UNIVERSITY OF IOWA COLLEGE OF DENTISTRY MASTER PLAN

Action Requested: Receive the University of Iowa College of Dentistry Master Plan.

Executive Summary: The University presents for Board review and comment the College of Dentistry Master Plan which outlines the need for improvements to the Dental Science Building, which houses the College of Dentistry. Representatives of the College of Dentistry and the University will present the Master Plan at the October meeting. The University’s Master Plan exhibit is included as Attachment A to this agenda item.

The University of Iowa College of Dentistry is the State of Iowa’s only dental school; approximately 80% of Iowa’s dentists are graduates of the University of Iowa. The College is one of only a few dental schools in the nation that offers advanced education in all dental specialties, with faculty generalists and specialists in every dentistry discipline, as well as residencies in general dentistry and hospital dentistry. The College’s current enrollment in its ten departments includes 320 pre-doctoral students and approximately 90 graduate students. In addition, the College handles approximately 125,000 patient visits per year.

The Dental Science Building, located on the University’s Health Sciences Campus, was completed and occupied in 1973. (See Attachment B for map.) With few exceptions, the building is original to its 1973 construction; the same is true of the building fixtures and equipment. The University reports that these aging facilities cannot efficiently respond to modern dental patient care, medical technology and research. In addition, the building requires improvements to address patient accessibility, changing patient populations, and the need for additional instructional space in response to enrollment growth. (The first year class has been increased to 80 students.)

The University has undertaken an evaluation of the Dental Science Building to identify the building’s constraints relative to the College’s mission of providing high quality education, clinical care, and research. This study has identified a need for substantial renovation and expansion of the Dental Science Building. In response to these findings, the University proposes a two-phase project which includes construction of a clinic addition (Phase 1), and renovation of existing clinic areas, including deferred maintenance improvements (Phase 2).

The Phase 1 project cost is currently estimated at $17 million, with funding proposed from College of Dentistry gifts and clinical earnings, Income from Treasurer’s Temporary Investments, and building improvement funds. The Phase 2 project cost is currently estimated at $20 million ($14 million for clinic renovations and $6 million for laboratory renovations) with funding proposed from capital appropriations or bonding authorization, College of Dentistry gifts and earnings, Income from Treasurer’s Temporary Investments, and indirect cost recoveries from sponsored research.

The University would return to the Board for specific project approvals.
THE UNIVERSITY OF IOWA

MASTER PLAN

DENTAL SCIENCE BUILDING – RENOVATION/ADDITION

Purpose

The College of Dentistry and the University administration have been considering options for expanding the capacity and renovating portions of the Dental Science Building on the Health Sciences campus. The work envisioned will take a number of years to accomplish and will need financial support from a variety of sources. What follows is a brief master plan, a description of the overall need, the work undertaken thus far, and the direction of the overall multi-phased plan. As has been done with other important and protracted projects, the University wanted to bring to the Board of Regents a master plan for discussion prior to taking the formal steps outlined in the Regents Capital Register process. College of Dentistry and University administrators will be available to make an oral report to the Board at its October meeting.

In the course of this master planning process, the University has considered the needs of future UIHC growth as well as the parking and support needs of the entire Health Sciences Campus and adjacent athletics facilities.

Background

The University of Iowa Dental “Department” was founded in 1882. The College (Department) was first housed in the South Hall of the Pentacrest. By 1890 enrollment had grown from 14 to 150, forcing the College to move into Pentacrest North, a new building just north of Old Capital. In 1900 the Dental Department became the College of Dentistry and 15 years later was granted funds to build Trowbridge Hall, which was described as one of the best, if not the best, dentistry school in the nation. Trowbridge Hall is located one block north of the UI Pentacrest.

The College of Dentistry remained in Trowbridge Hall for more than 50 years. In 1967, federal funds became available and were supplemented with state funding to build a new building. The Dental Science Building, located on the University’s Health Sciences Campus, was completed and occupied in 1973. (See attached map.)

The Dental Science Building houses 10 departments and accommodates 320 pre-doctoral students and approximately 90 graduate students. The first year dental class has been increased to 80 students. The entire dental curriculum, with the exception of the basic science courses and community outreach clinical activities, is delivered in the Dental Science Building. Approximately 80% of Iowa’s dentists have graduated from the University of Iowa.

The College provides 125,000 patient visits per year. With the exception of a small number of renovated operatories, all the operatory equipment including patient chairs, casework and associated infrastructure are original to the building. The existing operatories are smaller than what is being constructed in new dental college buildings.
The Dental Science Building is a 4-story concrete structure with 200,844 gross square feet. The building consists of two rectilinear buildings of unequal size with a transparent circulation link. The south wing is dedicated to clinic areas and associated clinical support while the north wing houses dental research laboratories, administration, and preventive and community dentistry with instructional space.

A 1998 renovation of the second floor of the north wing created a modern Simulation Clinic for pre-clinical instruction. Also included in the project were an additional classroom and an instructional bench lab. While there have been other minor renovations to the building, the majority of the building is original construction. Changes in patient care, medical technology and research have resulted in reduced efficiency within the facility.

**Rationale – Need**

Concern about ADA-compliant accessibility to the clinical areas for patients, the need for increased student and small group instructional spaces, changing patient populations, including increased geriatric and special needs patients, rapidly developing technological needs, and aging research laboratories has led the College to explore facility needs.

An evaluation of the building condition and use of space was prepared by an external consultant with substantial input from faculty, staff and University officials. The primary goal of the analysis was to identify facility constraints to the maintenance and improvement of the College’s mission of providing high quality education, clinical care and research.

Three major factors drove the analysis: 1) the ability to continue to attract outstanding students to meet the growing needs for dentists in Iowa and the nation requires modern, efficient facilities; 2) increased reliance on clinical revenue for College operational expenses requires facilities that are modern, accessible, attractive, and convenient to patients in order for the College to compete with other sources of oral health care; 3) cutting edge research has moved from the age of histology and microscopy requiring small individual laboratories to the age of molecular biology and genetics that require open and flexible wet laboratories.

The conceptual analysis concluded that substantial renovation and an expansion of space were needed. The analysis provided four building transformation options. The option now preferred to address the changing needs of the College would occur in two major phases. Phase one includes the construction of a new clinic addition on the west end of the south building wing and phase two includes clinic renovations in the south wing and renovation of research space in the north wing. Clinic renovations include the replacement of existing operatories, renovation of public corridors and reception spaces and needed deferred maintenance work.

The phase one construction of an approximately 33,000 square foot addition on the west end of the south wing would provide a new accessible on-grade clinic entrance, 48 additional operatories for clinical education and faculty practice and related collegiate support spaces. These new operatories will be larger than the existing building operatories and will provide swing space when existing operatory equipment is replaced in phase two. Educational and patient care commitments require that clinic operations continue to function during any construction or renovation projects.

The dental research laboratories located in the north wing will be renovated and expanded to meet modern scientific needs, allow for flexibility, provide more opportunities for collaboration and enhance research productivity. Research grant awards have grown dramatically in recent years and further growth is both desirable and anticipated.
Anticipated Sources of Funds

Current estimates indicate a project cost for the phase one clinic addition of approximately $17 million. Phase one is anticipated to be funded by College of Dentistry gifts and clinical earnings and University allocations from Treasurer’s Temporary Investment income or central building improvement funds. The approximate cost of the phase two clinic renovation is $14 million and $6 million for the research space renovation. Funding for phase two is anticipated from a State capital request, College of Dentistry earnings, Gifts, and University allocations from Treasurer’s Temporary Investment income and indirect cost recoveries from sponsored research. These estimated project costs are in 2007 dollars.