MEMORANDUM

TO: Kitty Lagareta  
Chairperson, Board of Regents

VIA: David McClain 
President

FROM: Rose Tseng 
Chancellor, University of Hawai‘i at Hilo

SUBJECT: Establishment of the Pacific Aquaculture and Coastal Resources Center and Reorganization of the College of Agriculture, Forestry and Natural Resource Management, University of Hawai‘i at Hilo

SPECIFIC ACTION REQUESTED

It is requested that the Board of Regents approve the establishment of the Pacific Aquaculture and Coastal Resources Center (PACRC) under the administration of the College of Agriculture, Forestry and Natural Resource Management (CAFNRM) at the University of Hawai‘i at Hilo.

RECOMMENDED EFFECTIVE DATE

Upon Board approval.

ADDITIONAL COST

Currently, the interim director is a full professor and has been granted partial course release time to manage the Center. Based on its previous record of obtaining grant funds, PACRC expects that the external funding from grants will continue. As of July 26, 2006, the PACRC has 51 current projects with a total value in excess of $8 million. The average annual budgets of these externally funded projects is over $3 million. As research facilities come on line (equipment installation by PACRC personnel is still ongoing), the grant volume should increase.

Construction of the PACRC’s core facilities in Keaukaha and Pana‘ewa were completed in late 2005, using over $5 million in funds from legislative appropriations, an Economic Development Administration grant, and County of Hawai‘i funds. Operational resources,
other than the salaries of the permanent positions and those costs typically included in indirect costs, will be derived from external funds. This reliance on external funds is quite reasonable given PACRC’s record of obtaining grants and contracts. Even though PACRC has been operating on an informal basis from a converted dormitory, it has been awarded several million dollars in grants and contracts from a wide variety of funding sources.

A projected annual budget follows:

<table>
<thead>
<tr>
<th>Core Support</th>
<th>FY 2006</th>
<th>FY 2007</th>
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<tbody>
<tr>
<td>Salaries of five permanent staff (G-funded)</td>
<td>$195,000</td>
<td>$266,272</td>
</tr>
<tr>
<td>Salary of Janitor II*</td>
<td>23,864</td>
<td>25,547</td>
</tr>
<tr>
<td>Total appropriated by 2005 Legislature</td>
<td>$218,864</td>
<td>$291,819</td>
</tr>
<tr>
<td>Utilities and other core functions</td>
<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Total core support</td>
<td>$268,864</td>
<td>$341,819</td>
</tr>
<tr>
<td>Grants and contracts</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Total annual budget</td>
<td>$2,268,864</td>
<td>$2,341,819</td>
</tr>
</tbody>
</table>

*In the interest of efficiency, the janitor position was assigned to Auxiliary Services which is responsible for general maintenance of UH Hilo facilities. This position is listed as a Janitor II on the BJ Tables, but it was established as a Groundskeeper I, Position No. 200271.

As shown on the estimated projected budget above, cost of research equipment and furniture will be obtained through grants and contracts. It is expected that internal and external funding will continue, based on the PACRC’s past grant history.

**BACKGROUND INFORMATION**

The Pacific Aquaculture and Coastal Resources Center (PACRC) has two off-campus facilities: a 12-acre coastal site at Keaukaha, adjacent to the Hilo port, and an inland site at Pana‘ewa, six miles away. The Keaukaha facilities include a water quality laboratory, a pearl oyster hatchery, marine fish hatchery and a demonstration farm for ornamental fish cultivation. The focus of the Pana‘ewa facilities is health management and integrated agriculture-aquaculture farming systems.
PACRC’s main mission is to advance long-term sustainable use and conservation of coastal areas worldwide through aquaculture and resource management. This is directly related to the goal of the College of Agriculture, Forestry and Natural Resource Management (CAFNRM) which is to prepare students for a broad and full understanding of basic factors involved in production, management, processing, distribution, marketing, sales, and services in the field of agricultural sciences. To achieve this goal, CAFNRM offers the Bachelor of Science degree in seven areas of specialization of which aquaculture is one. Further, the purpose and function of PACRC is clearly linked to the vision and goals of the University of Hawai‘i at Hilo which include in part “leadership in studies of the tropical environment; active learning in research, internships and community service; and commitment to community development,” and the University’s encouragement of theoretical and applied research which benefit Hawai‘i Island and the State through resource centers. In carrying out its mission, PACRC will continue to contribute to the System’s purpose of “advancing missions that promote distinctive pathways to excellence, differentially emphasizing instruction, research and service while fostering a cohesive response to state needs and participation in the global community.”

The PACRC’s infrastructure supports aquaculture, marine science, and conservation biology programs at the University of Hawai‘i at Hilo by providing faculty and maintaining a quality teaching and research facility. Center activities also include inter-disciplinary research and development in coastal areas throughout the world, and through the Hawai‘i Cooperative Studies Unit, a wide variety of ecological and environmental projects. Students are actively involved in all aspects of Center operations. The Center also maintains close relationships with the aquaculture industry and encourages the employment of UHH graduates.

In 1988, Senate Resolution 38 of the Fourteenth Legislature requested a study of possible sites for research and teaching related to the production of marine organisms for commercial purposes.

During 1988 and 1989, a site survey was conducted. In 1989, as a result of cooperative effort, Onekahakaha Park was selected as a potential site of an aquaculture facility.

Subsequently, in 1990, the then College of Agriculture (currently the College of Agriculture, Forestry and Natural Resource Management (CAFNRM)) at the University of Hawai‘i at Hilo received a grant from the Aquaculture Development Program of the State of Hawai‘i Department of Land and Natural Resources. During the period 1989 to 1991, in cooperation with the County of Hawai‘i, the then College of Agriculture used the grant funds to develop a conceptual plan for the East Hawai‘i Aquaculture Center.
Unfortunately, between 1991 and 1997, development of the project was stalled due to economic conditions and the site was lost.

The 1997 Legislature appropriated, by HB2500, HD1, SD1, CD1, funds for construction of a well and pump at the UHH farm in Panaewa. This well and pump was to supply both the aquaculture and agriculture operations at the farm. This appropriation was never released by the Governor. Before the appropriation lapsed, it was reauthorized. The Governor released the reauthorized appropriation as it was then included as part of the matching funds for PACRC construction.

In 1998, the County of Hawai‘i initiated the cleanup process of the former wastewater treatment plant in Keaukaha on the Big Island and in 1999, then Mayor Steven Yamashiro initiated preliminary discussions about the use of the facility by the then College of Agriculture. During 1999-2001, three executive orders were issued to set aside a parcel of land for the Panaewa Agricultural Park and two parcels of land in Keaukaha designated in part and fully, respectively, for PACRC.

Legislation passed during the 1999 legislative session provided funding for PACRC and for a well and pump project located at the Pana‘ewa site. The 2000, 2003, and 2004 legislative sessions provided funding for plans, designs and construction of PACRC. Concurrently, during 2000-2005, the University received grants from the US Economic Development Administration for the development of the aquaculture facilities at PACRC.

At its June 20, 2003, meeting the Board of Regents of the University of Hawai‘i (BOR) approved the University of Hawai‘i at Hilo’s request (in part) to service order $2,000,000 CIP funds to RCUH for the Pacific Aquaculture and Coastal Resources Center.

In 2005, the University was officially granted occupancy of the facilities at the Keaukaha site. The facilities are in the process of being setup for laboratory and other working space.

The current College of Agriculture, Forestry and Natural Resource Management (CAFNRM) will administer PACRC. The proposed reorganization will establish PACRC and provide for positions as appropriated by the 2005 State Legislature. The State’s biennial budget provided for six positions totaling $218,864 for fiscal year 2006, and $291,819 for fiscal year 2007. The six positions include a Director (#96602F), an Associate Director (#96603F), an Academic Support (#96604F), an Academic Support (#96605F), a Secretary (#96101F) and a Janitor* (#96102F). The Director will report to the Dean of the College of Agriculture, Forestry and Natural Resource Management; the Associate Director, Secretary, and two Academic Support positions and the Janitor will report to the Director. The Janitor* will report to Auxiliary Services. (*Note: Position
#96102F is listed on the BJ Tables as Janitor II, but it was established as Groundskeeper I, Position #900271). RCUH and other contract personnel hired by the Center will report to either the Director or Associate Director, depending on the project. There are no plans to hire any permanent project staff; therefore, it is not anticipated that any permanent subordinate positions will be assigned to the Associate Director.

The reorganization requested herein formally establishes the Pacific Aquaculture and Coastal Resources Center within the UH Hilo College of Agriculture, Forestry and Natural Resources Management. This will enhance UH Hilo’s aquaculture, marine sciences and natural resource programs, thereby improving student and faculty recruitment as well as external development opportunities. It will also create the infrastructure for the future development of more diverse program offerings, including a Masters in Aquaculture and Fisheries. Further, the establishment of PACRC will put the University at the forefront of developing an infrastructure needed for world-class aquaculture and marine science programs, supporting commercial aquaculture, fisheries and eco-tourism and transferring technologies developed and tested at the Center to similar coastal areas throughout the world. Continuing collaboration with organizations, including the private sector, is making land, water, and other resources available for the development of additional small-scale research facilities.

Through funding and other support, the many Federal, State and County agencies have demonstrated their commitments to support this program. The establishment of the Pacific Aquaculture and Coastal Resources Center will solidify the University’s continued commitment to the State of Hawai‘i and the wider global community.

Although the BOR was aware of the efforts to construct the PACRC and had approved budgets that included the federal funds for PACRC construction, formal efforts to organize the PACRC had stalled after the first attempt in 2000. As there were not yet any positions for the Center and as construction would not be complete for some time, the decision was made to wait until the construction was complete and positions created for the Center. As construction was complete and the UH was officially granted occupancy of the facilities in November, 2005, and six positions were authorized by the 2005 Legislature, the process for formal organization was restarted in early 2006.

To ensure that PACRC is consistent in its efforts to achieve its mission and support the missions of CAFNRM, UH Hilo and the System, it will measure and monitor its work by qualitative and quantitative successes. The true qualitative success of the PACRC will be measured by the success of its clients (former students, farmers, fishermen, environmental leaders, government agencies) in developing sustainable coastal communities. Specific to UHH, the Center will be continuously monitored to ensure that
research and development facilities are made available to UH faculty and staff. As an R&D unit, quantitative measures of its success will include:

- Number of sponsoring and collaborating organizations
- Number of publications by PACRC staff
- Number of grants and contracts
- Value of grants and contracts
- Number of student internships managed
- Number of student projects supported
- Number of farmers and fishermen trained at Center facilities
- Number of new aquaculture farms resulting from Center activities

The United Public Workers (UPW), the Hawai‘i Government Employees Association (HGEA) and the University of Hawai‘i Professional Assembly were consulted and given the opportunity to review and comment on the proposal to establish PACRC under the administration of CAFNRM. Neither UPW nor UHPA had any comments or concerns about the proposal. HGEA’s memorandum listing questions and concerns and UH Hilo’s response are attached.

**ACTION RECOMMENDED**

It is recommended that approval be granted to establish the Pacific Aquaculture and Coastal Resources Center under the administration of the College of Agriculture, Forestry and Natural Resource Management at the University of Hawai‘i at Hilo.

**Attachments:**
- Current Functional Statement, UH Hilo
- Current Organizational Chart I, UH Hilo, Updated July 1, 2006
- Current Functional Statement, Office of Academic Affairs, UH Hilo
- Current Organizational Chart III, Academic Affairs, UH Hilo, Updated July 1, 2006
- Current Functional Statement, College of Agriculture, Forestry and Natural Resource Management, UH Hilo
- Current Organizational Chart IIID, College of Agriculture, Forestry and Natural Resource Management, UH Hilo, Updated July 1, 2006
- Proposed Functional Statement, College of Agriculture, Forestry and Natural Resource Management, UH Hilo
- Proposed Organizational Chart, IIID, College of Agriculture, Forestry and Natural Resource Management, UH Hilo
- Letter from HGEA, dated October 13, 2006
- UH Hilo Response to HGEA Letter, dated October 17, 2006

**c Executive Administrator and Secretary to the Board Pang**

Sam Callejo, Vice President for Administration, UH