

University of Manitoba's Faculty of Dentistry — "Traditions of Excellence: Horizons of Change"

Anthony M. Iacopino, DMD, PhD

The year 2008 marks the anniversary of the first class enrolled at the University of Manitoba's faculty of dentistry in 1958. There is no better way to celebrate 50 years of proud traditions and accomplishments than to build on that history and launch an aggressive new campaign. Presently, the faculty enjoys a solid reputation as a premiere educational institution, but there is always room for improvement. Thus, the faculty has developed a 5-year strategic plan that is based on a "Drive for Top Five." Very simply, the faculty wants to be regarded as one of the top 5 dental schools in North America within the next 5 years.

There is no credible objective measure for ranking schools of dentistry; however, an even stronger and more beneficial barometer of status is the opinion of peer institutions and stakeholders, which means much more than any published rankings. Perception of the dental school and the image that it generates, both in and outside the dental community, are the key components to success.

The 50th anniversary year provides an opportunity for the faculty of dentistry to move

forward with new approaches and visions. The "Drive for Top Five" is based on the faculty's strategic plan, featuring the 9 "Pillars of Innovation," which expand existing areas of strength and add programs that do not exist in any other dental school. When fully implemented, these 9 initiatives will provide a distinct brand and reputation for the University of Manitoba's faculty of dentistry.

Benefits of Becoming a "Top Five" Institution

Achieving top 5 status would make it much easier to recruit and maintain high-quality students, faculty and support staff. Additionally, it would be much easier to obtain financial support from proud alumni, industry and foundations, as most benefactors desire to align themselves with excellence and significant accomplishments. The enhanced reputation of the institution would facilitate successful research grant applications, support of government and professional organizations for new initiatives and result in increased stature for the university, Winnipeg and Manitoba.

The faculty of dentistry would serve as a valuable community resource for policy makers, health care practitioners and the public. It would be regarded as an epicentre of intellectual thought, research and discovery and be recognized for its modern dental training program. A Manitoba dental graduate would be seen as a practitioner with a state-of-the-art education, capable of effective community leadership and comprehensive interprofessional health care management, and able to apply the latest advances in science and modern technologies to patient care. The faculty would be "a place where the action is," a place one would come for first-rate education and training, opportunities to do things not possible in other environments and to forge a stimulating and satisfying career.



Dr. Anthony Iacopino, Dr. Steven Lindauer and Dr. Magda Barnard at the Centre for Oral-Systemic Health. The centre is dedicated to the linkages between oral health and systemic health.



Outreach in action (from left): Shirley Declercq and granddaughter Storm, along with dental assistant Matilde Kostiv and Dr. Robert Schroth of the Centre for Community Oral Health, at the Health Action Centre dental clinic in Winnipeg, Manitoba.

Nine Pillars of Innovation

International Centre for Oral-Systemic Health

Launched in January 2008, the centre is believed to be the first in the world dedicated to the linkages between oral and systemic health. Its priorities are to: 1) advance the science of oral-systemic medicine; 2) develop new areas of research around the biomedical mechanisms responsible for the linkages; 3) implement innovative interprofessional models of care based on current evidence; 4) evaluate the public health impact of new models of care that involve multidirectional screening and referral; and 5) establish continuing education teams appropriate for various target audiences. One major goal is to establish new models of interprofessional practice and evaluate their effectiveness in improving overall patient health. The centre has recently partnered with JFDA on a column titled “Surveillance Spotlight: Current Concepts in Oral-Systemic Health,” to disseminate the latest science and discoveries, centre findings and oral-systemic health information.

Imaging Centre

Advances in imaging technology provide the potential for improved diagnostics and outcomes of surgical procedures, especially for temporomandibular joint disorders, orthognathic reconstruction, oral cancer and implant dentistry. New CT scan and MRI methodologies, along with digital radiography equipment, are essential for providing modern education and training programs and high-quality patient services. The fac-

ulty plans to develop a unique imaging centre that will not only serve patients of the faculty, but will also be a valuable referral destination for practising dentists throughout Winnipeg. Additionally, graduates of the faculty will be prepared to enter a practice world that is completely digital and driven by electronic patient record management systems.

Centre for Children’s Oral Health

The most distressing and frustrating problems within the provincial health care system revolve around access to care and preventive care for underserved children. Children living in urban poor, rural and First Nations communities are suffering from substandard dental health at a rate 10 times higher than the rest of the childhood population. Existing approaches and solutions have been ineffective and it is time to think of new approaches and develop new partnerships to address these issues. The faculty plans to establish a new graduate program in pediatric dentistry that emphasizes understanding of, and immersion in, underserved and disadvantaged cultures, rather than traditional restorative practice in urban centres. Graduates of this program will be trained to develop and implement effective new models for prevention and public health. Solutions developed here will have applications locally, nationally and internationally.

Centre for Implant Dentistry

The general idea of a Centre for Implant Dentistry is not new. However, the way this particular centre fits into the overall curriculum and how it drives the philosophy of implant dentistry is unique. First, the faculty’s goal is to significantly expand education and clinical training in implant dentistry for dental students to make it the most comprehensive in North America. Second, the continuing education office and industry partners will develop an extensive menu of short and long-term programs for the practising community. Third, the faculty will implement a new graduate program in prosthodontics, emphasizing implant dentistry, and provide comprehensive skill sets related to diagnosis, treatment planning and co-ordination of surgical and restorative aspects of patient care.

Additionally, a “2+2” periodontics and prosthodontics dual specialty will be developed. Selected graduate residents will complete the specialty programs sequentially. Students will also complete an extended Master of Science research project related to implant dentistry. Graduates of this

dual degree will be experts in both the surgical placement and prosthetic restoration of various implant systems.

Centre for Community Oral Health

The Centre for Community Oral Health is internationally recognized for its highly developed infrastructure that serves urban poor, rural, First Nations, elderly, disabled and other underserved populations at high risk for oral disease. There is still a huge need for this kind of care in Manitoba. The centre will work with its partners to expand existing programs, redesign program infrastructure to become more efficient, and implement new programs to better meet evolving needs and further improve the quality of life for the populations it serves.

Virtual Simulation/Electronic Digital Curriculum

A new generation of curriculum tools (virtual simulation and electronic digital curriculum) is now available to our students within a comprehensive platform of foundational science, space-age simulation with haptic feedback and student assessment exercises that apply basic principles and operative techniques to patient care. This system incorporates all existing foundational electronic curriculum databases and improves on the simulation environment by providing tactile sensation and virtual patient scenarios. This entirely new approach is only offered to a limited number of dental schools for testing and final development and design. The faculty has been selected for testing based on its history of leadership in dental education, commitment to excellence and its de-

sire to assume a place of prominence at the cutting edge of curriculum design and innovation.

Head and Neck Pain Program

The faculty has unique expertise in head and neck pain and temporomandibular disorders and will significantly expand its educational programs within this discipline. Additionally, a dedicated clinic will be established to support comprehensive patient care experiences. The initiative will include an in-depth and comprehensive undergraduate and graduate curriculum, and will become a valuable resource for community referrals. The program will also have a continuing education component for practising professionals.

Practice Management Program

The concepts and principles of practice management continue to be the least adequately covered topics in dental education. The faculty is developing partnerships with industry and the University of Manitoba's School of Business to develop a unique, comprehensive program that provides information over the 4-year program, as appropriate, on personal debt and financial planning, business tools, small business start-up, branding and marketing, entrepreneurship and financial services with reinforcement through applied clinical exercises. Each student will be required to have a professionally critiqued business plan before graduation. This initiative will be extended to graduate residents and as continuing education for practising professionals and will include state-of-the-art online learning environments. Thus, the faculty will be at the forefront of dental education in this important area, providing its graduates with high-quality practice management education and valuable training for immediate success.

Oral Biology Research

The oral biology department has a rich history of accomplishments including being the first ever department of oral biology in the world; being one of the world's largest repositories of oral pathogens; and gaining an international recognition for expertise in microbial physiology, salivary biochemistry and biochemical approaches to caries prevention. The faculty will invest in facility renovations and recruit new researchers to maintain its position of prominence in oral biology research. New laboratory facilities and investigators will be targeted to areas that complement existing strengths, or provide niche foci in oral health and nutrition and the oral-systemic connection.



Student Ryan Cormack test drives the new state-of-the-art Digital Dental System at a demonstration held at the faculty in January. (Photo: Wayne Glowacki/Winnipeg Free Press)

Developing a New Vision for Dental Community

The parameters of dental education, research and practice are dynamic and change rapidly. The amount of new knowledge and information in dentistry is expected to double every 5 years and approaches to modern dental practice continue to evolve toward more biologically based therapies, individualized treatments and prevention strategies that consider oral health a component of overall health and wellness. Thus, traditional notions of dental education and practice are quickly becoming outdated and need to be replaced. The academic and practising dental communities, industry and private sector will have to come together in new ways to forge a closer collaboration.

In light of this, the faculty is focusing on creating a unique dental community in Manitoba, starting with the first ever Dental Office Visit Program. As dean, I am currently visiting every dental office in the province of Manitoba, with the goal of getting to know the practitioners personally, becoming familiar with their practices and the issues they face. It is a chance to update Manitoba's dentists on what is happening at the

faculty of dentistry, as well as an opportunity to learn more first-hand about the training required for new graduates to be successful in the current practice environment.

In addition, the faculty has significantly expanded the scope of events and activities within its Alumni Affairs and Continuing Education offices, noticeably improving services for alumni and practitioners. Stakeholders in the faculty of dentistry at the University of Manitoba are working together to provide a welcoming environment where practitioners can learn about state-of-the-art technologies and new scientific advances in patient care, receive high-quality continuing education and test drive the most up-to-date equipment and products. The goal of this portion of the faculty of dentistry's "Drive for Top Five" campaign is to create a valuable resource for life-long learning and enrichment. ❖

THE AUTHOR



Dr. Iacopino is dean, professor of restorative dentistry and director of the International Centre for Oral-Systemic Health at the faculty of dentistry, University of Manitoba, Winnipeg, Manitoba. Email: iacopino@cc.umanitoba.ca