



RCUH

Research Corporation
of the University of Hawai'i

OUR MISSION:

to support the research and training programs of the University of Hawai'i and to enhance research, development, and training generally in Hawai'i.

RCUH BOARD OF DIRECTORS



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2015 marks the 50th year since the establishment of the Research Corporation of the University of Hawai'i (RCUH) by the State Legislature in 1965. We celebrate the occasion in this annual report by highlighting RCUH's milestones over the past five decades. We then focus on what RCUH has accomplished during the 2015 calendar year but also report on budget and financial statements for the July 2014–June 2015 fiscal year.

During the past year, RCUH provided important services to the University of Hawai'i and our community of principal investigators, upgraded personnel and financial systems to increase operational efficiencies, recognized outstanding work, and received positive evaluations of its performance. Accuity LLP, certified public accountants, found no weaknesses or material findings in its audit of RCUH; its report comprises the last section of the 2015 annual report.

We wish to extend our deep appreciation to the researchers and others who entrusted their projects to RCUH and whose quest for knowledge, dedication, and passion for their work have enriched our scientific understanding and Hawai'i's economy. Our sincere thanks go to the RCUH staff whose professionalism, proactive service, and efficient work enable our clients to be more productive and to achieve the positive outcomes that, in the end, benefit the entire state.

We hope you'll learn something new about RCUH in this report. Happy 50th birthday, RCUH, and may the next half century be filled with more and greater successes.



EUGENE BAL III, CHAIR
Board of Directors



SYLVIA YUEN, PH.D.
Executive Director

Cover photos are from the JIMAR, OANRP, and PISCES projects. For more information on these projects, please see pgs. 13–14.

RCUH is an equal employment opportunity/affirmative action employer. Our Affirmative Action Plan is available from the RCUH Human Resources Department.

RCUH THE FIRST 50 YEARS

THE BEGINNING

1965

RCUH established

Board of Directors first meeting

Historical Note: War escalates in Vietnam

1966

First project: Auditory Deprivation funded at \$8,855

1972

Internal agreement signed between UH and RCUH

GROWTH AND CHANGE

1975

Volume of business: \$11.2 million

Historical Note: Personal computers appear on market

1977

Ground broken for new UH Cancer Center, with RCUH managing construction

1983

Moana Wave modified, making it one of most modern research ships in U.S. oceanographic fleet

1971

RCUH offices relocated to Varsity Building on University Avenue

OPERATING EFFICIENCIES = BIG IMPACTS

1985

Volume of business: \$40.5 million

Historical Note: Scientists report enormous hole in earth's ozone layer

1986

RCUH internal operations computerized

1987

Endowment Fund established to support scholarships, fellowships, and professorships

1988

First award to RCUH Outstanding Employee of the Year

First two research assistantships provided to UH students

SERVING THE UNIVERSITY COMMUNITY, SERVING THE STATE

- 1993** RCUH offices moved from Varsity Building to Manoa Innovation Center
- 1995** Volume of business: \$77.3 million
Master Agreement between State of Hawai'i and RCUH signed
Historical Note: First cloned sheep created from embryo cells
- 1996** Human Resources and part of Finance Departments moved from Manoa Innovation Center to UH Sakamaki Hall
- 1998** RCUH website and online financial system launched
- 2000** Funds provided for UH Research Awards
- 2001** All UH extramural awards service-ordered to RCUH
UH and RCUH partner to successfully bid for Maui High Performance Computing Center contract
- 2002** Emergency employees quickly hired to assist workers displaced by 9/11 economic downturn
- 2004** Continuous human resources and payroll services provided despite flooding caused by "100-year storm"

EXPANSION AND LOOKING AHEAD

- 2005** Volume of business: \$322.4 million
Interfaces built between RCUH and UH Kuali financial systems
Historical Note: Hurricane Katrina devastates Gulf Coast
- 2012** Human Resources and part of Finance Departments moved from UH Sakamaki Hall to EWC Burns Hall

EXECUTIVE DIRECTORS 1965-2015



ROBERT HIATT
1969-71



RICHARD LEE
1971-79



WYTZE GORTER
1979-84



FUJIO MATSUDA
1984-94



HAROLD MASUMOTO
1994-2003



GILBERT OSHIMA
2003-04 (Acting)



MIKE HAMNETT
2004-2015



SYLVIA YUEN
2015-Present

Not Pictured: Frank Calendar, Associate Executive Director, 1965-1969

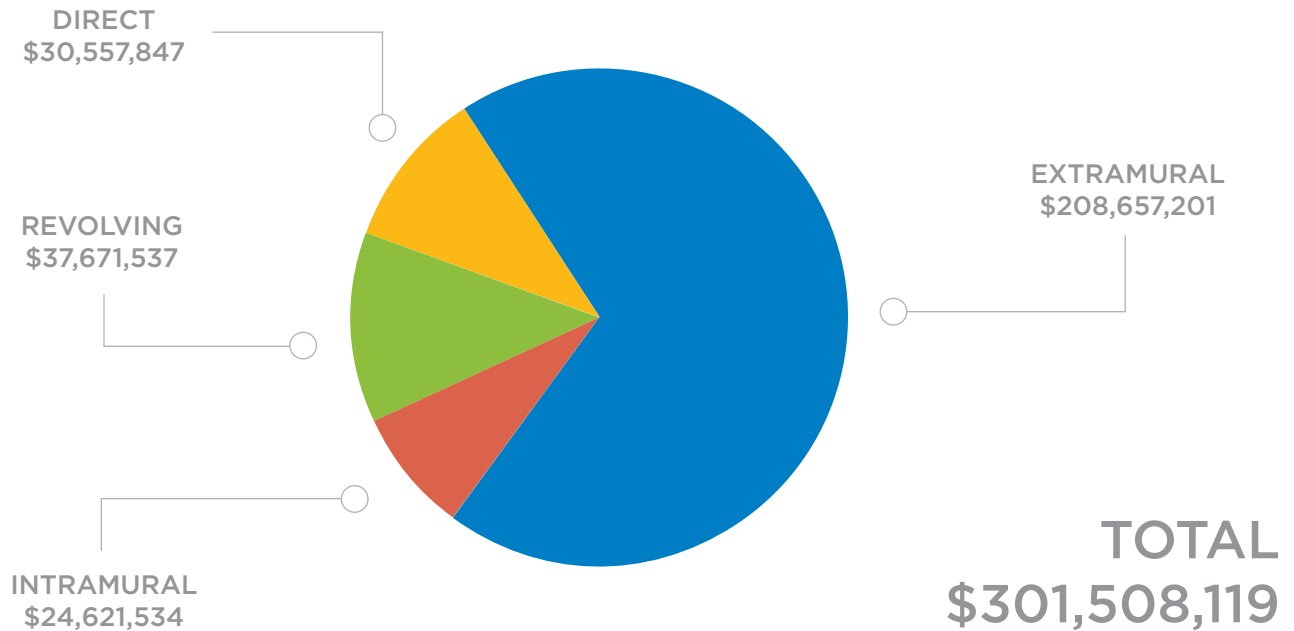
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RCUH provides the financial and human resources services that enable researchers to learn more about outer space, the depths of the ocean, and the interactions between air and sea.

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RCUH 2015 REPORT

VOLUME OF BUSINESS BY TYPE OF PROJECT



FOUR TYPES OF RCUH PROJECTS

UH Extramural projects:	External federal and non-federal sponsored contracts, grants, and other agreements.
UH Intramural projects:	Internal sponsored programs or activities funded with UH Research and Training Revolving Funds (RTRF) or Tuition and Fee Special Funds (TFSF).
UH Revolving projects:	Self-sustaining, income-generating projects established to support a specialized service activity, a recharge center, or other sales and service activities.
Direct projects:	Projects assigned to and accepted by RCUH from non-UH organizations, including federal and state agencies, international organizations, and other not-for-profit organizations.

PROJECTS BY COUNTY

COUNTY	NO. PROJECTS	NO. EMPLOYEES	VOLUME OF BUSINESS
HAWAII	323	816	\$42,691,838
HONOLULU	6,044	1,707	\$241,010,878
KAUA'I	27	105	\$1,595,698
MAUI	108	294	\$16,209,705
OTHER (Continental US & Non US)		98	
TOTAL	6,502	3,020	\$301,508,119

RCUH is one of the state's largest employers. The vast majority of RCUH's 3,020 employees in FY 2014-15 resided in the state of Hawai'i, with the remainder located on the continental U.S. and foreign countries. There were RCUH employees living and working in all of Hawai'i's counties—generally as scientists, project managers, and technicians—and their employment contributed to the vitality and economy of their communities and state.

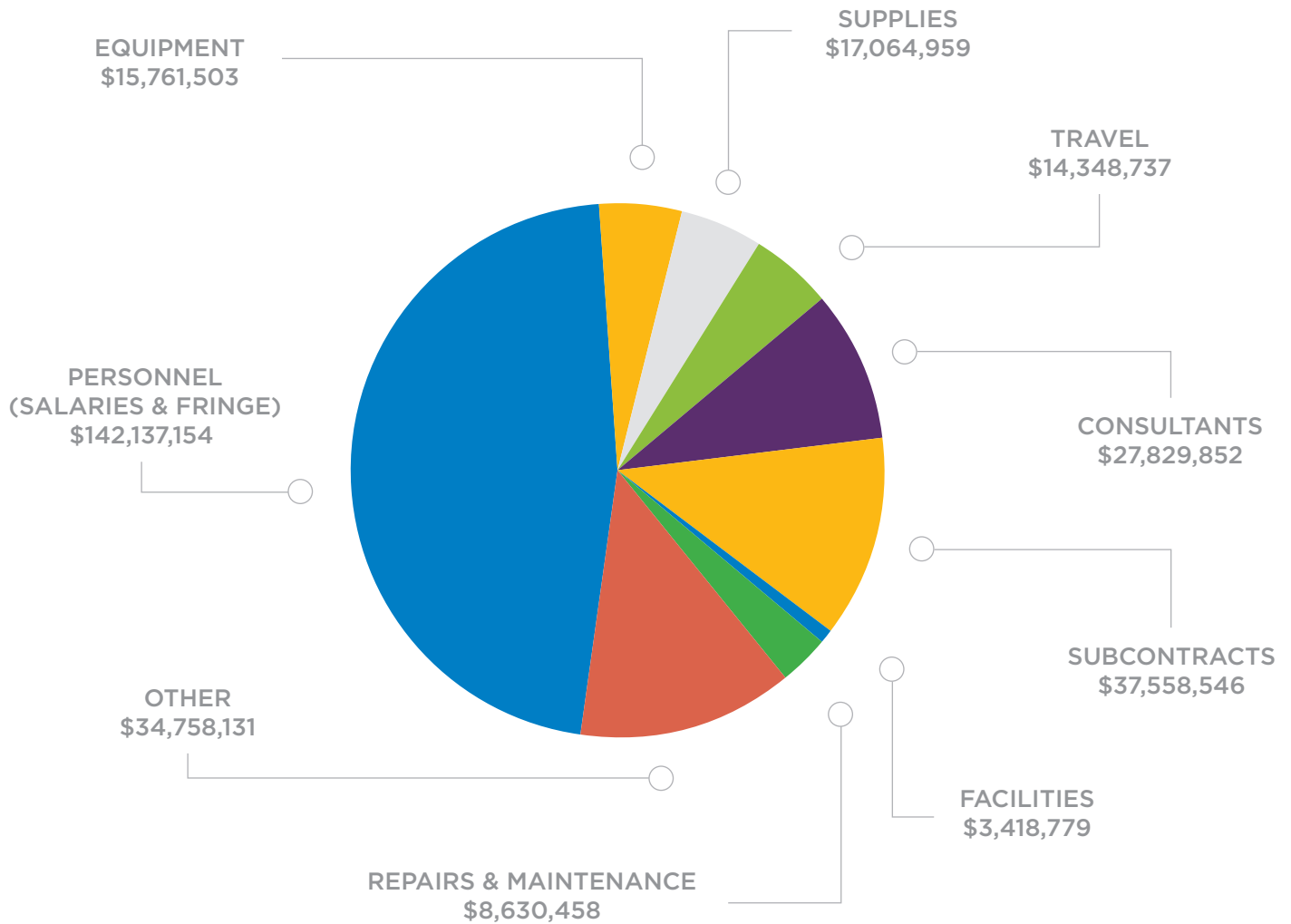
PAYROLL AND PERSONNEL TRANSACTIONS

PAYROLL	NUMBER
TOTAL EMPLOYEES	3,020
SALARIES AND WAGES	\$114,259,378
FRINGE BENEFITS	\$27,877,776

PERSONNEL TRANSACTIONS	NUMBER
HIRES	1,759
TERMINATIONS	1,694
W-2s ISSUED	4,065

The employment of RCUH project personnel is dependent on the grants, contracts, or agreements under which they were hired, which generally have a duration of several months to several years. The high numbers of hires and terminations reflect the high employee turnover as funds for projects are received and end at various times of the year.

FINANCIAL EXPENDITURES



In FY 2014–2015, the total financial payment for various goods and services was \$301,508,119.

OPERATIONAL EFFICIENCY IN HR TRANSACTIONS

The Electronic Personnel Action Form (ePAF) was launched to enable RCUH and project staff to operate more efficiently. It replaces paper personnel action forms and memos for over 8,600 transactions each year, including 5,500 project number changes and more than 1,600 terminations. ePAF is simple to use and rich in features, such as embedded policies, a plug-in-data/auto fill capability, new pay adjustment and fringe benefit rates, and other items, which reduce mistakes and streamline the work of users. The entire personnel transaction process—from point of initiation to completion—has been expedited.



Migrating to new software provides RCUH with the capability to now work on future enhancements... positioning RCUH well for the future.



MODERNIZATION IN FINANCIAL TRANSACTIONS

The most significant advancement to RCUH's online financial system since the electronic system was implemented in 1998 occurred with the modernization of its previously outdated software platform. The new, more powerful and robust platform was launched this year and provides the following benefits:

- Improved security
- Single-screen concept: several actions can be completed on a single screen, rather than the multiple screens required in the past
- Easier user profile editing: users can make changes without relying on RCUH to do so
- Ability to track documents: users can track document from creation to approval
- Consistent look to documents
- Enhancements to travel documents: number of forms to complete transaction is reduced and there are more automated, pre-programmed calculations
- More dropdown menus and auto-fill features
- Text-wrapping and auto-line additions

Migrating to the new software provides RCUH with the capability to now work on future enhancements, which will add greater capabilities and functionality that were not possible under the old platform, positioning RCUH well for the future.

EVALUATION OF RCUH SERVICES

New Hire Survey: based on feedback from 81 individuals who responded to a survey within the first month of their employment:

Rate your overall recruitment and hiring experience with RCUH up to this point:

72% marked positive/very positive on a five-point scale (very positive, positive, neutral, no opinion, negative).

User Survey: confidential online survey sent to 704 principal investigators, fiscal officers, and project managers/coordinators of RCUH projects. A total of 287 individuals completed the survey for a 41% response rate.

Overall satisfaction with RCUH:

80% reported they were satisfied/very satisfied on a 5-point scale (very satisfied, satisfied, neutral, dissatisfied, very dissatisfied).

Would you recommend RCUH services to other users?

87% indicated “yes”.

Which 3 words would you use to describe RCUH?

The most frequently listed words were helpful, efficient, and professional.

RECOGNITIONS OF OUTSTANDING WORK

Each year, RCUH employees are recognized for their exemplary work. The following were recognized in 2015:



Outstanding Project Support Staff:

This award was given to Adam Elzinga, Underline Management Program Technician/ Wildlife Assistant, Pacific Cooperative Studies Unit, for his work on the recovery

of Kauai’s threatened and endangered forest birds, with emphasis on puaiohi (*myadestes palmeri*), ‘akikiki (*oreomystis bairdi*), and ‘akeke’e (*loxops caeruleirostris*).



Outstanding Researcher/Project Manager/Professional Staff:

Terrence “Terry” Kerby, Director of Operations, Hawaii Undersea Research Laboratory, was selected for this honor. He serves as

Chief Pilot and Director of Operations for HURL’s underwater vehicle operations at sea and in port.

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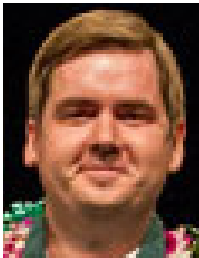
*The most frequently used words
to describe RCUH were helpful, efficient,
and professional.*

”

RCUH provided a \$5,000 cash award to each recipient of the UH Regents Medal for Excellence in Research. The three 2015 faculty awardees and summaries of their research are presented below:



Karen Meech, an Astronomer at the Institute for Astronomy, has been a pioneer in observing the behavior of comets. Her research bridges the boundaries between astronomy, planetary science, geology and astrobiology. Her work investigating the leftovers of the planetary building process has contributed to the understanding of the conditions during the time our solar system was put together.



Robert Thomson, an Assistant Professor in the Department of Biology, is an evolutionary biologist. His work focuses on improving statistical and bioinformatic methods for elucidating this history from complex genomic datasets, applying these methods to long-standing questions about evolutionary history, and using the answers to inform conservation efforts and protect biodiversity.



Axel Timmermann is a Professor in the Department of Oceanography and at the International Pacific Research Center. He studies the causes of past and future climate change and has pioneered the development of computer models that can simulate ice ages and abrupt climate change. One of his most acclaimed contributions is his seminal study on the sensitivity of the El Niño phenomenon to global warming.

In 2015, two \$500 student Excellence in Research awards were funded by RCUH. The recipients of these awards were:



Benjamin Fulton, a Master's degree candidate at the Institute for Astronomy, is a National Science Foundation Graduate Student Research Fellow. He focuses on the discovery, characterization, and demographics of planets around nearby stars (exoplanets) using robotic telescopes.



Chao-Ling Hung's research focuses on understanding the formation and evolution of the most luminous galaxies in the Universe. She is a doctoral degree candidate in the Institute for Astronomy and will continue her academic career as the Harlan J. Smith Postdoctoral Fellow at the University of Texas, Austin.

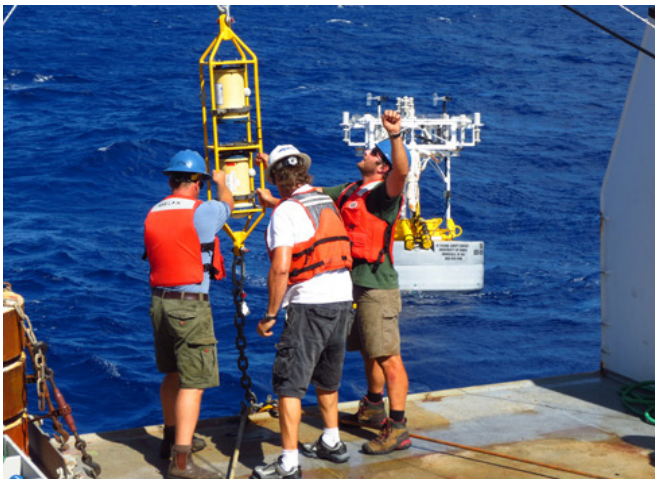
IMPACT OF RCUH PROJECTS

RCUH provides the financial and human resources services that enable researchers to learn more about outer space, the depths of the ocean, and the interactions between air and sea. Other projects protect Hawai'i's natural environment, beautify roadside landscapes, increase knowledge of climate change, educate students, and bring other benefits to our state. A small sample of the important work undertaken by RCUH projects is presented below.



Developing Large Scale Seed Production and Roadside Establishment Protocols for Five Native Hawaiian Groundcovers: Dr. Joseph DeFrank, PI

Pili grass growing on the northeast bank of the west-bound entrance of the H1 freeway in Mānoa is part of the research that will identify weed-control protocols that can be used to establish large plantings of native Hawaiian plants for seed production and sustainable landscapes.



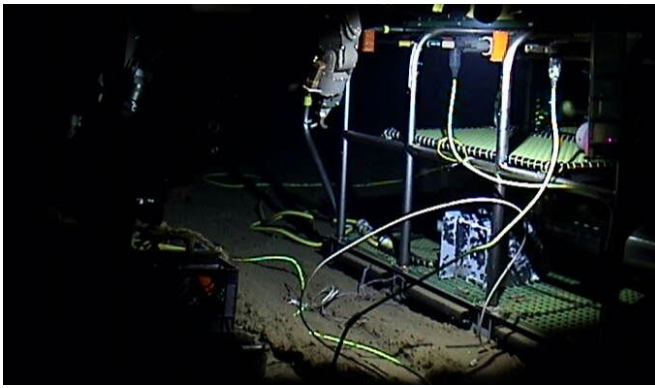
Woods Hole Oceanographic Institution Hawai'i Ocean Time-series Site (WHOTS): Roger Lukas, co-PI, and Mathew Church, Lead PI

Part of the long-term Hawai'i Ocean Time-series (HOT) project, Woods Hole Oceanographic Institution (WHOI) and UH scientists collaborate to study interactions between the atmosphere and ocean. The highly instrumented WHOTS mooring and buoy have been redeployed each summer since 2004 to document surface atmospheric forcing of the ocean, essential for improving ocean and climate models. High time-resolution upper ocean and near-bottom measurements provide important details on ocean processes to augment the intensive near-monthly HOT shipboard measurements.



Oahu Army Natural Resources Program (OANRP): David Duffy, PI

OANRP effectively balances the requirements of the Army's training mission with its natural resource responsibilities by managing over 100 of the 400 federally listed threatened and endangered species in Hawai'i.



ALOHA Cabled Observatory (ACO): Bruce Howe, PI, and Roger Lukas and James Potemra, co-PIs

ACO, the deepest-operating ocean observatory on the planet with power and Internet, provides communications to scientific instruments on the seafloor. It measures temperature, salinity, dissolved oxygen, and currents, and provides real-time data to machines on land via a retired AT&T submarine fiber-optic cable.



Hanauma Bay Education Program (HBEP): Darren Okimoto, PI

HBEP educates the public on Hawai'i's marine environment, emphasizing marine and coastal conservation, which enhances appreciation and promotes understanding and stewardship of Hanauma Bay.



Joint Institute for Marine and Atmospheric Research (JIMAR): Mark Merrifield, PI

JIMAR conducts research necessary for understanding and predicting environmental change in the Pacific Islands Region; conserving and managing coastal and marine resources throughout the Pacific; and supporting the region's economic, social, and environmental needs.



Pacific International Space Center for Exploration Systems (PISCES): W. Jeffrey Pang, PI

PISCES uses the world-class Hawai'i volcanic test sites to develop, test, and validate pioneering technologies that can advance robotic and human missions on planetary surfaces. One of its programs, STARS (STEM Aerospace Research Scholars), engages female high school students in Hawai'i in a five-day workshop that includes guided exercises, presentations from aerospace and astronomy experts, a test drive of PISCES's Helelani planetary rover, a summit sunset tour spanning several Mauna Kea observatories, and even a mock robotic mission to the Moon.

Report of Independent Auditors

To the Board of Directors of
The Research Corporation of the University of Hawai'i

We have audited, in accordance with auditing standards generally accepted in the United States of America, the statements of net position of The Research Corporation of the University of Hawai'i, State of Hawai'i as of and for the years ended June 30, 2015 and 2014, and the related statements of revenues, expenses and changes in net position, and cash flows for the years then ended (not presented herein); and in our report dated October 26, 2015, we expressed an unmodified opinion on those financial statements.

In our opinion, the information set forth in the accompanying condensed financial statements is fairly stated, in all material respects, in relation to the financial statements from which it has been derived.

Acuity LLP

Honolulu, Hawai'i
November 25, 2015

The Research Corporation of the University of Hawai‘i
State of Hawai‘i
Condensed Statements of Net Position
June 30, 2015 and 2014

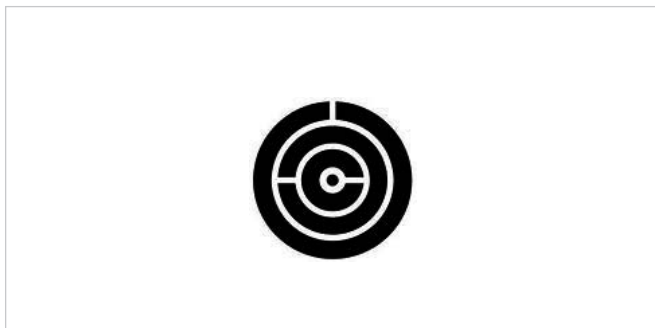
	2015	2014
Current assets	\$ 43,635,909	\$ 52,742,447
Capital assets	<u>1,756,861</u>	<u>1,273,038</u>
Total assets	<u>\$ 45,392,770</u>	<u>\$ 54,015,485</u>
Current liabilities	\$ 30,465,391	\$ 39,614,701
Noncurrent liabilities	<u>4,532,676</u>	<u>4,222,488</u>
Total liabilities	<u>34,998,067</u>	<u>43,837,189</u>
Net position		
Invested in capital assets	1,756,861	1,273,038
Unrestricted	<u>8,637,842</u>	<u>8,905,258</u>
Total net position	<u>10,394,703</u>	<u>10,178,296</u>
Total liabilities and net position	<u>\$ 45,392,770</u>	<u>\$ 54,015,485</u>

The Research Corporation of the University of Hawai‘i
State of Hawai‘i
Condensed Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2015 and 2014

	2015	2014
Operating revenues		
University of Hawai‘i	\$ 5,521,842	\$ 5,918,131
Other sponsor agencies	986,309	1,080,328
Total operating revenues	<u>6,508,151</u>	<u>6,998,459</u>
Operating expenses		
Personnel costs	3,679,587	3,696,680
Data processing services	707,368	824,423
Office supplies and services	440,890	379,370
Insurance	330,225	296,661
Office and equipment rental	234,615	199,756
Depreciation	215,761	211,354
Project development	213,292	122,289
Retiree medical benefits	2,000	190,000
Other expenses	308,831	410,613
Total operating expenses	<u>6,132,569</u>	<u>6,331,146</u>
Operating income	<u>375,582</u>	<u>667,313</u>
Nonoperating revenues (expenses)		
Intergovernmental (Federal awards)		
Revenue	167,319	1,056,921
Expense	(167,319)	(1,056,921)
Interest income	90,825	92,554
Income before special and extraordinary item	<u>466,407</u>	<u>759,867</u>
Special and extraordinary item		
Funding support to University of Hawai‘i	<u>(250,000)</u>	<u>-</u>
Increase in net position	<u>216,407</u>	<u>759,867</u>
Net position		
Beginning of year	<u>10,178,296</u>	<u>9,418,429</u>
Ending of year	<u>\$ 10,394,703</u>	<u>\$ 10,178,296</u>

The Research Corporation of the University of Hawai'i
State of Hawai'i
Condensed Statements of Cash Flows
Years Ended June 30, 2015 and 2014

	2015	2014
Operating activities		
Cash received from operations	\$ 4,880,565	\$ 6,820,200
Cash payments for operations	(5,341,438)	(5,531,319)
Project expenditures and reimbursements, net	(5,013,258)	2,614,087
Net cash provided by (used in) operating activities	<u>(5,474,131)</u>	<u>3,902,968</u>
Financing activities		
Noncapital	(250,000)	-
Capital	(702,151)	(501,472)
Net cash used in financing activities	<u>(952,151)</u>	<u>(501,472)</u>
Investing activities		
	89,137	90,026
Increase (decrease) in cash	<u>(6,337,145)</u>	<u>3,491,522</u>
Cash		
Beginning of year	37,310,569	33,819,047
Ending of year	<u>\$ 30,973,424</u>	<u>\$ 37,310,569</u>



Previous Logo



New Logo

RCUH adopted a new logo in 2015 which presents a strong, clear, and contemporary image to the public. The new logo was designed by Miles Hakoda, former Interim Director of Advancement with the University of Hawai'i-Mānoa Chancellor's Office and Director of Communication Services, College of Tropical Agriculture and Human Resources. Prior to serving the University, Miles was Senior Art Director at Communications Pacific.

Upon request, this report is available in alternate format for persons with print disabilities.

For assistance, please call 808-988-8300.



**Research Corporation
of the University of Hawai'i**

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