

Notice of Meeting
UNIVERSITY OF HAWAI'I
BOARD OF REGENTS COMMITTEE ON RESEARCH AND INNOVATION

Members: Regents Bal (Chair), Sullivan (Vice-Chair), Moore, Tagorda, and Wilson

Date: Wednesday, November 4, 2020

Time: 8:30 a.m.

Place: Virtual Meeting

In light of the evolving COVID-19 situation, protecting the health and welfare of the community is of utmost concern. As such, this will be a virtual meeting and written testimony and oral testimony will be accepted in lieu of in-person testimony. Meetings may be monitored remotely via the livestream pilot project. See the Board of Regents website for information on accessing the livestream: www.hawaii.edu/bor. Mahalo for your consideration.

AGENDA

- I. Call Meeting to Order**
- II. Approval of Minutes of the August 6, 2020, Meeting**
- III. Public Comment Period for Agenda Items:**

All written testimony on agenda items received after posting of this agenda and up to 24 hours in advance of the meeting will be distributed to the board. Late testimony on agenda items will be distributed to the board within 24 hours of receipt. Written testimony may be submitted via the board's website through the testimony link provided on the [Meeting Agendas, Minutes and Materials](#) page. Testimony may also be submitted via email at bor.testimony@hawaii.edu, U.S. mail, or facsimile at (808) 956-5156. All written testimony submitted are public documents. Therefore, any testimony that is submitted for use in the public meeting process is public information and will be posted on the board's website.

Those wishing to provide oral testimony for the virtual meeting may register [here](#). Given constraints with the online format of our meetings, individuals wishing to orally testify must register no later than 7:00 a.m. on the day of the meeting in order to be accommodated. It is highly recommended that written testimony be submitted in addition to registering to provide oral testimony. Oral testimony will be limited to three (3) minutes per testifier.

IV. Agenda Items

- A. University of Hawai'i Research: Overview of Ocean Sciences by Dr. David Karl, Director of the Center for Microbial Oceanography Research and Education
- B. Research Corporation of the University of Hawai'i (RCUH): A Historical Overview

C. Fiscal Year 2020-2021 1st Quarter Extramural Awards Update

V. Adjournment

DISCLAIMER - THE FOLLOWING ARE DRAFT MINUTES AND ARE SUBJECT TO FURTHER REVIEW AND CHANGE UPON APPROVAL BY THE COMMITTEE

MINUTES

**BOARD OF REGENTS COMMITTEE ON RESEARCH AND INNOVATION
MEETING**

AUGUST 6, 2020

Note: On January 30, 2020, the World Health Organization declared the outbreak of COVID-19 a public health emergency of international concern, subsequently declaring it a pandemic on March 11, 2020. On March 16, 2020, Governor David Y. Ige issued a supplementary proclamation that temporarily suspended Chapter 92, Hawaii Revised Statutes, relating to public meetings and records, “to the extent necessary to enable boards to conduct business in person or through remote technology without holding meetings open to the public.”

I. CALL TO ORDER

Chair Eugene Bal called the meeting to order at 9:36 a.m. on Thursday, August 6, 2020. The meeting was conducted virtually with regents participating from various locations.

Committee members in attendance: Chair Eugene Bal; Vice-Chair Jan Sullivan; Regent Randy Moore; Regent Michelle Tagorda; and Regent Ernest Wilson.

Others in attendance: Board Chair Benjamin Kudo; Regent Simeon Acoba; Regent Kelli Acopan; Regent Wayne Higaki; Regent Alapaki Nahale-a; Regent Robert Westerman; (ex officio committee members); President David Lassner; Vice President (VP) for Administration Jan Gouveia; VP for Community Colleges Erika Lacro; VP for Legal Affairs/University General Counsel Carrie Okinaga; VP for Academic Planning and Policy Donald Straney; VP for Research and Innovation Vassilis Syrmos; VP for Information Technology/Chief Information Officer Garret Yoshimi; VP for Budget and Finance/Chief Financial Officer Kalbert Young; UH-Mānoa (UHM) Provost Michael Bruno; UH-Hilo Chancellor Bonnie Irwin; UH-West O’ahu Chancellor Maenette Benham; Executive Administrator and Secretary of the Board of Regents (Board Secretary) Kendra Oishi; and others as noted.

II. APPROVAL OF MINUTES

Regent Moore moved to approve the minutes of the March 5, 2020, meeting, seconded by Regent Wilson, and the motion carried with all members present voting in the affirmative.

III. PUBLIC COMMENT PERIOD

Board Secretary Oishi announced that the Board Office did not receive any written testimony, and no individuals signed up to provide oral testimony.

IV. AGENDA ITEMS

A. Committee Work Plan

Chair Bal referenced the Committee Work Plan (Work Plan) that was provided to committee members in the materials packet stating that the Board Office prepared the Work Plan based upon what the committee has historically done and that the Work Plan was intended to be used as an outline of the work to be performed by the committee during the coming year. He remarked that, at the request of the administration, a review of the management relationship with the Research Corporation of the University of Hawaii was added to the Work Plan. He further stated that periodic briefings on extramural research projects being conducted by the university over the course of the year were also added to the Work Plan as this was an important issue.

B. Recommend Board Approval of New Regents Policy (RP) 12.211, Ethical Guidelines in the Conduct of Technology Transfer Activities

Stating that the university is in a unique position to support basic and applied research on its campuses, identify and select those discoveries that have potential commercial value, and transform these inventions into commercially viable services or products that can be introduced to the private market, a process generally referred to as technology transfer, VP Syrmos provided background on the development of proposed RP 12.211. He reported that the State Legislature enacted proposals in 2017 that authorized the university to be more actively and directly engaged in the commercialization of its research products. Act 38, Session Laws of Hawaii 2017 (Act 38), was one such proposal that exempted technology activities sponsored by the university from certain sections of the State Ethics Code as long as the technology transfer activities complied with a regulatory framework and research compliance programs and policies approved by the board. Proposed RP 12.211, along with the implementation of Executive Policy 12.206 and administrative procedures, creates the regulatory framework and compliance programs contemplated by Act 38.

VP Syrmos emphasized that proposed RP 12.211 does not exempt technology transfer activities from the State Ethics Code but rather, transfers oversight responsibility from the State Ethics Commission to the university to identify, manage, and mitigate ethical conflicts of interest arising during the course of university-sponsored technology transfer activities. He also reviewed next steps that would be taken by the administration should the committee recommend approval of the proposed RP, including seeking full board approval at its August meeting.

Noting that the ultimate responsibility of overseeing the ethical portions of the proposed new RP and ensuring that technology transfer occurs in a proper manner rests with the board, Vice-Chair Sullivan inquired about a university policy that allowed faculty members to commit up to 20 percent of their university employment time to a private company established through their research efforts and how the administration was enforcing this policy. VP Syrmos responded that the 20 percent is a maximum and not a benefit that is automatically initiated. He stated that the amount of time a faculty member is allowed to work for the private company has to be negotiated between the faculty member, their department chair, and their dean. VP Syrmos noted that the situation becomes more complicated when the faculty member is the owner of the

private company and a decision has to be made on an issue where the company's position differs from the university's position. In order to address this scenario, the university has requested that faculty members who are owners of a private company established as a result of their university research efforts file a conflict of interest form and a conflict of interest management plan with the university.

Vice-Chair Sullivan stated that, while she was supportive of this RP and the modernization of the university's technology transfer policy, it would be prudent for the administration to provide annual reports to the committee noting any conflict of interest issues and requested that this requirement be established within the proposed RP. VP Symos concurred with Vice-Chair Sullivan noting that the administration could provide this information to the committee.

Regent Acoba noted that certain language contained in proposed RP 12.211 appears to imply that the university is exempted from certain federal regulations, as well as a number of provisions of the State Ethics Code, and requested clarification of this matter. VP Symos responded that extramurally funded projects, particularly those funded by the federal government, requires that the university comply with all applicable federal regulations, which are much more stringent than state regulations. He reiterated that Act 38 does not exempt the university from the State Ethics Code but rather, transfers oversight and enforcement responsibility for specific portions of the State Ethics Code relative to technology transfer activities from the State Ethics Commission to the university. Executive Policy 12.206, which will complement proposed RP 12.211, will also offer more specificity regarding this issue.

Associate General Counsel Presley Pang added that when Act 38 was first proposed, the university, at the Legislature's request, provided the Legislature with six specific provisions of the State Ethics Code that it believed created obstacles to technology transfer initiatives. Exemptions from these provisions were incorporated into Act 38. All other provisions of the State Ethics Code still apply to technology transfer activities. Mr. Pang agreed that the term "other" would be deleted in the phrase "must comport with all other applicable federal regulations..." in order to remove any ambiguity that any federal regulations would not be followed. Regent Acoba requested that the ethics code provisions that would not apply to technology transfers be specifically listed in the proposed RP 12.211. Mr. Pang agreed that these changes would be made.

Regent Moore moved to recommend board approval of the proposed RP 12.211 subject to the requested amendments being made to the proposed RP 12.211 and presented to the board at its August meeting, seconded by Vice-Chair Sullivan, and the motion carried, with all members present voting in the affirmative.

C. Fiscal Year (FY) 2020 Year-in-Review and FY 2021 Extramural Awards Outlook

Prior to the presentation, Chair Bal congratulated the administration and the university's research community on exceeding expectations for the receipt of extramural awards for FY 2020 noting that the university obtained approximately \$450 million in extramural awards.

VP Syrmos reported on the receipt of extramural awards for FY 2020. He reviewed a breakdown of trends, significant awards, and award amounts by campus, as well as award revenues received to date and projected award revenues noting that the university received slightly less than internal projections and the administration would be reviewing the methodology of its projections to attempt to make them more realistic and achievable. For the second year in a row, total awards were over \$400 million, with a total of \$450.4 million being received in FY 2020. VP Syrmos noted that UH received \$139.5 million in award revenues for the fourth quarter of FY 2020, which was 54.2 percent more than the same period last year. He also reviewed the number of invention disclosures made, the number of patents applied for, and the number of licenses/options awarded for research projects for FY 2020.

VP Syrmos stated that, while growth in extramural funding has shown steady increases over the last three years and the university is cautiously optimistic that growth will continue, with award projections of approximately \$416.3 million in FY2021, the uncertainty caused by the coronavirus pandemic and its effect on the economy will pose a challenge.

Regent Wilson inquired whether the university was anticipating the receipt of additional research funding from the National Security Agency (NSA). VP Syrmos replied that the university has one to two small projects involving NSA funding. However, he noted that this was one area where the university could experience growth in research and development funding. The university is currently attempting to better align its core competencies in subjects such as cybersecurity, data science, computer science, and other areas of research that NSA is funding and thus increase the university's competitiveness for federal funding.

Vice-Chair Sullivan asked whether the extramural funding amounts noted by VP Syrmos included federal Coronavirus Aid, Relief, and Economic Security Act (CARES Act) funds. VP Syrmos replied that the extramural funding amounts he presented did not reflect CARES Act funds.

Stating that a \$10 million award for the Culinary Institute of the Pacific was received from the University of Hawai'i Foundation (UHF), Vice-Chair Sullivan asked why grants from UHF were considered as extramural grants. VP Syrmos explained that this has been the custom and practice of the university for over 40 years noting that UHF can only provide funds to the university through an external grant process. The administration is currently having internal discussions as to whether these funds should be counted as extramural funding for reporting purposes going forward. Vice-Chair Sullivan requested that the administration consider breaking out this funding source in a separate category to delineate it from other extramural funding received by the university.

Vice-Chair Sullivan remarked that, on the subject of innovation, data on new start-up companies appears to indicate that the university has to do a better job of stimulating these types of ventures. VP Syrmos replied that the data that was provided only accounted for start-up companies that used licensed technology from the university and did not include all start-up companies incubated by the university. If the definition for

what the university considers a start-up was amended to remove the use of licensed technology requirement, the data would have reflected a total of nine start-up companies incubated at the university in FY 2020.

Board Chair Kudo asked whether the entrepreneurship program at UHM's Shidler College of Business was involved with assisting start-up companies incubated at the university. VP Symos responded in the affirmative and stated that various budgets are currently being reviewed to determine the amount that can be allocated to maintain the interplay between investments and operating costs with regard to incubated start-up companies.

D. Strategic Directions: Update on Metrics, Extramural Awards Targets vs. Actuals

VP Symos stated that last year the administration began reviewing possible changes to metrics used by the university to determine the receipt of extramural awards, particularly with regard to established extramural funding targets versus actual amounts of extramural funding received by the university. He reviewed the process the administration has been using to determine possible amendments to these metrics including conducting reviews of historical data and the accuracy of assumptions used to establish extramural funding targets and noted some of the changes the administration is proposing for extramural awards and funding targets for FY 2021. It was also stressed that one key to maintaining or increasing the amounts of extramural funding witnessed by the university over the past several years is continuing to strategically invest in these efforts in the future. Historical data has shown that when investments in extramural funding efforts were lessened or severely restricted to address budget issues facing the university, the receipt of extramural funding became stagnant. The administration will continue to conduct in-depth, internal discussions on this matter going forward and also intends to involve the committee in these discussions.

V. ADJOURNMENT

There being no further business, Vice-Chair Sullivan moved to adjourn, seconded by Regent Tagorda, and with all members present voting in the affirmative, the meeting was adjourned at 10:42 a.m.

Respectfully Submitted,

Kendra Oishi
Executive Administrator and Secretary
of the Board of Regents



UNIVERSITY
of HAWAII
SYSTEM

RECEIVED

Office of the Vice President for Research and Innovation

20 OCT 29 P3:26 UNIVERSITY OF HAWAII
BOARD OF REGENTS

UH DTS #21069

UNIVERSITY OF HAWAII
PRESIDENT'S OFFICE OCT 29 P3:47

October 29, 2020

MEMORANDUM

TO: Eugene Bal III, Chairperson
BOR Committee on Research and Innovation

VIA: David Lassner 
President

FROM: Vassilis L. Syrmos 
Vice President for Research and Innovation

SUBJECT: **BOR COMMITTEE ON RESEARCH AND INNOVATION AGENDA MATERIALS
FOR NOVEMBER 2020 MEETING**

Please find attached the following materials that will be discussed at the November 4, 2020 BOR Committee on Research and Innovation meeting:

IV. Agenda Items:

- A. University of Hawai'i Research: Overview of Ocean Sciences by Dr. David Karl, Director of the Center for Microbial Oceanography Research and Education (**D. Karl presentation*)
- B. Research Corporation of the University of Hawai'i (RCUH): A Historical Overview (**VPRI presentation*)
- C. Fiscal Year 2021 1st Quarter Extramural Awards Update (**VPRI presentation*)
 - 1. FY21 Q1 Extramural Awards Analysis Report
 - 2. FY21 Q1 Research and Innovation Metrics Summary
 - 3. FY21 Monthly Report of Extramural Awards (as of September 30, 2020)



UNIVERSITY
of HAWAI'I®
SYSTEM

UH RESEARCH

A View from the Sea

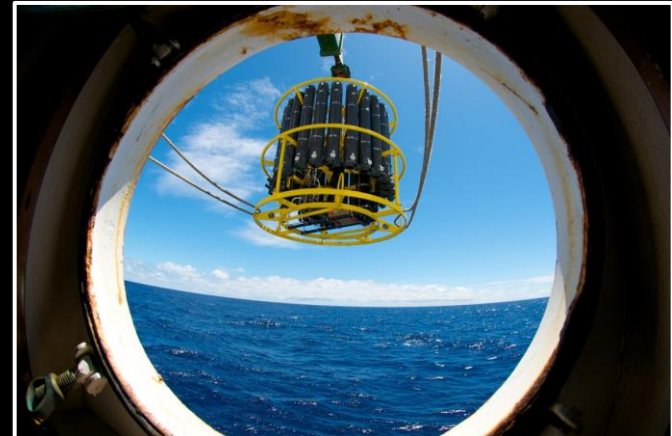
From distant galaxies to the ocean depths ... and everywhere in between

*Land • Sea • Space • Sun
... research that matters*

Today's Discussion Points:

What matters, and why?

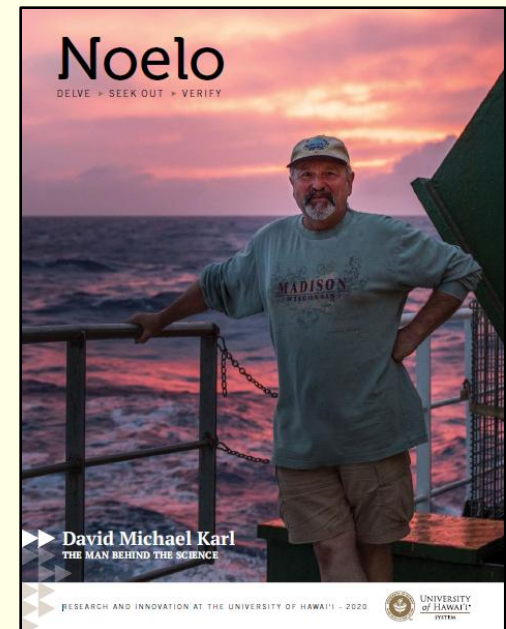
- **Fundamental Research**
the key to knowledge
- **UH and the Sea**
global leadership
- **Beyond COVID-19**
challenges and opportunities



What is Basic Research?

- Seeks fundamental knowledge about the natural world: *hypothesis and curiosity driven*
- Generates principles, ideas and theories:
e.g., How did the universe begin?
How did life arise on Earth?
Are we alone in the universe?
- No immediate commercial benefits:
essential for applied “spinoffs”

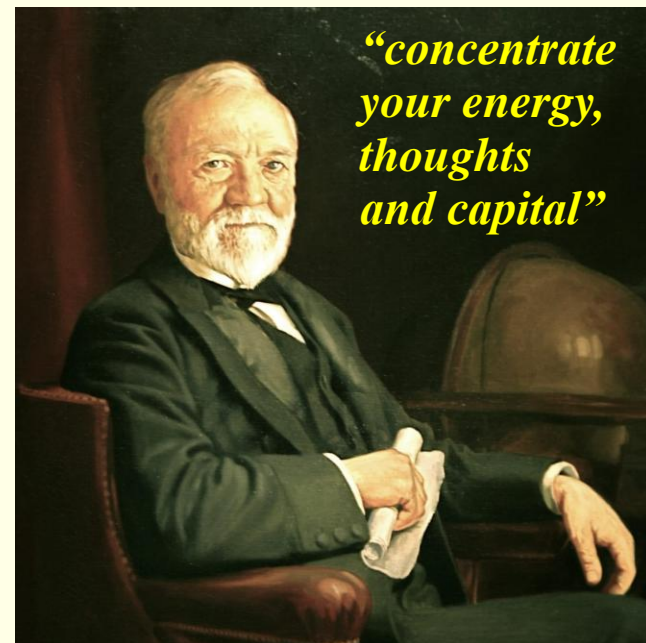
Noelo... Delve • Seek Out • Verify



Carnegie Classification

*...the gold standard in
higher education*

- Developed in 1973 by the Carnegie Foundation for Advancement of Teaching
- Ranking based on various education and research success metrics
- Effective and transparent: *raw data used are publicly available*
- Three major classes for 335 U.S. doctorate-granting institutions for research activity: **R1: highest**
R2: higher / R3: moderate



Examining the Carnegie Classification Methodology for Research Universities

Robert Kosar and David W. Scott

Department of Statistics, Rice University, Houston, TX

- **Classification criteria have changed over time, and will likely change in the future**
- **Rankings are updated every 5 years, most recently in 2016**
- **This paper evaluates current criteria, and proposes an improved methodology**

UH MUST STAY ON TOP!



**“History is the
version of the past
that people have
decided to agree
upon”**

Napoleon Bonaparte (1769-1821)

UH AND THE SEA

The Emergence of Marine Expeditionary Research and Oceanography as a Field of Study at the University of Hawaii at Manoa

DAVID M. KARL



**Founded in 1907 as College of A&M of Hawaii
1911 College of Hawaii • 1920 University of Hawaii**



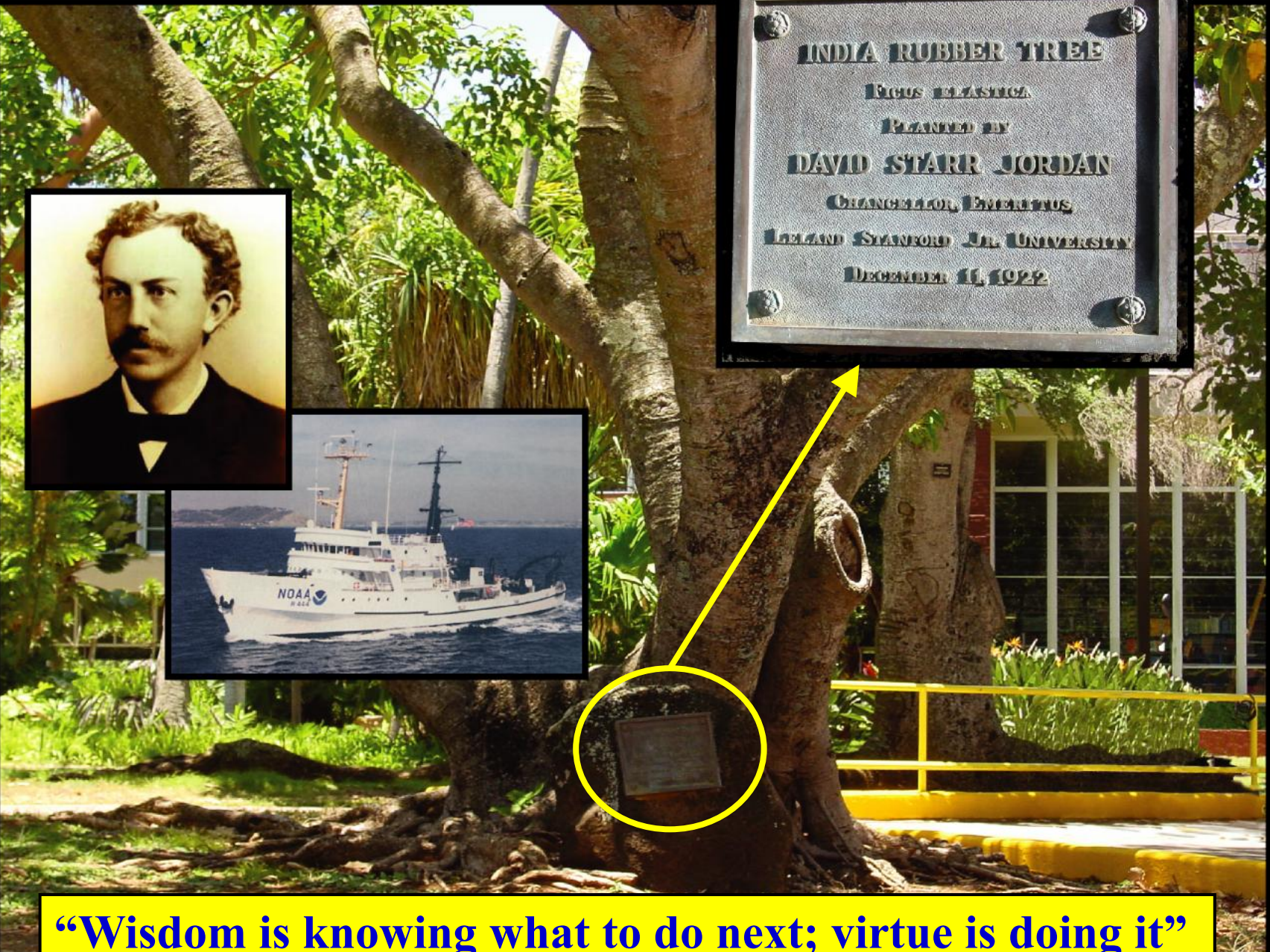
Admin/Classes

Ag Science Lab

Football Field

Engineering

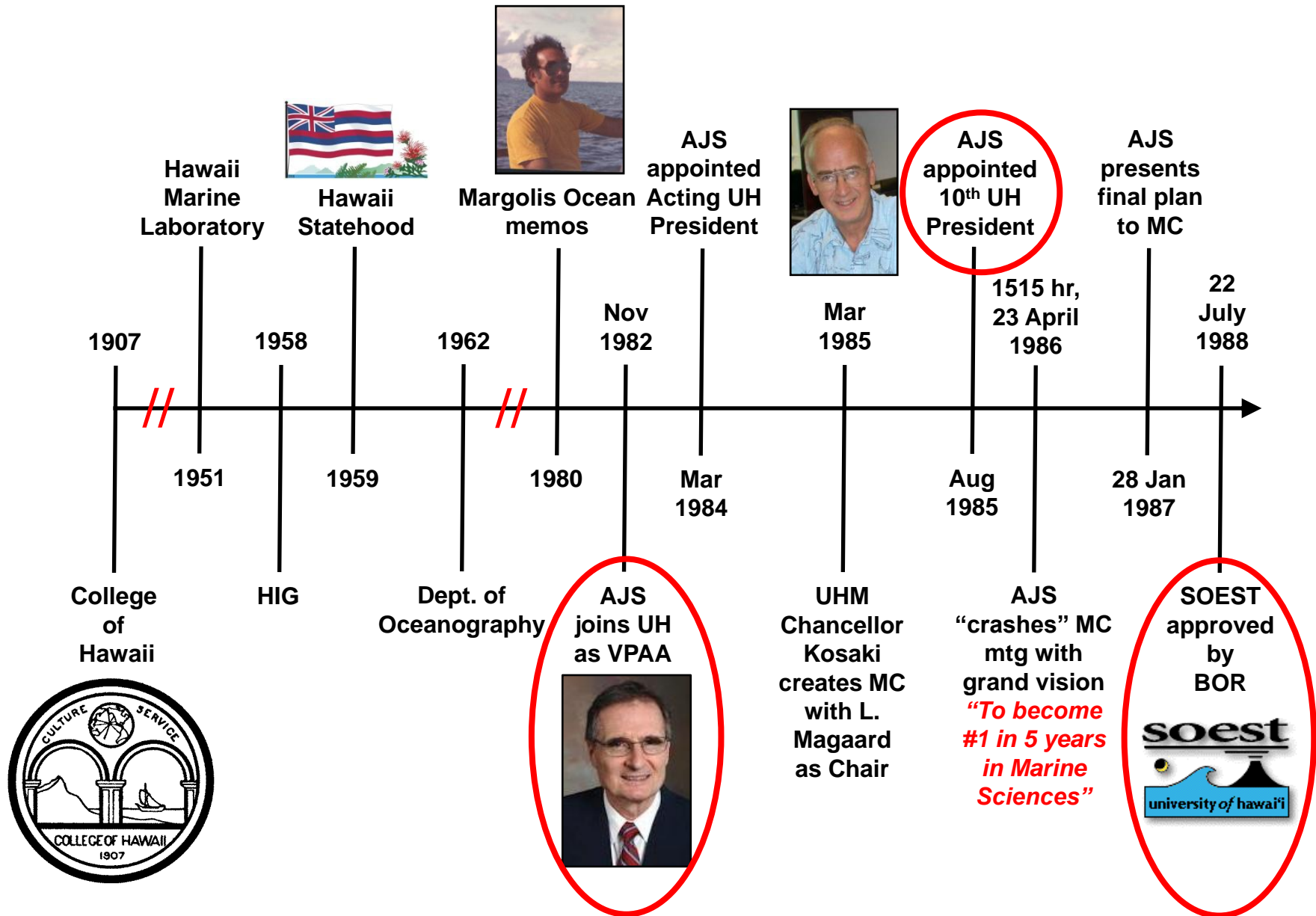
University of Hawaii: circa 1922



“Wisdom is knowing what to do next; virtue is doing it”

David Starr Jordan (1851-1931)

1907-1988: Waypoints to SOEST



PRESIDENT

December 11, 1987

Dr. Lorenz Magaard
Department of Oceanography
University of Hawaii at Manoa
1000 Pope Road
MSB, Room 307
Honolulu, Hawaii 96822

11 December 1987

Dear Lorenz:

I want to congratulate you and thank you so very much for your excellent work with the Marine Council and the Faculty Senate. This creative and energetic effort on your part led directly to the overwhelming faculty senate endorsement of the proposed School for Ocean and Earth Science and Technology.

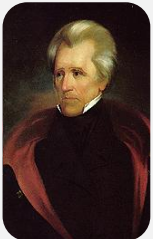
While I congratulate you, I also express my appreciation for what has been accomplished so far organizationally and in terms of bringing programs and people together. Please convey this sense of appreciation and congratulations to Chuck Helsley, and others on the Marine Council on my behalf.

It appears that, now, the future is ours. We must go forward with the next steps. These include a presentation to the Board of Regents for formal approval, securing the necessary funds for CIP, personnel, and operations, and, most importantly, attaining the high standards of excellence that we have established for ourselves in this field.

Cordially yours,



Albert J. Simone
President



*“One man with courage makes
a majority”*

Andrew Jackson (1767-1845)

Marine Council (1985-1989)

- L. Magaard, Ocean, Chair
- J. Davidson, Sea Grant Dir.
- F. Gerritsen, Ocean Engineering
- R. Grigg, HIMB
- P. Helfrich, HIMB Dir.
- C. Helsley, HIG Dir.
- D. Hussong, HIG
- D. Karl, Oceanography
- A. Malahoff, HURL Dir.
- D. Moore, JIMAR Dir.
- F. Peterson, G&G
- F. Kamemoto, Zoology
- P. Takahashi, HNEI Dir.

Resolution to establish a new
School of Ocean and Earth Science and Technology

Whereas Hawaii's island heritage is strongly linked to the sea,
there is a compelling need

to enhance educational opportunities for the people of
Hawaii, the nation, and the Pacific basin,

to accelerate the growth of the University of Hawaii to
preeminence in research and development in ocean and earth
science and technology,

and to build the strength of the University of Hawaii for
public service and outreach in the Pacific Basin.

Therefore the Marine Council of the University of Hawaii unanimously
endorses the plan to establish a new School of Ocean and Earth Science
and Technology.

“It appears that, now, the future is ours”
A.J. Simone

Wednesday, January 28, 1987

**President Simone attended Marine Council meeting to present the final plan
and to witness the Council's unanimous endorsement of the new school**

“Concentrate your energy, thoughts and capital”

soest

EARTH

*understanding
Earth
systems*

OCEANS

*hydrosphere-
biosphere-
atmosphere
interactions*

ATMOSPHERE

*tropical and
global
weather
dynamics*

SPACE

*exploring
Earth, Moon,
Mars, and
beyond*

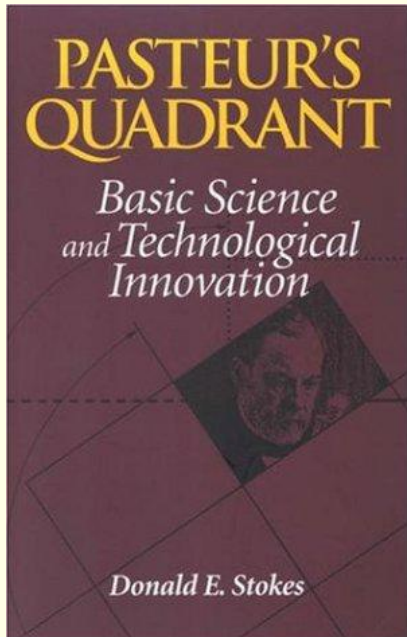
ENERGY

*developing
alternative
energy
resources*

Building on 30+ years of excellence and innovation

SOEST's Primary Mission

Create and
disseminate
knowledge



Improve models,
inform society,
protect the sea

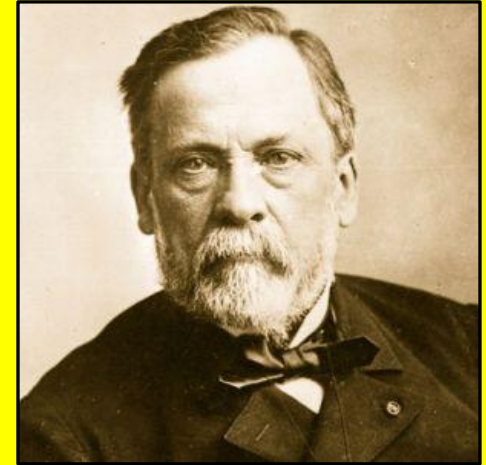
high

Quest for fundamental understanding

low

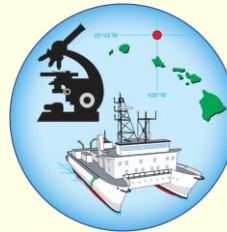


PURE BASIC RESEARCH



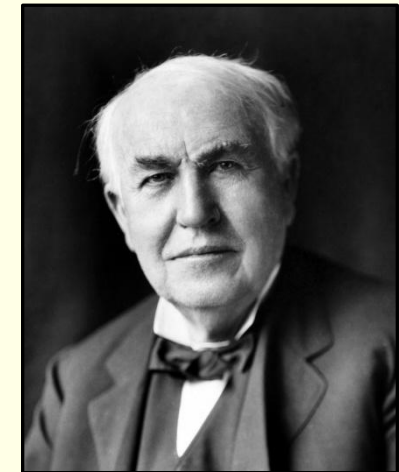
USE-BASED BASIC RESEARCH

Bohr



Research
that matters

Edison



PURE APPLIED RESEARCH

low

Consideration of use

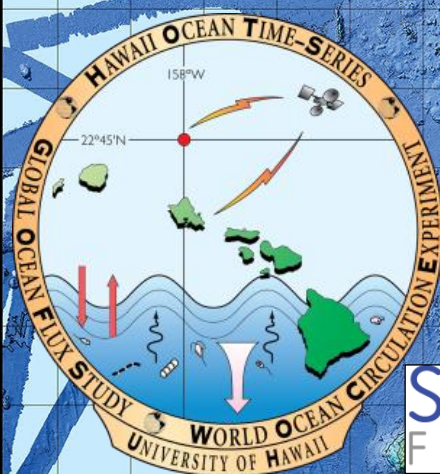
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UNIVERSITY
of HAWAII®
MĀNOA

Ocean
Station
ALOHA
est. 1988

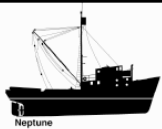
● 22°45'N, 158°W



GORDON AND BETTY
MOORE
FOUNDATION

SIMONS
FOUNDATION

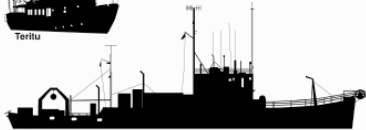
**>\$150 M, and counting
Public-Private-Partnership**



Heptune



Teritiu



Mahi



Kana Keoki



Moana Wave



No'i



Kila



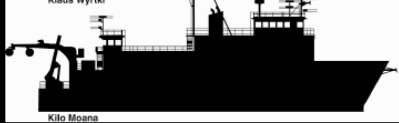
Samuel P. Lee



Ka'imikai O Kanaloa



Klaus Wyrki



Kilo Moana

1965

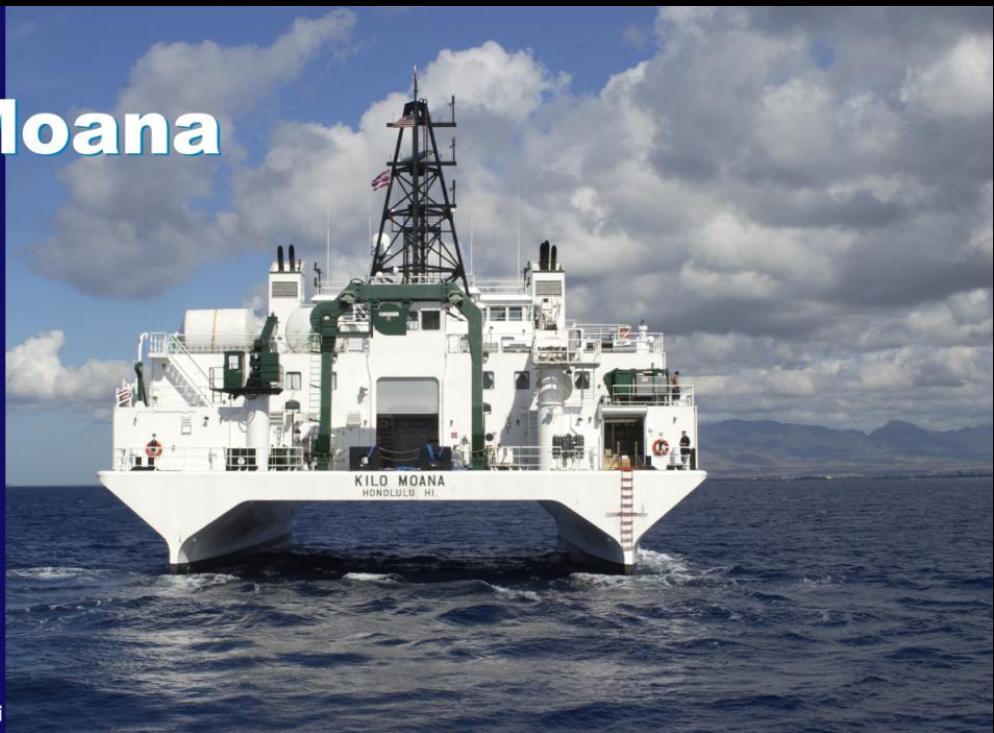
2020

R/V

Kilo Moana

christened
17 Nov 2001

SOEST
University of Hawaii



UH: A Charter UNOLS Member

- Access to ships
- Access to the sea
- Vital for ocean research

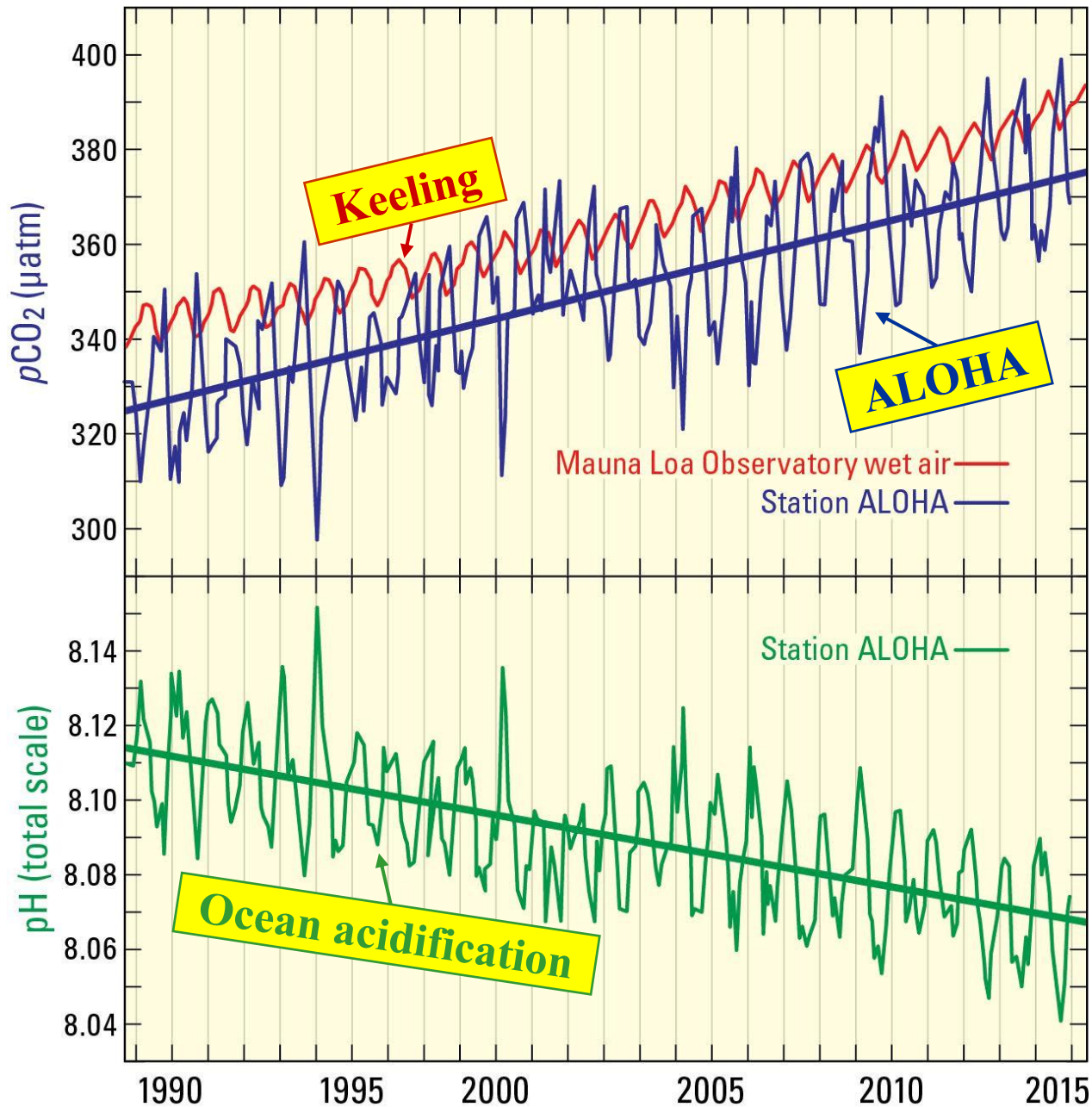
Check out 2020 Noelo



SCHOOL OF OCEAN AND EARTH
SCIENCE AND TECHNOLOGY
UNIVERSITY OF HAWAII AT MĀNOA



The *Iconic* ALOHA Curve



PNAS

Physical and biogeochemical modulation of ocean acidification in the central North Pacific

John E. Dore^{a,1}, Roger Lukas^b, Daniel W. Sadler^b, Matthew J. Church^b, and David M. Karl^{b,1}

PNAS | July 28, 2009 | vol. 106 | no. 30 | 12235–12240

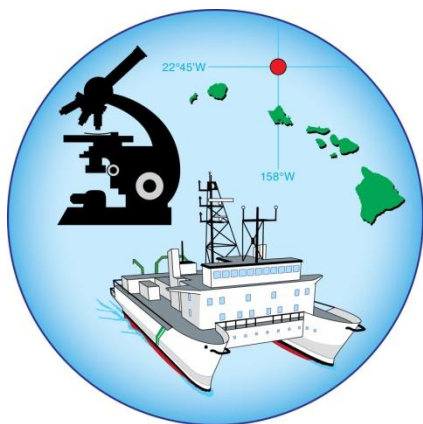
2010 Cozzarelli Prize



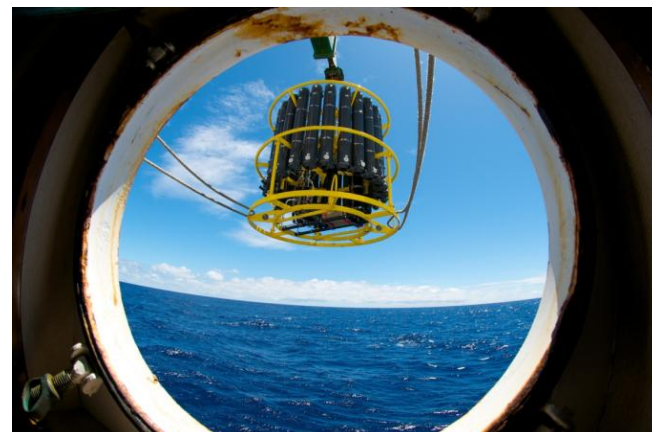
AMERICAN
SOCIETY FOR
MICROBIOLOGY

MILESTONES IN MICROBIOLOGY SITE

University of Hawaii at Manoa
Ocean Station ALOHA



Station ALOHA
has been designated an
ASM Milestones in Microbiology Site
“for historic and visionary accomplishments”





ALOHA

Virtual Issue

The Hawaii Ocean Time-series:
30th Anniversary Collection

Read
Now

ASLO
WILEY

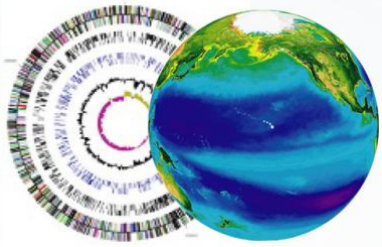
article

Station ALOHA: A Gathering Place for Discovery, Education, and Scientific Collaboration

L&O Bulletin,
2018

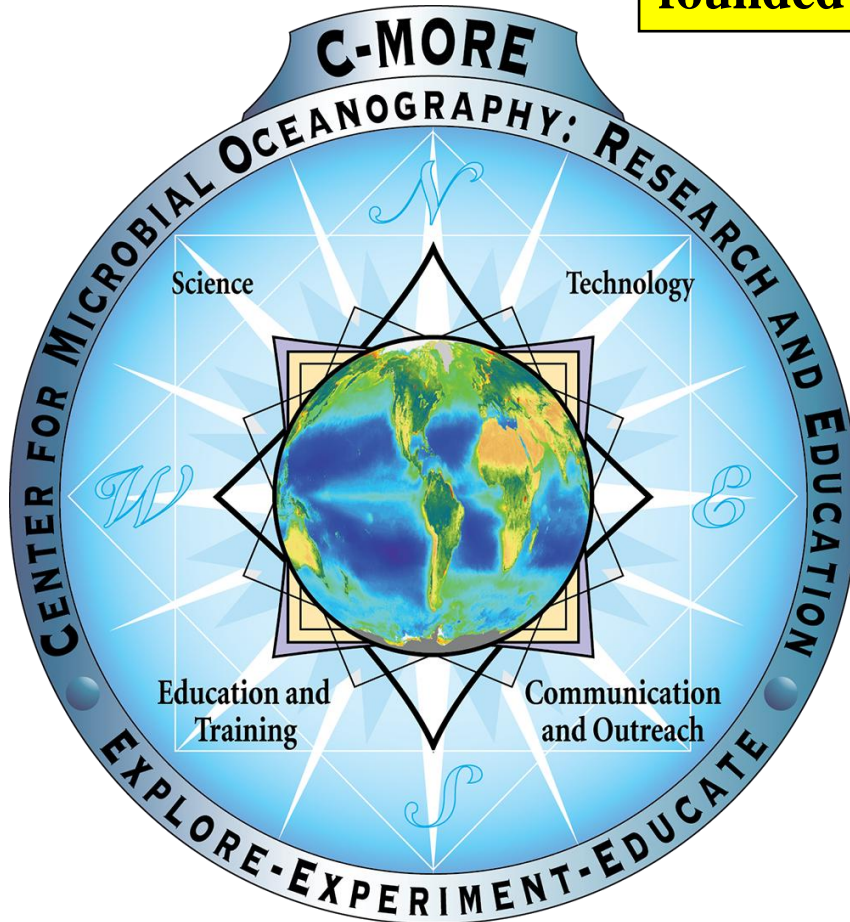
David M. Karl , and Matthew J. Church

- Collection of 60 *L&O* publications on biogeochemical and ecological processes at Station ALOHA
- Includes contributions from several HOT, CMORE and SCOPE investigators and many team members
- Published on 30 Oct 2018, ALOHA's 30th birthday!



center for microbial oceanography: research and education
C-MORE *linking genomes to biomes*

founded 1 Aug 2006

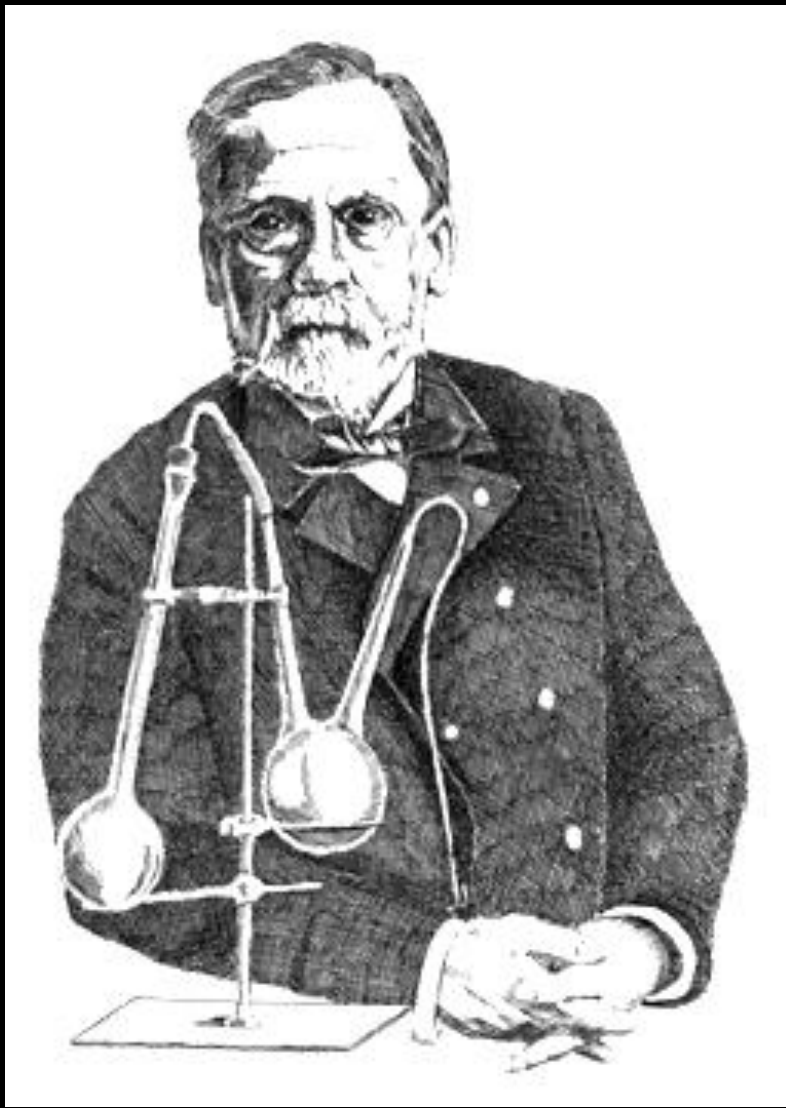


- **Explore**
- **Experiment**
- **Educate**



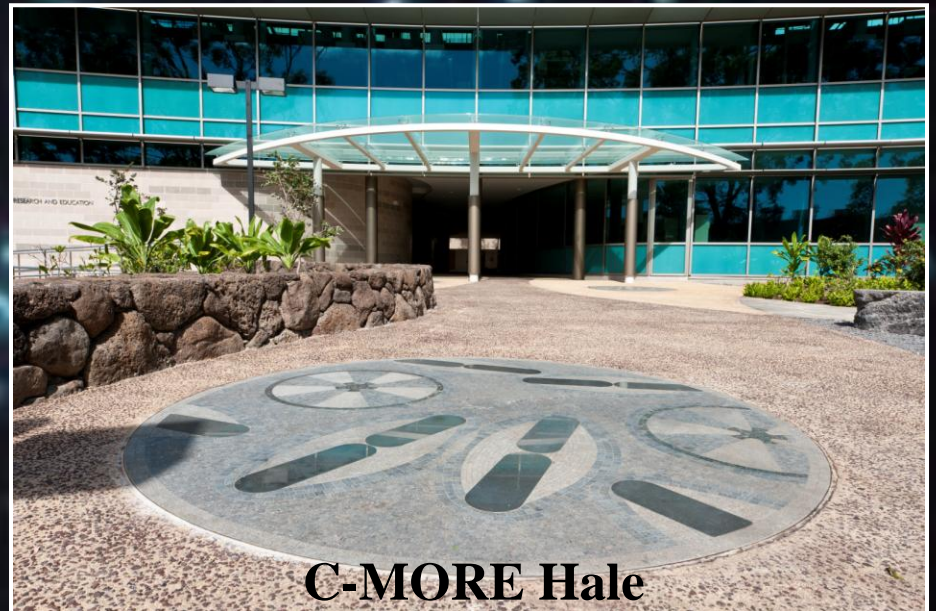
**Science &
Technology
Centers
program**

Create, Collaborate, Communicate



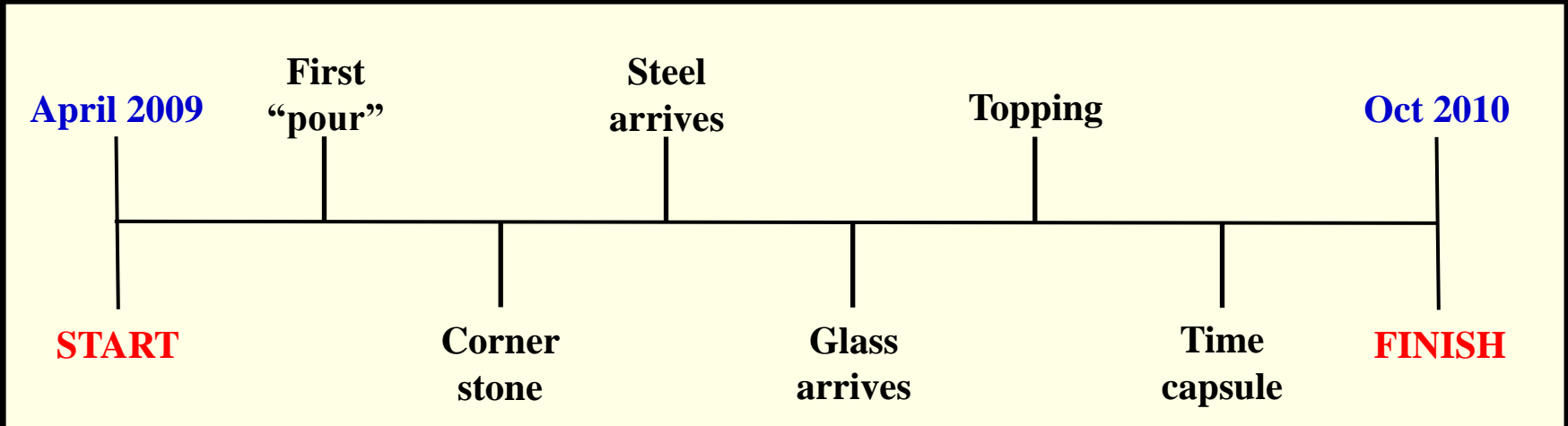
**“Scientific
laboratories are
the temples of
humanity”**

Louis Pasteur



C-MORE Hale

C-MORE Hale: A Vision in the Making



Groundbreaking



15 April 2009

Dedication



25 October 2010

Victor and Peggy Brandstrom Pavel Endowed Chair in Microbial Oceanography



\$9.2 Million Gift Commitment to Transform our Community

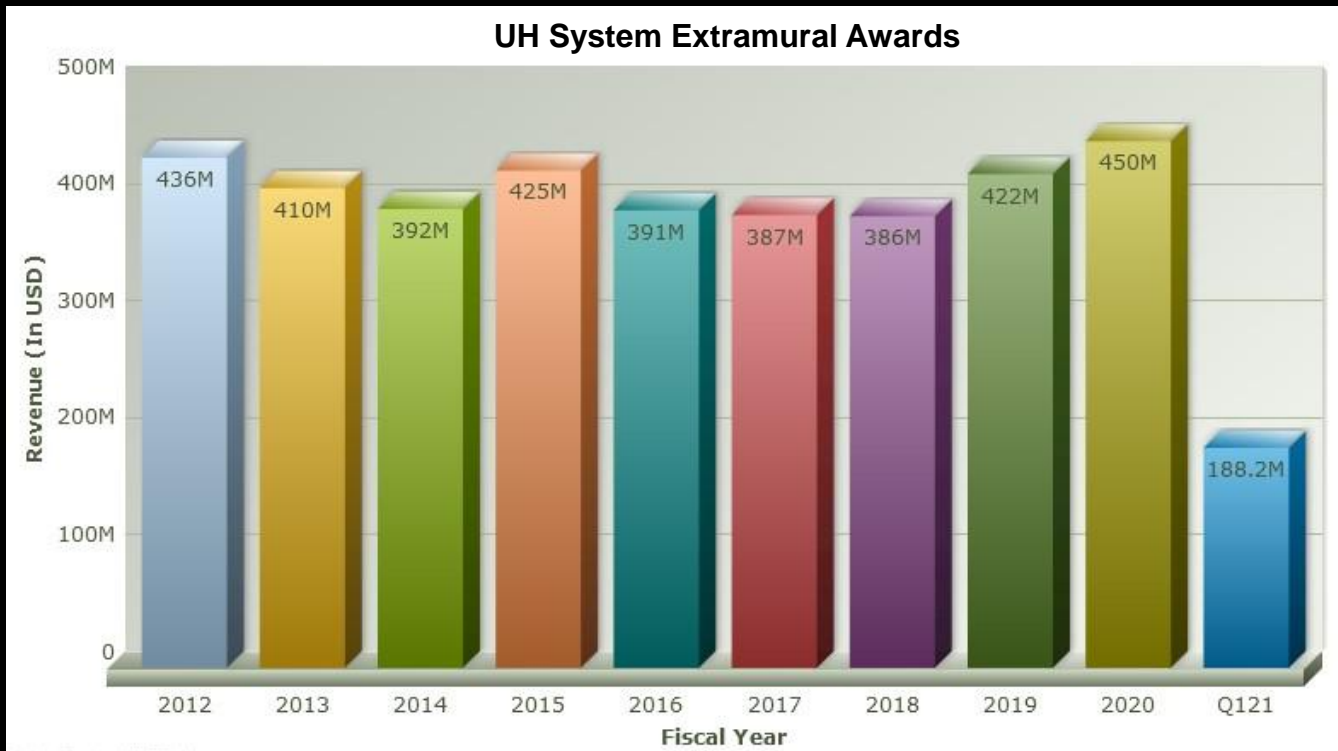
[Home](#) » [News](#) » [Press Releases](#) » \$9.2 Million Gift Commitment to Transform our Community

December 26, 2012

An inspired donor has made one of the largest gift commitments to the University of Hawai'i by a private individual to benefit UH students and research.

The donor's \$9.2M gift will:

- Fund scholarships for underrepresented students on 10 campuses;
- Expand our knowledge of the universe;
- Fuel research in microbial oceanography and grow our knowledge of the tiniest organisms so important to a healthy ocean ecosystem;
- Help build an advanced culinary training facility in Hawai'i;
- Help people live better for longer;
- Save Hawai'i's endangered plants.



SOEST Extramural Awards

2017	\$84.4 M
2018	\$93.0 M
2019	\$97.4 M
2020	\$0.102 B!



THE ECONOMIC IMPACT OF THE UNIVERSITY OF HAWAII SYSTEM

APRIL 16, 2013



**A commissioned
study of
economic impact
of basic research:
\$3.6 B/yr**

The geology of the planet

Welcome to the Anthropocene

Humans have changed the way the world works. Now they have to change the way they think about it, too

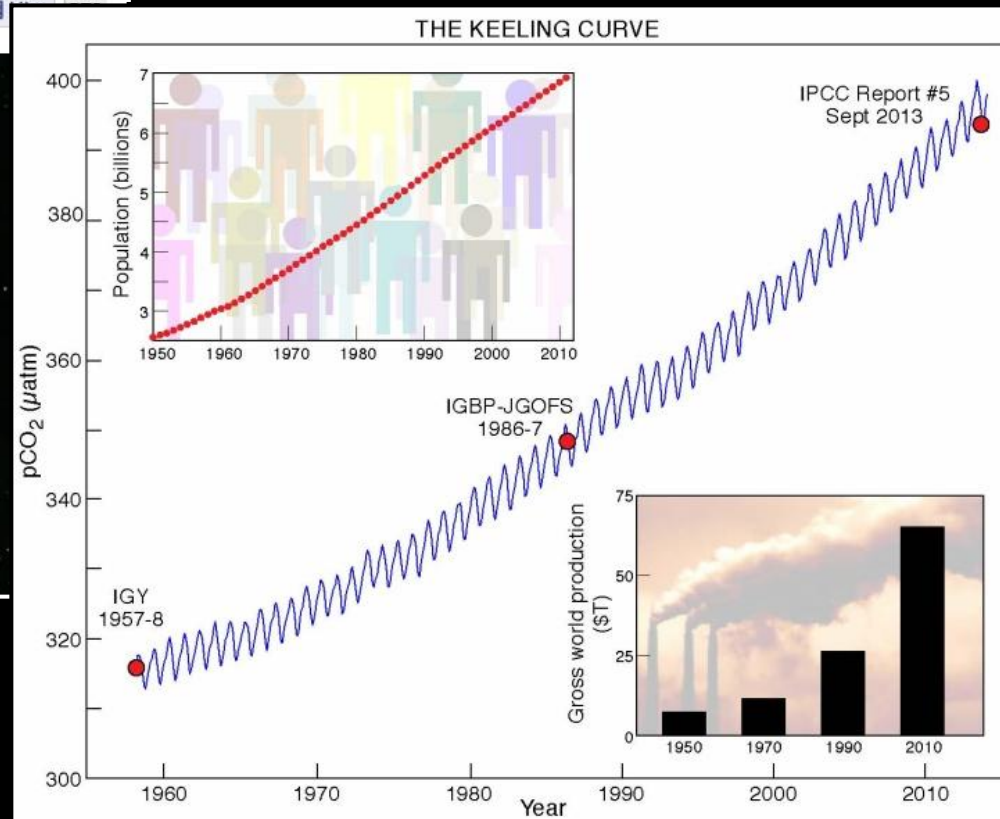
May 26th 2011 | from the print edition

Tweet 41



*The “Larger Context” –
that’s what matters!*

**Science, society and
sustainability are
inextricably linked!**





What is at Stake?



- *Conceptual understanding* of the sea, Earth's largest biome
- *Global productivity* and other ecosystem services
- *Ocean carbon sequestration* and climate
- *Planetary habitability* and human survival

quite a bit!

Feature Panel Discussion

Basic Research as an Industry in Hawaii: Building for the Future



**April 2012
(left to right):**

**James Lally
Steve Case
M.R.C. Greenwood
Dave Karl
James Wei**

**HAWAII EXECUTIVE
CONFERENCE**

***18 April 2012
Kohala Coast, Hawaii***



**The Sky Is
Not the Limit**

The University of Hawai'i Innovation Initiative Reaches for the Stars



www.hawaii.edu/innovation

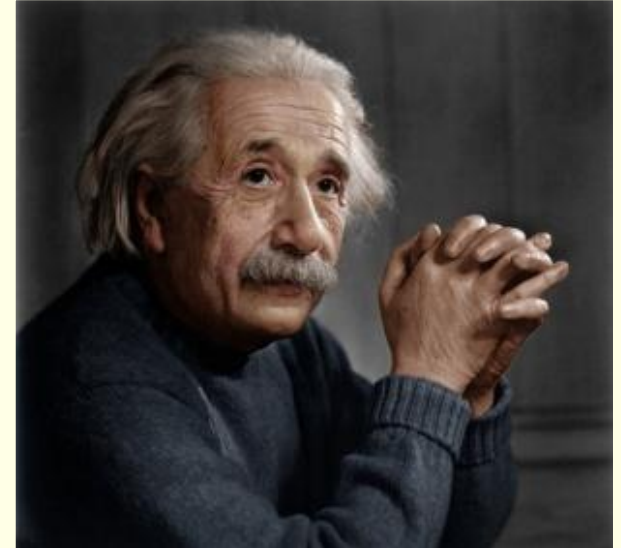
RESEARCH THAT MATTERS

- **An approved BoR initiative**
- **Build a \$1B basic research industry in 5 yr**
- **Identify areas where we have a strategic advantage (e.g., ocean sciences)**
- **Identify top research scientists and recruit them**

“Concentrate your energy, thoughts and capital”

The State of UH Ocean Research: *Building our Legacy*

What have we done
and learned,
and what have we
built for the future?



*“Not everything that can be counted counts,
and not everything that counts can be counted”*

Albert Einstein (1879-1955)

...others may decide our legacy and determine our future...

HAWAI'I BOOK & MUSIC FESTIVAL



HAWAI'I
BOOK & MUSIC
FESTIVAL
A Celebration of Story and Song



Hawai'i 2.0 Shaping Our Future



October 1 - November 4, 2020
presented by the Hawai'i Book & Music Festival
in partnership with University of Hawai'i at Mānoa
Visit hawaiiibookandmusicfestival.com for complete schedule

**“We are the University
of, and for, Hawaii”**



M. Bruno
10 Oct 2020



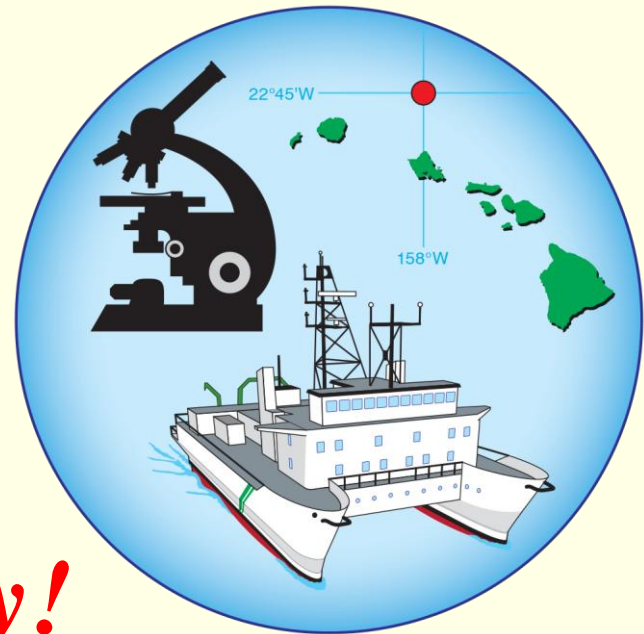
- **President
Lassner**
- **Provost
Bruno**
- **Ocean
scientists
Ed DeLong
and Rick
Rocheleau**

IMAGE DESIGNED BY FREEPIK

SUSTAINABILITY > INNOVATION + TECHNOLOGY > HEALTH + WELLNESS > LITERARY VOICES > INTERNATIONAL STORYTELLING

Karl's View from the Sea

- Important scientific questions
- Enormous education/outreach potential
- Enabling technologies
- Global interest
- UH leadership



The future is today!

Inputs
investments
since 1965

Location

mid-ocean
setting with
access to the
deep sea

People

researchers,
students and
post-docs

Facilities

laboratories and
research vessels

Excellence in Ocean Research



UNIVERSITY
of HAWAII®
SYSTEM



UH RESEARCH

From distant galaxies to the ocean depths ... and everywhere in between

Outcomes
rewards
2020, and beyond

Scholarship

knowledge
gained and
disseminated

Reputation

recruitment and
retention of
world-class
ocean
researchers

Extramural

Funding

business and
economic
development
and more

Research Corporation of the University of Hawai'i (RCUH): A Historical Overview

BOR Committee on Research and Innovation
November 4, 2020



UNIVERSITY
of HAWAII®
SYSTEM

Rationale

- “The rapid and extensive entry of the University of Hawai‘i into basic and applied research programs...requires a much more flexible and streamlined method of operation than is permitted the usual operations of state agencies. In short, the University must be able to function in research activities more like a business, with...highly flexible financial capability, and ease of operations both in- and out-of-state.”

Senate Standing Committee Report No. 836 on House Bill No. 1227, Regular Session of 1965.



“Low hanging fruit”

- Hawai‘i Legislature realized it could facilitate research by fixing the two things within its control
 - Research requires the ability to hire qualified staff at competitive salaries and to let personnel go when grant funding expires. State’s public employment law had to be set aside.
 - Research also requires the ability to procure goods and services quickly so that experiments can be timely conducted to meet sponsor deadlines. State’s procurement law had to be set aside.



RCUH is born

- Act 209 (L 1965) – “Bill for an Act Amending Chapter 44 of the Revised Laws of Hawai`i 1955, as Amended, Relating to the University of Hawai`i, by Establishing the Research Corporation of the University of Hawai`i [....]”



Organization

- [...]The Research Corporation shall be a public instrumentality and shall be a part of the University of Hawai`i for administrative purposes, as provided for in section 14A-4, Revised Laws of Hawai`i 1955, as amended.[...]



Exemptions Part 1 (1965)

- ‘(a) Sections 132-16 and 132-17, Revised Laws of Hawai‘i 1955, as amended[now Sections 36-27 and 36-30], relating to special fund reimbursements to the State general fund;
 - [Generally means RCUH’s special fund is not subject to sweep by the State Director of Finance.]
- ‘(b) Sections 9-21 and 9-38, Revised Laws of Hawai‘i 1955[now Chapter 103D], relating to advertising for bids and purchases to be made in Hawai‘i whenever public moneys are expended;
 - [Generally means RCUH is exempt from what is considered to be a major part of the delay in procurement.]



Exemptions Part 2 (1965)

- ‘(c) Chapter 3, Revised Laws of Hawai‘i 1955[now Chapter 76], as amended, relating to civil service;
- ‘(d) Chapter 4, Revised Laws of Hawai‘i 1955, as amended, relating to compensation[equivalent Chapter 77 was repealed, L 2000]; and
- ‘(e) Section 5-1, Revised Laws of Hawai‘i 1955[now Section 78-1], as amended, relating to public employment.
 - [Generally means that RCUH is exempt from the normal State/UH hiring process and collective bargaining limitations on compensation.]



Takeaways

- RCUH is “administratively attached” to UH for reporting purposes (e.g., annual financial report to state)
 - However, it is governed by a separate board
- RCUH is only exempt from certain State of Hawai`i accounting, personnel, and procurement laws
- RCUH is not exempt from any federal or state laws, statutes, regulations, or policies affecting grants and contracts administration or the conduct of research; service ordering to RCUH does not reduce the bureaucracy involved in compliance with those requirements



RCUH Board Composition

1993 (Per State Auditor's Report 93-10)	1999-2013 (Per HRS)	2014 – Present (Per HRS)
<ul style="list-style-type: none">• Nine-members, appointed by governor subject to senate confirmation	<ul style="list-style-type: none">• Ten members: five members of the board of regents selected by the board of regents; five members appointed by governor subject to senate confirmation	<ul style="list-style-type: none">• Eight members: two members of the board of regents selected by the board of regents; three appointed by governor subject to senate confirmation; one appointed by senate president; one appointed by speaker of the house of representatives.• VP for Research is ex-officio, non-voting member.



Mission Evolution

1993 (Per State Auditor's Report 93-10)	1999-2013 (Per HRS)	2014 – Present (Per HRS)
<ul style="list-style-type: none"> State Auditor identified lack of UH control over RCUH as an issue State Auditor also cited economic development as being incompatible with RCUH mission, which is to primarily service UH 	<ul style="list-style-type: none"> State Auditor report ushered in a period where perception of UH control was reflected in board composition and UH President was president of RCUH 	<ul style="list-style-type: none"> Public disputes over UH management and role of RCUH result in dilution of UH and governor control in board composition and removal of UH President as president of RCUH 2015 State Auditor report cited RCUH failure to assist with economic development as one of its findings



RCUH Executive Directors

Executive Directors , 1965-Present

Frank Calendar, 1965-1969 (Associate Executive Director)

Robert Hiatt, 1969-1971

Richard Lee, 1971-1979

Wytze Gorter, 1979-1984

Fujio Matsuda, 1984-1994

Harold Masumoto, 1994-2003

Gilbert Oshima, 2003-2004 (Acting)

Mike Hamnett, 2004-2015

Sylvia Yuen, 2015-2020

Leonard Gouveia, Jr., 2020-Present



Key Dates

- 1965 – RCUH established
- 1973 – First UH-RCUH internal agreement established



Internal Agreement Sections

1973 Internal Agreement Articles	1996 Internal Agreement Articles
<ul style="list-style-type: none">1 – Appropriate Undertakings and Services to be Provided [....]2 – Processing of Proposals3 – Service Procedure4 – Responsibilities of the University5 – Responsibilities of the Corporation6 – Funding –Corporate Expenses7 – Changes8 - Termination	<ul style="list-style-type: none">1 - Definitions2 – Appropriate Undertakings and Services to be Provided [....]3 – Processing of Proposals4 – Responsibilities of the University5 – Responsibilities of the Corporation6 – University’s Payment for Corporation’s Administrative Services [....]7 – Working Capital; Reimbursement8 - Personnel9 – Equipment Purchases and Inventory10 – Revolving Fund Accounts11 – Intellectual Property12 – Other University Projects13 – Non-University Projects14 - Facilities15 – Miscellaneous



Extramural and other UH projects

- For purposes of this presentation, we are primarily addressing UH extramural projects that are paid for under the management fee
- UH has revolving fund accounts (i.e., recharge centers) and other UH projects (a.k.a., “internal service orders” of university funds such as RTRF) at RCUH that are paid for under a separate fee (currently 2.9%)
- If we include revolving fund accounts and internal service orders, UH accounts for 90% of RCUH’s business on average



Management Fee Evolution

Snapshots from internal agreements, amendments or memorandum

1973	1996	2000	2003
<p><u>Formula:</u> $\frac{\text{UH Projects MTDC}}{\text{All Projects MTDC}} \times \text{Total Corporation Management Support Service Expenses} = \text{University Share of Management Costs}$</p>	<p><u>Formula:</u> 5% - first \$20m of MTDC 4% - \$20+m to \$50m 3% - \$50+m to \$100m 2% - \$100+m</p>	<p><u>Formula:</u> 3.5% of MTDC not to exceed \$1.9 million</p>	<p><u>Formula:</u> 3% of MTDC subject to conditions: If MTDC exceeds \$100 m, the rate shall be 2.5% for the following year; If MTDC exceeds \$125 m for any fiscal year, the rate shall be 2% for the following year; If MTDC does not amount to at least \$75 million, the rate shall be 3.5% for the succeeding year</p>



Management Fee Evolution (cont.)

Snapshots from internal agreements, amendments or memorandum

2007 - Current

UH extramural award MTDC ÷ Total MTDC
(roughly 65% on average) x RCUH budget
= management fee

MTDC is the same as federal MTDC, which is used for computing indirect costs on a grant. MTDC includes costs such as salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and the first \$25,000 of each subaward. In accordance with the federal definition, it excludes costs such as equipment, capital expenditures, scholarships and fellowships, and the portion of each subaward in excess of \$25,000.



RCUH & UH Evolution

- Due to federal audit findings in 1991-1993 major change to UH RCUH Internal Agreement

1973 – Article 4 – Responsibilities of the University	1996 – Article 4 – Responsibilities of the University
1. The University shall be responsible for fulfilling the terms and conditions of the contract/agreement between the University and the Sponsor. [...]	1. The University shall be solely and directly responsible for fulfilling the terms and conditions of extramurally-sponsored research or training awards and for assuring compliance with all sponsor requirements, including, but not limited to compliance with applicable laws and regulations. [...]



RCUH & UH Evolution (cont.)

- 1997 – As part of audit resolution with the Office of Naval Research, UH implemented a new financial system (FMIS); RCUH did not adopt FMIS
- 1998 – RCUH website and online system launched



RCUH & UH Evolution (cont.)

- 2000 – UH President Mortimer signs memo automatically service ordering all extramural awards to RCUH
- 2001 – President Mortimer signs internal agreement amendment establishing that RCUH employees are UH employees to meet requirement of MHPCC contract



RCUH & UH Evolution (cont.)

- 2012 – UH implements Kuali Financial System; RCUH does not, maintaining its own financial system with the strong backing of its UH client base
- 2013 – Restriction added to RCUH exemption regarding construction contracts where 1) state funds are involved and 2) compliance with HRS103D is required by the legislature



Major Construction Projects Service Ordered to RCUH

Construction Project	Original Estimated Cost
John A. Burns School of Medicine	\$150.0 million
UH Cancer Center	\$120.0 million
UH West Oahu Phase 1	\$100.0 million
C-MORE Hale	\$22.5 million
UH Cancer Center Clinical Research Center	\$13.0 million

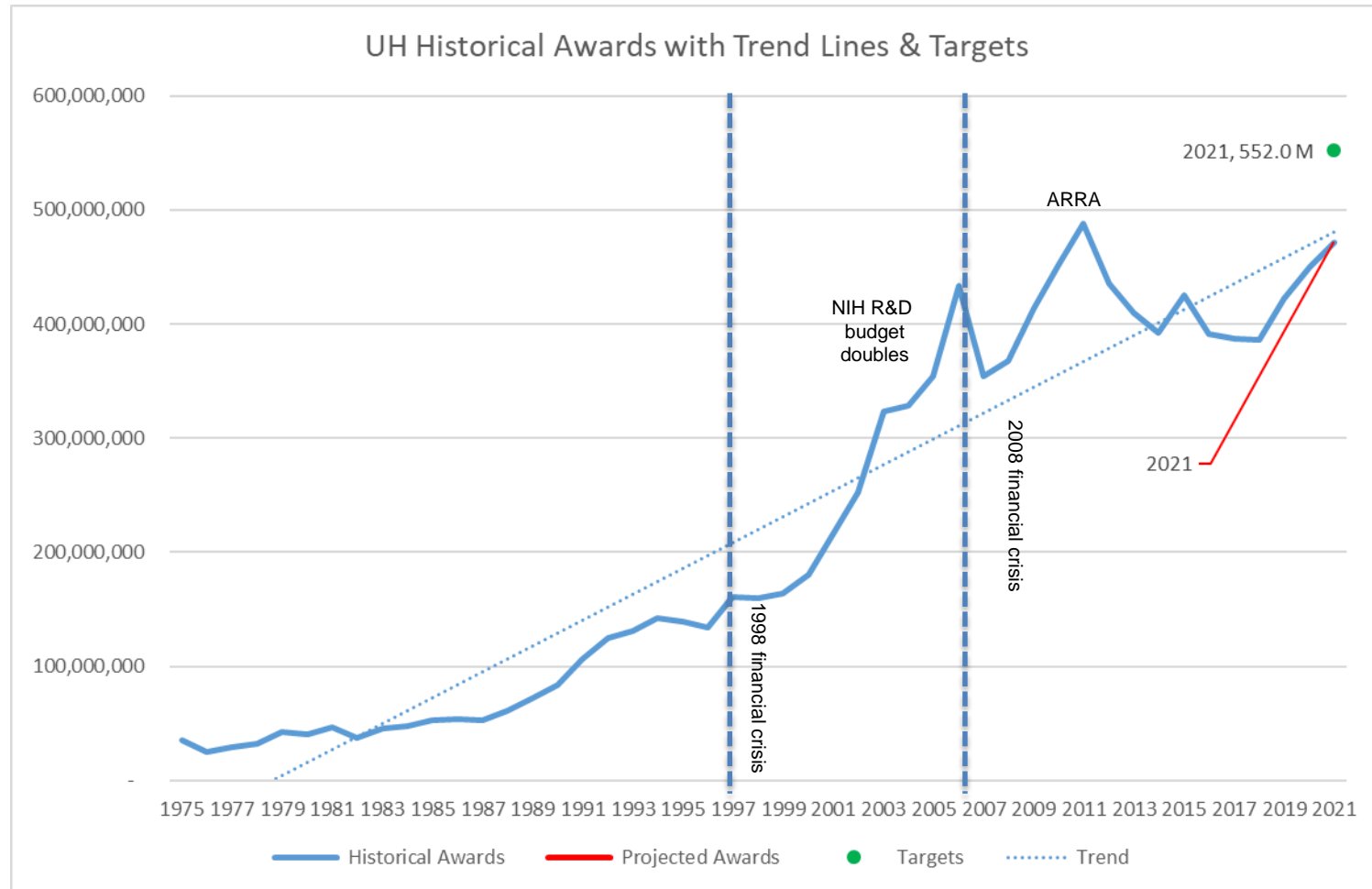


The Benefits of RCUH

- UH retaining 100% of RTRF since 1997 and establishment of basic allocation ratio and management philosophy in 2003 credited with exponential growth in extramural awards between 1997 to 2008
- RCUH has been a very important partner in making this possible



UH Historical Awards



Other Research Corporation or Foundation Models

- Research corporations performing similar functions to RCUH, but within university
 - Georgia Tech Research Corporation reports to VP for Research; does not have a separate board; created under Georgia Board of Regents policy on “cooperative organizations”
- Separate, 501(c)3 foundation setup for innovation and commercialization purposes
 - Washington Research Foundation (works with all Washington State universities)
 - Wisconsin Alumni Research Foundation (assoc. with UW – Madison)

Continuing Issues

- RCUH primarily support UH or reduce UH business?
 - RCUH strategic plan is to diversify to other agencies
- Maintaining separate IT systems costs a lot of money that UH pays as part of management fee
- In the long run, maintaining redundant procurement systems also costs money



FY21 Q1 Extramural Awards Analysis Report

I. Summary

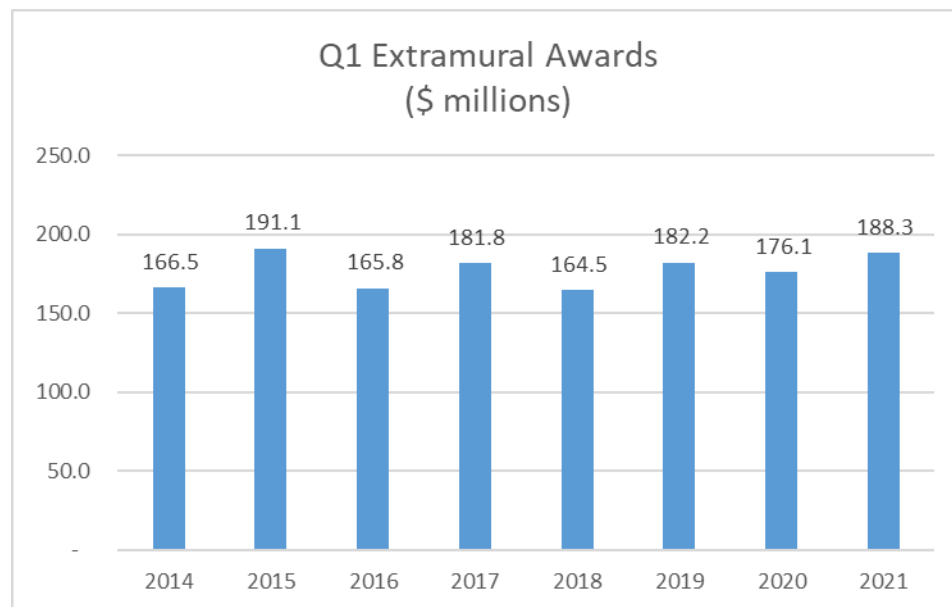
Awards for FY21 Q1 totaled \$188.3 million, which is 6.9% more than FY20 Q1.

II. Quarterly Performance Metrics

Awards for FY21 Q1 were 6.9% more than FY20 Q1. See *IV. Award Trends by Campus* for an explanation of major increases or decreases that contributed to FY21 Q1 results.

Quarterly Extramural Awards
\$ millions

	2014	2015	2016	2017	2018	2019 ¹	2020	2021
Q1	166.5	191.1	165.8	181.8	164.5	182.2	176.1	188.3
Q2	74.7	77.0	56.9	59.5	62.0	76.2	79.1	TBD
Q3	55.4	52.8	66.2	67.1	71.0	77.3	55.7	TBD
Q4	95.7	104.8	102.4	78.6	88.8	90.5	139.5	TBD
FY	392.3	425.7	391.3	387.0	386.3	426.2	450.4	188.3



¹ Unlike prior fiscal years, FY 2019 does not include deobligations or corrections to previously reported amounts. If included, FY 2019 would be \$421.8 million.

III. Significant Awards by Campus

During FY21 Q1, UH received 599 awards from 193 different sponsors. The following table reports the largest awards received this quarter by campus. As expected, because September 30 marks the end of the federal fiscal year, nine of the eleven campuses' largest awards are from federal sponsors.

Campus	Sponsor Type	Sponsor	Project Title	Amount
Mānoa	State and Local	Department of Health	Coordinated Addiction Resource Entry System (CARES) Hawaii	6,000,000
Hilo	Federal	Department of Interior	Cooperative Monitoring and Assessment of Hawaii Volcano Hazards	1,050,469
West O'ahu	Federal	Department of Education	Ho'opuliko Kumu Hou Educational Pathway Project	400,000
Hawai'i CC	Federal	Department of Education	Manai-a-Maui: Transforming Institutions with an Indigenous Framework	450,000
Honolulu CC	Federal	Department of Education	Ola Niuhelewai - Improving Native Hawaiian Success through Well-Being	450,000
Kapi'olani CC	Federal	Department of Education	Kuloaa - Advancing Indigenous Innovators	449,643
Kaua'i CC	Federal	Department of Education	Keleka'a Ho'ona'auo: Education Delivered Through Distance Education	449,846
Leeward CC	Federal	Department of Education	Ke Ala 'Anu'u: The Path of Steps	442,299
Maui College	State and Local	Department of Human Services	CWS SHAKA	1,950,000
Windward CC	Federal	Department of Education	Mala Aoao Kaiaulu Growing a Garden of Speakers in Our Community	499,927
UH System ²	Federal	Department of Defense	Oahu and Makua Implementation of Endangered Species Management, US Army Garrison, Hawaii	5,538,100

² UH System represents units under Vice Presidents that receive extramural funding. Examples include the P20 and Gear Up grants under the VP for Academic Affairs; Maui High Performance Computing Center and Pacific Disaster Center contracts under the VP for Information Technology; Applied Research Laboratory task orders under the VP for Research and Innovation; and the Pacific Business Center Program under the VP for Community Colleges.

IV. Award Trends by Campus

The following table summarizes the awards received this quarter by campus.

Q1 Award Amounts by Location					
\$ millions					
Campus	2018	2019	2020	2021	2021-20 Change ³
Mānoa	112.6	129.7	135.3	129.1	-4.6%
Hilo	7.5	8.9	6.2	7.2	16.4%
West O'ahu	5.1	3.0	1.4	1.5	6.1%
Hawai'i CC	0.4	0.2	0.3	1.1	282.9%
Honolulu CC	1.0	0.8	0.4	1.3	255.3%
Kapi'olani CC	3.7	3.1	1.4	1.5	4.0%
Kaua'i CC	0.9	0.7	0.1	0.8	738.1%
Leeward CC	3.0	2.6	0.3	0.8	127.9%
Maui College	9.7	8.2	6.1	7.6	25.8%
Windward CC	5.8	5.6	2.4	3.6	48.3%
Total CC's	24.5	21.2	11.0	16.7	51.8%
UH System	14.8	19.4	22.2	33.8	51.8%
TOTAL	164.5	182.2	176.1	188.3	6.9%

Major dollar increases and decreases are attributed as follows:

Hawai'i CC increase: The increase is attributed to a timing difference. Two US Department of Education award increments totaling \$849,824 were reported in FY21 Q1. The comparable award increments were reported in FY20 Q2.

Honolulu CC increase: The increase is attributed to two US Department of Education awards totaling \$900,000. One of these awards is an incremental award with a timing difference. The \$450,000 award was reported in FY21 Q1. The comparable award increment was reported in FY20 Q2.

Kaua'i CC increase: The increase is attributed to a timing difference. Two US Department of Education award increments totaling \$829,296 were reported in FY21 Q1. The initial awards were reported in FY20 Q2.

UH Hilo increase: The increase is attributed to a new \$950,000 US Department of Education award.

³ The percent change over the prior year is calculated using the actual figures not the rounded figures.

UH Mānoa decrease:

The overall decrease is attributed to two factors:

- There was a decrease of 65 awards in the \$100,000 - \$499,000 range, which accounted for -\$14.9 million.
- The large decrease was offset by large awards such as the \$6.0 million Hawai'i Department of Human Services award.

UH Maui College increase: The increase is attributed to the \$1.9 million Hawai'i Department of Human Services award.

UH System increase

The increase is attributed to three sponsors:

- Timing difference for a \$1.4 million Hawaii Department of Human Services award. The comparable award was reported in FY20 Q2.
- Seven Department of Defense awards totaling \$6.7 million. Six are new awards totaling \$5.1 million. Around \$1.5 million is for an award with a timing difference. Its comparable award was incrementally funded between FY20 Q2 to Q4.
- A new \$3.1 million National Science Foundation award. The prior award's last increment reported in FY 20 Q1 was \$597,125.

Windward CC increase: The increase is attributed to three US Department of Education awards totaling around \$1,200,000. One of these awards is an incremental award with a timing difference. The \$447,640 award is reported in FY21 Q1. The comparable award increment was reported in FY20 Q2.

V. Forecast vs. Actuals

Results for FY 21 Q1 were about \$5.2 million or 2.8% more than forecast.

FY 2021	Forecast	Actual	Variance
Q1	183.1	188.3	2.8%
Q2	63.8	TBD	N/A
Q3	73.0	TBD	N/A
Q4	96.4	TBD	N/A
Total	416.3	188.3	N/A

Extramural Sponsor Awards Quarterly Summary

<u>Program Type</u>	Jul 1 - Sep 30 2020		Jul 1 - Sep 30 2019	
	<u>Count</u>	<u>Amount</u>	<u>Count</u>	<u>Amount</u>
Research	310	\$ 85,072,631	375	\$ 84,416,314
Non-Research	289	\$103,981,424	271	\$ 92,198,299
<u>Total</u>	<u>599</u>	<u>\$189,054,055</u>	<u>646</u>	<u>\$176,614,613</u>

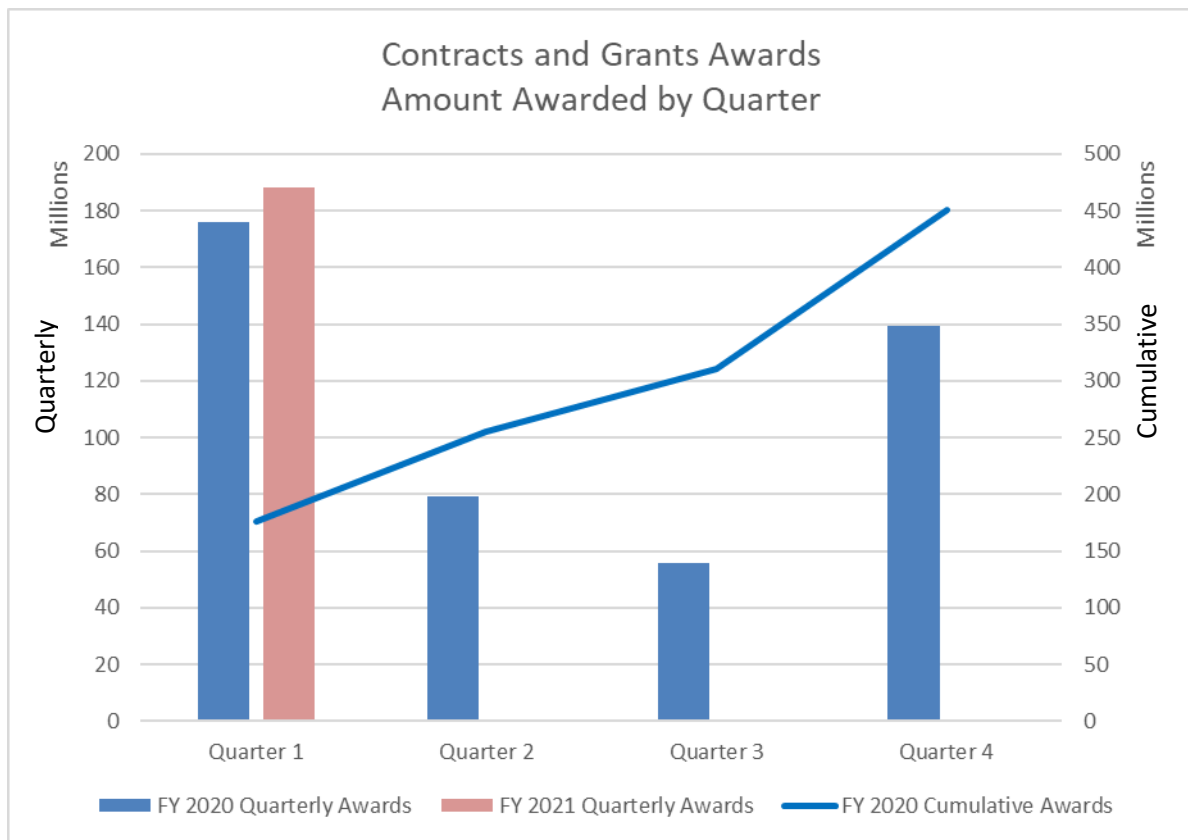
Note: The detailed award listing is available at:

<http://www.ors.hawaii.edu/index.php/bor-reports>

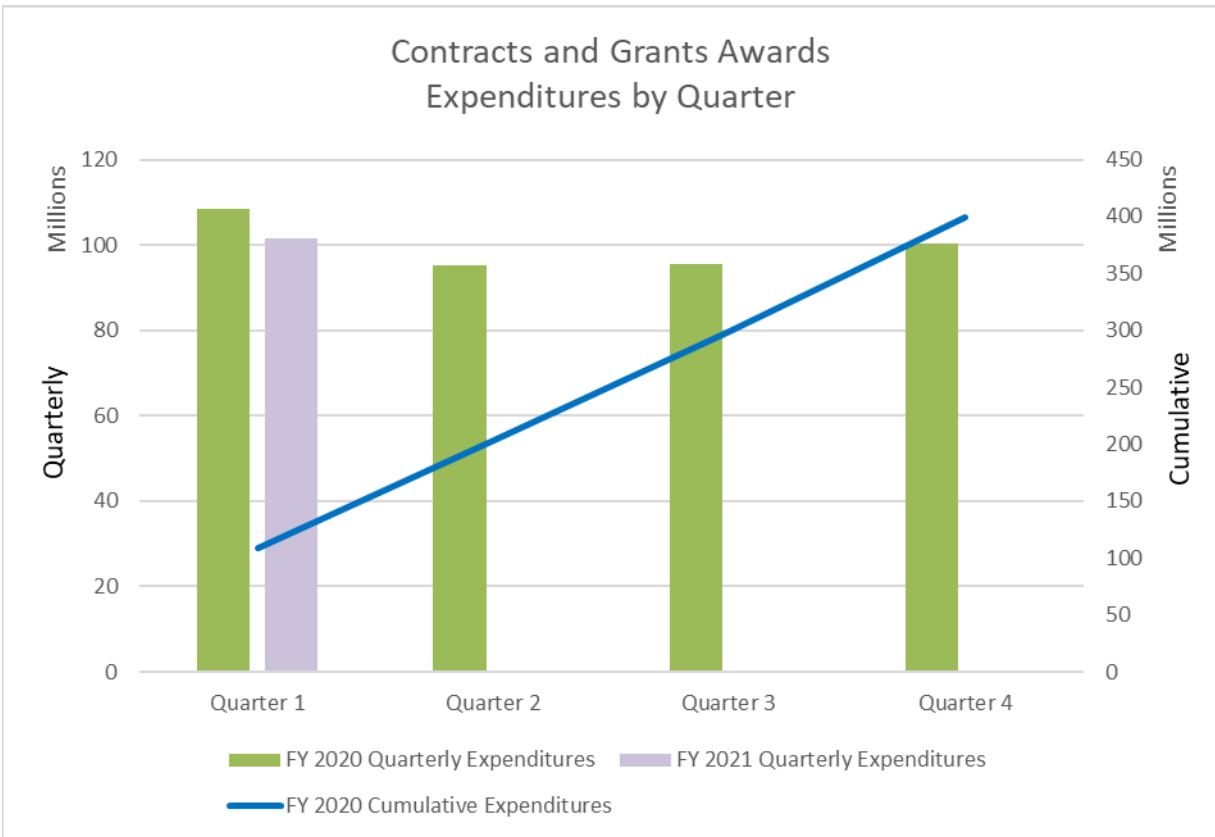
The FY 2020 year-to-date total was: \$176,130,086

The unofficial FY 2021 year-to-date total is: 599 awards totaling
\$188,277,560

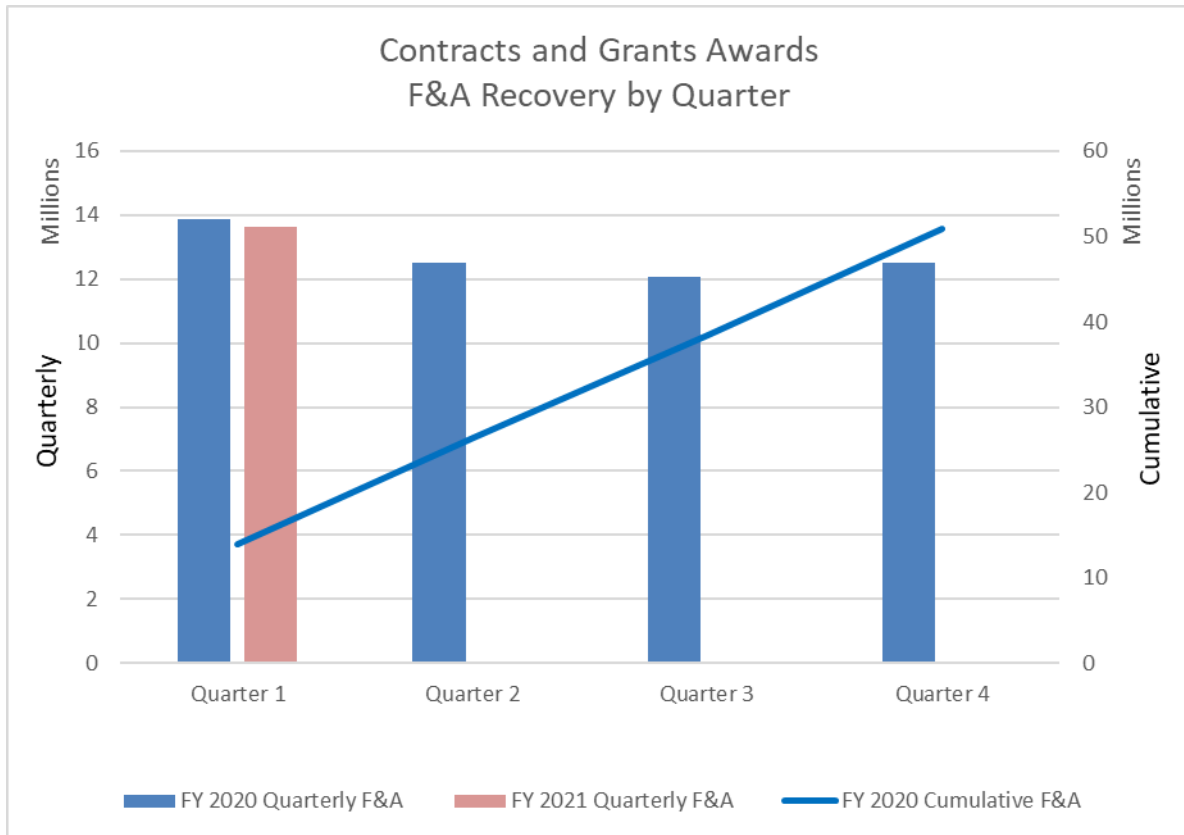
Contracts and Grants Awards
As of Quarter One – FY 2021



Contracts and Grants Expenditures
As of Quarter One – FY 2021



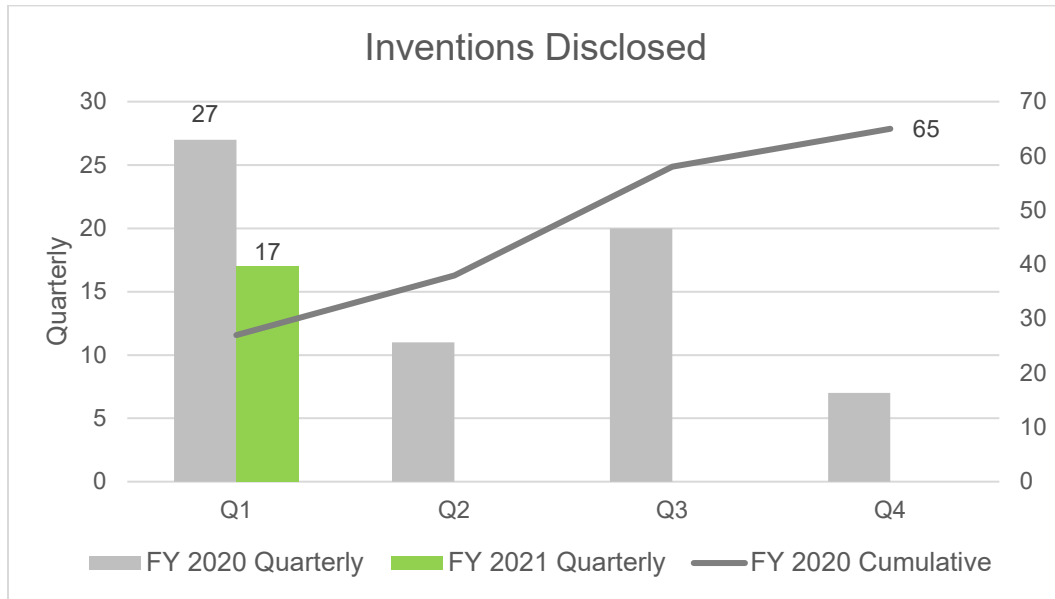
Contracts and Grants F&A Recovery
As of Quarter One – FY 2021



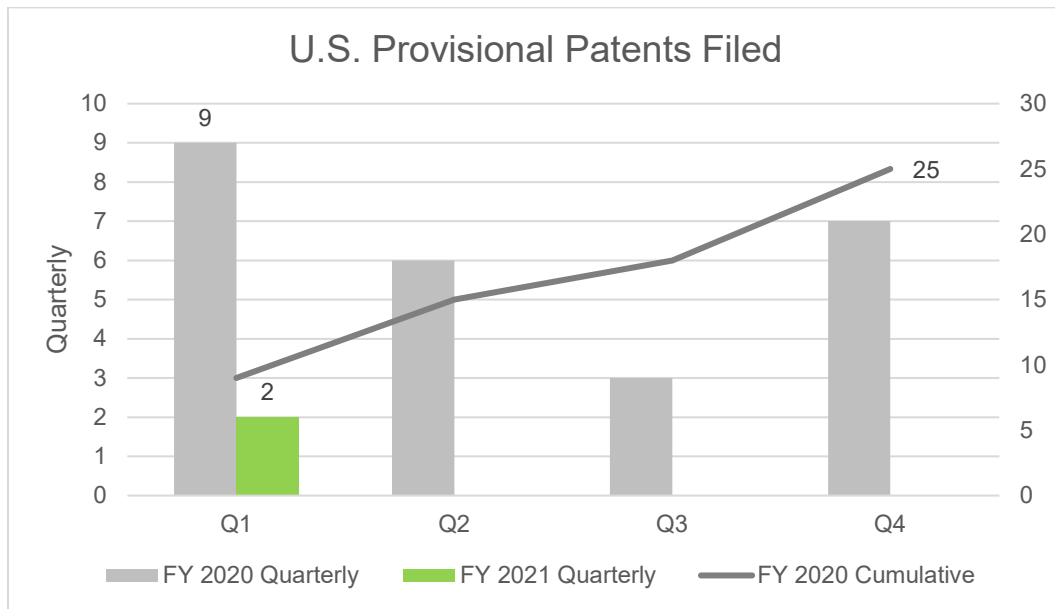
OIC Research & Innovation Metrics FY 2021 – First Quarter Summary

	FY 2021	FY 2020
<u>Metric</u>	<u>7/1/20 – 9/30/20</u>	<u>7/1/19 – 9/30/19</u>
Invention Disclosures	17	27
U.S. Provisional Patents Filed	2	9
U.S. Non-Provisional Patents Filed	4	6
U.S. Non-Provisional Patents Issued	2	1
License & Option Agreements Executed	2	2
Active License & Option Agreements	147	137
Royalty Revenue	\$87,123.95	\$26,404.25
Start-Up Support	24	0

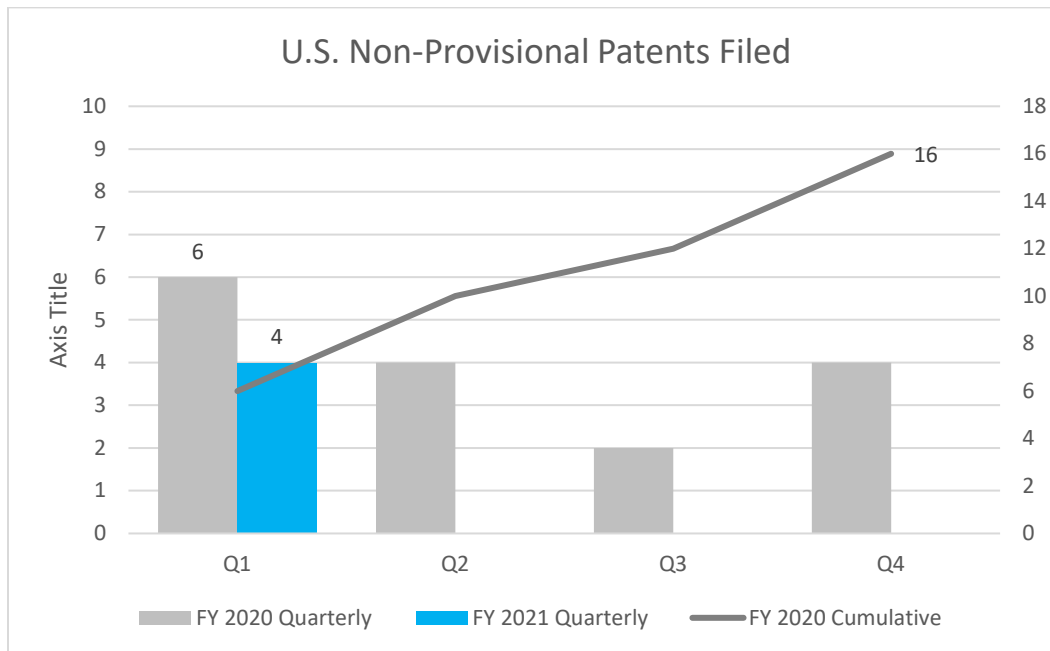
Invention Disclosures
As of Quarter One – FY 2021



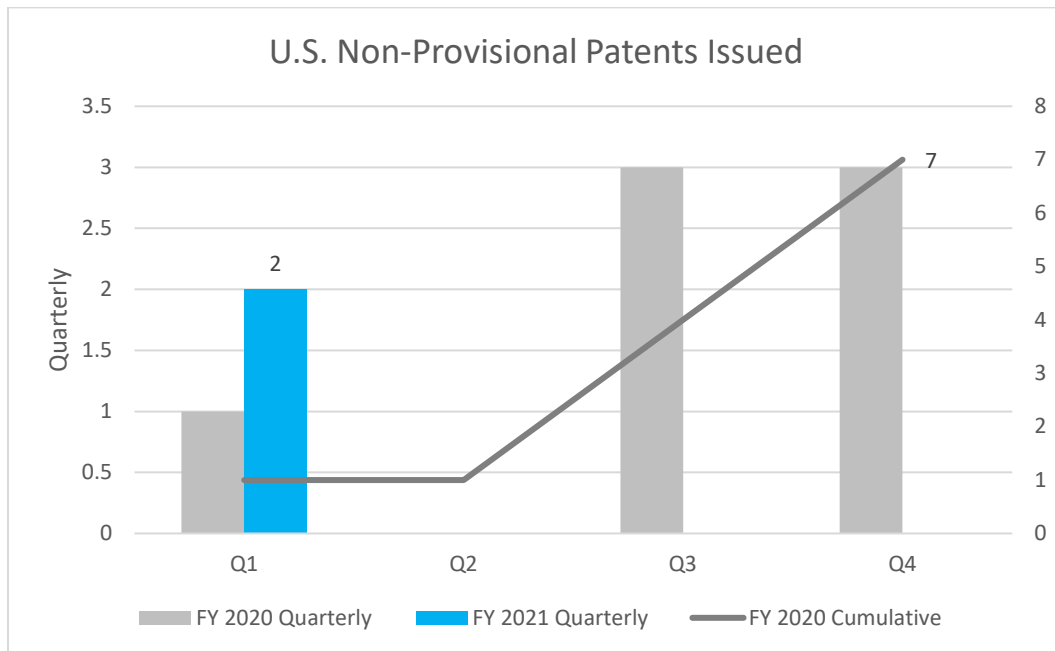
U.S. Provisional Patents Filed
As of Quarter One – FY 2021



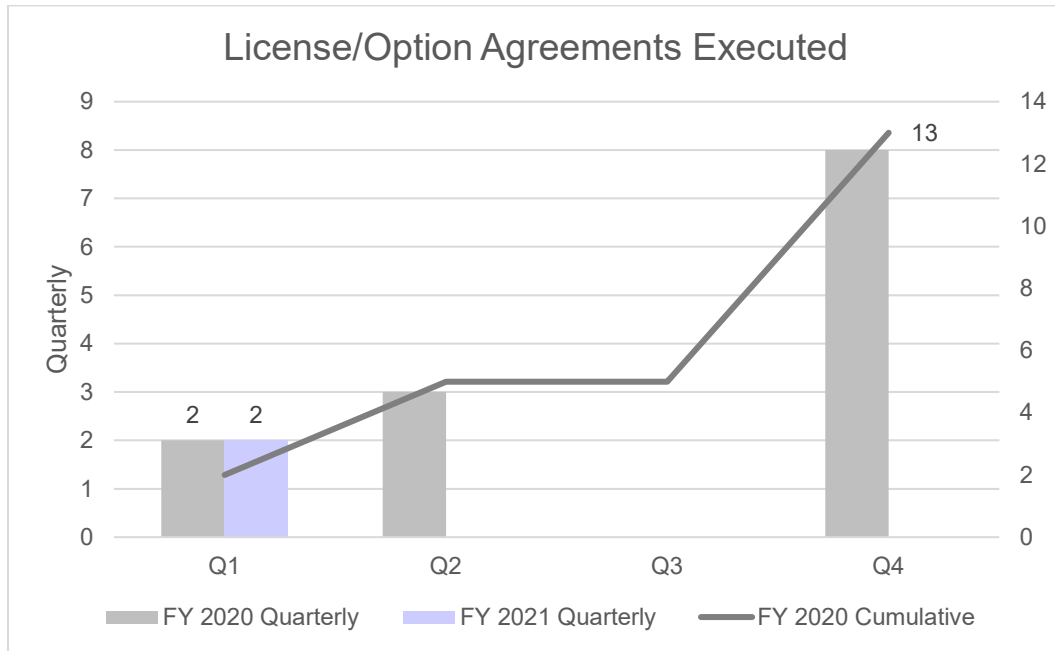
U.S. Non-Provisional Patents Filed
As of Quarter One – FY 2021



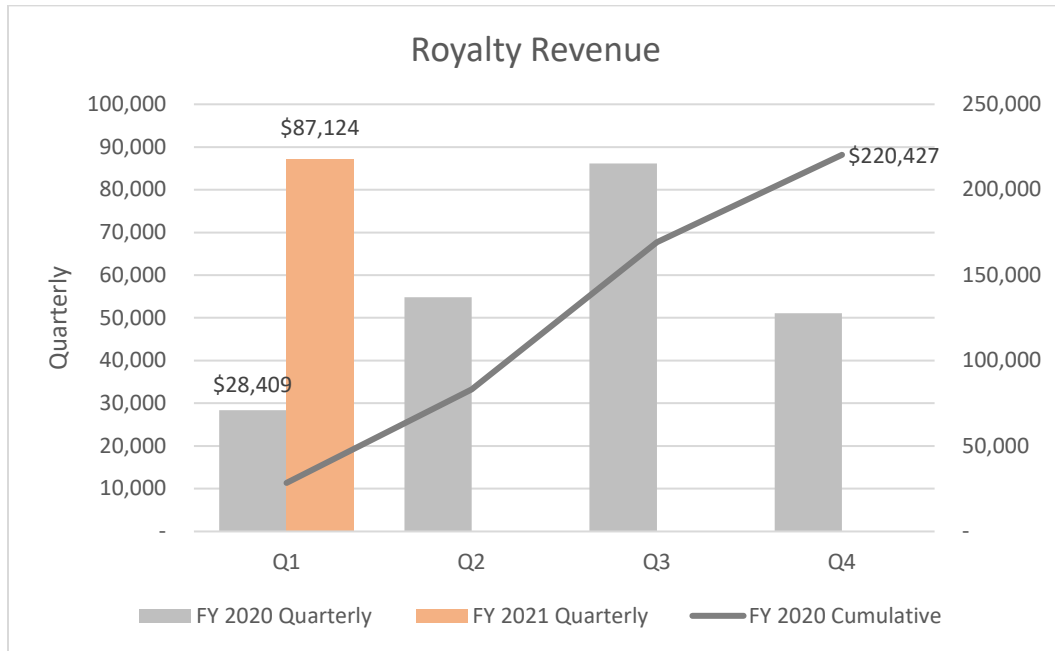
U.S. Non-Provisional Patents Issued
As of Quarter One – FY 2021



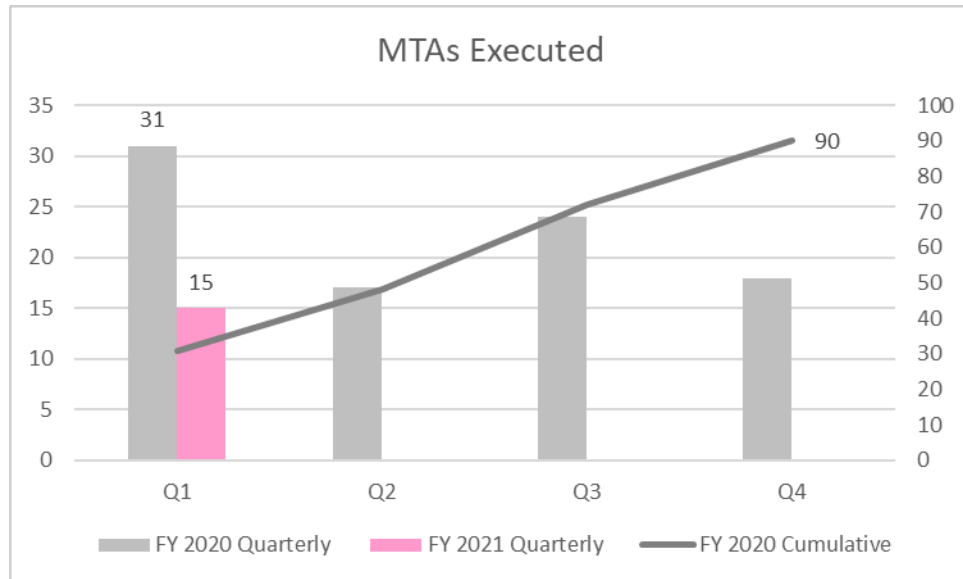
License/Option Agreements
As of Quarter One – FY 2021



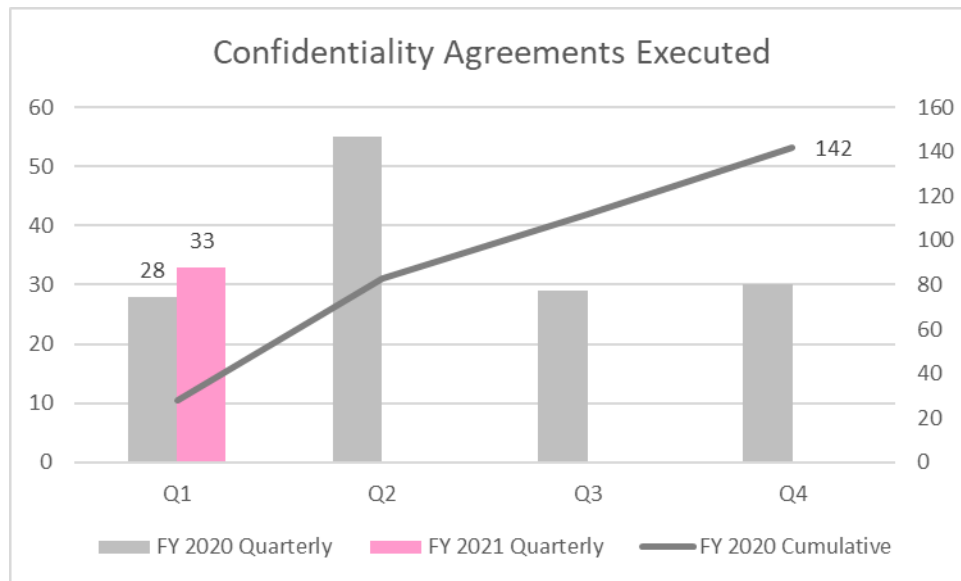
Royalty Revenue
As of Quarter One – FY 2021



Material Transfer Agreements Executed
As of Quarter One – FY 2021



Confidentiality Agreements Executed
As of Quarter One – FY 2021



FY 2021 Monthly Report of Awards to Date as of September 30, 2020						
Summary By Campus						
Campus	FY 2020		FY 2021		\$ Change	% Change
	Award Count	Award Amount	Award Count	Award Amount		
Hawai'i Community College	7	298,512	5	1,143,074	844,562	282.9%
Honolulu Community College	3	356,867	5	1,252,493	895,626	251.0%
Kapi'olani Community College	4	1,437,279	10	1,512,428	75,149	5.2%
Kaua'i Community College	2	100,000	3	838,117	738,117	738.1%
Leeward Community College	2	330,000	5	752,162	422,162	127.9%
University of Hawai'i Maui College	13	6,054,072	16	7,614,101	1,560,029	25.8%
Windward Community College	7	2,430,454	12	3,603,295	1,172,841	48.3%
Subtotal Community Colleges and UH Maui College	38	11,007,184	56	16,715,670	5,708,486	51.9%
University of Hawai'i at Hilo	38	6,194,539	36	7,249,053	1,054,514	17.0%
University of Hawai'i at Manoa	546	135,793,280	473	129,783,103	(6,010,177)	-4.4%
University of Hawai'i at West O'ahu	6	1,391,922	7	1,495,000	103,078	7.4%
University of Hawai'i System	18	22,227,688	27	33,811,229	11,583,541	52.1%
Grand Total	646	176,614,613	599	189,054,055	12,439,442	7.0%
FY 2021 Monthly Report of Awards to Date as of September 30, 2020						
Campus Details						
Campus	FY 2020		FY 2021		\$ Change	% Change
	Award Count	Award Amount	Award Count	Award Amount		
Hawai'i Community College	7	298,512	5	1,143,074	844,562	282.9%
Chancellor, Hawaii Community College	7	298,512	5	1,143,074	844,562	282.9%
Academic Affairs (Hawaii CC)	1	75,000	-	-	(75,000)	-100.0%
Chancellor, Hawaii Community College	2	34,500	2	849,824	815,324	2363.3%
Office of Continuing Education & Training	3	182,985	1	75,000	(107,985)	-59.0%
UH Center at West Hawai'i	1	6,027	2	218,250	212,223	3521.2%
Honolulu Community College	3	356,867	5	1,252,493	895,626	251.0%
Chancellor, Honolulu Community College	3	356,867	5	1,252,493	895,626	251.0%
Chancellor, Honolulu Community College	1	264,867	1	274,137	9,270	3.5%
Pacific Center for Advanced Technology Training	1	40,000	-	-	(40,000)	-100.0%
Transportation and Trades Programs	-	-	1	26,356	26,356	100.0%
University College	1	52,000	3	952,000	900,000	1730.8%
Kapi'olani Community College	4	1,437,279	10	1,512,428	75,149	5.2%
Chancellor, Kapiolani Community College	4	1,437,279	10	1,512,428	75,149	5.2%
Chancellor, Kapiolani Community College	1	796,527	1	449,963	(346,564)	-43.5%
Continuing Education / Non-Credit Program	1	30,000	2	129,897	99,897	333.0%
Emergency Medical Services	1	240,000	2	389,480	149,480	62.3%
Health Academic Program	-	-	1	6,000	6,000	100.0%
Health Sciences	-	-	3	153,360	153,360	100.0%
Student Support Services	1	370,752	1	383,728	12,976	3.5%
Kaua'i Community College	2	100,000	3	838,117	738,117	738.1%
Chancellor, Kauai Community College	2	100,000	3	838,117	738,117	738.1%
Chancellor, Kauai Community College	1	60,000	3	838,117	778,117	1296.9%
Continuing Education and Training (Kauai CC)	1	40,000	-	-	(40,000)	-100.0%
Leeward Community College	2	330,000	5	752,162	422,162	127.9%
Chancellor, Leeward Community College	2	330,000	5	752,162	422,162	127.9%
Arts and Sciences	-	-	2	472,299	472,299	100.0%
Chancellor, Leeward Community College	1	80,000	-	-	(80,000)	-100.0%
Continuing Education and Workforce Development	1	250,000	2	277,488	27,488	11.0%
Drama and Theatre (Leeward CC)	-	-	1	2,375	2,375	100.0%
University of Hawai'i at Hilo	38	6,194,539	36	7,249,053	1,054,514	17.0%
Chancellor, UH Hilo	1	860,827	1	816,522	(44,305)	-5.1%
Chancellor, UH Hilo	1	860,827	1	816,522	(44,305)	-5.1%
College of Agriculture, Forestry and Natural Resource Mgt	1	198,946	1	30,000	(168,946)	-84.9%
College of Agriculture, Forestry and Natural Resource Mgt	-	-	1	30,000	30,000	100.0%
Pacific Aquaculture and Coastal Resources Ctr	1	198,946	-	-	(198,946)	-100.0%
College of Arts and Sciences	13	1,950,312	11	2,161,328	211,016	10.8%
Anthropology (UH Hilo)	1	816,244	-	-	(816,244)	-100.0%
College of Arts and Sciences	2	394,125	2	1,069,006	674,881	171.2%
College of Natural and Health Sciences	-	-	3	256,082	256,082	100.0%
Geography (UH Hilo)	3	271,741	2	260,000	(11,741)	-4.3%
Marine Science	-	-	2	239,143	239,143	100.0%
Mathematics (UH Hilo)	1	118,807	-	-	(118,807)	-100.0%
Natural Sciences Division	5	249,398	-	-	(249,398)	-100.0%
Sociology (UH Hilo)	-	-	1	150,322	150,322	100.0%
Tropical Conservation Biology and Environmental Science	1	99,997	1	186,775	86,778	86.8%
College of Business and Economics	-	-	1	76,956	76,956	100.0%
College of Business and Economics	-	-	1	76,956	76,956	100.0%
College of Continuing Education and Community Svc	1	40,000	-	-	(40,000)	-100.0%
College of Continuing Education and Community Svc	1	40,000	-	-	(40,000)	-100.0%
College of Pharmacy	3	108,175	2	176,931	68,756	63.6%
College of Pharmacy	1	49,980	-	-	(49,980)	-100.0%
Pharmaceutical Sciences	1	30,000	2	176,931	146,931	489.8%
Pharmacy Practice	1	28,195	-	-	(28,195)	-100.0%
Imiloa Astronomy Center Of Hawaii	1	91,000	2	240,945	149,945	164.8%

FY 2021 Monthly Report of Awards to Date as of September 30, 2020						
Summary By Campus						
Campus	FY 2020		FY 2021		\$ Change	% Change
	Award Count	Award Amount	Award Count	Award Amount		
Imiloa Astronomy Center Of Hawaii	1	91,000	2	240,945	149,945	164.8%
Ka Haka'Ula O Ke'Elikolani-UHH	1	781,861	2	1,200,000	418,139	53.5%
Hale Kuamo'o Center	1	781,861	1	950,000	168,139	21.5%
Ka Haka'Ula O Ke'Elikolani-UHH	-	-	1	250,000	250,000	100.0%
Vice Chancellor for Administrative Affairs	2	4,375	2	22,500	18,125	414.3%
Vice Chancellor for Administrative Affairs	2	4,375	2	22,500	18,125	414.3%
Vice Chancellor for Research	10	738,560	8	750,349	11,789	1.6%
Vice Chancellor for Research	10	738,560	8	750,349	11,789	1.6%
Vice Chancellor for Student Affairs	5	1,420,483	6	1,773,522	353,039	24.9%
Center For Gifted And Talented Native Hawaiian Children	1	630,588	-	-	(630,588)	-100.0%
Student Affairs - Kipuka	-	-	1	630,588	630,588	100.0%
Vice Chancellor for Student Affairs	4	789,895	5	1,142,934	353,039	44.7%
University of Hawai'i at Manoa	546	135,793,280	473	129,783,103	(6,010,177)	-4.4%
College of Arts and Humanities	8	392,632	4	277,821	(114,811)	-29.2%
College of Arts and Humanities	-	-	1	81,993	81,993	100.0%
History (UH Manoa)	3	101,693	-	-	(101,693)	-100.0%
Music (UH Manoa)	-	-	1	4,848	4,848	100.0%
Philosophy (UH Manoa)	1	5,000	-	-	(5,000)	-100.0%
Religion (UH Manoa)	2	15,369	-	-	(15,369)	-100.0%
Theatre and Dance	-	-	1	1,633	1,633	100.0%
UHM Uehiro Academy for Philosophy and Ethics in Education	2	270,570	1	189,347	(81,223)	-30.0%
College of Education	25	7,272,799	20	7,659,945	387,146	5.3%
Center on Disability Studies/University Affiliated Pgms	14	4,960,038	11	5,045,140	85,102	1.7%
College of Education	1	11,440	1	1,219,991	1,208,551	10564.3%
Curriculum Research and Development Group	2	969,977	3	419,661	(550,316)	-56.7%
Department of Curriculum Studies	2	753,312	1	463,133	(290,179)	-38.5%
Department of Special Education	3	289,987	1	43,111	(246,876)	-85.1%
Institute for Teacher Education	3	288,045	3	468,909	180,864	62.8%
College of Engineering	24	4,075,755	13	1,102,315	(2,973,440)	-73.0%
Civil and Environmental Engineering	9	761,928	2	74,058	(687,870)	-90.3%
College of Engineering	1	534,883	-	-	(534,883)	-100.0%
Electrical Engineering	6	1,211,601	4	224,407	(987,194)	-81.5%
Hawaii Center for Advanced Communications	1	100,032	-	-	(100,032)	-100.0%
Mechanical Engineering	7	1,467,311	7	803,850	(663,461)	-45.2%
College of Language, Linguistics and Literature	6	1,091,382	5	610,761	(480,621)	-44.0%
Department of East Asian Languages and Literature	3	991,638	3	514,672	(476,966)	-48.1%
Department of English	-	-	1	77,331	77,331	100.0%
Department of Linguistics	3	99,744	1	18,758	(80,986)	-81.2%
College of Natural Sciences	72	11,951,744	56	6,291,717	(5,660,027)	-47.4%
Department of Biology (Biology Program)	4	600,296	2	186,011	(414,285)	-69.0%
Department of Botany	54	8,280,844	39	4,788,197	(3,492,647)	-42.2%
Department of Chemistry	2	453,953	2	155,139	(298,814)	-65.8%
Department of Mathematics	1	241,835	6	703,343	461,508	190.8%
Department of Physics and Astronomy	7	1,826,429	5	414,612	(1,411,817)	-77.3%
Information and Computer Sciences	4	548,387	2	44,415	(503,972)	-91.9%
College of Social Sciences	34	8,955,755	26	9,209,888	254,133	2.8%
College of Social Sciences	3	157,222	1	199,609	42,387	27.0%
Department of Anthropology	3	80,790	2	116,236	35,446	43.9%
Economics (UH Manoa)	2	41,163	-	-	(41,163)	-100.0%
Ethnic Studies	-	-	1	91,116	91,116	100.0%
Geography (UH Manoa)	2	389,308	1	63,198	(326,110)	-83.8%
Psychology (UH Manoa)	6	1,243,271	4	1,159,870	(83,401)	-6.7%
Public Administration	-	-	1	12,500	12,500	100.0%
School of Communications	1	18,755	2	59,982	41,227	219.8%
Social Science Research Institute	15	1,989,219	13	2,507,377	518,158	26.0%
Urban and Regional Planning	2	5,036,027	1	5,000,000	(36,027)	-0.7%
College of Tropical Agriculture and Human Resources	56	7,110,412	46	7,811,636	701,224	9.9%
Center on the Family	2	240,000	2	23,472	(216,528)	-90.2%
College of Tropical Agriculture and Human Resources	4	615,863	4	615,863	-	0.0%
Family and Consumer Sciences	1	80,000	-	-	(80,000)	-100.0%
Hawaii County	3	463,972	2	79,000	(384,972)	-83.0%
Human Nutrition, Food and Animal Sciences	6	396,007	4	1,023,781	627,774	158.5%
Maui County	1	26,767	-	-	(26,767)	-100.0%
Molecular Biosciences and Bioengineering	1	60,000	3	441,464	381,464	635.8%
Natural Resources and Environmental Mgt (NREM)	3	261,639	8	340,479	78,840	30.1%
Office of The Assoc Dean for Academic and Student Affairs	4	645,081	3	1,107,290	462,209	71.7%
Plant and Environmental Protection Sciences	25	3,825,648	17	4,093,349	267,701	7.0%
Tropical Plant and Soil Science	6	495,435	3	86,938	(408,497)	-82.5%
Hawai'iiniiakea School of Hawaiian Knowledge	3	1,589,492	3	894,875	(694,617)	-43.7%
Hawai'iiniiakea School of Hawaiian Knowledge	2	887,571	1	120,750	(766,821)	-86.4%
Kamakakuokalani Center for Hawaiian Studies	-	-	1	75,000	75,000	100.0%
Kawaihuelani Center for Hawaiian Language	1	701,921	1	699,125	(2,796)	-0.4%
Institute for Astronomy	39	9,764,795	23	4,659,884	(5,104,911)	-52.3%
Institute for Astronomy	39	9,764,795	23	4,659,884	(5,104,911)	-52.3%

FY 2021 Monthly Report of Awards to Date as of September 30, 2020						
Summary By Campus						
Campus	FY 2020		FY 2021		\$ Change	% Change
	Award Count	Award Amount	Award Count	Award Amount		
John A. Burns School of Medicine	62	22,126,669	83	35,541,868	13,415,199	60.6%
Associate Dean for Academic Affairs	5	2,768,684	3	974,468	(1,794,216)	-64.8%
Department of Anatomy, Biochemistry, and Physiology	1	1,043,376	10	2,300,157	1,256,781	120.5%
Department of Cell and Molecular Biology	2	125,820	1	50,000	(75,820)	-60.3%
Department of Family Medicine and Community Health	-	-	2	213,690	213,690	100.0%
Department of Geriatric Medicine	1	476,134	6	1,283,675	807,541	169.6%
Department of Medicine	11	2,297,303	11	2,583,433	286,130	12.5%
Department of Native Hawaiian Health	1	157,641	-	-	(157,641)	-100.0%
Department of Obstetrics, Gynecology and Women's Health	7	3,401,375	8	3,066,524	(334,851)	-9.8%
Department of Pediatrics	5	2,829,953	10	2,618,109	(211,844)	-7.5%
Department of Psychiatry	3	3,656,536	2	2,813,417	(843,119)	-23.1%
Department of Quantitative Health Sciences	3	1,151,062	5	2,906,739	1,755,677	152.5%
Department of Surgery	4	1,205,911	4	260,095	(945,816)	-78.4%
Department of Tropical Medicine, Medical Micro and Pharm	15	2,081,750	10	5,231,647	3,149,897	151.3%
John A. Burns School of Medicine	4	931,124	11	11,239,914	10,308,790	1107.1%
Lyon Arboretum	3	362,431	1	247,109	(115,322)	-31.8%
Lyon Arboretum	3	362,431	1	247,109	(115,322)	-31.8%
Outreach College	3	39,258	2	62,596	23,338	59.4%
Community Programs	1	15,000	1	2,500	(12,500)	-83.3%
Outreach College	2	24,258	1	60,096	35,838	147.7%
School of Architecture	1	188,831	-	-	(188,831)	-100.0%
School of Architecture	1	188,831	-	-	(188,831)	-100.0%
School of Nursing and Dental Hygiene	3	251,024	3	123,886	(127,138)	-50.6%
Department of Nursing	3	251,024	1	9,326	(241,698)	-96.3%
Hawaii State Center for Nursing	-	-	1	23,760	23,760	100.0%
School of Nursing and Dental Hygiene	-	-	1	90,800	90,800	100.0%
School of Ocean and Earth Science and Technology	140	33,337,736	128	33,162,566	(175,170)	-0.5%
Center for Microbial Oceanography, Research and Edu (C-MORE)	5	3,388,829	4	186,345	(3,202,484)	-94.5%
Department of Atmospheric Sciences	5	866,715	5	602,527	(264,188)	-30.5%
Department of Ocean and Resources Engineering	1	41,901	2	109,500	67,599	161.3%
Department of Oceanography	13	3,962,757	18	4,340,114	377,357	9.5%
Earth Sciences	9	990,684	12	2,521,898	1,531,214	154.6%
Hawaii Institute of Geophysics and Planetology (HIGP)	23	2,686,345	15	1,919,315	(767,030)	-28.6%
Hawaii Institute of Marine Biology (HIMB)	14	1,881,753	14	2,023,436	141,683	7.5%
Hawaii Natural Energy Institute (HNEI)	7	656,652	5	1,471,127	814,475	124.0%
International Pacific Research Center (IPRC)	5	1,377,594	1	262,039	(1,115,555)	-81.0%
Joint Institute for Marine and Atmospheric Research (JIMAR)	34	13,042,668	28	12,390,939	(651,729)	-5.0%
Pacific Biosciences Research Center	12	3,043,412	9	2,852,628	(190,784)	-6.3%
School of Ocean and Earth Science and Technology	-	-	2	2,235,398	2,235,398	100.0%
Sea Grant College Program	11	1,387,521	12	1,810,491	422,970	30.5%
University Marine Center/Ship Operations	1	10,905	1	436,809	425,904	3905.6%
School of Pacific and Asian Studies	7	1,164,327	7	830,083	(334,244)	-28.7%
Center for Chinese Studies	-	-	1	90,000	90,000	100.0%
Center for Japanese Studies	2	366,000	2	359,000	(7,000)	-1.9%
Center for Korean Studies	1	10,000	2	89,756	79,756	797.6%
Center for Southeast Asian Studies	1	313,500	-	-	(313,500)	-100.0%
School of Pacific and Asian Studies	3	474,827	2	291,327	(183,500)	-38.6%
School of Social Work	10	2,515,380	14	11,451,520	8,936,140	355.3%
Center on Aging	-	-	2	2,929,846	2,929,846	100.0%
Office of Public Health Studies	6	1,271,891	8	2,133,466	861,575	67.7%
School of Social Work	4	1,243,489	4	6,388,208	5,144,719	413.7%
Shidler College of Business	1	114,880	-	-	(114,880)	-100.0%
Department of Information Technology Management	1	114,880	-	-	(114,880)	-100.0%
University of Hawaii Cancer Center	23	17,035,621	21	7,232,003	(9,803,618)	-57.5%
Cancer Biology	2	325,091	5	1,171,390	846,299	260.3%
Cancer Epidemiology	10	4,765,365	7	1,110,967	(3,654,398)	-76.7%
Cancer Prevention in the Pacific	2	540,383	2	474,448	(65,935)	-12.2%
Translational and Clinical Research	1	507,500	1	91,100	(416,400)	-82.0%
University of Hawaii Cancer Center	8	10,897,282	6	4,384,098	(6,513,184)	-59.8%
Vice Chancellor, Academic Affairs	3	517,182	6	1,105,197	588,015	113.7%
Graduate Education	-	-	1	1,030,967	1,030,967	100.0%
Library (UH Manoa)	1	51,500	2	29,672	(21,828)	-42.4%
Service Learning	1	25,717	-	-	(25,717)	-100.0%
Undergraduate Education	1	439,965	1	10,000	(429,965)	-97.7%
Vice Chancellor, Academic Affairs	-	-	2	34,558	34,558	100.0%
Vice Chancellor, Research	1	75,000	1	17,279	(57,721)	-77.0%
Vice Chancellor, Research	1	75,000	1	17,279	(57,721)	-77.0%
Vice Chancellor, Students	9	3,034,907	3	882,910	(2,151,997)	-70.9%
Student Equity Excel & Diversity	8	3,009,907	2	824,910	(2,184,997)	-72.6%
Women's Center	1	25,000	1	58,000	33,000	132.0%
Water Resources Research Center	2	161,982	3	125,910	(36,072)	-22.3%
Water Resources Research Center	2	161,982	3	125,910	(36,072)	-22.3%
William S. Richardson School of Law	11	2,663,286	5	481,334	(2,181,952)	-81.9%
William S. Richardson School of Law	11	2,663,286	5	481,334	(2,181,952)	-81.9%

FY 2021 Monthly Report of Awards to Date as of September 30, 2020						
Summary By Campus						
Campus	FY 2020		FY 2021		\$ Change	% Change
	Award Count	Award Amount	Award Count	Award Amount		
University of Hawai'i at West O'ahu	6	1,391,922	7	1,495,000	103,078	7.4%
Chancellor, UH West Oahu	6	1,391,922	7	1,495,000	103,078	7.4%
Chancellor, UH West Oahu	2	946,922	4	930,000	(16,922)	-1.8%
Division of Social Sciences	1	100,000	-	-	(100,000)	-100.0%
Education (UH WO)	1	100,000	-	-	(100,000)	-100.0%
'Ulu'ulu Giugni Archives	-	-	1	90,000	90,000	100.0%
Vice Chancellor for Student Affairs	2	245,000	2	475,000	230,000	93.9%
University of Hawai'i Maui College	13	6,054,072	16	7,614,101	1,560,029	25.8%
Chancellor, UH Maui College	13	6,054,072	16	7,614,101	1,560,029	25.8%
Academic Affairs (UH Maui College)	1	2,000,000	-	-	(2,000,000)	-100.0%
Chancellor, UH Maui College	11	3,994,072	16	7,614,101	3,620,029	90.6%
Continuing Education and Training (UH Maui College)	1	60,000	-	-	(60,000)	-100.0%
University of Hawai'i System	18	22,227,688	27	33,811,229	11,583,541	52.1%
Office of the Vice President for Community Colleges	2	150,000	3	2,042,238	1,892,238	1261.5%
Office of the Vice President for Community Colleges	2	150,000	3	2,042,238	1,892,238	1261.5%
Office of the Vice President for Research and Innovation	9	11,606,667	17	19,149,578	7,542,911	65.0%
Applied Research Laboratory	7	6,252,595	15	13,606,978	7,354,383	117.6%
Office of the Vice President for Research and Innovation	1	5,350,000	2	5,542,600	192,600	3.6%
STEM Pre-Academy	1	4,072	-	-	(4,072)	-100.0%
Office of the VP for Academic Planning and Policy	1	4,135,250	1	4,127,456	(7,794)	-0.2%
Hawai'i P-20 Partnerships for Education Office	1	4,135,250	1	4,127,456	(7,794)	-0.2%
Office of the VP for Information Tech/Chief Info Officer	6	6,335,771	6	8,491,957	2,156,186	34.0%
Office of the VP for Information Tech/Chief Info Officer	4	4,714,229	4	7,373,957	2,659,728	56.4%
Pacific Disaster Center	2	1,621,542	2	1,118,000	(503,542)	-31.1%
Windward Community College	7	2,430,454	12	3,603,295	1,172,841	48.3%
Chancellor, Windward Community College	7	2,430,454	12	3,603,295	1,172,841	48.3%
Chancellor, Windward Community College	6	2,270,454	12	3,603,295	1,332,841	58.7%
Continuing and Community Education	1	160,000	-	-	(160,000)	-100.0%
Grand Total	646	176,614,613	599	189,054,055	12,439,442	7.0%