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**Notice of Meeting  
UNIVERSITY OF HAWAI'I**

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

Members: Regents Bal (Chair), Haning (Vice-Chair), Acoba, Acopan, and Wilson

**Date:** Thursday, May 5, 2022

**Time:** 8:30 a.m.

**Place:** University of Hawai'i at Mānoa  
Information Technology Building  
1st Floor Conference Room 105A/B  
2520 Correa Road  
Honolulu, HI 96822

***See the Board of Regents website to access the live broadcast of the meeting and related updates: [www.hawaii.edu/bor](http://www.hawaii.edu/bor)***

**AGENDA**

- I. Call Meeting to Order**
- II. Approval of Minutes of the February 3, 2022 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](mailto:bor.testimony@hawaii.edu), U.S. mail at 2444 Dole Street, Bachman 209, Honolulu, HI 96822, or facsimile at (808) 956-5156.

Those wishing to provide oral testimony virtually may register [here](#). Given the constraints with the format of hybrid meetings, individuals wishing to orally testify virtually must register no later than 7:00 a.m. on the day of the meeting in order to be accommodated. Registration for in-person oral testimony on agenda items will also be provided at the meeting location 15 minutes prior to the meeting and closed at the posted meeting time. 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.

All written testimony submitted are public documents. Therefore, any testimony that is submitted orally or in writing, electronically or in person, for use in the public meeting process is public information and will be posted on the board's website.

- IV. Agenda Items**

- A. Research Project Briefing: *“Basic to Applied Research: Volcanology to Hydrology to Managing Community Risks”* Presentation by Dr. Donald Thomas, Geochemist, Hawai'i Institute of Geophysics and Planetology, University of Hawai'i at Mānoa
- B. Fiscal Year 2021-2022 (FY22) 3<sup>rd</sup> Quarter Extramural Awards Update
  - 1. FY22 3<sup>rd</sup> Quarter Research and Innovation Metrics Summary
  - 2. FY22 Monthly Report of Extramural Awards
- C. Committee Annual Review

**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**

**FEBRUARY 3, 2022**

**Note:** On January 26, 2022, Governor David Y. Ige issued a proclamation related to the COVID-19 emergency that temporarily suspended Section 92-3.7, Hawai'i Revised Statutes (HRS), "only to the extent necessary to suspend the requirement to have at least one meeting location that is open to the public".

**I. CALL TO ORDER**

Vice Chair Haning called the meeting to order at 8:32 a.m. on Thursday, February 3, 2022. The meeting was conducted virtually with regents participating from various locations.

Committee members in attendance: Vice-Chair William Haning; Regent Simeon Acoba; Regent Kelli Acopan; and Regent Ernest Wilson.

Committee members excused: Chair Eugene Bal.

Others in attendance: Board Chair Randy Moore; Regent Wayne Higaki; Regent Benjamin Kudo; Regent Alapaki Nahale-a; Regent Diane Paloma; Regent Robert Westerman (ex officio committee members); President David Lassner; Vice President (VP) for Community Colleges Erika Lacro; VP for Legal Affairs/University General Counsel Carrie Okinaga; 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**

Vice-Chair Haning stated that the minutes of the October 7, 2021, committee meeting had been distributed and inquired as to whether committee members had any recommended corrections. Hearing none, the minutes were approved.

**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. Research Project Briefing: “The Global Impact of Hawai‘i Astronomy”  
Presentation by Doug Simons, Director, Institute for Astronomy (IfA) at UHM**

Dr. Simons provided an overview of the role Hawai‘i has played in the growth of modern astronomy, noting the global impacts of this work and stating that these impacts extend far outside the realm of science. He provided a brief history of the beginnings of 20th century astronomy in Hawai‘i noting that, in 1968, consistent with Governor John A. Burns vision for Maunakea, the state signed the Mauna Kea Science Reserve Master Lease which enabled observatories to operate on the summit of Maunakea. Since that time, Maunakea has been regarded worldwide as the premier gateway to astronomical research and education which has led to scientific, community, and economic advancement. He also discussed some of the accomplishments and ground-breaking discoveries attributable to research and other activity occurring at the astronomy assets located on Maunakea and Haleakalā, as well as the scientific impact of Hawai‘i’s telescopes and observatory complexes relative to its counterparts around the world.

In addition to research activity, Hawai‘i-based observatories also offer several unique educational and outreach programs. Dr. Simons spoke about the Maunakea Scholars Program (Program), which is the first program of its kind internationally, stating that it is an innovative approach designed to directly impact the educational advancement of Hawai‘i’s high school students. The Program provides aspiring young astronomers with a glimpse into the observatory community and competitively allocates observing time on world-class telescopes for student research projects. Since its inception in 2016, more than 500 students have participated in the Program.

Another unique program, A Hua He Inoa, highlights a collaborative effort to link indigenous and contemporary science and create a pathway in which language and culture are at the core of modern scientific practices. Led by the ‘Imiloa Astronomy Center. A Hua He Inoa is shifting global paradigms and has positioned Hawai‘i as the first place in the world to weave traditional indigenous practices into the process of officially naming astronomical discoveries. To date, six major astronomical discoveries have been given Hawaiian names through this program.

Dr. Simons noted that Hawai‘i continues to be a world leader in the field of astronomy which has grown exponentially over the last 400 years. Given that continued expansion of this field is expected, he opined that there remains tremendous opportunities to advance astronomy in Hawai‘i over the course of the next century. He also shared a video, stating that it captured the essence of his presentation, and expressed his belief that the future of astronomy in Hawai‘i principally lies in the hands of the local community, stressing that, as the Director of IfA, he will continue seeking to deepen and broaden community engagement.

Vice-Chair Haning thanked Dr. Simons for an exceptional, informative, and entertaining presentation.

**B. Facilities and Administrative Cost Rate (F&A Rate) Primer**

VP Syrmos provided an overview of the university's F&A Rate stating that this is a negotiated method by which the federal government reimburses the university for infrastructure and operational costs incurred in executing extramurally funded research and training grants, contracts, and other sponsored agreements. He noted that the F&A Rate only allows for recovery of certain facility and administrative costs associated with a project; is not attributable to a single project but rather is based upon a collection of data from across the university research enterprise; and is typically renegotiated every five to six years. He also described the process used to negotiate the F&A Rate, clarified common misconceptions about the F&A Rate; provided the formula used to calculate the F&A Rate along with detailed information about each of its variables; and summarized strategies that can be used to increase the university's ability to recover indirect costs.

As of this fiscal year, the F&A Rate for the university stood at 46.5 percent, which is an increase from the 42 percent previously negotiated, and will remain static until the next negotiation is concluded. While the university's current negotiated F&A Rate compares favorably with negotiated rates at peer institutions, as well as established benchmarks, its effective recovery rate, which is the actual amount of funds recovered by the university, stands at 20 percent, which is significantly lower than the 34 percent experienced by institutions nationally. VP Syrmos explained that the low effective recovery rate was due to a variety of factors including the number of projects that contain large subawards to which F&A Rate charges are not applicable and the waiving, as well as reduction, of indirect recovery costs by the university. He also stressed the importance of not only increasing the F&A Rate, which he believes should be near 50 percent for an institution such as UHM, but also of remaining disciplined in controlling the effective recovery rate, particularly with respect to the waiving of indirect costs.

It was noted that, in 2021, the university recovered \$53.1 million in indirect costs because of the F&A Rate. VP Syrmos emphasized that the F&A Rate is the largest and most important internal source of research support at the university and touched upon the benefits of this funding source, highlighting its flexibility due to fewer expenditure restrictions. He also reported on several of the reinvestment strategies for the use of these funds, including the support of faculty start-up costs and the bolstering of research support services, and relayed the university's current approach to allocating these funds to the colleges and units that recovered the F&A costs, stating that the distribution percentages used are some of the highest among research universities across the country.

VP Syrmos reviewed the F&A Rate proposal for fiscal year 2022 stating that the base year for this proposal encompassed July 1, 2021, through June 30, 2022, and noted several key factors being considered in determining the rate proposal, including the impact of millions of dollars received by the university in Higher Education Emergency Relief Funds as a result of the COVID-19 pandemic. He also reviewed the timeline for completion and submittal of the new F&A Rate proposal stating that negotiations with the federal government on the proposal are expected to begin sometime after its submittal in March 2023.

Regent Paloma asked if her assumption was correct that the Research and Training Revolving Fund encompassed funds recovered through the F&A Rate and that these were considered indirect funds. VP Symos responded in the affirmative. Regent Paloma then inquired as to whether there were instances where grantors allowed researchers to charge for, or provided supplemental funding for, indirect costs associated with an awarded grant, and if so, how many of these situations existed at the university. VP Symos replied that he was unaware of situations where a researcher was provided with the opportunity to charge a grantor for indirect costs. However, he stated that grants awarded by the National Institutes of Health (NIH) allow for indirect costs to be added after the budget for direct costs has been calculated and reviewed and that NIH is the only such agency that allows this to occur. All other agencies include indirect costs within the limit of the grant's budget. He also stated that data would be provided on the number of grants the university has received from NIH.

Referencing a comment made by VP Symos that the university must be more disciplined with respect to the waiving or reduction of indirect recovery costs in order to increase its effective recovery rate, Regent Acoba questioned how this would be accomplished and who would be responsible for ensuring that this was achieved. VP Symos provided a brief overview of the university's process for requesting a waiver or reduction of indirect costs stating that, at the campus level, final determination of this request is made by either the Office of the Vice Provost for Research, in the case of UHM, or the Chancellor, in the case of the other campuses. At the system level, this responsibility lies with the Office of the Vice President for Research and Innovation. It was noted that researchers tend to aggressively seek waivers for indirect costs so that they can maximize spending on the direct costs related to a project. The administration attempts to keep these actions in check by providing each campus with an annual report detailing the amount of indirect costs that it does not recover due to the approval of waiver or reduction requests. VP Symos also provided an example of how this dilemma is addressed at other research universities that involves the assessment of costs waived or reductions in the total allocation of funds made to a campus.

Regent Acoba asked if the executive policy relating to the waiving or reducing of indirect recovery costs should be amended to discourage this practice. VP Symos responded that such an amendment could be helpful and committed to starting the conversation on this idea with the various campuses.

### **C. University of Hawai'i Cancer Center Update – Early Phase Clinical Research Center Business Plan Report (EPCRC Report)**

VP Symos presented historical background on the EPCRC project at the Cancer Center and offered his personal observations on this issue. He stated that, over the course of more than 30 years of service to the university, at least 15 of which has been spent managing research at some level, he has come to realize that managing research enterprises involving telescopes, the operation of oceanographic research vessels, or healthcare delivery and translational research is extremely difficult due to the risks involved and costs. While challenging, these research enterprise projects often offer the most benefit, are highly impactful, and have been well-managed by the university.

He expressed his belief that, despite its difficulties, the EPCRC project is worthwhile and will be brought to successful fruition by the university.

It was noted that the EPCRC Report was the culmination of work conducted by the EPCRC Task Force (Task Force) formed by the administration. The Task Force was charged with reviewing the EPCRC's business plan, validating some of the assumptions made by the plan with the university's external partners, and providing an assessment of the challenges and opportunities facing the EPCRC. VP Syrmos reviewed the membership of the Task Force and summarized the EPCRC Report highlighting several challenges that the university is anticipated to face with respect to the operations of the EPCRC under the current business plan. He also reported on opportunities to increase the viability of the business plan and the facility, and stated that the report concluded that, despite the challenges it faces, the EPCRC was a worthy project.

VP Syrmos reiterated that the EPCRC project is a difficult undertaking and emphasized that it will not be a self-sustaining facility. However, he stressed that it is a facility that is being built for the benefit of healthcare in Hawai'i using mainly extramural funds. The issues and challenges facing the EPCRC project are well understood and the university is prepared to address these issues to ensure its success.

Dr. Joe Ramos, Interim Director of the Cancer Center, presented his assessment of the EPCRC project espousing its numerous benefits, the most important of which being that it would reduce the emotional and financial burden on Hawai'i's cancer patients by providing local access to the most advanced and innovative cancer treatments available through the provision of clinical cancer research trials. He stated that, since the issuance of the EPCRC Report near the end of October 2021, the Cancer Center has been working collaboratively with its extramural partners, as well as individuals in the medical community, to ensure that there exists a need for such a facility in Hawai'i. He also stated that the Cancer Center has been conducting outreach efforts to address some of the challenges and opportunities noted in the EPCRC Report and offered to return to the committee in the future to give a presentation on these efforts.

Regent Westerman asked whether there has been an increase in philanthropic support for the Cancer Center. VP Syrmos replied that philanthropic support for the Cancer Center has been increasing and is currently on a good trajectory. Dr. Ramos added that the Cancer Center is working closely with the University of Hawai'i Foundation to refocus how fundraising efforts are being conducted and stated that donations for the EPCRC have risen significantly over the last two months.

Stating that there may be private practitioners in the medical community that are unaware of the services provided by the EPCRC, Regent Westerman inquired as to whether outreach was occurring. Dr. Ramos responded in the affirmative noting that educational information is regularly provided to members of the medical community and that a fair number of private practitioners are already engaged in some of the clinical trials currently occurring at the Cancer Center.

Vice-Chair Haning questioned whether his understanding that a regional broker for clinical cancer research trials did not exist in Hawai'i was accurate. Dr. Ramos replied

that the Cancer Center serves as the de facto clinical cancer research trials broker since it administers almost every clinical trial in Hawai'i and is aware of the few clinical trials which it does not administer, such as specialized trials involving pediatric cancers.

Regent Kudo expressed his concerns with the EPCRC's business plan relative to the challenges expressed in the EPCRC Report including low census numbers, the overreliance on philanthropic support, the lack of vertical integration of the EPCRC, and the lack of development of this type of facility in the past by currently existing medical facilities in Hawai'i. He opined that, while the EPCRC project may be worthwhile and is an admirable endeavor, the risks outweigh the benefits and the project has the potential of becoming a future financial burden to the university.

Regent Wilson asked whether consideration has been given to expanding research and clinical collaborations across the Asia and Pacific regions, including American Samoa, to increase census numbers related to the use of the EPCRC. Dr. Ramos responded that the Cancer Center has investigated, and continues to explore, several collaborative opportunities with countries across the Asia and Pacific regions. However, the success of these efforts is often contingent upon the availability of facilities located in the collaborating region. He also mentioned that the issue of medical tourism for individuals from other parts of the world has been discussed as a possible source of revenue in the long-term future of the Cancer Center.

**D. Fiscal Year 2021-2022 2<sup>nd</sup> Quarter Extramural Awards Update**

Due to time constraints, this agenda item was deferred.

**V. ADJOURNMENT**

There being no further business, Vice-Chair Haning adjourned the meeting at 10:04 a.m.

Respectfully Submitted,

Kendra T. Oishi  
Executive Administrator and Secretary  
of the Board of Regents





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'22 APR 28 P2:12


UH DTS #22424

April 28, 2022

**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 MAY MEETING**

Please find attached the following materials that will be discussed at the May 5, 2022 BOR Committee on Research and Innovation meeting:

**IV. Agenda Items:**

- A. Research Project Briefing: *"Basic to Applied Research: Volcanology to Hydrology to Managing Community Risks"* Presentation by Dr. Donald Thomas, Geochemist, Hawai'i Institute of Geophysics and Planetology, University of Hawai'i at Mānoa
- B. Fiscal Year 2022 3<sup>rd</sup> Quarter Extramural Awards Update (\*VPRI presentation)
  1. FY22 Q3 Research and Innovation Metrics Summary
  2. FY22 Monthly Report of Extramural Awards (as of March 31, 2022)

## BASIC TO (VERY) APPLIED RESEARCH

VOLCANOLOGY TO HYDROLOGY TO  
MANAGING COMMUNITY RISKS

**Donald Thomas**

**Hawaii Institute of Geophysics and  
Planetology**

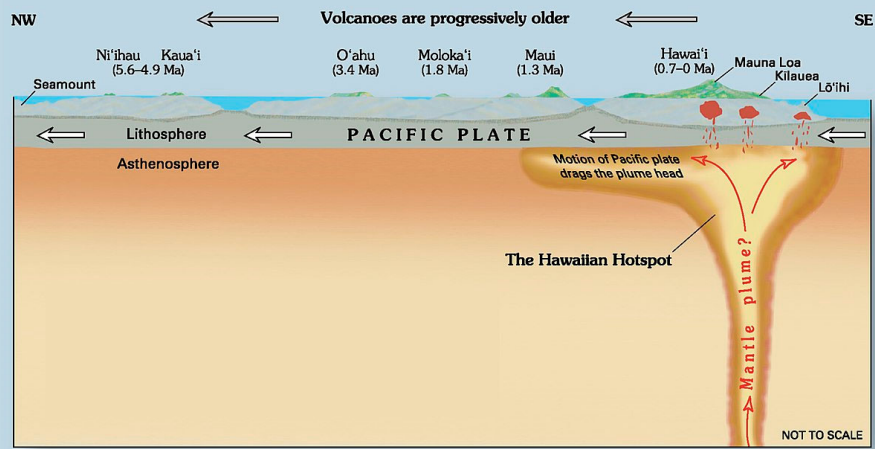
**Center for the Study of Active Volcanoes**



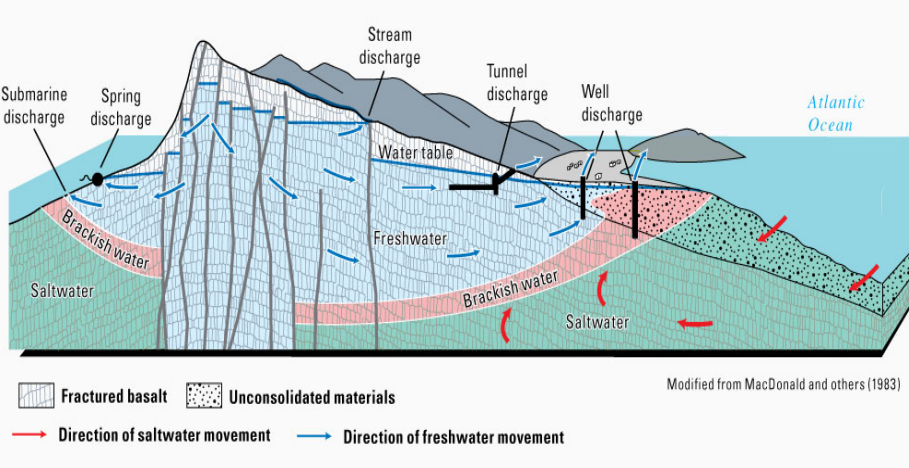
### The Hawaii Scientific Drilling Project

- Assess the Planetary Processes Responsible for Hawai'i's volcanism
- Collect lava samples going back into Maunakea's history as far as we can
- Investigate the basic geochemical processes occurring within the seawater-saturated base of the island to understand how the island base weathers over time

# The Hawaii Scientific Drilling Project



# The Hawaii Scientific Drilling Project



## The Hawaii Scientific Drilling Project

- Collect lava samples going back into Maunakea's history as far as we can:
  - Continuous sequence of eruption products 11,540' below sea level
  - Showed that each volcano samples a different part of the mantle plume
  - Demonstrated that there was internal structure to the plume with the inner plume originating near the core-mantle boundary
  - Showed that the life cycle of Hawaii's volcanoes is about twice as long as we had previously thought

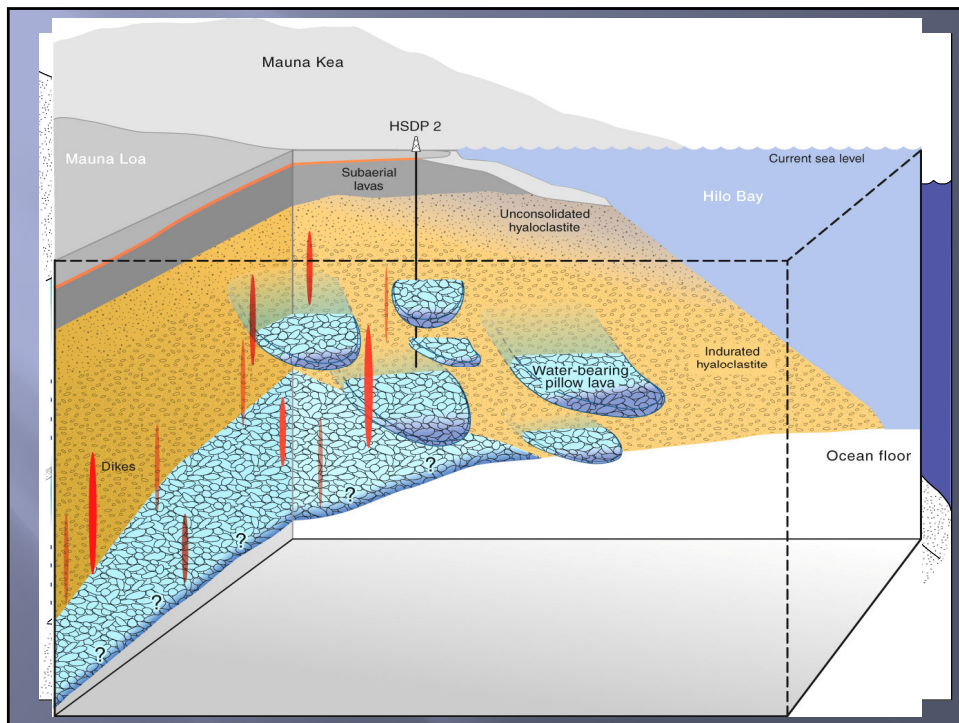
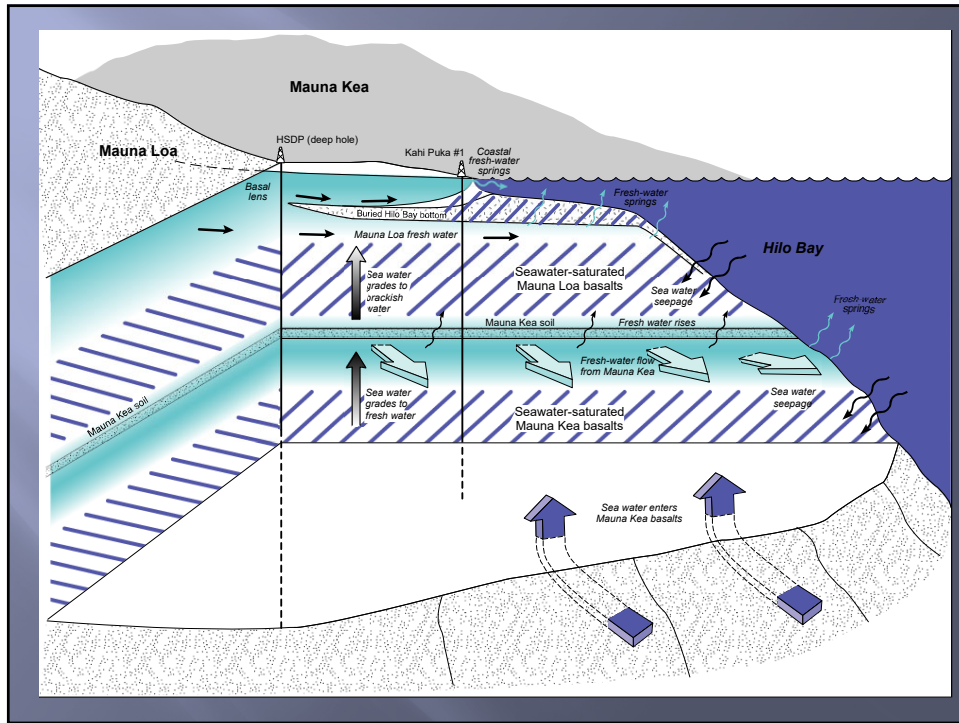
## The Hawaii Scientific Drilling Project

- Investigate the basic geochemical processes in the seawater-saturated base...
  - An interesting thing happened on the way to our target depth...
  - Artesian water wasn't supposed to be present anywhere on Hawaii Island

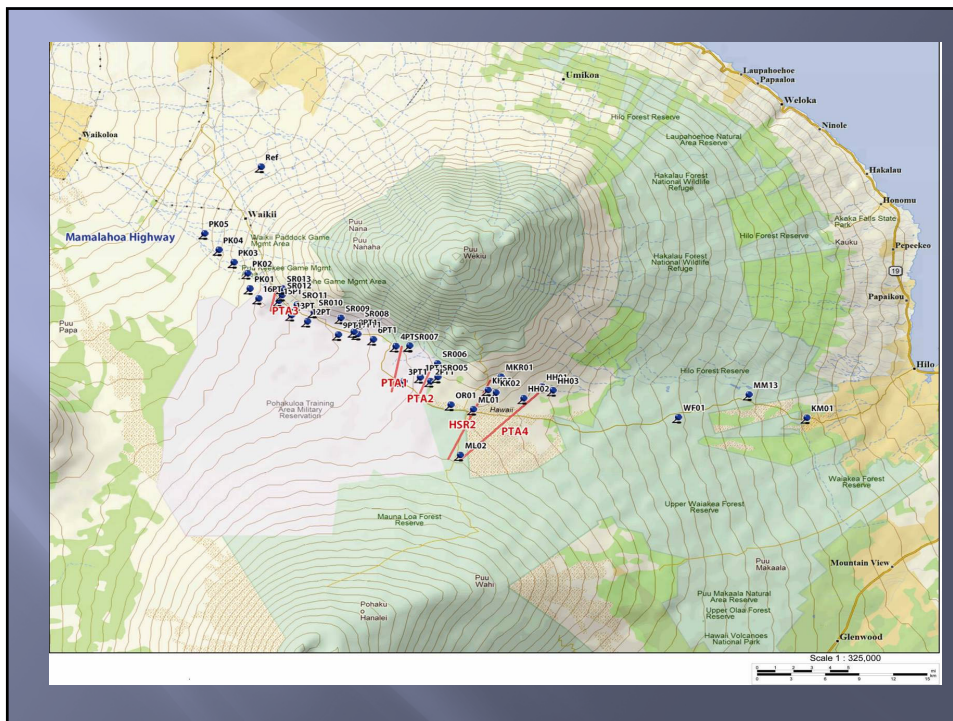


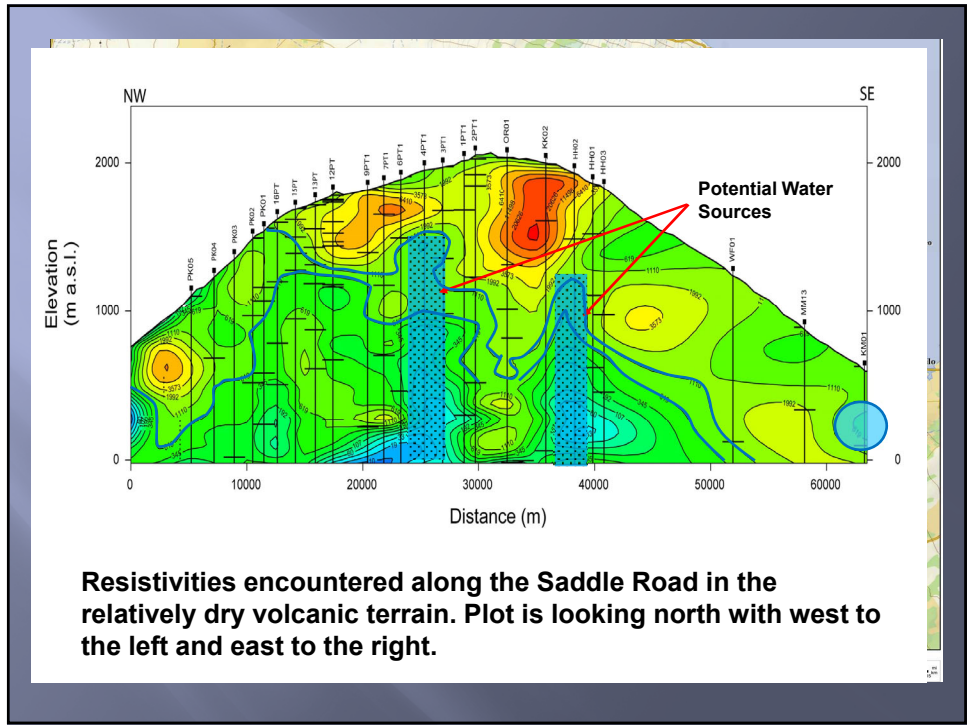
## The Hawaii Scientific Drilling Project

- Investigate the basic geochemical processes occurring the seawater- saturated
  - We encountered a basal fresh aquifer and drilled into salt water below as expected
  - A second – artesian - freshwater aquifer >1000' below sea level
  - Later shown to be discharging freshwater deep offshore (possibly as much water as Oahu uses)
  - Continued drilling encountered additional freshwater saturated zones at ~6500' below sea level and extending to at least 10,000 bmsl
  - That deep water may be >100,000 years old



- The presence of freshwater at ~ 3 km depth requires that there is higher elevation groundwater within the island
- Geophysical surveys - measuring the resistivity of the subsurface rocks – were conducted across the Humu’ula Saddle
- First use in Hawaii for groundwater exploration
- Successfully identified high elevation groundwater

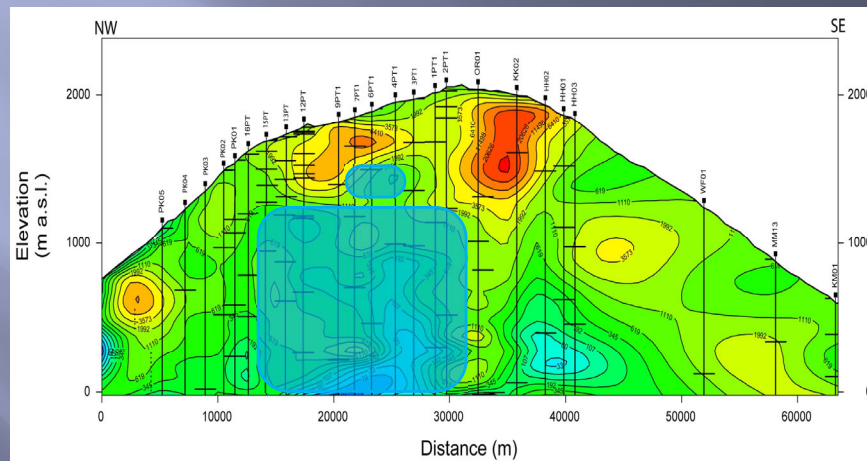






## Hydrology Findings

- Sequence of small perched aquifers extending from 700' to 1200' depth
- Saturated formation from 1800' (~4600' amsl) to total depth @5786', water level remained at 1800'
- We believe that this represents the regional aquifer for the Saddle region
- Suggests that we have twice the freshwater reserve on Hawai'i Island that the traditional model had anticipated
- Also identified a previously unrecognized geothermal prospect

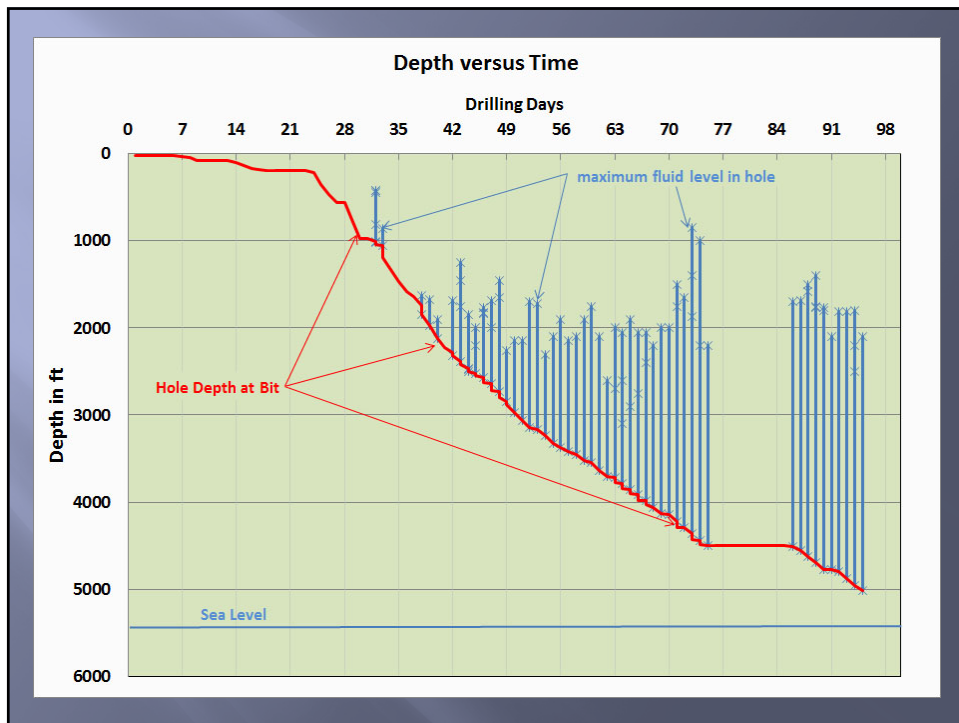
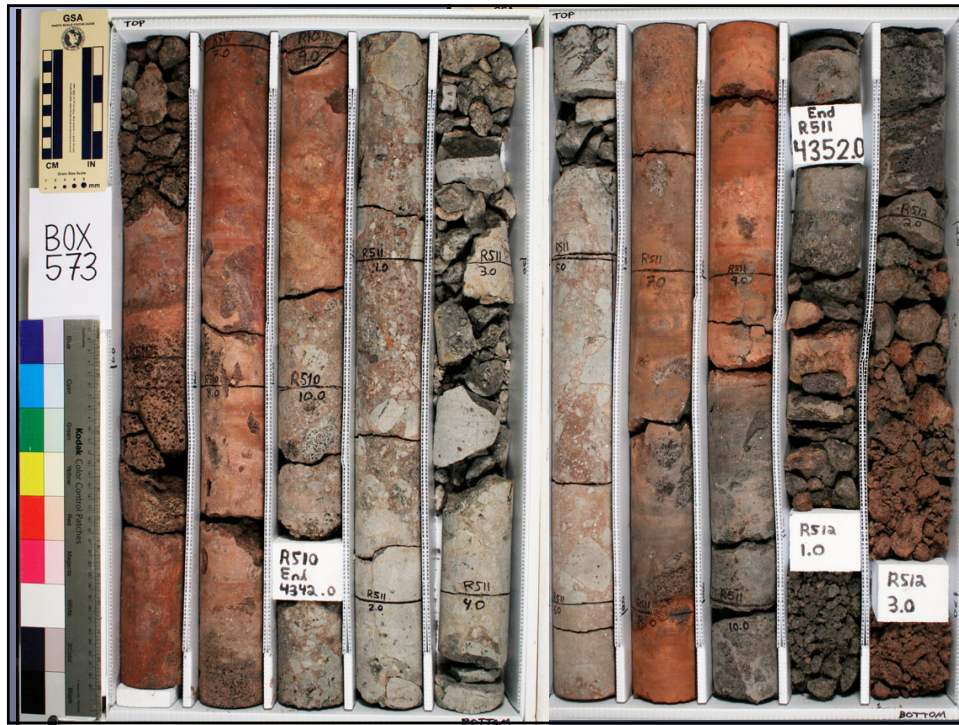


To test the extent of the regional aquifer we selected a second drilling site at the western edge of the Saddle

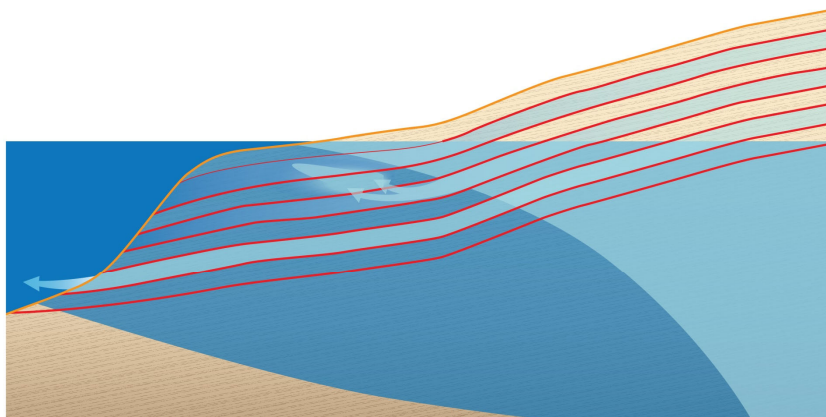
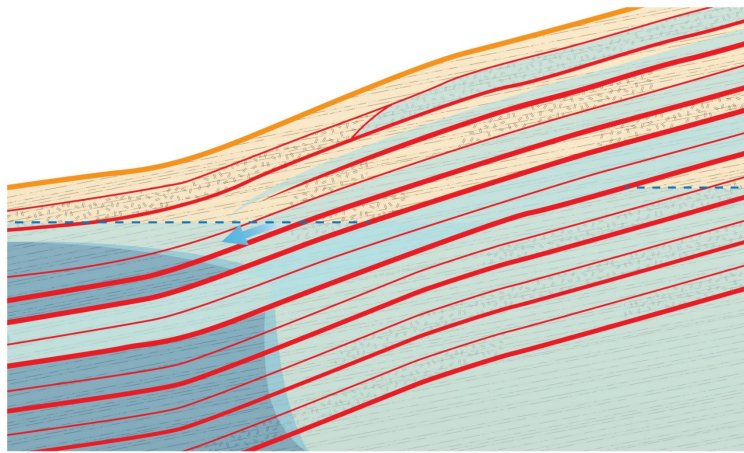


## KMA-1 Findings

- A sequence of confined aquifers at varying hydrostatic pressures as depth of the hole progressed
- Confining layers are mostly ash clay and explosion deposits
- These varying layers are a history of the eruptive activity of Mauna Kea (and possibly Hualalai and Mauna Loa)
- These layers influence the volume of water stored and where groundwater discharges from the island



A (simple) conceptual model for what we are seeing would look something like this:



## Why are these findings important

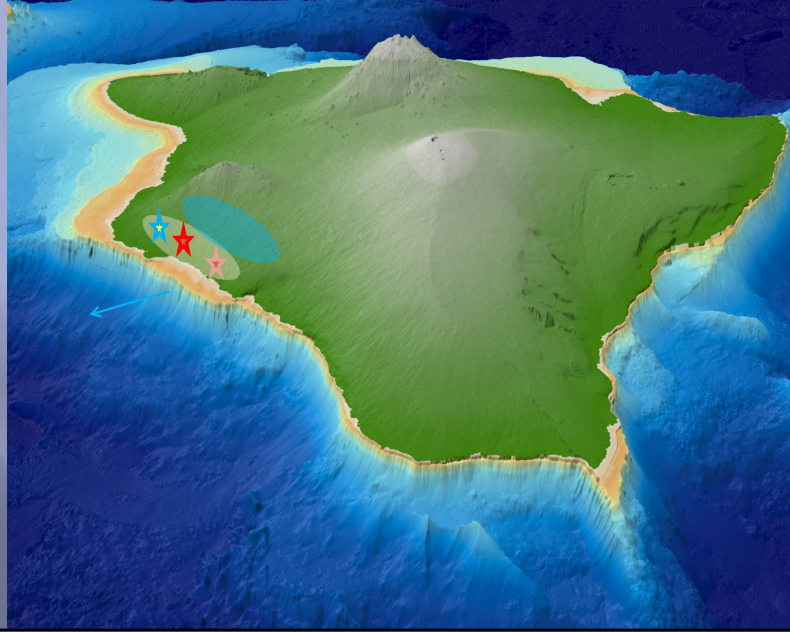
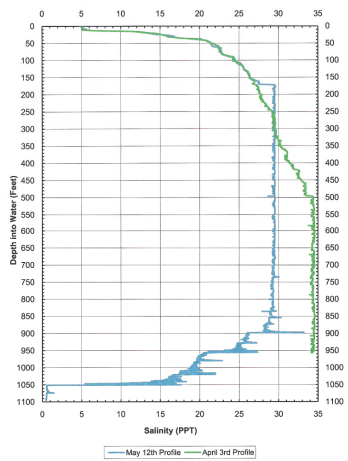


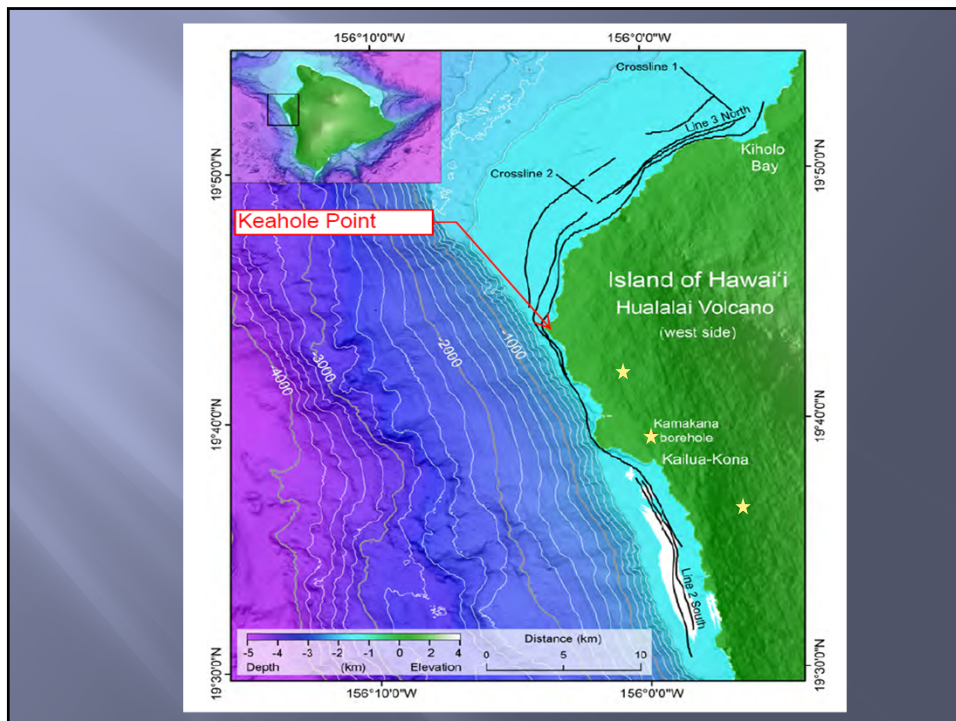
Figure 3  
Comparison of Salinity Profiles  
May 12th Versus April 3, 2010

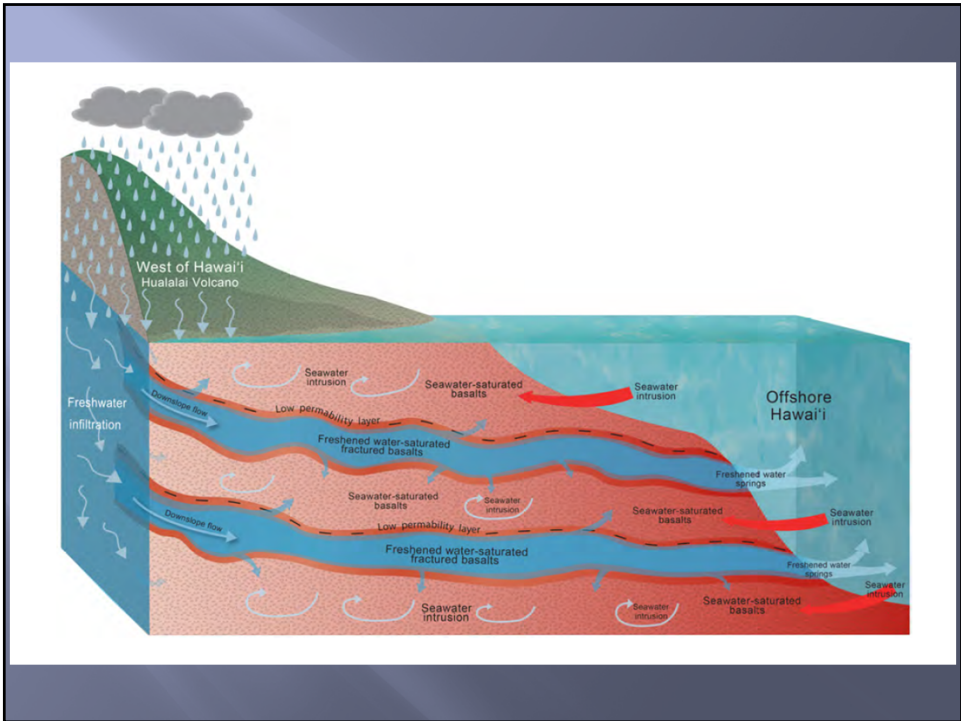
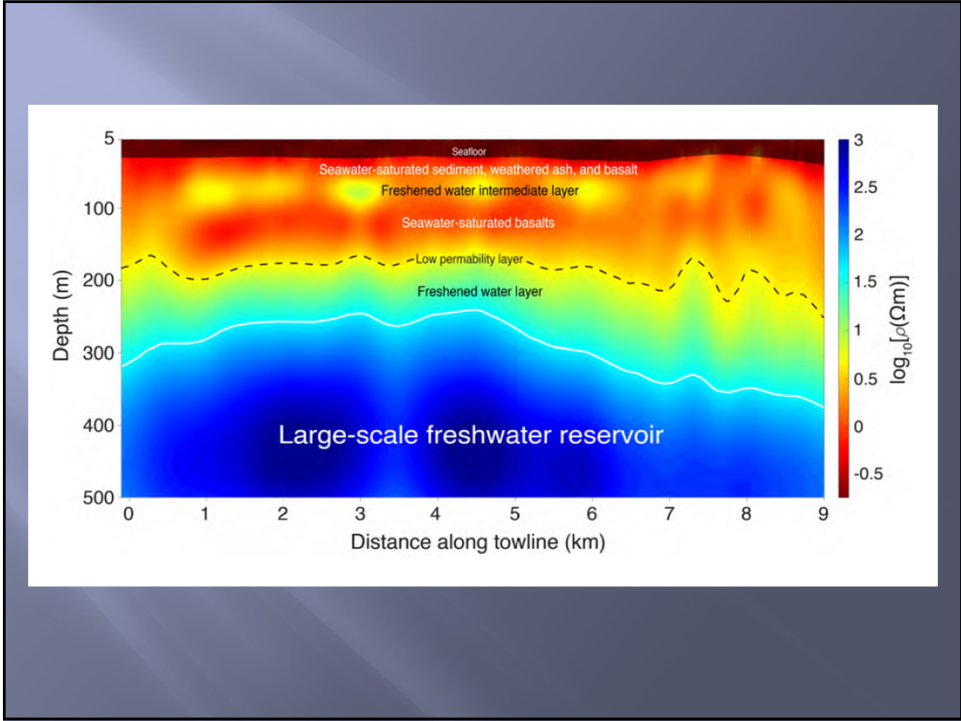


# Characterizing the Deep Aquifers

## Offshore geophysical surveys

- Similar to methods used in the Saddle
- Higher resistivity freshwater rocks
- Lower resistivity saltwater saturated rock
- Large reservoir of freshwater that is bypassing the basal groundwater system





Do we have evidence that these structures exist and influence groundwater flow on other islands?

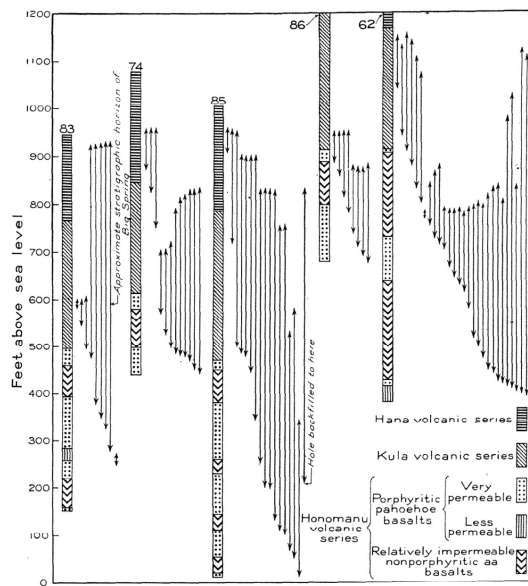
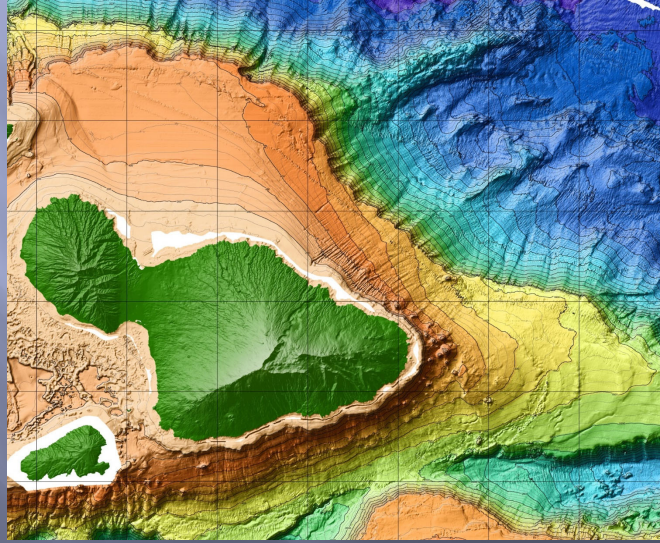
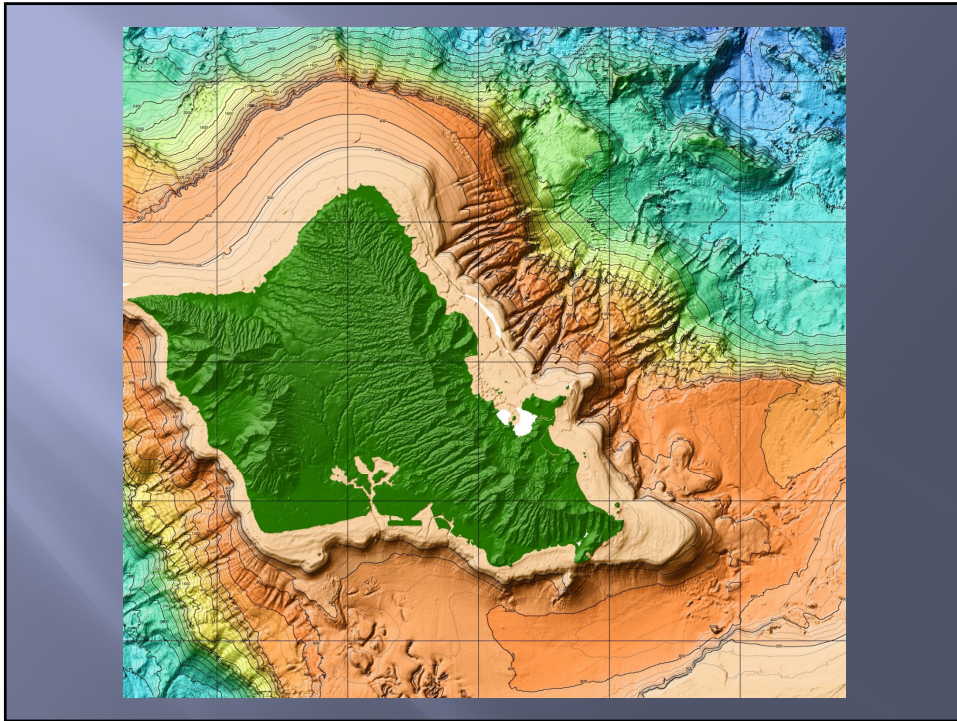


Figure 39. Diagram showing the water levels at various depths during the drilling of holes 62, 74, 83, 85, and 86. The lower end of each double-headed arrow indicates the depth of the hole, and the upper end the contemporaneous water level.

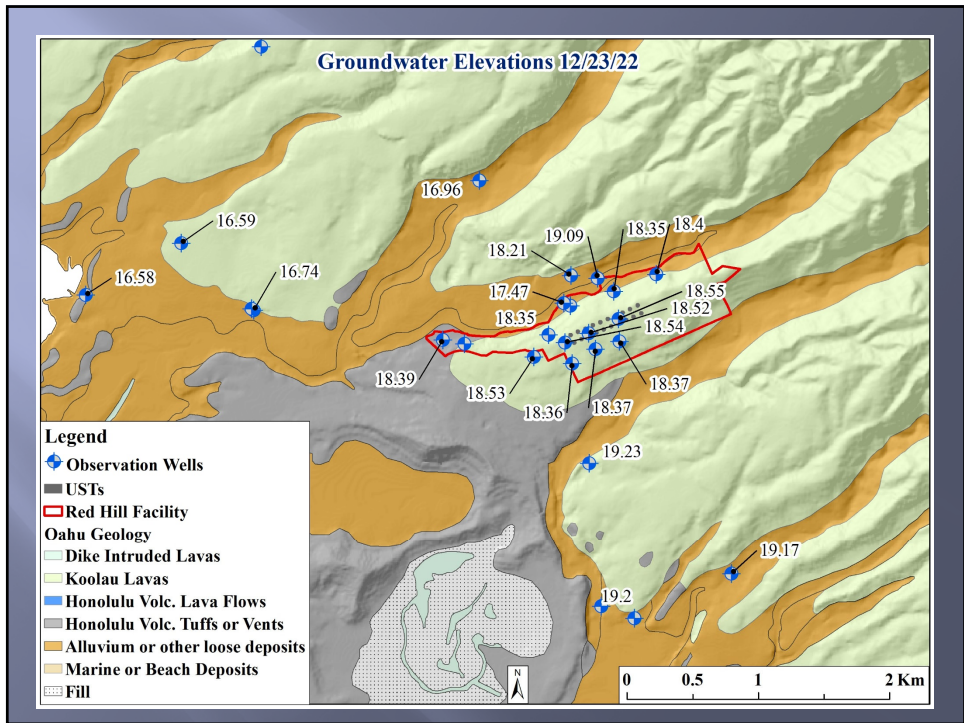
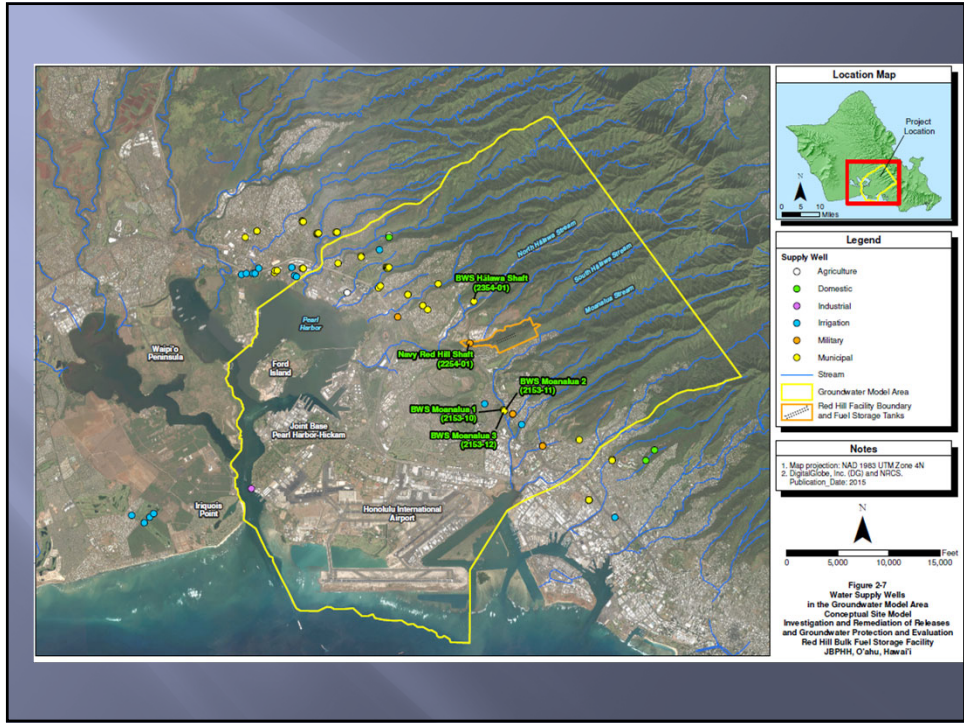


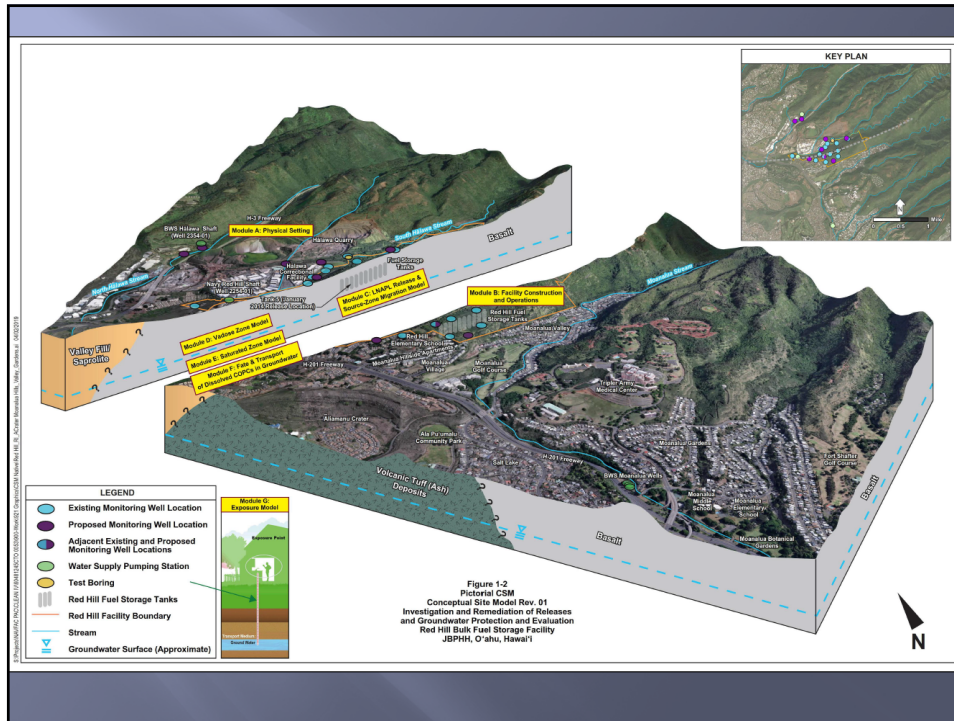


The hydrogeology of the Red Hill region is even more complex:

- Tanks are constructed inside basalt strata
- Flanked by stream-cut valleys, now filled with compacted/cemented alluvium and saprolite
- Terminated by late-stage volcanics
- And offshore cap-rock

A major source of conflict between regulatory agencies and the Navy contractor has been the latter's use of Hawai'i's traditional groundwater model to try to describe groundwater flow in this region





Just-approved ONR project will apply current geophysical, geochemical and modeling techniques to the Red Hill region to:

- Define how fuel moves through the basalt structures in the unsaturated zone to the water table;
- Determine how geologic structures in the saturated zone control groundwater (and contaminant) flow;
- Develop a comprehensive conceptual site model (CSM) of the geologic structures;
- Use the CSM as the foundation of a numerical model that can describe contaminant transport in the region
- That model will allow regulatory agencies to assess risks of future releases in the region to drinking water sources that could be impacted

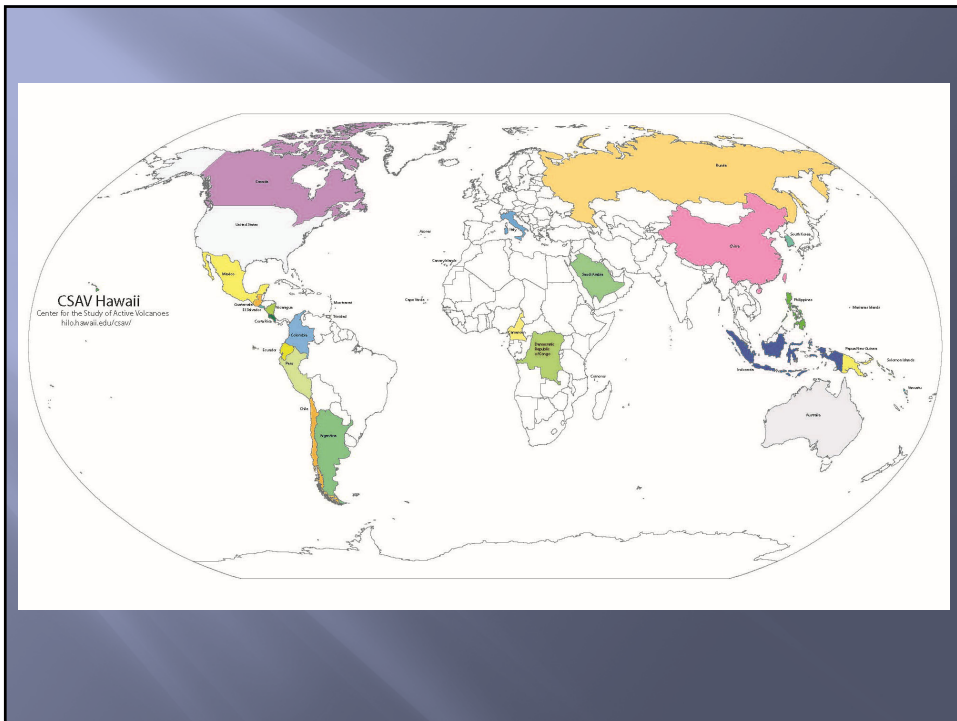
Ultimately, our goal is to extend the investigations at Red Hill to all islands so that we can:

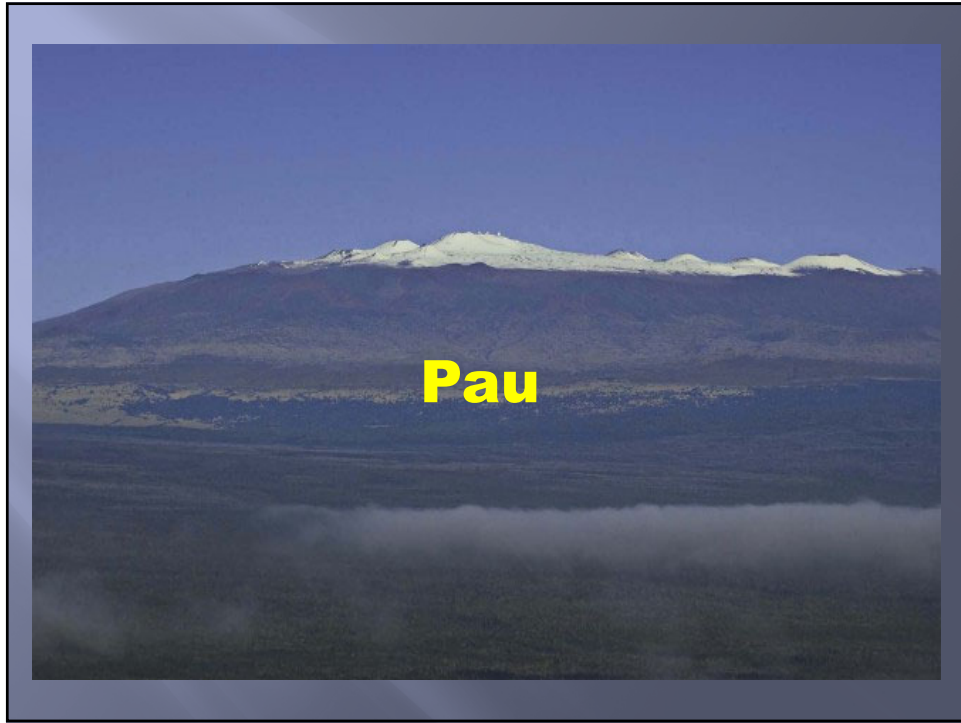
- Better understand and manage our groundwater so that it is sustainable over the long-term
- Better respond to the impacts of climate change – whatever they may be – to ensure adequate drinking water for our communities' needs
- Better protect them from contamination associated with increasing population
- And develop needed resources in a way that minimizes the impacts of withdrawal on other near-shore marine communities

## From Local to Global

The Center for the Study of Active Volcanoes

- Founded by BOR in 1990
- A partnership among HIGP/UHH/USGS VHP
- Cooperative research between UH and HVO
- Cooperative Agreements since 2002
  - Research and research support
  - Public education and outreach to communities
- International Training Program
  - Focus on developing countries
  - Supported by USGS Volcano Disaster Assistance Prog.
  - 280 trainees
  - 27 different countries





Office of the Vice President for Research and Innovation



UNIVERSITY  
*of* HAWAII  
SYSTEM

# FY22 Q3 Extramural Awards

BOR Committee on Research and Innovation

May 5, 2022

# Overview

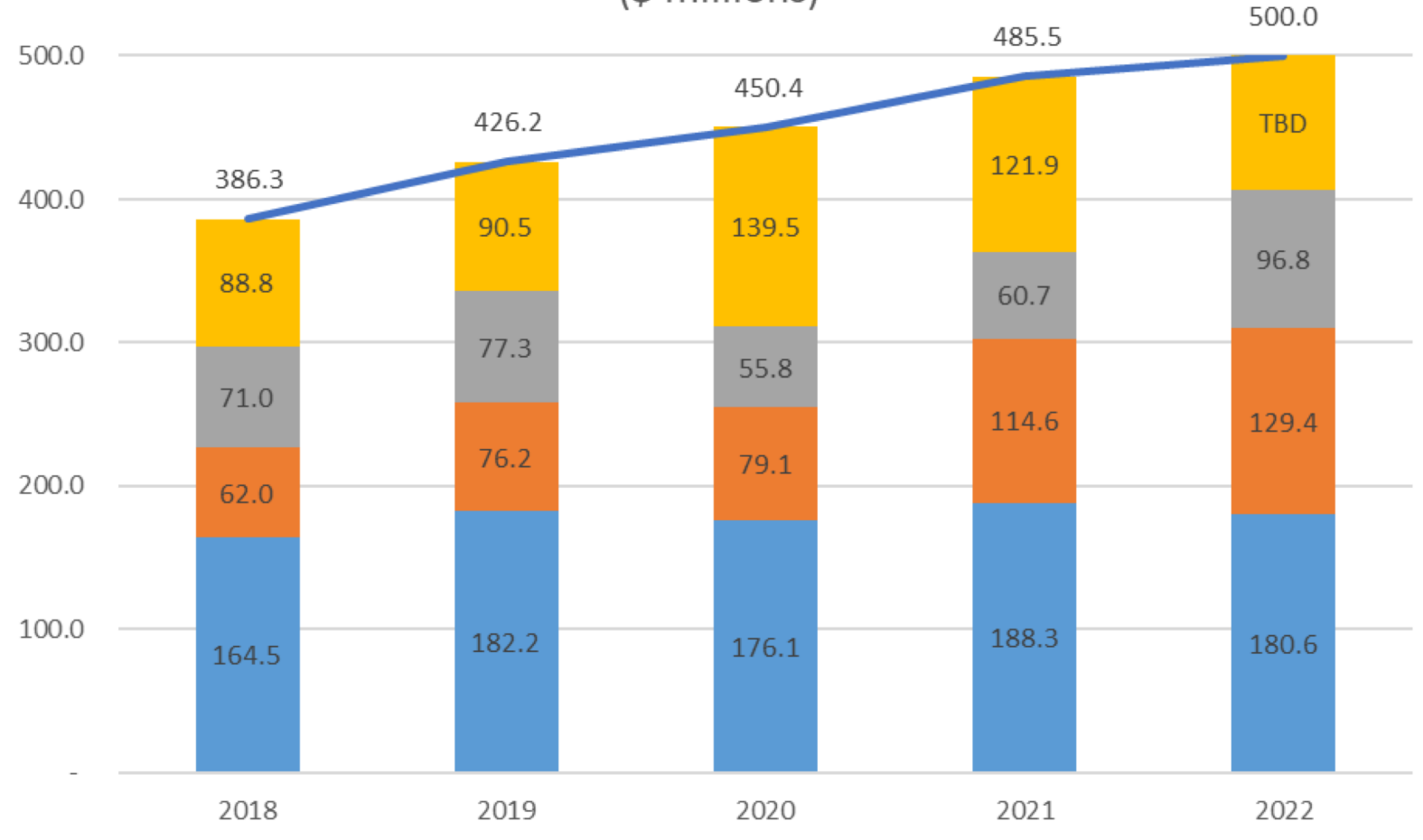
- ▶ FY 22 Q3 Recap
- ▶ Q3 Significant Awards by Campus
- ▶ Q3 Award Amounts by Location

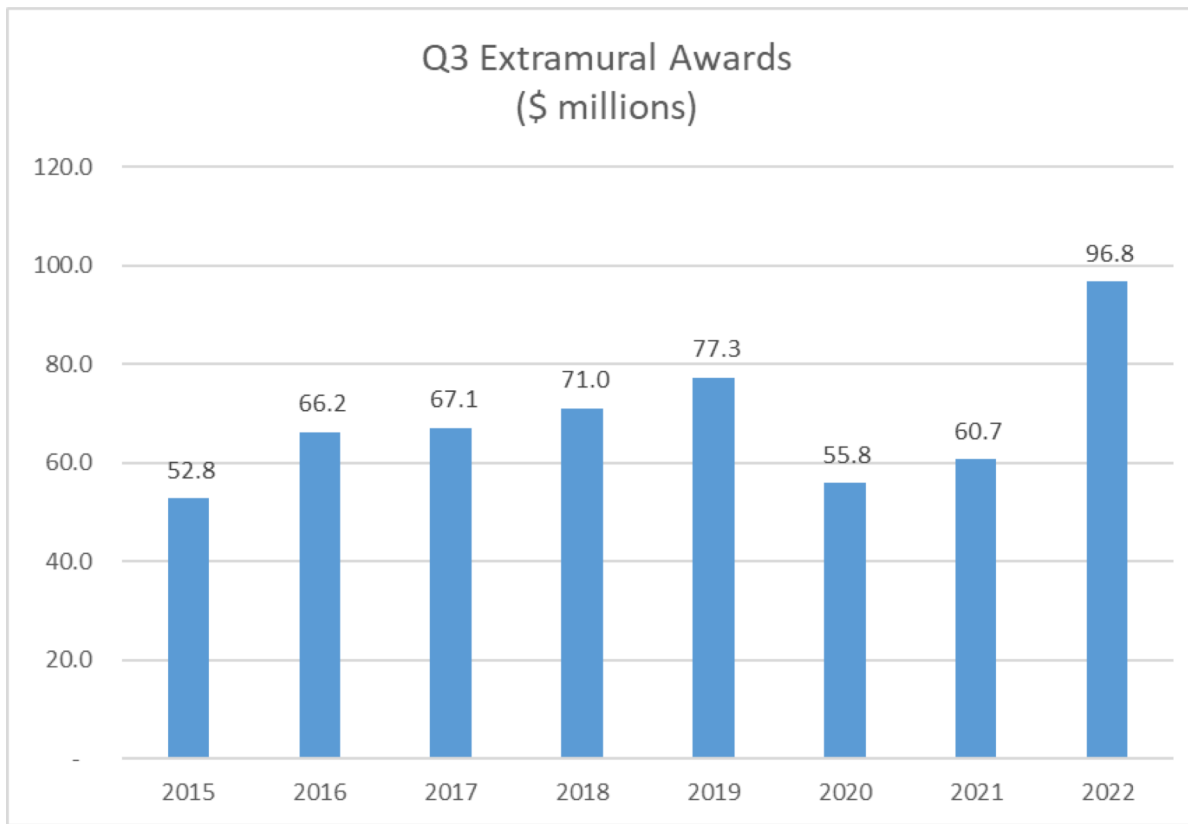


# FY22 Q3 Recap

- ▶ Year to date (YTD) awards as of 3/31/2022 were \$43.2 million or 11.9% more than the FY21 Q3 YTD total
- ▶ FY22 Q3 was \$36.1 million or 59.4% more than FY21 Q3
- ▶ It appears that the university is on track to hit \$500 million, if current trends continue

### Extramural Awards (\$ millions)





	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Q1	191.1	165.8	181.8	164.5	182.2	176.1	188.3	180.6
Q2	77.0	56.9	59.5	62.0	76.2	79.1	114.6	129.4
Q3	52.8	66.2	67.1	71.0	77.3	55.7	60.7	96.8
Q4	104.8	102.4	78.6	88.8	90.5	139.5	121.9	TBD
<b>Total</b>	<b>425.7</b>	<b>391.3</b>	<b>387.0</b>	<b>386.3</b>	<b>426.2</b>	<b>450.4</b>	<b>485.5</b>	<b>406.8</b>

# Q3 Significant Awards by Campus

Campus	Sponsor Type	Sponsor	Title	Amount
Mānoa	Federal	Department of Defense	Asia Pacific Research Initiative for Sustainable Energy Systems 2021 (APRISES21)	6,249,889
Hilo	Federal	National Science Foundation	REU Site: Ka'ao: Telling the Stories of Hawaiian Ecosystems	387,134
West O'ahu	Nonprofit	Kellogg (WK) Foundation	Hawaii Institute for Sustainable Community Food Systems	1,000,000
Hawai'i CC	State	Department of Labor	Employment and Training Fund Program (ETF) 2022-01 (Micro Vendor)	150,000
Honolulu CC	State	Department of Labor	Employment and Training Fund Program (ETF) 2022-01 (Micro Vendor)	50,000
Kapi'olani CC	State	Department of Labor	Employment and Training Fund Program (ETF) 2022-01 (Micro Vendor)	800,000
Kaua'i CC	Nonprofit	UH Foundation	KauaiCC COGS Fund	46,000
Leeward CC	State	Department of Labor	Employment and Training Fund Program (ETF) 2022-01 (Micro Vendor)	425,000
Maui College	Local	County of Maui	UH Maui College Cooperative Education & Extended Learning Workforce Development Partnership Grant	75,000
Windward CC	State	Department of Human Services	Learning To Grow Child Care Stabilization Grant	173,175
UH System	Federal	Department of Defense	University of Hawaii Pacific Disaster Center (UoH PDC) Cooperative Agreement 2021-2026	4,706,252

## Q3 Award Amounts by Location (\$ millions)

Campus	2019	2020	2021	2022	2022-21 Change*
Mānoa	58.0	45.2	49.9	81.4	62.9%
Hilo	2.2	1.8	1.7	1.6	-5.9%
West O'ahu	0.5	0.0	0.5	1.1	103.3%
Hawai'i CC	0.4	0.0	0.0	0.3	2,867.8%
Honolulu CC	0.1	0.1	0.1	0.1	-53.6%
Kapi'olani CC	2.1	0.2	0.1	0.9	764.2%
Kaua'i CC	0.1	0.0	0.1	0.0	-23.5%
Leeward CC	0.2	0.0	0.1	0.6	1,108.2%
Maui College	1.4	0.1	0.2	0.2	-21.8%
Windward CC	0.1	0.0	0.6	0.3	-53.0%
UH System	12.2	8.3	7.4	10.3	39.7%
TOTAL	77.3	55.7	60.7	96.8	59.4%

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

# Major Changes by Location

- ▶ UH Mānoa: The \$31.5 million increase is attributed to the increase in award count across all four levels of funding. There were not enough large, new awards to explain the increase.

Level	FY21 Q3 Count	FY21 Q3 Amount	FY22 Q3 Count	FY22 Q3 Amount	FY21 Q3 Average	FY22 Q3 Average
\$1-\$99,999	180	\$6,927,726	228	\$7,312,434	\$38,485	\$32,072
\$100,000-\$499,999	72	\$15,890,329	105	\$20,545,826	\$220,699	\$195,674
\$500,000 - \$999,999	15	\$9,367,739	27	\$18,684,499	\$624,516	\$692,019
\$1 million+	7	\$17,805,930	17	\$34,890,888	\$2,543,704	\$2,052,405
TOTAL	274	\$49,991,274	377	\$81,433,647		

# Major Changes by Location

- ▶ UH System: The \$2.9 million increase is attributed to two Department of Defense awards. One was a new award from the Office of Naval Research for \$1.1 million. The other was a renewal award whose initial increment exceeded the increment reported last year by \$1.5 million.

## Extramural Sponsor Awards Quarterly Summary

<u>Program Type</u>	<b>Jan 1 - Mar 31 2022</b>		<b>Jan 1 - Mar 31 2021</b>	
	<u>Count</u>	<u>Amount</u>	<u>Count</u>	<u>Amount</u>
Research	264	\$ 61,553,732	196	\$ 37,321,355
Non-Research	177	\$ 36,405,928	137	\$ 24,983,852
<b><u>Total</u></b>	<b><u>441</u></b>	<b><u>\$ 97,959,660</u></b>	<b><u>333</u></b>	<b><u>\$ 62,305,207</u></b>

Note: The detailed award listing is available at:

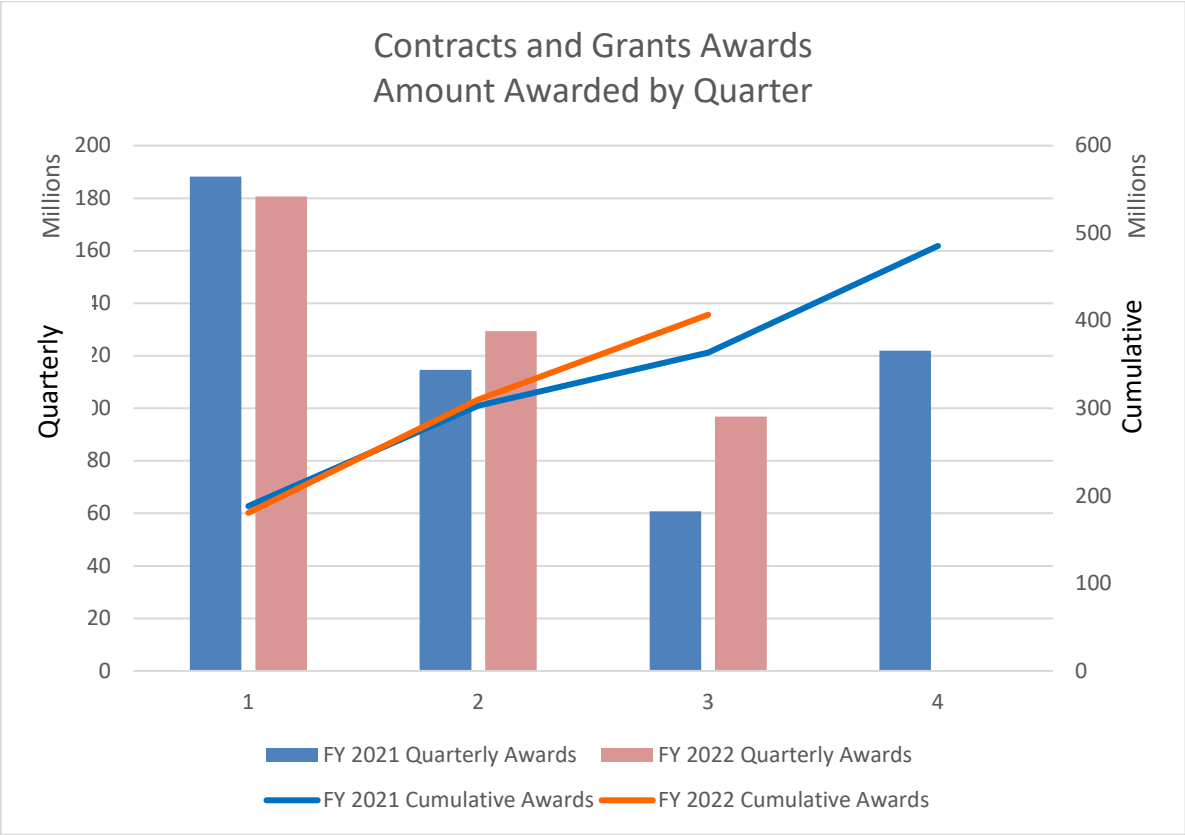
<http://www.ors.hawaii.edu/index.php/bor-reports>

The FY 2021 year-to-date total was: \$363,583,146

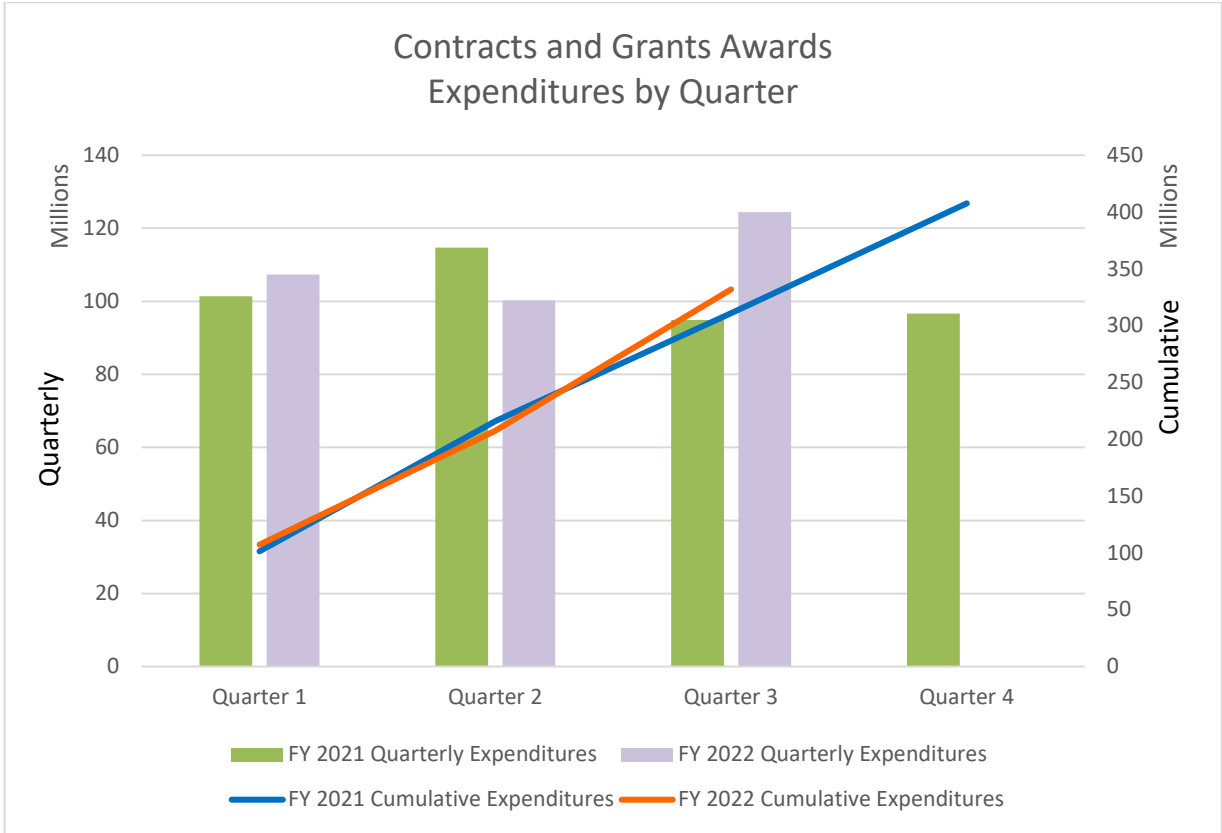
The unofficial FY 2022 year-to-date total is: 1,533 awards totaling \$406,861,371.



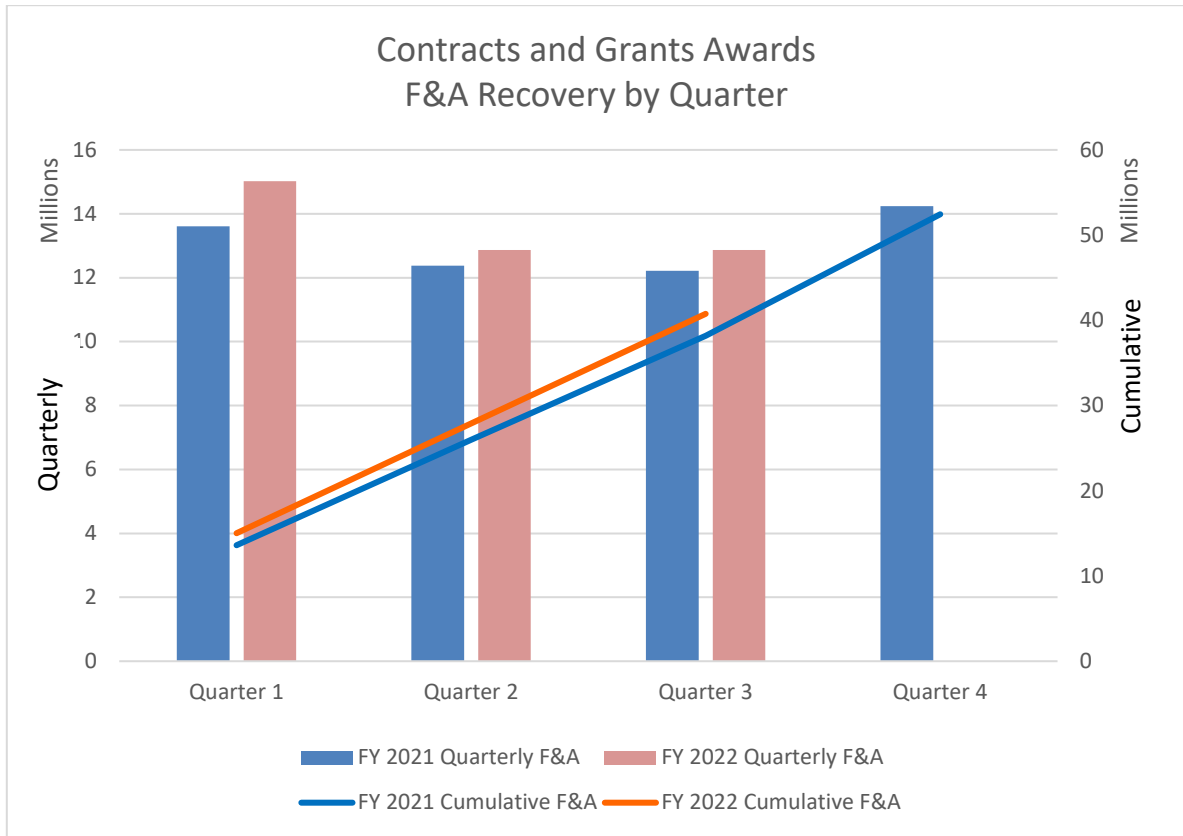
Contracts and Grants Awards  
As of Quarter Three – FY 2022



Contracts and Grants Expenditures  
As of Quarter Three – FY 2022



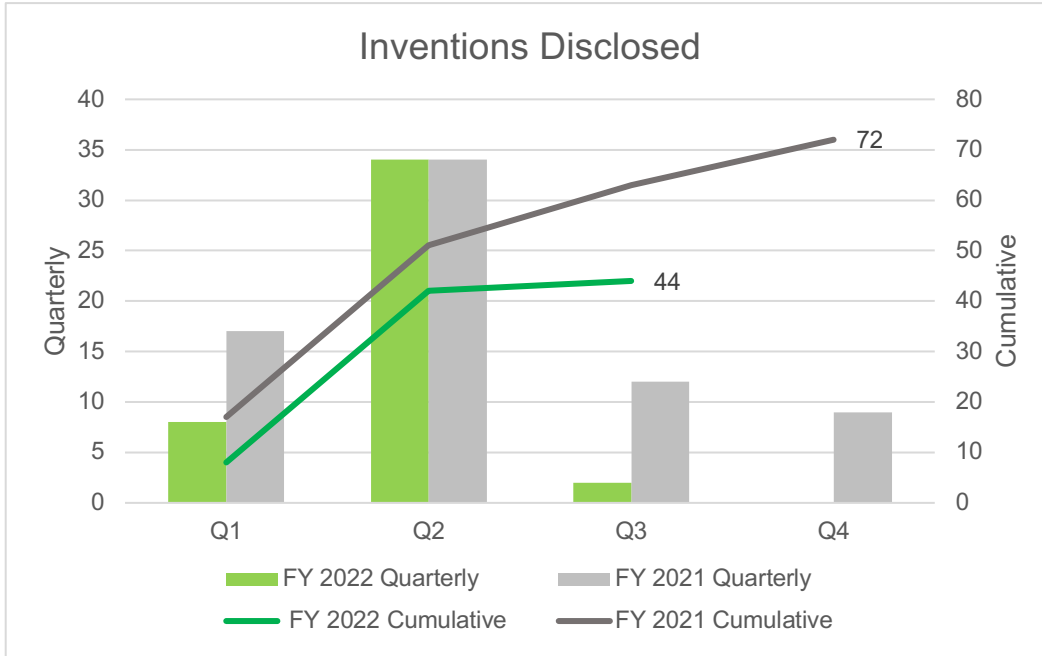
Contracts and Grants F&A Recovery  
As of Quarter Three – FY 2022



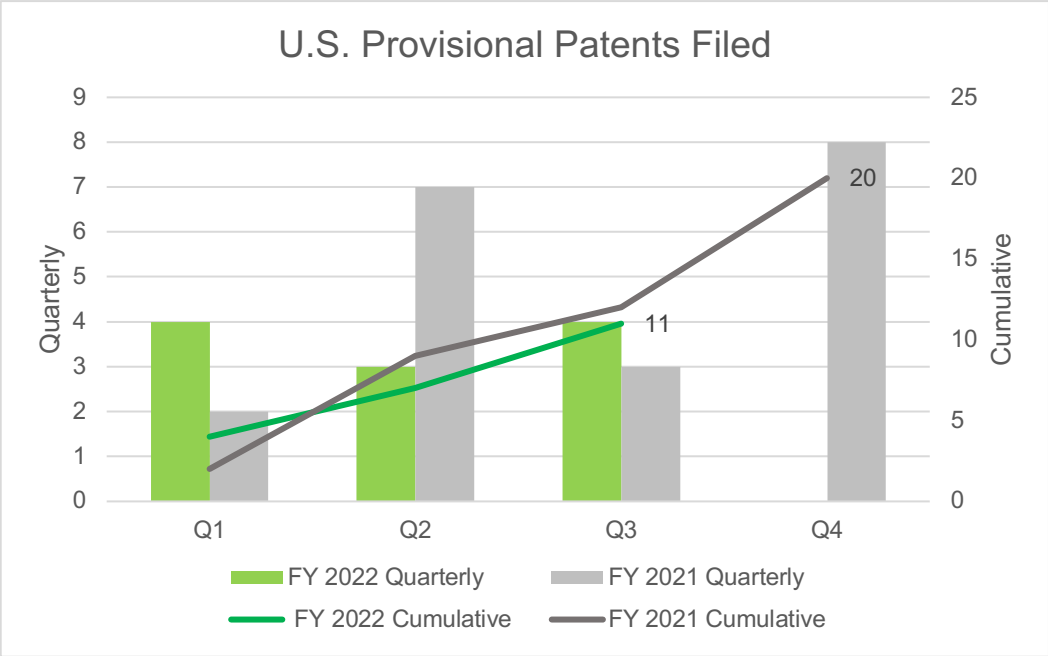
**OIC Research & Innovation Metrics  
FY 2022 – Third Quarter Summary**

<u>Metric</u>	FY 2022 <u>1/1/22 – 3/31/22</u>	FY 2021 <u>1/1/21 – 3/31/21</u>
Invention Disclosures	2	12
U.S. Provisional Patents Filed	4	3
U.S. Non-Provisional Patents Filed	1	4
U.S. Non-Provisional Patents Issued	3	0
License & Option Agreements Executed	5	2
Active License & Option Agreements	151	151
Royalty Revenue	\$123,567.40	\$148,771.23
Startup Support	14	26
Innovation & Entrepreneurship Engagement	16	108

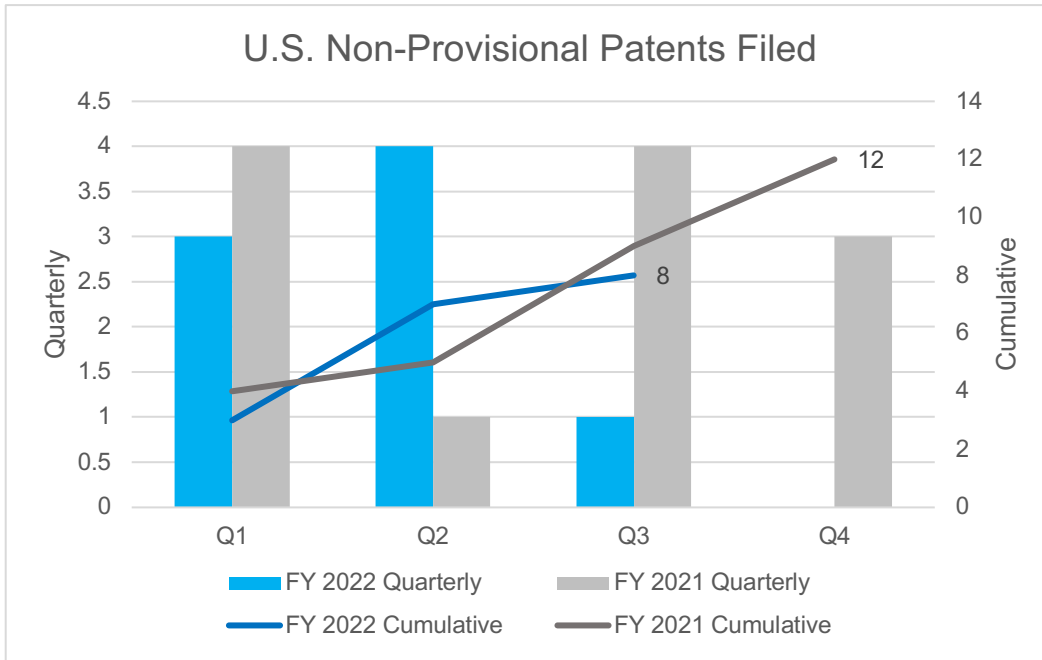
Invention Disclosures  
As of Quarter Three – FY 2022



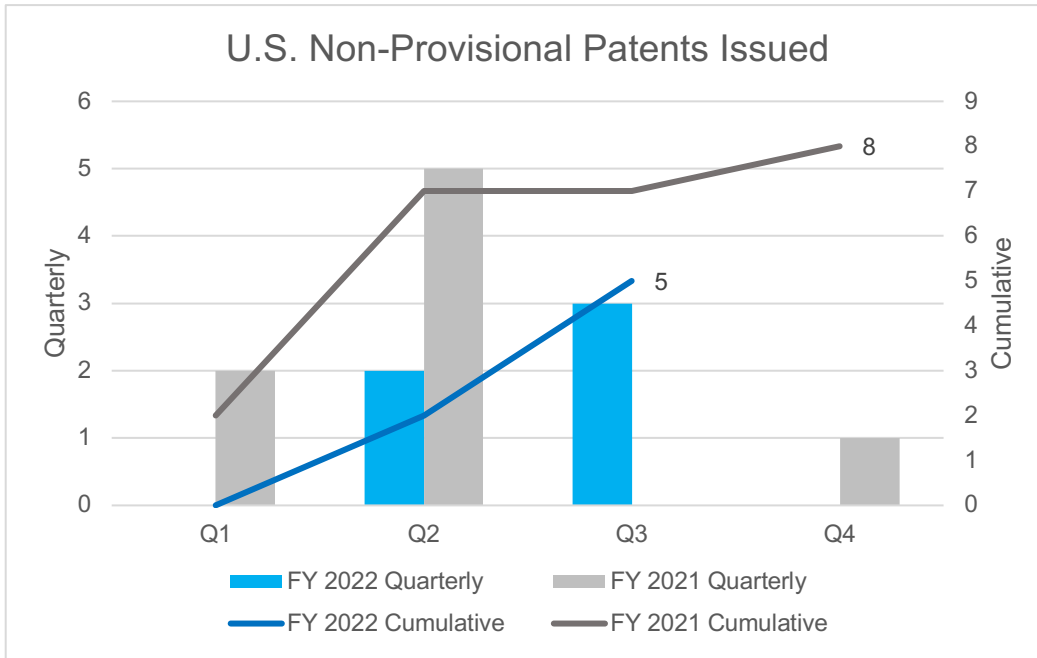
U.S. Provisional Patents Filed  
As of Quarter Three – FY 2022



U.S. Non-Provisional Patents Filed  
As of Quarter Three – FY 2022

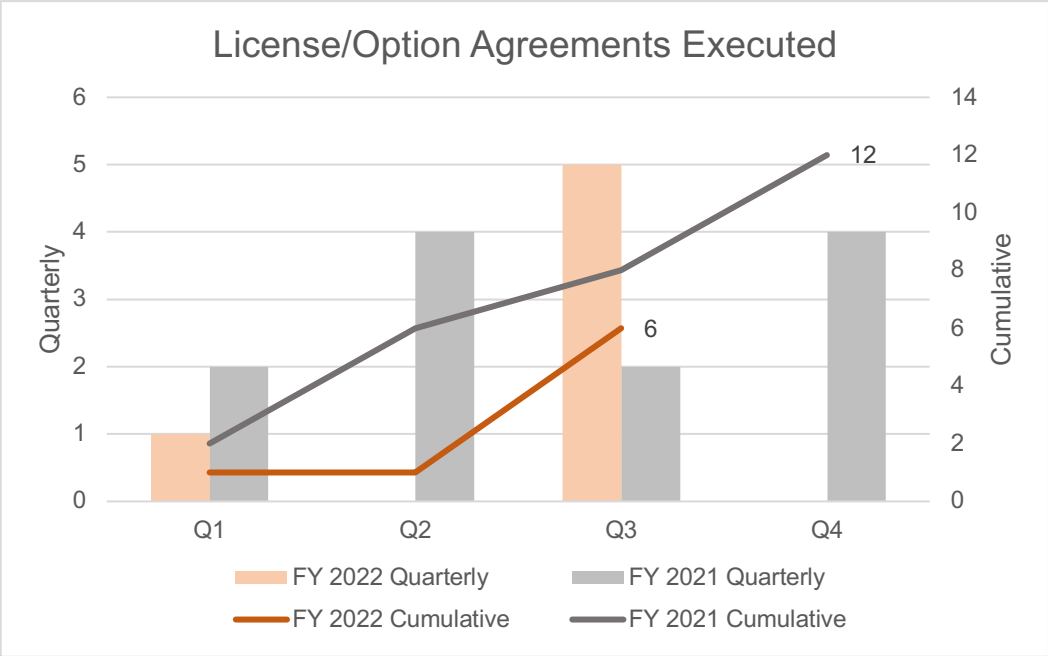


U.S. Non-Provisional Patents Issued  
As of Quarter Three – FY 2022

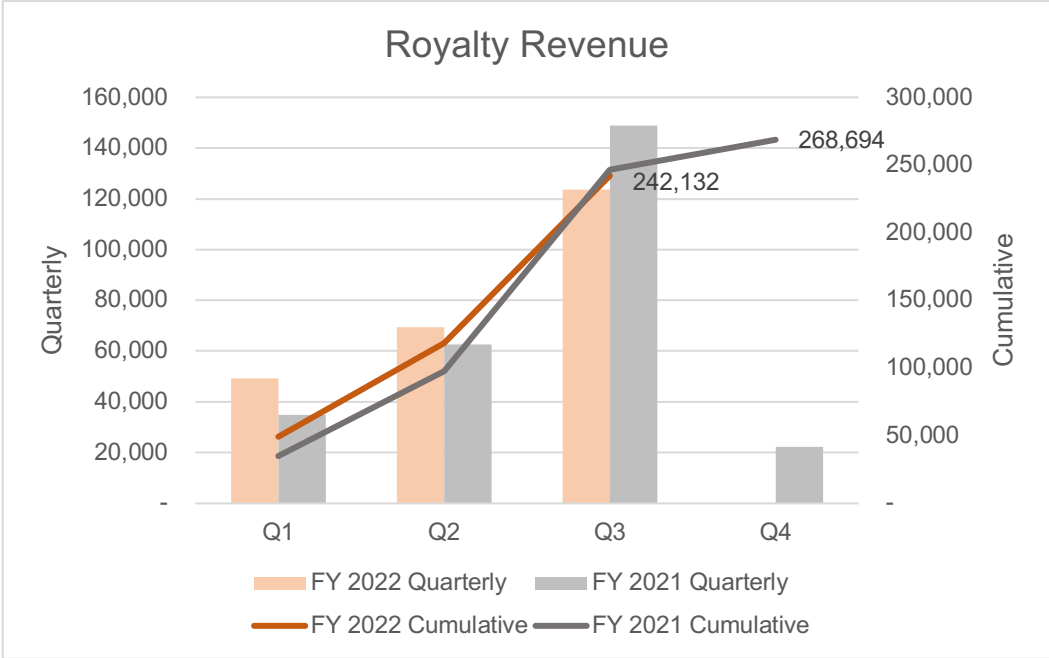




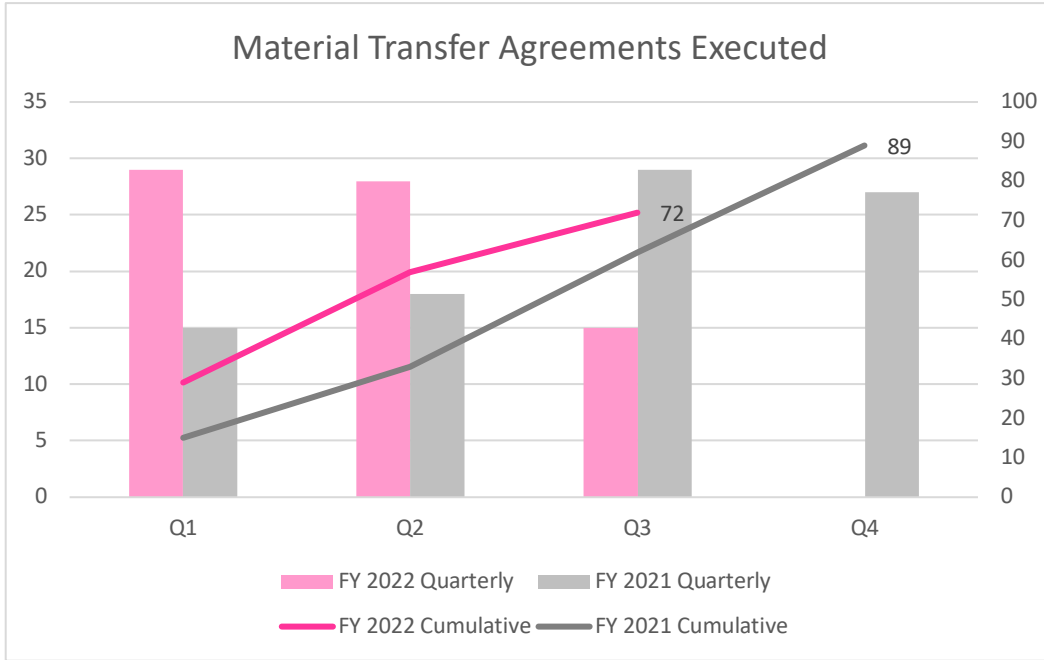
License/Option Agreements  
As of Quarter Three – FY 2022



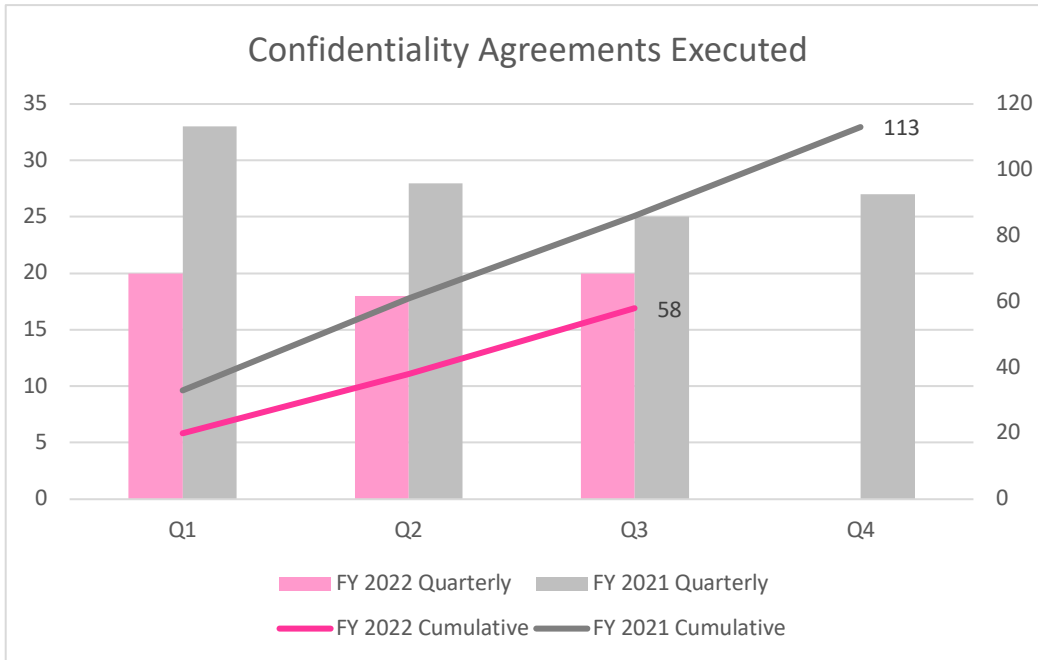
Royalty Revenue  
As of Quarter Three – FY 2022



**Material Transfer Agreements Executed  
As of Quarter Three – FY 2022**



### Confidentiality Agreements Executed As of Quarter Three – FY 2022



FY 2022 Monthly Report of Awards to Date as of March 31, 2022							
Summary By Campus							
Campus	FY 2021		FY 2022		\$ Change	% Change	
	Award Count	Award Amount	Award Count	Award Amount			
Hawai'i Community College	9	1,594,118	11	3,443,526	1,849,408	116.0%	
Honolulu Community College	11	1,773,354	10	2,488,071	714,717	40.3%	
Kapi'olani Community College	16	2,869,026	17	5,026,612	2,157,586	75.2%	
Kaua'i Community College	5	1,103,880	12	3,035,807	1,931,927	175.0%	
Leeward Community College	7	1,211,538	15	4,453,057	3,241,519	267.6%	
University of Hawai'i Maui College	33	11,914,780	42	12,680,362	765,582	6.4%	
Windward Community College	18	5,526,504	20	9,664,035	4,137,531	74.9%	
<b>Subtotal Community Colleges and UH Maui College</b>	<b>99</b>	<b>25,993,200</b>	<b>127</b>	<b>40,791,470</b>	<b>14,798,270</b>	<b>56.9%</b>	
University of Hawai'i at Hilo	83	12,010,753	86	15,667,275	3,656,522	30.4%	
University of Hawai'i at Manoa	1,135	254,262,401	1,230	301,169,904	46,907,503	18.4%	
University of Hawai'i at West O'ahu	16	2,376,100	20	6,573,359	4,197,259	176.6%	
University of Hawai'i System	72	72,739,792	70	44,819,454	(27,920,338)	-38.4%	
<b>Grand Total</b>	<b>1,405</b>	<b>367,382,246</b>	<b>1,533</b>	<b>409,021,462</b>	<b>41,639,216</b>	<b>11.3%</b>	
FY 2022 Monthly Report of Awards to Date as of March 31, 2022							
Campus Details							
Campus	FY 2021		FY 2022		\$ Change	% Change	
	Award Count	Award Amount	Award Count	Award Amount			
<b>Hawai'i Community College</b>	<b>9</b>	<b>1,594,118</b>	<b>11</b>	<b>3,443,526</b>	<b>1,849,408</b>	<b>116.0%</b>	
<b>Chancellor, Hawaii Community College</b>	<b>9</b>	<b>1,594,118</b>	<b>11</b>	<b>3,443,526</b>	<b>1,849,408</b>	<b>116.0%</b>	
Academic Affairs (Hawaii CC)	-	-	-	-	-	100.0%	
Chancellor, Hawaii Community College	4	1,259,663	6	3,061,526	1,801,863	143.0%	
Liberal Arts and Public Services	1	23,205	1	17,000	(6,205)	-26.7%	
Math and Natural Sciences (Hawaii CC)	1	18,000	-	-	(18,000)	-100.0%	
Office of Continuing Education & Training	1	75,000	1	150,000	75,000	100.0%	
UH Center at West Hawai'i	2	218,250	3	215,000	(3,250)	-1.5%	
<b>Honolulu Community College</b>	<b>11</b>	<b>1,773,354</b>	<b>10</b>	<b>2,488,071</b>	<b>714,717</b>	<b>40.3%</b>	
<b>Chancellor, Honolulu Community College</b>	<b>11</b>	<b>1,773,354</b>	<b>10</b>	<b>2,488,071</b>	<b>714,717</b>	<b>40.3%</b>	
Academic Affairs (Honolulu CC)	1	274,137	-	-	(274,137)	-100.0%	
Chancellor, Honolulu Community College	-	-	2	494,137	494,137	100.0%	
Early Childhood (Honolulu CC)	1	40,000	1	2,000	(38,000)	-95.0%	
Pacific Center for Advanced Technology Training	2	123,300	1	50,000	(73,300)	-59.4%	
Transportation and Trades Programs	3	55,214	1	7,269	(47,945)	-86.8%	
University College	4	1,280,703	5	1,934,665	653,962	51.1%	
<b>Kapi'olani Community College</b>	<b>16</b>	<b>2,869,026</b>	<b>17</b>	<b>5,026,612</b>	<b>2,157,586</b>	<b>75.2%</b>	
<b>Chancellor, Kapiolani Community College</b>	<b>16</b>	<b>2,869,026</b>	<b>17</b>	<b>5,026,612</b>	<b>2,157,586</b>	<b>75.2%</b>	
Academic Affairs (KCC)	-	-	2	218,442	218,442	100.0%	
Chancellor, Kapiolani Community College	4	1,368,252	7	2,795,209	1,426,957	104.3%	
Continuing Education / Non-Credit Program	2	129,897	2	892,268	762,371	586.9%	
Culinary Arts (KCC)	-	-	2	337,485	337,485	100.0%	
Emergency Medical Services	2	389,480	2	149,480	(240,000)	-61.6%	
Health Academic Program	1	6,000	-	-	(6,000)	-100.0%	
Health Sciences	4	192,360	-	-	(192,360)	-100.0%	
Office for Institutional Effectiveness	1	99,976	2	633,728	533,752	533.9%	
Student Support Services	2	683,061	-	-	(683,061)	-100.0%	
<b>Kaua'i Community College</b>	<b>5</b>	<b>1,103,880</b>	<b>12</b>	<b>3,035,807</b>	<b>1,931,927</b>	<b>175.0%</b>	
<b>Chancellor, Kauai Community College</b>	<b>5</b>	<b>1,103,880</b>	<b>12</b>	<b>3,035,807</b>	<b>1,931,927</b>	<b>175.0%</b>	
Chancellor, Kauai Community College	5	1,103,880	12	3,035,807	1,931,927	175.0%	
<b>Leeward Community College</b>	<b>7</b>	<b>1,211,538</b>	<b>15</b>	<b>4,453,057</b>	<b>3,241,519</b>	<b>267.6%</b>	
<b>Chancellor, Leeward Community College</b>	<b>7</b>	<b>1,211,538</b>	<b>15</b>	<b>4,453,057</b>	<b>3,241,519</b>	<b>267.6%</b>	
Academic Affairs (Leeward CC)	1	399,376	2	949,911	550,535	137.8%	
Arts and Sciences	2	472,299	5	1,618,214	1,145,915	242.6%	
Chancellor, Leeward Community College	-	-	3	990,000	990,000	100.0%	
Continuing Education and Workforce Dev	2	277,488	2	470,932	193,444	69.7%	
Drama and Theatre (Leeward CC)	1	2,375	-	-	(2,375)	-100.0%	
Education (Leeward CC)	1	60,000	1	210,000	150,000	250.0%	
Social Science (Leeward CC)	-	-	2	214,000	214,000	100.0%	
<b>University of Hawai'i at Hilo</b>	<b>83</b>	<b>12,010,753</b>	<b>86</b>	<b>15,667,275</b>	<b>3,656,522</b>	<b>30.4%</b>	
<b>Chancellor, UH Hilo</b>	<b>1</b>	<b>816,522</b>	<b>5</b>	<b>3,256,092</b>	<b>2,439,570</b>	<b>298.8%</b>	
Chancellor, UH Hilo	1	816,522	5	3,256,092	2,439,570	298.8%	
<b>College of Agriculture, Forestry and Natural Resource Mgt</b>	<b>10</b>	<b>1,188,560</b>	<b>8</b>	<b>599,411</b>	<b>(589,149)</b>	<b>-49.6%</b>	
College of Agriculture, Forestry and Natural Resource Mgt	5	319,020	5	362,914	43,894	13.8%	
Pacific Aquaculture and Coastal Resources Ctr	5	869,540	3	236,497	(633,043)	-72.8%	
<b>College of Arts and Sciences</b>	<b>7</b>	<b>1,401,519</b>	<b>9</b>	<b>709,876</b>	<b>(691,643)</b>	<b>-49.3%</b>	
College of Arts and Sciences	4	1,081,515	2	315,169	(766,346)	-70.9%	
Geography (UH Hilo)	3	320,004	5	289,707	(30,297)	-9.5%	
Psychology (UH Hilo)	-	-	1	5,000	5,000	100.0%	
Social Sciences Division	-	-	1	100,000	100,000	100.0%	
<b>College of Business and Economics</b>	<b>1</b>	<b>76,956</b>	<b>-</b>	<b>-</b>	<b>(76,956)</b>	<b>-100.0%</b>	
College of Business and Economics	1	76,956	-	-	(76,956)	-100.0%	
<b>College of Continuing Education and Community Svc</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>149,000</b>	<b>149,000</b>	<b>100.0%</b>	
College of Continuing Education and Community Svc	-	-	1	149,000	149,000	100.0%	
<b>College of Natural and Health Sciences</b>	<b>15</b>	<b>1,563,446</b>	<b>21</b>	<b>2,448,964</b>	<b>885,518</b>	<b>56.6%</b>	
Biology (UH Hilo)	-	-	1	108,049	108,049	100.0%	
College of Natural and Health Sciences	4	381,082	10	1,472,252	1,091,170	286.3%	
Computer Science (UH Hilo)	1	105,669	1	115,117	9,448	8.9%	
Geology	-	-	1	106,399	106,399	100.0%	

FY 2022 Monthly Report of Awards to Date as of March 31, 2022							
Summary By Campus							
Campus	FY 2021		FY 2022		\$ Change	% Change	
	Award Count	Award Amount	Award Count	Award Amount			
Kinesiology and Exercise Sciences	1	106,462	2	166,314	59,852	56.2%	
Marine Science	5	445,171	4	121,836	(323,335)	-72.6%	
Mathematics (UH Hilo)	1	16,800	-	-	(16,800)	-100.0%	
Tropical Conservation Biology and Environmental Science	3	508,262	2	358,997	(149,265)	-29.4%	
<b>College of Pharmacy</b>	<b>10</b>	<b>325,410</b>	<b>7</b>	<b>669,878</b>	<b>344,468</b>	<b>105.9%</b>	
College of Pharmacy	7	127,599	3	360,908	233,309	182.8%	
Pharmaceutical Sciences	2	176,931	1	124,011	(52,920)	-29.9%	
Pharmacy Practice	1	20,880	1	60,000	39,120	187.4%	
Research	-	-	2	124,959	124,959	100.0%	
<b>Hawaii Small Business Development Center</b>	<b>2</b>	<b>120,000</b>	<b>4</b>	<b>496,011</b>	<b>376,011</b>	<b>313.3%</b>	
Hawaii Small Business Development Center	2	120,000	4	496,011	376,011	313.3%	
<b>Imiloa Astronomy Center Of Hawaii</b>	<b>5</b>	<b>973,641</b>	<b>3</b>	<b>1,559,106</b>	<b>585,465</b>	<b>60.1%</b>	
Imiloa Astronomy Center Of Hawaii	5	973,641	3	1,559,106	585,465	60.1%	
<b>Ka Haka'Ula O Ke'Elikolani-UHH</b>	<b>4</b>	<b>1,318,408</b>	<b>7</b>	<b>1,978,383</b>	<b>659,975</b>	<b>50.1%</b>	
Hale Kuamo'o Center	1	950,000	2	1,085,424	135,424	14.3%	
Ka Haka'Ula O Ke'Elikolani-UHH	3	368,408	5	892,959	524,551	142.4%	
<b>Vice Chancellor for Administrative Affairs</b>	<b>2</b>	<b>22,500</b>	<b>3</b>	<b>134,630</b>	<b>112,130</b>	<b>498.4%</b>	
Vice Chancellor for Administrative Affairs	2	22,500	3	134,630	112,130	498.4%	
<b>Vice Chancellor for Research</b>	<b>14</b>	<b>1,228,316</b>	<b>8</b>	<b>651,315</b>	<b>(577,001)</b>	<b>-47.0%</b>	
Vice Chancellor for Research	14	1,228,316	8	651,315	(577,001)	-47.0%	
<b>Vice Chancellor for Student Affairs</b>	<b>12</b>	<b>2,975,475</b>	<b>10</b>	<b>3,014,609</b>	<b>39,134</b>	<b>1.3%</b>	
Student Affairs - Kipuka	1	630,588	-	-	(630,588)	-100.0%	
Upward Bound	5	1,199,403	5	1,488,004	288,601	24.1%	
Vice Chancellor for Student Affairs	6	1,145,484	5	1,526,605	381,121	33.3%	
<b>University of Hawai'i at Manoa</b>	<b>1,135</b>	<b>254,262,401</b>	<b>1,230</b>	<b>301,169,904</b>	<b>46,907,503</b>	<b>18.4%</b>	
<b>College of Arts and Humanities</b>	<b>10</b>	<b>672,488</b>	<b>11</b>	<b>353,358</b>	<b>(319,130)</b>	<b>-47.5%</b>	
Academy for Creative Media (Manoa)	-	-	1	32,000	32,000	100.0%	
American Studies	1	350,000	-	-	(350,000)	-100.0%	
College of Arts and Humanities	2	86,893	-	-	(86,893)	-100.0%	
History (UH Manoa)	-	-	2	8,500	8,500	100.0%	
Music (UH Manoa)	2	19,848	2	23,000	3,152	15.9%	
Philosophy (UH Manoa)	-	-	2	43,000	43,000	100.0%	
Theatre and Dance	2	5,400	3	20,858	15,458	286.3%	
UHM Uehiro Academy for Philosophy and Ethics in Education	3	210,347	1	226,000	15,653	7.4%	
<b>College of Education</b>	<b>51</b>	<b>16,813,522</b>	<b>64</b>	<b>25,240,675</b>	<b>8,427,153</b>	<b>50.1%</b>	
Center on Disability Studies/University Affiliated Pgms	24	9,705,486	24	11,545,140	1,839,654	19.0%	
College of Education	3	1,979,942	4	3,550,601	1,570,659	79.3%	
Curriculum Research and Development Group	10	2,378,503	9	1,968,236	(410,267)	-17.2%	
Department of Curriculum Studies	1	463,133	6	2,734,268	2,271,135	490.4%	
Department of Educational Administration	-	-	1	4,000	4,000	100.0%	
Department of Educational Foundations	1	15,000	1	913,779	898,779	5991.9%	
Department of Educational Psychology	-	-	1	439,772	439,772	100.0%	
Department of Kinesiology and Rehabilitation Science	3	345,348	5	1,425,575	1,080,227	312.8%	
Department of Learning Design and Technology	-	-	1	996,552	996,552	100.0%	
Department of Special Education	3	354,502	2	345,158	(9,344)	-2.6%	
Institute for Teacher Education	6	1,571,608	10	1,317,594	(254,014)	-16.2%	
<b>College of Engineering</b>	<b>33</b>	<b>4,998,745</b>	<b>31</b>	<b>5,567,199</b>	<b>568,454</b>	<b>11.4%</b>	
Civil and Environmental Engineering	9	1,108,778	11	1,985,340	876,562	79.1%	
College of Engineering	1	644,198	5	708,782	64,584	10.0%	
Electrical Engineering	6	1,607,315	7	916,882	(690,433)	-43.0%	
Hawaii Center for Advanced Communications	1	39,265	-	-	(39,265)	-100.0%	
Mechanical Engineering	16	1,599,189	8	1,956,195	357,006	22.3%	
<b>College of Language, Linguistics and Literature</b>	<b>11</b>	<b>1,371,008</b>	<b>17</b>	<b>2,475,607</b>	<b>1,104,599</b>	<b>80.6%</b>	
Center for Language and Technology	-	-	1	156,000	156,000	100.0%	
College of Language, Linguistics and Literature	-	-	2	1,105,201	1,105,201	100.0%	
Department of East Asian Languages and Literature	6	1,215,471	8	1,099,365	(116,106)	-9.6%	
Department of English	1	77,331	1	15,000	(62,331)	-80.6%	
Department of Linguistics	1	18,758	3	63,310	44,552	237.5%	
Department of Second Language Studies	2	53,368	2	36,731	(16,637)	-31.2%	
Dept of Languages and Literatures of Europe and the Americas	1	6,080	-	-	(6,080)	-100.0%	
<b>College of Natural Sciences</b>	<b>166</b>	<b>20,857,435</b>	<b>179</b>	<b>32,781,952</b>	<b>11,924,517</b>	<b>57.2%</b>	
Department of Biology (Biology Program)	4	330,655	11	1,543,791	1,213,136	366.9%	
Department of Botany	119	16,267,198	18	5,752,658	(10,514,540)	-64.6%	
Department of Chemistry	8	1,220,993	14	2,778,384	1,557,391	127.6%	
Department of Mathematics	8	815,024	3	216,789	(598,235)	-73.4%	
Department of Microbiology	-	-	2	413,716	413,716	100.0%	
Department of Physics and Astronomy	17	1,492,743	21	3,098,406	1,605,663	107.6%	
Information and Computer Sciences	9	635,822	8	1,550,277	914,455	143.8%	
Pacific Cooperative Studies Unit	1	95,000	102	17,427,931	17,332,931	18245.2%	
<b>College of Social Sciences</b>	<b>71</b>	<b>17,790,512</b>	<b>80</b>	<b>20,232,074</b>	<b>2,441,562</b>	<b>13.7%</b>	
College of Social Sciences	3	236,347	2	35,789	(200,558)	-84.9%	
Department of Anthropology	4	148,714	4	304,034	155,320	104.4%	
Economics (UH Manoa)	3	95,145	2	59,728	(35,417)	-37.2%	
Ethnic Studies	2	100,547	4	356,285	255,738	254.3%	
Geography (UH Manoa)	5	295,020	2	71,602	(223,418)	-75.7%	
Political Science (UH Manoa)	-	-	1	5,920	5,920	100.0%	
Psychology (UH Manoa)	10	1,298,839	10	558,749	(740,090)	-57.0%	

FY 2022 Monthly Report of Awards to Date as of March 31, 2022						
Summary By Campus						
Campus	FY 2021		FY 2022		\$ Change	% Change
	Award Count	Award Amount	Award Count	Award Amount		
Public Administration	2	15,700	1	108,000	92,300	587.9%
School of Communications	3	327,606	3	78,654	(248,952)	-76.0%
Social Science Research Institute	33	9,953,792	41	12,417,279	2,463,487	24.7%
Sociology (UH Manoa)	-	-	1	51,854	51,854	100.0%
Urban and Regional Planning	6	5,318,802	9	6,184,180	865,378	16.3%
<b>College of Tropical Agriculture and Human Resources</b>	<b>122</b>	<b>16,141,143</b>	<b>124</b>	<b>25,149,409</b>	<b>9,008,266</b>	<b>55.8%</b>
Agricultural Diagnostic Service Center	1	57,750	-	-	(57,750)	-100.0%
Center on the Family	5	519,859	7	1,147,914	628,055	120.8%
College of Tropical Agriculture and Human Resources	4	615,863	4	615,863	-	0.0%
Cooperative Extension	1	300,000	2	225,000	(75,000)	-25.0%
Family and Consumer Sciences	-	-	1	474,835	474,835	100.0%
Hawaii County	12	1,032,952	20	1,518,785	485,833	47.0%
Human Nutrition, Food and Animal Sciences	10	1,832,271	14	12,088,713	10,256,442	559.8%
Maui County	2	70,000	8	1,378,685	1,308,685	1869.6%
Molecular Biosciences and Bioengineering	7	952,319	7	604,626	(347,693)	-36.5%
Natural Resources and Environmental Mgt (NREM)	20	1,399,370	13	1,027,580	(371,790)	-26.6%
Oahu County	6	839,269	4	900,494	61,225	7.3%
Office of The Assoc Dean for Academic and Student Affairs	9	2,788,995	5	1,332,884	(1,456,111)	-52.2%
Plant and Environmental Protection Sciences	32	4,840,893	27	2,302,939	(2,537,954)	-52.4%
Tropical Plant and Soil Science	13	891,602	12	1,531,091	639,489	71.7%
<b>Hawai'iiniuakea School of Hawaiian Knowledge</b>	<b>5</b>	<b>1,000,675</b>	<b>18</b>	<b>1,512,210</b>	<b>511,535</b>	<b>51.1%</b>
Hawai'iiniuakea School of Hawaiian Knowledge	1	120,750	2	684,396	563,646	466.8%
Kamakakuokalani Center for Hawaiian Studies	3	180,800	4	405,512	224,712	124.3%
Kawaihuelani Center for Hawaiian Language	1	699,125	9	254,190	(444,935)	-63.6%
Native Hawaii Student Services	-	-	3	168,112	168,112	100.0%
<b>Institute for Astronomy</b>	<b>59</b>	<b>16,122,978</b>	<b>62</b>	<b>16,248,531</b>	<b>125,553</b>	<b>0.8%</b>
Institute for Astronomy	59	16,122,978	62	16,248,531	125,553	0.8%
<b>John A. Burns School of Medicine</b>	<b>160</b>	<b>49,659,154</b>	<b>141</b>	<b>46,808,389</b>	<b>(2,850,765)</b>	<b>-5.7%</b>
Associate Dean for Academic Affairs	9	1,391,411	12	4,702,109	3,310,698	237.9%
Department of Anatomy, Biochemistry, and Physiology	17	2,842,243	13	2,171,515	(670,728)	-23.6%
Department of Cell and Molecular Biology	4	293,384	5	593,589	300,205	102.3%
Department of Family Medicine and Community Health	13	2,766,490	10	1,208,112	(1,558,378)	-56.3%
Department of Geriatric Medicine	8	1,410,089	6	526,202	(883,887)	-62.7%
Department of Medicine	17	3,271,986	16	3,027,098	(244,888)	-7.5%
Department of Native Hawaiian Health	4	608,093	9	7,875,245	7,267,152	1195.1%
Department of Obstetrics, Gynecology and Women's Health	12	3,254,745	6	3,577,694	322,949	9.9%
Department of Pediatrics	13	3,787,879	15	4,349,859	561,980	14.8%
Department of Psychiatry	5	4,159,544	9	5,118,455	958,911	23.1%
Department of Quantitative Health Sciences	8	3,223,823	9	1,715,782	(1,508,041)	-46.8%
Department of Surgery	10	936,308	6	789,775	(146,533)	-15.7%
Department of Tropical Medicine, Medical Micro and Pharm	22	6,123,305	9	562,525	(5,560,780)	-90.8%
John A. Burns School of Medicine	17	15,463,734	16	10,590,429	(4,873,305)	-31.5%
Office of Biostatistics & Quantitative Health Sciences	1	126,120	-	-	(126,120)	-100.0%
<b>Lyon Arboretum</b>	<b>1</b>	<b>247,109</b>	<b>2</b>	<b>39,022</b>	<b>(208,087)</b>	<b>-84.2%</b>
Lyon Arboretum	1	247,109	2	39,022	(208,087)	-84.2%
<b>Nancy Atmospera-Walch School of Nursing</b>	<b>8</b>	<b>537,365</b>	<b>14</b>	<b>1,617,963</b>	<b>1,080,598</b>	<b>201.1%</b>
Department of Nursing	5	367,836	6	682,808	314,972	85.6%
Hawaii State Center for Nursing	2	78,729	-	-	(78,729)	-100.0%
Nancy Atmospera-Walch School of Nursing	1	90,800	8	935,155	844,355	929.9%
<b>Office of the Provost</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>98,011</b>	<b>98,011</b>	<b>100.0%</b>
Office of the Provost	-	-	3	98,011	98,011	100.0%
<b>Outreach College</b>	<b>4</b>	<b>145,096</b>	<b>3</b>	<b>132,500</b>	<b>(12,596)</b>	<b>-8.7%</b>
Community Programs	3	85,000	2	85,000	-	0.0%
Outreach College	1	60,096	1	47,500	(12,596)	-21.0%
<b>School of Architecture</b>	<b>1</b>	<b>183,102</b>	<b>1</b>	<b>179,585</b>	<b>(3,517)</b>	<b>-1.9%</b>
School of Architecture	1	183,102	1	179,585	(3,517)	-1.9%
<b>School of Ocean and Earth Science and Technology</b>	<b>275</b>	<b>65,425,406</b>	<b>305</b>	<b>80,183,653</b>	<b>14,758,247</b>	<b>22.6%</b>
Center for Microbial Oceanography, Research and Edu (C-MORE)	8	613,763	4	519,379	(94,384)	-15.4%
Cooperative Institute for Marine and Atmospheric Research (CIMAR)	31	12,774,858	42	14,844,065	2,069,207	16.2%
Department of Atmospheric Sciences	11	1,941,071	10	822,933	(1,118,138)	-57.6%
Department of Ocean and Resources Engineering	6	445,276	11	9,388,914	8,943,638	2008.6%
Department of Oceanography	35	9,660,368	29	6,486,382	(3,173,986)	-32.9%
Earth Sciences	16	2,750,237	22	3,892,717	1,142,480	41.5%
Hawaii Institute of Geophysics and Planetology (HIGP)	45	5,309,460	47	7,934,472	2,625,012	49.4%
Hawaii Institute of Marine Biology (HIMB)	31	4,674,953	49	8,975,281	4,300,328	92.0%
Hawaii Natural Energy Institute (HNEI)	13	7,703,680	14	8,072,027	368,347	4.8%
International Pacific Research Center (IPRC)	4	534,747	2	422,498	(112,249)	-21.0%
Pacific Biosciences Research Center	35	6,482,974	26	3,918,073	(2,564,901)	-39.6%
School of Ocean and Earth Science and Technology	6	5,331,721	6	7,539,323	2,207,602	41.4%
Sea Grant College Program	32	6,265,489	39	6,218,320	(47,169)	-0.8%
University Marine Center/Ship Operations	2	936,809	4	1,149,269	212,460	22.7%
<b>School of Pacific and Asian Studies</b>	<b>12</b>	<b>1,448,668</b>	<b>15</b>	<b>2,607,094</b>	<b>1,158,426</b>	<b>80.0%</b>
Center for Chinese Studies	1	90,000	1	350,000	260,000	288.9%
Center for Japanese Studies	4	593,183	4	598,183	5,000	0.8%
Center for Korean Studies	2	89,756	3	68,000	(21,756)	-24.2%
Center for Pacific Islands Studies	-	-	1	13,992	13,992	100.0%
Center for Southeast Asian Studies	1	118,703	2	563,500	444,797	374.7%

FY 2022 Monthly Report of Awards to Date as of March 31, 2022							
Summary By Campus							
Campus	FY 2021		FY 2022		\$ Change	% Change	
	Award Count	Award Amount	Award Count	Award Amount			
School of Pacific and Asian Studies	4	557,026	4	1,013,419	456,393	81.9%	
<b>School of Travel Industry Management</b>	-	-	1	<b>35,382</b>	<b>35,382</b>	<b>100.0%</b>	
School of Travel Industry Management	-	-	1	35,382	35,382	100.0%	
<b>Shidler College of Business</b>	1	<b>24,500</b>	1	<b>36,000</b>	<b>11,500</b>	<b>46.9%</b>	
Pacific Asian Management Institute	1	24,500	-	-	(24,500)	-100.0%	
Shidler College of Business	-	-	1	36,000	36,000	100.0%	
<b>Thompson School of Social Work &amp; Public Health</b>	34	<b>14,964,851</b>	35	<b>10,406,034</b>	<b>(4,558,817)</b>	<b>-30.5%</b>	
Center on Aging	10	4,427,313	8	7,098,781	2,671,468	60.3%	
Department of Social Work	-	-	1	16,200	16,200	100.0%	
Dept of Public Health Sciences and Epidemiology	-	-	1	2,443	2,443	100.0%	
Office of Public Health Studies	18	4,144,905	15	1,913,137	(2,231,768)	-53.8%	
Thompson School of Social Work & Public Health	6	6,392,633	10	1,375,473	(5,017,160)	-78.5%	
<b>University of Hawaii Cancer Center</b>	58	<b>17,230,108</b>	60	<b>18,548,454</b>	<b>1,318,346</b>	<b>7.7%</b>	
Cancer Biology	15	2,240,440	14	1,860,176	(380,264)	-17.0%	
Cancer Epidemiology	30	7,256,335	32	13,070,459	5,814,124	80.1%	
Cancer Prevention in the Pacific	3	624,448	3	782,866	158,418	25.4%	
Translational and Clinical Research	3	1,400,538	2	1,189,039	(211,499)	-15.1%	
University of Hawaii Cancer Center	7	5,708,347	9	1,645,914	(4,062,433)	-71.2%	
<b>Vice Chancellor, Admin, Finance and Operations</b>	-	-	1	<b>124,000</b>	<b>124,000</b>	<b>100.0%</b>	
Department of Public Safety	-	-	1	124,000	124,000	100.0%	
<b>Vice Provost, Academic Excellence</b>	15	<b>1,737,232</b>	19	<b>1,996,926</b>	<b>259,694</b>	<b>14.9%</b>	
Graduate Education	2	1,063,917	4	1,165,706	101,789	9.6%	
International & Exch Program	1	52,806	-	-	(52,806)	-100.0%	
Library (UH Manoa)	6	81,672	8	159,864	78,192	95.7%	
Undergraduate Education	3	497,279	2	585,774	88,495	17.8%	
Vice Provost, Academic Excellence	3	41,558	5	85,582	44,024	105.9%	
<b>Vice Provost, Research and Scholarship</b>	1	<b>17,279</b>	1	<b>2,444</b>	<b>(14,835)</b>	<b>-85.9%</b>	
Vice Provost, Research and Scholarship	1	17,279	1	2,444	(14,835)	-85.9%	
<b>Vice Provost, Student Success</b>	14	<b>4,684,291</b>	11	<b>4,030,709</b>	<b>(653,582)</b>	<b>-14.0%</b>	
Health & Wellness	-	-	1	10,000	10,000	100.0%	
Student Equity Excel & Diversity	12	3,839,473	9	3,965,709	126,236	3.3%	
Women's Center	2	844,818	1	55,000	(789,818)	-93.5%	
<b>Water Resources Research Center</b>	10	<b>1,345,970</b>	14	<b>3,431,296</b>	<b>2,085,326</b>	<b>154.9%</b>	
Water Resources Research Center	10	1,345,970	14	3,431,296	2,085,326	154.9%	
<b>William S. Richardson School of Law</b>	13	<b>843,764</b>	17	<b>1,331,427</b>	<b>487,663</b>	<b>57.8%</b>	
William S. Richardson School of Law	13	843,764	17	1,331,427	487,663	57.8%	
<b>University of Hawai'i at West O'ahu</b>	16	<b>2,376,100</b>	20	<b>6,573,359</b>	<b>4,197,259</b>	<b>176.6%</b>	
<b>Chancellor, UH West Oahu</b>	16	<b>2,376,100</b>	20	<b>6,573,359</b>	<b>4,197,259</b>	<b>176.6%</b>	
Chancellor, UH West Oahu	6	944,000	5	3,173,778	2,229,778	236.2%	
Division of Business	1	183,088	1	201,871	18,783	10.3%	
Division of Humanities	-	-	1	15,000	15,000	100.0%	
Division of Mathematics, Natural and Health Sciences	1	47,500	2	799,883	752,383	1584.0%	
Division of Social Sciences	2	306,512	5	1,244,577	938,065	306.0%	
'Ulu'ulu Giugni Archives	2	140,000	-	-	(140,000)	-100.0%	
Vice Chancellor for Academic Affairs (UH WO)	1	110,000	2	18,250	(91,750)	-83.4%	
Vice Chancellor for Student Affairs	3	645,000	4	1,120,000	475,000	73.6%	
<b>University of Hawai'i Maui College</b>	33	<b>11,914,780</b>	42	<b>12,680,362</b>	<b>765,582</b>	<b>6.4%</b>	
<b>Chancellor, UH Maui College</b>	33	<b>11,914,780</b>	42	<b>12,680,362</b>	<b>765,582</b>	<b>6.4%</b>	
Allied Health Department	1	57,000	-	-	(57,000)	-100.0%	
Chancellor, UH Maui College	31	11,782,780	38	12,270,064	487,284	4.1%	
Cooperative Education (UH Maui College)	1	75,000	-	-	(75,000)	-100.0%	
Science, Technology, Engineering and Mathematics Department	-	-	1	199,998	199,998	100.0%	
University of Hawaii Center, Maui	-	-	3	210,300	210,300	100.0%	
<b>University of Hawai'i System</b>	72	<b>72,739,792</b>	70	<b>44,819,454</b>	<b>(27,920,338)</b>	<b>-38.4%</b>	
<b>Office of the Vice President for Community Colleges</b>	8	<b>18,907,261</b>	7	<b>3,806,796</b>	<b>(15,100,465)</b>	<b>-79.9%</b>	
Office of the Vice President for Community Colleges	8	18,907,261	7	3,806,796	(15,100,465)	-79.9%	
<b>Office of the Vice President for Research and Innovation</b>	39	<b>25,298,815</b>	36	<b>25,977,584</b>	<b>678,769</b>	<b>2.7%</b>	
Applied Research Laboratory	33	19,541,215	25	14,610,403	(4,930,812)	-25.2%	
Office of the Vice President for Research and Innovation	6	5,757,600	10	11,342,243	5,584,643	97.0%	
STEM Pre-Academy	-	-	1	24,938	24,938	100.0%	
<b>Office of the VP for Academic Planning and Policy</b>	6	<b>6,201,983</b>	10	<b>4,751,331</b>	<b>(1,450,652)</b>	<b>-23.4%</b>	
Hawai'i P-20 Partnerships for Education Office	6	6,201,983	10	4,751,331	(1,450,652)	-23.4%	
<b>Office of the VP for Information Tech/Chief Info Officer</b>	17	<b>22,156,064</b>	14	<b>9,735,098</b>	<b>(12,420,966)</b>	<b>-56.1%</b>	
Office of the VP for Information Tech/Chief Info Officer	10	13,475,535	12	3,634,842	(9,840,693)	-73.0%	
Pacific Disaster Center	7	8,680,529	2	6,100,256	(2,580,273)	-29.7%	
<b>Office of the VP for Student Affairs and Univ/Comm Relations</b>	-	-	2	<b>479,639</b>	<b>479,639</b>	<b>100.0%</b>	
Hawaii Commission for National and Community Service (HCNCS)	-	-	2	479,639	479,639	100.0%	
<b>President, University of Hawaii System</b>	1	<b>158,868</b>	-	-	<b>(158,868)</b>	<b>-100.0%</b>	
President, University of Hawaii System	1	158,868	-	-	(158,868)	-100.0%	
<b>VP For Administration</b>	1	<b>16,801</b>	1	<b>69,006</b>	<b>52,205</b>	<b>310.7%</b>	
VP For Administration	1	16,801	1	69,006	52,205	310.7%	
<b>Windward Community College</b>	18	<b>5,526,504</b>	20	<b>9,664,035</b>	<b>4,137,531</b>	<b>74.9%</b>	
<b>Chancellor, Windward Community College</b>	18	<b>5,526,504</b>	20	<b>9,664,035</b>	<b>4,137,531</b>	<b>74.9%</b>	
Academic Affairs (Windward CC)	1	851,053	2	1,056,396	205,343	24.1%	
Chancellor, Windward Community College	17	4,675,451	18	8,607,639	3,932,188	84.1%	
<b>Grand Total</b>	<b>1,405</b>	<b>367,382,246</b>	<b>1,533</b>	<b>409,021,462</b>	<b>41,639,216</b>	<b>11.3%</b>	



**Committee on Research and Innovation**  
Annual Review for the 2021-2022 Academic Year

	Committee duties per bylaws	2021-2022 Committee Goals and Objectives	Projected Accomplishments			
			1 <sup>st</sup> Q Jul-Sept	2 <sup>nd</sup> Q Oct-Dec	3 <sup>rd</sup> Q Jan-Mar	4 <sup>th</sup> Q Apr-Jun
1	Evaluate and approve long range plans that establish the strategic goals and objectives for research, innovation, and technology transfer at the University.	Research and Innovation Long-Range Plans and Goals				
		Innovation Presentation: Office of Indigenous Innovation, by Kamuela Enos (10/7/21)		X		
		Received updates on the UH Cancer Center Task Force and Early Phase Clinical Research Center (EPCRC) Business Plan Report (2/3/22)			X	
2	Review and make recommendations regarding investments, policies, and practices relating to University research, innovation and technology transfer programs.	Received FY21 Year-in-Review and FY22 Extramural Award Outlook (10/7/21)		X		
		Received Extramural Awards Quarterly Report (5/5/22)				X
		Research Project Presentation: Natural Resources Management/Conservation, by Melissa Price (10/7/21)		X		
		Research Project Presentation: The Global Impact of Hawai'i Astronomy, by Doug Simons (2/3/22)			X	
		Research Project Presentation: Basic to Applied Research: Volcanology to Hydrology to Managing Community Risks, by Don Thomas (5/5/22)				X
		Facilities and Administrative (F&A) Cost Rate Primer (2/3/22)			X	

3	Review and make recommendations on proposals to establish or to terminate Organized Research Units (ORU) and research centers.					
4	Work in concert with Administration to establish performance goals and metrics to evaluate progress against the strategic goals and objectives.	Strategic Directions: Received Update on Metrics (10/7/21; 5/5/22)		X		X
5	<i>Committee Governance</i>	Reviewed committee work plan (10/7/21)		X		
		Review committee's work for the year (5/5/22)				X