing of HB2557 to continue and further these important STEM development programs.

Statement of
Alexandra Nisenoff, STARS Program alumnus
University of Chicago
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

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HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Alexandra Nisenoff, 2/15/2018



Statement of
Shauna Tonkin
Director of Education & Curatorial Services
Pacific Aviation Museum Pearl Harbor
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

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HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,



Shauna Tonkin
February 15, 2018

Statement of
Christina Cauley
GIS Sole Proprietor
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

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As a student, PISCES provided my paid internship in geology. The experience and connections provided by PISCES lead to my successful NASA internship the following year. Hawaii must further develop such opportunities for students and post-graduation, for the success of our youth and the future of the state.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Christina Cauley, 02/15/2018

Statement of
Beverly Uhr
private citizen
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and strong support for HB2557.

My daughter is currently a senior at Hilo High School. She has had the wonderful opportunity to work with Rodrigo Romo and his staff at PISCES in the summer of 2017. She was able to assist a college intern programming the Mars Rover and observed the testing on the slopes of Mauna Kea. She was selected as one of the PISCES STEM Aerospace Research Scholars (STARS) where she and other young women were able to explore career opportunities at two of the telescopes.

Hawaii Island has very few opportunities for teens such as herself to gain hands-on real life applications of science. Because of this exposure at PISCES, she is now planning on studying computer science or engineering in college this fall.

Please continue to fund programs such as these if you are truly committed to building the future of our children. HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

Beverly Uhr

HB-2557-HD-1

Submitted on: 2/15/2018 2:26:40 PM

Testimony for FIN on 2/16/2018 3:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Krystal Schlechter	Individual	Support	No

Comments:

Aloha Chair Luke, Vice Chair Cullen and members of the Committee,

My name is Krystal Schlechter and I am currently a tour guide on Hawai'i island. I attended the University of Hawai'i at Hilo (UHH), and graduated with a B.S. in Astronomy and a B.A. in Physics in 2015. During my time at UHH I had the amazing pleasure of interning for the Pacific International Space Center for Exploration Systems (PISCES). It was my first internship as an aspiring astronomer and without a doubt, that internship helped shaped who I am today on top of providing me with a unique, hands-on, intellectually challenging, and breathtaking educational experience. As a learner and educator, I want as many students as possible to have the chance to experience internships like I did. This is why I support Measure HB2557.

I first got to know PISCES through the Akamai Internship Program. I started working on a project that would help a satellite called the Lunar Atmosphere Dust and Environment Explorer (LADEE). I was provided with two telescopes that I would set up and attach video cameras to them and record the moon, ultimately looking for meteors crashing on the surface of the moon. During my Akamai internship, (due to a short time frame) I was able to organize the the project and get it going. Setting up two telescopes on the slopes of Maunakea in the middle of night is quite difficult and dangerous for one person so I organized volunteers from the UHH Astronomy Department to help me. I had to first learn, and then teach my volunteers how to properly set up and take down 11" telescopes, how to analyze the data that we got, and how to properly take care of the equipment and each other during our long nights on the mauna. This was a long term project however, so after my Akamai internship was completed, PISCES hired me on as an intern directly so that I could see the mission through.

Thanks to PISCES, by the time the LADEE mission was completed, I had logged around 1000 hours of observing alone; I had trained about 10 people how to properly care for, operate, and transport, fairly large telescopes (a few of these people went on to volunteer or work for the Maunakea Visitor Information Station with the experience they gained); I became a mentor to a high schooler that went on to win awards for her work with the LADEE project and continues to pursue astronomy today; I got the amazing opportunity to see the LADEE mission be sent off to space (mostly thanks to donations, but impossible without PISCES support) from Wallops, VA. Overall I

developed social skills and learned how to act in professional settings and write press releases. I attended conferences and got to speak about the project to people around the world about the work we were doing at PISCES, further developing my communication and speaking skills.

Had I not interned for PISCES, I'm not sure I would have completed my degree. I often found my coursework hard and difficult but when I thought about the work I was doing, and what I could do from that, and that kept me inspired and fighting. I would not have been exposed to as many opportunities as I was, or developed as many connections on the island and around the world, therefore I might not be where I am today nor possess the wealth of knowledge that I have today. These are all if's and maybe's, but I can say for certain that my education at UHH would not have been nearly as fulfilling or even adequate if it were not for the additional work and experience that I gained during my time interning for PISCES. It would be a downright shame to take that same educational experience away from future students.

Although I have decided not to pursue astronomy research (by no fault of my internship with PISCES), I still use the skills and knowledge I gained from my time interning for PISCES. One of the most common questions I get on tour today (especially in Kona) is: "what do you do with all this lava, can you use it for something?" When I start by telling them we mostly just use it as a road foundation, people are disappointed. They often think that seems wasteful. Then I start describing some of the work PISCES has done with the basalt, like the 3D printed sidewalk in Hilo and the possibilities of this in space, the martian and lunar rover testing on Maunakea, and the research into lava tubes and, again, the possibility of living in them in space. People are suddenly excited for what the future holds upon hearing this information. They see Hawai'i not just as beaches and palm trees, but as a place of science and innovation, carrying on the Hawaiian traditions to explore and utilize without waste. In my opinion, tourists seem to walk away happier knowing that the money they spend on island isn't just going back to the resorts, but to the future of humans. I know I would be much happier knowing my taxes were going to encourage our future generations to expand our knowledge and capabilities as a human race as well as helping them develop the skills they will need to do so.

Please, continue to support PISCES and the work they do in with internship and economic development programs on Hawai'i island. Support support Measure HB2557.

Mahalo nui loa,

Krystal Schlechter

HB-2557-HD-1

Submitted on: 2/15/2018 2:45:59 PM

Testimony for FIN on 2/16/2018 3:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
David S. De Luz, Jr.	Individual	Support	No

Comments:

In consideration and support of:

HB2557

RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR EXPLORATION SYSTEMS (PISCES)

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear Chair, Vice Chair and members of the Committee,

1. wish to express my appreciation and strong support for HB2557.

The State of Hawaii has limited opportunities for young future engineers and scientists to participate in real-life, hands-on internship and education programs like the ones offered by PISCES. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

Former PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women's STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,

David S. De Luz, Jr.

VP of DSDE, Inc.

808-895-4284, djr@teamdeluz.com

February 15, 2018

HB-2557-HD-1

Submitted on: 2/15/2018 2:49:40 PM

Testimony for FIN on 2/16/2018 3:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
G. Jeffrey Taylor	Individual	Support	No

Comments:

I wish to express my appreciation and strong support for HB2557.

I have been involved as a UH professor in the Hawai'i Space Grant undergraduate fellowship program. This program gives engineering and science students at UH Hilo and Manoa and the community colleges the opportunity to do hands-on science and engineering work. The PISCES internships also offer such educational and motivating opportunities. We have too few such programs in the state. This bill will support the continuation and growth of the important workforce development initiatives offered at PISCES, like their Summer Internship Program and Women's STARS Program.

Like former Space Grant Fellows, PISCES interns have gone on to land prestigious internships and employment opportunities in fields related to their internship work following graduation. In addition, the Women's STARS Program offered to high school girls provides a valuable and potentially life-changing experience to local women interested in STEM by engaging them with successful female scientists and providing them with the encouragement and mentorship they need to succeed.

HB2557 will allow PISCES to enhance these valuable workforce development programs and I strongly support its passing.

Statement of
Rachel Solemsaas, resident of Hilo, Hawai'i
Before the
Committee on Finance
Friday, February 16th, 2018 @ 15:00
State Capitol, Conference Room 308

In consideration of
HB2557
**RELATING TO THE PACIFIC INTERNATIONAL SPACE CENTER FOR
EXPLORATION SYSTEMS (PISCES)**

To: Chair Luke, Vice Chair Cullen and members of the Committee.

Dear members of the Committee,

I wish to express my appreciation and support for HB2557. I am Rachel Solemsaas, resident of Hilo, Hawai'i. I also serve as Chancellor for Hawai'i Community College.

As an educational leader, I firmly believe that we need learners who graduate with deeper learning outcomes that include and extend beyond content knowledge. This is an absolute requirement as we build a modern workforce equipped to thrive in our global economy.

Thus, we need to support any opportunity to build our local capacity that expands learning through authentic experiences like PISCES, like their Summer Internship Program and Women's STARS Program. These type of programs bring students with the tools and skills they need to collaborate, think critically and solve complex challenges.

Hawai'i Community College students have served as PISCES interns like [Andrew Hasegawa and Jack Andersen](#). Both have received promising job offers now prior to their graduation. HB2557 will allow PISCES to continue building upon these valuable workforce development programs and I strongly support its passing.

Mahalo,



Rachel Solemsaas
25-184 Papali St.
Hilo, HI 96720
February 15, 2018