

# 2017 ANNUAL REPORT



# ALOHA

**W**e're continually confronted by changes taking place—in our climate; in our social norms; in the technologies we use to travel, purchase goods, and communicate with one another. Change is constant and inevitable, and as social entrepreneur Bill Drayton advised, "Every successful organization has to make the transition from a world defined primarily by repetition to one primarily defined by change." The Research Corporation of the University of Hawai'i (RCUH) has taken this lesson to heart, recognizing that it must evolve in order to achieve its mission to support and enhance research, development, and training in Hawai'i with a focus on the University of Hawai'i.

This annual report presents highlights of RCUH's accomplishments during the 2017 calendar year and its personnel and financial status for the July 2016–June 2017 fiscal year. It features the new products and changes in services that RCUH has provided to clients over the past 12 months. These initiatives—such as e-signatures on documents, online training, and upgrades to IT systems—were undertaken to assist project directors and their staff to work more effectively and productively. We take pride in contributing to their success.

This report also features the outstanding achievements of faculty, staff, and students who were presented with RCUH awards this past year. It further describes the

contributions to science and significant impacts the projects we support have had on Hawai'i and beyond. We're proud of the very favorable report issued by Accuity LLP, certified public accountants, which found no weaknesses or material findings in its audit of RCUH. A summary of that report comprises the last section of this document.

In closing, we wish to acknowledge the dedicated work of the RCUH core staff who provide these fast, efficient, professional, and helpful services to thousands of projects and individuals. Their adaptability and willingness to change make it possible for RCUH to provide quality services in rapidly changing times.



**EUGENE BAL III, CHAIR**

*Board of Directors*



**SYLVIA YUEN, PH.D.**

*Executive Director*

*Cover photos courtesy: STEM Undergraduate Research Experience • Hawai'i Coral Reef Initiative (PC: Darla White) • Kai Yama Project • Strombolian and Hawaiian Explosions: New Insights from Synchronizing Videos and Exsolved Volatiles • UH Cancer Center • State of Hawai'i Department of Land & Natural Resources - Division of Aquatic Resources • Native Ecosystem Protection and Management Program (PC: Kirsten Gallaher) • Subaru Telescope/National Astronomical Observatory of Japan • Curriculum Research & Development Group Summer Programs • Archaeological Documentation and Inventory of Historic Features at the Honouliuli National Monument • Kapi'olani Community College Culinary Arts Program • Pan-STARRS • UH West O'ahu Bachelor of Applied Science in Sustainable Community Food Systems • Predoctoral Training in General, Pediatric, and Public Health Dentistry and Dental Hygiene • Developing Large Scale Seed Production and Roadside Establishment Protocols for Five Native Hawaiian Groundcovers • Projecting Future Rainfall and Evapotranspiration for Kaua'i • Pacific Archaeology & Heritage Unit • UH Department of Biology • Shidler College of Business Executive Education Center • UH Postgraduate Medical Education Program at Okinawa Chubu Hospital*

# ABOUT RCUH

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The Research Corporation of the University of Hawai'i (RCUH) was established by the Hawai'i State Legislature in 1965 as a public instrumentality and is attached to the University of Hawai'i for administrative purposes.

To fulfill its mission, RCUH is exempt from certain state procurement and personnel laws. This allows RCUH to provide rapid and efficient financial and human resources services that enable its clients to be more productive and to meet their research, development, and training objectives in a timely manner.

## OUR VISION

*A Hawai'i where research, development, and training flourish and energize a prosperous state economy*

## OUR MISSION

*To support and enhance research, development, and training in Hawai'i, with a focus on the University of Hawai'i*

## RCUH BOARD OF DIRECTORS



**EUGENE BAL III**  
*Chair*



**DONNA IKEDA**  
*Vice Chair*



**DAVID DUFFY**



**KELLI GOODIN**



**MICHAEL MABERRY**



**RANDOLPH MOORE**



**RAYNARD SOON**



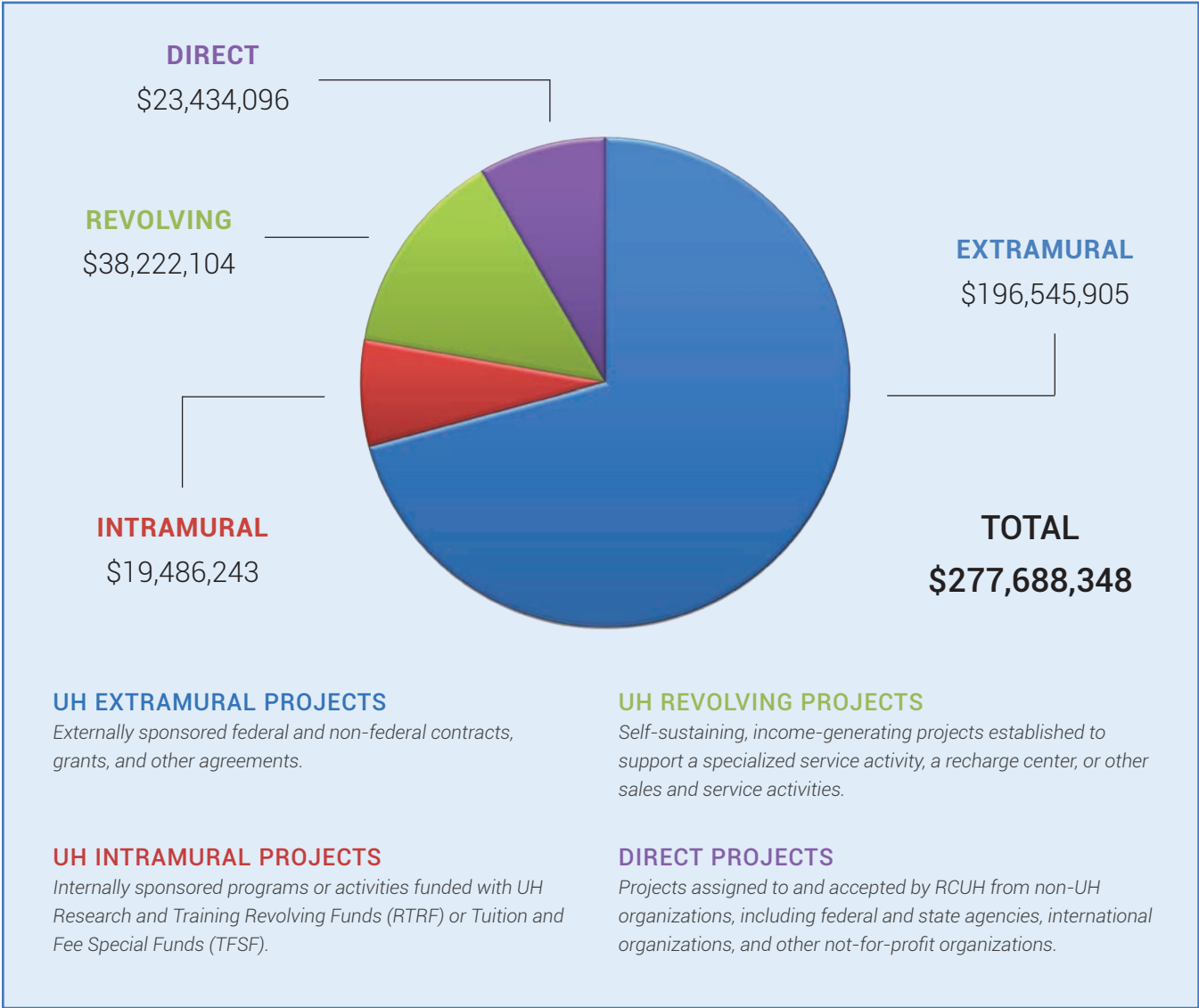
**VASSILIS SYRMOS**

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RCUH is an equal employment opportunity/affirmative action employer. It is our policy to recruit and advance in employment qualified applicants and employees without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.

# FINANCE & HUMAN RESOURCES

## VOLUME OF BUSINESS BY PROJECT TYPE

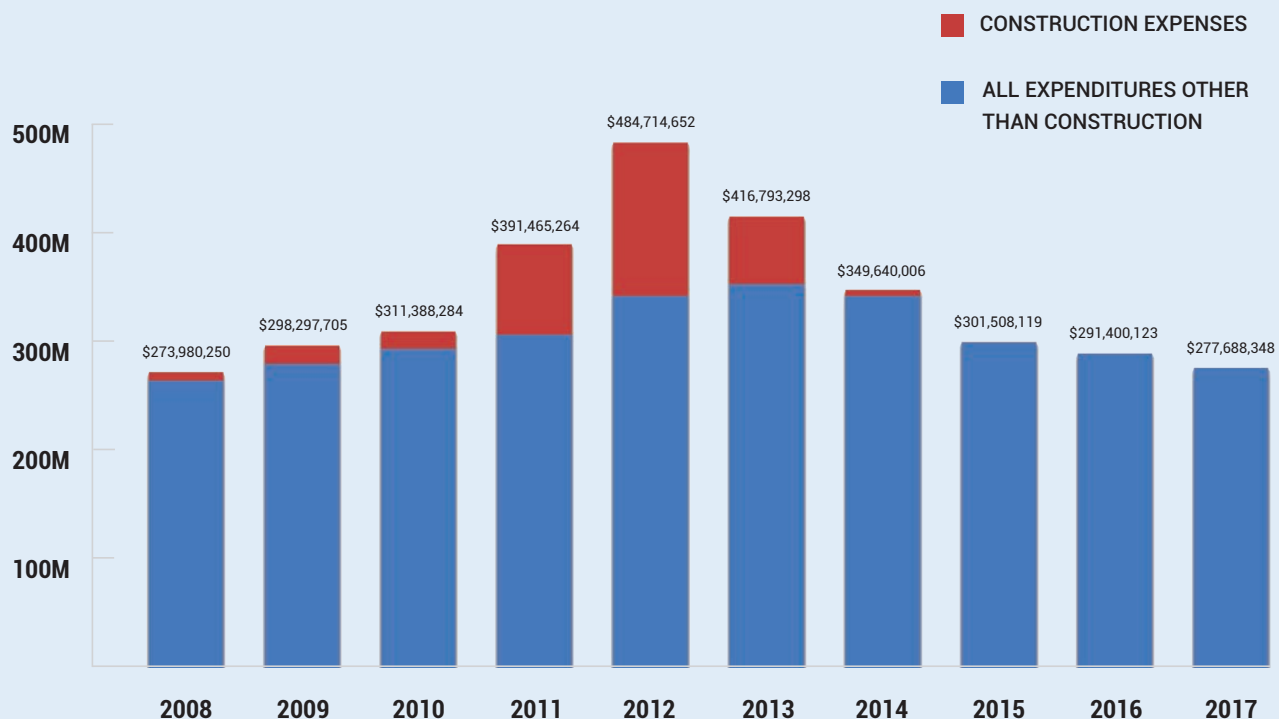


Subaru Telescope is operated by a foreign institute. Employment of local and international staff through RCUH is critically important for Subaru Telescope to conduct its operations in Hawai'i as about 70% of staff members are RCUH employees.



**Michitoshi Yoshida, Subaru Telescope**

## VOLUME OF BUSINESS 2008–2017



University of Hawai'i extramural contracts and grants have a substantial impact on RCUH's volume of business. The University's awards reached a peak in 2011, which was reflected in RCUH's increased project expenditures from 2011 to 2013. When expenditures for construction are removed, the magnitude of the fluctuation in business volume over the past several years is greatly reduced.

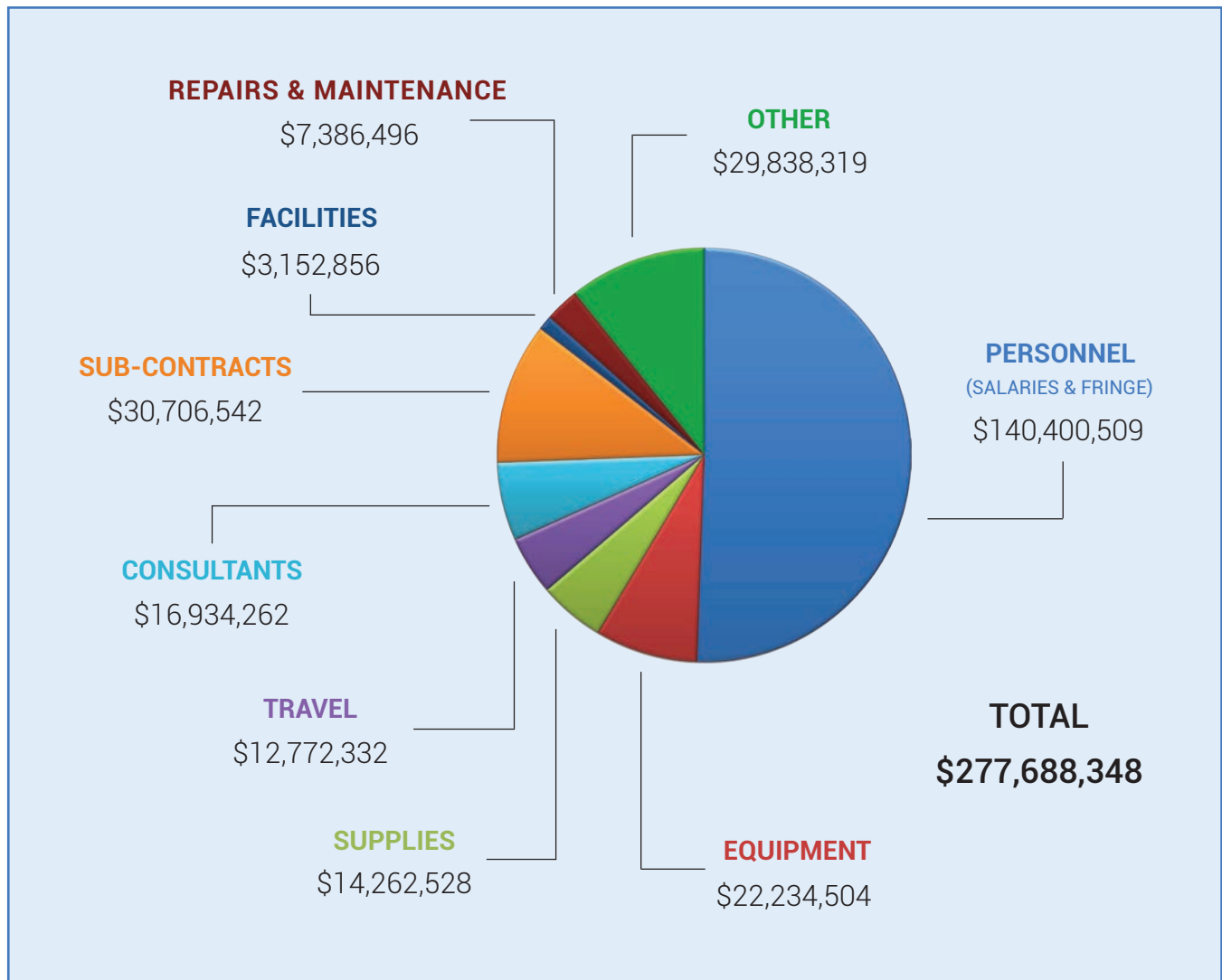


*The administration of the Okinawa Chubu Project would be impossible without RCUH's input, especially the budget and personnel issues. Without RCUH's assistance, guidance, and oversight, the Okinawa Project at JABSOM would not have lasted for these 50 years!*



**Satoru Izutsu, UH John A. Burns School of Medicine**

# FINANCIAL EXPENDITURES



*From quick approval of human resource requests, to providing detailed direction in procurement, RCUH has shown to be a valuable asset in the overall administration of the TAACCCT-3 grant.*



**Louise Pagotto, Kapi'olani Community College**

## PAYROLL AND PERSONNEL TRANSACTIONS

| PAYROLL                | 2017          | 2016          | 2015          |
|------------------------|---------------|---------------|---------------|
| TOTAL EMPLOYEES        | 2,749         | 2,835         | 3,020         |
| SALARIES & WAGES       | \$110,362,315 | \$112,853,336 | \$114,259,378 |
| FRINGE BENEFITS        | \$30,038,194  | \$29,085,956  | \$27,877,776  |
| PERSONNEL TRANSACTIONS | 2017          | 2016          | 2015          |
| HIRES                  | 1,397         | 1,539         | 1,759         |
| TERMINATIONS           | 1,459         | 1,687         | 1,694         |
| W-2s ISSUED            | 3,535         | 3,749         | 4,065         |

The employment of RCUH project personnel is dependent on the grants, contracts, and agreements under which they were hired. These generally have durations ranging from several months to several years. The large number of hires and terminations reflects the high employee turnover as funds for projects are received and end at various times of the year.

## PROJECTS BY COUNTY

| COUNTY                              | NO. PROJECTS | NO. EMPLOYEES | VOLUME OF BUSINESS   |
|-------------------------------------|--------------|---------------|----------------------|
| HAWAII                              | 345          | 640           | \$32,170,985         |
| HONOLULU                            | 6,082        | 1,680         | \$220,771,378        |
| KAUA'I                              | 15           | 77            | \$1,092,086          |
| MAUI                                | 119          | 268           | \$23,653,899         |
| OTHER (Continental U.S. + non-U.S.) |              | 84            |                      |
| <b>TOTAL</b>                        | <b>6,561</b> | <b>2,749</b>  | <b>\$277,688,348</b> |

RCUH is one of the state's largest employers. During the fiscal year RCUH hired nearly 1,400 employees and conducted nearly 700 recruitments. RCUH employed approximately 2,750 employees in FY2016–17 with 96.9% of these employees working and residing in the state of Hawai'i and the remaining 3.1% in the continental U.S. and foreign countries. RCUH employees live and work on all of the major Hawaiian islands and their employment contributes to the vitality and economy of their communities and state.

# NEW INITIATIVES

## ONLINE SYSTEMS & WEBSITE

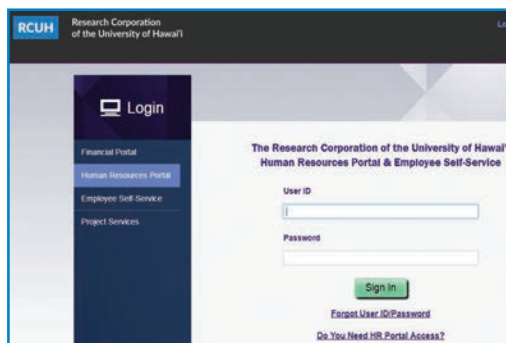
**PeopleSoft 9.2 system upgrade and enhancements:** RCUH's Human Resources IT operating system was upgraded to PeopleSoft 9.2. The transition included a long process of user feedback, installation and programming, and testing and revisions before launch. The upgrade was necessary to install an electronic platform that would allow RCUH to utilize new technologies to provide clients with quality services.

Enhancements were also made to the Human Resources Manager Portal, Employee Self-Service Portal, Online Recruitment/Application process, and Applicant Review Selection System. Feedback from the user community indicates the system upgrade was successful and the enhancements are appreciated and positively received.

PREVIOUS HR PORTAL LOG-IN

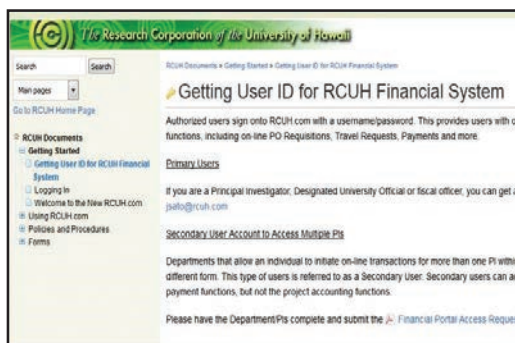


NEW HR PORTAL LOG-IN

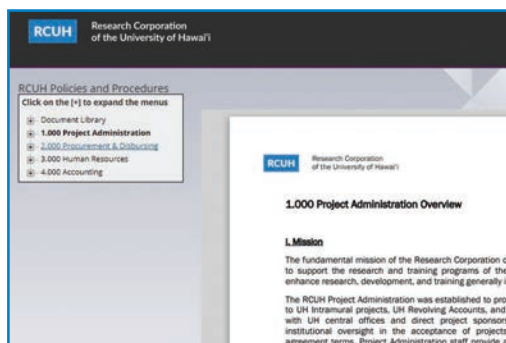


**Policies and Procedures (P&P):** The RCUH P&P “refresh” went live—the P&Ps were moved to a new IT platform on our website, along with other enhancements, providing a more robust search function. As part of a larger initiative, all policies and procedures were reviewed, edited, reformatted for consistency, and checked for accurate links. This work encompassed 170 policies; 300 forms, attachments, and exhibits; and 1,600 links.

PREVIOUS P&P



NEW P&P



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## ENHANCED COMMUNICATIONS

**Social Media:** RCUH is now on Facebook! Information and photos, posted every 1–2 weeks, include announcements of RCUH special events, highlights of project overviews and activities, awards, and accomplishments of project staff.

**Monthly e-Newsletter:** PIs, fiscal administrators, project staff, and others—about 6,000 individuals—currently receive RCUH’s monthly e-Newsletter. This new communications platform enables RCUH to quickly and cost-effectively share information about events, training, new initiatives, important deadlines, and other items of interest.

**Brochure:** The RCUH brochure was developed to provide a quick introduction to RCUH and its services. It is disseminated to potential clients and vendors, new PIs and employees, and others who have an interest in RCUH.

**Principal Investigator Welcome Packet:** An informational packet was developed and is being sent to new principal investigators (PIs) to acquaint them with RCUH services. The packet contains a quick reference guide, information on how to access the HR and financial systems, a contact list, and other information. After the packets are mailed, a Corporate Services staff member contacts the PI to offer further assistance and to answer any questions. During 2017, Corporate Services reached out to 121 new PIs to warmly welcome them to RCUH.

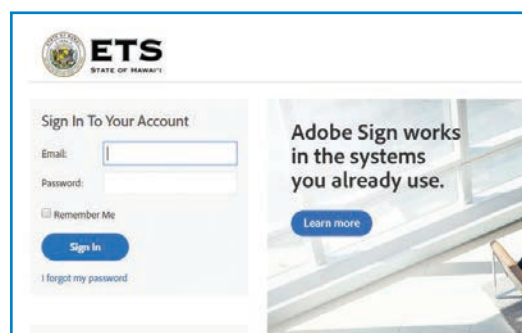


*October 2017 e-newsletter*

## OPERATIONS/SERVICES

**Electronic signatures:** RCUH implemented eSign electronic signatures in collaboration with the Hawai'i Office of Enterprise Technology Services. Users are able to route documents for electronic signatures, eliminating the need for printing/scanning/delivery of paper documents. The use of eSign results in greater efficiency and time-savings. The system meets security requirements, as well as federal and State laws, and allows the document originator to track the progress of the document along its electronic route.

**Notary services:** RCUH currently offers notary services to RCUH PIs and employees. The service is offered by appointment with notaries at both the Mānoa Innovation Center and Burns Hall locations.



*RCUH eSign log-in*

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# TRAINING

RCUH believes its greatest asset is its employees, who play a significant role in the achievement of RCUH's vision—a *Hawai'i where research, development, and training flourish and energize a prosperous state economy*. For this reason, greater investments are being made in the professional development of RCUH's core and project staff to provide them with the knowledge and training to function efficiently and effectively.

The following trainings were conducted during the past year:

**In-person training:** RCUH held training sessions on

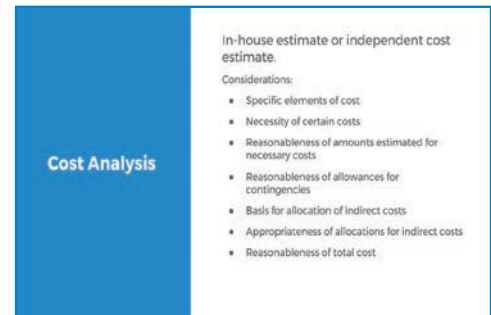
- EEO/sexual harassment,
- new hire orientation,
- employee/independent contractor,
- workplace violence,
- drug and alcohol awareness,
- modules on RCUH finance and human resources for the UH Office of Research Services' certification program
- ePayments,
- travel forms,
- eSign, and other topics.

**Online training:** The following series were developed in 2017:

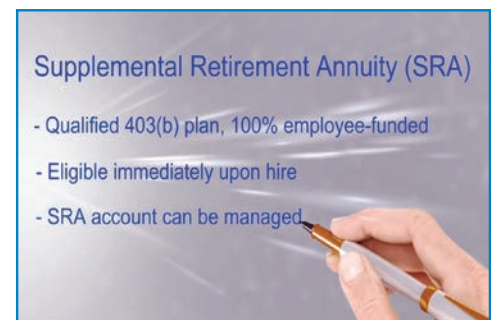
- Sole Source Justification (3 video segments)
- Cost or Price Reasonableness (4 video segments)
- How to Complete Form I-9 (2 video segments)
- New Hire Orientation/Benefits (2 video segments)
- Hawai'i State Ethics Code (6 video segments)

There were more than 1,000 views of the above new videos over the past year. In addition, the finance module for the UH-ORS Contracts & Grants Certification Program was converted from live to online video delivery. Project personnel are now able to access the module "on demand."

**Core staff training:** Professional development sessions were also conducted for RCUH's core staff at their quarterly meetings: dealing effectively with people, cybersecurity, and health/wellness. In addition, staff enrolled in group and individual sessions on presentation skills.



*Determining Cost or Price Reasonableness*



*New Hire Orientation Part 2: Benefits*



*Hawai'i State Ethics Code*



*Core Staff Training*

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## RCUH FORUM

The inaugural RCUH Forum on “The Federal Landscape: What’s Ahead for Research & Training?” was held on October 6, 2017, on the UH-Mānoa campus and broadcast to all other campuses. The Forum was co-sponsored by the University of Hawai’i and the University of Hawai’i Association of Research Investigators (UHARI) and featured three panelists: Anthony DeCrappeo, president of the Council on Government Relations (COGR); Jennifer Poulakidas, vice president for Congressional & Governmental Affairs of the Association of Public Land-grant Universities (APLU); and Jennifer Sabas, president of Kaimana Hila and consultant to the University of Hawai’i.

Confidential online evaluations from those who attended the Forum and provided feedback indicated that a large majority agreed or strongly agreed with these statements:

- the presentations were informative,
- the information was clearly presented,
- the presentations increased their knowledge of the subject,
- the length of the session was good, and
- the overall quality of the forum was high.



Photos (Left): RCUH Executive Director Sylvia Yuen; panelists Jennifer Poulakidas, Anthony DeCrappeo, and Jennifer Sabas; and UHARI President David Duffy posed for a photo after the Forum. (Right) More than 100 attendees filled the live session at UH Mānoa’s IT Center.



*The information presented was appropriate for a high-level briefing to stakeholders within the University. This will spark an important conversation among PIs and future PIs to get involved and support the University’s research enterprise.*

**UH Mānoa attendee**



# AWARDS & HONORS

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## RCUH OUTSTANDING EMPLOYEES OF THE YEAR

The RCUH Awards Luncheon recognizes outstanding employees who have made demonstrable, significant, and exemplary contributions to their projects. The first-place individual and team honorees are presented with \$1,000, while second-place honorees receive \$500. To reset the awards luncheon schedule to occur annually in the fall, two events were conducted this past year to honor the 2016 and 2017 outstanding employees.

### 2016 OUTSTANDING RESEARCHER/PROJECT MANAGER/PROFESSIONAL STAFF



**1st Place:** Tyler Bogardus, *Pacific International Center for High Technology Research*

Tyler refined a strategy for rodent control by aerial distribution of rodenticide pellets and worked with a company to pelletize a reproductive-control strategy for use in native ecosystems. He thus reduced the required “boots in the field,” which can cause additional damage to habitats of endangered species.



**2nd Place, tie:** Violet Horvath, *UH Pacific Disabilities Center*

Violet was responsible for a complete turnaround of the Pacific Disabilities Center, from an organization that was about to collapse to a vibrant entity that is making a real difference in the lives of persons with disabilities. Because of her efforts, more people with disabilities in Hawai'i are getting the help they need.



**2nd Place, tie:** Brett Taylor, *UH Joint Institute for Marine and Atmospheric Research*

Brett garnered much-needed support and strengthened partnerships with bio-sampling teams and marine resource agencies in Guam and Saipan. He has provided important training opportunities to help them gain the capacity to process and analyze biological sample collections on site and otherwise supported their fledging research plans.

### 2016 OUTSTANDING PROJECT SUPPORT STAFF



**1st Place, tie:** Alisa Kimura, *UH Pacific Cooperative Studies Unit*

Alisa manages a complicated budget that is supported by multiple grants with varying deadlines. She is equally adept at working with the outreach staff to make sure that products are high quality and convey the intended messages. She spearheaded the project's first fundraiser and went beyond the scope of her responsibilities to find new funding opportunities.



**1st Place, tie:** Angela Schultz, *UH Institute for Astronomy*

As the lead observer for the Pan-STARRS telescope project on Haleakalā, which searches for dangerous asteroids, Angela's responsibilities entail planning observations of important transient events, including detections of gravitational waves and neutrino bursts. Her tireless efforts have enabled the program to succeed, overcoming severe restrictions in resources.

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## 2017 OUTSTANDING RESEARCHER/PROJECT MANAGER/PROFESSIONAL STAFF



**1st Place:** Tomoko Acoba, *UH Joint Institute for Marine and Atmospheric Research*

Tomoko used seafloor terrain metrics to improve JIMAR's ability to evaluate the relationships between the distribution of reef fish species and various aspects of the seafloor landscape. Her findings resulted in mapping products that significantly enhanced the National Marine Fisheries Service's management of coral species listed under the Endangered Species Act.



**2nd Place:** Angela Bononi, *UH Cancer Center*

For the past four years, Angela has worked seven days a week on her cancer research. She focuses on how to counteract BAP-1 deficiency, with the hope of preventing cancer in those born with these mutations. She also hopes to increase the effectiveness of chemotherapy for patients who have BAP-1 mutations and are resistant to chemo.

## 2017 OUTSTANDING PROJECT SUPPORT STAFF



**1st Place:** Robert Goya-Smith, *UH Animal and Veterinary Services*

Robert has gone above and beyond his required duties to implement the new highly intensive federal training requirements. He created coursework that ensures all required research techniques are covered and contacts staff when training is due. He also delivers the training, which includes providing personalized sessions for those unable to attend a scheduled class.



**2nd Place:** Richard Tamae, *Subaru Telescope*

Richard is responsible for maintaining the Subaru Telescope facility, which includes conducting regular inspections, troubleshooting, and repairs. One of his most notable accomplishments was the modification of the telescope enclosure to accommodate the Prime Focus Spectrograph, an instrument that will expand astronomers' knowledge of dark energy.

## 2017 OUTSTANDING TEAM



**1st Place:** Grants Development Office, UH John A. Burns School of Medicine  
*Lori Chun, Kari Kim, Tammy Ho, Megan Kira, Susan Ordinado*

The JABSOM GDO team has helped secure more than \$80 million in funding. Short turnaround times are the norm, so the GDO team is constantly "on call," working evenings, weekends, and holidays in order to get the job done.



**2nd Place:** Hawai'i Coral Reef Initiative, UH Social Science Research Institute  
*Charissa Minato, Pamela Fujii, Kristine Davidson*

HCRI provides expertise in supporting research, management, and education related to our islands' marine environment. After suffering a drastic cut in funds in 2007, it bounced back to become a sustainable, robust, and thriving organization.

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## FACULTY & STUDENT EXCELLENCE IN RESEARCH

The Regents' Medal for Excellence in Research is awarded by the UH Board of Regents in recognition of scholarly contributions that expand the boundaries of knowledge and enrich the lives of students and the community. RCUH provided \$5,000 in research support to each recipient of this prestigious award. The Student Excellence in Research Award is awarded by the UH Mānoa Office of the Vice Chancellor for Research in recognition of outstanding scholarly research endeavors by students. RCUH recognized these individuals with a \$500 award.

### 2017 UH FACULTY EXCELLENCE IN RESEARCH



**Christoph J. Baranec**, *UH Institute for Astronomy*

Christoph designs, builds, and uses adaptive optics systems—instruments that overcome the blurring effects of the Earth's atmosphere. He won an Alfred P. Sloan Research Fellowship in 2014 for leading the development of the first automated adaptive optic system, Robo-AO.



**James Dean Brown**, *UH Department of Second Language Studies*

James has trained hundreds of graduate students, served on 44 doctoral committees, and written 370 publications in the field of applied linguistics. This Fulbright Senior Scholar has received many prestigious awards, including the Duke of Edinburgh Award.



**Jeffrey R. Kuhn**, *UH Institute for Astronomy*

Jeff is internationally recognized for improving our understanding of the global properties of the sun, as well as its mean structure, its rotation, and the physics of its variability. On Haleakalā, he built a telescope that measures the weak magnetism of the sun's outer atmosphere.

### 2017 UH STUDENT EXCELLENCE IN RESEARCH (DOCTORAL LEVEL)



**Mapuana Antonio**, *Public Health Studies*

Mapuana is dedicated to advancing the health of indigenous people. Her research explores associations involving stress, coping, obesity, diabetes, and general health among Native Hawaiians, especially those residing on Hawaiian Homestead Lands.



**William M. Best**, *Astronomy*

William is studying the properties of brown dwarfs (faint gaseous bodies with masses in between those of planets and stars) that reside in our neighborhood of the galaxy. In 2017, he was recognized as an ARCS Foundation® Scholar in astronomy.



**Glen M. Chew**, *Biomedical Sciences*

Glen's research focuses on the mechanisms driving immune dysfunction during chronic viral infections. His investigation may lead to ways to harness the immune system to prevent, control, or eliminate HIV infection and optimize quality of life.

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## RCUH GRADUATE FELLOWSHIPS

RCUH established an endowment fund in 1986 to support doctoral students at the University of Hawai'i. With the addition of funds throughout the years, a \$1 million endowment was created, which was given to the University of Hawai'i to administer in 1999. The following Ph.D. students were presented with awards from the RCUH Graduate Fellowships Fund in 2017:



**Sara Bolduc**, *Urban and Regional Planning*

The scholarship award enabled Sara to focus on completing her studies and her dissertation in Urban and Regional Planning, which focuses on environmental governance, collaborative research, and evaluation.



**Jeanette Hall**, *American Studies*

Jeanette's dissertation is on the cultural history of women jazz singers from the 1930s to the 1950s, with emphases on performance, race, gender, and labor. She has a forthcoming article on blues women and digital humanities that will appear in *Frontiers: A Journal of Women's Studies*.



**Piphall Heng**, *Anthropology/Archaeology*

Piphall is investigating the relationships between organizational change, ideology, and political economy through archaeological research in Cambodia, using the pre-Angkorian center of Thala Borivat as a case study.



**Boeun Billie Lee**, *American Studies*

As an artist/scholar, Boeun hopes to gain a deeper understanding of the various ways social change can be put into practice and the roles that art, identity, and community play in creating alternative visions for the future.



**Yanli Luo**, *American Studies*

Yanli's dissertation examined transnational adoption from China from 1882, the year when the Chinese Exclusion Act was passed, to the present, from the perspective of cultural representations.



**Ju-Hua Wei**, *Theatre*

Ju-Hua's dissertation will analyze the process of mounting the new kunqu play *The Sage of Kunqu: Wei Liangfu* from initial script to a fully staged production, applying the essential traditional dramatic principles of kunqu.



**Robert James York**, *History*

Robert will conduct his research in Asia and work in policy analysis or academia in the U.S. upon completion of his doctorate. His interests are in North Korean human rights; South Korea's democratic transition; and Korean nationalism, political ideologies, and business culture.

# IMPACT OF PROJECTS

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RCUH provides the financial, human resources, and other support services to projects that expand the boundaries of knowledge and/or utilize creative ways to apply research findings in real-world situations. As can be seen from the examples below, important work is being conducted across many disciplines in a variety of settings.



## CULINARY INSTITUTE OF THE PACIFIC

Principal Investigator: Ron Takahashi

Food safety is paramount to preventing foodborne illnesses and public health problems. At the Culinary Institute of the Pacific, programs are designed in collaboration with industry professionals, including Lauren Tamamoto's food safety class, which trains students in emerging industry standards and Food Safety Modernization Act (FSMA) compliance. Students learn how to assess whether suppliers are complying with FSMA law to insure products are safe to cook and eat.



## ACHIEVING A BACHELOR'S DEGREE IN NURSING: A VETERANS INITIATIVE

Principal Investigator: Kristine Qureshi

This program is designed to facilitate veteran student success in the nursing program from admission to graduation and beyond. Participants of the Veterans to Nurses program may enroll in any of the UH Mānoa Nursing pathways, and individuals with military medical training and/or experience may be eligible to receive academic credit and decrease time to graduation.



## PACIFIC DISASTER CENTER

Principal Investigators: David Lassner, Ray Shirkhodai

The Pacific Disaster Center (PDC) works with decision makers, disaster managers, planners, and the public to develop solutions to natural, technological, and human-caused disasters. PDC strives to prevent hazards from becoming disasters, and disasters from becoming crises. Their products and services have assisted United Nations agencies, national governments, relief organizations, and humanitarian assistance organizations worldwide.

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## KIKAHA STEM PROJECT

**Principal Investigator:** Esther Widiasih

The Kikaha STEM Project aims to increase science, technology, engineering, and mathematics instructional and research capacities at UH West O'ahu. In the summer of 2017, fifteen student research projects were supported, ranging from investigations of the Kalaeloa anchialine pools and investigation of native limu at One'ula Beach Park to disaster management and mathematical modeling of cost projections for solar PV panels.



## HAZARD SEES: PERSISTENT VOLCANIC CRISES RESILIENCE IN THE FACE OF PROLONGED AND UNCERTAIN RISK

**Principal Investigator:** Bruce Houghton

Lava from Kīlauea on Hawai'i Island may soon isolate a community of 10,500, while heightened seismic activity in Long Valley, California, suggests possible magma movement in the crust. The Hazard SEES project is developing new understandings of the eruptive record, volcanic plumbing, and the social response and resilience to volcanic threats at both locations.



## PIHANA HOU: A RESPONSE TO INTERVENTION APPROACH BUILDING EARLY READING SKILLS IN SCHOOLS AND COMMUNITIES

**Principal Investigator:** Hugh Dunn

Pihana Hou provides partnering schools with ongoing professional development, job-embedded coaching, and web-based instructional support tools designed to foster high-quality instruction and student literacy achievement. This interagency collaboration has been informed by teams of researchers, instructional designers, and cultural practitioners.

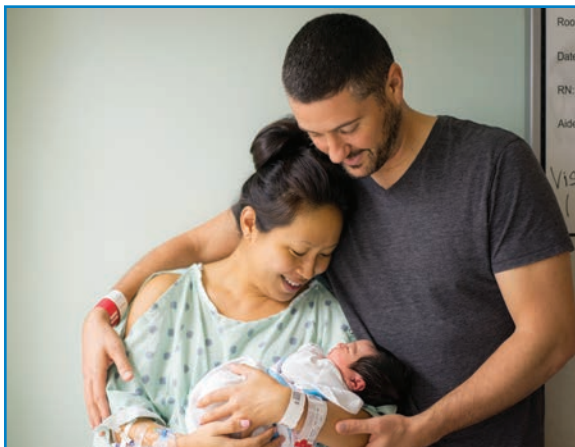




## PLANT EXTINCTION PREVENTION PROGRAM

Principal Investigator: Cliff Morden

This statewide program is committed to saving Hawai'i's rarest native plant species from extinction. PEPP focuses its efforts on "PEP species" (fewer than 50 wild individuals). Today, PEPP manages more than 200 PEP species across the state with these core objectives: collecting seeds and cuttings for off-site storage and propagation, reintroducing plants to the wild, mitigating threats, monitoring existing populations, and surveying for unknown individuals.



## ADVANCING PAID FAMILY LEAVE IN HAWAI'I

Principal Investigator: Hua Zan

The UH Center on the Family (COF) collaborates with the Hawai'i State Commission on the Status of Women and the Hawai'i Children's Action Network to address the needs for comprehensive and equitable paid family leave that supports all of Hawai'i's families. COF focuses on the development and production of data and research-based products, and works with partners to engage advocates, stakeholders, and policymakers.



## STATE OF HAWAI'I DEPARTMENT OF LAND & NATURAL RESOURCES, DIVISION OF AQUATIC RESOURCES

Principal Investigator: Bruce Anderson

The DLNR-DAR program manages, conserves, and restores the state's unique aquatic resources and ecosystems for present and future generations. Currently, DAR has three individual projects—the Statewide Marine Resources Assessment, the Investigation of Estuarine Habitats, and the Hawai'i Marine Resources Assessment.

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## CYBER SECURITY WORKFORCE DEVELOPMENT AND THE UH WEST O'AHU CYBER SECURITY COORDINATION CENTER

**Principal Investigator: Matthew Chapman**

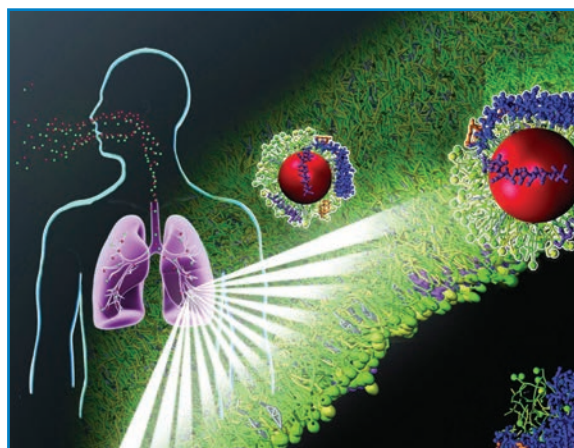
This project directly supports cyber workforce development needs for the U.S. Navy, develops subject-matter experts in information security, and supports the transition of veterans into engineering-related career fields. Students from UH West O'ahu and Honolulu Community College teamed up to win the prestigious National Cyber League competition in 2016.



## NANO-BIO INTERACTIONS IN THE LUNG

**Principal Investigator: Yi Zuo**

Rapid development of nanotechnology has led to an increasing concern about the potential environmental and health impacts of nanoparticles. This project studies the toxicological profile of inhaled nanoparticles and their risks, using combined novel experiments and high-performance computing. The molecular mechanism unveiled by this study also advances our understanding of other air pollutants, such as vog, a unique air pollutant in Hawai'i.



## OUR PROJECT IN HAWAI'I'S INTERTIDAL

**Principal Investigators: Joanna Philippoff, Kanesa Seraphin**

Our Project in Hawai'i's Intertidal (OPIHI) is an undergraduate internship program and a citizen science program for teachers and their students. The scientific purpose of both programs is to characterize the Hawaiian rocky intertidal zone to determine if and how the community is changing over time. Students learn about marine ecology and conservation, species identification, and sampling techniques, while building their confidence and interest in science.



# AUDITOR'S REPORT

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## 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, 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, 2017 and 2016, 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, 2017, 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  
October 26, 2017



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**The Research Corporation of the University of Hawai'i**  
**State of Hawai'i**  
**Condensed Statements of Net Position**  
**June 30, 2017 and 2016**

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|                                    | <b>2017</b>          | <b>2016</b>          |
|------------------------------------|----------------------|----------------------|
| Current assets                     | \$ 40,611,385        | \$ 45,102,246        |
| Capital assets                     | <u>2,527,330</u>     | <u>2,020,615</u>     |
| Total assets                       | <u>\$ 43,138,715</u> | <u>\$ 47,122,861</u> |
| Current liabilities                | \$ 27,547,075        | \$ 31,847,054        |
| Noncurrent liabilities             | <u>5,183,775</u>     | <u>4,664,562</u>     |
| Total liabilities                  | <u>32,730,850</u>    | <u>36,511,616</u>    |
| Net position                       |                      |                      |
| Invested in capital assets         | 2,527,330            | 2,020,615            |
| Unrestricted                       | <u>7,880,535</u>     | <u>8,590,630</u>     |
| Total net position                 | <u>10,407,865</u>    | <u>10,611,245</u>    |
| Total liabilities and net position | <u>\$ 43,138,715</u> | <u>\$ 47,122,861</u> |

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**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, 2017 and 2016**

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|                                         | 2017          | 2016          |
|-----------------------------------------|---------------|---------------|
| <b>Operating revenues</b>               |               |               |
| University of Hawai‘i                   | \$ 6,653,265  | \$ 5,864,638  |
| Other sponsor agencies                  | 756,360       | 874,862       |
| Total operating revenues                | 7,409,625     | 6,739,500     |
| <b>Operating expenses</b>               |               |               |
| Personnel costs                         | 4,172,682     | 3,662,249     |
| Data processing services                | 1,235,327     | 1,123,074     |
| Project development                     | 509,896       | 207,435       |
| Depreciation                            | 447,500       | 319,230       |
| Insurance                               | 341,683       | 352,890       |
| Office and equipment rental             | 227,001       | 226,964       |
| Office supplies and services            | 186,874       | 143,265       |
| Other expenses                          | 623,056       | 594,375       |
| Total operating expenses                | 7,744,019     | 6,629,482     |
| Operating income (loss)                 | (334,394)     | 110,018       |
| <b>Nonoperating revenues (expenses)</b> |               |               |
| Intergovernmental (Federal awards)      |               |               |
| Revenue                                 | 41,504        | 11,002        |
| Expense                                 | (41,504)      | (11,002)      |
| Interest income                         | 131,014       | 106,524       |
| Increase (decrease) in net position     | (203,380)     | 216,542       |
| <b>Net position</b>                     |               |               |
| Beginning of year                       | 10,611,245    | 10,394,703    |
| Ending of year                          | \$ 10,407,865 | \$ 10,611,245 |

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**The Research Corporation of the University of Hawai'i**  
**State of Hawai'i**  
**Condensed Statements of Cash Flows**  
**Years Ended June 30, 2017 and 2016**

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|                                              | 2017                | 2016                 |
|----------------------------------------------|---------------------|----------------------|
| <b>Operating activities</b>                  |                     |                      |
| Cash received from operations                | \$ 8,535,735        | \$ 6,499,052         |
| Cash payments for operations                 | (7,044,279)         | (6,044,241)          |
| Project expenditures and reimbursements, net | (9,164,695)         | (4,792,633)          |
| Net cash used in operating activities        | (7,673,239)         | (4,337,822)          |
| <b>Financing activities</b>                  | (954,215)           | (582,984)            |
| <b>Investing activities</b>                  | (6,373,566)         | (2,896,015)          |
| Decrease in cash                             | (15,001,020)        | (7,816,821)          |
| <b>Cash</b>                                  |                     |                      |
| Beginning of year                            | 23,156,603          | 30,973,424           |
| Ending of year                               | <u>\$ 8,155,583</u> | <u>\$ 23,156,603</u> |

