Operative Dentistry Graduate Program

Mission

In 1960 the College of Dentistry Department of Operative Dentistry organized the Graduate Program in Operative Dentistry meeting the requirement of the Masters of Science Degree from the University of Iowa. The mission of our graduate program is integral to that of the University of Iowa in teaching, research and outreach. The primary objective of the Operative graduate program is to train dental graduates to become effective teachers in dental education. Operative Dentistry at Iowa has a reputation as a top ranked program and graduates have achieved recognition in teaching, research and leadership both nationally and internationally. The MS Program in Operative Dentistry provides advanced clinical experience, as well as teaching and research training in restorative dentistry. Specifically, the areas of instruction include the following:

1. Education of operative dentistry graduate students/residents as specialists in the all areas of operative dentistry, including both direct and indirect procedures in esthetic dentistry.

2. Research into dental materials and clinical materials testing, advanced restorative procedures and preventive therapies for caries control; as well as collaboration with associated disciplines including: all dental specialties, radiology, pediatrics, and biomedical engineering. Research is required to be at a scholarly level for a Master’s of Science as well as being submitted for publication in a peer-reviewed professional journal.

3. Training in the both didactic and clinical aspects of dental education providing both knowledge and experience for a possible future career in dental education. This includes service to the community, state, profession, and specialty.

Admission Processes and Criteria

The Operative Dentistry Graduate Program is one of only four operative graduate programs in the nation. The Iowa program is well known both nationally and internationally for the number and the quality of educators that it produces and it graduates are in demand for faculty positions. Thus, there is significant student demand and competitive selection in our graduate program applicant pool. In the past five years our applicant pool has ranged from 20-30 qualified applicants, from which three are selected for the Operative graduate program. The fall applicant and enrollment statistics from the University do not accurately reflect our student situation because our program begins in the summer session, In the last five years (data reviewed) all of the candidates receiving official offers have accepted positions in the Operative MS degree program except one who had to withdraw due to a medical emergency and one due to immigration restrictions. In these cases the first alternate candidate accepted the position. Most of the U.S. applicants that we receive for consideration to the program are graduates interested in a teaching position or dentists associated with the military. The remainder of the applicant pool consists of international dentists. These international students are quite competitive as applicants, ranked at the top of their class, with excellent
recommendations and highly motivated to succeed. We have had many outstanding graduates who have recognition in their country and some world-wide from the program. Admission is based upon academic scores and rank, letters of recommendation, personal statement of purpose and career goals and an interview. Emphasis is placed upon students seeking an academic career. Of the three students accepted in each class, typically two will be international students. There is a balance in the gender of the graduate students although currently they are predominantly female. Almost all graduates go on to obtain a faculty position either in the United States or in their country. The Masters of Science degree is imperative in the professional development of our graduate’s academic or military/public health careers.

- Financial support for students

Students are responsible for arranging for the cost of their graduate education through personal funds, loans or the support of the institution where they are employed. International students do not qualify for financial aid through the University. US residents are eligible to apply for grants, fellowships and other financial aid through the University. The US military/Public Health usually provides funding for their students in the Operative graduate program. No stipends are available for the Operative graduate students. They are paid a small amount, $2000, for the teaching assistant experiences that they have as part of their program. A fixed percentage of the clinic income is returned to the department and used for support of the graduate program. Additional funding of $2000 has been set aside for each graduate student for research and travel expenses from the Bob and JeriLee Williams Professor of Restorative Dentistry fund. Many of our students have received additional funding through their research, professional recognition, and other honors that include monetary awards.

Program Outcomes

All of the students in the Operative program between 1999 and the present have graduated. The average GPA of graduates is high (3.4) and the time to completion is stable (2 yrs). The MS in Operative Dentistry is unique in that the primary focus is on preparing graduates for a career in dental education. Nearly all of the graduates of the MS program (95%) have gone on to teach in dental schools both nationally and internationally or in the military and many have served in leadership roles, including dept heads and deans of dental schools. Others have contributed to research, education and leadership in the military and professional organizations. Each year our graduate students receive significant recognition through professional and research awards, and other honors. All of the graduate students present their research at the National meeting and over 60% have published the results of their thesis research in peer-reviewed journals.

Program Characteristics

The Department of Operative Dentistry of The University of Iowa College of Dentistry is known for its progressive undergraduate education as well as its dynamic graduate program. The Operative Department provides an important role in the College of Dentistry in establishing the foundational concepts of dentistry to the pre-doctoral dental students in basic restorative
techniques. This is the primary mission of the Operative Department. It also serves an equally important position in providing national leadership in dental research and advanced restorative technology both in its collective faculty efforts and through its Graduate Program in Operative Dentistry. The Department of Operative Dentistry has nine full time faculty, all of whom have advanced degrees in dentistry. Faculty members are recognized for their teaching, research and clinical expertise. Many of the faculty have served or are serving in leadership roles in dentistry, both locally and nationally. All faculty in the department are active in private patient care.

Each year we accept three students into our Masters of Science program for a total of six graduate students during the two year graduate program. Students may stay a third year to complete their Operative Board Certification or pursue and additional advanced degree (i.e. PhD or MS). Most of our full time faculty participate in teaching and mentoring in the graduate program providing an excellent teacher: student ratio. Each contributes uniquely to the didactic, clinical and research training of our students. Because of a strong faculty and a commitment to excellence and progress, Operative Dentistry at Iowa has maintained a quality graduate program over the years and is highly respected for training excellent clinicians and dental educators.

Operative Dentistry at Iowa is one of only four Operative Dentistry MS graduate programs in the country. The strengths of the program have been outlined above. Upon graduation, all of our graduates have been able to obtain jobs as a result of their advanced training. The vast majority (90%) of the graduate students plan for a career in dental education. Others return to military dental careers as educators and administrators. As these future educators face the research rigors of tenure in an academic institution along with the challenges of teaching and practice, the training gained through the Operative program is essential to their success.

Graduates have achieved recognition in teaching, research and leadership both nationally and internationally. We currently have Operative graduates serving international as dental teachers in fifteen different countries. In addition, Operative graduates serving as faculty at seventeen different U.S. dental schools. These have included seven chairman, four graduate directors, one dean, and one associate dean. Since the start of the graduate program nearly forty years ago, approximately two thirds are still actively involved in dental education. A number of our students have taken the Operative specialty board and the success rate has been excellent. The Iowa Operative Department has the highest number of board certified Operative dentists of any dental school and its graduates comprise nearly a fourth of the total number of board certified dentists.

The Operative graduate program has a long history in its production of dental educators. In a current time when dental educators are in great demand and short supply, and resources are strained, it will be our challenge to continue to provide the necessary educational, clinical, and research experiences for our graduates as future teachers and practitioners. The strength of the Department of Operative Dentistry is essential to this mission. We must strive to preserve the quality of our faculty, research and clinical training in this climate of budgetary constraints. This requires careful and progressive planning with a focus on the changing role of Operative Dentistry and its importance to the mission of the University of Iowa, dental education and the dental profession.