

## THE MOUNT SINAI HOSPITAL DENTAL CLINIC

# A PLACE FOR ALL PATIENTS

*“To hospital dental residents, it’s not a job. It’s more like a devotion.”*

People with complex medical conditions, disabilities, and rare or difficult-to-diagnose conditions travel to Toronto from across the country to access the expertise of the hospital clinic’s dentists and specialists. In an interview with CDA, Dr. Tenenbaum describes the central role of the hospital dental clinic in providing patient care, student learning opportunities, and dental resident training. And he explains how patients who come to the clinic may end up contributing to the development of novel therapies for other patients who also suffer from conditions that are hard to treat.



Dr. Howard Tenenbaum, Dentist-in-Chief at Sinai Health System, describes the workings of the Mount Sinai Hospital Department of Dentistry, a place where patients who can’t be treated elsewhere find necessary oral care.

## The patients

We see a whole range of patients. We see patients who can only be safely treated in a hospital because they are medically complex or have severe medical issues. This could include patients at high risk for cardiac arrest for example. We also diagnose and/or manage patients who otherwise can’t find a solution to their problem, whether it’s severe oral disease, severe or refractory periodontitis, or chronic orofacial pain. We also see people with disabilities who can be more challenging to manage behaviourally or who have physical needs that might preclude treatment in a regular dental office.

and oral surgery, for example—who volunteer in our hospital dental residency program. The clinic where we treat people with disabilities has 10 operatories.

The dental residents we bring into the program receive very specialized, high-level training. I think it’s important to understand that our hospital dental residents could go into practice right after graduation. But instead, they dedicate themselves to a year of being on call, of doing some very demanding work; they are a special group of people. To hospital dental residents, it’s not a job. It’s more like a devotion.

## The dentists

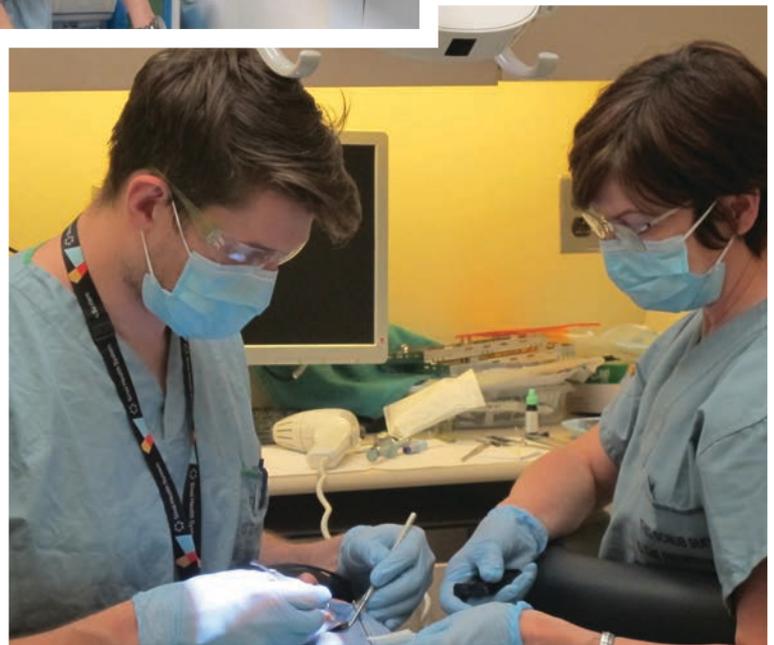
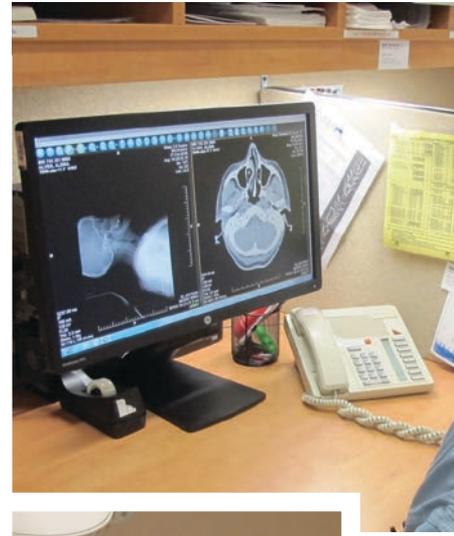
We have about 30 part-time practising dentists and specialists, as well as 10 consultant specialists—in prosthodontics

## High demand for special care dentistry

There is a two-year waiting list for patients with disabilities who cannot be treated in a regular dental office and must be



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Collage of photos: Hospital dental residents working together at the Mount Sinai Hospital dental clinic.

treated under a general anesthetic—and that’s for routine dental care. We’ve tried to increase the OR time, but with government cutbacks and just the sheer volume of patients, it hasn’t been possible to decrease the waiting period. The dentists running that program are working very hard, as efficiently as they can, so under the circumstances they’re delivering optimal care. Problems occur when a patient has a condition that is quite manageable initially, but their care may be complicated by the fact that they’ve had to wait so long for their initial treatment. Yet through some research studies we’ve demonstrated that even the few and far apart exposures to oral debridement leads to marked improvements in periodontal inflammation or oral inflammatory load.

## A crucial role in educating dental students

The third and fourth year dental students (from the University of Toronto faculty of dentistry) who rotate through the clinic love working here. It’s interesting because it’s not an easy clinic to participate in and often represents their initial and perhaps only encounter with patients with disabilities. This rotation teaches our students to be creative in how they approach patient management. They know how to do the dentistry; it’s really patient management that they learn here.



## Cultivating collaboration between clinicians and researchers

We received a \$500,000 donation from dentalcorp to support a program we've named the Centre for Advanced Dental Research and Diagnosis (see p.xx). This initiative is being developed in close collaboration with the University of Toronto faculty of dentistry. The program is based on a concept we call "chairside to bench to chairside." This means that patients will be coming into the program for management of conditions ranging from refractory periodontitis to implant-associated soft tissue disease, and we use the opportunity to study the biological, psychosocial and microbial factors that play a role in these conditions. We anticipate that this will then lead us to the development of even better biologically based treatment modalities for various conditions.

## Developing new therapies

We've learned so much about refractory disease in a pilot program that we actually have developed novel therapeutic approaches for these conditions and this will lead to the delivery of improved therapy. For example, Dr. Michael Goldberg (who operates the Severe/Refractory Periodontal Diseases Unit), in collaboration with colleagues in Dr. Michael Glogauer's lab, have demonstrated that patients with refractory periodontitis are "hyper-immune." We postulated that even though they might not harbour the "classic" periodontal pathogenic bacteria, they are probably mounting an immune response to what we would otherwise

consider normal bacterial flora. Therefore, additional scaling and root planing as well as more surgery is not the answer. Similarly, treatment with additional antibiotics and antimicrobial rinses might also not provide benefit. Alternatively, we can dampen their immune responses with the use of subantimicrobial dose doxycycline, used in various combinations with a low dose NSAID, as well as a novel antioxidant and aryl hydrocarbon receptor antagonist, resveratrol. Where we would like to perform more experimental treatments or analyse patient data more closely, we operate under blanket scientific and ethics approvals.

## What most people don't know about hospital dentistry

The hospital dental clinic is here to manage patients with conditions that are difficult to treat or diagnose and to serve people who, for various reasons, can't receive care in a regular dental office. People with physical or mental disabilities, those in wheelchairs or who are bedridden but can still be transported, and people with severe medical conditions—they don't have to stop going to the dentist. At the same time, we are developing novel research and educational programs. These range from a pending program designed to treat elderly patients with mandibular endosseous implants (at a markedly reduced cost) to support mobile mandibular prostheses, the testing of a novel analgesic agent in a third molar extraction model for pain, and the newly operational Advanced Program for Orofacial Pain and Temporomandibular Joint Surgery. ✦



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Photos: Mount Sinai Dental Department