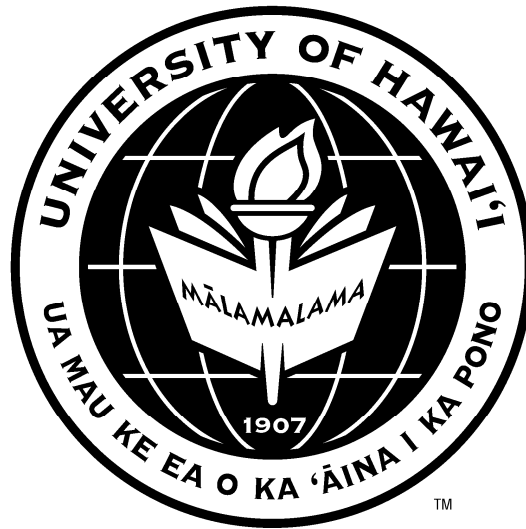


UNIVERSITY OF HAWAI‘I SYSTEM REPORT



REPORT TO THE 2022 LEGISLATURE

Report from the RCUH Task Force

SR 148 SD1 (2021)

December 2021

1 | TASK FORCE CHARGE

Senate Resolution 148 SD1 (SR148), which was adopted by the Senate, requested the University of Hawai'i (UH) to convene a task force to examine and assess its arrangement for services with the Research Corporation of the University of Hawai'i (RCUH), including the terms and conditions of the service agreement between the parties and whether amendments to the service agreement (a.k.a., UH-RCUH Internal Agreement or Internal Agreement) are warranted.

In particular, the Senate stated that “it is a matter of statewide concern to assure that the fees committed and paid by the University of Hawai'i to the RCUH for its support services are reasonable and commensurate with, and balanced against, the needs, priorities, and other demands placed on the University's limited resources [...]”

UH previously convened a working group to review the Internal Agreement, the associated management fee, RCUH operational costs, and to provide recommendations that are beneficial to both UH and RCUH. The task force will continue the efforts of the working group.

2 | TASK FORCE MEMBERSHIP

Pursuant to SR148, the task force was appointed as follows:

- Dr. Vassilis Syrmos, Vice President for Research and Innovation, UH System, Chair
- Leonard Gouveia, Jr., Executive Director, Research Corporation of the University of Hawai'i
- Glenn Yee, Director of Finance, Research Corporation of the University of Hawai'i
- Eugene Bal III, Board of Regents University of Hawai'i, Board of Regents Chairperson's designee
- Dr. Brian Taylor, Dean, School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa (UH Mānoa), UH President appointee
- Michael Unebasami, Associate VP for Administrative Affairs, UH Community Colleges, UH President appointee
- Dr. Velma Kameoka, Interim Vice Provost for Research & Scholarship, UH Mānoa, UH President appointee

3 | EXECUTIVE SUMMARY

UH previously convened a working group, which reviewed RCUH operational costs and reasons for the increase from FY 2015 to FY 2020. The working group recognized that the driver of the operational cost increase was the implementation of RCUH's Strategic Plan. The creation of that Strategic Plan was in response to the 2015 Legislative Audit. Three major sources for the increase were identified:

- Increase in depreciation, which resulted from planned equipment purchases to support information technology (IT) modernization and improvements
- Increase in IT services costs, which were necessary to implement the planned modernization and improvements to RCUH's financial, procurement and human resources systems
- Increase in RCUH project development (Discontinued in 2021; see Section 5 Findings for details)

UH pays for the RCUH management fee from research and training revolving funds (RTRF). UH members of the working group believe that, while RCUH provides a valuable service, the extramural awards management fee should not account for more than 10% of the available annual RTRF allocation (approx. \$50-52 million).

The task force is recommending that UH and RCUH explore ways of reducing the extramural awards management fee such as:

- Revising the service order criteria for intramural service orders and revolving account service orders, as well as eliminating non-extramural construction, in order to reduce the volume of non-extramural service orders to RCUH. The reduction in volume may help reduce overall RCUH operating costs and allow it to focus on supporting sponsored research and training.
- Considering integrating RCUH into the UH financial system to reduce redundancy, lower costs and improve compliance; if that is not possible, exploring information sharing to address compliance issues
- Paying UH's share of RCUH IT investments separately, as needed, and not as part of the extramural award management fee (assumes RCUH integration in UH financial system is not possible)

Terms of the Internal Agreement may change based on the results of these proposed recommendations and would be made in the future. As a result, this report does not propose changes to the current Internal Agreement at this time.

4 | BACKGROUND

Establishment and Purpose of RCUH

RCUH was established by the Hawai'i Legislature in 1965 to assist UH in hiring employees and procuring goods and services in a rapid and efficient manner to facilitate the timely conduct of UH extramurally-funded research and training grants and contracts. In order to provide this responsiveness and flexibility, the Legislature exempted RCUH from certain state personnel and procurement laws (see Table 1), which would otherwise undermine UH competitiveness among research universities.

Table 1 – Key RCUH Powers

Hawai'i Revised Statute (HRS)	Benefits
Per HRS 304A-3005: Exempt from Chapter 103D, relating to advertising for bids and purchases to be made in Hawaii whenever public moneys are expended	Enables UH to avoid a major delay in obtaining goods and services for projects in a timely manner. In addition, having a dedicated procurement office for extramural funds expedites processing of purchase orders and payments.
Per HRS 304A-3005: Exempt from Chapter 76, relating to civil service and Chapter 78-1, relating to public employment	Enables UH to hire project employees quicker, at competitive salaries and with a shorter retirement vesting period than under public employment. Also enables UH to release employees when projects end, unlike public employment that provides vested employees with certain rights to reemployment.
HRS 304A-3010: Authorization for RCUH to set up a special account, which “may be used to receive, disburse and account for funds of research and training projects of the University of Hawaii [...]”	Along with HRS 304A-3003, which grants RCUH broad powers, it enables UH to establish revolving fund accounts (a.k.a., recharge centers in federal nomenclature) within the RCUH special fund account.

It should be noted that RCUH is only exempt from State of Hawai'i personnel and procurement laws as it relates to rules the state has placed on the expenditure of public funds or public employment. RCUH is not exempt from other federal or state laws, statutes, regulations, or policies with respect to grants and contracts administration or the conduct of research.

UH Utilization of RCUH and Payment Method for Services

UH determines whether to send procurement and personnel transactions to RCUH. The process is referred to as a “service order” in UH Administrative Procedure (AP) 12.203 – Service Orders to the RCUH and AP 12.204 – Revolving Fund Service Orders to the RCUH. There are four types of service orders and the payment methods, per Section 6 of the Internal Agreement, are described in the Table 2 below.

Table 2 – Types of Service Orders

Service Order Type	Description/Comments	Payment Method/Source of Funds
Extramural ("Schedule A" – Section 6.2)	Procurement and personnel services for grants and contracts. Prior to 2000, a service order determination was required, which was considered a major impediment by faculty. Since a 2000 UH President executive memo, all grants and contracts are automatically service ordered to RCUH.	Covered by "UH Management Fee" formula: UH Modified Total Direct Costs ¹ (MTDC)/All Projects MTDC x RCUH Operating Expenses = UH Management Fee Paid from Research and Training Revolving Funds (RTRF).
Internal ("Schedule B" – Section 6.3)	Procurement and personnel services for research and training activities supported by institutional funds such as Research and Training Revolving Funds (RTRF). Service order determinations are required.	Federally negotiated service order rate x internal service order MTDC = Fee Paid from service ordered funds.
Revolving fund account ("Schedule B" – Section 6.3)	Establish a recharge center ² within the RCUH special account and provide related procurement and personnel services. Service order determinations are required.	Federally negotiated service order rate x internal service order MTDC = Fee. Paid from revolving fund account and recovered in fee paid by users of recharge center.
Other ("Schedule C" – Section 6.4)	Other situations where RCUH personnel and procurement services are necessary to support research and training activities and initiatives	RCUH is entitled to recover all direct expenses incurred in providing services. Generally, fee is negotiated between unit requesting services and RCUH. Paid from funds set aside by UH unit to pay the fee.

¹ MTDC is modeled after the federal definition. Under the Internal Agreement, it includes salaries and wages, fringe benefits, materials and supplies, services, travel, subgrants and subcontracts up to \$25,000 each but excluding equipment costs as defined in 2 CFR 200.33, trainees' tuition, stipends and allowances, rental space, and charges from specialized service facilities.

² Recharge centers are facilities that provide services or products to primarily UH customers for a fee with the goal of breaking even over time. Such services or products relate to and support the research and training mission of UH by providing consulting, materials or supplies, or specialized equipment at economies of scale to grants and contracts, instruction, other institutional activities, and sometimes outside entities. Examples include research ship operations; electronics, optics and machine shops; sample testing and analysis; microscopy; imaging; informatics; geographic information system (GIS) mapping and analysis; chemical stores; liquid nitrogen generation; publications support; conference support; etc.

Information was requested regarding the duration of the services. All service ordered projects have project start and end dates. However, UH principal investigators have many awards throughout the year, some of which have overlapping project periods. Thus, it can be said that the UH-RCUH service relationship is ongoing.

Volume of UH Extramural Awards Service Ordered to RCUH

The extramural awards that UH receives annually are primarily cost-reimbursable, meaning that UH must incur costs first, bill the sponsor, and then receive payment. Thus, extramural awards are often referred to as “obligations” because at the time of award there is no transfer of cash from the sponsor to UH. This is common among higher educational institutions that conduct sponsored research and training.

Table 3 summarizes annual expenditures of UH extramural awards that are service ordered to RCUH. The task force used annual extramural expenditures (rather than dollar amount of awards) to show the amount service ordered because expenditures more accurately reflect the portions of an extramural award that are service ordered to RCUH, and various items budgeted in an award are not processed via RCUH, such as UH employee payroll, student fellowship and trainee payments, and UH purchasing card transactions.

Table 3 – RCUH Transactions as Percentage of UH Extramural Expenditures (Direct Costs)

(millions)

Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Direct costs	\$342.4	\$342.1	\$340.7	\$341.4	\$348.9
F&A costs	\$48.3	\$47.5	\$48.6	\$50.8	\$50.7
UH expenditures	\$390.7	\$389.6	\$389.3	\$392.2	\$399.6
RCUH extramural service order transactions ³	\$208.2	\$196.5	\$199.1	\$196.3	\$200.4
RCUH % of UH direct costs	60.8%	57.4%	58.4%	57.5%	57.4%

In Table 3, the RCUH percentage is calculated based on UH direct costs. Facilities & Administrative costs (F&A) are calculated based on the rate and calculation base that sponsors have authorized UH to use on their awards for F&A recovery. These can range from as high as the UH’s federally negotiated F&A rates (e.g., 56.50% of MTDC for Kaka’ako Campus research) or as low as 0%, where the sponsor policy prohibits award recipients from charging F&A. The F&A costs recovered on grants and contracts become revenue to the Research and Training Revolving Fund (RTRF) under HRS 304A-2253.

An accounting for the items for which the F&A costs/RTRF retained by the UH were spent was requested. Appendix 1 contains a copy of the Annual Report on the Research and Training Revolving Fund to the 2021 Legislature. The report summarizes the fund investments for UH fiscal year 2020. Please note that on page 2 of the report, it is reported that \$5.8 million of the RTRF was set aside to pay the RCUH management fee.

Fees Paid by UH and Other Sources of Revenue to Cover RCUH Operating Costs

RCUH does not directly receive state general fund appropriations from the Legislature. It funds its operating costs through the assessment of service fees. On average, UH’s combined service orders (i.e., extramural

³ Total expenditures.

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awards, internal service orders, and revolving fund accounts) account for approximately 90% of RCUH's business. It is important to note that UH pays for the majority of its service fees from legislatively appropriated funds. Specifically, Research and Training Revolving Fund (RTRF) is the primary source of funds used by UH to pay RCUH management fees for extramural service orders. RTRF is funded by indirect cost or F&A recovery on grants and contracts awarded to UH and is appropriated to UH under Hawaii Revised Statutes (HRS) 304A-2253. This expenditure is an allowable cost because the statute permits RTRF to be used for facilitating research and training.

Under Article 13 of the Internal Agreement, RCUH may provide services to other organizations that are not a part of UH. In addition, RCUH can be a prime contractor or grantee on its own projects (a.k.a., RCUH direct projects). RCUH has its own federally negotiated rate for such projects, which UH calculates and negotiates as part of UH's F&A cost proposal to the federal government.

Also, under current arrangements, the UH Office of the Vice President for Research and Innovation has agreed to reimburse RCUH for the costs of leasing space at the East-West Center to house part of RCUH's operations.

A simplified, high-level overview of the source of RCUH operating revenues and operating costs is presented in Table 4 below.

Table 4 – RCUH Operating Revenues and Operating Costs

Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Extramural award fees	\$4,119,190	\$4,905,605	\$5,232,005	\$5,840,525	\$6,328,537
Internal/revolving account fees	\$1,644,025	\$1,645,916	\$1,637,624	\$1,448,707	\$1,322,314
East-West Center	\$101,423	\$101,744	\$101,103	\$109,623	\$109,611
UH subtotal	\$5,864,638	\$6,653,265	\$6,970,732	\$7,398,495	\$7,760,462
RCUH direct projects	\$874,862	\$756,360	\$681,275	\$794,121	\$593,243
Total revenue	\$6,739,500	\$7,409,625	\$7,652,007	\$8,192,616	\$8,353,705
Operating expenses	\$6,629,482	\$7,744,019	\$8,016,402	\$8,561,553	\$9,047,893
Net operating income (loss)	\$110,018	(\$344,394)	(\$364,395)	(\$368,937)	(\$694,188)

Key Dates in UH-RCUH Relationship

1965 – RCUH established

1973 – First UH-RCUH Internal Agreement executed

1993 – Legislative Audit identified lack of UH control over RCUH and incompatible economic development mission of RCUH as problems

1995 - Follow-up on 1993 Legislative Audit on RCUH found that RCUH initiated steps to implement the recommendations from the 1993 audit.

1996 – UH-RCUH Internal Agreement substantially revised

1997 – UH implements Financial Management Information System (FMIS); RCUH does not adopt

1998 – RCUH website and online financial system launched

2000 – UH President’s executive memo directing automatic service order of extramural funds to RCUH issued

2012 – UH implements Quali Financial System (KFS); After consultation with UH and RCUH stakeholders, RCUH decides to not adopt KFS

2014 – Legislature changes composition of RCUH board to reduce UH control and leadership

2015 – Legislative Audit identified lack of progress by RCUH from diversifying from UH and not doing enough to fulfill its economic development mission as problems

2017 - UH-RCUH Internal Agreement reconfirmed

2018 - Follow-up on 2015 Legislative Audit on RCUH found 11 of 11 recommendations were implemented, including the adoption of a strategic plan to increase the number of non-UH research projects.

Brief Discussion on Substantive Changes to UH-RCUH Internal Agreement

As shown in Table 5, the first UH-RCUH Internal Agreement in 1973 consisted of eight articles. The revision in 1996 expanded the agreement to fifteen articles.

Table 5 – Side by Side Internal Agreement Section Headings

1973	1996
1 – Appropriate Undertakings and Services to be Provided [...]	1 - Definitions
2 – Processing of Proposals	2 – Appropriate Undertakings and Services to be Provided [...]
3 – Service Procedure	3 – Processing of Proposals
4 – Responsibilities of the University	4 – Responsibilities of the University
5 – Responsibilities of the Corporation	5 – Responsibilities of the Corporation
6 – Funding –Corporate Expenses	6 – University’s Payment for Corporation’s Administrative Services [...]
7 – Changes	7 – Working Capital; Reimbursement
8 – Termination	8 – Personnel
	9 – Equipment Purchases and Inventory
	10 – Revolving Fund Accounts
	11 – Intellectual Property
	12 – Other University Projects
	13 – Non-University Projects
	14 – Facilities
	15 – Miscellaneous

Instead of examining each article, the task force identified articles relevant to the review or for historical information. For example, a few of the changes in the 1996 revision were made in response to a federal review.

In 1991, an inquiry by the U.S. Office of Naval Research (ONR) into Stanford University’s indirect cost (now known as F&A) rates uncovered alleged unallowable costs. ONR decided to review its other F&A cognizant universities, including UH. The review by the Defense Contract Audit Agency (DCAA) reported 27 findings.

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To summarize, these findings dealt with: 1) equipment title and inventory procedures, 2) federal rules regarding recharge centers (known as “revolving fund accounts” in UH/RCUH nomenclature), and 3) internal control and compliance issues. The first two are addressed by Articles 2.3 (refers to AP 12.204 – Revolving Fund Service Orders to RCUH), 9, and 10. The third was addressed by firmly placing compliance responsibility with UH.

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. [...]

The UH believes these revisions were necessary and are acceptable today.

Other relevant articles to the review are:

Article	Comments
7 – Working Capital; Reimbursement	Per terms, UH reimburses RCUH on a weekly basis for payments made on behalf of UH by RCUH for UH.
10 – Revolving Fund Accounts	Establishes the use of Revolving Funds Accounts and the intent of the UH to utilize RCUH’s administrative services.
12 – Other University Projects	Establishes the use of Intramural (Internal) Projects and the intent for the UH to utilize RCUH’s administrative services.
13 – Non-University Projects	UH acknowledges that RCUH may provide services to organizations that are not part of the UH (i.e., State of Hawaii and Not-For-Profits)
14 – Facilities	Per terms, UH shall provide administrative facilities to RCUH at no cost; may have been a tool in reducing the management fee in the past.

Appendix 2 contains a copy of the current Internal Agreement. The 2017 restatement updated references to the current HRS, UH and RCUH policies and procedures, and incorporated existing Internal Agreement amendments.

Control

The 1993 Legislative Audit occurred shortly after the 1991 ONR review. In 1993, the auditor found that lack of UH control over RCUH and the incompatible economic development mission of RCUH to be problems. At the time, UH amounted to approximately 90% of RCUH’s business.

From 1993 to 2014, there was the appearance of UH control over RCUH. Under the HRS, the UH President also served as the President of RCUH and five of the ten RCUH Board members were selected by the UH Board of Regents. It appeared to be a relatively stable period, including the management fee.

Coincidentally, after 2014 when the HRS was revised to remove the UH President as the President of RCUH and reduce UH representation on the RCUH Board to three out of eight members (one of them a non-voting member), RCUH operating expenses started to increase. However, as noted in Findings, it is merely coincidental and there are other factors involved.

Information Technology

As one of the ONR review corrective actions, UH implemented a new financial system in 1997. RCUH chose not to participate in the implementation and instead implemented its own web-based financial system in 1998 that included procurement capabilities.

When UH implemented the Quali Financial System (KFS), RCUH decided to not participate after many discussions and evaluations with UH and RCUH stakeholders. Reasons cited included UH and RCUH operating under differing purposes, policies and procedures and the cost of conversion were deemed prohibitive. It is also important to note that in a survey of users who used both systems, 87% expressed a strong preference for the RCUH system and its user-friendly interface.

These actions may have represented missed opportunities to reduce future costs.

5 | FINDINGS

As described under Section 1-Task Force Charge, UH previously convened a working group that included five of the task force members (three from UH and two from RCUH).

One of the topics the working group reviewed was RCUH operational costs and reasons for the increase from FY 2015 to FY 2020. The working group recognized that the driver of the operational cost increase was the implementation of RCUH's Strategic Plan. The creation of that Strategic Plan was in response to the 2015 Legislative Audit. Three major sources for the increase were identified:

- Increase in depreciation, which resulted from planned equipment purchases to support information technology (IT) modernization and improvements
- Increase in IT services costs, which were necessary to implement the planned modernization and improvements to RCUH's financial, procurement and human resources systems
- Increase in RCUH project development

From 2015 to 2020, in collaboration with the OVPRI, RCUH awarded \$2.4 million to OVPRI to implement a program where investigators could apply for seed funding in research areas that were identified as strategic hubs under the research and innovation long-range plan. The program failed to attract qualified, high impact proposals and was discontinued in 2021.

UH members understood that RCUH's IT systems needed to be updated in order to deliver improved services. In the past there has been coordination and discussions between RCUH and UH for such strategic IT investments (e.g., KFS conversion). However, a decision was made for RCUH to continue to develop and operate its own long-range IT plan.

In the end, the IT investments were probably necessary. RCUH disclosed that the AS400 system and financial software that is the backbone of their current system is nearing end of life and will need to be replaced soon. Again, an understandable situation, but there should be more coordination with UH going forward to identify potential cost saving measures, if any.

In addition, the working group examined the management fee for Extramural Projects. The current management fee structure for Extramural Projects requires UH to fund approximately 65%, on average, of the RCUH's operating costs based on the formula in Internal Agreement Section 6.2. UH participates in RCUH budget deliberation, but is a minority on the RCUH Board while providing 90% of RCUH's business.

The UH members were concerned that UH is obligated to pay the RCUH management fee under the current arrangement even though UH faces budget cuts. Thus, the working group's UH members proposed a change to limit the amount for the management fee to 10% of the current year's RTRF allocation, which is based on the prior year's actual RTRF revenue. This would amount to roughly \$5.0 to \$5.2 million based on recent RTRF revenue. Demand for RTRF is enormous and the 10% cap is in line with the constraint that was established on off-the-top expenses under UH EP 12.216 – Research and Training Revolving Fund.

RCUH objected to this proposal noting that UH EP 12.216 was in direct conflict with the existing Internal Agreement and created without any prior discussions with RCUH.

6 | RECOMMENDATIONS

Recommendation #1 – Tie Management Fee to the University of Hawai'i (UH)'s Facilities & Administrative Cost (F&A) Recovery

The Research and Training Revolving Fund (RTRF) is the primary source of funds used by UH to pay RCUH management fees for extramural service orders. RTRF is funded by indirect cost or F&A recovery on grants and contracts awarded to UH and is appropriated to UH under Hawaii Revised Statutes (HRS) 304A-2253. This expenditure is an allowable cost because the statute permits RTRF to be used for facilitating research and training.

The RTRF is a finite resource that is used to support research and training purposes that may result in additional grants and contracts at UH. The amount of RTRF recovered annually is around \$50-52 million and, in 2020, a UH committee recommended placing a 10% cap on the amount of RTRF that can be used for the RCUH management fee for extramural service orders. As mentioned earlier, the 10% cap is specified in UH Executive Policy 12.216. RCUH was not included in this committee and had no knowledge of its existence.

After deducting the RCUH management fee, about 75% of the RTRF is distributed to the campuses. The remaining 25% is used for UH System research and training support services and any funds remaining are used to strategically invest in campus or research unit requests for support of initiatives aimed at stimulating growth in extramural awards or innovation. UH views RCUH as a necessity, but RCUH operating costs cannot take up a larger share of RTRF given the other demands on the fund.

Recommendation:

1. RCUH should explore measures to bring the UH extramural awards share of its operating costs in line with the amount available based on the 10% cap of RTRF.
2. UH and RCUH should work together to explore ways to reduce services and related costs. Some recommended actions are contained in this document for consideration.

Timeline:

- Target Spring 2022 for implementation in FY 2023.

Recommendation #2 – Reduce Service Orders to the Research Corporation of the University of Hawai'i (RCUH)

The RCUH's operating costs are tied to the nature, complexity, and volume of services that the UH requests from RCUH. One way to reduce RCUH operating costs and the resultant management fee is to reduce the volume of UH service orders submitted to RCUH.

Although RCUH has broad purposes and powers under HRS 304A-3001 and HRS 304A-3003, UH's ability to utilize RCUH is governed by HRS 304A-112. Under this statute, UH's use of RCUH is limited to sponsored research and training projects and only when UH determines that neither UH or another state agency can more effectively or efficiently handle procurement of goods and services or employment of personnel for those projects.

UH projects supported by funds appropriated by the Legislature (e.g., RTRF) may also be service ordered to RCUH pursuant to rules adopted by the UH Board of Regents. This clause has been liberally interpreted by UH to include other activities, which has added to the volume of service orders over time.

The volume of service orders can be reduced by drafting stricter guidelines on the use of service orders to RCUH and having both UH and RCUH enforce the guidelines. Such restrictions and enforcement should reduce the number of accounts serviced by RCUH and related operating costs.

Recommendation:

1. UH and RCUH should jointly revise the service order criteria for intramural service orders and revolving account service orders, some of which might be outside the scope of UH's authorized use of RCUH under the HRS.
2. UH should consider limiting construction service orders to sponsored research and training only.

Timeline:

- Target Spring 2022 for implementation in FY 2023.

Recommendation #3 – Improve Compliance by Integrating Systems

Human Resources (HR) and Travel

In 2014, the federal government issued a recompilation and recodification of its regulations for grants and contracts under 2 CFR 200 or what is commonly referred to as the “Uniform Guidance.” One of the major changes in regulations pertained to the compensation of personnel. The federal government introduced the concept of institutional base salary (IBS) and extra service pay, which covers additional pay that employees can earn such as overload or summer salary.

The federal government expects that the grantee or contractor has written policies regarding IBS that are consistently followed and policies that specify the situations and limits in which extra service pay can be earned. Thus, it has become more important than ever to monitor where UH employees are being paid, the UH employees total FTEs, and whether they are within UH guidelines for extra service pay.

Human Resources. Service orders to RCUH have created a potential source of non-compliance with federal regulations because UH is unable to know in real time whether a UH employee is concurrently employed on UH funds via RCUH. Also, RCUH personnel policies should not override or supplement UH personnel policies with respect to UH employee IBS or extra service pay. UH is currently developing written policy to clarify the employment status of UH personnel supported by extramural contracts or grants received by UH or intramural funds administered by RCUH pursuant to a service order.

Travel. Over the last ten years, there has been an increase in federal reviews of foreign influence on federally funded research at universities. Currently, UH is unable to gain a complete picture on concerns such as foreign travel because UH employees can choose to use RCUH’s travel system rather than UH’s e-Travel system that should be used as specified in UH policies.

Ideally, UH’s and RCUH’s HR and payroll systems should be integrated so that there is greater visibility to help prevent issues of non-compliance. Policies will need to be enforced or created to ensure that proper systems and controls are followed.

Financial Systems

UH comprises roughly 90% of RCUH’s business. Thus, RCUH should consider using an accounting system that is fully integrated with UH’s system.

Also, there are roughly 300 UH revolving accounts at RCUH that are not reported to the legislature by UH nor RCUH. There is a question whether these accounts should have been created under HRS 304A-2157 (f.k.a., HRS 304-8.956) – Auxiliary Enterprises Special Fund. Under HRS 304A-2007, UH is required to submit an annual report on special and revolving fund balances to the Legislature. Thus, there is currently a question on the transparency and accountability of UH operations.

In addition to lowering RCUH’s operating costs, there are benefits to be gained by integrating RCUH into UH’s financial system such as KFS or a successor system:

(a) There would be no need for the RCUH electronic data interchange (EDI) since transactions would originate in UH's KFS. RCUH revolving accounts might be able to use the internal billing functions of KFS to bill UH customers. If transactions originate in KFS, RCUH would not need working capital to cover UH extramural award costs. All users could adapt to using the KFS interface or a custom interface could be overlaid on KFS's procurement system.

(b) For transparency and accountability, revolving accounts would be in KFS and could be reported to the Legislature per HRS 304A-2007. Fund balances could be monitored.

(c) RCUH direct projects of other state agencies could be accounted for on the Research Corporation (RC) chart of accounts in KFS.

Recommendation:

1. UH and RCUH should explore integrating their HR and payroll systems and instituting controls to ensure that RCUH cannot be used to circumvent UH personnel policies regarding IBS and extra service pay.
2. UH and RCUH should require UH employees to use UH's e-Travel system to prepare travel requisitions and completions. RCUH can continue to be used for travel procurement.
3. If #1 and/or #2 are not possible, UH and RCUH should explore ways to share information for compliance monitoring purposes so that non-compliance can be flagged and corrected.
4. UH and RCUH should explore integrating RCUH into KFS, ending the EDI and working capital requirements, and adopting or overlaying the KFS procurement interface.
5. If #4 is not possible, UH and RCUH should explore moving all UH revolving accounts under KFS to the Auxiliary Enterprises Special Fund per 304A-2157 and doing intramural service orders for the revolving accounts.

Timeline:

- Target Spring 2023 for implementation in FY 2024.

Recommendation #4 – If RCUH Must Maintain a Separate Financial System Consider Phasing to Another Funding Model for Major Infrastructure Investments

UH understands that RCUH must replace the AS 400 and related financial system because it is near end of life. If the determination is made that RCUH must maintain a separate financial system, UH recommends that the UH and RCUH boards consider phasing over to a different funding model for major infrastructure investments. UH believes that RCUH has enough reserve balance to finance the replacement of the AS 400 and the related financial system and proposes that RCUH use the reserve to do so.

UH also proposes the following. Moving forward, if a major infrastructure investment is required, UH will provide 90% of the proposed cost up-front, subject to the submission and presentation of a business case and cost estimate from RCUH to UH. Depending on what is decided, both UH and RCUH board approvals may be necessary for the investment.

RCUH Task Force

If UH investment is made up-front, it should not become part of the annual management fee. If UH or the UH Board decides to forego up-front investment, then the annual management fee will go up in the future so that RCUH can recoup its investment.

Recommendation:

1. UH and RCUH should explore decoupling major infrastructure investments from the annual management fee; such special investments would be paid separately as needed.

Timeline:

- Target Spring 2022 for implementation in FY 2023.

7 | APPENDICES

1. University of Hawai'i System Annual Report, Report to the 2021 Legislature, Annual Report on the Research and Training Revolving Fund, HRS 304A-2253, December 2020
2. UH-RCUH Internal Agreement, entered into 28 June 1996 and restated July 17, 2017

APPENDIX 1

UNIVERSITY OF HAWAI‘I SYSTEM ANNUAL REPORT



REPORT TO THE 2021 LEGISLATURE

Annual Report on the
Research and Training Revolving Fund

HRS 304A-2253

December 2020

ANNUAL REPORT ON THE RESEARCH AND TRAINING REVOLVING FUND 2019-2020

INTRODUCTION

The Research and Training Revolving Fund continues to be very effective in stimulating research, which results in extramural contracts and grants. This report summarizes the investments of the Fund for 2019-2020 and indicates the effectiveness of this support. Procedures for awarding grants from the Fund were the same as in previous years.

The Governor's approved guidelines for the administration and investments of the Fund:

1. The funds were administered by the Vice President for Research & Innovation (VPRI), the UH Mānoa Vice Chancellor for Research (VCR), and the University Research Council within the general guidelines approved by the University President.
2. The funds were administered in the four categories described under Part I – Fund Investments.

FUND INVESTMENTS

Pursuant to HRS Section 304A-2253, \$52,059,371.97 was deposited into the Research and Training Revolving Fund and invested as follows:

1. Scholarly Development Fund

The Scholarly Development Fund serves two purposes. The first is to provide seed money support to develop research projects or training programs for extramural funding. The second is to provide travel funds for University professionals that enable them to communicate research and new ideas at international, national or regional meetings, and to permit contact with extramural funding agencies.

Investments

A total of \$350,000 was invested in Professional Travel by the UH Mānoa VCR distributed as follows:

The Council reviewed 189 travel requests and made 161 awards totaling \$223,798.88. Table 1 lists the Professional Travel recipients.

A total of \$100,000 was invested in Professional Travel for UH West O'ahu and was distributed as follows:

The Council reviewed 67 travel requests and made 57 awards totaling \$103,776. Table 2 lists the Professional Travel recipients.

Investments for 2019-2020: \$450,000

2. Facilitating Services Fund

The Facilitating Services Fund is used to support the research, instruction and public service missions of the University units that generated overhead revenue.

The fund is invested in proportion to the overhead revenue generated by each of the units.

Effective FY 1999, the Deans and Directors of the units were granted the authority to expend these funds at their own discretion.

Investments

A total of \$37,279,488 was invested in the fund. Table 3 lists the distribution by unit.

Investments for 2019-2020: \$37,279,488

3. Project Development Fund

The Project Development Fund is used to facilitate research and training in new or developing fields, provide matching funds for the acquisition of research equipment, and to promote participation in professional organizations.

Investments

The UH Mānoa VCR made 57 awards totaling \$6,113,883.40. Table 4 lists the Project Development Fund recipients.

\$1,500 was invested in the Student Excellence in Research Awards by the UH Mānoa VCR. Table 5 lists the Student Excellence in Research Awards recipients.

Investments for 2019-2020: \$6,115,383.40

4. Vice President for Research and Innovation Investments:

A total of \$11,331,504.88 was invested for infrastructure:

Description	FY 2020
RCUH Management Fees	5,792,149.52
A-133 Audit	381,644.63
High Speed Internet Connection	810,000.00
Office of the VP for Research and Innovation	1,053,144.03
Office of Research Services	1,527,657.48
Office of Innovation and Commercialization	823,164.07
Office of Research Compliance	943,747.15
TOTAL	11,331,504.88

The VPRI made 22 awards totaling \$2,891,033.51 in support of programs summarized in Table 6.

Investments for 2019-2020: \$14,222,538.39

5. Summary of Investments

	Allocation	Carry Forwards / Adjustments	Total Available	Expenditures	Committed to be Spent	Available Balance
Professional Travel	450,000	214,153	664,153	265,840	398,314	-
Facilitating Services	29,904,829.10	28,170,908	58,075,737	30,816,480.69	27,259,256	-
Project Development Fund						
Vice Chancellor for Research	7,023,159	4,742,820	11,765,979	4,072,311.08	7,693,668	-
Student Excellence in Research Awards	1,500		1,500	1,500	-	-
Vice President for Research & Innovation	3,348,379	292,621	3,641,000	8,162,505.50	(4,521,505)	-
Research Infrastructure	11,331,505	(4,202,100)	7,129,405	7,373,658	(244,253)	-
TOTAL	52,059,372	29,218,403	81,277,775	50,692,295	30,585,480	-

RESULTS OF SEED MONEY AND PROFESSIONAL TRAVEL AWARDS

1. Extramural Awards to Recipients of Seed Money

Recipients of these funds are actively seeking new sources to support their research. The Scholarly Development Fund (“Fund”) is very important in this connection, especially for younger faculty not yet having established a track record. Once they have initiated research with seed money, they can cite initial results, and thus make a much stronger case for receiving additional support.

Results from seed money are not always immediate but may occur sometime after a seed money award. The results reported herein thus may be due to funds invested in earlier years. The Fund was initiated in 1975.

The Research Council awards for seed money from the Fund give due consideration to the potential for generating extramural support. Faculty receiving seed money awards must indicate their plans for extramural funding to further research. During the last fiscal year, no awards were given for seed money.

2. Extramural Awards to Faculty Receiving Travel Support

The recipients of these travel awards are all productive scholars with active research agendas. The presentation of their research results at major professional meetings allows the investigators to meet with potential sponsors and exchange ideas with colleagues. It also exposes the broader professional community, including funding agencies, to the work being accomplished at the University of Hawai’i, results in increased professional recognition of investigator and the University, and leads to additional funding.

TOTAL EXTRAMURAL SUPPORT FOR RESEARCH/TRAINING, 2019-2020

Attached summary table, Table 7 for research and non- research projects, each of which gives comparative figures for awards made to the University, the past five years.

In 2019-2020, research awards worth \$229,664,292 and training awards worth \$220,774,957 were received.

CONCLUSIONS:

As summarized in this report, the Research and Training Revolving Fund is essential to the effective operation of the programs administered through this office. It is one of the most important sources of support this University has. The Governor and the Legislature should be commended for their foresight in establishing the Fund as an investment in the health of research and training at the University, and for the provision of the additional funds for equipment, repairs and maintenance.

Respectfully submitted,

Vassilis L. Syrmos
Vice President for Research & Innovation

Attachments

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Table 1	Professional Travel Awards Annual Report – Mānoa
Table 2	Professional Travel Awards Annual Report – West O‘ahu
Table 3	Distribution of Facilitating Services Fund
Table 4	Project Development Fund Awards
Table 5	Student Excellence in Research Awards
Table 6	VP for Research & Innovation Investments
Table 7	Five-Year Summary of Research and Non-Research Grants and Contracts Awarded

**Table 1
2019-2020 Professional Travel Awards Annual Report – Mānoa**

Count	Last Name	First Name	Rank	Estimated Funds Requested	Amount Approved	Department	Conference	Title of Presentation
1	Abinales	Patricio	I5	\$ 1,100.00	\$ 1,000.00	Asian Studies	Conference on Mindanao and Mindanao Studies and a Meeting with Japanese scholars working on the southern Philippines	"American Soft Power and the Peace Process in Mindanao" for the Conference on Mindanao and Mindanao Studies
2	Agcaoili	Aurelio	I4	\$ 1,700.00	\$ 1,200.00	Indo-Pacific Languages and Literatures	2019 International Year of Indigenous Languages	Indigeneity, Inclusion, and Internal Colonialism: Towards an Orthopraxis for Liberation Education and the Empowerment of First
3	Agrusa	Jerome	I4	\$ 2,648.00	\$ 1,700.00	Travel Industry Management	Asia Pacific Tourism Association Conference	SHORT-TERM RENTAL: DISRUPTIVELY INNOVATIVE OR DISTURBINGLY ANNOYING FOR RESIDENTS?
4	Allen	Sarah	I4	\$ 2,310.67	\$ 1,200.00	English	2019 Feminisms and Rhetorics Conference	Human Animal and Nonhuman Animal Rhetorics: Listening to the Nonhuman Animal's Voice
5	Amend	Anthony	I4	\$ 2,514.60	\$ 1,700.00	Botany	Ecological Society of America	Microbial connectivity across land, sea, and stream within a model Hawaiian mesocosm
6	Aranda	Lucia	I5	\$ 1,920.00	\$ 800.00	Languages and Literatures of Europe and the Americas	American Literary Translators Association	Collaborating with students and the author: a translation of SS Heliópolis. La primera emigración de andaluces a Hawái. 1907.
7	Auman	Ann	I5	\$ 3,373.00	\$ 1,200.00	Communications	Journalism Education and Research Association of Australia	Hawaiian Journalism Resource Guide and Stylebook
8	Bacchilega	Cristina	I5	\$ 1,848.00	\$ 1,200.00	English	International Conference on the fantastic in the Arts	"Post-classic Disney: Remix, Desist, Reanimate"
9	Bahng	Youngjin	I4	\$ 2,210.00	\$ 1,700.00	Family and Consumer Sciences	International Textiles and Apparel Association (ITAA) annual conference	Understanding female retail entrepreneurs' managerial performance and well-being: resources, barriers, capabilities, motivation, and Collection, selection and evaluation of native Hawaiian plants for landscape and indoor uses (Oral presentation)
10	Baldos	Orville	R3	\$ 1,690.00	\$ 1,690.00	Tropical Plants and Soil Sciences	IX International Symposium on New Ornamental Crops	Morphological characterization and identification of pa'uohi'iaka (Jacquemontia sandwicensis A. Gray) accessions for hanging basket use (Poster
11	Banna	Jinan	I4	\$ 2,000.00	\$ 1,700.00	Human Nutrition, Food and Animal Sciences	Annual Meeting of the Japan Society for Developmental Origins of Health and Disease	Acceptability of a text message-based intervention for obesity prevention in infants from Hawai'i and Puerto Rico WIC
12	Bateni	Sayed	I3	\$ 2,350.00	\$ 2,000.00	Civil and Environmental Engineering	74th Soil and Water Conservation Society (SWCS) International Annual Conference	Conserving Water Resources in the US Pacific Islands Region by Optimal Irrigation of Farmlands
13	Beaule	Christine	I4	\$ 600.00	\$ 600.00	Languages and Literatures of Europe and the Americas	The Southwest Seminar	Heavily Embroidered Burdens: The Social and Gendered Construction of Indigeneity through Andean Textiles
14	Berez-Kroeker	Andrea	I4	\$ 2,965.00	\$ 1,700.00	Linguistics	14th Munin Conference on Scholarly Publishing	Data citation in linguistics publications: A scholar-led, community-based initiative
15	Bergstrom	Kelly	I3	\$ 1,915.00	\$ 1,915.00	Communication	Society for Cinema and Media Studies	Exit points: Why do women leave gaming?
16	Biggs	Brittany	I3	\$ 2,284.75	\$ 1,500.00	Academy for Creative Media	Performing Animation, Animating Performance	Integrating the Study of Gesture and Performance with Animation Industry Workflows in Teaching 3D Character Animation
17	Boeckman	Jeffrey	I4	\$ 1,031.88	\$ 1,031.88	Music	Guest conducting residency in Kuala Lumpur & Penang, Malaysia	Guest conducting residency in Kuala Lumpur & Penang, Malaysia
18	Bousquet	Louis	I4	\$ 2,161.00	\$ 1,700.00	LLEA	Au carrefour des sens quatrième édition, colloque international de linguistique et littérature	Extases inexplicables
19	Brunson	Jan	I4	\$ 1,970.00	\$ 1,200.00	Anthropology	American Anthropological Association annual conference	Tool of economic development, metric of global health: Promoting planned families and economized life in Nepal
20	Buelow	Stephanie	I4	\$ 2,002.00	\$ 1,200.00	Institute for Teacher Education	National Council of Teachers of English	1. STEM Literacies (Session Title). Presentation Title: "Seizing Teachable Moments: Promoting Inquiry through a Disciplinary Literacy Instructional Approach in Kindergarten" 2. Inquiring Out, Developing Within (Session Title). Presentation Title: "A Disciplinary Literacy Instructional Framework in Elementary Education"

Table 1
2019-2020 Professional Travel Awards Annual Report – Mānoa

Count	Last Name	First Name	Rank	Estimated Funds Requested	Amount Approved	Department	Conference	Title of Presentation
21	Burrage	Rachel	I3	\$ 2,048.00	\$ 2,000.00	Social Work	Council on Social Work Education Annual Program Meeting (CSWE APM)	Presentation 1: Trauma and Loss in Indigenous Context: The Case of the Beauval Indian Residential School; Presentation 2: Constructing Culturally Grounded Literature Reviews
22	Cain	Matthew	I3	\$ 2,000.00	\$ 2,000.00	Chemistry	ORGANOMETALLICS GORDON RESEARCH CONFERENCE	New Phosphorus-Ligated Transition Metal Complexes and Novel PN Heterocycles: Systematic Investigations into Small Molecule Activation and Catalysis
23	Caldwell	Ethan	I3	\$ 2,414.00	\$ 1,700.00	Ethnic Studies	Global Mobility Humanities Conference (GMHC) 2019	"Trapped in Nuanced Frequency: Black Soldiers, Black Cool, and Hip Hop in Okinawa"
24	Cantal-Pagkalinawan	Leticia	I3	\$ 2,000.00	\$ 1,000.00	Indo-Pacific Languages and Literatures	2020 Association for Asian Studies Annual Conference	Philippine Traditional Games and Pastimes: A Tool for Teaching Language and Culture Session Title: Globalization of Southeast Asian Language Instruction
25	Chai	Sun-Ki	I5	\$ 2,847.73	\$ 1,200.00	Sociology	American Sociological Association	Endogenous Preference Change and Group Behavior in Experiments
26	Chandler	Paul	I5	\$ 2,754.00	\$ 1,000.00	Languages and Literatures of Europe and the Americas	2019 MLA International Symposium	Discovering M J Coito: The Portuguese Poet of Honolulu
27	Chandra	Nandini	I3	\$ 2,020.00	\$ 1,700.00	English	Annual Conference on South Asia	The Artisanal Turn in Graphic Media: Bhimayana's Historiography on the Gandhi-Ambedkar Debate
28	Chang	Sumi	I2	\$ 2,582.72	\$ 1,000.00	East Asian Languages and Literatures	The American Council on the Teaching of Foreign Languages (ACTFL) Annual Convention and World Languages Expo	"Can-Go" Beyond Classroom to Community Language Contest?
29	Cheng	Chung-ying	I5	\$ 4,900.00	\$ 1,000.00	Philosophy	21st International Conference on Chinese Philosophy	On Primary Cosmology, to be is to become
30	Chi	Junwook	I4	\$ 2,084.00	\$ 1,200.00	School of Travel Industry Management	Applied Business and Entrepreneurship Association International Sixteenth Annual Meeting	Revisiting the tourism-inequality nexus: Evidence from a panel of developed and developing economies
31	Choi	Jaerim	I3	\$ 1,500.00	\$ 1,500.00	Economics	Midwest International Trade Conference	Global Influences on Gender Inequality: Evidence from Female Employment in Korea
32	Colwill	Elizabeth	I4	\$ 1,678.00	\$ 1,200.00	American Studies	National Women's Studies Association	"Blood on Her Chemise": Remapping the Boundaries of Terror in Cap Français
33	Cook	Haruko	I5	\$ 3,585.12	\$ 800.00	East Asian Languages and Literatures	9th International Symposium on Intercultural, Cognitive and Social Pragmatics (EPICS IX)	"Socialization into multimodal construction of a professional self in a Japanese company" in a panel entitled, "Professional Identities in Transitional Contexts"
34	Crosby	Martha	I5	\$ 2,610.50	\$ 1,200.00	Information and Computer Sciences	21st International Conference on Human-Computer Interaction/13th International Conference on Augmented Cognition	Tokens of Interaction: Psychophysiological Signals, A Potential Source of Evidence of Digital Incidents
35	Crowther	Dustin	I3	\$ 1,696.00	\$ 1,696.00	Second Language Studies	Second Language Research Forum	Accentedness and Comprehensibility as Predictors of Task Performance: Listeners' Scalar-based vs. Raters' Rubric-based Scoring (solo author) The Construct of Accuracy in Oral Language Production Studies (solo author, as part of invited colloquium) 'I thought if I ever went undercover in Russia': Foreign Language Motivation in a Military Context (second author - abstract not uploaded, Talking Story: Lessons from Public Engagement Around Transit-Oriented Development in Hawai'i
36	Das	Priyam	I4	\$ 2,298.00	\$ 1,500.00	Urban and Regional Planning	Association of Collegiate Schools of Planning	The transformative impacts of pro-poor shelter policies: planning lessons from Surabaya
37	Das	Ashok	I4	\$ 2,590.00	\$ 1,500.00	Urban and Regional Planning	Association of Collegiate Schools of Planning Annual Conference	Why does puppy have a tummy ache?: Facilitating expectation using pedagogical questions to promote learning in preschoolers
38	Daubert	Emily	I3	\$ 2,033.15	\$ 1,700.00	Psychology	Cognitive Development Society	1. Children's Acquisition of Perspective-Taking Benefactive Verbs in Japanese 2. Pronoun Advantage in L2 Relative Clause Processing 3. Children Need More Information for Comprehension: Limits on the Agent-first Preference in Korean
39	Deen	Kamil	I5	\$ 2,313.00	\$ 1,200.00	Linguistics	Boston University Conference on Language Development	My Mother was a Sabra and Other Inconvenient Truths
40	Desser	Daphne	I4	\$ 2,235.00	\$ 500.00	English	Humanities Education and Research Association Conference	

Table 1
2019-2020 Professional Travel Awards Annual Report – Mānoa

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41	Drake	Donald	I5	\$ 4,119.03	\$ 1,200.00	Botany	Island Biology 2019	The forgotten fauna: native seed predators on islands
42	Fan	Victoria	I3	\$ 2,887.00	\$ 1,700.00	Public Health Studies	11th Asia/Oceania Congress of Gerontology and Geriatrics 2019 (IAGG 2019)	Senior Citizen "Movements" in the US and Europe
43	Ferguson	Kathy	I5	\$ 2,509.80	\$ 1,000.00	Political Science and Women's Studies	American Political Science Association	Printers' Letters: Epistolary and Compositional Exchanges
44	Feuerstein	Anna	I4	\$ 2,250.00	\$ 1,700.00	English	Interdisciplinary Nineteenth-Century Studies (INCS)	Salt, Slavery, and the Cruelty of Extraction: Reading The History of Mary Prince as Part of the Black Anthropocene
45	Fincham	Naiyi	S2	\$ 2,726.00	\$ 1,000.00	Center for Language and Technology	ACTFL 2019 Annual Convention and World Languages Expo	Developing Intercultural Competence Through a Korean Simulation
46	Foster	James	R4	\$ 2,491.00	\$ 1,500.00	Hawai'i Institute of Geophysics and Planetology	International Union of Geodesy and Geophysics	Ship-based GNSS Tsunami Detection
47	Frambaugh-Kritzer	Charlotte	I4	\$ 3,780.00	\$ 1,700.00	Institute for Teacher Education	21st European Literacy Conference associated with 18th Nordic Literacy Conference as well as the International Literacy Association (ILA) and the Federation of European Literacy Association (FELA)	How I found more Overt Ways to Bring Social Justice to Action in my Secondary Disciplinary Literacies Methods Course
48	Friday	James	S5	\$ 2,286.00	\$ 1,200.00	Natural Resources and Environmental Management	Society of American Foresters 2019 National Convention	Management of native Hawaiian forests affected by Ceratocystis wilt
49	Fukuda	Shin	I4	\$ 1,691.83	\$ 1,000.00	EALL	The 12th International Workshop on Theoretical East Asian Linguistics (TEAL 12)	A Case of Lexically Specific Symmetrical DOM: Experimental Evidence from Transitive Deverbal Nouns in Japanese
50	Gabrovski	Miroslav	I3	\$ 2,549.00	\$ 1,700.00	Economic	Western Economic Association International, 94th Annual Conference	Simultaneous Innovation and the Cyclicity of R&D
51	Gagnon	John	I3	\$ 1,992.00	\$ 1,992.00	English	Trauma, Narratives, Institutions: Transdisciplinary Dialogues	The Role of Decolonial Rhetorics in Re-imagining Trauma-Related
52	Garneau	Marie	I5	\$ 2,522.00	\$ 1,100.00	Languages and Literatures of Europe and the Americas	EHIC (Human Spaces and Cultural Interactions) University of Literature and Humane Sciences of Limoges, France	Le corps vérolé balzacien, réceptacle d'une longue histoire médicale, éthique et artistique
53	Gasiorek	Jessica	I4	\$ 3,040.00	\$ 225.00	Communicology	International Communication Association Conference	Interpersonal Communication about Age and Aging Predicts Health-Related Quality of Life
54	Gerhardt	Christina	I4	\$ 1,955.00	\$ 1,700.00	Languages and Literatures of Europe and the Americas	German Studies Association	Perceived Stress Predicts Age-Based Social Categorization in Middle Aged and Older Adults' Communication Contributions of LSP [Language and Social Psychology] to Studying Understanding
55	Gilliland	Betsy	I4	\$ 1,544.00	\$ 1,544.00	Second Language Studies	Syposium on Second Language Writing	New German Cinema, Feminist Filmmaking and Its International Contexts
56	Goodyear-Kaopua	Noelani	I5	\$ 1,912.20	\$ 1,200.00	Political Science	National Women's Studies Association	Preservice EFL teachers' writing preparation in the Chilean context
57	Gruter	Theres	I4	\$ 1,700.00	\$ 1,700.00	Second Language Studies	44th annual Boston University Conference on Language Development (BUCLD)	"Mana Wahine theory and the work of Haunani-Kay Trask" in roundtable titled, "'Oceanic Indigenous feminisms: s/pacific bodies, 1) Evidence for the resilience of syntactic processing to L1 attrition 2) Learning words with lexical tone: Is manipulation of attentional focus beneficial? 3) Tense and finiteness in contemporary child Pidgin (Hawai'i Creole)
58	Habel	Shellie	A2	\$ 1,990.00	\$ 1,000.00	Sea Grant College Program	The Geological Society of America Annual Meeting	COMPOUNDING MECHANISMS OF SEA LEVEL RISE INDUCED FLOODING PRODUCES DOUBLING OF CRITICAL
59	Hallett	Brien	I5	\$ 2,420.01	\$ 1,000.00	Institute for Peace	American Sociological Association Annual Meeting	INFRASTRUCTURE FAILURE IN HONOLULU BY THE 2030S
60	Halliday	Timothy	I5	\$ 2,050.00	\$ 1,200.00	Economics	Asian Workshop on Econometrics and Health Economics	John Austin on Quantum Physics: Agency and the Non-Existent
								The Impact of Medicaid on Medical Utilization in a Vulnerable Population: Evidence from COFA Migrants

Table 1
2019-2020 Professional Travel Awards Annual Report – Mānoa

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61	Harwit	Eric	I5	\$ 2,130.00	\$ 1,000.00	Asian Studies	American Political Science Association Annual Conference 2019	"Globalization of China's Dominant Social Media App: Prospects for WeChat"
62	Hasegawa	Atsushi	I3	\$ 2,242.00	\$ 1,700.00	East Asian Languages and Literatures	American Association for Applied Linguistics	How Do Students Use Activity Prompts? Interactive Emergence in Semi-Scripted Pair Work (included in the colloquium titled "Sociomateriality in Language Learning and Teaching: Emergent Definitions of 'Materials' and 'Materials Use'")
63	He	Yanghua	I3	\$ 2,335.00	\$ 1,700.00	Human Nutrition, Food and Animal Sciences	Plant and Animal Genome XXVIII Conference	Epigenetic mechanisms of myogenesis in myostatin transgenic mice
64	Herrero-Bervera	Emilio	R5	\$ 1,947.20	\$ 1,200.00	Hawai'i Institute of Geophysics and Planetology	American Geophysical Union (AGU)	1)Full Vector and 40Ar/39Ar Study of an Excursion Recorded by the Kaupo flow, Honolulu Volcanic Series, Oahu, Hawaii, USA: A new Excursion or just a Record of the Hilina Pali episode? 2) Integrated high resolution magnetostratigraphy, relative paleointensity (RPI) and petrofabric (AMS) study of IODP Expedition 381, Sites 0078 a and b, Understanding the regulation of CAM photosynthesis through a new genomic model in Yucca
65	Heyduk	Karolina	I3	\$ 1,553.39	\$ 1,554.00	School of Life Sciences	Joint Genome Institute Annual User Meeting	
66	Hoffman	Daniel	I3	\$ 2,033.60	\$ 1,700.00	Learning Design and Technology	2019 Association for Educational Communications and Technology's International Convention	Lessons in Combining Discrete and Continuous Assessment Data: Activity Trackers, Standardized Tests, and Test Anxiety, Using a Simulated World to Engage Students in Social Studies
67	Hoffmann	Kathryn	I5	\$ 2,152.00	\$ 1,000.00	Languages and Literatures of Europe and the Americas	Millennial Masculinities	Men's Fashion in the Borderlands: The Jacket that Led to the Asylum, The Ruff in the Cave, and Suits that Make Noise
68	Holton	Gary	I5	\$ 2,505.00	\$ 1,200.00	Linguistics	Linguistics Society of America	What is DEL and what is it good for?
69	Howes	Craig	I5	\$ 992.26	\$ 1,000.00	English	Work/Leisure, Duty/Pleasure--the 2019 Annual Conference of the Research Society for Victorian Periodicals	"Bury the Duke": Wellington, Caricature, and the Politics of Personality
70	Hung	Chia-Ko	I3	\$ 1,930.00	\$ 1,200.00	Public Administration Program	Research on Nonprofit Organizations and Voluntary Action	"Decomposing the Effect of Commercialization on Nonprofit Donations." and "Four Faces of Corporate Social Responsibility: A Lab Experiment on the Impact of CSR on Consumers" Purchasing Criminalizing Students of Color in the U.S.: Re-Examining Racial Threat Theory
71	Irwin	Katherine	I5	\$ 1,902.00	\$ 1,200.00	Sociology	American Society of Criminology	
72	Jiang	Ningjun	I3	\$ 2,350.00	\$ 2,000.00	Civil and Environmental Engineering	International Conference on Case Histories & Soil Properties	Sandy soil stabilization by in situ bio-stimulation approach: Indigenous ureolytic bacteria enrichment
73	Jiang	Song	I4	\$ 2,090.00	\$ 1,000.00	EALL	The 10th International Conference on Han Characters Education and Research	Making the case for special topics in the study of Chinese characters in U.S. collegiate Chinese
74	Johnson	Richard	I5	\$ 1,375.00	\$ 1,000.00	Curriculum Studies	Reconceptualizing Early Childhood Education (RECE)	Notions of Marginality and Identity in the Borderlands of Childhood in an Ongoing Era of Child Trauma
75	Juarez	Ruben	I4	\$ 2,300.00	\$ 1,700.00	Economics	2019 International Conference on Game Theory at Stony Brook	Incentive-Compatible Simple Mechanisms
76	Kehl	Adam	I3	\$ 1,770.00	\$ 1,770.00	Music	Idaho Music Educators Association State Convention	Let's Take a Trip: Reimagining the Score Study Process
77	Kelikoa	Lehua	S3	\$ 3,465.00	\$ 1,200.00	Office of Public Health Studies	12th Annual Conference on the Science of Dissemination and Implementation in Health	Culturally-relevant program implementation in Hawai'i Federally-Qualified Health Centers: Facilitators and barriers faced by community health workers in chronic disease prevention and management
78	Khanal	Samir	I5	\$ 2,000.00	\$ 1,200.00	Molecular Biosciences and Bioengineering	New Horizons in Biotechnology (NHBT 2019)	Nanobubble Technology Applications in Environment and Agriculture
79	Kim	Mary	I4	\$ 2,000.00	\$ 1,500.00	East Asian Languages and Literatures	The 9th annual conference of the Language and Social Interaction (LANSI)	Talking in the present: A way to resist questions during congressional hearings
80	Kim	Min Sun	I5	\$ 3,700.00	\$ 450.00	Communicology	International Communication Association	Multicultural Identity as Enlightened "Identity"

Table 1
2019-2020 Professional Travel Awards Annual Report – Mānoa

Count	Last Name	First Name	Rank	Estimated Funds Requested	Amount Approved	Department	Conference	Title of Presentation
81	Kimura	Aya	I2	\$ 1,787.60	\$ 1,200.00	Sociology	Society of Social Studies of Science	Author meets critics session for the Rachel Carson Book Awardee
82	Kobayashi	Kent	R4	\$ 1,762.00	\$ 1,200.00	Tropical Plant and Soil Sciences	2019 American Society for Horticultural Science Conference	LED and Fluorescent Lighting Effects on Hydroponically Grown Hawaiian Chili Pepper and 'Koba' Green Onions. Simulated Martian Soil for Hydroponically Grown 'Koba' Green Onions.
83	Konter	Jasper	I4	\$ 2,110.00	\$ 1,500.00	Earth Sciences	American Geophysical Union Fall Meeting 2019	The Link Between Ontong-Java and Louisville Revealed in the West
84	Kostetskaya	Anastasia	I4	\$ 1,783.00	\$ 1,700.00	Languages and Literatures of Europe and the Americas	ASEEES	"The Soviet Baby: the GDR's cinematic myth of origins"
85	Kramer	Hanae	I4	\$ 295.00	\$ 295.00	School of Communications	Annual Japan Studies Association Conference	The Tokugawa Shogunate's 1675 Exploration of the Western Pacific
86	Kumar	Jason	I5	\$ 1,834.60	\$ 1,200.00	Physics and Astronomy	Searching for New Physics - Leaving No Stone Unturned!	A sub-GeV dark matter model
87	Lee	Hye Seung	I2	\$ 1,438.00	\$ 1,000.00	East Asian Languages and Literatures	Japanese/Korean Linguistics Conference	A comparative study of diminutives: Pragmatic expansion of Korean com 'a little' and Japanese chotto 'a little'
88	Lee	Yeonjung	I3	\$ 1,650.00	\$ 1,650.00	Social Work	Society for Social Work and Research (SSWR)	Abstract Title: Integrating Health Equity and Productive Aging Perspectives to Improve Cognitive Health Session Title: Productive Engagement in Later Life: Examining the Health Outcomes of Vulnerable Older Adult Populations Working and Volunteering
89	Li	Yong	I4	\$ 2,905.00	\$ 1,700.00	Human Nutrition, Food and Animal Sciences	International Association for Food Protection (IAFP) Annual Meeting	I will make two presentations as shown below. 1. Comparison of the Antimicrobial Activities of Ohelo Berry (<i>Vaccinium reticulatum</i>) and Cranberry (<i>Vaccinium macrocarpon</i>). 2. Antimicrobial Properties of Ohelo Berry (<i>Vaccinium reticulatum</i>) Fractions: Anthocyanins, Non-Anthocyanin Phenolics, and Organic Acids.
90	Lin	Ingrid	I4	\$ 2,770.00	\$ 1,200.00	Travel Industry Management	Asia Pacific Tourism Association (APTA) 2019 Annual Conference	FUNCTIONAL ROBOTS ADOPTION ON THE HOTEL SERVICE DELIVERY PROCESS AND EMPLOYEE JOB SATISFACTION
91	Lin	Shu Hwa	I5	\$ 1,889.00	\$ 1,200.00	Family and Consumer Sciences	International Textile and Apparel Association (ITAA) Annual Meeting	Two Creative designs: 1 ECG Monitoring via Apparel for Female Firefighter's Safety (III) and 2 Reflective Light Sport Suit ; Four research papers: 1. The Infusion of Design Elements of Hanbok into Modern Fashion Styles, 2 Body Scanning to Develop an Avatar for Fitting Simulation, 3 Fire fighter safety: ECG monitoring via apparel, and 4 Virtual Costume Museum Exhibition incorporating 3-D
92	Lin	I-Bei	I5	\$ 4,000.00	\$ 1,200.00	Music	European Tour Cello Concerto Performances with the UH	This is a once in a lifetime opportunity for many of the individuals involved in the orchestra and it is a special opportunity in that it coincides with Beethoven's 250th birth anniversary year. I was fortunate to be invited to perform a cello concerto in some of the most important musical cities (Bonn, Vienna, Prague) in Europe. By participating in these events, I will fulfill my primary research-cello performance. These performances will be very significant to the establishment of my reputation as a performing artist in Europe as
93	Littman	Robert	I5	\$ 2,187.00	\$ 1,200.00	Languages and Literatures of Europe and the Americas	AMERICAN SCHOOL OF ORIENTAL RESEARCH ANNUAL MEETING	The Egyptian Revolt and Excavations at Tell Timai
94	Loo	Lenora	I4	\$ 2,350.00	\$ 1,200.00	Cancer Biology	12th American Association for Cancer Research Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved	The association between 27-hydroxycholesterol metabolizing enzymes, CYP27A1 and CYP7B1, expression and mortality in a multiethnic U.S. population of breast cancer patients
95	Loong	Chet-Yeng	I5	\$ 2,249.00	\$ 1,200.00	Music	American Orff-Schulwerk Conference	Traveling the World with Little Ones Ages 2-7
96	Lucas	Chris	I3	\$ 2,335.00	\$ 1,500.00	Educational Administration	American Educational Research Association	A Phenomenological Study of the College Student Disciplinary Suspension and Reenrollment Experience
97	Lynham	John	I5	\$ 1,987.43	\$ 1,200.00	Economics	International Conference on Sustainability Science and Management	Economic Impact of Two of the World's Largest Protected Areas on the Longline Fishing Industry
98	Magdalena	Federico	S4	\$ 2,000.00	\$ 1,000.00	Center for Philippine Studies	National Annual Conference of Philippine Sociological Society; also invited to give 2 lectures at Bukidnon State University	Globalization, Sovereignty Movement, and Conflict Resolution (Phil. Sociological Society); plus two lectures on Research Methodology using Statistics, and Indigenous Peoples' Struggle for Self-Determination (Bukidnon State University).
99	Manghnani	Murli	R5	\$ 1,551.00	\$ 1,000.00	Hawai'i Institute of Geophysics and Planetology	20th International Symposium on Boron, Borides and Related Materials	Progress in Ultrahigh Pressure Studies of Elastic, Vibrational, Structural, and Electrical Properties of Boron Carbide up to 72 GPa
100	Mangram	Charmaine	I3	\$ 3,145.00	\$ 2,000.00	Institute for Teacher Education, Secondary Program	The Society for Information Technology and Teacher Education (SITE) Annual Conference 2020	Supporting Preservice Teachers' Professional Judgment around Digital Technology Use: A Case of Mathematics Education

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101	Matsui	Takashi	I5	\$ 2,000.00	\$ 1,200.00	Anatomy, Biochemistry and Physiology	American Heart Association (AHA) Basic Cardiovascular Science (BCVS) Scientific Sessions 2019	Ferroptosis, Iron-dependent Non-apoptotic Cell Death, in Ischemic Heart Disease
102	McDonnell	Bradley	I3	\$ 3,066.00	\$ 2,000.00	Linguistics	50th Annual Conference of the International Association of Sound and Audiovisual Archives	Assessing Video Standards for Endangered Languages Archives
103	McGuire	Laura	I3	\$ 2,806.00	\$ 1,700.00	Architecture	"Urban Tropicality" 7th International Network of Tropical Architecture Conference	Alfred Preis and Rebuilding Laupahoehoe School After a Tidal Wave: Making Modernism "Hawaiian"
104	Miller	Jhalak	I4	\$ 2,765.00	\$ 1,500.00	Theatre and Dance	The Seoul International Dance Festival	"A Slow Awakening" and "Dance, Improvisation, and New Media at the Culture Tank"
105	Miz	Dan	I3	\$ 2,373.00	\$ 1,700.00	Urban and Regional Planning	Annual Meeting of the Association of Collegiate Schools of Planning	COMPUTER SUPPORTED COLLABORATIVE PLANNING: USING VISUALIZATION TOOLS TO ENHANCE SOCIAL LEARNING AND DEMOCRATIC DELIBERATION
							2019 Poultry Science Association (PSA) annual meeting	3 presentations from my lab (Two poster presentations by graduate students, and an oral presentation by me): 1) Transcriptional regulation of albumen biosynthesis and eggshell biomineralization in the oviduct of laying hens (Oral). 2) Dietary supplementation of dried plum: A novel strategy to mitigate heat stress in poultry (Poster). 3) New transcriptomic insights into processes associated with the formation of egg-white in the magnum of laying hens (Poster). In addition, 3 more poster presentation from collaborator lab (Dr. Rajesh Jha): 4) Comparative effects of in ovo injection of xylotriase, xyloetraose, mannotriose and mannotetraose on growth performance and gut health of broilers. 5) Effects of early feeding of resistant starch during post-hatch yolk dependent period on growth performance and gut health parameters of broilers. 6) Cecal microbiota profile of
106	Mshra	Birendra	I3	\$ 3,545.00	\$ 2,000.00	Human Nutrition, Food and Animal Sciences		
107	Molina	Teresa	I3	\$ 1,948.25	\$ 1,700.00	Economics	LACEA-LAMES Meeting	The Labor Market Effects of Eliminating University Tuition in Ecuador
108	Muccio	Leah	I4	\$ 1,706.20	\$ 1,500.00	Institute for Teacher Education	27th International Reconceptualizing Early Childhood Education Conference	Teacher Empathy at the Hyphen
109	Muir	Christopher	I3	\$ 1,778.08	\$ 1,779.00	School of Life Sciences	Society for Integrative and Comparative Biology	Climate anomalies are altering local adaptation
110	Nakamura	Brad	I4	\$ 2,860.00	\$ 1,700.00	Psychology	Annual Convention of the Association for Behavioral and Cognitive Therapies (ABCT)	The MAP Toolkit for Enhancing the Connections between Science and Practice: Common Elements and Much More
111	Neo	Rachel	I3	\$ 2,003.01	\$ 2,000.00	Communications	The Annual Association for Education in Journalism and Mass Communication Conference	Linking Judgments of Network Characteristics With Political Social Media Use via Perceived News Trustworthiness
112	Nguyen	Thanh Truc	I5	\$ 4,262.00	\$ 1,000.00	Curriculum Research and Development Group	43rd Annual Pacific Circle Consortium Conference	Writing Session: Global Citizenship, A PCC Project
113	Novotny	Rachel	I5	\$ 3,084.00	\$ 1,200.00	Human Nutrition, Food and Animal Sciences	International Society for Behavioral Nutrition and Physical Activity	The influence of the Children's Healthy Living Program's multilevel food related intervention
114	Ogawa	Michael-Brian	S4	\$ 2,581.03	\$ 1,700.00	Information and Computer Sciences	Human Computer Interaction International 2019	activities on child health behaviors and health outcomes in the Pacific Impedances of memorable passphrase design on augmented
115	Oliveira	Katrina-Ann	I5	\$ 1,160.00	\$ 1,000.00	Kwaihuelani Center for Hawaiian Language	American Educational Research Association	E Ola Mau Ka Olelo Hawaii: Long Live the Hawaiian Language
116	Osborne	Thomas	I5	\$ 1,575.00	\$ 1,000.00	Music	Rehearsals and premiere of concerto	"Ascent": Concerto for Geomungo and Korean Traditional Orchestra
117	Osorio	Jamaica	I3	\$ 2,710.00	\$ 1,500.00	Political Science	National Women's Studies Association Conference 2019	A Queer Indigenous Gathering: Intersectional Indigeneity, Creating Future, and the Politics of Knowledge
118	Pagkalinawan	Leticia	I3	\$ 2,000.00	\$ 1,700.00	Indo-Pacific Languages and Literatures	17th ASIA TEFL and 6th FLLT International Conference	Increasing Student Engagement Through Individual, Creative, and Tech-Based Methods of Learning
119	Pauker	Kristin	I4	\$ 2,035.00	\$ 1,700.00	Psychology	Society of Experimental Social Psychology	The role of essentialism and discrimination in multiracial individual's flexible self-perception
120	Ray	Tyler	I3	\$ 2,580.00	\$ 2,000.00	Mechanical Engineering	Innovative Materials for Additive Manufacturing	FIELD-ASSISTED AERSOL JET PRINTING FOR ELECTRONICS APPLICATIONS

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121	Reilly	Andrew	I5	\$ 2,078.00	\$ 1,200.00	Family and Consumer Sciences	International Textile and Apparel Association	(1) Assessment of Student Learning Outcomes for TAPAC Accreditation (2) Preparing Your Program for TAPAC Accreditation: Understanding Standards and Self-Study Report Requirements
122	Revilla	Marie	I3	\$ 2,495.00	\$ 2,000.00	Human Nutrition, Food, and Animal Sciences	Society of Nutrition Education and Behavior	Student Perception between a Publisher Textbook vs an Open Educational Resource Textbook for an Introductory Nutrition Course
123	Revilla	Noukahuoli	I3	\$ 2,088.00	\$ 1,200.00	English	National Women's Studies Association (NWSA)	Komo i ka ulu, he ulu ia: Developing a Poetics of Protection
124	Robertson	Ian	I5	\$ 4,145.00	\$ 1,200.00	Civil and Environmental Engineering	Seventh International Conference on Structural Engineering, Mechanics and Computation	Building Cost Implications of Tsunami Design per ASCE 7-16
125	Royer	David	I3	\$ 1,798.50	\$ 1,500.00	Special Education	Council for Exceptional Children 2020 Special Education Convention and Expo	(1) Ci3T in Hawai'i: Building a Tiered Model of Prevention in a New Locale (presentation with Q&A) (2) Secondary Teachers' Sense of Efficacy and Burnout After Two Years of Implementing Ci3T (presentation with Q&A) (3) Social Support, Self-Efficacy, and Burnout of Special Educators of Students with EBD (presentation with Q&A) (4) Treatment Integrity of Primary Prevention Efforts in Tiered Models: A Review of the Literature (poster) (5) Examining Social Validity within Comprehensive, Integrated, Three-tiered (Ci3T) Models: Illustrations and Relations Garnered Across a University-District Partnership
126	Rubin	Ashley	I3	\$ 1,985.00	\$ 1,985.00	Sociology	American Society of Legal History	Benevolent Discretion: Prison Administration and Legal Ambiguity in Eastern State Penitentiary, 1829-1849
127	Sak-Humphry	Chhany	I4	\$ 3,170.00	\$ 1,000.00	Indo-Pacific Languages and Literatures	The Conference on Asian Linguistic Anthropology 2020 (CALA 2020)	"(Re)claiming Identity: Traditional Folktales of the Hare - Language Materials for Heritage Learners"
128	Saplan	Jace	I3	\$ 1,250.00	\$ 1,250.00	Music	American Choral Directors Association Regional Conference	I Ka Piko: Return to Center (An accepted conference performance by Nā Wai Chamber Choir, Dr. Jace Saplan— director)
129	Segeral	Nathalie	I3	\$ 1,862.00	\$ 1,862.00	Languages and Literatures of Europe and the Americas	Pacific Ancient and Modern Language Association	A Transnational Academic Motherhood Adventure: Debunking the "French Mother Myth."
130	Severa	Godwin	R3	\$ 2,530.00	\$ 2,000.00	Hawai'i Natural Energy Institute	International Conference on Smart Cities	PACIFIC-ISLANDS' DESALINATION AIMING FOR ZERO-DISCHARGE: CONCEPTS, DESIGNS, AND FEASIBILITY
131	Shankar	Subramanian	I5	\$ 2,168.50	\$ 1,200.00	English	South Asian Literature Association Conference / Modern Language Association Conference	Teaching Caste in the USA / Critical Caste Studies Roundtable
132	Sharma	Nandita	I4	\$ 2,971.00	\$ 1,000.00	Sociology	2 conferences: 1) Society for the Study of Social Problems (SSSP) Annual Meeting; 2) American Sociological Association (ASA) Annual Meeting	1) SSSP: "National Autochthony and the Making of Postcolonial National-Natives"; 2) ASA: "The Postcolonial New World Order and the Containment of Decolonization"
133	Shea	Thomas	I3	\$ 2,003.00	\$ 1,500.00	Earth Sciences	American Geophysical Union 2019	Storage conditions and longevity of rift zone magmas at Kilauea Volcano, Hawai'i: melt inclusion insights from the 2018 Lower East
134	Shin	Sangwoo	I3	\$ 2,195.00	\$ 2,000.00	Mechanical Engineering	American Physical Society Annual Meeting (APS March Meeting 2020)	A trace amount of surfactants enable diffusiophoretic swimming of bacteria
135	Sierratla	Karla	I3	\$ 2,842.00	\$ 1,700.00	Architecture	ACSA 108th Annual Meeting / Open	Hawaii Housing Lab
136	Siriwardhana	Chathura	I3	\$ 2,395.00	\$ 1,700.00	Complementary and Integrative Medicine	Joint statistical meetings of the american statistical association (JSM 2019, Denver, CO)	Personalized Treatment Selection using Data from Crossover Designs with Carry Over Effects
137	Smith	Amanda	I3	\$ 4,235.00	\$ 1,500.00	Curriculum Studies	Oxford Ethnography and Education Conference	Participation Integrated Imagework: Materializing the Invisible in
138	Song	Zhuoyuan	I3	\$ 2,000.00	\$ 2,000.00	Mechanical Engineering	MTS/IEEE OCEANS 2019 Seattle	1. Fast Autonomous Underwater Exploration using a Hybrid Focus Model with Semantic Representation 2. Underwater Docking System for a Wave Energy Converter based Mobile Station 3. Resident Subsea Robotic Systems: A Review 4. Resident Subsea Robotic Systems: Challenges and Opportunities in Robotic Autonomy
139	Steele	Jamie	I4	\$ 3,750.00	\$ 1,700.00	Institute for Teacher Education	The Arts in Society	Teacher! Teacher! Applied Theatre Prepares Teacher Candidates For The Realities Of The Profession
140	Stepec	Joseph	I3	\$ 710.00	\$ 710.00	Music	Guest Artist Residency at the University of Oregon	Performance of Johann Christian Bach's Sixth Symphony

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141	Sugiyama	Anna	I3	\$ 2,205.00	\$ 2,000.00	School of Life Sciences	67th Ecological Society of Japan Annual Meeting	Predicting seedling performance from intraspecific variation for restoration of <i>Acacia koa</i>
142	Sutherland	Tonia	I3	\$ 2,000.00	\$ 1,700.00	Information and Computer Sciences	1st Unlocking Caribbean Memory Symposium	Searching for Solitude: Black Women and Resistance in the French Colonial Archives
143	Suvorov	Ruslan	S4	\$ 1,918.00	\$ 1,500.00	Center for Language and Technology	American Council on the Teaching of Foreign Languages (ACTFL)	Resources for the ACTFL Mentoring Program for Online Language Teachers
144	Tan	Paulo	I3	\$ 2,000.00	\$ 2,000.00	Institute for Teacher Education	American Educational Research Association	A DSE Deconstruction of "Evidence-Based Practices" in Mathematics Research
145	Taniguchi	Emiko	I3	\$ 2,000.00	\$ 2,000.00	Communicology	International Communication Association (ICA) Conference	When Is Mental Illness Disclosure Related to Enhanced Self-Esteem?: Examination of Self-Image Goals as a Moderator
146	Thoulag	Jean	B3	\$ 1,413.00	\$ 1,000.00	Access Services	Access Services Conference	Outreach and Marketing and Access Services: Findings from the 2018 Environmental Scan for the Access Services Framework
147	Tschudi	Stephen	S3	\$ 2,095.60	\$ 1,000.00	Center for Language and Technology	American Council on the Teaching of Foreign Languages (ACTFL)	Examples for Designing High-Quality Project-Based Language Learning (lead presenter) Designing Microlearning Experiences for 21st Century Learners (co-presenter)
148	Turnbull	Rory	I3	\$ 2,371.00	\$ 1,700.00	Linguistics	19th International Congress of Phonetic Sciences	Across-language priming in bilinguals: Does English "bet" prime French "bête"?
149	Wee	Sherilyn	S3	\$ 2,530.00	\$ 1,700.00	Public Policy	2019 Association for Public Policy Analysis & Management (APPAM) Fall Research Conference	What determines the adoption of electric vehicle policies in U.S. states?
150	Wells	Jenny	I5	\$ 2,388.00	\$ 1,200.00	Special Education	The 39th Annual ACRES National Conference	Using one-way online recorded video interviews in the admissions process: Applicant and Faculty perspectives
151	Wen	Ivan	I4	\$ 3,520.00	\$ 1,000.00	Travel Industry Management	2019 Asia Pacific Tourism Association Conference	CUSTOMER-VALUE CREATION IN SELF-SERVICE TECHNOLOGIES (SSTs) IN THE HOSPITALITY INDUSTRY
152	Womack	Donald	I5	\$ 2,614.00	\$ 1,000.00	Music	Premiere of 白雨 (White Rain) for Japanese instrument ensemble	白雨 (White Rain) for Japanese instrument ensemble
153	Wright	Amber	I3	\$ 2,158.03	\$ 1,700.00	Biology	Ecological Society of America	Traits predict resource use and competitive effects in a novel lizard assemblage
154	Wu	Yan Yan	I4	\$ 2,565.00	\$ 1,700.00	Office of Public Health Studies	The Gerontological Society of America (GSA) 2019 Annual Scientific Meeting	Symposium title: Disparities of Dental Care and Consequence of Poor Oral Health for Older Adults in the U.S. (Chair) Abstract #1: Disparities of Dental Care Utilization Among White, Black, Hispanic, Native Hawaiian, and Asian from 2002 to 2016 (Presenter) Abstract #2: The Quality of Dental Care in Nursing Homes: Variation by Facility and Market Characteristics Abstract #3: The Moderating Role of Birth Place on Dental Cleaning Service Among Chinese Older Adults in Hawai'i Abstract #4: The Impact of Diabetes and Poor Oral Health on A 14-Year Multi-Case Study of the Academic, Career, and Personal Development of Five Native Hawaiians
155	Yamauchi	Lois	I5	\$ 2,000.00	\$ 1,200.00	Educational Psychology	American Educational Research Association	Can wastewater surveillance achieve rapid and comprehensive detection of foodborne disease outbreaks?
156	Yan	Tao	I5	\$ 2,780.00	\$ 1,200.00	Civil and Environmental Engineering	2020 ASM Biothreats Meeting	Climate Change Reporting: The Case of U.S. Dow Jones 30
157	Yang	David	I5	\$ 1,622.20	\$ 1,000.00	Accountancy	2019 American Accounting Association Annual Meeting	Neighborhood Social Cohesion, Resilience, and Well-Being among Chinese Older Adults in Honolulu, Hawai'i
158	Zhang	Wei	I5	\$ 2,406.00	\$ 1,200.00	Sociology	The Gerontological Society of America's 71st Annual Scientific Meeting	Aging Policies and Solutions
159	Zhou	Kate	I5	\$ 1,994.00	\$ 800.00	Political Science	American Accounting Association Auditing Section Midyear Meeting	Aging Policies in Asia-Pacific Region
160	Zhou	Jian	I5	\$ 1,867.68	\$ 1,200.00	Accountancy	American Accounting Association Auditing Section Midyear Meeting	Are Accounting Professors Effective Monitors? An Empirical Investigation of Accounting Professors on Audit Committees
161	Ziegler	Nicole	I4	\$ 2,705.00	\$ 1,700.00	Second Language Studies	International Conference on Task-Based Language Teaching	Miscommunication in Maritime English: Insights from a Task-Based Needs Analysis
			Total:	\$ 366,660.15	\$ 223,798.88			

Table 2
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1	Abes, Katrina	S2	2,389	2,000	Student Affairs	NODA Annual Conference	Integrating Cultural Wealth into Orientation □ Ways of Building a Beloved Community
2	Ahn, Eun	I5	2,166	2,000	Business Administration	49Th Annual lea Meeting	Price Rent Dynamics for Small Multifamily Housing Using Local Projection
3	Akamine, Glennis	S3	2,359	2,000	Student Affairs	15th Annual On Course National Conference	Strategies to Unpack Cultural Diversity
4	Chernisky, Carina	S2	1,895	1,895	Library	Open Education Conference	One Workshop, Multiple Rewards: An OER Collaboration to Further Engage Faculty
5	Cook, Kealani	I3	2,721	2,000	Humanities	Native American And Indigenous Studies Association 2020	Making Oceania: Indigenous Researchers and the Bishop Museum
6	Furuto, Michael	I4	2,360	2,000	Mathematic, Natural and Health Science	National Council Of Teachers Of Mathematics (Nctm) Annual Meeting & Exposition	Success in Calculus: Strategies to Increase Student Participation, Mathematics Self-Efficacy, and Academic Achievement
7	Garcia-Santiago, Orlando	I4	1,600	1,600	Social Science	14Th Annual International Conference On Sociology, Athens, Greece	Detecting Best Practices for Re-entry Programs □Development and Implementation: An Exploratory Study
8	Gilles, Allyson	I3	4,482	2,000	Social Science	Annual Society Of Behavioral Sleep Medicine Scientific Meeting	Impact of Age-related Social and Environmental Determinants in Insomnia-Cardiometabolic Health Relationships in Individuals Who Exercise
9	Gilles, Allyson	I3	4,919	1,800	Social Science	Sleep 2020	Cardiometabolic Disease Risk And Sleep Difficulty: Associations With Diet, Physician Support, Proactive Health Behaviors, And Family Risk Knowledge
10	Graham-Tutt, Camonia	I3	710	710	Mathematic, Natural and Health Science	lafor International Conference On Sustainability, Energy & The Environment (licsee)	Conservation Practices and Their Impact on Hawaiian Well-being Among Youth
11	Hayes, Michael	I5	2,740	2,000	Education	Engagement Scholarship Consortium	research for a better world: Poetic design and engagement research
12	Heller, Mary	I5	2,772	2,000	Education	American Educational Research Association	From The Editor's Desk: Writing for Scholarly Publication
13	Herman, Louis	I5	3,000	2,000	Social Science	Wild 11	REWILDING COSMOLOGY
14	Hopper, Mark	I3	2,389	2,000	Social Science	32 ND American Psychological Society (Aps) Annual Convention	Using the VIA survey and Hawaiian/Pacific Islander indigenous talk story to understand character strengths
15	Ikeda, Cathy	I3	2,204	2,000	Education	Engaged Scholarship Consortium Conference	"The Rain Follows the Forest": Collaboration Rooted in the (K)New

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16	Itoga, Holly	I3	3,395	2,000	Business Administration	Travel Tourism Research Association 51St Internation Conference	The effects of agritourism on visitor satisfaction in Hawaii
17	James, Laurie	I3	2,000	2,000	Education	Canada International Conference On Education	Teacher Preparation Program and Professional Development that Focus on Mathematics
18	James, Laurie	I3	2,000	1,800	Education	2020 Washington College Mathematics Conference	*Math Teachers Circle: Empower, Engage, and Encourage Learning Through Games*
19	Jones, Richard	I4	1,947	1,947	Education	NSTA Regional Conference	NSTA Regional Salt Lake City Presentations
20	Joseph, Michiko	I2	2,099	2,000	Library	Open Education Conference	One Workshop, Multiple Rewards: An OER Collaboration to Further Engage Faculty
21	Kamai, Stephanie	S4	2,204	2,000	Education	Engaged Scholarship Consortium Conference	The rain follows the forest: Collaboration rooted in the (k)new.
22	Levy, Jason	I5	3,633	2,000	Public Administration	New Delhi	Advances in Social Vulnerability and Community Disaster Resilience in New Delhi and Visakhapatnam, India
23	Levy, Jason	I5	2,012	2,000	Public Administration	The 3rd International Multi-Topic Conference on Engineering and Science (IMCES'2020)	Very High-resolution Pictometry Imagery for Assessing Environmental Hazards: Advances in Information and Computer Technologies (ICT) for Disaster Management
24	Lilomaiaava-Doktor, Sailieman	I5	2,163	2,000	Humanities	Native American And Indigenous Studies Association (NAISA) 2020	Cultral Significance of Storytelling and Indigenous Samoan Understanding of Place or Fanua
25	Liu, Veny	I3	2,195	2,000	Mathematic, Natural and Health Science	2019 Pacific-Basin Steam Teaching Conference	Locking Legos Machine to Lifesize Manipulatives: Engaging Hands-on Activities for Elementary Students, A Mathematical Journey of Dots, Learning the Secret to Win at Nim: Game Theory
26	Machosky, Brenda	I5	2,059	2,000	Humanities	Modern Language Assoc Annual Convention	Being Human in the (post)colonial: Australia and Aotearoa/New Zealand
27	Machosky, Brenda	I5	2,484	1,800	Humanities	Amer Assoc of Australasian Lit Studies	Real Fiction: A Novel Twist
28	Machosky, Brenda	I5	125	125	Humanities	Association of University Presses: AUPresses 2020: Virtual Annual Meeting	Australian Literature and Scholarship in the United States
29	Magnussen, Jon	I4	2,156	2,000	Humanities	Coda (College Orchestra Directors Association) 2020 National Conference	Place-Based Programming for Stronger Community Ties
30	Mahiko, Joy	I3	1,913	1,913	Education	American Council on Rural Special Education	Voices from the Community to Support Rural Youth With Disabilities Who are Work-Bound

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31	Mahiko, Joy	I3	569	569	Education	International Conference on Teacher Education	Moving Online: Creating Effective Tasks for Analysis of Teaching Evidence
32	Mahiko, Joy	I3	2,240	1,800	Education	Association for Assessment of Learning in Higher Education	Program Completer Impact on Student Learning: A Critical Analysis of UHWO Teacher candidates' Journey From Preservice to Inservice Teaching and Learning
33	Mareko, Joseph	I2	2,468	2,000	Student Affairs	2019 Naspaw Western Regional Conference	Integrating Cultural Wealth into Orientation □ Ways of Building a Beloved Community
34	Mello, Christina	I3	2,891	2,000	Social Science	Society For Applied Anthropology	Achieving Native Hawaiian Culture- and Place-Based Tourism Sovereignty to Expand Biodiverse Agricultural Production and Address Climate Change
35	Miles, Albie	I3	3,434	2,000	Social Science	Ucsc Casfs Agroecology And Sustainable Food Systems Education	Creating institutional spaces for critical agroecology education: epistemological foundations and engaged communities of practice toward agri-food system transformation.
36	Mironesco, Monique	I5	6,036	2,000	Social Science	Tahiti Travel For Research Interviews With Women Leaders Of Afns	Women's Leadership in Alternative Food Networks in the Pacific
37	Mota, Xochitl	I3	1,900	1,900	Social Science	Sex Ed And The Church	The Science of Repression: Sex (Ed), Dating and God
38	Niles, Gloria	I3	2,092	2,000	Distance Education	CEC 2020 Convention & Expo	Intersecting Instructional Design, Special Education, and Online Pedagogy: Supporting Online Learners with Autism
39	Nolte-Odhiambo, Carmen	I3	2,270	2,000	Humanities	Modern Language Association	Out of Time: Aetotemporalities and Hawaiian Young-Adult Literature
40	Odhiambo, Nandi	I4	784	784	Humanities	Verb Festival	Smells Like Stars
41	Orr, Stanley	I5	1,820	1,820	Humanities	Modern Language Association Annual Convention	Public Humanities: Regional MLAs and Their Communities
42	Orr, Stanley	I5	2,665	2,000	Humanities	2020 Popular Culture Association Conference	'The Good Killing': John Kneubuhl, Adventures in Paradise, and Metrocolonial Television" and 'I wonder which of you is real': The Indigenous Confidence Man in John Kneubuhl's 'The Night of the Two-Legged Buffalo'
43	Prizzia, Ross	I5	1,900	1,893	Public Administration	2019 Transatlantic Dialogue (Tad 15) Restoring The Administrative State: Trust, Engagement, Security, And Identity□	Innovation in Autonomous Subterranean Vehicle Research for National Security and Disaster Management
44	Riley, Lorinda	I2	2,015	2,000	Public Administration	Western Society Of Criminology	igenizing Restorative Justice
45	Romero, Yasmine	I3	2,989	2,000	Mathematic, Natural and Health Science	Teacher of English to Speakers of Other Languages (TESOL) 2020	Panel on Diversity and Inclusion

Table 2
2019-2020 Professional Travel Awards Annual Report – West O’ahu

<u>Count</u>	<u>Faculty</u>	<u>Rank</u>	<u>Estimated Funds Requested</u>	<u>Amount Awarded</u>	<u>Department</u>	<u>Purpose</u>	<u>Title of Presentation/Paper</u>
46	Romine, Rebecca	I3	1,921	1,921	Mathematic, Natural and Health Science	WSCUC Arc 2020	Disaggregating Student Outcomes: Facilitating Student Success in STEM
47	Rosenlee, Li-Hsiang	I5	2,340	2,000	Humanities	American Philosophical Association	A comparative feminist reflection on care
48	Sakuda, Keith	I4	3,897	2,000	Business Administration	International Conference on Social Sciences & Management	An Exploration Of Irrational Competition: Comparing The U.S. & Japanese Business Environments
49	Scheiding, Thomas	I3	3,683	2,000	Social Science	Engaged Scholarship Consortium Conference & Missouri Valley Economics Association Conference	Renewing an Appreciation of Hawaiian Culture through Farming and Learning & Homer Jones and the Institutionalization of Monetarism
50	Scheiding, Thomas	I3	2,373	1,800	Social Science	Research at Duke University	Mathematica and the Role of Economists in Public Policy -- A Historical Exploration
51	Schwartz, Jonathan	I4	335	335	Education	Association for the Advancement of Computing in Education	Moving Online: Creating Effective Tasks for Analysis of Teaching Evidence
52	Scwartz, Jonathan	I4	2,040	2,000	Education	Association for the Assessment of Learning in Higher Education	Program Completer Impact on Student Learning: A critical analysis of UHWO teacher candidates journey from preservice to inservice teaching and learning.
53	Tasaka, Robyn	I3	1,417	1,417	Student Affairs	Pacific Northwest Writing Centers Association	Inadequate Space: Physical Sites for Online Tutoring
54	Velasco, Rouel	S2	2,389	2,000	Student Affairs	National Orientation Directors » Association National Conference	Integrating Cultural Wealth into Orientation □ Ways of Building a Beloved Community
55	Widiasih, Esther	I4	1,947	1,947	Mathematic, Natural and Health Science	Siam-MPE 2020	Asymmetric Energy Balance Model of the Glacial Cycles
56	Wilson, Stefanie	I5	2,495	2,000	Business Administration	2020 Clute Institute International Academic Conferences Orlando	Leading with Aloha and Multiple Intelligences: Stellar Classroom Practices Impacting Student Learning
57	Yu, Peiyong	I2	2,681	2,000	Social Science	Western Economic Association International	Effects of the Honolulu Rail Transit on Property Values on Oahu, HI
			134,682	103,776			

Table 3
2019-2020 Distribution of Facilitating Services Fund

UNIT	Basis	Allocation
College of Arts & Humanities	38,456	
College of Education	1,605,100	
College of Engineering	838,167	
College of Languages, Linguistics and Literature	451,898	
College of Natural Sciences	3,987,636	
College of Social Sciences	1,596,301	
College of Tropical Agriculture and Human Resources	1,569,132	
Hawai'i inuiakea School of Hawaiian Knowledge	22,157	
Institute for Astronomy	4,033,348	
John A. Burns School of Medicine	9,267,136	
Lyon Arboretum	79,811	
Outreach College		
School of Architecture	9,888	
School of Nursing and Dental Hygiene	112,894	
School of Ocean and Earth Science and Technology	12,456,149	
School of Pacific Asian Studies	65,957	
School of Social Work	706,881	
Shidler College of Business	24,465	
UH Cancer Center	5,694,850	
Waikiki Aquarium	928	
Water Resources Research Center	133,774	
William S. Richardson School of Law	101,668	
Vice Chancellor, Academic Affairs	47,520	
Vice Chancellor, Research	472,804	
Vice Chancellor, Students	367,871	
Manoa	43,684,791	31,778,460
UH Hilo	1,803,518	
SBDC	123,678	
UH Hilo	1,927,196	1,251,053
West O'ahu	227,614	
West O'ahu	227,614	192,653
VP for Community Colleges	117,103	
Hawai'i CC	73,344	
Honolulu CC	169,508	
Kapi'olani CC	191,516	
Kaua'i CC	120,003	
Leeward CC	155,393	
Maui College	1,103,627	
Windward CC	240,592	
Campus CC	2,171,087	1,450,380
Office of the President	316	
VP for Academic Planning and Policy	245,316	
VP for Administration	7,577	
VP for Rsch and Innovation	557,869	
Pacific Disaster Center	2,108,659	
Office of the VP for Information Tech/Chief Info Officer	1,088,528	
Applied Research Laboratory	40,419	
Systemwide	4,048,684	2,606,942
Grand Total	52,059,372	37,279,488

Table 4
2019-2020 Project Development Fund Awards – Vice Chancellor for Research

Item No.	Unit	Account Title	P.I.	Commitment
1	College of Education	CI3T Focus Groups	Royer, D.	1,000.00
2	College of Education	Faculty Start-Up	Centeio, E.	30,000.00
3	College of Engineering	Faculty Start-Up	Song, Z.	35,000.00
4	College of Engineering	Faculty Start-Up	Ray, T.	70,750.00
5	College of Engineering	Faculty Start-Up	Uspal, W.	15,000.00
6	College of Engineering	Faculty Start-Up	Moon, D.	36,000.00
7	College of Engineering	Faculty Start-Up	Xiao, Y.	37,000.00
8	College of Engineering	Faculty Start-Up	Cho, C.	35,000.00
9	College of Engineering	UTC University	Prevedorous, P.	50,000.00
10	College of Engineering	MRI Support	Brown, J.	116,688.00
11	College of Language Linguistics and Literature	Flagship Tech Innovation	Rodriguez, J.	40,000.00
12	College of Language Linguistics and Literature	Flagship Tech Innovation	Rodriguez, J.	40,000.00
13	College of Language Linguistics and Literature	Chinese Language Flagship	Spring, M.	25,000.00
14	College of Natural Sciences	East China MOU	Kaiser, R.	70,000.00
15	College of Natural Sciences	Faculty Start-Up	Haas, R.	24,000.00
16	College of Natural Sciences	Faculty Start-Up	Haglund, E.	83,333.33
17	College of Natural Sciences	Bridging	Hoang, T.	50,000.00
18	College of Natural Sciences	Research Support	Bindi, V.	24,000.00
19	College of Natural Sciences	Research Support	Amend, A.	24,000.00
20	College of Natural Sciences	Travel for WLHE Conference	Helminck, A.	5,154.34
21	College of Social Sciences	Renovations	Barile, J.	146,580.00
22	College of Tropical Agriculture and Human Resources	Faculty Start-Up	Shikano, I.	16,667.00
23	Facilities	Utilities	Araki, B.	1,000,000.00
24	Graduate Division	GSO Support (Travel)	Westfall-Senda, M.	50,000.00
25	Information Technology Services	ITS Data Sci Institute	Jacobs, G.	250,000.00

Table 4
2019-2020 Project Development Fund Awards – Vice Chancellor for Research

Item No.	Unit	Account Title	P.I.	Commitment
26	Institute for Astronomy	Research Support	Chun, M.	75,000.00
27	Institute for Astronomy	Faculty Start-Up	Shappee, B.	55,000.00
28	Institute for Astronomy	Faculty Start-Up	Shappee, B.	65,000.00
29	Institute for Astronomy	Faculty Start-Up	Sun, X.	80,000.00
30	Institute for Astronomy	Faculty Start-Up	Huber, D.	50,000.00
31	Institute for Astronomy	Faculty Start-Up	Bottom, M.	40,000.00
32	John A. Burns School of Medicine	HJMPH Journal	Hedges, J.	20,000.00
33	John A. Burns School of Medicine	COBRE III Support	Ward, S.	42,116.00
34	John A. Burns School of Medicine	MHRT Program	Nerurkar, V.	51,604.80
35	Lyon Arboretum	Faculty Start-Up	Zahawi, Z.	75,000.00
36	School of Ocean & Earth Science Technology	Gov Green Power	Roberts, M.	30,000.00
37	School of Ocean & Earth Science Technology	Lab Support	Ishii, H.	80,000.00
38	School of Ocean & Earth Science Technology	Faculty Start-Up	DeLong, E.	100,000.00
39	School of Ocean & Earth Science Technology	Lab Support	Ishii, H.	61,500.00
40	School of Ocean & Earth Science Technology	Faculty Start-Up	Shea, T.	50,000.00
41	School of Ocean & Earth Science Technology	Faculty Start-Up	Frank, K.	33,333.00
42	School of Ocean & Earth Science Technology	Faculty Start-Up	Stuecker, M.	50,000.00
43	School of Ocean & Earth Science Technology	Faculty Start-Up	Janiszewski, H.	13,000.00
44	School of Ocean & Earth Science Technology	Hope Ishii Lab Support	Ishii, H.	70,000.00
45	School of Ocean & Earth Science Technology	Faculty Start-Up	Bushinsky, S.	13,000.00
46	School of Ocean & Earth Science Technology	Faculty Start-Up	Li, S.	100,000.00
47	School of Ocean & Earth Science Technology	KOK Scrapping	Taylor, B.	150,000.00
48	UH Cancer Center	Faculty Start-Up	Shepherd, J.	150,000.00
49	UH Public Health	Research Support	Mitchell, J.	9,856.92
50	Vice Chancellor for Academic Affairs	Manoa Horizon	Gonzalez, V.	2,000.00

Table 4
2019-2020 Project Development Fund Awards – Vice Chancellor for Research

Item No.	Unit	Account Title	P.I.	Commitment
51	Vice Chancellor for Research	ASA Support	Kameoka, V.	2,000.00
52	Vice Chancellor for Research	Faculty Travel Support	Kameoka, V.	350,000.00
53	Vice Chancellor for Research	Makai Pier	Kameoka, V.	40,000.00
54	Vice Chancellor for Research	Makai Pier Support	Kameoka, V.	75,000.00
55	Vice Chancellor for Research	Bond	Kameoka, V.	1,801,425.01
56	Vice Chancellor for Students	SACNAS Sponsorship	Kameoka, V.	50,000.00
57	Water Resources Research Center	Research Support	Giambelluca, T.	53,875.00
	TOTAL COMMITTED			6,113,883.40

Table 5
2019-2020 Student Excellence in Research Awards

Item No.	Name	Department	Amount Awarded
1.	Aiu, Marley	College of Arts, Languages and Letters	500.00
2.	Anger, Joy	College of Social Sciences	500.00
3.	Zhang, Zhoujian	Institute for Astronomy	500.00
		TOTAL	1,500.00

Table 6
2019-2020 VP for Research and Innovation Investments

Item	Campus	Unit	Purpose	Commitment
1	HI	Chancellor	Hawai'i on the Hill	2,716.13
2	HI	Chancellor	OMKM Support	268,132.89
3	HI	Chancellor	Imiloa Support	25,000.00
4	HI	Daniel K. Inouye College of Pharmacy	COBRE	125,000.00
5	MA	College of Engineering	Research Support for Ceramic & Polymer Nanocomposit	200,000.00
6	MA	College of Natural Sciences	UPS System	12,500.00
7	MA	College of Natural Sciences	HECO Innovation Impact Challenge	10,000.00
8	MA	College of Natural Sciences	Chemistry Start Up	120,000.00
9	MA	College of Social Sciences	COVID-19 Crowdsorce	30,000.00
10	MA	College of Tropical Agriculture and Human Resources	Hawai'i on the Hill	2,994.66
11	MA	John A. Burns School of Medicine	COBRE Phase I	50,000.00
12	MA	John A. Burns School of Medicine	Lab Support	20,000.00
13	MA	School of Ocean and Earth Science and Technology	AMOS Support	953.30
14	MA	School of Ocean and Earth Science and Technology	Bridge Funding	152,146.00
15	MA	Shidler College of Business	Accelerator/Venture Lab and Lift Off Programs	235,759.00
16	SW	Academy for Creative Media	ACM Support	450,000.00
17	SW	Office of General Counsel	Research Support	228,009.72
18	SW	STEM	STEM Support	22,150.00
19	SW	Vice President for Research and Innovation	Sinclair Bond Payment	368,171.81
20	SW	Vice President for Research and Innovation	UH Ventures Support	392,500.00
21	WO	Chancellor	Faculty Travel	100,000.00
22	WO	Chancellor	Research Support	75,000.00
				<u>2,891,033.51</u>

Table 7
Five-Year Summary of Research and Non-Research Grants and Contracts Awarded

<u>Description</u>	<u>Fiscal Year</u> 2016	<u>Fiscal Year</u> 2017	<u>Fiscal Year</u> 2018	<u>Fiscal Year</u> 2019	<u>Fiscal Year</u> 2020
Research	199,840,628	209,249,788	215,982,321	222,860,456	229,664,292
Non-Research	191,493,900	177,751,917	170,329,382	198,991,704	220,774,957
	<u>391,334,528</u>	<u>387,001,705</u>	<u>386,311,703</u>	<u>421,852,160</u>	<u>450,439,249</u>

APPENDIX 2

INTERNAL AGREEMENT

THIS AGREEMENT entered into this 28th day of June, 1996 and amended (2001 and 2007), and restated as of July 27, 2017, by and between the UNIVERSITY OF HAWAI'I, hereinafter called the "UNIVERSITY", and THE RESEARCH CORPORATION OF THE UNIVERSITY OF HAWAI'I, hereinafter called the "CORPORATION".

RECITALS

A. The CORPORATION was established by Act 209, Session Laws of Hawai'i 1965 (codified in Chapter 304A, Hawai'i Revised Statutes) to provide the UNIVERSITY and other state agencies or political subdivisions of the State, any private person, firm, partnership, association, company, or corporation with an expeditious managerial environment, which is necessary to function in the highly competitive research environment and the quest for research funding support from the federal government and private industry, by granting to the CORPORATION administrative flexibility in procurement and hiring of personnel.

B. The objects for which the CORPORATION is organized, as stated in Section 304A-3001, Hawai'i Revised Statutes, are "to promote all educational, scientific and literary pursuits by (1) encouraging, initiating, aiding, developing, and conducting training, research and study in the physical, biological and social sciences, humanities, and all other branches of learning; (2) encouraging and aiding in the education and training of persons for the conduct of the training, investigations, research and study; (3) the furnishing of means, methods, and agencies by which the training, investigations, research and study may be conducted; (4) assisting in the dissemination of knowledge by establishing, aiding and maintaining professorships, or other staff positions, fellowships, scholarships, publications, and lectures, (5) engaging in other means of making the benefits of training, investigations, research, and study available to the public; and (6) taking any and all other actions reasonably designed to promote these purposes in the interest of promoting the general welfare of the people of the State." In order to carry out these statutory purposes and objectives, the CORPORATION was granted statutory authority which provides it with administrative flexibility in hiring its personnel, in procuring goods and services, and in handling and disbursing moneys by being excepted from the following state laws:

- (a) Sections 36-27 and 36-30, Hawai'i Revised Statutes, relating to special fund reimbursements to the state general fund;
- (b) Chapter 103D, Hawai'i Revised Statutes, relating to advertising for bids and purchases to be made in Hawai'i whenever public moneys are expended; and with respect to construction contracts, provided that the exception shall not apply where state funds are used and compliance with chapter 103D is required by a bill enacted by the legislature;
- (c) Chapter 76, Hawai'i Revised Statutes, relating to civil service; and
- (d) Section 78-1, Hawai'i Revised Statutes, relating to public employment.

The CORPORATION was also granted broad authority pursuant to Section 304A-3003, Hawai'i Revised Statutes, to, among other things, coordinate the CORPORATION's activities with the work of state agencies for the purpose of relating research work to the economic development of the State of Hawai'i whenever practical or desirable, to promote and stimulate cooperative research activities, and to do any and all acts reasonably necessary to carry out the objects and purposes of the CORPORATION and the UNIVERSITY.

C. The CORPORATION is a public instrumentality and body corporate, under the control and general management of a Board of Directors that consists of three members appointed by the Governor; two members of the University's Board of Regents, one member appointed by the Senate President; one member appointed by the Speaker of the House; and one member being the University's Vice President for Research and Innovation, who is an ex-officio, nonvoting member.

D. The CORPORATION is a part of the UNIVERSITY for administrative purposes as provided for in Section 26-35, Hawai'i Revised Statutes, and the administrative supervision of the CORPORATION by the UNIVERSITY shall be in the manner expressly set forth in Section 26-35, Hawai'i Revised Statutes.

E. The CORPORATION has been conducting such of its affairs as are of mutual concern to the UNIVERSITY and the CORPORATION in a manner consistent with the applicable provisions in Section 26-35, Hawai'i Revised Statutes, as well as UNIVERSITY policies that have been communicated by the UNIVERSITY to the CORPORATION from time to time.

F. To fulfill the CORPORATION's statutory mandate, the UNIVERSITY and CORPORATION have been utilizing the CORPORATION's administrative flexibility to perform the UNIVERSITY's externally-sponsored investigation, research, and training contracts and grants pursuant to the terms of this Agreement. The UNIVERSITY and the CORPORATION desire to continue to utilize the CORPORATION's administrative flexibility to perform the UNIVERSITY's extramurally-sponsored investigation, research, and training contracts and grants, that may be appropriately assigned to the CORPORATION by the UNIVERSITY and which are to be administered in accordance with UNIVERSITY policies and procedures.

G. The UNIVERSITY has requested, and the CORPORATION desires to provide the UNIVERSITY, the utilization of the CORPORATION's administrative flexibility to procure goods and services for the extramurally-sponsored investigation, research, and training projects and grants, and the provision, by hire or other means, of technical and support personnel as may be required by the UNIVERSITY to fulfill the terms and conditions of such research and training awards.

AGREEMENT

The Parties agree as follows to a mutually acceptable set of relationships, responsibilities, and procedures.

ARTICLE I Definitions

1.1 "Agreement" shall mean this Internal Agreement and as made effective on the date provided herein.

1.2 "Board of Directors" shall mean the Board of Directors of the Research Corporation of the University of Hawai'i, State of Hawai'i.

1.3 "Board of Regents" shall mean the Board of Regents of the University of Hawai'i, State of Hawai'i.

1.4 "Contract or grant" shall mean any contract, grant, cooperative agreement, or other agreement between the UNIVERSITY and an extramural sponsoring agency relating to an investigation, research, education, or training project.

1.5 "Core administrative position" shall mean a personnel position filled by an employee who is under the direction, supervision, and control of the Executive Director of the CORPORATION.

1.6 "CORPORATION" shall mean The Research Corporation of the University of Hawai'i, State of Hawai'i.

1.7 "Extramurally-sponsored research or training award" shall mean financial assistance provided by an extramural sponsoring agency in the form of a grant, contract, lease, cooperative agreement, or other agreement that supports, stimulates, promotes, or accomplishes a cooperative research project or activity, or the research or training purposes stated in an award document.

1.8 "Extramural sponsoring agency" shall mean an agency or organization that is not under the jurisdiction of the UNIVERSITY and shall include, but not be limited to, agencies of the Federal Government, State Governments, local governments, foreign nations, and private agencies, both for profit and not for profit.

1.9 "Fiscal Year" or "FY" shall mean the period from July 1st through June 30th of each year.

1.10 "Indirect cost rate" shall mean that rate which is negotiated by the UNIVERSITY with the appropriate federal cognizant agency, and used to allocate the CORPORATION's indirect costs to each University service ordered project or activity, including revolving fund accounts and RCUH direct projects.

1.11 "Indirect costs" shall mean those costs that are incurred for common or joint objectives, and cannot be identified readily and specifically with a particular sponsored project or instructional activity or any other institutional activity.

1.12 "FS" shall mean the University's Financial System, which is the financial accounting and reporting system of the UNIVERSITY.

1.13 "Management fee" shall mean the fee paid by the UNIVERSITY to reimburse the CORPORATION for administrative costs and expenses incurred by the CORPORATION in providing specialized administrative services to the UNIVERSITY, such fee being determined pursuant to Article VI.

1.14 "Modified Total Direct Costs" or "MTDC" shall mean those direct costs incurred by the CORPORATION and consisting of salaries and wages, fringe benefits, materials and supplies, services, travel, subgrants and subcontracts up to \$25,000 each but excluding equipment costs as defined in 2 CFR 200.33, trainees' tuition, stipends and allowances, rental space, and charges from specialized service facilities.

1.15 "Practice" shall mean any written or customary policy or procedure previously adopted by the CORPORATION or UNIVERSITY.

1.16 "Principal Investigator" shall mean the UNIVERSITY employee who is officially designated by the UNIVERSITY to be the project manager for a particular sponsored project or activity, including any research or training project, and delegated the primary discretionary responsibility for the day-to-day and overall operational management of the project or activity, including the fulfillment of the scope and work plan of the research or training award.

1.17 "Project position" shall mean a personnel position of an employee employed by the CORPORATION and under the direction, supervision, and control of the designated Principal Investigator pursuant to fulfilling a contract or grant that will also pay or fund the employee's wages or salary.

1.18 "RCUH direct project" shall mean extramurally sponsored research or training awards awarded directly to the CORPORATION as the prime contractor or grant recipient responsible for the overall performance under the award.

1.19 "Recharge center" shall mean a UNIVERSITY facility providing institutional services on an ongoing basis primarily to projects or activities that are supported by an extramurally-sponsored research or training award.

1.20 "Revolving fund accounts" shall mean the revolving accounts that are established by the CORPORATION for the purpose of supporting a UNIVERSITY specialized service activity, recharge center, or other sales or service activity that are of a self-sustaining and income-generating nature and which are maintained within the CORPORATION's special account in accordance with the authorization of Section 304A-3010, Hawai'i Revised Statutes.

1.21 "Specialized Service Facility" or "SSF" shall mean a UNIVERSITY facility providing institutional services on an ongoing basis to projects or activities that are primarily supported by an extramurally-sponsored research or training award and the project or activity involves the use of highly complex or specialized facilities with revenues exceeding \$250,000 per year.

1.22 "Sponsor" shall mean a private, federal, or non-federal agency or organization that provides financial assistance in the form of a grant, contract, award or other agreement to support or stimulate a research or training activity.

1.23 "Subcontract" shall mean an award made by the CORPORATION to a vendor for the performance of a substantial portion of the scope of work for a project or activity.

1.24 "Subgrant" shall mean an award made by the CORPORATION to a subrecipient, usually another institution, for the performance of a substantial portion of the scope of work for a project or activity.

1.25 "UNIVERSITY" shall mean the University of Hawai'i, State of Hawai'i.

1.26 "Work" shall mean the effort or activity directed toward the production or accomplishment of the research or training project goal.

1.27 "Working capital" shall mean the funds that are available for the CORPORATION to cover estimated disbursements of funds to be made by the CORPORATION on behalf of the UNIVERSITY for a given period.

ARTICLE II

Appropriate Undertakings and Services to be Provided by the CORPORATION to the UNIVERSITY

2.1. When requested by the UNIVERSITY and agreed to by the CORPORATION, the CORPORATION shall provide certain specialized administrative services for UNIVERSITY research or training projects. These administrative services shall include, but not be limited to, the procurement of goods and services and the hiring of personnel.

2.2. If requested by the UNIVERSITY and agreed to by the CORPORATION, the CORPORATION shall also provide research services, new ventures services, and scientific or economic development services, which comport with the statutory purposes for which the CORPORATION was established.

2.3. All UNIVERSITY requests for administrative services, as noted in sections 2.1 and 2.2 above, shall be made in writing and pursuant to law and as further provided by University Administrative Procedures (AP) 12.203 and 12.204, which specify the criteria and administrative procedure through which services of the CORPORATION can be requested by the UNIVERSITY. Notwithstanding any provision to the contrary, the CORPORATION reserves the right to decline any request for services if acceptance of such request would be contrary to the purposes or objectives of the CORPORATION under Chapter 304A, Hawai'i Revised Statutes.

2.4 The UNIVERSITY shall not request services of the CORPORATION for UNIVERSITY activities or programs that are not within the statutory purposes of the CORPORATION, and which would allow the UNIVERSITY to evade competitive bidding and other statutory requirements for UNIVERSITY programs or activities that were not intended to be exempted under Chapter 304A, Hawai'i Revised Statutes, and as provided in the Recitals previously stated herein.

ARTICLE III Processing of Proposals

3.1 Research or training proposals prepared by UNIVERSITY staff members shall be reviewed, approved, and forwarded to a Sponsor in accordance with the UNIVERSITY's established practices, policies and procedures.

3.2 Copies of proposals of possible interest to the CORPORATION may, in the discretion of the University President or designee, be forwarded to the CORPORATION.

3.3 Any communication with a potential Sponsor shall follow existing UNIVERSITY practice or procedure. If desired, the UNIVERSITY may request the advice or assistance of the CORPORATION.

ARTICLE IV Responsibilities of the University

4.1 The UNIVERSITY shall be solely and directly responsible for fulfilling the terms and conditions of the 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. The CORPORATION's sole responsibility shall be limited to furnishing the administrative services set forth in Article V of this Agreement.

4.2 The UNIVERSITY shall make the necessary funds available to the CORPORATION, as provided in Article VI of this Agreement.

4.3 The UNIVERSITY, through the officially-designated Principal Investigator, shall be solely responsible for the supervision of the research or training projects and the projects' work and that the work being performed is directly related to the extramurally-sponsored research or training. The Principal Investigator will comply with all requirements and procedures of the CORPORATION relating to the services provided by the CORPORATION, including procurement and hiring of personnel. The Principal Investigator will ensure that CORPORATION employees follow UNIVERSITY research policies and procedures in the performance of the CORPORATION employees' work-related duties on UNIVERSITY projects.

4.4 The UNIVERSITY shall designate from time to time, in a written communication to the CORPORATION by the University President or designee, the persons or offices authorized to bind and obligate the UNIVERSITY, as required in Article V of this Agreement.

ARTICLE V Responsibilities of the CORPORATION

5.1 All commitments and disbursements of project funds, subcontracts, or subgrants made by the CORPORATION on behalf of the UNIVERSITY shall be authorized by the UNIVERSITY's officially authorized representative and as designated pursuant to paragraph 4.4.

5.2 The UNIVERSITY's FS shall be the book of original entry, and the CORPORATION shall provide to the UNIVERSITY for recording in the UNIVERSITY's FS all commitments and disbursements of project funds made by the CORPORATION on behalf of the UNIVERSITY.

5.3 The CORPORATION shall not make any disbursement of project funds without the prior written approval of an authorized representative of the UNIVERSITY. If the CORPORATION determines, in good faith and in its reasoned judgment, that the UNIVERSITY representative's authorization does not properly fall within the scope, policy, or terms and conditions of the applicable extramurally-sponsored research or training award, the CORPORATION shall notify either the UNIVERSITY's Vice President for Research and Innovation or Director of Research Services for appropriate action.

5.4 If the extramurally-sponsored research or training award requires the prior approval of the Sponsor before any specific expenditure may be made, the CORPORATION shall, if requested by the UNIVERSITY, assist the UNIVERSITY in preparing the appropriate request to the Sponsor.

5.5 The CORPORATION shall provide to the UNIVERSITY fiscal and administrative services that are related to the procurement of goods and services and the hiring of personnel required by the UNIVERSITY's research or training projects, including any financial information on expenditures made by the CORPORATION on behalf of the UNIVERSITY that may be used by the UNIVERSITY for reporting to and billing of Sponsors. The CORPORATION shall not provide project auditing services.

5.6 If an expenditure was made by the CORPORATION on behalf of the UNIVERSITY for a project or activity and was not authorized by the UNIVERSITY through an authorized UNIVERSITY representative, and such expenditure was subsequently determined by the Sponsor to be improper, the CORPORATION shall pay to the UNIVERSITY the amount of any loss in reimbursement of funds resulting directly therefrom.

5.7 If an expenditure was made by the CORPORATION on behalf of the UNIVERSITY for a project or activity and was authorized by the UNIVERSITY through an authorized UNIVERSITY representative, and such expenditure was subsequently determined by the Sponsor to be improper, the UNIVERSITY shall reimburse the CORPORATION regardless of whether the UNIVERSITY is in turn reimbursed.

ARTICLE VI

UNIVERSITY's Payment for the CORPORATION's Administrative Services on Behalf of the UNIVERSITY

6.1 The UNIVERSITY agrees to reimburse the CORPORATION for the administrative expenses incurred by the CORPORATION in providing specialized administrative services to projects of the UNIVERSITY in accordance with Schedule A, Schedule B, and Schedule C provided below.

6.2. Schedule A. Without exception, all UNIVERSITY extramurally-sponsored research and training awards service ordered to the CORPORATION will be included in the fee computation. For quarterly billing purposes, the estimated fee will be based on the following computation:

$$\frac{\text{UH MTDC}}{\text{All Projects MTDC}} \times \text{RCUH Operating Expenses} = \text{UH Management Fee}$$

where historical data is used to estimate the first ratio and the RCUH Board approved budget (less contingency allowances) is used for RCUH Operating Expenses. UH MTDC shall include only UH extramurally-sponsored research and training awards. MTDC generated by RCUH direct projects, UH internally-funded projects, UH revolving fund accounts, and any other non-UH extramurally-sponsored research or training awards shall not be included in UH MTDC and shall be included in All Projects MTDC. At the close of the fiscal year, actual figures for the fiscal year will be used to compute the actual UH Management Fees for that fiscal year and any required adjustment to billing based on the estimated fee will be made on the next quarterly bill after the issuance of the audited financial statements for that fiscal year. For the actual computation, MTDC will be on a cash basis and RCUH Operating Expenses will be as reflected in the audited financial statements of RCUH for that fiscal year.

6.3 Schedule B: The following shall apply to (a) all UNIVERSITY revolving fund accounts serviced by the CORPORATION, including SSFs, recharge centers, and other sales or service activity, and (b) all internally-funded projects, including those funded from general, special, or trust funds.

a. The CORPORATION shall recover its administrative expenses by charging each individual project or activity its indirect costs based on negotiated indirect cost rates that have been received from the appropriate federal cognizant agency, if applicable.

b. For all other projects, the equivalent of the above rates, subject to further adjustment or modification by prior mutual agreement in writing by the parties.

Any provision contained in this Agreement to the contrary notwithstanding, any modified total direct costs for accounts covered in Schedule B shall be excluded from Schedule A accounts.

6.4 Schedule C: If the UNIVERSITY requests the services of the CORPORATION other than those services provided in Schedules A and B above, the UNIVERSITY shall reimburse the CORPORATION for all direct expenses incurred in providing such services.

6.5 If the CORPORATION executes a direct agreement with a non-UNIVERSITY entity, the CORPORATION may enter into an agreement with the UNIVERSITY for use of UNIVERSITY facilities with the UNIVERSITY's personnel in the performance of those direct agreements. In those cases, the CORPORATION shall reimburse the indirect costs of the UNIVERSITY at the highest federally-approved rate that is applicable, subject to adjustment by mutual agreement. The CORPORATION shall obtain the UNIVERSITY's prior approval when entering into a direct agreement that would obligate the CORPORATION to supply services that will be supplied in turn by the UNIVERSITY.

6.6 The reimbursements for administrative expenses incurred by the CORPORATION in providing services to the UNIVERSITY, as specified in sections 6.2 and 6.4 above, shall be made on a quarterly basis in advance on an estimated basis.

6.7 Within one hundred twenty (120) days following the close of each fiscal year, for Schedule A purposes the CORPORATION shall submit to the UNIVERSITY an annual accounting report in a format that is mutually agreed upon, which report shall include the following: (a) the actual costs of the UNIVERSITY's projects as specified in section 6.2 of this Agreement on a modified total direct costs basis, (b) the actual administrative costs of the CORPORATION, and (c) a computation of any required adjustment of the estimated advances for the fiscal year. The report shall also include for Schedule B and C purposes the following: (a) total modified total direct cost basis for UH internally funded projects and related Schedule B fees, (b) total modified total direct cost basis for UH revolving fund accounts and related Schedule B fees, and (c) total modified total direct cost basis for Schedule C projects and related Schedule C fees. This annual accounting report (which is independent of the federal single audit report required under 2 CFR 200) shall be certified by an independent certified public accountant.

ARTICLE VII

Working Capital: Reimbursement

The UNIVERSITY shall provide a non-interest bearing working capital advance to the CORPORATION in an amount determined by mutual agreement of the CORPORATION and the UNIVERSITY that shall be used by the CORPORATION as working capital for UNIVERSITY projects or activities. Reimbursements for payments made by the CORPORATION on behalf of the UNIVERSITY shall be made on a weekly basis, based upon the actual expenditures of the preceding one-week period; provided, however, that until such data is available, the reimbursements shall be made on a mutually-agreed basis.

ARTICLE VIII

Personnel

8.1 The UNIVERSITY may request the CORPORATION to hire or provide the services of technical and support personnel for UNIVERSITY research and training projects.

8.2 Any technical and support personnel requested by the UNIVERSITY and hired by the CORPORATION pursuant to paragraph 8.1 shall be employees of the CORPORATION and their terms and conditions of employment shall be governed by the practice, policies or procedures of the CORPORATION.

The provisions of Article 8.2, notwithstanding, specific employees designated by the UNIVERSITY shall be employees of the UNIVERSITY, and the UNIVERSITY's tax identification number shall be utilized for such employees, provided however, that the CORPORATION shall provide such services that are necessary for their employment, including, but not limited to, recruitment, payroll, and benefits.

8.3 The CORPORATION shall keep account of all personnel costs and shall maintain records of such expenditures for the UNIVERSITY. The UNIVERSITY shall reimburse the CORPORATION for all such expenditures together with the reimbursement required under Article VII of this Agreement.

ARTICLE IX

Equipment Purchases and Inventory

9.1 If the UNIVERSITY determines that a specific equipment is required to support a research or training project or activity of the UNIVERSITY, and upon the request of the duly authorized UNIVERSITY representative, the CORPORATION may procure the requested items of equipment utilizing its best efforts to obtain the equipment on the terms desired by the UNIVERSITY.

9.2 Upon acquisition and receipt of the equipment and reimbursement of the cost thereof to the CORPORATION, the control and custody of such equipment shall vest immediately with the UNIVERSITY. To assist the UNIVERSITY in adequately accounting for such equipment, the CORPORATION shall make its records available to the UNIVERSITY.

9.3 The UNIVERSITY may request the CORPORATION to procure and take title to specific equipment to be leased to the UNIVERSITY. The terms and conditions of any such lease shall be negotiated on a case-by-case basis.

ARTICLE X

Revolving Fund Accounts

10.1 When requested by the UNIVERSITY and agreed to by the CORPORATION, the CORPORATION shall establish, separate revolving fund accounts for specialized service facilities, recharge centers, and other research and training projects that have a sales and service component; provided, however, that the revolving fund account must support the research and training activities of the UNIVERSITY and are within the scope of the statutory purposes for which the CORPORATION was established.

10.2 The UNIVERSITY shall maintain fiscal control and authority over the revolving fund accounts and shall be responsible for all financial obligations of the accounts, except for the expenditures that are not authorized by the UNIVERSITY through the individuals designated under section 4.4 of this Agreement. If requested, the CORPORATION within available resources, shall provide assistance to the UNIVERSITY in carrying out its responsibilities.

10.3 The CORPORATION shall maintain financial records for each revolving fund account and shall provide a report on each account to the UNIVERSITY's designated representative who is responsible for the account.

10.4 To allow the CORPORATION to recover its administrative costs, the CORPORATION may assess each revolving fund account a fee pursuant to Section 6.3 of this Agreement.

Article XI
Intellectual Property

11.1 The UNIVERSITY may request and the CORPORATION may accept responsibility for the exploitation and maintenance of intellectual property rights.

11.2 If the CORPORATION accepts the UNIVERSITY's request, then the CORPORATION shall vigorously prosecute the exploitation of the intellectual property and shall remit any license fee received for such intellectual property to the UNIVERSITY on a quarterly basis; provided, however, that the CORPORATION may retain a negotiated fixed fee or percentage fee to reimburse the CORPORATION for the expense of administering such intellectual property.

11.3 Except as provided in Section 304A-3009, Hawai'i Revised Statutes, no summary, report, map, chart, graph, table, or other document or discovery, invention or development produced in whole or in part under this Agreement shall be the subject of an application for copyright or patent by or on behalf of the CORPORATION, its officers, its agents, its employees, or its subcontractors without the prior written authorization from the UNIVERSITY.

ARTICLE XII
Other UNIVERSITY Projects

12.1 The UNIVERSITY may assign the administration of other research or training projects that may be internally funded to the CORPORATION; provided, however, that the administration of those projects is within the statutory purposes for which the CORPORATION was established. These projects may include such activities as the animal research facility or other centralized research and training support activities. The CORPORATION may recover its costs through overhead charges pursuant to section 6.3.

ARTICLE XIII
Non-UNIVERSITY Projects

13.1 The UNIVERSITY acknowledges that the CORPORATION may provide services to organizations that are not part of the UNIVERSITY. If the CORPORATION provides services to non-UNIVERSITY projects, the following requirements shall apply:

(a) The CORPORATION shall keep separate accounts for the non-UNIVERSITY projects and shall ensure that the UNIVERSITY is not charged for the costs of servicing such projects.

(b) The CORPORATION shall not enter into an agreement to provide administrative services to a non-UNIVERSITY organization that requires the utilization of UNIVERSITY personnel or facilities without the prior approval of the UNIVERSITY.

(c) When the CORPORATION is a prime contractor or grantee, the CORPORATION shall reimburse the UNIVERSITY for all the UNIVERSITY's costs in connection with the utilization by the CORPORATION of UNIVERSITY personnel or facilities. Such reimbursement shall include all the UNIVERSITY's direct costs as well as any indirect costs as set forth in section 6.5.

ARTICLE XIV
Facilities

14.1 The UNIVERSITY shall provide administrative facilities to the CORPORATION at no cost; provided, however, that:

(a) The CORPORATION shall reimburse the UNIVERSITY for the cost of that portion of the facilities used for serving non-UNIVERSITY related activities;

(b) The CORPORATION shall accept the facilities "as is" and shall restore the facilities to its original condition upon vacating the facilities; and

(c) Any extraordinary costs, excluding normal common area maintenance costs, associated with the facilities shall be borne by the CORPORATION.

(d) The UNIVERSITY shall provide parking to the CORPORATION personnel in core administrative positions on the same basis as regular UNIVERSITY employees.

ARTICLE XV
Miscellaneous

15.1 CONFLICT OF INTERESTS. By statute, two members of the CORPORATION Board are members of the Board of Regents of the UNIVERSITY. If the dual loyalties and dual fiduciary duties create a conflict of interest in the administration of this Agreement, the conflict shall be resolved in the manner set forth in the CORPORATION's Bylaws, as adopted by the CORPORATION's Board of Directors.

15.2 INSPECTIONS.

(a) At all reasonable times, upon prior written notice, the CORPORATION shall permit an authorized representative of the UNIVERSITY to inspect, audit, and make copies of all books, records, summaries, reports, charts, graphs, tables, recommendations, and other documents and materials, as available, produced in whole or in part under this Agreement.

(b) At all reasonable times, the UNIVERSITY shall permit an authorized representative of the CORPORATION to inspect, audit, and make copies of all books, records, summaries, reports, charts, graphs, tables, recommendations, and other documents and materials, as available, produced in whole or in part under all projects covered by this Agreement.

15.3 DISPUTES. Any dispute concerning a matter or acts arising under this Agreement, which is not disposed of by mutual agreement by the parties within thirty (30) days, shall be decided by the Attorney General of the State of Hawai'i or the Attorney General's designee, who shall reduce his/her decision to writing. Such decision shall be final and conclusive. Pending final decision on a matter in dispute, the CORPORATION and UNIVERSITY shall proceed diligently with the performance of their respective responsibilities under this Agreement in accordance with the requests of the other party.

15.4 ENTIRE AGREEMENT. This Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof and supersedes any and all prior understandings and agreements, oral and written, relating hereto. Any modification of this Agreement must be in accord with the following paragraph on "Amendment".

15.5 AMENDMENT. This Agreement may be amended at any time only by written mutual agreement of the parties hereto.

15.6 TERMINATION OF THIS AGREEMENT. This Agreement shall be valid until terminated without cause by either party giving the other party written notice, specifying the effective date of the termination, at least 60 days prior to the effective date of the termination.

15.7 NOTICES. All notices and amendments to this Agreement shall be in writing and sent by mail, by hand delivery, electronic transmission, or by facsimile with a copy to be mailed or hand delivered, and addressed as follows:

To UNIVERSITY at: University of Hawai'i
Office of the President
Attention: Vice President for Research and Innovation
Telephone: 956-5006
Facsimile: 956-5286
ovpri@hawaii.edu

To CORPORATION at: The Research Corporation of the University of Hawai'i
2800 Woodlawn Drive, Suite 200
Honolulu, HI 96822
Attention: Executive Director
Telephone: 988-8311
Facsimile: 988-8319
rcuhed@rcuh.com

Any such address, contact person, telephone number, email address or facsimile number may be changed from time to time by serving notice to the other party as above provided. Service of such notice shall be deemed complete on the day of actual delivery or at the expiration of the second day after the date of any mailing, whichever is earlier.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

UNIVERSITY OF HAWAI'I

by its President

RESEARCH CORPORATION OF THE UNIVERSITY OF HAWAI'I

by its Executive Director