ACTION UNDER PRESIDENT'S AUTHORITY - AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM AND APPROVAL OF EXTERNAL FINANCING, RESEARCH BUILDING II REMODEL, DAVIS MEDICAL CENTER, DAVIS CAMPUS

It is recommended that:

Pursuant to Standing Order 100.4(q)

(1) The President amend the 2007-08 Budget for Capital Improvements and the Capital Improvement Program to include the following:

From: Davis: Research Building II Remodel – preliminary plans, working drawings, construction and equipment – $8,945,000 to be funded from School of Medicine reserves.

To: Davis: Research Building II Remodel – preliminary plans, working drawings, construction and equipment --$5,983,000 to be funded from external financing ($5,503,000) and campus funds ($480,000).

Pursuant to Standing Order 100.4 (nn)

(2) The President approve and authorize external financing not to exceed $5,503,000 to finance the Research Building II Remodel project, subject to the following conditions:

a. Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.

b. As long as the debt is outstanding, the Davis campus’ share of the University Education Fund shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing; and

c. The general credit of The Regents shall not be pledged.
(3) The Officers of The Regents be authorized to execute all documents necessary in connection with the above.

A Key to abbreviations and the project description are attached.

(Attachments)
KEY
Capital Improvement Program Abbreviations

S  Studies
P  Preliminary Plans
W  Working Drawings
C  Construction
E  Equipment
-  State Funds (no abbreviation)
F  Federal Funds
G  Gifts

HR  Hospital Reserve Funds
I  California Institutes for Science and Innovation
LB  Bank Loans or Bonds (External Financing includes Garamendi, Bonds, Standby, Interim and Bank Loans)
LR  Regents’ Loans (Internal Loans)
N  Reserves other than University Registration Fee (Housing and Parking Reserves)
R  University Registration Fee Reserves
U  Regents’ Appropriations (Presidents’ Funds, Education Fund)
X  Campus funds
CCI  California Construction Cost Index
EPI  Equipment Price Index
Budget for Capital Improvements  
And Capital Improvement Program  
Scheduled for  
Regents’ Allocation, Loans, Income Reserves,  
University Registration Fee Reserves, Gift Funds,  
And Miscellaneous Funds

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<tr>
<th>Campus and Project Title</th>
<th>Proposed 2007-08</th>
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**DESCRIPTION**

The Davis campus requests project and financing approval for the Research Building II Remodel project at a total cost of $5,983,000 to be funded from external financing ($5,503,000) and campus funds ($480,000). The project would renovate 17,000 gsf to provide open research laboratories, individual research laboratories, support rooms, academic, postdoctoral and administrative space for various biomedical research programs.

**Background**

In July 2005, the Office of the President approved the Research Building II Remodel project at a total project cost of $8,985,000 funded from School of Medicine (SOM) reserves. The approval was to renovate 22,213 asf of space being used by the Vascular Research Program within the facility. However, the unsuccessful recruitment of a Vascular Research Director put this project on indefinite hold. Since then, alternatives for the building’s use were studied, and the final decision was to assign the space to biomedical research programs that would relocate from Tupper Hall on the Davis campus to the Sacramento medical center campus. This would allow some of the basic science departments to expand into the vacated Tupper Hall space.

The amount and adequacy of research space has become a critical constraint to the efforts to expand and enhance the research programs within the UC Davis Health System. The School of Medicine’s latest Academic Plan stated, “Space is the school’s most critical issue for enhancing and sustaining research. In order to advance the research goals and mission of the Health System, more space is required to recruit top faculty and create more programs.” In order to provide additional space for the biomedical research programs, the plan would relocate and consolidate them in Research Building II on the Sacramento campus. Relocation of the research
programs and administrative activities to Sacramento would increase their square footage, and help resolve long standing space deficiencies. The School of Medicine has and is currently reconfiguring and renovating the space assigned to three of the five basic science departments (Biochemistry and Molecular Medicine, Cell Biology & Human Anatomy, Medical Microbiology and Immunology, Pharmacology and Physiology & Membrane Biology) on the Davis and Sacramento campus. New and upgraded laboratory space is vital to allow for the recruitment of new department chairs and well-funded research faculty.

Research Building II is one of three facilities designated for the SOM research programs at the Sacramento campus. These three research buildings provide a collaborative home for several programs of the five basic science departments and basic research components of several clinical departments. The majority of the space in Research Building II was previously assigned to clinical pathology and contained several sections that processed both outpatient and inpatient lab tests. The pathology department has relocated to an off-site leased facility allowing the vacated space to be reassigned to research.

The long-range plan for Research Building II always was to upgrade it to a functional biomedical research building once the clinical laboratories programs relocated. The building was designed and constructed at the same time as Research Building I and shares many of the building utility systems that are currently fed from the basement of Research Building II to Research Building I. The renovations not only provide necessary life safety upgrades but also increase the utilization of bench and equipment space in the laboratories by using modular metal casework that allows for flexibility in the laboratories and reduces future cost to accommodate changes in bench activity. These upgrades would largely consist of the replacement of outdated laboratories casework and the conversion of interior rooms to laboratories support rooms, resulting in a more functional open laboratory environment.

This research program would also take advantage of a previous project in Research Building II’s basement that provided a central ultra low freezer farm for long-term storage of research samples. The space included a dedicated emergency electrical service, alarm service, and HVAC equipment to support up to 24 ultra-low freezers.

Project Description

This project would provide laboratory space, individual multifunction laboratory support spaces, shared heavy equipment space, academic and administrative office space for various biomedical research programs. This facility is located on the medical center campus near the corner of Second Avenue and 45th Street in Sacramento. The project encompasses 14,466 asf of useable research space. This space consists of 10,166 asf of laboratories, 3,497 asf of research core/equipment space, and 803 asf of office/conference space.

Spaces would be designed to meet the functional needs of the building users, including the necessary spatial arrangements, adjacencies, utilities, and furnishings. The design would be flexible enough to accommodate changing uses and evolving research programs. Spaces for users who are not yet identified or whose needs are not yet specifically known would be designed as generic modular spaces incorporating the known requirements. Building services to
those spaces would be planned so that future provision would entail only localized disruptions and minimal cost. Many of the common lab support areas would be shared or otherwise allow communication among groups. The major interaction areas occur at the common support areas of the building and the collaboration zone at the end of the lab area. Efforts would be made to balance large interactive workspaces, often the site of distracting noises and odors, with a sense of personal space and privacy within the labs.

The primary program element would be the development of generic wet laboratory modules grouped to create connected laboratory spaces of varying sizes and decentralized laboratory support spaces, such as common equipment rooms, cell culture rooms, electrophysiology suites, and imaging rooms. Some of these laboratories and support rooms would be configured based on specific known requirements while others would be generic for maximum flexibility. This project would provide all upgrades, HVAC, plumbing, and electrical power, to accommodate all individual laboratories and equipment. All upgrades shall meet the 2007 California Building Standards code requirements for laboratory spaces, Campus Standards, and design criteria. The renovations fall into three main categories: 1) wet laboratories for individual faculty investigators and shared open laboratories for program-driven collaborative research, 2) creation of heavy equipment storage space and centralized shared small equipment rooms, 3) laboratory support rooms, and (4) administrative space.

Near the “center core” of the project area on each floor are groupings of laboratory support spaces that are centralized for the convenient use of the surrounding research laboratories. On each of the first, second and third floors, two-room cell culture suites are provided. The other two large areas in the core on each floor provide individual laboratory support rooms designed to support electrophysiology, cell culture or other special needs. The remaining central rooms provide space for shared equipment. The first and third floors include shared imaging rooms with the infrastructure to support both confocal and fluorescent imaging systems. All of these rooms are designed to state-of-the art standards for laboratory support rooms with dedicated normal power, emergency power, and high-pressure compressed air to support air tables, plumbed CO-2, and other specialty gases from a central manifold room, special lighting, blackout curtains, and sheet vinyl flooring.

The project would be implemented using the design-bid-build contracting method. Construction is anticipated to begin in July 2008, with completion anticipated in June 2009.

Policy on Sustainable Practices

This project will comply with the University of California Policy On Sustainable Practices. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

CEQA Classification

This project is consistent with the approved March 1989 Long Range Development Plan (LRDP) and includes the relevant mitigation measures adopted in the LRDP EIR. The project qualifies
for a categorical exemption under the California Environmental Quality Act pursuant to the Class 1 exemption for renovations to an existing facility.

**Financial Feasibility**

The total project cost of $5,983,000 would be funded with external financing ($5,503,000) and campus funds ($480,000). Average annual debt service for the project assuming a 30-year debt at 5.75 percent would be $389,000 for the first year of full principal and interest in FY 2010-11. The campus’s share of University Education Funds is the source of repayment.

The University Education Fund Debt Repayment Policy requires that campuses meet two financial tests: (1) that the amount of projected maximum annual debt payments payable from the campus’ Education Funds shall not exceed 65% of the campus’s total Education Funds allocated each year, and (2) that no more than 33% of the campus’s total Education Funds allocated each year are used for debt service payment. The Davis campus meets both tests. In FY 2010-11, the second full year of occupancy and first full year of principal and interest for the project, 8.3% of the campus’s total Education Funds allocation would be applied to debt service. The external financing will be paid from revenue sources specified in the external financing documents.

Additional financial details are provided on Attachment 2.

Approved by:

[Signature]

Robert C. Dynes
President of the University

Date: 5/8/02

Attachments
### Project Statistics

**Research Building II Remodel**  
**Capital Improvement Budget**  
**Davis Campus**  
**CCCI 5100**

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### Statistics

- **Gross Square Feet (gsf)**\(^{(e)}\): 16,803
- **Assignable Square Feet (ASF)**\(^{(e)}\): 14,466
- **Ratio asf/gsf (%): UC**: 86%
- **Building Cost/gsf**\(^{(f)}\): $212
- **Building Cost/asf**: $246

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a. A/E fees include the cost of basic and added services and expenses required for substantial revision of preliminary plans necessary to address the transition in program functions planned for this space, noted in *Background*.

b. Fees include independent design reviews, and other consultants.

c. Campus Administration includes project management and construction inspection.

d. Special Items include EIR, cost estimates, value engineering, special consultants and interest during construction.

e. Gross square feet is the total area, including usable area, stairways, and space occupied by the structure itself. Assignable square feet is the net program area.
SUMMARY FINANCIAL FEASIBILITY ANALYSIS

Project Title: Research Building II Remodel

Total Estimated Project Cost: $5,983,000

Proposed Sources of Funding:
- External Financing $5,503,000
- Campus Funds $480,000

Projected Financing Terms:
- Interest rate: 5.75%
- Duration: 30 years

Davis Education Fund Information (2010-11)¹

Estimated Annual Revenue²
- Education Fund Allocation $15,607,000
- Total Estimated Annual Revenue $15,607,000

Estimated Average Annual Debt Service
- Potential Debt Service on Proposed External Financing $389,000
- Pledged Expenditures $905,000
- Total Estimated Annual Expenses $1,294,000

% Education Fund Pledged for debt (policy limit 65%) 8.3%

Debt Service Coverage 12.06X

¹ First full year of principal and interest payments on the project
² Based on 4% growth/year. Actual growth for 2006-07 was 13%.