



CASE

SCHOOL OF DENTAL MEDICINE

School of Dental Medicine

Case Western Reserve University
10900 Euclid Avenue
Cleveland, Ohio 44106-4905

Phone 216-368-3200

Fax 216-368-3204

www.case.edu

April 4, 2011

Pamela B. Davis, M.D., Ph.D.
Dean, School of Medicine
Case Western Reserve University
10900 Euclid Avenue
Cleveland, OH 44106

Dear Dean Davis: *Pan*

I wholeheartedly support the proposal for the combined degree program in dental medicine public health (DMD/MPH) at Case Western Reserve University. There is an urgent need for public health training programs, both nationally and locally; there are less than five such combined degree programs in the country. At the local level, 11 of the 60 underserved areas in Ohio are situated in Cuyahoga County. Populations living in underserved areas would tremendously benefit from appropriate oral health promotion programs as well as improved access to dental care. Public health dentists play an important role in administering these programs.

The combined degree program will enhance the mission of the Case School of Dental Medicine, "contributing new knowledge through research and scholarly pursuits". I also endorse the program's efforts to have the capstone experience at local public health agencies including community health centers. Since graduates of the program will most probably be working in public health settings, this capstone experience provide an excellent opportunity to address some of the oral health problems among vulnerable groups through both patient care, research and oral health promotion activities. The program will also complement the existing Healthy Smiles Sealant Program in which first-year dental students place pit-and-fissure sealants on the teeth of needy children in Cleveland Metropolitan School District, thereby improving access to dental care.

I commend the efforts to develop and implement the combined degree program in dental medicine and public health at the Case School of Dental Medicine, and I would like to reiterate my support and commitment to the program. If you have any questions about my support to the program, please feel free to contact me.

Sincerely,

Jerold S. Goldberg, DDS



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April 4, 2012

Gary S. Chottiner, PhD
President, Faculty Senate
Case Western Reserve University
10900 Euclid Avenue
Cleveland, OH 44106

Dear Dr. Chottiner:

I am writing to confirm that the DMD/MPH proposal was unanimously approved by the faculty of the School of Dental Medicine at its regular meeting on April 19, 2010. Prior to the approval by faculty at large, the proposal was also endorsed by the Dental Education Committee and the Graduate Studies Committee of the school. Due to the relatively smaller number of faculty at the school, we do not have a formal Faculty Council.

As stated in my letter dated April 4, 2011, to Dean Pamela Davis, the School of Dental Medicine and I most enthusiastically support this program because it enhances our mission "contributing new knowledge through scholarly pursuits". The DMD/MPH proposal received a five-year grant totaling nearly 1.3 million from the Health Resources and Services Administration (HRSA). The support includes stipend, tuition, and travel for the dual degree students. I believe DMD/MPH is one of the few dual degree programs with external funding.

I thank the Faculty Senate's consideration of this dual degree proposal which has the unwavering support of the faculty and administration of the School of Dental Medicine. Should you have any questions or need additional information, please feel free to contact me.

Sincerely

A handwritten signature in black ink, appearing to read "Jerold S. Goldberg".

Jerold S. Goldberg, DDS
Dean

Memorandum

Pamela B. Davis, M.D., Ph.D.
Dean
Vice President for Medical Affairs
Office of the Dean

10900 Euclid Avenue
Cleveland, Ohio 44106-4915

Visitors and Deliveries
Biomedical Research Bldg - Rm 113

Phone 216.368.2825

Fax 216.368.2820

<http://casemed.edu>

To: Pamela B. Davis, M.D., Ph.D.
Dean, School of Medicine

From: Jill Barnholtz-Sloan, Ph.D.
Chair, Faculty Council 2011-2012



Date: January 24, 2012

Re: Proposal for the Dual Degree Program in Dental Medicine and Public Health
(DMD/MPH)

At its meeting on January 23, 2012, Faculty Council reviewed the proposal for the Dual Degree Program in Dental Medicine and Public Health (DMD/MPH).

The dual degree program in Dentistry and Public Health at CWRU seeks to impart content and skills necessary to expand the practice of dentistry into the community in a proactive way that fosters improved oral health, and as a direct result, yields improved overall health of the populations involved. Traditionally, the field of dentistry has approached the oral health of individuals in the context of the one-on-one doctor-patient relationship. We anticipate that participation in the dual degree program will enhance preventive dentistry skills in the office setting, but most importantly, focus on improving the health of populations through community intervention.

The need for public health dentists has increased recently because of the decline in the number of dental graduates and an increase in the number of dental health professional shortage areas (DHPSA). The number of dental graduates has decreased from 6300 to 4700 between 1977 and 2008. During the last decade the number annually has increased from 1275 to 2000 and the population impacted by this trend increased from 28 to 48 million.

Faculty Council concluded the Dual Degree Program in Dental Medicine and Public Health an interesting and exciting opportunity for collaboration between programs. By a vote of 33 in favor; 0 against, 0 abstain, the proposal was recommended for approval.

Please review the proposal and add any additional comments; then forward to the University Faculty Senate for its review and recommendation.

Thank you.



SCHOOL OF MEDICINE

CASE WESTERN RESERVE
UNIVERSITY

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Vice President for Medical Affairs
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Memorandum

To: Gary Chottiner, Ph.D.
Chair, Faculty Senate

From: Pamela B. Davis, M.D., Ph.D.
Dean, School of Medicine



Date: January 25, 2012

Re: Proposal for the Dual Degree Program in Dental Medicine and Public Health
(DMD/MPH)

Enclosed please find a proposal for a new Dual Degree Program in Dental Medicine and Public Health to award the DMD and MPH degrees. The program has been recommended for approval by the Faculty Council of the School of Medicine, acting under our Bylaws for the Faculty of Medicine, and has my enthusiastic endorsement.

I understand that the process for further review includes oversight by the Faculty Senate's Graduate Studies Committee and the Faculty Senate as a whole. Please let me know if I can provide any additional information.

Thank you for your consideration.

C: (all w/o enclosures): Jill Barnholtz-Sloan, Ph.D.
Scott Frank, Ph.D.
Sena Narendran, BDS, MPH



SCHOOL OF MEDICINE

CASE WESTERN RESERVE
UNIVERSITY

**Proposal for the Dual Degree Program in
Dental Medicine and Public Health
(DMD/MPH)**

***Scott Frank
Sena Narendran***

October 25, 2011

Background:

The Case School of Dental Medicine (CSDM) offers a rigorous 4-year degree resulting in graduates who are competent to practice dentistry. In addition, Case Western Reserve University (CWRU) offers a master's degree in public health (MPH), which is administered by the School of Graduate Studies and is housed in the School of Medicine (SOM); completion of the MPH degree requires 42 credit hours. CWRU also offers numerous joint degree programs such as MD/MPH, JD/MPH, MD/PhD; including 6 current dual degrees with the MPH (medicine, nursing, anthropology, business, law, bioethics). Most of the constituent schools at CWRU offer dual-degrees in affiliation with the MPH program. Dental public health is one of the nine recognized specialties of the American Dental Association. The dental curriculum lends itself to a dual degree with public health as evidenced by the CSDM's existing community-oriented programs: the Dental Sealant Program and other similar cornerstone experiences.

Justification:

CSDM maintains a strong philosophical and strategic commitment to improving the oral health of the community. Affiliation with the MPH Program would provide a curricular framework in which to realize that commitment on behalf of the dental students who elect to pursue a dual DMD/MPH degree. The dual degree program in Dentistry and Public Health at CWRU seeks to impart content and skills necessary to expand the practice of dentistry into the community in a proactive way that fosters improved oral health, and as a direct result, yields improved overall health of the populations involved. Traditionally, the field of dentistry has approached the oral health of individuals in the context of the one-on-one doctor-patient relationship. We anticipate that participation in the dual degree program will enhance preventive dentistry skills in the office setting, but most importantly, focus on improving the health of populations through community intervention. Oral health necessarily involves facilitation of preventive behaviors through purposeful efforts to influence lifestyle of patients and populations. Since wellness is based largely on individual lifestyle choices; and since the health care delivery system is focusing more on collaborative self-management populations; and since prevention is becoming an increasingly compelling imperative; it is clear that dentistry and public health are inexorably linked. Dental practice provides the path to public health needs, and public health provides solutions to those needs identified through the practice of dentistry. It is necessary to address populations to improve the health of individuals and to work with individuals to improve the health of populations. Dentistry and public health are interdependent, reliant on each other in order to achieve their mutual goals.

The need for public health dentists has increased recently because of the decline in the number of dental graduates and an increase in the number of dental health professional shortage areas (DHPSA). The number of dental graduates has decreased from 6300 to 4700 between 1977 and 2008. During the last decade the number of DHPSAs has increased from 1275 to 2000 and the population impacted by this trend increased from 28 to 48 million. At the state level, 11 of the 60 dental HPSAs in Ohio are in Cuyahoga County. With the passage of health care reform, a tremendous need for primary dental care training (general, pediatric, and public health dentistry) exists. HRSA reiterated this need by issuing two request for proposals (RFP) in April 2010; for post- and pre-doctoral training in dental public health. CSDM is now the recipient of both

funding sources (see “New Resources” below). The proposed dual degree program will be under the auspices of the pre-doctoral training. Partnership between CSDM and the MPH program in post-doctoral training furthers the critical mass of public health/dental medicine students and the opportunities for collaboration between programs.

Program Objectives:

- To enhance public health/dental student capacity to address health needs of the individual and of populations
- To enhance public health/dental student skill in health promotion and disease prevention through detailed understanding of health behavior and health communication principles
- To increase the ability of the public health/dental students to apply epidemiological and biostatistical precepts to dental populations
- To expand the public health/dental student knowledge base to include public health practice, community assessment and intervention in addition to individual diagnosis and treatment
- To expand public health/dental student understanding of health care systems and the role of the dentist in the equitable provision of dental services; health policy; health advocacy; and health administration

We envisage the combined DMD/MPH program will be five years in duration, and completion of the MPH part of the program will require 42 credit hours¹ that will include:

- | | |
|--|-----------|
| • Core courses | 18 hours* |
| • MPH Major Courses (9 credits required): | |
| ○ Outreach Preventive Dentistry: A Cornerstone Experience (ACE) ² | 6 hours |
| ○ MPHP approved Health Promotion, Disease Prevention Course | 3 hours |
| • MPH Seminars | 0 hours* |
| • Others/electives | 6 hours* |
| ○ Health, Science, and Society Module (HSS) ³ | 3 hours |
| ○ MPHP elective | 3 hours |
| • Capstone Experience/Project | 9 hours |

¹A total of 9 School of Dental Medicine credit hours will count toward the course requirements of the MPH degree.

²Cross counted course from School of Dental Medicine approved to count toward the MPH Major in Health Promotion and Disease Prevention.

³Cross counted course from School of Dental Medicine approved to count as an MPH elective, but not toward the MPH Major in Health Promotion and Disease Prevention.

As a routine, the DMD/MPH students will be entered into the Health Promotion Disease Prevention Major of the MPH program, with Outreach Preventive Dentistry an approved course for this major, leaving an additional 3 credits required for completion of the HPDP major. The Dental Medicine Course Health, Science, and Society will be accepted as an MPH program elective, leaving an additional 3 hours of elective time. Because the Outreach Preventive Dentistry (6 credit hours) course is only approved for the Health Promotion Disease Prevention Major, DMD/MPH students choosing a major other than Health Promotion and Disease

prevention (Population Health Research, Global Health, or Health Policy) are likely to need additional credit hours beyond the required 42 hours to complete Major requirements.

The CWRU Capstone Experience is “a public health field practicum that places students in health related settings to work on projects of mutual interest to the agency and student. The experience gives students the opportunity to apply the knowledge and skills acquired through academic course work to a problem involving the health of the community.” Thus, a dental student in the DMD/MPH program will be required to complete 24* hours of core and elective courses of the MPH program (i.e., the courses indicated by the * in the chart above), in addition to the ACE, HSS, and the capstone project. Please see the attached syllabus for the Outreach Preventive Dentistry (MAHE 145), which is A Cornerstone Experience (ACE) for the first year dental students at the Case School of Dental Medicine. The syllabus for Health, Science and Society module (LDRS 111) is also attached. The requirement, 24 hours, can be completed in two semesters (referred to as the MPH dedicated year) based on the attainable graduate school course load of 12-15 hours per semester. These 24 didactic hours can be completed through any one of the following models during the five year period:

- MPH dedicated learning during year 1 (before initiating the DMD) program followed by the standard DMD program (Model 1).
- Between Year 2 and 3 of the five-year program, i.e. after completing the second year of the DMD program (Model 2).

The preferred approach is Model 1 with Model 2 included to add flexibility to the combined degree program and also to accommodate students who become interested in public health after entering the CSDM. Model 1 is preferred because of the high level of need to develop, practice, and maintain manual dexterity skills inherent to the practice of dental medicine. An uninterrupted approach to skill development provides a natural advantage to learners. Students electing DMD/MPH program Model 1 will complete a major portion of the Capstone Project during the summer between the first and second of the five-year program. Any remaining capstone activities can be completed during the rest of the DMD program.

Students adopting DMD/MPH program Model 2 will complete a part of the capstone project during the summer between the second and third year of the five-year program. The remainder of the Capstone Project can be completed during the following two years of the DMD program. Model 2 is similar to existing programs such as the MD/MPH and DMD/MS. The latter is a combined degree program in dental medicine and clinical research. The MD/MPH program has been in place for many years with a long tradition of success.

Tuition:

Of the five years that students would be enrolled in the dual DMD/MPH Program, one year will be devoted exclusively to the MPH coursework (24 credit hours), and four years will be dedicated exclusively to DMD clinical study and coursework. We agree that the simplest approach to tuition management for the normal scenario for a dual DMD/MPH degree student will be as follows:

During the MPH dedicated year, (usually the first year of the five year sequence), students will register and pay tuition through the School of Graduate Studies at the rate set by Case Western Reserve University. Tuition revenue for the dedicated MPH year will return to the Department of Epidemiology & Biostatistics through the normal mechanisms. If the MPH-dedicated year occurs during the student's third overall year in the dual degree program, and the student is home-based in the DMD program, current university policy would require the student to take a leave of absence from the DMD program in order to register and be billed at the School of Graduate Studies tuition rate. This policy states that a student may not be simultaneously enrolled in two schools (professional school plus graduate school). The leave of absence approach is used presently with other professional schools in order to complete dual degrees. During the other four years of study, students will register and pay tuition through the School of Dental Medicine at the school's going rate. Through the existing mechanisms, the tuition for those four years will return to the School of Dental Medicine through the normal mechanisms.

Mentoring and Academic Advising:

CSDM: The Department of Community Dentistry has six full-time faculty members, two of them (Drs. Lalumandier and Narendran) are Diplomates of the American Board for Dental Public Health, two others are epidemiologists (Drs. Demko and Nelson), one member has an MPH degree (Dr. Williams), and another has expertise in behavioral sciences. Dr. Narendran, co-director of the DMD/MPH program will have the primary responsibility of mentoring the dental students in the program. Dr. Narendran has excellent mentoring skills that are apparent from the list of awards won by dental students from Case Western Reserve University during the last four years or so (Appendix C). He has a similar track record at the previous institutions he has worked. We will constitute an advisory committee for each dental student enrolled in the DMD/MPH program and the committee will include at least one faculty member from the Department of Epidemiology and Biostatistics or from another school on campus. In addition to the aforementioned faculty members in the Department of Community Dentistry, two other faculty members at the School of Dental Medicine have MPH degrees: Drs. Gerald Ferretti and Lance Vernon. If needed, each may serve as members of the advisory committee of the DMD/MPH program. The advisory committee for a DMD/MPH program student may also serve as his/her Capstone Committee during the experience.

MPH: The MPH program has a system for academic advising that includes assignment of two advisors upon entering the program, allowing the student to choose their preference. The MPH Program Director will be one of the two academic advisors offered to DMD/MPH students. Other advisors can be selected from among core faculty and coordinators of the MPH Majors.

Applicant Pool:

Students for the combined DMD/MPH program will be selected from the applicant pool of the CSDM, which is approximately 3000 per year. While the number of dental graduates has declined, the number of applicants per school has not. For the application cycle, 2010-11, CSDM received 2843 applications. The anticipated enrollment for the DMD/MPH program is two dental students per year.

Admission Protocol:

Applicants to the DMD/MPH program must fulfill the requirements for both the DMD (see <http://dental.case.edu/dmd/>) and MPH programs (see <http://mph.case.edu/admissions.html>). Separate applications must be submitted to the School of Medicine for DMD degree and to the Graduate School for the MPH degree. Applicants must be accepted by both the programs to be enrolled in the dual degree. Admission to the DMD program does not entail automatic admission to the MPH program and vice versa. The admission process will occur independently within each program, with a letter of support from CSDM required for any applicant to the CWRU MPH program. Selected faculty members from the MPH program and the School of Dental Medicine will review final admissions decisions for the DMD/MPH program.

Capstone Experience:

Students in the DMD/MPH program will complete their capstone projects in any of the local public health agencies, and will be particularly encouraged to consider community health centers offering dental health services.. The capstone for the DMD/MPH student will hold the same requirements as for MPH students and students in other dual degree programs. The Capstone Experience is the centerpiece of the CWRU MPH Program. A Public Health field practicum required of all MPH students, this 9-credit course places students in health related settings to work on projects of mutual interest to the agency or organization and the student. The experience gives students the opportunity to apply the knowledge and skills they have acquired through their academic course work to a problem involving the health of the community. Students learn to communicate with target groups in an effective manner, to order priorities for major projects according to definable criteria, to use computers for specific applications relevant to public health, to identify ethical, social, and cultural issues relating to public health policies, research and interventions, to identify the process by which decisions are made within the organization or agency, and to identify and coordinate the use of resources at the site.

All DMD/MPH students will designate a Capstone Committee consisting of at least 3 members. Their Capstone Committee must include at least one member of the CSDM faculty and one member of the CWRU MPH program faculty; with the third member generally from the Capstone site where the project is conducted.

The outcomes of the capstone experience for the DMD/MPH program will include an oral presentation and a written report. Both products will be evaluated by the student's Capstone Committee. Similar to the first year dental student summer research projects, we will require the DMD/MPH program students to present their capstone experience at a national meeting and at the School of Dental Medicine Professional Day. DMD/MPH students will also be required to present their project at the MPH Population health innovations Conference, offered at the end of fall and spring semesters. We will also encourage the students to submit a manuscript for publication in a peer-reviewed journal.

New Resources:

During July 2011, Health Resources and Services Administration (HRSA) awarded a five-year grant totaling \$1,281,653.00 to the Case School of Dental Medicine (CSDM) for Pre-doctoral training in Dental Public Health. Dr. Sena Narendran, co-author of this DMD/MPH program proposal, is the principal investigator of this grant. The grant will pay stipend, tuition, and travel expenses for one DMD/MPH student in the first year and two students per year during the subsequent four years of the grant. The grant also includes partial faculty and administrative support to the program. CSDM also received yet another 5-year grant of \$1,294,564.00 for post-doctoral training in dental public health with Dr. Narendran as the principal investigator. The second grant will pay stipend, tuition, and travel expenses for dental public health residents along with partial faculty and administrative support. Thus during the last month CSDM received two training grants for dental public health totaling to nearly 2.6 million dollars.

Sample Template for Course Schedule for DMD/MPH, Model 1

<u>Course Name (*indicates core)</u>	<u>Credits</u>	<u>Course #</u>
<u>Year 1, fall</u>		
*Statistical Methods in Public Health	3	MPHP 405
*History & Philosophy of Public Health	3	MPHP 406
*Epidemiology: Introduction to Theory & Methods	3	MPHP 490
Health Disparities	3	MPHP 510
*Future of Public Health	0	MPHP 506
Total Credits	12	
<u>Year 1, spring</u>		
*Introduction to Health Behavior	3	MPHP 411
*Epidemiology of Environmental Health	3	MPHP 429
*Health Management & Policy	3	MPHP 439
Community Interventions & Program Evaluation	3	MPHP 433
*Building a Public Health Capstone	0	MPHP 507
Total Credits	12	
<u>Year 1, summer</u>		
*Capstone Experience	3-6	MPHP 652
<u>Year 2, fall</u>		
First Year DMD Curriculum		
Sealant ACE	6	MAHE 145
Health Science & Society	3	LDRS 111
<u>Year 2, spring</u>		

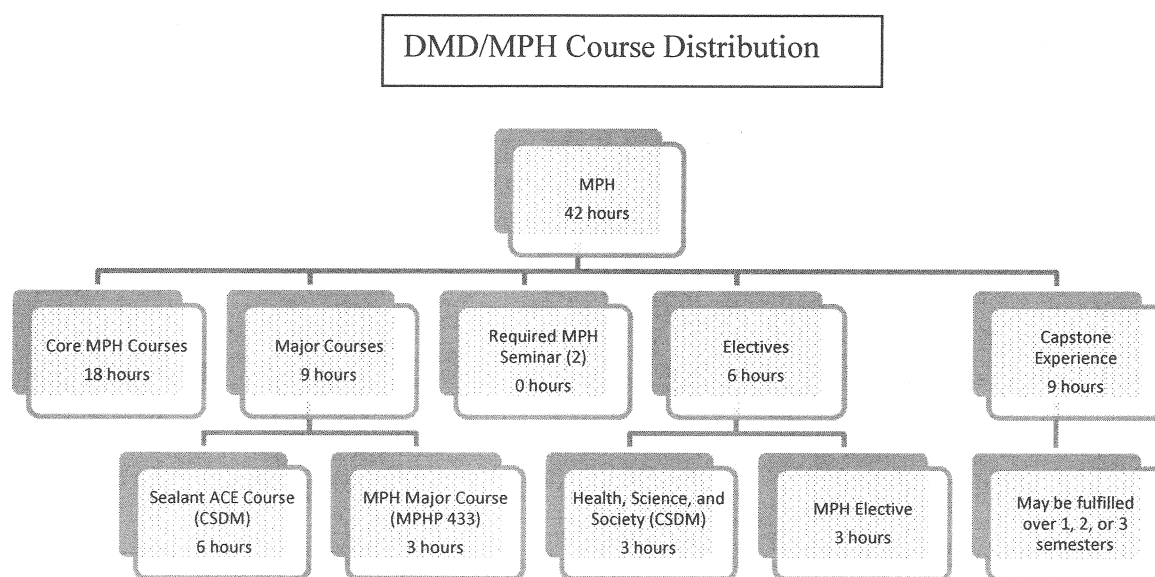
First Year DMD Curriculum

Year 2, summer

*Capstone Experience **3-6** MPHP 652

Years 3-5: Regular DMD Curriculum of years 2-4

*Capstone Experience **3-6** MPHP 652



Sample Template for Course Schedule for DMD/MPH, Model 2

Course Name (*indicates core)	Credits	Course #
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Year 1, fall

First Year DMD Curriculum

Sealant ACE	6	MAHE 145
Health Science & Society	3	LRDS 111

Year 1, spring

First Year DMD Curriculum

Years 2: Second Year DMD Curriculum

Year 3, fall

*Statistical Methods in Public Health	3	MPHP 405
*History & Philosophy of Public Health	3	MPHP 406
*Epidemiology: Introduction to Theory & Methods	3	MPHP 490
Health Disparities	3	MPHP 510
*Future of Public Health	0	MPHP 506
Total Credits	12	

Year 3, spring

*Introduction to Health Behavior	3	MPHP 411
*Epidemiology of Environmental Health	3	MPHP 429
*Health Management & Policy	3	MPHP 439
Community Interventions & Program Evaluation	3	MPHP433
*Building a Public Health Capstone	0	MPHP 507
Total Credits	12	

Year 3, summer

*Capstone Experience	3-6	MPHP 652
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Years 4-5

Regular DMD curriculum: years 2-4

*Capstone Experience	3-6 Credits/year	MPHP 652
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**CASE WESTERN RESERVE UNIVERSITY
SCHOOL OF DENTAL MEDICINE
Fall 2010**

COURSE TITLES:	Health, Science, & Society
COURSE NUMBERS:	LDRS 111
DEPARTMENT:	Community Dentistry
SEQUENCE YEAR:	First
CLOCK HOURS:	
LDRS 111 (Didactic)	40
DIRECTOR:	Dr. Catherine Demko, PhD
Supplemental Faculty	Dr. James Lalumandier, DDS, MPH
OFFICE and CONTACT INFO	Room 217, 216-368-8804 catherine.demko@case.edu

COURSE DESCRIPTION:

This 3 week intensive sequence concerning health and society will provide a frame for the student to view his or her professional education based on the mission of the profession: "to protect and improve the oral health of individuals and the society." This three week sequence provides the first experience with the problem-based learning format and further provides the content foundation in epidemiology and skills for evidence-based dentistry.

COURSE GOALS:

The overall goal of the program is to provide information and orientation concerning the role of health, oral health, and the dentist in the maintenance and improvement of health of individuals and the society. Learning is organized around (1) four public health paradigms, (2) the health field theory of LaLonde, (3) epidemiological principles in clinical and population-based health, and (4) basic ethical principles of professional care. The problem-based cases will illustrate the four paradigms and the elements of the health field theory. They will also require the discussion of ethical principles and further demonstrate the application of the epidemiological principles taught in the lecture portion of the course. The topics in the small group PBL sessions will be reinforced with full-class presentations by guest experts using various formats (interviews, question and answer sessions, debates). Students will be expected to prepare reflection papers or complete class assignments from PBL cases as assigned.

General COURSE OBJECTIVES: By the end of this course, the student will:

1. Identify the role of dentistry in society and public health.
2. Define four basic principles of professional ethics.
3. Define barriers to access to health care.
4. Identify and describe the mechanism of action of fluoride and state the optimal fluoride intake.
5. Understand and apply a multi-factorial approach to dental caries.
6. Define the objectives of the epidemiologic method.
7. Apply epidemiological measures of incidence, prevalence and rates to systemic and dental morbidity; mortality.
8. Describe the epidemiology of oral disease by demographics and risk factors.
9. Distinguish association from causality.
10. Define reliability and validity in study design and study measures.
11. Define and recognize types and sources of bias and confounding in study measures.
12. Define and compute the sensitivity and specificity of a diagnostic test.
13. Understand the meaning of a confidence interval around a point estimate.
14. Define the relationship between sample size, confidence intervals and effect size.
15. Distinguish clinical from statistical significance.
16. Define the principles of Evidence-Based Dentistry (EBD).
17. Build a searchable clinical question using the PICO technique.
18. Examine the levels of evidence for EBD; perform the steps to critically appraise a journal article.
19. Explain how epidemiological evidence identified risk factors for an oral disease.
20. Understand the distribution and determinants of risk factors in a population.

Learning Objectives for the Problem-based cases are not included here, as they are part of the learning process in the PBL sessions and will be released on Fridays.

PREREQUISITE: None

FORMAT: Lecture & Problem Based Learning.

OUTCOME ASSESSMENT:

The students

1. must attain the minimum competency of 70% on all didactic summative (final) examinations.
must attain a minimum of 65% on formative quizzes/assignments prior to taking the didactic summative examination
2. must attain the minimum competency of 70% on the Fresno Competency Exam.

GRADE SCALE:

Didactic ≥ 70 = Pass < 70 FAIL

- Grade adjustments will be made to a test if there was an error in calculation or in cases where the incorrect answer(s) were keyed.
- Discussions of test items with faculty are always encouraged; grade changes to Summative Evaluations will be made only if accompanied by written (word processor) description of rationale and reference (not just citation). This must be submitted within 1 week of the returned examination. No more than 3 test items will be reviewed.

COURSE REQUIREMENTS:

Students are required to take tests and exams (formative and summative) on the days indicated in the syllabus. In accordance with school policy, absences are:

1. Excused – in case of illness documentation from the treating physician must be presented. A new test will be administered. Format and time will be at the discretion of the faculty.
2. Unexcused – when a student fails to give notification of an absence which can be predicted to be absolutely unavoidable, or fails to present an appropriate excuse. In most cases, an unexcused absence would result in a zero score for the particular test.

REMEDICATION:

Fall Semester: Should a student earn a failing grade, he/she may have an opportunity to remediate and retest after Thanksgiving Break. This will occur ONLY after the Student Promotions Committee has met and made a recommendation for Remediation.

If a student does not pass the remediation – s/he must repeat the course. The students must complete all aspects of Remediation Course, and score at least a 70% on the remediation test.

ATTENDANCE POLICY:

Attendance in class is expected. Failure to attend class with subsequent failure of the exams does not warrant remediation. In accordance with school policy, students who habitually fail to attend class will be denied tutoring through CWRU School of Dental Medicine.

Required TEXTS:

Texts included in VitalSource digital library.

Gordis, L. Epidemiology. Third Edition. 2004. Elsevier Sanders

Jekel JF, Katz DL, Elmore JG and Wild DMG. Epidemiology, Biostatistics, and Preventive Medicine. Third Edition. 2007. Elsevier Sanders

Hackshaw A, Paul E, and Davenport E. Evidence-Based Dentistry: An Introduction. First Edition, 2006. Blackwell Munksgaard.

Health, Science, & Society
SCHEDULE 1st SEMESTER (Fall 2010)

DATE	LECTURE/PBL
Session 1 Mon. Aug. 9	8 – 9 am Administration of the HSRT 9 - 10am Introduction to Health, Science and Society: Public and Population Health (1 hour) Instructor: Dr. Demko
Session 2 Mon. Aug. 9	10-12 pm PBL: Fluoridation
Session 3 Tues. Aug. 10	8 – 10 am Guest Lecture
Session 4 Weds. Aug. 11	8-10am PBL: Fluoridation
Session 5 Thurs. Aug. 12	10-12 Fundamentals of Epidemiology: Incidence and Prevalence (1 hr) Oral Health Epidemiology (1hr)
Session 6 Fri. Aug. 13	10am -12pm PBL Fluoridation
Session 7 Fri. Aug. 13	1-3 pm Observational Studies: Design Issues (1 hr) Observational Studies: Analysis (1 hr)
Session 8 Mon. Aug. 16	8-10 am (2 hour) PBL: "It's Just a Tooth"
Session 9 Mon. Aug. 16	10-12 pm Examining Associations (1hr) Statistical Literacy (1hr)
Session 10 Tues. Aug. 17	8-10 am Experimental Studies: Design Issues (1hr) Experimental Studies: Analysis (1hr)
Session 11 Wed. Aug.18	8-10 am PBL: "It's Just a Tooth"
Session 12 Thursday. Aug.19	10-12 am Detecting Disease: Screening and Diagnostics (1hr) Systematic Reviews (1hr)
Session 13 Fri. Aug.20	10 am-12 pm PBL: "It's Just a Tooth"
Session 14 Fri. Aug.20	1-3 pm (2 hour) Guest Lecture

Session 15 Mon. Aug.23	10-12 pm (2 hour) PBL: Where's Spot: An Oral Cancer Case
Session 16 Tues. Aug.24	8am -10 am Critical Appraisal of the Literature (1hr) Evidence-based Dentistry (1hr)
Session 17 Wed. Aug. 25	8am – 10 am PBL: Where's Spot: An Oral Cancer Case
Session 18 Thurs. Aug. 26	10am -12pm Review
Session 19 Fri., Aug. 27	10 am–12 pm (2 hour) PBL: Where's Spot: An Oral Cancer Case
Session 20 Wed., Sept 1.	FINAL EXAM (3 hrs: 3-6 pm)

**CASE WESTERN RESERVE UNIVERSITY
SCHOOL OF DENTAL MEDICINE
Fall 2010**

COURSE TITLES: Outreach Preventive Dentistry Course
COURSE NUMBERS: MAHE 145
DEPARTMENT: Community Dentistry
SEQUENCE YEAR: Freshman
CLOCK HOURS: 62
 (Didactic, Lab & Clinical)
OUTREACH CLINIC HOURS: 100

DIRECTOR: Kristin Williams, DDS, MPH

SUPPORTING INSTRUCTIONAL STAFF: James Lalumandier, DDS, MPH

OFFICE and CONTACT INFO 2nd floor , 216 368 2392
kaw14@case.edu

COURSE DESCRIPTION:

The didactic portion of the course provides generalized background and current tools needed to enable students to provide dental sealants and other preventive procedures for children in the Cleveland Metropolitan School District (CMSD).

COURSE GOALS:

1. The student will develop an understanding of ergonomics, chair positioning and dental assisting.
2. The student will develop the skills necessary for applying fluoride varnish and fabricating mouth guards.
3. The student will develop the skills necessary for the delivery of dental sealants to the students of CMSD.
4. The students will acquire a fundamental knowledge of the conditions, medications found within the CMSD students and the student will be prepared to identify risk factors associated with common medical emergencies.
5. The student will acquire a fundamental knowledge of the epidemiology and mechanism of dental disease found in children.
6. The student will develop skills necessary for prevention practices and behavior management in children.
7. The student will develop a fundamental knowledge and develop necessary skills to practice correct infection control procedures in an outreach setting.
8. The student will develop skills to set-up, break-down and work with portable

equipment in an outreach dental setting.

9. The student will develop the skills necessary to treat patients in a multi-cultural setting understanding the impact and responsibility of the dental professional and the role of public health dentistry in our society.

COURSE OBJECTIVES:

By the end of this course, the student will:

1. Describe ergonomically correct chair positioning, aspiration and retraction techniques. (D4)
2. Prepare and place dental sealants to the occlusal surfaces of permanent molar teeth in children.(M2)
3. Identify non-carious, permanent molars in children which are a candidate for dental sealants. (H3)
4. Identify and describe potential medical emergencies and common medications taken by children. (M6)
5. Fabricate custom mouth guards using molds of their own mouth. (L4)
6. Identify proper technique and placement of fluoride varnish. (L6)
7. Describe the importance of preventing dental injuries.(L10)
8. Describe and reproduce correct infection control procedures in an outreach setting.(L1)
9. Describe and implement the ethical responsibilities of a dental practitioner in treating a diverse population. (L3)
10. Describe the epidemiology and mechanism of dental disease and prevention practices for children. (H2)

Reviewed and revised 7-14-2008

CORE CWRU COMPETENCIES:

This course provides didactic instruction that is designed to furnish foundation knowledge that is necessary for the development of a number of CWRU School of Dental Medicine Competencies. The successful completion of this course contributes to the development of the following competencies:

- H.2 Apply appropriate interpersonal and communication skills (*CODA 2-17*)
- H.3 Apply preventive strategies for patients based on their oral health status and risk factors (*CODA 2-25c*)
- H.4 Apply biological, clinical, and behavioral principles in patient-centered oral health care. (*CODA 2-16*)
- M.1 Recognize the principles involved in community interventions to improve oral health and general health, and participate in clinical experiences in oral health improvement (*CODA 2-25c*)
- M.4 Demonstrate knowledge of common drugs used in dental and medical situations related to the practice of dentistry (*CODA 2-25e*)

- D.4 Assess the treatment needs of special care patients (CODA 2-26)
- L.1 Participate in the delivery of oral health care for the individual and for groups (CODA 2-18)
- L.3 Apply the principles of ethical reasoning and professional responsibility as they pertain to patient care and practice management (CODA 2-21)
- L.4 Recognize the limits of their expertise through self-evaluation (CODA 2-22)
- L.6 Manage patient information (CODA 5-8)
- L.10 Manage a diverse patient population and display the interpersonal skills to communicate and function in a multi-cultural work environment (CODA 2-17)

PREREQUISITE: None

FORMAT: Lecture, Laboratory, Clinical, and Outreach Experience.

OUTCOME ASSESSMENT:

The students

1. Must attain the minimum competency of 70% on all didactic summative examinations.
2. Will attend all lecture, lab and clinical sessions as scheduled for their group.
3. Will successfully complete and pass the cultural competence reflection paper. A detailed description of the assignment will be distributed in class.

GRADE SCALE:

Didactic and Lab* >70 = Pass < 70 FAIL

COURSE REQUIREMENTS:

Students are required to take ALL tests and exams (formative and summative) on the days indicated in the syllabus. In accordance with school policy, absences are:

3. Excused – must be documented with student affairs. A new test will be administered. Format and time will be at the discretion of the faculty.
2. Unexcused – when a student fails to give notification of an absence which can be predicted to be absolutely unavoidable, or fails to present an appropriate excuse. In most cases, an unexcused absence would result in a zero score for the particular test.

Outreach Experience. Any absence from outreach clinical experiences must be approved by your group faculty and course director.

COURSE DEFICIENCY POLICY:

Professional behavior is part of the grade. Laboratory & Clinical: All students must complete an approved sealant in both clinic and lab. The student will repeat the procedure until they are deemed competent in sealant placement. Students must submit all projects when due. More than one late project will result in failure (and remediation) in laboratory portion of the course.

REMEDICATION:

Fall Semester: Should a student earn a failing grade, he/she may have an opportunity to remediate and retest after Thanksgiving Break. This will occur **ONLY** after the Student Promotions Committee has met and made a recommendation for Remediation.

If a student does not pass the remediation – s/he must repeat the course. The students must complete all aspects of Remediation Course, and score at least a 70% on the remediation test.

ATTENDANCE POLICY:

Attendance in class is expected. Failure to attend class with subsequent failure of the exams does not warrant remediation. In accordance with school policy, students who habitually fail to attend class will be denied tutoring through CWRU School of Dental Medicine.

Required TEXTS:

Online Vital source Library.

Jong's Community Dental Health, 5th Edition

Dentistry, Dental Practice, and the Community by Brian A. Burt and Stephen A. Eklund.

SCHEDULE FOR MAHE 145 OUTREACH PREVENTIVE DENTISTRY COURSE

(Lecture Room NOA250/290 and Sim Clinic)

<u>DATE</u>	<u>TIME</u>	<u>LECTURER</u>	<u>LECTURE TOPIC</u>	<u>ROOM #s</u>
August 11, 2010 Weds.	1:00–2:00 p.m.	Drs. Lalumandier	Introduction and Sealant Video	NOA250
	2:00– 3:00 p.m.	Drs. Lalumandier and Williams	Introduction of Dental Sealant Faculty and Staff	NOA250
		Angela Harris & Lisa Jevack	Health Educator (2 nd , 3 rd , and 6 th Graders)	
		Sherry Norman	Health Educator (Pre-K, K and 1 st Graders) Referral Coordinator	
August 13, 2010 Fri.	3:00 p.m. – 5:00 p.m.	Dr. Williams	Ergonomics	NOA250
	3:00 p.m. – 5:00 p.m.	Dr. Ferretti	Epidemiology and Mechanisms of Dental Disease and Prevention	NOA250
			Practices for Children and Fluoride Varnish Technique	
August 18, 2010 Weds.	1:00 pm – 3:00 pm	Sealant Faculty and Staff Dr. Williams	Alginate Impression (Groups I, II, III)	West Lab
	3:00 p.m. – 5:00 p.m.	Dr. Williams	Demonstration of Dental Assisting	NOA 250
August 20, 2010 Fri.	3:00– 5:00 p.m.	Chandra Drews	Fluoride Varnish Experience (Group I)	Sim Lab
		Sealant Staff	Dental Assisting Experience (Group II)	NOA 250
August 25, 2010 Weds.	1:00 pm – 3:00 pm	Dr. Williams	Acid-Etch Technique in Caries Prevention	NOA250
	3:00 p.m. – 5:00 p.m.	Dr. Faddoul	Pit and Fissure Sealants and Demonstration CPR	NOA250
August 27, 2010 Fri.	1:00 pm – 5:00 pm	Chandra Drews	Fluoride Varnish Experience (Group II)	Sim Lab
		Sealant Staff	Dental Assisting Experience (Group III)	NOA 260
		Dr. Faddoul	CPR Hands-On (Group I)	NOA 290
		Chandra Drews	Fluoride Varnish Experience (Group III)	Sim Lab
		Sealant Staff	Dental Assisting Experience (Group I)	NOA 260
		Dr. Faddoul	CPR Hands-On (Group II)	NOA 290
August 31, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Faddoul	Infection Control	NOA290

September 3, 2010 Fri.	3:00 p.m. – 5:00 p.m.	Dr. Ferretti	Behavior Management with Children	NOA290
September 7, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Narendran	Cariology	NOA 290
September 10, 2010 Fri.	3:00 p.m. – 5:00 p.m.	Dr. Lalumandier Dr. Houston	Sealant LAB Exercise (Group I)	Sim Lab
September 14, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Lalumandier	MIDTERM TEST	Sim Lab & West Lab
September 17, 2010 Fri.	3:00 – 5:00 p.m.	Dr. Lalumandier Dr. Williams	Sealant LAB Exercise (Group II)	Sim Lab
September 21, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Jurevic	Common Medical Conditions & Medications	NOA 290
September 24, 2010 Fri.	3:00– 5:00 p.m.	Dr. Lalumandier Dr. Houston	Sealant LAB Exercise (Group III)	Sim Lab
September 28, 2010 Tues.	1:00– 2:00 p.m.	Dr. Jurevic	Common Medical Conditions & Medications	NOA 290
	2:00– 3:00 p.m.	Dr. Jim Houston	Diagnodent Lecture & Demonstration	NOA 290
October 1, 2010 Fri.	3:00– 5:00 p.m.	Dr. Lalumandier Dr. Williams	Sealant Placement (Group I)	Ortho Clinic
October 5, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Coreno & Dr. Brett	Importance in Preventing Dental Injuries & Lab Demonstration on Custom Mouthguards	NOA 290
October 8, 2010 Fri.	3:00– 5:00 p.m.	Dr. Lalumandier Dr. Houston	Sealant Placement (Group II)	Ortho Clinic
October 12, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Narendran	Public Health	NOA 250
October 15, 2010 Fri.	3:00– 5:00 p.m.	Dr. Lalumandier Dr. Williams	Sealant Placement (Group III)	Ortho Clinic
October 19, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Williams	Cultural Competency	NOA 250
October 22, 2009 Fri.	3:00– 5:00 p.m.	Dr. Lalumandier Dr. Houston	Sealant Placement (Group I)	Ortho Clinic
		Dr. Coreno & Dr. Brett	Mouthguard Fabrication (Group II)	Lab Room 216 (off West lab)
October 26, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Williams	Ethics	NOA 250

October 29, 2010 Fri.	3:00– 5:00 p.m.	Dr. Lalumandier Dr. Williams	Sealant Placement (Group II)	Ortho Clinic
		Dr. Coreno & Dr. Brett	Mouthguard Fabrication (Group III)	Lab Room 216 (off West Lab)
November 2, 2010 Tues.	1:00 pm – 3:00 pm	Greg Jagger	Portable Equipment Set-Up Procedures (Group I, II, III)	NOA 250
November 5, 2010 Fri.	3:00– 5:00 p.m.	Dr. Lalumandier Dr. Williams	Sealant Placement (Group III)	Ortho Clinic
		Dr. Coreno & Dr. Brett	Mouthguard Fabrication (Group I)	Lab Room 216 (off West Lab)
November 9, 2010 Tues.	1:00 pm – 3:00 pm	Dr. Williams	Ethics	NOA 250
November 12, 2009 Fri.	3:00– 5:00 p.m.	Dr. Williams	Consent/Medical History/Treatment Documentation	NOA290

SCHOOL BASED CLINICAL COMPONENT

**November 29, 2010 -
December 10, 2010**

and

**January 24, 2011 -
January 28, 2011**

SCHOOL –BASED CLINICAL COMPONENT

SCHOOL –BASED CLINICAL COMPONENT

Recent Student and Personal Awards, Sena Narendran

Student Awards at CWRU:

Ms. Jennifer Sanders, Junior Dental Student, Case Western Reserve University First Place, Predoctoral Dental Student Merit Award The American Association of Public Health Dentistry	2011
Ms. Jennifer Sanders, Junior Dental Student, Case Western Reserve University Gunther M. Hans Award for Oral Presentation, the 30 th Annual Professionals Day Case School of Dental Medicine, Case Western Reserve University	2011
Ms. Jennifer Sanders, Sophomore Dental Student, Case Western Reserve University American Public Health Association (APHA) Anthony Westwater Jong Memorial Community Dental Health Preprofessional Award	2010
Ms. Avni Maru, Sophomore Dental Student, Case Western Reserve University American Dental Education Association (ADEA)/Johnson and Johnson Preventive Dentistry Scholarship	2009
Ms. Ashley Gibbs, Junior Dental Student, Case Western Reserve University American Dental Education Association (ADEA)/Johnson and Johnson Preventive Dentistry Scholarship	2009
Ms. Avni Maru, Sophomore Dental Student, Case Western Reserve University Second Honors, Clinical Science Presentation, the 29 th Annual Professionals Day Case School of Dental Medicine, Case Western Reserve University	2009
Ms. Jean Felton, Junior Dental Student, Case Western Reserve University American Association for Dental Research Bloc Travel Grant	2008
Ms. Ami Maru, Junior Dental Student, Case Western Reserve University First Place, Predoctoral Dental Student Merit Award The American Association of Public Health Dentistry	2008
Ms. Ami Maru, Junior Dental Student, Case Western Reserve University Honorable Mention, Poster Competition, Research ShowCase	2008
Ms. Anita Bhavnani, Sophomore Dental Student, Case Western Reserve University Honorable Mention, Poster Competition, Research ShowCase	2007
Ms. Anita Bhavnani, Sophomore Dental Student, Case Western Reserve University American Dental Education Association (ADEA)/Listerine Preventive Dentistry Award	2007

Ms. Anita Bhavnani, Sophomore Dental Student, Case Western Reserve University
International Association for Dental Research (IADR)/Colgate
Prevention in Research Award 2007

Ms. Anita Bhavnani, Sophomore Dental Student, Case Western Reserve University
Dentsply Student Clinician American Dental Association Award 2007
The 27th Annual Professionals Day, Case School of Dental Medicine, CWRU

Ms. Ami Maru, Sophomore Dental Student, Case Western Reserve University 2007
Second Honors, Clinical Science Presentation, the 27th Annual Professionals Day
Case School of Dental Medicine, Case Western Reserve University

Personal Awards

Excellence in Teaching Award, National Dental Association 2003

Outstanding Service Award to promote Optimal Oral Health for All 2005
American Association of Public Health Dentistry

Special Merit Award, American Association of Public Health Dentistry 2009