

# CUSTOMIZING A DENTAL EDUCATION

THROUGH FOUR CUTTING-EDGE DUAL-DEGREE OPTIONS, INCLUDING A BRAND NEW PROGRAM IN BIOENGINEERING, PENN DENTAL MEDICINE IS AT THE FOREFRONT OF THE MOVEMENT TOWARD INTERPROFESSIONAL EDUCATION

BY JULIANA DELANY



“My Master’s class professors are excited to have dental students in their classes. We bring a unique perspective and challenging opinions. The professors encourage us to incorporate dental school themes into the majority of our projects and papers.”

MAUREEN KUHTA (D ’12), DUAL-DEGREE IN EDUCATION

Miguel Padilla-Hernandez (D ’13) views the practice of dentistry as an opportunity to be a part of something larger — a global health care community with a mandate to make the world a better place. He believes that with membership in this community comes responsibility: for educating others, advocating for the medically underrepresented, and taking an active role in creating policies that improve access to health care worldwide. To achieve these ambitious and inspirational goals, Miguel is earning two degrees simultaneously: a DMD from Penn Dental Medicine and a Master’s in Public Health from Penn’s School of Medicine.

Miguel is one of a small but growing number of dual-degree students at Penn Dental Medicine who are choosing a longer, more demanding course of study in order to customize their education and pursue a highly specialized career. The School currently offers four dual-degree options: the MS in Public Health, the MS in Education, the MS in Bioethics, and its newest dual-degree program, the MS

in Bioengineering. Each program allows students to blend a full dental school experience with another professional specialty. The result: A broader perspective on dentistry as well as a distinctive career niche in the dental marketplace.

## AN IDEAL ENVIRONMENT FOR INTERPROFESSIONAL STUDY

Interdisciplinary study is a cornerstone of education at the University of Pennsylvania, and thus, at Penn Dental Medicine as well — one of the few dental schools in the nation to offer four dual-degree programs.

“We are in a unique position to offer our students a superior array of programs,” says Dr. Uri Hangorsky, Associate Dean for Academic Affairs. “Unlike many other urban universities, Penn’s professional schools are all located on the same campus, making it an ideal environment for dental students to take advantage of what the other schools have to offer.”

In addition to the dual-degree programs, Dr. Hangorsky notes that the School is also working on the development of interdisciplinary/interprofessional enhancements to the educational curriculum through elective courses being planned with the School of Nursing and School of Veterinary Medicine.

“While we are initiating this course development with the Nursing and Vet schools,” says Dr. Hangorsky, “there is in fact also a University-driven initiative underway to see how we can combine our teaching resources and enhance each others’ educational programs.”

At a time when institutions of higher education around the world are recognizing and promoting the value of inter-professional education, Penn Dental Medicine is truly at the forefront of the trend. Through dual-degree programs, students are able to tailor their dental education to take on a specific role in research, consulting, education, or government when they graduate, a strategy that can set them apart and maximize their career options. For example, a graduate of the new dual-degree program in Bioengineering will be well prepared to work in research and development for a manufacturer of dental biomaterials, while an alumna with a degree in Bioethics might go on to serve on the ethics committee of a hospital. A dentist who also holds a degree in Education will be perfectly situated for a teaching or administrative post in a dental school, while a Public Health

student like Miguel could go on to work in city, state, or federal government as a policy maker or as a director of a community health clinic.

### A PASSION FOR LEARNING

Although careers like these are the goal of many dual-degree students, others plan to enter traditional practice, taking on the challenge of a dual-degree purely to satisfy an intellectual curiosity about a subject in which they have always been interested. Either way, says Caryn Stivelman, Director of Academic Affairs, dual-degree students have one thing in common: a passion for learning. “A dual-degree student is usually looking for an outlet for that passion, a dialogue with others who share that specific interest,” she says. “Our dual-degree students hold a distinctive place at the School because of their special knowledge. They are often asked questions about their area of study and drawn into discussion and debates by other students, which enriches the environment for us all.”

### A HIGHLY COLLABORATIVE PROCESS

All of the dual-degree programs offered through Penn Dental Medicine are less than a decade old, with the oldest, the Master’s in Education, dating to 2001. The Master’s in Bioethics was first offered in 2004, followed by the Master’s in Public Health in 2008. This year, the Office of Academic



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RAY SHUPAK (D’11), DUAL-DEGREE IN BIOETHICS



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LAUREN KATZEL (D'12), DUAL-DEGREE IN PUBLIC HEALTH

Affairs proudly introduced the dual-degree program in Bioengineering, one of the first of its kind and already a source of great student interest. Each of these programs was developed in response to a specific need in the professional community for dentists with a customized background, and Dr. Hangorsky adds that there are “ongoing efforts to expand the dual-degree offerings even further with other professional School’s at Penn.”

All of the programs were created through a similar, highly collaborative process: after determining a need for and interest in the program, the Office of Academic Affairs met with its counterpart at the appropriate sister school and began to design a combined course of study. The partner schools analyzed their own curricula and each other’s, looking for holes and overlap, and investigating where dual credit might be given. Both schools then utilized the most stringent criteria in creating a program that meets the academic standards of the University of Pennsylvania.

Dual-degree students find that the interdisciplinary nature of the programs enhances both curricula, and that the sum equals even more than its parts.

“My Master’s class professors are excited to have dental students in their classes. We bring a unique perspective and challenging opinions,” says Maureen Kuhta (D ’12), a student in the dual-degree program in Education, who plans a career in both practice and teaching. “The professors encourage us to incorporate dental school themes into the majority of our projects and papers.”

Miguel Padilla-Hernandez has found connections in his classes from each side of his dual-degree program in Public Health that have helped him better understand both areas. For example, “In my Community Oral Health class, we were presented with clinical evidence promoting the use of sealants for young children to prevent decay,” he remembers. “Later on that evening, in my Master’s of Public Health class, I learned the techniques and procedures involved in research studies for dental sealants,” bringing him full circle in his exploration of the topic.

Ray Shupak (D ’11), a student in the dual-degree program in Bioethics, who hopes to pursue a career that combines surgery with medical ethics, has experienced far-reaching benefits from his program that he believes affect the way he practices dentistry. “I face ethical dilemmas every day in dental school,” he says. “My dual-degree training helps me analyze situations and arrive at an ethical decision that is amenable both to the patient and to the practice of dental medicine.”

#### A RIGOROUS REVIEW PROCESS, AN INTENSIFIED SCHEDULE

Students are offered the chance to apply to a dual-degree program in their second year of dental school, after they have established themselves as capable, creative, and well-rounded students, who can multi-task and organize their time — all necessary qualities for the four dual-degree programs. Applicants must write an essay detailing their interest in the program and the reasons they feel they will make an ideal candidate. A faculty committee assembled by the Office of Academic Affairs reviews each application carefully.

## Customizing a Dental Education

"We are looking for students with a GPA of at least 3.0 and good time-management skills," says Dr. Hangorsky. "We want to feel confident that they will be successful in the rigorous demands of a dual-degree program." Once that level of confidence is achieved, the Office of Academic Affairs sends a letter of application to the appropriate sister school at Penn requesting that the candidate be admitted into the master's program.

In addition to carrying out the same clinical and class schedules as their counterparts in the traditional DMD program, dual-degree students must complete about 14 master's courses in their partner program to earn the accompanying degree. They must also complete a senior project, such as a thesis or capstone project, in that degree program. Dual-degree students take classes for their second degree in the evenings, on weekends, and during summers. They are able to complete two degrees in four to five years, depending on the program. Currently, there are a total of 12 students enrolled within the School's four dual-degree programs.

For those students accepted into a dual-degree program, Penn Dental Medicine funds the cost of the degree, with eight slots available each year. This year, the dual-degree program in Public Health received a boost in scholarship funds through a federal grant from the Health Resources and Services Administration (HRSA), which will support two additional students in the program. "The goal of HRSA is to

expand access to health care and build a strong health care workforce," says Dr. Joan Gluch, Director of Community Health, Principal Investigator for the HRSA grant. "By funding students during their training, HRSA ensures that there are a sufficient number of dental graduates who understand public health issues and increase access to care".

### "A ONCE-IN-A-LIFETIME OPPORTUNITY"

While the intense schedule and organizational challenges of a dual-degree program are not for everyone, Ray Shupak says he jumped at the chance to earn two degrees during his dental school education. "I took a course in biomedical ethics in college and became fascinated with the subject," says Ray, who, like his fellow dual-degree students, will receive two separate diplomas when he graduates. "Pursuing a dual-degree program provided me with a once-in-a-lifetime opportunity to combine two of my interests into four years of study. I couldn't imagine not taking advantage of it!"

Lauren Katzel (D'12), a dual-degree student in Public Health, concurs. "The program keeps me extra busy, but the benefit is that I know I am receiving a wonderfully well-rounded education by pursuing these two career interests of mine at the same time." **PDJ**

## AN INTERPROFESSIONAL EDGE: DUAL-DEGREE PROGRAMS AT PENN DENTAL MEDICINE

In keeping with its belief in the value of interdisciplinary and interprofessional education, Penn Dental Medicine now offers the following four dual-degree programs with others being explored.

### **MASTER'S IN BIOENGINEERING (with the School of Engineering)**

Students in this program will take courses such as Engineering Entrepreneurship, Engineering Economics, and Medical Radiation, and can look forward to working in fields such as industry, medicine, academia, or other fields related to biomedical technology.

### **MASTER'S IN BIOETHICS (with the School of Medicine)**

The degree requires intensive coursework in Conceptual Foundations in Bioethics, Mediation, Research Ethics, Ethical and Legal Issues, and Cultural Competency in Medicine and Bioethics. Graduates may go on to pursue positions on ethical committees in hospitals and in regulatory affairs.

### **MASTER'S IN EDUCATION (with the School of Education)**

Students take a full complement of education courses including Contemporary Issues in Higher Education, Access and Choice in American Higher Education, Faculty and Academic Governance, and Student Development in College Environments, and are well prepared upon graduation for positions in dental school education and/or administration.

### **MASTER'S IN PUBLIC HEALTH (with the School of Medicine)**

Epidemiology, Biostatistics, and Policy, Ethics, and Law are a few of the courses required of students working toward this dual degree, which will provide the background and skills they need for positions in community oral health and public health.