

**New Program Proposal  
Master of Science in Dentistry (MSD)  
With Tracks in Periodontics (required), Orthodontics (required),  
and Pediatrics (optional)  
Medical University of South Carolina**

**Summary**

Medical University of South Carolina requests approval to offer a program leading to the Master of Science degree in Dentistry, to be implemented in Fall 2008.

The proposed program will become the degree required for students in the residencies in Periodontics and Orthodontics but will be optional for students in the residency in Pediatrics. For students in the residency program in Oral and Maxillofacial Surgery, no curriculum currently exists. When the College of Dental Medicine develops such a track, it will be submitted to the Commission for approval in the appropriate manner. The Pediatrics track in the MSD is optional as will be any future proposed track in Oral and Maxillofacial Surgery because the residencies to which they correspond are “hospital-based.” By contrast, the tracks of the proposed MSD program of study in Periodontics and Orthodontics relate to the residencies in Periodontics and Orthodontics, which are administered jointly by the MUSC Hospital and the College of Dental Medicine.

The Board of Trustees approved the proposal on October 12, 2007. The proposal was submitted for Commission review on October 30, 2007. It was reviewed and approved unanimously without substantive comment by the Advisory Committee on Academic Programs at its meeting on January 17, 2008.

The purposes of the program are to prepare graduates with superior clinical training based upon a sound foundation of scientific knowledge, including behavioral sciences and specialized knowledge of areas of dentistry. According to the proposal, the program will enhance recruitment of graduate students of dentistry interested in a residency program and will provide graduates of the program with skills and credentialing which will make them more competitive for positions in academic dentistry and research dentistry. Graduates of the proposed program who choose dental practitioner positions will bring better skills to the patient relationship. The proposal and staff communication with institutional spokespersons confirm that the MSD will be granted simultaneously to residents in either Periodontics or Orthodontics at the conclusion of the residency and that completion of the residency and the MSD in these two residency programs will be reciprocal. On the other hand, graduates of the residency

in Pediatrics may choose whether to enroll in the Pediatrics track of the proposed MSD program of study.

The proposal states that the need for the program is based upon the trend of increasing numbers of dental colleges in the Southeastern region and the country in general offering this kind of degree to their residents. Institutional representatives have stated that there are now 50 MSD and Master of Science programs for dental residents in the country. Eleven of these are found in the Southeastern region. The additional skills and knowledge bases found in the curriculum of the academic program make graduates of these residencies more competitive in research positions within and outside academic institutions. MUSC personnel maintain that because of the competition from other institutions, the program is important to give the College of Dental Medicine the ability to continue to attract to its residencies a talented pool of potential faculty and students. Students enrolled in the MSD will become eligible for related federal financial assistance while in their respective residency programs.

The degree is structured around a core of 23.5 semester hours of credit in didactic coursework which all students in the degree must take. In addition, to earn the degree a variable amount of credit must be completed, depending upon the track of the degree, corresponding to the student's chosen residency. The exact number of credit hours to be completed ranges from 35 credit hours in Periodontics, to 45 credit hours in Orthodontics, to 56 credit hours in Pediatrics. Thus, total credit hours to complete the program will range from 59 in Periodontics, to 69 in Orthodontics, to 80 in Pediatrics. This number of credit hours is approximately 30% higher than the number of credit hours in the various tracks of the programs of study at Indiana and Minnesota, the two institutions which are cited as models for the program proposal at MUSC. According to institutional representatives, the variation between the number of credit hours in the proposed program leading to the MSD and the two out-of-state programs after which it has been modeled is due to the Medical University's policy of assigning a value of earned credit for all hourly laboratory work in degree programs (which will generate credit hours for funding purposes under the MRR.)

No new faculty will be necessary in the first five years, according to the proposal. If additional faculty become necessary, then they must meet certain criteria as required by accreditation for the residency and the MSD program. According to statements from the MUSC representative at the Advisory Committee meeting, any new faculty will be added only after the initial five-year period. Existing faculty in the residencies who will be part of this degree total 18 headcount (.3 FTE). One new administrator (.3 FTE) and one new staff member (.3 FTE) will be added in the first year of the implementation of the program. An existing staff member (.5 FTE) will also be assigned to this degree program's administration.

Enrollment in the proposed program is estimated to begin at eight (4.66 FTE) in FY 2008-2009, increase to 16 headcount (9.3 FTE) in FY 2009-2010, and to 22 (12.08 FTE) in 2010-2011 and thereafter. Estimates are based upon the anticipated numbers of dental residents in each year in the three residencies for which tracks have been currently developed in the MSD. If enrollment projections are met, the program will meet the current CHE program productivity standards although the program will necessarily always be small, given its constituency.

The proposal states that student enrollments in the Master of Health Science (MHS) will be terminated for students in Periodontics and Orthodontics residencies when this new program is implemented on July 1, 2008. The MHS degree program will continue to be offered through another college of the Medical University for other students in healthcare fields either until such time as the institution might request its termination or until it no longer meets productivity requirements.

The dental residencies at the Medical University of South Carolina are all accredited through the national professional agency of the Commission of Dental Accreditation (CDA) of the American Dental Association. If approved, the program leading to the MSD will be considered as part of the College of Dental Medicine's next accreditation review in Fall 2010. All dental residencies of the College of Dental Medicine are currently accredited by the CDA. The Medical University Hospital is fully accredited by the Joint Commission on Hospital Accreditation.

Costs for the new program are estimated to begin at \$146,000 in the first year of the program's implementation, decreasing to \$72,000 for the second, third, fourth, and fifth years of the program's implementation. Total costs for the first five years are estimated by the institution at \$434,000. The total costs by category for these five years include administration (\$150,000); clerical support/personnel (\$100,000); supplies/materials (\$50,000); library resources (\$25,000); equipment (\$50,000); facilities (\$20,000) and "other" (\$39,000.) The category of "other" includes but is not limited to data analyses, information technology, travel expenses, and work related to thesis development.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2008-09	\$500,347	0	<b>\$500,347</b>	N/A	\$76,815	<b>\$76,815</b>
2009-10	\$1,000,693	0	<b>\$1,000,693</b>	\$189,140	\$153,629	<b>\$342,769</b>
2010-11	\$1,375,953	0	<b>\$1,375,953</b>	\$378,279	\$209,515	<b>\$587,794</b>
2011-12	\$1,375,953	0	<b>\$1,375,953</b>	\$517,605	\$209,515	<b>\$727,119</b>
2012-13	\$1,375,953	0	<b>\$1,375,953</b>	\$517,605	\$209,515	<b>\$727,119</b>

These data demonstrate that if MUSC meets the projected student enrollments and contains costs as they are shown in the proposal, the program will not cover new costs with revenues it generates by the fifth year of its implementation. However, the institution is committed to covering these costs with reallocation of other available institutional resources, as the proposal financial charts show.

In summary, MUSC will offer a program leading to the Master of Science degree in Dentistry (MSD) that will be unique in South Carolina and is expected to make MUSC's dental residencies more competitive. It is also expected to make graduates of the proposed degree more competitive for research positions and to make graduates who choose to enter private practice more expert with their clients. The MSD will have three tracks initially in Periodontics, Orthodontics, and Pediatrics. Beginning with July 1, 2008, the appropriate program track of the MSD program of study will be required of all new students in both the Periodontics and Orthodontics residencies of the College of Dental Medicine. The program track in Pediatrics will be optional for any student in the Pediatrics residency. Students in the residency tracks of Periodontics and Orthodontics will be unable to register for the Master in Health Science (MHS) degree beginning July 1, 2008.

### **Recommendation**

The Committee on Academic Affairs and Licensing commends favorably to the Commission approval of the program leading to the Master of Science degree in Dentistry with tracks in Periodontics, Orthodontics, and Pediatrics at MUSC, to be implemented in July 2008, provided that no "unique cost" or other special state funding be required or requested.