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PHASE I

FEASIBILITY PLAN

FOR THE

THE UNIVERSITY OF ROCHESTER
SCHOOL OF DENTAL MEDICINE

March 13, 2006
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Executive Summary

The purpose of this plan is to explore the feasibility of a University of Rochester School of Dental Medicine (URSDM). The URSDM is envisioned as the premier academic dental institution for the education of leaders in academia and the dental profession.

The history of dentistry at the University of Rochester as well as trends in dentistry and dental education lead to the following assumptions:

1. The University of Rochester is uniquely positioned to create a School of Dental Medicine. This position is based on its strength in research, postdoctoral dental education, and clinical care, coupled with the infrastructure that already exists to support a predoctoral dental education program.

2. An innovative model of predoctoral dental education would add value to the University of Rochester by making URSDM the only dental school focused on early career leadership development for academia and the dental profession.

3. A School of Dental Medicine, even with a small class of 10 students as proposed, at the University of Rochester is financially sustainable.

4. Market forces, as evident in workforce trends, dental economics, application trends, and the milieu within academic dentistry created by these forces, are favorable to the start of a School of Dental Medicine at the University of Rochester.

5. A predoctoral dental education program will enhance the strength of oral health research and postdoctoral dental education at the University of Rochester.

6. URSDM will help maintain and grow the existing endowment for oral health care and research that exists through the Eastman Dental Center Foundation.

This feasibility plan is the first step in the investigation of the URSDM. As such, the plan focuses on broad issues while introducing key internal considerations such as structure and governance and financial sustainability. Should this feasibility plan receive the approval of the University of Rochester President and the University of Rochester Board of Trustees, a proposed timeline with action steps is included that leads to the start of the first class of URSDM dental students in August 2008.

Background

Founded in 1920, the University of Rochester Medical Center (URMC) was one of the first medical and dental centers in the United States to house both the school and hospital in a single building and establish a tradition of interdepartmental collaboration between clinical and basic scientists. The dental research fellowship program, established in 1930, was the first postgraduate program for dentists in the United States. Between 1964 and 2005, over 175 MS/MPHs and 60 PhDs have been awarded to dentists at URMC. Many of these individuals have remained in academic dentistry as educators, researchers, and administrators. There are few dental schools in the United States that do not have at least one University of Rochester graduate among their faculty.
In 1997, the Eastman Dental Center (EDC) merged with the University of Rochester to become a division in the URMC on par with the other three divisions: the School of Medicine and Dentistry, the School of Nursing, and Strong Memorial Hospital (Appendix One, page 21). In 1998, the Rochester Dental Academic Units were reconfigured to maximize collaboration and enhance the URMC educational research and clinical service missions. To foster academic linkages between dentistry and biomedical health sciences, the Eastman Department of Dentistry (EDD) was created within the University of Rochester School of Medicine and Dentistry. In January 1999, Dr. Cyril Meyerowitz was named Chair of EDD and also assumed the role of Director of EDC.

EDD houses all dental faculty, educational programs, clinical and translational research, and clinical services. EDD has an annual enrollment of over 80 postdoctoral dental residents. Certificates of training are offered in Oral and Maxillofacial Surgery, Orthodontics, Pediatric Dentistry, Periodontics, and Prosthodontics. EDD also offers one- and two-year Postdoctoral General Dentistry programs. The EDC and EDD together consist of 175 staff members, over 30 full-time faculty, 26 salaried part-time faculty, and 98 part-time attending faculty. The total dentistry budget for EDC and EDD is approximately $25 million.

EDC provides care to patients of all ages. A significant percentage of these patients have serious oral health problems, mainly caries and/or periodontal disease, and many are medically compromised. EDC has over 140,000 patient visits per year. In addition to the services at its central facility, an outreach program is provided to urban and rural elementary schools and daycare centers using three mobile vans and fixed community sites. The EDD’s clinical service within Strong Memorial Hospital has over 30,000 patient visits each year, including ambulatory and consultative service to in-patients. In addition, EDD has a number of unique patient population outpatient clinics and a dental emergency clinic.

A third entity, the Center for Oral Biology (COB) was established within the Rochester Institute of Biomedical Sciences, in 1998. Together, the EDD and COB focus on basic, translational, and clinical science, emphasizing fundamental translational aspects of oral biology. The current Director of COB is Dr. James E. Melvin. The COB consists of seven interdisciplinary research teams that integrate aspects of biochemistry, developmental biology, genetics, immunology, microbiology, physiology, pharmacology, and structural biology to explore important problems of craniofacial, dental, and oral biology. URMC has a substantial and diverse portfolio of ongoing clinical and translational research. In 2004, the University of Rochester ranked sixth in National Institute of Dental and Craniofacial Research (NIDCR) funding, with $8.3 million in grants. Appendix Two, page 26 summarizes funded oral health research and training projects.

This URSDM Phase I Feasibility Plan builds upon the existing strength of Dentistry at the University of Rochester. In many ways, the University of Rochester is singular in its capacity to create an innovative predoctoral dental institution. As noted below, the environment is also ripe for creation of a small, leadership oriented, predoctoral dental program. A School of Dental Medicine at the University of Rochester will launch the first new dental school in an Association of American Universities institution in over three decades.

Building on its achievements, the substantial clinical, education, and research infrastructure available at the University of Rochester create a unique opportunity to make an even greater impact on the oral health of the public through a predoctoral dental education program. Among the challenges facing dental education and oral health care, three are especially critical:
future faculty, workforce, and curricular change and innovation to meet the oral health care needs of patients in the 21st century.

**Statement of Need**

**The Nation Faces a Critical Shortage of Dental School Faculty**

In 2000, Haden et al. observed that the “primary wellspring of oral and craniofacial research and the transfer of knowledge to the practical benefit of the public is drying up.” At that time, there were over 300 vacant budgeted faculty positions in U.S. dental schools. Figure one shows the trend in vacant budgeted positions at U.S. dental schools.

Figure 1

Number of Vacant Budgeted Faculty Positions in U.S. Dental Schools: 1992-2003

While the total number of vacant budgeted positions (296) fell by 11 positions between 2002-03 and 2003-04, the reported number of lost positions increased from 39 to 147. The average number of vacancies per school was 5.3. For the academic year 2003-2004, almost 50 percent of dental school deans reported that faculty recruitment and retention are significant problems, and more than half of dental school deans indicated that they expect filling vacant positions to become more difficult in the future. In 2003-2004, nearly 1,300 faculty left dental education, approximately half of whom entered private practice. Younger faculty of lower academic rank predominated those who left dental schools to enter private practice. The separation of new faculty is a critical concern because the strength of educational programs rests on teachers and researchers who have acquired the competencies and academic credentials to become valuable contributors to the overall mission of the parent institution. In 2003-2004, finding candidates for open faculty positions with the necessary academic qualifications and experience replaced salary/budget limitations and lack of response to position announcements as the main challenge to recruitment of faculty.

There are compelling reasons to believe that the deficit of qualified faculty required to educate the next generation of dentists and to conduct research will only worsen in the years ahead. The average age of an assistant professor in U.S. dental schools is 47 years; average age of an associate professor—55; and the average age of a full professor—60. With
an aging academic dental workforce, the number of retirements over the next 10 years is projected to be approximately 30 percent of current faculty, creating over 3,400 vacant positions. With few exceptions, dentists have come to faculty positions because of personal inclination, opportunity, and happenstance. These approaches to developing a cadre of dental faculty are clearly no longer sufficient. There must be systematic and sustained efforts to develop a new generation of first rate faculty to teach and to conduct advanced research. A substantial opportunity exists to develop new means of developing, recruiting, and retaining dental school faculty.

The Population to Dentist Ratio is Declining

The U.S. Department of Health and Human Services, Bureau of Health Professions, reports that over 3,000 dental health professions shortage areas (D-HPSAs) exist in the United States. Over 42 million people live in these areas. The Bureau estimates that 8,600 dentists are needed to reach a 3,000 to 1 patient to dentist ratio in these D-HPSAs. Not only is the number of D-HPSAs growing, in aggregate the ratio of dentists-to-population to population is also projected to decrease (Figure 2).

Figure 2: Professionally Active Dentist per 100,000 Population, by Year

It is unclear that increased productivity of dentists will significantly affect access to oral health care in the United States. Geographic maldistribution, regardless of possible increases in productivity, will remain a problem for the foreseeable future. In his 2000 report, Oral Health in America: A Report of the Surgeon General, the U.S. Surgeon General concludes that oral health disease amounts to a silent epidemic in the U.S. Given limitations in the capacity of U.S. dental schools to increase class size, this negative prognosis is unlikely to change.

While the ratio of professionally active dentists to population is projected to decline, the number of applications to U.S. dental schools is increasing. Applications were up 15 percent in 2005 compared to the previous year and are up this year another 15 percent in comparison to the same time in 2005. Figure 3 shows the upward trend in dental school applicants and the relative stable number of enrollees over the past several years.
Figure 3: Dental School Application and Enrollment Trends, 1955-2005

Source: American Dental Education Association, 2005.

In 2004, of 9,433 total applicants to dental schools, nearly one in every three (3,034) applied to New York dental schools. Of the number who applied to New York schools, only 429 were New York State residents. The number of individuals who enrolled in New York dental schools was 431, while only 181 of those enrollees were residents of New York State. The URSDM would have a significant opportunity and an advantage to recruit a bright and diverse student body from a national pool of applicants.

As incomes of dentists continue to rise, coupled with an anticipated growth in college enrollment of approximately 2,000,000 students over the next 10 years, applications to dental schools are expected to continue to rise. Yet, U.S. dental school deans do not anticipate significant increases in class size. In unpublished data collected by Lobb, 36 of 52 deans noted that their schools had little or no interest or capacity to expand class size. Thirty-one deans noted that their class size is unlikely to increase in the next five or more years. Weaver et al. observed that the first-year dental enrollment of 2004 was slightly less than that of 2003 and that little further expansion of first-year enrollment is expected. He concludes that, “What is expected is a continuing increase in the applicant pool, a continuing effort to increase underrepresented minorities within the applicant pool, a continuing and expanding commitment to ensuring a diverse student body, and an increasing competitiveness and selectivity in dental school admissions.”

New Vision of Dental Education Required

Not only is there a need for more and better qualified faculty to educate and mentor the next generation of dentists, the curriculum needs substantial change and innovation to incorporate emerging biological science, materials technology, and new modalities of care. Oral health care personnel needs are defined by the need to address infectious diseases (such as caries and periodontal disease), oral cancer, pain, immune disorders affecting oral health (such as Sjögrens, AIDS, and cancer therapies), and craniofacial malformations. The dentist of the
future has new roles to play as a primary health provider on an interprofessional health care team. For dental schools to meet the challenges posed by complex diseases through collaboration on a health care team, predoctoral curricula must change.

In 2005, the American Dental Education Association appointed the Commission on Change and Innovation in Dental Education (CCI). The principles guiding CCI are informative to the future of dental education curricula. Specifically, CCI stated that predoctoral dental curricula should be:

1. **Interdisciplinary** and focused on the knowledge, skills and values needed to produce entry level general dental practitioners prepared to provide comprehensive care;
2. Appropriate to the **oral health needs of all components of society**, and particularly those of historically underserved populations.
3. Cognizant of the **continuum of dental education**, including prerequisite education required for matriculation and postdoctoral education;
4. Focused on today and tomorrow — rather than yesterday and the traditional way of teaching and practice, **aggressively exploring future skills and competencies** necessary for the practice of general dentistry. Changing predoctoral dental education means that curricula must remove topics and activities that are no longer relevant to the practice of general dentistry or that can be acquired by other educational processes.

At the January 25, 2006 meeting of CCI, the group considered significant changes to the D.D.S. and D.M.D. degree, even to the extent of requiring a Masters degree in an area such as public health as a requirement for graduation. While CCI took no immediate action in this direction, debates at the national level include the substantive changes to predoctoral dental curricula. Signature problems such as overcrowded curricula, the lack of integration between basic and clinical sciences, the absences of collaboration with other health professionals, and the need to foster continuous learning and critical thinking are challenges that have faced dental education for at least five decades.\textsuperscript{x,xi,xii}

Dental education is challenged nationally to ensure that the latest science is incorporated into curricula and that the scholarship of discovery is a vibrant mission of dental schools. Of the 56 dental schools in the United States, 30 are in institutions classified as Carnegie Doctoral/Research Extensive Universities and more than 50 of these schools exist in academic health centers. Based on a National Science Foundation Report ranking the top institutions in federal research and development expenditures in 2002-2003, dental schools are located in 10 of the top 20 universities.\textsuperscript{XIII} **Given its history and current strengths, the University of Rochester has the option of developing model curricula to foster basic, clinical, and translational research through early career development in predoctoral dental education.**

In summary, dental education and the dental profession are faced with a concatenation of challenges:

- The need to increase the supply of well trained faculty for the nation’s dental schools;
- The threat of decreasing access to oral health care as the number in the workforce diminishes and dental health professions shortage areas increase;
- Overcrowded curricula that have changed little in decades;
- Leadership to address these and other challenges of academic dentistry and the dental profession.
University of Rochester School of Dental Medicine Mission, Goals, and Objectives

Mission Statement

As envisioned, the URSDM will be the premier academic dental institution for the education of leaders in academia and the dental profession to improve lives through the integration of outstanding research, education, leadership development, health care, and community service.

URSDM will create a national model for the integration of dentistry with medicine, other schools within the University, and the health care system at all levels of education, research, and clinical service. Continuing the URMC tradition of service, URSDM will be both a national and local leader of high quality oral health care that is evidence-based with an emphasis on prevention and community service. In collaboration with the School of Medicine, and in particular through joint efforts in the COB, the URSDM clinical, translational, and basic science research efforts will move the school into the top ranking of NIDCR funding for dental institutions.

Strategic Goals

In 2005, EDC, EDD, and COB initiated a strategic planning process for dentistry at URMC. That process resulted in the following 11 goals. The proposed URSDM would contribute substantially to each of these important strategic goals by establishing a vibrant predoctoral program focused on academic and professional leadership while simultaneously taking postdoctoral education, research, and patient care to even higher standards over the next five years.

The strategic goals are as follows:

Education

E-1. Recruit and retain the highest quality residents and students into our training programs and ensure that they have the necessary knowledge and skills to be the future leaders in dentistry.

E-2. Recruit and retain faculty who are well trained in the provision of education instruction to students and residents.

E-3. Link the clinical training programs with the overall research mission of Dentistry at the University of Rochester.

Research

R-1. Better integrate basic, translational, and clinical research efforts.

R-2. Boost our national reputation as a research institution.

R-3. Improve the overall quality and number of research intensive faculty.

Clinical Care

C-1. Integrate the administrative and fiscal management of all clinical dental services at the URMC and Strong Health.

C-2. Improve the oral health of the Rochester community.

C-3. Ensure that the clinical care system provides optimal educational experiences for residents in clinical training programs.
Facilities and Resources

F-1. Ensure the long-term fiscal and administrative viability of the dental enterprise.
F-2. Ensure state-of-the-art facilities and systems resources for the dental enterprise.

Each of these goals includes a series of strategies for their attainment. A complete list of the goals and strategies is found in Appendix Three, page 27.

Objectives

In support of these strategic goals, the URSDM would pursue these objectives:

- increase in the number of dentists educated to become dental faculty;
- serve as a national and international model for dental education that will produce 21st century practitioners;
- produce advanced research and researchers; and,
- develop the next generation of leaders in academic dentistry and the dental profession.

Dental Education for the 21st Century

The ADEA Commission on Change and Innovation in Dental Education has recently described the ideal educational environment as one that:

- fosters critical thinking and lifelong learning;
- models a humanistic pedagogy;
- incorporates scientific discovery and the integration of knowledge;
- builds upon evidence-based best practices in education;
- involves rigorous assessment, both formative and summative; and,
- develops and supports faculty to lead in curricular innovations.  

While not a part of this feasibility plan, the curriculum content to be developed for the URSDM will likely follow the University of Rochester School of Medicine and Dentistry’s “Double Helix” curriculum. Based on the URMC tradition of biopsychosocial medicine, the URSDM will combine basic science and clinical work throughout all four years of education. The curriculum will weave science and discovery with clinical practice, the social aspects of health and illness, and information management. The projected small size of the class, approximately 10 students, will allow substantial flexibility to design a learning environment that is student-centered.

One of the first steps in defining the URSDM curriculum will be the development of the competencies expected of the graduate. Competencies are complex behaviors or abilities required for the general dentist to begin independent, unsupervised dental practice. Competencies include knowledge, experience, critical thinking and problem-solving skills, professionalism, ethical values, and technical and procedural skills. URSDM students are expected to gain specific competencies that go beyond those required to provide excellent clinical care. They will also acquire competencies requisite for leadership in academia and the dental profession in areas such as:

- managing change;
- communications, both written and oral;
- conflict management;
- effective team performance;
Leadership development will be a thread running throughout the four-year experience.

As currently envisioned, the URSDM curriculum will be problem-based. Dental students will attend classes with medical students during the first two years. As with the medical curriculum, the dental curriculum will not only combine basic science and clinical sciences across the four years, it will also integrate themes throughout the curriculum. In addition to leadership, these themes are likely to include ethics, cultural competency, quality assurance, and evidence-based practice. Critical thinking, communications skills, and professionalism will be modeled by faculty and incorporated into the pedagogy. The four-year D.M.D. program will provide time for individual study and reflection and for electives. Students will be encouraged to pursue Ph.D., M.S., M.P.H., or an M.B.A. in addition to their D.M.D. degree. Collaboration with the Simon Graduate School of Business Administration, the Warner Graduate School of Education and Human Development, and the School of Nursing creates opportunities for a uniquely innovative predoctoral dental education program.

Anecdotal observations indicate that students are reticent to pursue academic dental careers because of the lack of mentors and role models. The close mentoring and advising relationships are central to the pursuit of URSDM’s vision and mission, along with involving them in research and professional academic experiences from the very start of their participation in the program. Because of the small size of the predoctoral dental education program, students will be guided in their professional development and career planning by faculty mentors. No dental school in the United States has an opportunity to provide the meticulous attention to each student’s professional development and career planning as the envisioned URSDM. Students will be assigned to a faculty mentor with whom they meet in both small groups and individually throughout their four years at URSDM.

In September 2006, an interdisciplinary curriculum committee is proposed to move forward with the development of the URSDM curriculum. The charge to this committee will be to:

1. State the specific goals for the predoctoral dental education program, including and especially those goals related to leadership development and interdisciplinary collaboration with other schools at the University of Rochester;
2. Define the competencies needed for graduation;
3. Develop student evaluation methods that measure the competencies;
4. Describe in detail the double helix model for predoctoral dental students, including how biomedical, behavioral, and clinical sciences will be integrated; and,
5. Develop a curriculum management plan that includes a description of how the curriculum will be reviewed and evaluated on an ongoing basis, not only with respect to clinical competency, but as the curriculum relates to developing students for postdoctoral study, faculty appointments, and taking leadership roles in research, education, and the profession.

Documents delineating requirements for Initial Accreditation Application from the Commission on Dental Accreditation will serve to guide this committee. The target date for the Initial Accreditation Application submission is March 1, 2007.
**Maintaining and Expanding the Strength of COB and Postdoctoral Dental Education Programs at URMC**

Dentistry at the University of Rochester is known internationally for excellence in basic, clinical and translational research, as well as superior postdoctoral dental education programs. EDD and COB currently play an inexorable role in developing new knowledge, transferring that knowledge for the improvement of the oral and craniofacial health of the public, and in educating the next generations of researchers and scholars. One of the most important considerations in exploring the feasibility of the URSDM is the impact of the predoctoral dental program on research and postdoctoral dental education at the University of Rochester. **Preliminary consideration related to the curriculum point to the importance of the interrelationship between basic and clinical sciences as a conceptual cornerstone of the URSDM.** Advances in genetics and molecular biology promise to change the health care system in significant ways. Beyond the acquisition of scientific knowledge at a particular point in time, the capacity to think scientifically, to apply the scientific method, is pivotal for the envisioned URSDM if students are to analyze and solve oral health problems, understand research, and practice evidence-based dentistry. In addition to the EDD researchers the COB could play a role by enabling select students to lay the foundation for careers in research and for others to enter the profession as men and women of science.

In the emerging model of the URSDM, EDD’s postdoctoral programs have a role to play in the education of predoctoral dental students, particularly in the third and fourth years of the program as students enter the clinic. Faculty from EDD’s various programs would have some additional responsibilities for teaching predoctoral students. Because of the proposed small class size, opportunities may exist for predoctoral students to observe and work with postdoctoral students. Some students from the predoctoral program are likely to continue postdoctoral dental education at the University of Rochester.

This Plan assumes that enhancing research and maintaining the excellence of postdoctoral dental education with the URMC is critical to the success of a predoctoral dental education program. A central consideration in the creation of the URSDM is structural changes that would occur within URMC. In the proposed future structure (Appendix One, page 25); postdoctoral programs are clearly defined along side the predoctoral program as part of the education mission of the URSDM. The proposed future structure would also maintain and foster the culture of interdisciplinary collaboration between the URSDM and the School of Medicine that exist between dentistry and medicine currently. As noted above, basic science instruction of dental and medical students would be a responsibility shared by the URSDM and the School of Medicine. The COB is envisioned as a bridge between the URSDM and the School of Medicine, particularly in the research arena and to a lesser extent in education.

The section below addresses structural issues in more detail. **This Phase I Plan acknowledges the importance of determining the impact of the URSDM on existing programs. Moreover, the Plan recognizes that more input is needed from stakeholders before there is a final determination of feasibility.**

**Structure and Governance**

All predoctoral dental education programs in the United States, and most around the world, exist at universities and academic health centers within dental schools and colleges. The process for accreditation of predoctoral dental programs is historically based on review of dental schools and colleges. To achieve the goals and objectives delineated for the URSDM, the creation of a
School of Dental Medicine is the most effective structure to establish national and international identity to define clear authority and responsibility for curriculum, faculty and staff, admissions, and related policies. A freestanding dental school at URMC would also promote efficient and productive use of resources within a unified organizational structure.

Appendix One, page 22 & 23, shows the current structure of the URMC, including the place of Dentistry within that structure. There are several anomalies in the existing structure:

1. Medicine and Dentistry exist as one school, with the EDC separate from and a peer to the School of Medicine and Dentistry, the Strong Memorial Hospital, and the School of Nursing.

2. The Chair of EDD and the Director of EDC are the same individual.

3. (1) and (2) result in a dual reporting relationship, in which the same individual reports to the Dean of the School of Medicine and Dentistry and to the Senior Vice President and Vice Provost for Health Affairs, to whom the Dean of the School of Medicine and Dentistry also reports.

4. The COB is a separate entity from both EDD and EDC, with the Director reporting to the Dean of School of Medicine and Dentistry. COB faculty have appointments in both basic sciences and in dentistry (EDD).

5. EDC has a separate Foundation and Board. Because clinical care is self-sustaining at EDC, the EDC Foundation channels all monies to research and education. Thus, the EDC Foundation’s purposes are germane to EDD and COB as well.

6. Collaborations exist across the EDC, EDD, and COB; however, the goal of linking basic research to translational research could be substantially enhanced with a structure that encourages and rewards close collaboration between and among research, education, and patient care.

Operationally, EDD controls patient care and is fiscally responsible. Neither EDD nor EDC are dependent on the School of Medicine and Dentistry for funding. EDC controls its clinical budget and owns and operates its building. Both EDC and EDD pay central allocations to the URMC and the University. Both have unique information management systems, purchased and owned by EDC and EDD. Lastly, both EDC and EDD have their own respective development activities. Appendix One, page 24 shows the structure of Dentistry alone at the URMC. To a large extent—minus the functional anomalies noted above—the operations of Dentistry at URMC parallel that of a dental school.

The creation of a predoctoral program leading to the D.M.D. degree is the defining action to lead to the establishment of the URSDM. Appendix One, page 25 presents a structural model for URSDM as a peer school to the School of Nursing and School of Medicine (no longer the School of Medicine and Dentistry). This model addresses the anomalies noted above as the new structure:

1. Brings EDC into the URSDM, further defining the URSDM’s service mission and clinical education activities;

2. Removes the duality associated with having both a Chair of EDD and Director of EDC, placing these responsibilities in a new position, Dean of the URSDM. The
URSDM Dean reports directly to the Senior Vice President and Provost for Health Affairs;

3. Creates through COB a bridge between the School of Medicine and the School of Dental Medicine, with faculty having joint appointments and the Director of COB reporting to both the Dean of the School of Medicine and the Dean of the School of Dental Medicine. COB becomes a vital part of the URSDM’s research mission, with the Director of COB serving also as the URSDM Associate Dean for Research.

4. Establishes an academic entity, a School of Dental Medicine, as the receiving organ to pursue the EDC Foundation’s purposes. The URSDM would provide a national and international identity for capital campaigns to grow this endowment.

5. Creates a peer institution with other dental schools, but because of the reputation of Dentistry at the University of Rochester, almost immediately establishes the URSDM as one of the nation’s premiere postdoctoral and predoctoral dental education institutions. This position not only helps URSDM recruit students, it will attract the world’s best faculty, researchers, and administrators.

Infrastructure, Finances, and Sustainability

The preliminary five-year operating budget shows that the URSDM predoctoral program is expected to generate nearly $2.7 million in net patient service revenue and over $6.5 million in tuition revenue between FY 2008/09 and FY 2012/13. A smaller amount of revenue is projected from endowment and investment income, approximately $1.2 million. During the same time period, total expenses are estimated to be approximately $8.9 million. After transfers of just under $1.3 million are considered, the five-year surplus from the D.M.D. program is expected to be approximately $250,000 in five years.

Appendix Four, pages 29-30 contains a projected budget for the predoctoral (D.M.D.) dental education program at the URSDM. It includes:

1. Preliminary Five-Year Operating Budget for the D.M.D. Program (page 29);
2. Preliminary Capital Budget for the D.M.D. Program (page 29);
3. Start-up Budget for the D.M.D. Program (page 30)

Pages 30-32 of Appendix Four explain the assumptions informing the budget. Page 33 contains a glossary. The following is an overview of the projected budget and its assumptions.

Revenue

Tuition (Appendix Four, page 30)

The budget is based on the assumption that 10 students will enter the URSDM predoctoral program in July/August 2008 and that class size will remain at 10 students for each class. Tuition is set at $42,000 for FY 2008/09. Tuition projections include all students paying tuition and a 4 percent growth rate on tuition. Four years are required to reach the optimal level of tuition revenue. Tuition revenue is projected to grow significantly, from $420,000 in Year 1 to $1,965,362 by Year 5 (FY 2012/13).
Net Patient Service Revenue (Appendix Four, page 30)

As Year 1 (FY 2008/09) and 2 (FY 2009/10) students move into the clinics in Year 3 (2010/11) and 4 (FY 2011/12), patient service revenue from the predoctoral program will likely grow from zero in FY 2008/09 to nearly $1.1 million by FY 2011/12. In Year 3 and 4, each student is expected to spend approximately six months providing clinical care. National norms indicate that each student is likely to care for three patients per day. Calculated per annum, three patient visits per day, five days each week, during 48 weeks of the year (minus 4 weeks of vacation) results in 720 patient visits per year. Since students will provide care for only six months, the number of patient visits for budgeting purposes is estimated at 360. Thus, for example, in FY 2010/11, each of the 10 students will care for 360 patients for a total of 3,600 patient visits. In FY 2011/12, with both Year 3 and 4 students in the clinic, the number of patient visits rises to 7,200.

Assuming that D.M.D. students care for the same patient mix – Medicaid, self-pay, and insurance – as EDD residents and postdoctoral students do now, the average patient visit yields $102.00. The projected 3,600 patients in FY 2010/11 will yield $367,200; in FY 2011/12, with two classes or 20 students, that number will double to $734,400. Additional income will be generated by employing one dental hygienist in FY 2010/11 and a second dental hygienist in FY 2011/12. Based on national norms, with a hygienist caring for seven patients per day, five days each year, 48 weeks of the year, each dental hygienist will produce an additional $171,000 each year, resulting in projected net patient service revenue for FY 2010/11 of $538,560 and $1,077,120 thereafter as long as the variables (patient mix, fees, number of students, and number of hygienists) remain unchanged.

Gifts and Other Sources of Income

While some unrestricted gift revenue is expected from the alumni of postdoctoral programs, parents of students, students, and other sources, for this budget, gift revenue is projected to be minimal over the first five years ($35,000). The budget does not assume any revenue from other sources.

Endowment and Investment Income (Appendix Four, page 31)

Revenues from the endowment are also based on a successful endowment campaign that will raise $10,000,000 over a period of five years and assumes an annual return of 8 percent. With these assumptions, using the draw that is standard for the University of Rochester and EDC, 5.5 percent, endowment revenue will grow substantially in a relative short period of time: from $44,880 in 2008/09 to $483,517 in 2012/13. In addition, an $8,000,000 capital campaign for facilities will be required. (See Facilities, page 17 and Appendix 4, page 29.)

Expenses

Salaries and Benefits (Appendix Four, page 31)

The budget assumes that the predoctoral dental education program will require two FTE faculty during the first two years and the addition of two to three more FTEs in years three and four. Estimating an academic salary of $100,000, plus 25 percent in benefits, salary and benefits are projected to be $250,000 for faculty in Year 1 (FY 2008/09), moving up to $669,938 by Year 5 (FY 2012/13). These projections include salary growth of 2.5 percent per year. Salary projections do not include other income that faculty members might generate from faculty
practice. In addition to FTEs, this feasibility plan also presupposes assistance in the predoctoral program by non-paid volunteer faculty from the practicing community.

Other staff expenses include salary and benefits for dental assistants and dental hygienists beginning in Year 3 (FY 2010/11). Five dental assistants are needed for FY 2010/11 as students enter the clinic. Five additional assistants will be needed in Year 4 (FY 2011/12) as 20 students are engaged in clinical care. Dental assistant staffing is based on a norm of .5 FTE per student. Salary and benefits for dental assistants are projected to begin in Year 3 at $163,250 and move to $343,029 by Year 5. This increase reflects salary and benefits for 10 dental assistants plus salary growth of 2.5 percent per year. One dental hygienist is required in Year 3 at an estimated cost of $58,770 (salary and benefits), and a second one in Year 4. Salary, benefits, and 2.5 percent salary growth for two dental hygienists will be $123,490 in Year 5 (FY 2012/13).

Twenty percent of administration expenses (Director's Office, Office of Quality Improvement & Compliance, Central Finance and Administrative Office) are estimated as overhead allocated to the predoctoral program in years 3 through 5; in years 1 and 2, 5% of administration expenses will be allocated. The projected administration costs will increase from approximately $25,000 in Year 1 (FY 2008/09) to nearly $110,000 in Year 5 (FY 2012/13). Year 3 marks the entrance of students into the clinics and the need to hire clinical operations staff at an estimated cost of $160,638. After the staff are hired in Year 3, the figure begins to level off, reflecting a 2.5 percent salary growth, to $168,770 by Year 5 (FY 2012/13).

Non-salary Expense (Appendix Four, page 29)

Non-salary expenses include medical supplies, lab fees, and expenses related to running a clinic. Also included are non-clinical related expenses. These expenses will increase significantly between Year 3 (FY 2010/11) and Year 4 (FY 2011/12) as the number of students in the clinic doubles, but then increases modestly based on inflationary costs of goods. Non-salary expense is expected to grow from a low of $92,400 in Year 1 (FY 2008/09) to $449,380 by Year 5 (FY 2012/13).

Medical Center and University Allocations (Appendix Four, page 29)

Projections for Medical Center and University allocations are based on estimated salaries and the current percentage of allocations returned to the Medical Center (0.11) and University (0.05). The projections are increased to reflect a salary growth of 2.5 percent per year. These allocations are likely to be near $31,000 for the Medical Center and approximately $13,500 for the University in Year 1 (FY 2008/09). As staffing grows these allocations will reach $159,675 for the Medical Center and $69,980 for the University by Year 5 (FY 2012/13).

Depreciation (Appendix Four, page 29)

Depreciation projections are based on capital expenditures for new building construction, modifications to the existing facility, and equipment totaling $7,550,000. Projections also assume that the new building will be completed by 2010. The new building and building modifications are depreciated over 25 years, while other capital expenditures for clinics, labs, electronic and digital resources, and learning resources are depreciated over 10 years. Depreciation begins in Year 3 (FY 2010/11) with an estimated $206,500 and climbs to $413,000 in Year 4 (FY 2011/12) and Year 5 (FY 2012/13). Over the first five years of operation of the D.M.D. program, depreciation will total $1,032,500.
Facilities (Appendix Four, page 29)

In order to build the facility a capital campaign will be required to raise $8,000,000 over a 5-year period. Before construction is started at least 50% of the cost of the facility will need to have been pledged. Facilities expenses are based on a pro rate of the existing costs to operate the current building. Beginning in Year 3 (FY 2010/11), these expenses include a new 16,000 square foot building. Thus, facilities expenses grow from $24,346 in Year 1 (FY 2008/09) to $362,613 in Year 5 (FY 2012/13).

In this five-year projection, the Change in Net Assets from operating and non-operating activities is positive every year of the predoctoral program with the exception of year 3, with a substantial increase between Year 3 (FY 2010/11) at -$7,767 and Year 4 (FY 2011/12) at $547,853. Over a five-year period, the positive change in net assets is over $1,500,000.

Transfers (Appendix Four, page 29)

Appendix Four, page 32, provides a detailed uses summary of shared services with the School of Medicine. The budget assumes a 4 percent growth rate. The figures are based on 10 dental students out of a total of 100 students (with medical students), sharing approximately 50 percent of services with the School of Medicine during Year 1 (FY 2008/09) and Year 2 (2009/10). Each predoctoral dental student is thus approximately 0.5 FTE or 5 percent of the cost per class each year. The cost of shared services begins in Year 1 (FY 2008/09) at $125,931, increases to $261,936 in Year 2 (FY 2009/10), reflecting the doubling of the student body and a 4 percent growth rate in costs. Because Year 3 and 4 dental students are no longer sharing services with the School of Medicine, the projections level off after the second year of the school (FY 2009/10). Over a five-year period, projected total allocations to the School of Medicine for Shared Services are $1,238,234.

Transfers also include other potential expenses incurred by the School of Medicine during the first two years of the predoctoral dental program. Projecting 5 percent of the costs of these expenses, $25,000 is reflected in both Year 1 (FY 2008/09) and Year 2 (FY 2009/10).

Changes in Net Assets (Appendix Four, page 29)

Over the first five years, budget projections for a predoctoral dental education program at the University of Rochester indicate a gain of over $250,000. The loss in the first year (FY 2008/09) of $122,243 is followed by a gain of $9,164 in Year 2 (FY 2009/10). Year 3 (FY 2010/11) shows another loss as 30 students enter the program, but only 10 are generating clinic income. By Year 4 (FY 2011/12), 20 students are in the clinic and are generating revenue, becoming the norm and resulting in continued operating surpluses. The assumptions on clinic revenue are conservative as many students in their fourth year care for more than the estimated three patients per day.

Start-up Funds (Appendix Four, page 30)

The EDC Foundation has agreed to provide $100,000 in Phase 1 start-up funds to move the URSDM forward. These funds cover a variety of committee activities. Phase 2 costs will be requested at a later date depending on the acceptance of the Feasibility Plan.
Program Development

This Phase I Feasibility Plan is preliminary to a more detailed Phase II Implementation Plan. Plans include engaging a wide variety of communities of interest to refine the URSDM mission, goals, and objectives. This engagement includes the following considerations:

- First and foremost, the approval of the University of Rochester President, Dr. Joel Seligman, and the University of Rochester Board of Trustees is required.

- One of the first steps already taken to refine the Phase I Feasibility Plan in anticipation of a Phase II Implementation Plan is the identification of some of the nation’s leading thinkers in medical, dental, and higher education, as well as industry, research, and public health. A list of the URMC Academic Dental Medicine Advisory Council (ADMAC) is found in Appendix Five, page 34.

- Inasmuch as the URSDM is planned to have an interdisciplinary focus, the input of the Deans from the School of Medicine and Dentistry, Nursing, the Simon Graduate School of Business Administration, the Warner Graduate School of Education and Human Development, and the College of Arts, Sciences, and Engineering should have input into the plan. A meeting will be scheduled to engage ADMAC with these important University of Rochester leaders.

- Marketing and recruitment of students will be a topic for ADMAC as well other stakeholders as an immediate step subsequent to the feasibility plan. The University of Rochester Early Medical Scholars (REMS), an eight-year B.A./B.S.-M.D. program for exceptionally talented undergraduates, is a potential model for the URSDM. The REMS program enrolls approximately 10 students each year. Other models that allow for early admission of exceptional students will also be considered. Strategies for recruiting a diverse class of students are critical to the success of the URSDM and the oral health of the public. URSDM’s unique environment, the small class size, and the opportunity to work closely with a faculty mentor are benefits that may attract international students and scholars from other fields, and professionals from other areas of health care who wish to pursue the D.M.D. degree.

- The Director of EDC/Chair of EDC will engage an external consultant to solicit feedback from faculty and staff within EDD, EDC, and COB. Specifically, steps planned include an online survey, focus group interviews, and individual interviews. Input from these groups is expected to assist significantly in developing the implementation plan. Of critical importance, engaging these faculty and staff will serve as one means to enhance communications between those who are leading the planning process and those who are vital to the implementation of the plan. During this stage, the EDC Foundation Board will also contribute their ideas to the URSDM design.

- In the late spring and early summer 2006, interviews will be conducted with key stakeholders, including local, state, and national leaders in organized dentistry. Local dental organizations and practicing dentists will have occasions through focus groups and open forums to engage those leading the effort to establish the URSDM. A website will carry updates and provide another conduit for direct input from both external communities and internal stakeholders.
The input of all of these groups will be considered in the development of a Phase II Implementation Plan that will be reviewed by ADMAC in August 2006 and submitted to the University of Rochester Board of Trustees in October 2006. The timeline in the next section outlines key actions and target dates for engaging internal and external communities.

**Action Steps**

The table below projects major actions leading to the start of the first class at URSDM. Specifically, action steps and timelines will need to be established for committees who work in such areas as curriculum development and admissions.

*Target dates have been removed from the original Feasibility Plan pending further direction from senior University of Rochester leadership regarding the Feasibility Study process.*

<table>
<thead>
<tr>
<th>Action</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointment of Academic Medicine Advisory Council (ADMAC)</td>
<td></td>
</tr>
<tr>
<td>Draft of Phase I Plan</td>
<td></td>
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<tr>
<td>Distribution of Phase I Plan to ADMAC</td>
<td></td>
</tr>
<tr>
<td>Distribution of Phase I Plan to EDD, EDC, and COB</td>
<td></td>
</tr>
<tr>
<td>Deadline for feedback (electronic survey) to Phase I Plan</td>
<td></td>
</tr>
<tr>
<td>Consultant interviews at URMC, to include administrators, faculty, students, and the EDC Foundation Board</td>
<td></td>
</tr>
<tr>
<td>ADMAC Conference to Discuss Phase I Plan</td>
<td></td>
</tr>
<tr>
<td>Interviews with external stakeholders: New York State Dental Association, President, President-elect, and Executive Director; New York State Board of Dentistry, President and Executive Director; New York Dental School Deans; ADA President, President-elect, and Executive Director</td>
<td></td>
</tr>
<tr>
<td>First meeting with the ADEA Application Service (known as AADSAS) staff to draft University of Rochester School of Dental Medicine (URSDM) application form</td>
<td></td>
</tr>
<tr>
<td>Develop and begin to implement recruitment plan for new faculty</td>
<td></td>
</tr>
<tr>
<td>Expansion of Phase I URSDM Plan into Phase II URSDM Implementation Plan</td>
<td></td>
</tr>
<tr>
<td>Distribution of Phase II URSDM Implementation Plan to ADMAC</td>
<td></td>
</tr>
<tr>
<td>Appointment of curriculum committee</td>
<td></td>
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<tr>
<td>Submission of final Phase II URSDM Implementation Plan to UR Board of Trustees</td>
<td></td>
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<tr>
<td>Notification to AADSAS to include the URSDM in all publications and communications for the 2008 application cycle</td>
<td></td>
</tr>
<tr>
<td>Completion of URSDM application for use by AADSAS (note: an appropriate disclosure about the School’s accreditation status must be included)</td>
<td></td>
</tr>
<tr>
<td>Application for Initial Accreditation (IA) submitted to the Commission on Dental Accreditation (CODA)</td>
<td></td>
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<tr>
<td>AADSAS Application Cycle begins</td>
<td></td>
</tr>
<tr>
<td>Pre-enrollment site visit by CODA</td>
<td></td>
</tr>
<tr>
<td>Preliminary draft of CODA IA site visit report is transmitted to the University of Rochester (UR) for consideration and comment prior to review by CODA</td>
<td></td>
</tr>
<tr>
<td>IA site visit report and UR response transmitted to the CODA Predoctoral Review Committee</td>
<td></td>
</tr>
<tr>
<td>URSDM begins to extend offers of admission (note: This timeline reflects the processes of many other dental schools)</td>
<td></td>
</tr>
<tr>
<td>CODA—the full Commission—considers the Predoctoral Review Committee’s report and takes action on accreditation status</td>
<td></td>
</tr>
<tr>
<td>CODA transmits its action regarding accreditation status and final visit report to UR. Desired Outcome: Initial Accreditation granted to URSDM</td>
<td></td>
</tr>
<tr>
<td>AADSAS 2008 Application Cycle closed (note: recommendations and application revisions are accepted until the end of March)</td>
<td></td>
</tr>
<tr>
<td>URSDM extends final offers for admission</td>
<td></td>
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<tr>
<td>URSDM Year 1 students begin</td>
<td></td>
</tr>
<tr>
<td>First CODA site visit after IA</td>
<td></td>
</tr>
<tr>
<td>Second CODA site visit after IA</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


viii Lobb WK. Marquette School of Dentistry, 2005.


xiii National Science Foundation, InfoBrief, July 2005.

xiv Kalkwarf KK. Open forum on curriculum. ADEA Annual Session, Orlando, FL, March 10, 2006.
APPENDIX ONE
Organizational Charts

A. Organizational Chart of the University of Rochester Medical Center

B. Current Structure - Dentistry at the University of Rochester

C. Dentistry at the University of Rochester Medical Center

D. Proposed Organizational Structure with a School of Dental Medicine
APPENDIX ONE – CHART B
Current Structure – Dentistry at the University of Rochester

University of Rochester Medical Center

Senior Vice President and Vice Provost for Health Affairs
C. McCollister Evarts, MD

SMD
EDC
SMH
SON

EDD
COB

EDC Site
SMH Site
UDFG
Community Dentistry
Affiliated Hospitals
APPENDIX ONE – CHART C
Dentistry at the University of Rochester Medical Center
Clinical, Education & Research Virtual Structure

Dentistry at the University of Rochester Medical Center

Clinical

Education

Research

Division of Eastman Dental Center
Oral health arm of UR Medical Center and Strong Health

Division of Eastman Dental Center
Oral health arm of UR Medical Center and Strong Health

COB

EDD

COB

EDD

Training Grants

MS Oral Biology

Basic Science

Clinical Translational Community Based Research

Pediatric Dentistry

General Dentistry

Periodontology

Prosthodontics

Orthodontics

Oral & Maxillofacial Surgery

Community Dentistry and Oral Disease Prevention

EDC Site Article 28

SMH Site

UDFG

Community Dentistry

Affiliated Hospitals

Divisions

Training Grants
APPENDIX ONE – CHART D
Proposed Organizational Structure with a School of Dental Medicine
## APPENDIX TWO

### Funded Oral Health Research and Training at the University of Rochester Medical Center

<table>
<thead>
<tr>
<th>Grant Number/Name</th>
<th>Years of Support</th>
<th>Faculty Involved/Role</th>
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<tbody>
<tr>
<td>R01 CA14587, Neuroinflammation in CNS Radiation Injury: IL-1 &amp; COX-2</td>
<td>2005-2010</td>
<td>S. Kyrkanides Co-I</td>
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<td>R01 DE14194, Adaptation of Human Herpes (HHV)-7 to Salivary Glands</td>
<td>2001-2006</td>
<td>S. Dewhurst Pt; D. Culp Co-I</td>
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<td>R01 DE014730, Salivary Mucous Cell Gene Expression</td>
<td>2003-2008</td>
<td>D. Culp Pt</td>
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<td>R01 DE016139, Influence of Cranberry of Plaque-Related Diseases</td>
<td>2004-2006</td>
<td>H. Koo Pt; W. Bowen Co-I; G. Watson Co-I</td>
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<td>R01 DE10174, Low pH Inducible DNA Repair in S. mutans</td>
<td>2001-2005</td>
<td>R. Quivey Pt</td>
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<td>R01 DE06127, Acid/base Physiology of Oral Streptococci</td>
<td>2002-2007</td>
<td>R. Marquis Pt; R. Quivey Co-I</td>
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<td>R01 DE06992, Mechanisms of Anion Transport Proteins in Salivary Cells</td>
<td>1990-2005</td>
<td>J. Melvin Pt</td>
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<td>R01 DE13681, Molecular Genetic Analysis of Craniofacial Development</td>
<td>2000-2005</td>
<td>R. Jiang Pt</td>
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<td>R01 DE3683, Oxidative Stress in Oral Streptococci</td>
<td>2000-2005</td>
<td>R. Marquis Pt; R. Quivey Co-I</td>
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<td>R01 DE13823, Role of Aquaporin 5 in Salivary Secretion, subcontract with the University of Cincinnati</td>
<td>2000-2005</td>
<td>S. Menon Pt; J. Melvin Co-I</td>
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<td>R01 DE14088, Role of O-Glycosylation in Epithelial Development</td>
<td>2001-2008</td>
<td>F. Hagem Pt</td>
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<td>R01 DE15207, Genetic Basis of Cold Lip and Palate</td>
<td>2003-2007</td>
<td>R. Jiang Pt</td>
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<td>R01 NS048339, Neuro-Inflammation and Treatment in GM2 Gangliosidosis</td>
<td>2004-2008</td>
<td>S. Kyrkanides Pt</td>
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<td>R01 CA0630, Genetic Regulatory Network in Mammary Tumorigenesis</td>
<td>2004-2009</td>
<td>W. Hsu Pt</td>
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<td>R01 DE3950, A Longitudinal Study of Lead Exposure and Dental Caries</td>
<td>2001-2006</td>
<td>G. Watson, Pt</td>
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<td>R21 DE014593, Molecular Pathogenesis of Orofacial Clefting</td>
<td>2003-2005</td>
<td>R. Jiang Pt</td>
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<td>R21 DE15736, Therapeutic scFv Antibody for Human Periodontitis</td>
<td>2004-2006</td>
<td>A. Teng Pt</td>
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<td>R21 DK066123, PACAP Overexpression and Voiding Function</td>
<td>2003-2005</td>
<td>S. Kyrkanides, Co-I</td>
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<td>2 R37 DE08921, Physiology of Mucus-Secreting Salivary Glands</td>
<td>1989-2009</td>
<td>J. Melvin, Pt</td>
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<td>P01 DE13539, Molecular Basis for Idiopathic Dry Mouth (Subproject 3:Genomic/Proteomic Analysis of Human Salivary Glands)</td>
<td>2000-2005</td>
<td>J. Melvin Pt; G. Watson Co-I; W. Bowen Co-I; C. Meyerowitz Co-I</td>
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<td>P30ES01248, Environmental Agents as Modulators of Disease</td>
<td>2000-2005</td>
<td>G. Watson Co-I</td>
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<td>R03 DE15411, Effects of Natural Agents with Fluoride on Caries</td>
<td>2003-2005</td>
<td>H. Koo Pt</td>
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<td>R03 TW060429, Mechanisms of GIC-type Chloride Channels Function</td>
<td>2003-2006</td>
<td>J. Melvin Pt</td>
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<td>K08 DE00471, Neuronal Function in Craniofacial Development</td>
<td>2001-2005</td>
<td>S. Kyrkanides Pt</td>
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<tr>
<td>T32 GE07165, Training Program in Oral Infectious Diseases</td>
<td>2001-2008</td>
<td>R. Marquis Pt; R. Quivey Co-I</td>
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<tr>
<td>T32 DE07202, Oral Cellular and Molecular Biology Training Grant</td>
<td>1990-2007</td>
<td>J. Melvin Pt; C. Meyerowitz Co-I</td>
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<td>D01 HP00023, Geriatric Training for Physicians, Dentists, and Behavioral and Mental Health Professionals</td>
<td>2003-2008</td>
<td>P. Katz, Pt; R. Saunders, Co-I</td>
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<tr>
<td>H17MC26531, Dental Home for Children Project</td>
<td>2003-2009</td>
<td>J. Petrosky Pt</td>
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<td>Institutional Pilot Project – Impact of Dental Insurance on Delivery and Outcomes of Dental Services</td>
<td>2004-2008</td>
<td>Y. Ren Pt</td>
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<td>American Academy of Fixed Prosthodontics – Tylman Grant</td>
<td>2004-2006</td>
<td>R. Huerta</td>
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<td>ITF Foundation – Preoperative Assessment of Implant Sites with Cross-Sectional Tomography and Surgical Guides</td>
<td>2003-2006</td>
<td>C. Ercoli Pt</td>
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<td>Colgate – Clinical Research Study to Measure the Whitening Efficacy of Colgate Platinum Professional Product</td>
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<td>Colgate – Clinical Study to Compare the Clinical Efficacy of Herbal Toothpaste on Dental Plaque and Gingival Inflammation</td>
<td>2004-2005</td>
<td>Y. Ren Pt</td>
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<td>Colgate – Clinical Study to Investigate Whitening Dentifrices</td>
<td>2005</td>
<td>Y. Ren Pt</td>
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<tr>
<td>Colgate – Clinical and Laboratory Assessments on the Efficacy of Commercial and Prototype Toothpaste on Dental Plaque and Gingival Inflammation Parts I and II</td>
<td>2005-2006</td>
<td>Y. Ren Pt</td>
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<td>Dental Herb Co. – Effectiveness of an Essential Oil and Herbal Extract Containing Mouthwash in Reducing the Levels of Malodor</td>
<td>2004-2006</td>
<td>H. Malmstrom Pt</td>
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<td>McNeil Consumer and Specialty Pharmaceuticals – A Double-blind randomized, vehicle-controlled study comparing the safety and efficacy of benzydamine hydrochloride 0.15% oral rinse including a separate open-label standard of care arm in subjects with radiation-induced oral mucositis</td>
<td>2003-2006</td>
<td>G. Watson Pt</td>
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<td>Monroe County – Surveillance of Oral Health of Monroe County School Children</td>
<td>1997-2006</td>
<td>R. Billings Pt</td>
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<td>New York State – An Intervention Study to Enhance Utilization of Oral Health Services for Children at Risk for Early Childhood Caries (ECC)</td>
<td>2000-2006</td>
<td>R. Billings Pt; R. Berkowitz Co-I</td>
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<td>Orion – Clinical Research Agreement</td>
<td>2005-2006</td>
<td>R. Ren, Pt</td>
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<td>USDA – Influence of grape vitis vinifera polyphenols on dental biofilm related oral diseases</td>
<td>2005-2008</td>
<td>Koo, Pt</td>
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<td>PENDING</td>
<td>2005-2008</td>
<td>Teng, Pt</td>
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<td>NIH K23 – Health risks of Problem Oriented Dental Attenders</td>
<td>2006-2011</td>
<td>R. Ren, Pt</td>
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<td>NIH R21 – Joint degeneration: Somatic mosaic analysis in a transgenic mouse</td>
<td>2006-2008</td>
<td>Kyrkanides, Pt</td>
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<td>Zimmer – Evaluation of Patient Satisfaction and Clinical Success Rate of Dental Implants Placed and Restored by General Dentistry Residents</td>
<td>2006</td>
<td>Malmstrom, Pt</td>
</tr>
</tbody>
</table>
APPENDIX THREE
Strategic Plan Outcomes in Education, Research and Clinical Care, 2005

EDUCATIONAL GOALS AND STRATEGIES

E.1. Recruit and retain the highest quality residents and students into our training programs and ensure that they have the necessary knowledge and skills to be the future leaders in dentistry:
   • Optimize the number of residents and students receiving training in dentistry.
   • Consolidate and coordinate core aspects of clinical training to eliminate or reduce redundancy in the curriculum.
   • Permit cross training in core areas, e.g., evidence-based practice, ethics, quality assurance.
   • Establish outcome measures and benchmarks to determine our success in meeting our educational goals.
   • Strive for diversity of the resident and student population.
   • Initiate a marketing plan for dentistry’s educational programs.

E.2. Recruit and retain faculty who are well trained in the provision of education instruction to students and resident:
   • Enhance the faculty development program.
   • Ensure protected time for faculty development.
   • Establish a mentor-training program.

E.3. Link the clinical training programs with the overall research mission of Dentistry at the University of Rochester:
   • Establish a research mentorship program for dentistry.
   • Establish a hybrid MS program for clinicians, which include multiple clinical research tracks, clinical research skills and oral biology elements.
   • Maintain and increase research-training grant funding.
   • Clarify and summarize process for outstanding masters/doctoral degrees.

RESEARCH GOALS AND STRATEGIES

R.1. Better integrate basic, translational and clinical research efforts:
   • Establish Research Oversight Committee.
   • Distribute pilot funds for research projects that integrate basic and clinical research.
   • Explore contiguous space for basic, translational and clinical researchers.
   • Enhance clinical and translational research seed pilot project funding and protected time for clinical researchers.
   • Develop thematically focused basic and clinical research teams (e.g., Sjögren’s disease).

R.2. Boost our national reputation as a research institution:
   • Benchmark current best practices among top dental research institutions.
   • Recruit to enhance “critical mass” in focused areas of research.
   • Increase the number of research submissions to NIH and other local and national funding agencies and commercial partners.
   • Add nationally prominent oral health researchers and academics to the EDC Foundation Board.
APPENDIX THREE (continued)
Strategic Plan Outcomes in Education, Research and Clinical Care, 2005

R.3. Improve the overall quality and number of research intensive faculty:
• Create multidisciplinary mentorship teams for all research junior faculty and ensure the teams meet at least three times per year.
• Encourage sabbaticals to develop expertise.

CLINICAL CARE GOALS AND STRATEGIES

C.1. Integrate the administrative and fiscal management of all clinical dental services at the URMC and Strong Health:
• Purchase and implement a unified clinical information system.
• Unify business practices.
• Develop benchmarks for clinical service efficiency.
• Clarify relationship of dentistry with URMFG, SH and HH to maximize efficiencies.
• Develop a faculty practice strategic plan.

C.2. Improve the oral health of the Rochester community:
• Increase access to care through public and private partnerships.
• Partner with Strong Health to include oral health improvement with general health initiatives.
• Consolidate and strengthen community outreach efforts.
• Ensure diversity of the oral health workforce.

C.3. Ensure that the clinical care system provides optimal educational experiences for residents in clinical training programs:
• Develop a referral system between programs.
• Initiate “joint” clinics for residency educational experience (e.g., implant clinic).
• Develop marketing strategy to enhance self-pay and insurance patients for resident clinics.

FACILITIES AND RESOURCES GOALS AND STRATEGIES

F.1. Ensure long-term fiscal and administrative viability of the dental enterprise:
• Develop a five-year fiscal plan for the clinical enterprise and development.
• Launch a campaign to enhance fund raising for Dentistry and the EDC Foundation.
• Correct post merge anomalies in the fiscal and administrative structure of the dental enterprise within the URMC (e.g., pooled cost recovery, relationship with URMFG).
• Develop and maintain a well-trained and motivated staff.

F.2. Ensure state-of-the-art facilities and systems resources for the dental enterprise:
• Conduct a master facility and space study.
• Establish a unified informational system for dentistry.
• Establish a centralized inventory system.
## Preliminary Five Year Operating Budget for DMD Program

### PRELIMINARY FIVE YEAR OPERATING BUDGET

<table>
<thead>
<tr>
<th></th>
<th>FY 2008/09</th>
<th>FY 2009/10</th>
<th>FY 2010/11</th>
<th>FY 2011/12</th>
<th>FY 2012/13</th>
<th>5-Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net patient service revenue</td>
<td>$538,560</td>
<td>$1,077,120</td>
<td>$1,077,120</td>
<td>$1,077,120</td>
<td>$1,077,120</td>
<td>$2,692,800</td>
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<tr>
<td>Tuition</td>
<td>$420,000</td>
<td>$873,600</td>
<td>$1,362,816</td>
<td>$1,888,772</td>
<td>$1,965,362</td>
<td>$6,511,550</td>
</tr>
<tr>
<td>Gifts</td>
<td>$5,000</td>
<td>$10,000</td>
<td>$20,000</td>
<td></td>
<td></td>
<td>$35,000</td>
</tr>
<tr>
<td>Endowment and investment income</td>
<td>$233,134</td>
<td>$360,032</td>
<td>$483,517</td>
<td></td>
<td></td>
<td>$1,236,034</td>
</tr>
<tr>
<td>Other sources</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>$464,880</td>
<td>$988,070</td>
<td>$2,139,510</td>
<td>$3,336,924</td>
<td>$3,546,000</td>
<td>$10,475,384</td>
</tr>
</tbody>
</table>

| **Expenses:**        |            |            |            |            |            |              |
| Salaries and benefits: |            |            |            |            |            |              |
| Faculty              | $250,000   | $256,250   | $637,656   | $653,986   | $689,938   | $2,467,442   |
| Dental Assistants    | $-         | $-         | $163,250   | $334,663   | $343,029   | $924,942     |
| Hygienists           | $-         | $-         | $58,770    | $120,479   | $123,490   | $302,739     |
| Administration       | $24,832    | $25,453    | $104,356   | $106,965   | $109,515   | $371,120     |
| Clinical administration support staff | $- | $- | $160,638 | $164,654 | $168,770 | $494,062 |
| Non-salary expense   | $92,400    | $192,192   | $316,820   | $432,750   | $449,380   | $1,483,541   |
| Medical Center Allocations | $31,019 | $154,470 | $233,134 | $360,032 | $483,517 | $1,236,034|
| University allocations | $31,019 | $154,470 | $233,134 | $360,032 | $483,517 | $1,236,034|
| Depreciation         | $13,995    | $13,995    | $55,320    | $55,320    | $65,320    | $221,980     |
| Facilities           | $24,346    | $172,346   | $316,720   | $338,890   | $362,613   | $1,214,916   |
| **Total expenses**   | $436,192   | $691,970   | $2,147,277 | $2,789,071 | $2,869,390 | $8,933,900   |

**Transfers:**

- Allocation to SOM for shared services:
  - $125,931
  - $261,936
  - $272,414
  - $263,310
  - $294,643
  - $1,238,234

- Non-mandatory transfers capital/other:
  - $25,000
  - $25,000
  - $25,000
  - $25,000
  - $25,000
  - $50,000

**Total transfers**:

- $150,931
- $286,936
- $272,414
- $263,310
- $294,643
- $1,288,234

**Net Operating Surplus/(Loss)**:

<table>
<thead>
<tr>
<th></th>
<th>FY 2008/09</th>
<th>FY 2009/10</th>
<th>FY 2010/11</th>
<th>FY 2011/12</th>
<th>FY 2012/13</th>
<th>5-Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in net assets from operating/non-operating activities</td>
<td>$28,688</td>
<td>$296,101</td>
<td>$7,617</td>
<td>$547,853</td>
<td>$676,610</td>
<td>$1,541,485</td>
</tr>
</tbody>
</table>

**Changes in net assets**:

- $122,243
- $9,164
- $280,181
- $264,543
- $381,967
- $253,251

### CAPITAL BUDGET

(Includes project management and architectural fees - to be funded by Development Campaign)

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Yrs. Depr.</th>
<th>Depr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>16,000 Sq. Ft. building @$300/sq.ft.*</td>
<td>4,800,000</td>
<td>25</td>
<td>192,000</td>
</tr>
<tr>
<td>Pre-clinical lab multimedia teaching system</td>
<td>150,000</td>
<td>10</td>
<td>15,000</td>
</tr>
<tr>
<td>Pre-clinical 15 station simulation lab (20,000/station)</td>
<td>300,000</td>
<td>10</td>
<td>30,000</td>
</tr>
<tr>
<td>20 operatories ($50,000/operatory)</td>
<td>1,000,000</td>
<td>10</td>
<td>100,000</td>
</tr>
<tr>
<td>Electronic &amp; digital resources</td>
<td>200,000</td>
<td>10</td>
<td>20,000</td>
</tr>
<tr>
<td>Learning resources for library and lecture rooms</td>
<td>200,000</td>
<td>10</td>
<td>20,000</td>
</tr>
<tr>
<td>Current building modifications</td>
<td>900,000</td>
<td>25</td>
<td>36,000</td>
</tr>
<tr>
<td>Facilities</td>
<td>800,000</td>
<td>10</td>
<td>80,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,550,000</td>
<td></td>
<td>413,000</td>
</tr>
</tbody>
</table>

**Depreciation:**

- New building construction & modifications to existing facility
  - $5,700,000
  - $228,000

- Other
  - $1,850,000
  - $185,000

- Total
  - $7,550,000
  - $413,000

*Assumes building will be completed by December 2010
APPENDIX FOUR (continued)

Preliminary Five Year Operating Budget for DMD Program

START UP FUNDS - (to be funded by EDC Foundation)*

<table>
<thead>
<tr>
<th>Phase 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>$50,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advisory Committee</td>
<td>$25,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steering Committee</td>
<td>$25,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 1 Total</td>
<td>$100,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Facility Plan</td>
<td>$75,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sr. Faculty Recruitment - includes salary and benefits</td>
<td>$150,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campaign Feasibility Study</td>
<td>$25,000</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Phase 2 Total</td>
<td>$250,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*At the EDC Foundation meeting held on February 14, 2006, the Foundation Board members approved a "line" of $100,000 to be allocated for phase 1 start-up funds.

ASSUMPTIONS

1. Tuition for 10 students *:

| Year 1 (FY 2008/09) | $42,000 | $420,000 |
| Year 2 (FY 2009/10) | $43,680 | $873,600 |
| Year 3 (FY 2010/11) | $45,427 | $1,362,816 |
| Year 4 (FY 2011/12) | $47,244 | $1,889,772 |
| Year 5 (FY 2012/13) | $49,134 | $1,965,362 |

* The DMD program tuition budget assumes at least 10 students per year paying tuition. We plan to recruit two DMD PhD students to the program per year. For these students, tuition may be provided from other sources but this is not included in these assumptions. This budget assumes tuition of $42,000 beginning in FY 2008/09.

2. Net Revenue**

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Revenue/year</th>
<th>Hygienist Revenue/year</th>
<th>Total Revenue/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd year</td>
<td>$367,200</td>
<td>$171,360</td>
<td>$538,560</td>
</tr>
<tr>
<td>4th year</td>
<td>$367,200</td>
<td>$171,360</td>
<td>$538,560</td>
</tr>
<tr>
<td>5th year</td>
<td>$1,077,120</td>
<td>$1,965,362</td>
<td>$1,043,482</td>
</tr>
</tbody>
</table>

**Revenue net of bad debt and adjustments
* Average net revenue per visit represents the average revenue per visit for Medicaid, self pay and insurance after bad debt and adjustments
APPENDIX FOUR (continued)

Preliminary Five Year Operating Budget for DMD Program

ASSUMPTIONS (continued)

3. Endowment
Assumes an 8% annual rate of return net of fees

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Contribution to Endowment</th>
<th>Endowment value</th>
<th>5 year avg.</th>
<th>5.5% draw rate</th>
<th>$ to be drawn *</th>
<th>Drawn in FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2005</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>5.5%</td>
<td>55,000</td>
<td>114,470</td>
<td>2009/10</td>
</tr>
<tr>
<td>2008</td>
<td>$2,000,000</td>
<td>$3,080,000</td>
<td>5.5%</td>
<td>169,400</td>
<td>360,032</td>
<td>2011/12</td>
</tr>
<tr>
<td>2009</td>
<td>$3,000,000</td>
<td>$6,326,400</td>
<td>5.5%</td>
<td>347,580</td>
<td>483,517</td>
<td>2012/13</td>
</tr>
<tr>
<td>2010</td>
<td>$4,000,000</td>
<td>$10,787,632</td>
<td>5.5%</td>
<td>531,358</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>$0</td>
<td>$11,536,172</td>
<td>5.5%</td>
<td>621,345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$0</td>
<td>$12,225,932</td>
<td>5.5%</td>
<td>683,434</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>$0</td>
<td>$12,843,974</td>
<td>5.5%</td>
<td>706,068</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total $10,000,000 1,236,034 total drawn

* Draw based on net five year market average of investment through the fiscal year prior to the draw year.

4. Faculty

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>100,000.00</td>
<td>125,000.00</td>
<td>150,000.00</td>
<td>175,000.00</td>
<td>200,000.00</td>
</tr>
<tr>
<td>2007</td>
<td>25,000.00</td>
<td>30,000.00</td>
<td>35,000.00</td>
<td>40,000.00</td>
<td>45,000.00</td>
</tr>
<tr>
<td>2008</td>
<td>125,000.00</td>
<td>150,000.00</td>
<td>175,000.00</td>
<td>200,000.00</td>
<td>225,000.00</td>
</tr>
<tr>
<td>2009</td>
<td>125,000.00</td>
<td>150,000.00</td>
<td>175,000.00</td>
<td>200,000.00</td>
<td>225,000.00</td>
</tr>
<tr>
<td>2010</td>
<td>125,000.00</td>
<td>150,000.00</td>
<td>175,000.00</td>
<td>200,000.00</td>
<td>225,000.00</td>
</tr>
<tr>
<td>2011</td>
<td>125,000.00</td>
<td>150,000.00</td>
<td>175,000.00</td>
<td>200,000.00</td>
<td>225,000.00</td>
</tr>
<tr>
<td>2012</td>
<td>125,000.00</td>
<td>150,000.00</td>
<td>175,000.00</td>
<td>200,000.00</td>
<td>225,000.00</td>
</tr>
<tr>
<td>2013</td>
<td>125,000.00</td>
<td>150,000.00</td>
<td>175,000.00</td>
<td>200,000.00</td>
<td>225,000.00</td>
</tr>
</tbody>
</table>

Total Clinical Salaries 250,000.00 256,250.00 859,676.25 1,136,457.12 3,611,122.03

5. Staff

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Assistant* annual salary</td>
<td>25,000.00</td>
<td>32,650.00</td>
<td>33,466.25</td>
<td>34,302.91</td>
<td></td>
</tr>
<tr>
<td>Benefit (30.6%)</td>
<td>7,650.00</td>
<td>33,466.25</td>
<td>34,302.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32,650.00</td>
<td>33,466.25</td>
<td>34,302.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTES</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Budget</td>
<td>250,000.00</td>
<td>256,250.00</td>
<td>637,656.25</td>
<td>653,597.66</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hygienist annual salary</td>
<td>45,000.00</td>
<td>58,770.00</td>
<td>60,239.25</td>
<td>61,745.23</td>
<td></td>
</tr>
<tr>
<td>Benefit (30.6%)</td>
<td>13,770.00</td>
<td>58,770.00</td>
<td>60,239.25</td>
<td>61,745.23</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>58,770.00</td>
<td>60,239.25</td>
<td>61,745.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTES</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Budget</td>
<td>58,770.00</td>
<td>120,478.50</td>
<td>123,490.46</td>
<td>302,738.96</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Clinical Salaries</td>
<td>250,000.00</td>
<td>256,250.00</td>
<td>859,676.25</td>
<td>1,136,457.12</td>
<td></td>
</tr>
</tbody>
</table>

Allocations (estimate based on current pro rata EDC allocations, increased to accommodate Dentistry salary growth of 2.5% per year)

Undergraduate Clinical Operations Staff

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>65,300.00</td>
<td>(includes salary &amp; benefits)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCBO &amp; PS</td>
<td>69,218.00</td>
<td>(includes salary &amp; benefits)</td>
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<td></td>
<td></td>
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<tr>
<td>Additional Library Staffing</td>
<td>26,120.00</td>
<td>(includes salary &amp; benefits)</td>
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<td></td>
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<tr>
<td>Total</td>
<td>160,638.00</td>
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<tr>
<td>EDC salaries</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2006</td>
<td>6,458,450.00</td>
<td>37,101,770</td>
<td>0.11</td>
<td></td>
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</tr>
<tr>
<td>FY 2008</td>
<td>6,871,193.72</td>
<td>801,542.76</td>
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</tbody>
</table>

University and Medical Center allocation expense is based on the percent of the projected relative EDC FY08 allocation to the projected EDC FY 08 salaries.
APPENDIX FOUR (continued)

Preliminary Five Year Operating Budget for DMD Program

ASSUMPTIONS (continued)

6. Facilities and Non-Salary Expenses*

   Facilities / Engineering management, utilities
   
   SDM 16,000.00
   EDC 65,000.00
   0.25
   
   EDC physical plant 950,100.00
   Space growth 0.25 cost/sq. ft.
   973,852.50 14.98
   
   * Assumes $18.50/sq. ft. per sq. ft. with annual growth rate of 7% = 18.50/sq. ft.

   * Does not include construction related expenses. Facilities costs are for utilities and building maintenance.

7. Non-salary expenses

   (assumes 22% of the tuition amount which will cover non-salary expenses in clinical and non-clinical activity)
   Increase in periodicals and journals 17,000

   Note: in year 1 and for 6 months of year 2 undergraduate program will be allocated 5% of current academic EDC bldg. facilities costs

8. Shared Services with School of Medicine

   Assumes 4 %
   per year growth rate

   Uses Summary
   
   Contact Hrs 1,969,207
   Office of Medical Education 2,889,433
   Office of Educations Resources 495,494
   E. G. Miner Library 400,000
   Operations & Maintenance 1,652,109
   Facility Depreciation 433,291
   Equipment Depreciation 71,429
   University & Med Center Allocations 700,739
   
   FY 2004 Total 8,611,702
   FY 2005 8,956,170
   FY 2006 9,314,417
   FY 2007 9,686,994
   FY 2008 10,074,473
   
   cost per class year
   
   1/4 2,518,618
   
   0.05 fte 125,930.9
   
   * Assumes that fiscal year transfer is based on previous year costs.

   Capital includes $25,000 in each of year 1 and year 2 for prorated capital for potential Medical School expansion.
### GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tuition</strong></td>
<td>Annual fee paid by student matriculated in the DMD program.</td>
</tr>
<tr>
<td><strong>SOM</strong></td>
<td>School of Medicine of the University of Rochester Medical Center</td>
</tr>
<tr>
<td><strong>SDM</strong></td>
<td>School of Dental Medicine of the University of Rochester Medical Center</td>
</tr>
<tr>
<td><strong>DMD</strong></td>
<td>Doctor of Dental Medicine</td>
</tr>
<tr>
<td><strong>Endowment</strong></td>
<td>Proposed campaign to establish a $10 million endowment to provide education and academic</td>
</tr>
<tr>
<td><strong>Medical Center Allocations</strong></td>
<td>SDM DMD program's share of shared Medical Center central services. This includes Medical Center administration salaries, marketing, public relations, legal, Medical Center computer information/data infrastructure, etc.</td>
</tr>
<tr>
<td><strong>University of Rochester Allocations</strong></td>
<td>SDM DMD program's share of shared University of Rochester (UR) central services. This includes UR administration salaries, HRMS, legal, public relations, UR computer information/data infrastructure, etc.</td>
</tr>
<tr>
<td><strong>Shared services</strong></td>
<td>Covers School of Medicine Office of Medical Education (OME) expenses such as number of contact hours, OME administration and staff, Miner library and appropriate overhead expenses related to this entity including the Medical Center and University of Rochester.</td>
</tr>
<tr>
<td><strong>Net patient service revenue</strong></td>
<td>Net revenue generated by 3rd and 4th year students and hygienists</td>
</tr>
<tr>
<td><strong>Non-salary expense</strong></td>
<td>Expenses for medical supplies and general office expenses including telecommunications, duplication, etc.</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>Annual prorating of capital expense based on useful life of asset</td>
</tr>
<tr>
<td><strong>Fiscal Year</strong></td>
<td>Fiscal year represents academic year beginning July 1 through June 30</td>
</tr>
<tr>
<td><strong>CFAO</strong></td>
<td>Division of Dentistry's Central Finance &amp; Administration Office</td>
</tr>
</tbody>
</table>
APPENDIX FIVE
University of Rochester Medical Center
Academic Dental Medicine Advisory Council (ADMAC)

Dr. Michael C. Alfano
Dean
New York University
College of Dentistry

Dr. J. Bernard Machen
President
University of Florida

Dr. M. Brownie Anderson
Senior Associate Vice President
Division of Medical Education
Association of American Medical Colleges

Dr. Martha J. Somerman
Dean
University of Washington
School of Dentistry

Dr. Charles N. Bertolami
Dean
University of California, San Francisco
School of Dentistry

Dr. Philip P. Stashenko
Senior Vice President for Research and Development
The Forsyth Institute

Dr. Loretta C. Ford
Former Dean
University of Rochester
School of Nursing

Dr. Lisa A. Tedesco
Dean, Graduate School of Arts and Sciences, and Vice Provost for Academic Affairs and Graduate Studies
Emory University

Dr. Kenneth L. Kalkwarf
President, American Dental Education Association
Dean, University of Texas Health Science Center at San Antonio Dental School

Dr. Richard W. Valachovic
Executive Director
American Dental Education Association

Mr. Wayne LeChase
Chief Executive Officer and Managing Partner
LeChase Construction

Dr. Steven A. Wartman
President
Association of Academic Health Centers