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## A BILL FOR AN ACT

RELATING TO THE UNIVERSITY OF HAWAII COLLEGE OF NATURAL  
SCIENCES.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The college of natural sciences at the  
2 University of Hawaii at Manoa has a faculty that is  
3 internationally known for their expertise. They brought in  
4 \$25,000,000 in federal dollars for the college last year.

5           One in ten students at the University of Hawaii at Manoa is  
6 majoring in the college of natural sciences and since 1993, its  
7 enrollment has increased by sixty-six per cent. Funding,  
8 however, has decreased every year since 1999, forcing the  
9 college to cut positions, even as student enrollment increased.

10           Added to the funding crisis, is the rising cost of teaching  
11 in science laboratories. Major advancements in molecular  
12 analyses have shifted the focus from a cellular level to a  
13 molecular one, which requires equipment and reagents that are  
14 sophisticated and costly. Maintaining this equipment is also  
15 expensive. Adding to the challenges of keeping up with the new  
16 technological advancements, enrollment in several costly  
17 laboratory classes has doubled over the past several years.



1           The college of natural sciences desperately needs to  
2 restore abolished permanent faculty positions and update its  
3 laboratories so students can receive the lecture and laboratory  
4 classes they need and deserve at class sizes that foster active  
5 learning.

6           The college field of natural science has gone through an  
7 explosion in innovation in fields such as genomics and  
8 biocomplexity. There have also been major advancements in  
9 instrumentation such as polymerase chain reaction or PCR,  
10 sequencing, geographical information systems or GIS, and  
11 modeling on high-speed computers.

12           The college of natural sciences has lagged behind the rest  
13 of the nation in research and student output due to:

- 14           (1) Aging infrastructure;  
15           (2) Fragmentation caused by its being spread over four  
16           different buildings;  
17           (3) Inadequate power supplies and cooling systems; and  
18           (4) Outdated laboratories.

19 The dilapidated condition of its physical infrastructure has  
20 sent a message to the student population that the University of  
21 Hawaii is no longer the leader in cutting edge science that it  
22 once was forty years ago. The infrastructure, as it currently



1 stands, is inadequate for fulfilling the University of Hawaii's  
2 strategic plan and commitment to undergraduate research.

3       The University of Hawaii is making a major commitment to  
4 research in the life science field with the development at  
5 Kakaako, Oahu. Building a new life sciences center on the  
6 University of Hawaii at Manoa campus would bridge the life  
7 sciences undergraduate program with the job and research  
8 opportunities that will be available at Kakaako. This will  
9 encourage high school students from Hawaii interested in the  
10 life sciences to remain in the State because of the new learning  
11 and job opportunities that will be available.

12       This new life sciences center would integrate all of the  
13 classrooms, laboratories and faculty offices of the college of  
14 natural sciences into one building. This center would also  
15 facilitate graduate and faculty research, though its focus would  
16 be to include undergraduates as integral participants in  
17 research activities. Centers like this that involve  
18 undergraduates in innovative research projects have been highly  
19 successful.

20       The new life sciences center would become a place of  
21 excitement and a symbol to the nation and the world that the  
22 University of Hawaii college of natural sciences is the place



1 for potential undergraduates to attend as well as the leader in  
2 cutting edge science.

3 SECTION 2. There is appropriated out of the general  
4 revenues of the State of Hawaii the sum of \$ , or so  
5 much thereof as may be necessary for fiscal year 2006-2007, for  
6 the University of Hawaii at Manoa college of natural sciences.

7 The sum appropriated shall be for the following purposes:

- 8 1. Department of chemistry 4FTE \$ 400,000
- 9 Department of mathematics 4FTE 400,000
- 10 Department of life sciences 4FTE 400,000
- 11 Department of information and computer
- 12 sciences 4FTE 0
- 13 2. Student lab supplies and equipment \$ 600,000
- 14 3. Facilities improvement - Edmonson Hall
- 15 Equipment purchase for two laboratory
- 16 courses \$ 10,000
- 17 Repair and purchase of air
- 18 conditioners 5,000
- 19 Subtotal facilities improvement \$ 15,000
- 20 4. Construction of new life sciences
- 21 center on the University of Hawaii
- 22 Manoa campus.

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1	Planning	\$ 600,000
2	Design	2,000,000
3	Construction	40,000,000
4	Total	\$42,600,000

5 SECTION 3. The sum appropriated shall be expended by the  
 6 University of Hawaii for the purposes of this Act.

7 SECTION 4. This Act shall take effect on July 1, 2006.

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**Report Title:**

University of Hawaii College of Natural Sciences; Appropriation

**Description:**

Appropriates funding to the University of Hawaii college of natural sciences.

