Overview of the Dental Public Health MS Degree Program
at the University of Iowa – for Provost’s Office

Introduction
Dental Public Health is the science and art of preventing and controlling dental diseases and promoting oral health through organized community efforts. It is that form of dental practice which serves the community rather than the individual. It is concerned with the dental health education of the public, applied dental research, administration of group dental care programs, and the prevention and control of dental diseases on a community basis.

Our Dental Public Health program is one of only 12 advanced education programs in Dental Public Health nationwide, and one of only 3 that are “degree-based”. Our program has been fully accredited since 1975.

The Department of Preventive and Community Dentistry is one of ten departments within the University of Iowa, College of Dentistry. The graduate program in Dental Public Health is located with the Department of Preventive and Community Dentistry, which has considerable responsibility for predoctoral education, as well.

Mission
Our graduate program provides the education for future leaders in Dental Public Health, one of the nine American Dental Association-recognized specialties. Its overall goal is to provide a planned sequence of advanced courses and experiences to educate students in the different domains of Dental Public Health in order for them to develop comprehensive scientific competence in the discipline. This is accomplished by having the curriculum address the 10 Dental Public Health competencies, including research and service. The curriculum does not involve direct patient care; however, a considerable amount of the curriculum addresses access to patient care and related issues.

Admission Procedures and Criteria

1 All American Dental Association-recognized specialties require that programs be fully accredited and that the specialty education be a minimum of two years beyond a dental degree. While all other dental specialties are entirely within the accreditation purview of the Commission on Dental Accreditation (CODA), Dental Public Health has two acceptable pathways for accreditation. First, two-year educational programs provide all of the advanced level education at a single academic institution and then confer a master’s degree upon fulfillment of a research thesis. These programs, such as ours, are entirely reviewed by CODA. Second, there are other CODA-accredited Dental Public Health programs that are one year only. Such programs will only be considered for CODA accreditation if they accept candidates who have already completed a basic Master’s of Public Health (MPH) degree from a Council on Public Health (CEPH)-accredited program. Then, each resident, in concert with the residency director, must develop an individual learning plan that addresses how these residents will adequately supplement previous educational experience to meet specified Dental Public Health competencies that were not sufficiently covered in the MPH program. In this latter pathway, residents must complete a research project, but it is not at the same level as a two-year program. Some of the one-year programs are located at academic institutions (e.g., University of Texas Health Science Center at San Antonio), while others reside within federal and state health programs (i.e., National Institute of Dental and Craniofacial Research, North Carolina Department of Health and Human Services). Programs that wish to change from a two-year to a one-year curriculum (and vice versa) must re-initiate the accreditation process.

2 These competencies are: 1) Plan oral health programs for populations; 2) Select interventions and strategies for the prevention and control of oral diseases and promotion of oral health; 3) Develop resources, implement and manage oral health programs for populations; 4) Incorporate ethical standards in oral health programs and activities; 5) Evaluate and monitor dental care delivery systems; 6) Design and understand the use of surveillance systems to monitor oral health; 7) Communicate and collaborate with groups and individuals on oral health issues; 8) Advocate for, implement and evaluate public health policy, legislation, and regulations to protect and promote the public’s oral health; 9) Critique and synthesize scientific literature; and 10) Design and conduct population-based studies to answer oral and public health questions.
The entire specialty of Dental Public Health is quite small, with only about 20-25 students in CODA-accredited training programs per annual cohort. We usually receive 4-8 applications and admit 2-4 new students per year, depending mostly on the quality of applicants, number of continuing MS students, and number of students continuing on for a PhD in our content area within the College of Dentistry’s PhD in Oral Sciences program. The majority of our applicants and admitted students are 4th (final) year dental students or recent dental graduates. However, we also receive applications from and accept individuals who are more established in their dental careers (mid-career) and from dental hygienists.

Criteria for selection include previous academic record, including dental/dental hygiene school and any other graduate study; commitment to the goals of and a career in Dental Public Health, especially academics; standardized test scores (GRE or DAT); and communication skills and personal qualities as noted in either a telephone or in-person interview.

Our entering students’ grade point averages have consistently averaged about 3.40, which is very similar to that of all UI dental sciences and all UI program matriculants. Also, our students’ GRE scores have been approximately equal to those for all UI dental sciences students and all UI students (about 1,700 total for V+Q+A or about 1,200 for V+Q), with a substantial increase in the most recent years. Our students have consistently scored above the national health sciences average.

Our program enjoys success in enrolling high quality students. The majority (~90%) to whom we offer admission do join us. Our students are quite diverse, in terms of national origin (recently including Palestine, Saudi Arabia, Jordan, India, China, Thailand, Sudan, Australia, Korea, Brazil, Botswana, and Colombia), race/ethnicity (e.g., 3 African-American students in the past 6 years, about 20%), and gender (about 50% female). We do not have fixed, ongoing financial support for our graduate students. However, we have been very successful obtaining federal training grant funding (Health Resources and Services Administration, Department of Health and Human Services) for U.S. citizen/resident trainees. We have had this support for 7 of the past 9 years, with a 3-year renewal recently funded through 2012. Also, we often are successful employing one student per year as a Grad RA on our federal (mostly NIH) research grants.

Program Outcomes
The large majority of those who enter our program have completed it successfully (~85%). Most complete the 2-year MS in 24-30 months, with their research efforts the major reason for any delay in graduation (mean ~25 months). Mean GPA during their program is 3.77 for 2000-2009 graduates. A number of our students have earned awards, fellowships or other honors, often for their research efforts, from national and local research and/or specialty organizations. In addition, one student currently is receiving a Graduate College diversity award and another was the one individual selected to receive a prestigious $25,000 Dental Public Health fellowship award from the American Association of Public Health Dentistry. A strong emphasis is placed on publication of thesis results, with most graduates having one or more papers published within 18 months of completion. Our graduates generally have been quite successful with career opportunities. Upon completion of the program, approximately equal numbers pursue additional advanced education, secure faculty positions, or are employed in various Dental Public Health practice positions (e.g., local or state health departments). In addition, six current College of Dentistry faculty in our Department and in other departments such as Pediatric Dentistry and Operative Dentistry are graduates of our MS program. This is very important in light of the severe shortage of dental faculty nationwide.

Because of the strong academic emphasis of our graduate program and the excellent opportunities and close working relationship with the Oral Sciences PhD program (directed by Dr. Christopher Squier), a number of our Dental Public Health MS students have pursued the Oral Sciences PhD. In fact, over the
past ~10 years, our students have constituted about half of all Oral Sciences PhD students, including both U.S. and international students. Most such students have completed their MS first and then continued on to the PhD, but two current students have elected to take all our Dental Public Health courses, pursue the PhD instead of MS, and still plan to be board-eligible in Dental Public Health. A record number of 5 Oral Sciences PhD students are currently pursuing their research in the area of Dental Public Health/Health Services Research.

Program Characteristics
The specialty of Dental Public Health and our graduate program are quite different from the majority of other dental specialty programs. Graduates of most other specialty programs go into private practice, while ours go into academics and public health leadership positions. However, salaries generally are much lower in these positions than in private practice, so the applicant to position ratio is much lower than for other dental specialty programs.

Thus, the ideal size for our MS degree graduate program is probably 3-5 new students per year, with our current goal being 4. The number is dependent on several factors, including applicant quality, number of current MS students, and number of current PhD students (i.e., Oral Sciences PhD, but with Dental Public Health faculty mentoring). We are extremely fortunate to have 10 faculty with varied, complementary expertise involved with graduate program teaching and research mentoring, along with strong departmental and collegiate support.

There are no national rankings for Dental Public Health, but we are considered among the very best programs. For example, the U.S. Army began sending all their Dental Public Health trainees to us 4 years ago, have expressed strong satisfaction, and plan to continue to do so. Ours is one of the largest Dental Public Health programs; most have one student per year, and the one larger program (Boston University) accepts 5 students per year who are typically all Saudi nationals. Also, our success in obtaining training grant support 7 of the past 9 years (and for the next 3 years) allows us to be very competitive in recruiting excellent students.

We have strong working relationships with the College of Public Health (for students to take several courses in general public health and in collaborative research) and Oral Sciences (to allow students to go on to the PhD). However, more formal reorganization does not appear to provide substantial advantages at this time. In fact, such an effort might jeopardize our accreditation status (occurring in 2011 and every 7 years thereafter).

Our current strengths are primarily our momentum and long-standing tradition of excellence, strong institutional support, remarkable faculty who work well together, diverse, motivated, hard-working students, and a relatively high publication rate for student research projects. Perceived weaknesses are the relatively small number of U.S. applicants and the lack of guaranteed funding available to trainees.

Conclusions
Our program continues to be strong, successful, and an international leader in Dental Public Health training. We have an excellent, interdisciplinary, diverse faculty; strong institutional support; strong relationships with the College of Public Health and Oral Sciences (PhD) program; talented, highly motivated, hard-working students; and successful career outcomes, including placement of our graduates in dental academic positions. We are proud of our accomplishments over the past 34 years and are very excited about the future of our program.