

U_{OF}T DENTISTRY

THE FIRST GREAT
ALUMNI EVENT

TORONTO INNOVATES

HONOURING A
FATHER'S MEMORY

ORAL HEALTH IN THE CITY

Urban poverty is changing and
growing. How do we keep up?

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MESSAGE FROM THE DEAN

CARING IN AN URBAN CONTEXT

Dental schools are an integral part of urban communities. We provide an essential service to the city's most vulnerable, while engaging with nearby hospitals and research institutes to drive innovation. Our students live, work and volunteer across the city as they learn.

Throughout this issue, we explore some of the critical health problems found in Toronto and in cities across the country, and how these intersect with our schools and our patients. This is a small piece of a much larger dialogue about how we can respond to changes in our local environments, and the challenges we face in creating sustainable educational healthcare facilities.

Our first feature takes a close look at the obstacles our patients navigate on a daily basis. Between food insecurity, affordability and a precarious labour market, our patients are being increasingly stretched in ways many of us would find unimaginable.

As dentists, we know oral health has a significant socioeconomic component. In a 2015 journal article, "Assessing the relationship between dental appearance and the potential for discrimination in Ontario, Canada," researchers from UofT Dentistry examined the role dental appearances play in societal discrimination. They outlined how poor oral health is perceived to be a marker of poverty, and that poor dental appearance can affect the way an individual is treated as well as their self-esteem.

When we treat patients, we have an opportunity to alleviate some of the barriers that reinforce cyclical poverty.

In our second feature, we look at the city of Toronto as a healthcare innovation hub and how UofT Dentistry plays a pivotal role. It is imperative that we continue to leverage our resources to connect the needs of our patients, the skills and knowledge of our clinicians, and the scientific breadth of our basic science researchers. By continuing to break down silos and foster meaningful dialogue between groups across the

When we treat patients, we have an opportunity to alleviate some of the barriers that reinforce cyclical poverty

city, we increase our ability to solve some of the fundamental problems in oral health and disease — and beyond — and make profound differences in the lives of our patients.

This is all part of our ongoing mission to reinvigorate dental research. In fields such as biomaterials, nanoscience, pain, cancer and tissue regeneration and repair, our research output continues to mark UofT Dentistry as a world-class research institution. With the official opening of our new research facilities this past spring, we are also signalling a reinvestment in the future of healthcare, and reinforcing our role as leaders in advancing knowledge that will ultimately benefit all patients. ■

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UP FRONT



Photos: Katia Taylor Photography

LEARNING CIRCLE KICKS OFF INDIGENOUS STUDY

Digital storytelling and other culturally appropriate Indigenous health interventions were the focus of a learning circle hosted at the Faculty by professor Herenia Lawrence this past May. The circle began the final leg of the Nishtam Niwiipitan Study (My First Teeth), which brings together co-investigators, students and community partners from First Nations communities across Ontario and Manitoba.

The goal of the study is to reduce early childhood caries (ECC), a disease that is vastly overrepresented in Indigenous communities, and which has led to the use of anaesthesia as the norm, rather than the exception, for treating the disease.

Funded by a CIHR Team Grant, this portion of the study is dedicated to developing family-centred preventive techniques such as motivational interviews and digital storytelling.

“Storytelling as a research methodology is not new in

Indigenous community-based research,” says Lawrence, “but digital storytelling has recently emerged as a participatory visual method and an effective strategy for promoting health and wellbeing.”

“Mothers will share their stories with prenatal mothers, and at the same time, the long tradition of Aboriginal storytelling will be honoured via new media,” says Lawrence.

Children in the study also receive fluoride varnish interventions. Yet for Lawrence, the prevention of ECC rests on the social side of the issue, not just the medical. “Restorative dental care alone will never be able to make a significant dent in the number of Indigenous children requiring emergency dental treatment.”



UofT MSc student participant Mara Hayward

BANNER YEAR FOR GRANTS

Over the last year, UofT Dentistry researchers have earned an unprecedented number of important funding grants.

Currently, 10 Dentistry researchers hold prestigious Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grants — a new record for the Faculty.

Grace de Souza, Bernhard Ganss, Massieh Moayed, Anuradha Prakki and Paul Santerre received Discovery Grants in November, totalling just over \$680,000 in funding. Previous awardees include Siew-Ging Gong, Anil Kishen, Celine Levesque, Tara Moriarty and Karina Carneiro.

NSERC funds support faculty members with the day-to-day costs of their research programs.

Currently, 10 Dentistry researchers hold prestigious Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grants — a new record for the Faculty

UofT Dentistry students also broke funding records for the Faculty. Eight graduate students won highly competitive grants from the Canadian Institutes of Health Research’s (CIHR) Institute of Musculoskeletal Health and Arthritis during the latest round of funding, accounting for over one quarter of the total CIHR funds awarded across the University of Toronto.

Assistant professor Limor Avivi-Arber 9T3 Dip Prosthodontics, 9T4 MSc, 0T9 PhD was awarded a two-year, \$150,000 CIHR Catalyst Grant for her study of intraoral injuries.

Also, a Connaught New Researcher Award from the University of Toronto valued at \$10,000 has been awarded to assistant professor Marco Magalhaes 0T9 PhD, 1T5 MSc OP/OM. He was recognized for his research towards developing a non-invasive oral cancer detection test.

GET INVOLVED

All our alumni are voting members of the Faculty of Dentistry Alumni Association. Become a board member or take part in the annual fall Alumni Association meeting. Become an instructor, a mentor, a volunteer or a donor. For more information: www.dentistry.utoronto.ca/alumni.

DENTISTRY PROFS' IMPACT RECOGNIZED

Two faculty members have been singled out for the highest honours from the American Association of Endodontics: professor Shimon Friedman was awarded the I.B. Bender Lifetime Educator Award, while professor emeritus Calvin Torneck 5T8 was awarded the Part-Time Educator Award. Both were honoured for their impact on student learning throughout their careers. Torneck’s award is also one-of-a-kind: the AAE renamed it the Calvin D. Torneck Part-Time Educator Award, in recognition of Torneck’s immense lifetime contributions.



As well, professor Paul Santerre has been awarded one of seven inaugural University of Toronto President’s Impact Awards (PIA). The award acknowledges the impact of his work beyond academia in research, translation and commercialization. Santerre and his fellow honourees were chosen from across the university and also have been inducted as advisors into the newly formed President’s Impact Academy.

Earlier this spring, Santerre, who is cross-appointed to the Institute of Biomaterials & Biomedical Engineering (IBBME) and the Ted Rogers Centre for Heart Research, was named to the \$2.5M Baxter Chair of Health Technology and Commercialization, and received a prestigious Ontario Professional Engineers Award for his entrepreneurship.

Photo: American Association of Endodontics

UOFT PRESIDENT OPENS DENTISTRY LABS



From left to right: dean Daniel Haas, UofT president Meric Gertler, chair of governing council Claire Kennedy, Terry Stavroullakis 1T8 MSc, vice dean research, Bernhard Ganss and senior communications advisor with the Government of Canada Marianne Bruin

On May 25, the Faculty officially opened the newly renovated fourth and fifth floors of the Dentistry building on Edward Street. In attendance at the ribbon cutting were faculty, staff and dignitaries, including UofT president Meric Gertler, and representatives from the University of Toronto and the Government of Canada.

The \$20-million project saw labs, offices, and meeting rooms on these two floors revitalized. Many of the labs were original to 1959, while others dated back to 1985. Most were in poor condition.

They're now bright, well ventilated and fully accessible. Some of the furniture, including benches, is modular and can be unplugged and moved to accommodate new research projects. Throughout the project, green technologies were used.

Five of Dentistry's most celebrated principal investigators have also moved from satellite locations on campus to Edward Street, where they join existing research teams in open, collaborative spaces for meeting and working.

"This is a great day for the Faculty of Dentistry and for the entire University of Toronto, as we celebrate the revitalization of hundreds of labs here and across our three campuses," said Gertler at the ceremony. "It is also an occasion to celebrate the power of partnership in advancing Canada's capacity for world-leading science and innovation."

The open-bench design of the renovation follows the philosophy that important scientific developments arise from cross-disciplinary collaboration between clinicians and basic research scientists — and a recognition that good science requires good infrastructure.

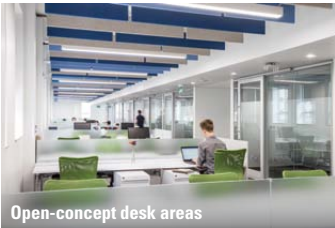
"Now, the work of our exceptionally talented researchers — experts in areas such as biomaterials, tissue regeneration and repair, and the neuroscience of pain — will no longer be limited in what they can accomplish simply due to outdated infrastructure," said dean Daniel Haas.

The renovation was supported by the federal and provincial governments, as well as the University's Lab Innovation for Toronto (LIFT) project.

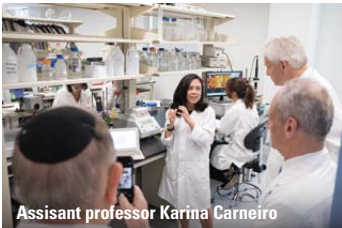
Photo: Gustavo Toledo Photography



Fourth-floor common area



Open-concept desk areas



Assistant professor Karina Carneiro



Professor Anil Kishen

Photos: Stanter, Gustavo Toledo

JACK GERROW NAMED TO ORDER OF CANADA



Photo: Jeff Comber

This past June, Jack Gerrow 7T9 was named to the Order of Canada, one of the country's highest civilian honours, for his contributions to dentistry education. This came on the heels of Gerrow receiving a Gies Award for Innovation from the American Dental Education Association (ADEA).

Gerrow served as executive director and registrar of the National Dental Examining Board of Canada for 24 years, and helped develop examinations and certification processes globally. Currently an adjunct professor at the Faculty, Gerrow works to improve teaching and learning. He received UofT Dentistry's highest honour, the Award of Distinction, in 2015.



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University of Toronto's online oral health teaching hub for RCDSO core approved courses

An illustration of a woman and a child walking through a city at night. The woman, with blonde hair and a pink face, wears a blue jacket and carries a white shopping bag. She holds the hand of a small child with a pink face and a yellow shirt. They are walking past a dark building with a lit window. In the background, a city skyline is visible under a dark sky, with a street lamp casting a warm glow. The overall style is flat and graphic, with a muted color palette of blues, browns, and oranges.

precarious CITIES

As affordability spins out of control, poverty in Canada's big cities is on the rise. That's having a profound effect on oral healthcare and the organizations that try to fill the gaps.

BY ERIN VOLLOCK

ILLUSTRATION BY DAVE MURRAY

Since October, 46-year-old Chad Vernon has been working night shifts for the City of Toronto's solid waste management collection department. Thanks to the job, Vernon has access to family dental benefits for the first time in his life. But that doesn't mean he can afford all the dental care he needs.

For Vernon and his family, money has been tight for a long time — so tight that he's lived with the excruciating pain and sensitivity of a broken tooth for the past five years. “The top and one side were just filling,” says Vernon. “Food kept getting stuck under the filling.” He has a couple of other chipped teeth and needs some fillings. He wants a partial made at some point.

Vernon also wants to get braces for his son and comprehensive care for his wife. So the family became patients at UofT's clinics this year. His student dentist already extracted his tooth — to his profound relief — and will continue to work on his health over the 2018–19 school year.

“Even though I have the benefits, I'm still not happy to just waste that money. I can get more work done going through the dental school on the benefits plan that I have.” It just makes sense, he says, “with the deteriorated state of my mouth.”

Vernon is just one of the thousands of people in the greater Toronto area who can barely afford the basics of self-care. But poverty in today's city differs from decades past. Despite plenty of social programs, urban shifts mean that there are more people in our city — and other Canadian urban areas — struggling financially and coming up against challenges that programs can't address. As cost of living soars and wages stagnate, oral healthcare falls lower and lower on the priority list — and has become out of reach for an increasing number of people.

Confronted with overwhelming need, public oral healthcare services for the city's poor and working poor have had to adapt to a rapidly shifting environment. With fresh ideas and shifts to services, they're heading off poverty's often devastating impact on oral health.

POVERTY'S URBAN EVOLUTION

There is a new face of poverty in Canadian cities, and it's ubiquitous. The City of Toronto says the poverty rate in the GTA is

between 20 and 30 per cent. However, people made 990,970 visits to GTA food banks last year, says Richard Matern, former director of research and communications at the Daily Bread Food Bank. That's up 24 per cent over the last ten years, and up nearly 10 per cent since 2016.

Hunger-related data pinpoint those most in need: seniors account for the fastest growing group of users of food banks, followed by people on social assistance programs such as Ontario Disability Support Program (ODSP) and Ontario Works (OW).

Meanwhile, racialized urbanites — be they new Canadians or not — are much more likely to struggle financially. Statistics Canada numbers say that 62 per cent of Torontonians and 58 per cent of Vancouverites living in poverty are from racialized backgrounds.

Being employed is no longer a guarantee of escaping poverty and hunger. In 2017, food bank clients typically earned higher than minimum wage, but worked an average of only 20 to 25 hours per week. Most — 78 per cent — had no benefits. Precarious employment and stagnant incomes have pushed yesterday's middle income city dwellers right onto the poverty line.

Education doesn't ensure a comfortable income either. Over the last decade, food banks have noted a huge surge of clients with postsecondary education. “Education is becoming less of a predictor of financial stability or ability to escape poverty,” Matern says.

The dramatic rise in housing and rental costs underpins many of these problems. According to the 2018 Canadian Rental Housing Index, nearly half of renters in the GTA pay in excess of 30 per cent of their gross income on housing, the official affordability threshold. And just shy of one quarter pay more than 50 per cent, which the index says puts them at a “crisis level of spending” that could lead to homelessness.

As a result of skyrocketing rents, poverty has been on the move, out of the city's core to where rents are lower. But not that low: 32 per cent of renters in Richmond Hill spend more than half their income on housing. Food bank visits in the GTA's inner suburbs have shot up 68 per cent in the past ten years, and 13 per cent in the past two.

Living on the fringes, the city's vulnerable have to travel extensively for work, childcare, healthcare and social services. While dense, urban areas have affordable transit and walkable neighbourhoods, the ‘burbs require a car, with all its additional costs, or more pricey and time-consuming transit options.

It all translates to more urbanites running out of money before the next paycheck, with few dollars left to spend on preventive dentistry — a luxury when the rent and car insurance take most of your income. “If I'm not in pain or not seeing anything strikingly debilitating or detracting, I'll probably just ignore it for now,” says Hazel Stewart 7T4, 7T8 Dip DPH, who recently retired as director of dental and oral health services at Toronto Public Health (TPH). She had been with the city agency since 1987, and closely observed the “serious choices” people make on a daily basis. When a dental emergency hits a low income family, there's often little left in the budget to get the kind of comprehensive treatment truly needed.

AFFORDABLE OPTIONS

While it may be changing, poverty in the city is not new, and numerous services work to address the dental needs of those who can't afford care. One of the benefits of living in a large urban centre like Toronto is the number of low cost or free oral healthcare options available. TPH, which has been a major dental caregiver for the city since 1911, is the most comprehensive. It offers free services at 24 clinics and a two-chair mobile clinic that cater to distinct cohorts: children,

seniors, and adults age 18 to 64 on social assistance programs like ODSP and OW.

Meanwhile, UofT Dentistry runs the largest single-site reduced-fee clinic in the GTA — and in Canada. Last year, the school logged a staggering 93,047 patient visits, and that number doesn't take into account community service learning rotations at the Centre for Addiction and Mental Health, George Brown College, or the city's teaching hospitals. Seventy-three per cent of the Faculty's patients earn less than \$30,000 per year, putting them well below the poverty level. And a majority of the school's patients, 69 per cent, are either recent immigrants or refugees, a cohort known to experience food insecurity and precarious employment, both of which put them at higher risk for poor oral health.

In Toronto, community dental health partners try to fill in each other's gaps. Jamaican-born Beverley Bowen was referred to UofT Dentistry by TPH in April. She couldn't get comprehensive care for her root canal through TPH, but couldn't afford a full-fee dentist either. A 68-year-old retiree on a fixed income, Bowen doesn't mind the long appointments, and receives top-notch, comprehensive care in return. “I think coming here is fantastic,” she says, even if it's “all I can afford.”

A PATCHWORK OF INITIATIVES

George Jones (not his real name) became a patient at UofT Dentistry's clinics last year. He was unaware of other low cost or free dental service options when he came in for dentures, and knew of the school's clinics because his father had been a dentist and a clinical instructor at the school. He's battled mental health issues throughout his adult life. “I'm more stable now,” says the 64 year old, who's been on ODSP for nearly three years. Although his benefits will increase next year when he turns 65, Jones faces an uncertain future. He lives with his



cousin in his recently deceased mother's condominium. The condo has sold, so he'll soon have to move. Jones doesn't know what kind of accommodation he will be able to afford on his assistance cheque. "Living is a challenge, and you just have to watch your dollar," he says. "Times are tough out there."

Resources are strained, and most programs are not comprehensive enough to cover everyone in need, or keep pace with new needs. Access to services can be a challenge that varies widely depending on your age, which social assistance program you are on and where you live. "It's a patchwork of different initiatives here and there," says Stewart. She notes that programs for 18- to 64-year olds are "very, very spotty," despite considerable demand from this vast age group.

Anecdotal evidence also suggests that a growing number of people cannot afford even reduced fees. Well over 50 per cent of nurse practitioner Shona MacKenzie's patients at the Parkdale Queen West Community Health Centre (which houses a low-fee dental clinic) are "stuck in a cycle of food insecurity and poverty." She refers her clients — many of whom suffer from addiction, face mental health challenges, or are homeless — to

Anecdotal evidence also suggests that a growing number of people cannot afford even reduced fees

reduced-fee dental services. Many never go. "They're not ever going to do it," she says. Some may not be able to afford the

transportation to get to an appointment. For others, the appointments are scheduled months in advance, and in the meantime, other, more pressing priorities will take precedence. When a tooth hurts or there's an abscess, "they're going to get the antibiotics and it drops down their priority list." Lacking access to preventive and restorative care, many of her clients will wait until their teeth rot, save their money, and then have all their teeth extracted.

Government dental benefits, she adds, don't stretch far enough. While clients on ODSP can at least have their teeth cleaned once a year, she says, dental work on OW is limited to specific emergency care. And, once people like Jones return to work, often with a minimum wage job, they immediately lose their government medical and dental coverage. "Now suddenly you have to pay for your own medication," MacKenzie says.

Seniors represent another challenge. People are keeping their teeth longer but their health can deteriorate once they lose workplace benefits at retirement. The city can offer one-time care, but no follow-up, and the waiting lists for some of these clinics can stretch up to two years. Homebound seniors, meanwhile, can lack accessibility altogether. "At least once a week we get a call asking us to bring the bus to a senior's home," says Melvin Hsu, TPH's acting director, dental and oral health services. But, as it rotates through a 52-week schedule of community partners, the resources are spread too thin as it is.

Care at many agencies remains focused on downtown. Most of the nation's dental schools' clinics reside in urban cores, and suburban clients have a long commute to get to

care. (University of British Columbia's dental clinic has the opposite problem: located in the far west neighbourhood of Point Grey, patients need to transit in from the downtown core.) TPH tries to move care around via its mobile service, but it only offers basic dental care, no orthodontics or prosthodontics. Those who seek cheaper living costs further afield can be really out of luck: TPH's free services don't extend to people outside the boundaries of Toronto.

Meanwhile, dental school clinics, like public health services, struggle with the administrative side of keeping up with demand. "We used to have just over ten mass screenings throughout the school year," says Doris Lunarden, associate chair of clinical operations at the University of Alberta's School of Dentistry. An average of 50 spots would be available at a time, but when phone lines opened to accept new patients, "you almost had to be the lucky caller to get one," she says. Last year, the clinic reorganized patient screenings so they're done on most days through the school year, improving access.

For every service provider, disseminating information to the public about what services are available to whom, and where, is a major task. Paradoxically, TPH does not actively let people know about its dental services. "We cannot advertise our [18-64] program simply because the demand would outstrip the resources," Stewart says. That's left to word-of-mouth referrals by community partners like the Daily Bread Food Bank. Janet Evans, a volunteer who's often stationed at the food bank's information and referral service desk, says the information provided at the desk is crucial: many clients have little sense of what options are available to them.

CREATIVE CARE

As urban poverty becomes more entrenched and complex, services providers are pushing harder to meet the ever-mounting need. TPH continuously lobbies all levels of government for more public oral healthcare projects. During last spring's election in Ontario, all major parties spoke of some form of oral health initiative, something Stewart says she's never seen in her 44 years in dentistry. "I think we have finally started to get some attention to the issues," she says.

Poverty advocates consider it a win that ODSP and OW have recently made changes to allow people to make more money and hold more savings while on these benefits. Ontario's new OHIP+ has extended access to thousands of free prescription drugs for children (although it's recently been clawed back to omit children covered by private insurance). "I've seen such a difference," say MacKenzie of her Parkdale working poor clientele, who, before OHIP+, would skip meals to pay for their children's meds.

Still, free and comprehensive oral healthcare is the ideal for low-income earners. The pilot project Dental Services for Vulnerable Residents of Toronto offers zero-charge dental care for adults at the Parkdale Queen West Community Health Centre. It's being funded by Greenshields Canada with partners that include the Canadian Centre for Refugee and Immigrant Health,

At present, what exists is a loose collection of hardworking government agencies, community health initiatives and educational institutions doing their very best to fill the gaps

the Evergreen Centre for Street Youth and TPH. Clients get care if they meet a low-income threshold and can be on assistance or working. Uniquely, the clinic offers comprehensive care. "We're definitely trying to give patients a full range of options," says Tina Lam, one of two part-time dentists who run the clinic.

The schools have been service innovators, too. As well as its reduced-fee clinics, McGill University's Faculty of Dentistry offers four different free clinics. "The large majority of funding for McGill's free dental clinics come from philanthropy," says former dean Paul Allison, presenting a perennial challenge for the school. Since the city of Montreal offers no other free public oral health service, free clinics run by McGill and Université de Montréal play a vital role in serving that city.

UofT Dentistry keeps increasing its financial assistance to patients in the most need, thanks to major donations to UofT's Access to Care fund. George Christodoulou 8T5 donated \$500,000 to the fund in 2018, which followed a \$250,000 donation in the previous year by Lynn Tomkins 8T1 and Dan Kmieciak 8T1.

A number of other changes at UofT Dentistry have also expanded accessibility. In 2014, the Faculty increased DDS enrollment. With more students to provide care, the clinics saw 4,115 more patients last year alone, and had 15,000 more patient visits after the class expansion. Nearly 4,000 of those were emergency appointments, available to anyone experiencing dental pain.

Last September, UofT Dentistry rolled out a four-week extension for third-year DDS students. That keeps the undergraduate clinic open until the third week of July, improving continuity of care. "We've shortened the break where patient care stops," says James Posluns 9T1, 9T8 Dip Ortho, assistant dean and director of clinics.

Meanwhile, to get services right where they are needed, UBC's Faculty of Dentistry provides on-site hygiene and dentistry at long-term care facilities — delivered bedside or in dental offices at the facilities.

FUTURE INVESTMENTS

As every dentist knows, oral health is deeply influenced by overall determinants of health. Housing strategies, better transit, childcare reform and other adjustments to the social safety net — measures that help people climb out of poverty — would lead to healthier mouths.

As would, of course, an affordable oral healthcare strategy that would impact everyone, not just those living in cities. "Oral health should be considered part of general health," says UBC's director of clinics Andrea Esteves. "With that inclusion, with that expansion, more resources could be available in a regular medical plan," she says.

Part of that shift might also come, in part, if pediatricians started doing oral health screenings, and if medical education were to further embrace oral health education, says Hsu. Graduating MDs "say that they don't get a really strong component of oral health and dentistry," he says. If a family physician had the training to point to poor oral health as a factor in uncontrolled diabetes, for example, that would place the problem — and solution — in a whole other light.

At present, what exists is a loose collection of hardworking government agencies, community health initiatives and educational institutions doing their very best to fill the gaps. They can't change the system quickly. They can't lower rents or make the bus any faster or cheaper. But they can make a new denture, ease the pain of an infected tooth, or offer the hope of a new life that can come alongside a new smile. ■

TORONTO THE SMART

How Toronto became a world presence in health innovation. And where it needs to go next

BY DIANE PETERS



Photos: Jeff Comber

On the 14th floor of the MaRS building's west tower, in the Ted Rogers Centre for Heart Research, Michael Floros is baking little sticks of aluminum at 1,000 degrees Celsius. That's to see if the adhesive he's invented will stay stuck at dramatic temperatures.

"The glass is broken, but it still held together," he says, showing off a glass shard coated with adhesive that he's been stress testing in other ways. Some have been lingering in water for months — and are still sticking. Floros, who did his PhD in materials science at Trent University, expects this adhesive, which works alongside thin, flexible pieces of tape,

to have regulatory approval around 2020. The new inventions can replace the metal plates and screws that oral and maxillofacial surgeons use to fuse bones together, but are smaller, more flexible and reabsorb into the body after about a year. Such tools should have a starting price of around \$2,400 per surgery, so these products, which shall be sold under Floros' newly formed company Cohesys, could be highly lucrative.

But to get these devices on the market and into real patients, Floros is going to need a lot of help. He's got it. Floros works as a post doc with the Faculty of Dentistry's Paul Santerre, and he's getting plenty of support from the startup veteran. Santerre and a group of researchers invented an earlier version of the bone tape and Santerre hired Floros to perfect it, and "spin out



Michael Floros

a company on it." He has access to equipment in this roomy lab space at MaRS. His scientific advisory panel includes top physicians and researchers, including a surgeon who tells him how the product would work in an OR.

Floros is a member of University of Toronto Early Stage Technology (UTEST), Health Innovation Hub (H2i), MaRS Innovation and MaRS Venture. These organizations have helped him learn how to run a startup and understand things like patents and healthcare codes, and have given him tips on pitching to investors. Importantly, he received \$100,000 from MaRS Innovation to fund the company's initial operations — he will need \$3 – 4 million in the coming years. "Without the support I've found here, the company would be lost," says Floros.

While it's early days for Cohesys — its web site isn't even live yet — other innovators in Toronto are finding similar levels of support in the city's health ecosystem. Toronto's health hub has becoming increasingly supportive of new ideas and collaboration. Across the fields of medicine, dentistry and biomaterials, Toronto is becoming a world-class centre for health innovation — with the university at the nucleus of it all, and UofT Dentistry a key player. Both basic researchers and health-related private enterprises are doing truly innovative work, and getting noticed around the globe. UBI Global recently ranked the University of Toronto among the five best universities in the world for fostering startups. "Over the last

five-to-ten years, we've become a hotbed for commercialization and innovation," says Ying Tam, managing director of Health Venture Services at MaRS.

It was a series of efforts on the part of government, academic institutions, researchers and clinicians that made it all happen. They took Toronto from a smart but quiet, semi-big city into an organized destination for new ideas in health. Toronto rising up culturally via its increasingly high profile entertainers, sports teams and tourist destinations have helped make it cool across the board. Yet, the city has a long way to go. "There are still a lot of missing elements," says Santerre, including barriers to success related to capital, talent and the healthcare system itself. Toronto deserves its accolades, but has to admit its imperfections. While the city is on the rise, it's time to push for even better.

SMALL BEGINNINGS

Canada, and specifically Toronto, has always held its own with basic research. After all, here's where insulin was discovered in the 1920s, then stem cells in the 1960s. Farah Thong, research and business development manager, technology and research with the Faculty of Dentistry, recalls that while doing her post doc at Sick Kids in the early 2000s, government agencies focused on basic science, not translational medicine. "Everyone was studying cancer or diabetes, but nobody stopped to think whether or not their work had an application to the disease, that at some point it would relate to patient care," she says.

Academic silos were alive and well in that era. "There were about 20 institutions all gunning to be seen as Toronto," says Santerre. "And there was very little collaboration." While many talented researchers and clinicians stuck around and did important work, major talents got lured south of the border by high profile universities, big salaries, top equipment and the likelihood of gaining international clout.

The worlds of business and science had few linkages then. When Michael May, now CEO of the Centre for Commercializa-

Toronto is becoming a world-class centre for health innovation — with the university at the nucleus of it all, and UofT Dentistry a key player

tion of Regenerative Medicine (CCRM), finished his PhD in chemical engineering in 1998, he was told by his supervisor that if he wanted to be an entrepreneur, he'd have to get a job — doing a startup in

science was unheard of. "Taking the commerce or industry route was not looked upon favourably." After having some success in business a few years later, May recalls speaking to a group of about seven grad students about entrepreneurship. (Now, he does guest lectures for MaRS's Entrepreneurship 101 to a room of 500 with hundreds more watching online.)

That lack of entrepreneurial spirit became a problem.



“Canada’s growth relative to the rest of the world and the peak centres of health research was not keeping up,” says Santerre. Then, some key players realized a way to change: Toronto would never be as large as New York City or London, but by creating more connections within the city’s organizations, it could build critical mass.

The move away from silos towards collaboration happened around the turn of the last century. In 1999, the University Health Network was formed, merging Toronto Western, Toronto General and Princess Margaret hospitals under one umbrella, and hospital researchers began sharing ideas. The same year, IBBME came about, a merger between the Institute of Biomedical Engineering, Dentistry’s Centre for Biomaterials and the Tissue Engineering Group at UofT’s Department of Chemical Engineering & Applied Chemistry. “The focus changed to the team, not me and my achievements,” says Santerre.

Then MaRS Discovery District was founded in 2001. While the not-for-profit met with criticism out of the gate, when UofT president David Naylor created MaRS Innovation in 2008, gathering together 16 partner organizations to pool their collective innovative ventures, the organization started to get some traction.

In 2010, Ryerson University’s pro-business president Sheldon Levy opened up the Digital Media Zone (now known as the DMZ) incubator. A year later, the federal government’s

Jenkins Report — Naylor was on the advisory panel — made the case for Canada pushing an innovation agenda to stay competitive and bolster the overall economy. Also in 2011, May helped found CCRM to link stem cell scientists to industry expertise and partners, and the Impact Centre opened in 2013.

Meanwhile, government funding agencies began demanding research with clinical implications. UofT gradually grew its roster of incubators, which now stands at nine,

including H2i, which focuses on health startups. The launch of Medicine by Design in 2015 gave regenerative medicine a further boost.

Now, the city has a newly robust health sciences ecosystem with a collaborative infrastructure bent on innovation.

Meanwhile, entrepreneurship has cache in the sciences and indeed across sectors. Suddenly, anyone in any lab could invent the next big breakthrough, and have it nurtured. “All of these changes began to change everyone’s perception,” says Thong.

A MATURE ECOSYSTEM

“We’re really seeing the community hitting its stride,” says May of Toronto’s health research ecosystem today. It’s now common for PhD students to ponder entrepreneurship over academia. Basic researchers now collaborate with clinicians, and clinicians are doing more research too, so Toronto labs produce science with real-life applications. “Patients have become the centrepiece

of science,” says Thong.

And, if you look at hires, more and more people are coming back from the U.S. or not leaving in the first place. Santerre recalls negotiating with a talented researcher being offered \$3 million from Harvard. He convinced her to stay by saying: “You can go there and jump into a pool and swim. Here, you jump into the pool and there will be a lot of people throwing you life vests and supporting you.” Increasingly, those throwing the life vests are people like Santerre and May who have considerable science entrepreneurship experience. Meanwhile, Toronto has appeal as a home base, and is still affordable compared to New York and San Francisco. “People want to live here,” says Santerre.

Toronto is starting to see successes in healthcare innovations. In 2017, MaRS-supported ventures raised \$4.8 billion in capital and earned \$3.1 billion in revenue. In 2017, H2i had 80 companies as members — up considerably from the mere seven companies it started with in 2014 — bringing in \$80 million in revenue.

Notable startups making a difference include Atomwise, founded by a UofT computer science grad, which uses AI to help companies find molecules worth pursuing as drug targets. It just earned \$45 million in venture capital. Stem cell company BlueRock Therapeutics, founded by a team led by Gordon Keller, director of the McEwen Centre for Regenerative Medicine in the University Health Network, landed \$225 million from Versant Ventures and Bayer in 2016.

STARTUP WOES

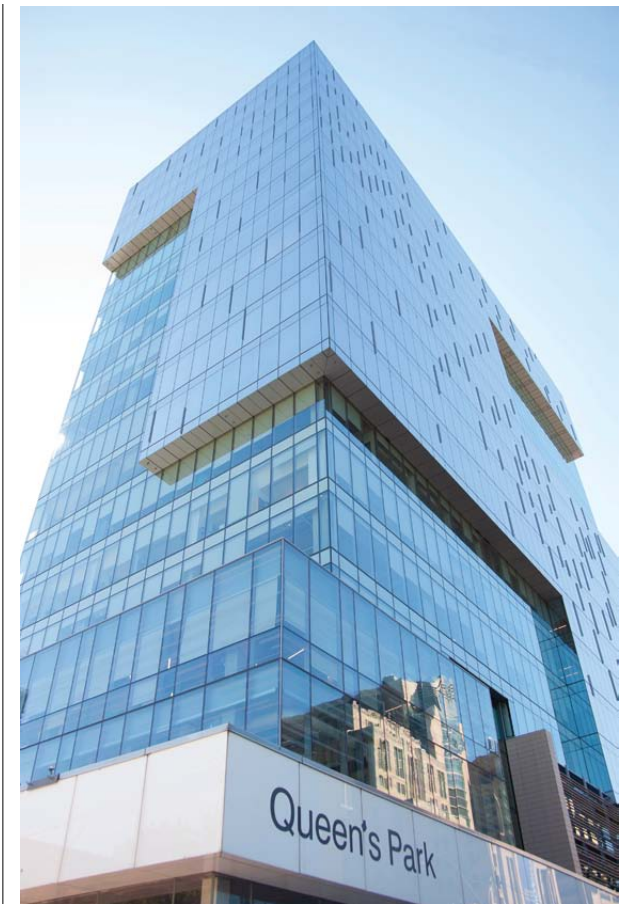
The human body is very good at rejecting foreign objects, including vital surgical implants. But during his PhD at IBBME, Kyle Battiston — another of Santerre’s students — developed a polymer with anti-inflammatory qualities with the help of IBBME grad Soror Sharifpoor.

The duo founded the company Polumiros in 2016 and got considerable support from the university’s Innovation & Partnerships Office and from the Impact Centre. But now, things are somewhat stalled. Battiston and Sharifpoor have been

“We need more players and we need players who know how to get to market faster”

working for nearly a year to secure the \$3 million they need to fund clinical trials to look ahead to FDA approval. “This is a Class III medical device, considered to be high risk,” says Battiston. Since few venture capitalists seem willing to wait the three years or so it might take to fully test the polymer, Battiston says, “We might have to get creative in how we get this funding.” So they’re looking for money from philanthropists, foundations and government. They landed \$50,000 from an oncology research competition — a huge boost, but nowhere near what they need.

Battiston and Sharifpoor are falling into a typical trap for Toronto-based startups: they’ve got the cool products, but not



the money or the means to get to market. “Canada leads the world in terms of IP patents and all that stuff, but we’ve always had a tough time commercializing,” says Tam.

Access to capital is a huge barrier. According to a report from the Impact Centre, the U.S. has five times more capital for new companies and six times more for companies that are scaling up. Our relatively fledgling hub just doesn’t have the same appeal as San Francisco or Boston for venture capitalists. Meanwhile, while our government agencies fund research, it’s not at the same level as other jurisdictions. “We may have the most research but we don’t have the highest research dollars per capita,” says Santerre. That means companies have to seek private capital earlier in the process.

“The reason the capital isn’t there is the companies aren’t there,” says Charles Plant, senior fellow with the Impact Centre. “The capital will go where there are good companies.” He thinks Toronto’s startups aren’t growing fast enough to attract capital. U.S. companies may be getting better support and advice to get to market quicker.

Indeed, the talent gap is still huge here: while many Toronto health sciences entrepreneurs have a few startups under their belt, those in Silicon Valley may have a dozen. “We need more players and we need players who know how to get to market faster,” says Santerre.

We also lack the resources for some healthcare companies

to get going. “We need incubator wet lab space,” says Santerre, noting there’s almost none to support biology-related startups. Compounding the problem is our public healthcare system, which is often downright hostile towards innovation. “Ontario is the largest healthcare buyer in Canada, but in order for a Canadian company to be successful, they have to go beyond our borders,” says Tam. Both Floros and Battiston plan to get FDA approval and hit the U.S. market before they attempt to get Health Canada approval or find customers here.

Plant say Toronto is simply not keeping up, and neither is Canada. His calculations put government and university investment into health innovation research at \$7.3 billion annually, which results in company revenues of just \$3.5 billion — we’re bleeding startup dollars. “We tell a good story about how well we’re doing, but the real data doesn’t really match the rest of the story,” he says. “We have improved but the rest of the world is improving at a different pace.”

He’d like to see a fundamental change to a push system that sees healthcare providers solicit solutions to their real, on-the-ground clinical problems from entrepreneurs. Our current pull system sees companies try to sell their new wares into a mostly resistant market, so companies fail and the system

While many people in today’s healthcare innovation workforce started their careers in the silo age, the next generation will be different

never gets more efficient or offers better care. But, that would entail a massive shift in the healthcare system. Santerre believes some changes will evolve naturally. While many people in today’s healthcare innovation workforce started their careers in the silo age, the next generation will be different. In any given year, 35,000 UofT students are exposed to ideas around entrepreneurship through courses, lectures and events. In turn, those students will be that much more likely to not just launch a startup, but work at one. Today’s startup newbies will be veterans in time, and add to our talent pool in blending science and business.

The Toronto ecosystem should mature, bolstered by important new changes: a recent \$15 million government investment in CCRM, a new 14-storey innovation hub to be built soon by UofT. At Dentistry, the launch of the Fibrosis Network and the opening of newly renovated labs and workspaces embrace collaboration and state-of-the-art equipment. As the city’s health innovators continue to take the lead on AI, regenerative medicine and fibrosis, and seek new opportunities in emerging areas such as skilled manufacturing in synthetic biology and the use of big data in healthcare, we’ll find our niche at the top — and keep carving out excellence in a place unlike any other. Says Santerre, “This is an electric, fun city to be in.” ■

NEW DIRECTIONS

Toronto’s ability to innovate at a world-class level relies on proximity. The city offers walking-distance range to numerous innovative, supportive and cutting-edge organizations, with the University of Toronto and the Faculty of Dentistry right at the core. It’s easier to work together when you can meet for a coffee to chat about your next big healthcare idea

1. **MaRs Discovery District**
The world’s largest innovation hub, it puts research centres, UofT labs, startups and incubators in collaborative quarters. Startup members include Cohesys and Polumiros.

2. **Medicine by Design**
UofT’s wet lab incubator for regenerative medicine and cell therapy.

Centre for Commercialization of Regenerative Medicine (CCRM)
Where scientists get support to take their regenerative medicine ideas to market.

Ted Rogers Centre for Heart Research
This partnership between UofT, University Health Network and Sick Kids focuses on advancing heart research.

3. **Mitacs**
A government-sponsored accelerator that links university research with industry.

4. **Institute of Biomaterials and Biomedical Engineering (IBBME)**
This world leading organization — cofounded by Dentistry — is one of the conduits through which faculty members develop innovations.

5. **University of Toronto Centre for the Study of Pain**
Co-developed by UofT Dentistry, this is an interdisciplinary institute changing how we understand and treat pain.

6. **Mount Sinai**

7. **Centre for Advanced Dental Research and Care**
The Faculty and Mount Sinai work together to develop
- breakthroughs in hard-to-treat conditions and to impact patient care.

8. **Hospital For Sick Children**

9. **Princess Margaret Cancer Centre**

10. **Toronto General Hospital**

11. **Health Innovation Hub (H2i)**
UofT’s health-focused

incubator that supports student entrepreneurial ideas.

12. **Faculty of Dentistry**

13. **Toronto Western Hospital**

14. **Sunnybrook Health Sciences Centre**
-
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THE COMMUNITY BUILDERS

Meet Caroline Conway DDS and Terry Stavroullakis MSc. These recent grads are notable for more than their academic records — they’ve spent their school years building up their community

THE ACTIVIST

Caroline Conway and her fellow classmates from the DDS class of rT8 are nostalgic about their time at UofT Dentistry. The class entered the Faculty at a period of momentous change that impacted the academic organizational structure, curriculum and the creation of key new positions. But for Conway, it was the school’s shift towards really listening to students that meant the most.

“I’m really encouraged by the changes,” says Conway, who served as the Dental Students’ Society (DSS) president in her final year. “Everyone talks about it. We’ve all noticed the shift in culture. It’s a lot more positive, and a lot of people feel like they can provide feedback and it will be taken into consideration.”

One of the most potent changes, to Conway, were those made to interview day. The Faculty changed the admission interview format this year based on feedback from students and faculty, so DDS students now play an integral part in creating a welcoming and positive climate for potential new students.

“This year we even had balloons,” says Conway, who was an organizer and volunteer for the day, which sees hundreds of nervous applicants come to the school for entrance interviews. “I know it sounds silly, but these small touches make a huge difference. I think incoming students will just be excited to show up because they had such a positive first impression.”

Conway is no stranger to making positive impressions at the Faculty. She was involved from year one. Conway served as the DSS assistant community outreach representative by second year, and then became vice president, community outreach. In that role, she was actively involved in some of the organization’s most successful initiatives that raised money for cancer research, supported research for sick children, and promoted mental health awareness.

By DDS4, Conway had been elected president of the DSS,



Caroline Conway

Photos: Lisa Sakulensky

and was awarded a prestigious Cressy Leadership Award from the university for her exemplary service.

Conway is now doing a one-year general practice residency at the McGill University Health Centre. But she isn’t ruling out returning to UofT for a specialty degree later. “Of course I’d come back!” says Conway. “This was a great community to be a part of. There was great mentorship and I learned a lot more than just dentistry.”

THE CONNECTOR

Most days last spring, you’d find Terry (Alexander) Stavroullakis in the newly renovated labs on the fourth and fifth floors, giving new summer research students a tour and helping them get settled in. He knows where all the equipment is, and how to run the machines.

He’s also the guy people lean on when they have a problem.

As 2016-17 president of the Graduate and Postgraduate Dental Students’ Society (GPDSS), students would come to Stavroullakis for advice. “I was sympathetic, I wanted to help, but in the end, I didn’t have any training.”

Stavroullakis is now trying to change that. This fall he hopes to train at the St. George campus to become a peer counsellor. These counsellors are the first stop for graduate students with complaints about their supervisors or other students, and they also connect students to resources.

Stavroullakis began at the Faculty as a volunteer researcher in fall 2012. He was taking extra courses before applying to dental schools and was looking to round out his research experience. Right away, he got hooked on research. His first publication was accepted as he entered the MSc program in 2014.

But complications ensued. “I had a change in supervisors early in my program,” he says. Not knowing where to turn to for guidance — graduate students were isolated by small, windowless labs and offices, often having little contact with each other — would, ironically, shape his career. He reached out by getting involved, first as treasurer of the GPDSS, then as a Research Day organizer. And while president of the GPDSS, Stavroullakis made key changes to help grad students in need.

“There are five leaders now in the society. We now have a whole list of resources for students.”

Stavroullakis may develop his talent for helping people as he considers his future path. He is interested in the Faculty of Dentistry’s PhD program, and while he hasn’t ruled out a DDS degree, he’s also considering applying to the University of



Terry Stavroullakis

Toronto’s psychotherapy counselling program.

For now, though, he’s just excited for the incoming graduate students. The newly revitalized labs and offices on the fourth and fifth floors of the Dentistry building give students unprecedented access to faculty equipment — and to each other. “I’ve already seen a huge difference,” Stavroullakis says. “There are tons of people in the lab space, people are talking and sharing instruments. It’s different. It has a different vibe to it.” ■

CONGRATULATIONS CLASS OF 2018!

DDS

Ruba Al-Luaibi
Margot Andrus
Manvir Bagri
Irina Baranova
Abdelrahman Bendary
Kaitlyn Bento
Cac Bui
Amanda Chan
Anny Charolia
Grace Chen
Yani Chen
Tsu Huan Cheng
Cameron Chiang
Kraig Alexander Chin
Yan Yee Chu
Katie Yuen Kei Chung
Fangdi Cong
Caroline Elizabeth Conway
Mevna de Silva
Armita
Dehmoobadsharifabadi
Julie Marie Delcorde
Aleksandr Devyatov
Alexander Joseph Dolan
Kyung Min Dong
Prema Susan D’Souza
Amr Ali Ahmed El Maghrabi
Grace Ettinger
Hamza Farooq
Karen Feldman
Rachel Filice
Vinod Krishnan Ganesan
Negin Ghaffari
Ali Ghorbani Gazar
Erin Olga May Goertzen
Kiranjot Gosal

Wesley Crawford Graham
Anshu Grewal
Hui Jun Guo
Andrew Hall
Kimberly Hawrylyshyn
Pei Yuan He
Ahmed Mostafa Heider
Michelle Hoang
Jenny Hong
Paula Pei Yao Hsien
Michelle Huang
Nadia Inayat
Svitlana Ivanova
Namita Joshi
Katherine Kazak
John Kerr
Arian Khorshid
Bomee Kim
Vasily Vladimirovich
Kulchenko
Daniel Kulevski
Alethea Suzanne Langan
Jihyun Lee
Junhyung Lee
Angela Yijie Lin
Lauren Elizabeth Lin
Tracy Liu
Yi-Shan (Annie) Liu
Raymond Ho Fai Lo
Derek Mah
Sina Makaremi
Shelina Mehdi Maredia
Matteson John Marinovich
Venus Marwah
Khalid Marzouk
Colette Mascarenhas

Kaveh Mirsaeidi
Steven Thomas Monardo
Eric Moryoussef
Sina Moshiri
Kelsey Motomura
Habiba Mumtaz
Neetu Nath
Emily Ann Nisbett
Courtney Nosak
Jae Hwan Oh
Kelsey O’Hagan-Wong
Dominic Pang
Hannah Park
Ji Ho Park
Stephen Perkins
Rebecca Catherine Phillips
Mandip Puri
Siran Qin
Santa Rabi
Joshua Aaron Raisin
Yelda Rawofi
Tyler James David Ricer
Amit Rozenblit
Golsa Samii Saket
Jaclyn Nicole Scurk
Li Shi
Amit Soni
Stena Dushantha
Sothiratnam
Kelli Stein
Karen Emily Stoskopf
Tyler Tam
Calvin Tang
Gagandeep Toor
Olivia Trzcinski
Alexander Patrick Vasiliou

Gowthami Venishetti
Ahmed Qays Baqer Witwit
Zheng Dong Xie
April Xu
Xiaoxin Yang
Brandon Yee
Sangjoon Yeo
Clarence Yeung
Wenyi Yuan
Alena Yurchuk
David Sol Zelsman
Yixing Zhou
Shuang Lin Zhu
Rostyslav Zvanych

Photo: Lisa Sakulensky



MSC

Najm Alfrisany
Oriyah Barzilay
Melissa Cerone,
Orthodontics
Ralph Dana, Endodontics
Hendrik Doering,
Periodontics
Ashkan Ebrahimpour,
Prosthodontics
Alia El-Mowafy,
Dental Anaesthesia
Nupur Gupta

Siavash Hassanpour,
Periodontics
Nghia Quang Huynh,
Endodontics
Yang Heon Kang,
Paediatric Dentistry
Nicholas John Ledderhof,
Oral Surgery
Hayder Ali Mahdi,
Radiology
Soheil Mohammadi
Khojasteh,
Dental Anaesthesia

Ouliana Oguienko,
Orthodontics
Adam Ohayon, Periodontics
Fay Pereira, Orthodontics
Petar Boyd Petrovic
Azadeh Reyhani,
Orthodontics
Annie Shrestha,
Endodontics
Alexander Stavroullakis

PHD

Sally Esmail

Bo Huang
Shiva Hamidian Jahromi
Muna Qasim Mustafa
Marashdeh
Mariam Mashregi

Every effort was made to ensure the accuracy of this list as of press time.

MSc and PhD graduates range from fall 2017 to spring 2018.

GREAT TIMES AT THE GREAT ALUMNI EVENT

OVER 300 ALUMNI AND FRIENDS TURNED OUT FOR THE INAUGURAL GREAT ALUMNI EVENT

Last April, students spanning 70 years — as far back as the 1950s right up our current DDS4 and grad students — came together to celebrate their profession and their affiliation with the Faculty of Dentistry at Steam Whistle Brewing.

The Great Alumni Event took place on the same weekend as the Ontario Dental Association’s Annual Spring Meeting, which was held at the nearby Metro Toronto Convention Centre, so guests could easily walk over to join the festivities.

Alumni were able to reconnect and reminisce, all while enjoying some great food and posing for pictures in the photo booth.

Class of rT8 student Ahmed Witwit and his classmates, including Abdel Bendary, came out to enjoy their first alumni event ever. Others, such as Roger Ellis, who celebrated his 60th class reunion two years ago, and members of the class of 8To — including Elizabeth MacSween, Paul Piccininni and Steve Brown — have known each other for more than 40 years. “We are a cohesive group,” said MacSween, who was honoured with the Award of Distinction in 2017. “We still get together and have a lot of laughs.”

This event was made possible by the generous support of dentalcorp, HANSAméd Limited, TMFD Financial, Sunstar Americas, Inc., Henry Schein Canada Inc. and RBC Royal Bank. 🍷



Photos: David Lai



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GREAT ALUMNI EVENT 2019

Friday, May 10, 2019

Come out to see your former classmates and meet other UofT Dentistry grads. Join us at Steam Whistle Brewing at 255 Bremner Blvd.

Ticket sales open in the New Year.

Visit:
www.dentistry.utoronto.ca/the-great-alumni-event
for more information.



UNTIL WE MEET AGAIN

This spring, 14 classes with honoured years ending in 3 and 8 met to catch up, reminisce, and join in general merriment. A big thank you to all of you who shared your reunion stories with us!

UofT Dentistry presents a new online community hub for our alumni. Visit www.dentistry.utoronto.ca/reunions for information on upcoming class reunions and see our alumni photo galleries. Easily download your class photos, or check out pics from the latest alumni gatherings, such as the Great Alumni Event.

Still missing your friends? Read profiles on your fellow

UofT Dentistry alumni here: www.dentistry.utoronto.ca/alumni/profiles.

ORGANIZING YOUR CLASS REUNION?

If you graduated in a year ending in a 4 or 9, it is your honoured year! For information, or if you are interested in organizing your class reunion for spring 2019, please contact the Advancement Office at advancement@dentistry.utoronto.ca.



Class of 0T3



Members of the Class of 6T3



Class of 9T8

BOUNDLESSIMPACT

A FAMILY-INSPIRED LEGACY

VALERIE STAVRO'S FATHER GAVE BACK THROUGH HIS WORK, SO SHE'S DOING THE SAME



Valerie Stavro

Looking back on her career in dentistry, Valerie Stavro 8T4 is philosophical. "Dentistry has been a great influence in my life," says Stavro.

"It's all about the person as an individual, and all their uniqueness. As dentists, we see the problem, identify what caused it, treat it, and try to prevent it from happening again. Each person's care is tailored to their specific needs."

It's this holistic vision of patients and community, of the whole person and all of their circumstances, that informs Stavro's generosity. This year, Stavro donated \$25,000 as part of the

Boundless Promise Program to create the Valerie Stavro Student Bursary, which will help deserving students in financial need.

It was a gift made in honour of her father, Chris Stavro.

A businessman and landlord, Chris put people first. "My father was all about giving back and helping out someone in lesser circumstances," Stavro says. "There was a tenant who had difficulty securing a job, so my father bought him a new pair of shoes for his job interviews. On another occasion, he bought a new denture for a tenant. He had faith that the tenants would succeed. My father led by example. We learned to help whenever we could help."

Photo: Jacklyn Atlas

When Stavro moved towards retirement, she felt it made sense to give back to her alma mater, UofT Dentistry. Originally graduating from nursing at UofT, Stavro realized that her calling lay elsewhere. She joined the DDS class of 8T4 after a life-changing conversation with a dental student at Toronto East General Hospital (now the Michael Garron Hospital), where she and her siblings volunteered.

Despite how few women were entering dentistry at the time — she was one of just 20 in a class of 120 — especially women with her traditional heritage, Stavro says she was surprised at the lack of obstacles in her path. “It was not in vogue to support women in education,” says Stavro, but her father supported her through a second professional degree without hesitation.

Stavro’s grandparents emigrated to Toronto from Greece in 1926. A family of entrepreneurs, they quickly became juggernauts of the grocery industry before branching off into restaurants and hotels. After Chris Stavro passed away last year, Stavro and her family found among his papers an acceptance to UofT’s teaching program — an offer her father never took up. Although Chris believed that education was the foundation

of a progressive society, his obligations to the family business kept him from his own educational pursuits.

Stavro has already left her mark at UofT Dentistry and with the alumni community through her many contributions to the school. As well as running a successful Yorkville dental

practice, she began teaching in the International Dental Placement Program in 2000, then called the Qualifying Program, and has participated in teaching restorative ever since.

She became an active participant in the Alumni Association Board, where she and her fellow Board members ran a successful charity golf tournament and created the UofT Dentistry Gala.

Stavro served as the Alumni Association president between 2005 and 2010. She received UofT’s prestigious Arbor Award, honouring exceptional volunteer contributions to the University, in 2013.

Stavro has also created a legacy gift in her will that offers even more aid for students. “I really hope this donation highlights the point that small gifts are good, too. It doesn’t have to be millions of dollars. Every contribution is a move in the right direction.” ■

“I really hope this donation highlights the point that small gifts are good, too. It doesn’t have to be millions of dollars. Every contribution is a move in the right direction”

FACULTY OF DENTISTRY ALUMNI ASSOCIATION ANNUAL GENERAL MEETING WITH CATEGORY 2 CE LECTURE:

“UPDATE ON INFECTION PREVENTION AND CONTROL,” CHRIS SWAYZE, RCDSO

October 16, 2018
6:30 p.m. – 8:30 p.m.
Rm 170, 124 Edward St., Toronto



AS AN ALUMNUS, YOU ARE A MEMBER.

We invite all alumni to attend the UofT Dentistry Alumni Association’s Annual General Meeting with special speaker Chris Swayze of the Royal College of Dental Surgeons of Ontario. Come meet your Alumni Association Board, fellow classmates and colleagues to hear about the exciting changes the Board has planned.

This year will also feature a lecture and Q&A on the new standards of practice for infection control. A reception will follow in the Student Commons. The lecture is eligible for one point, category two. Additionally, a \$100 credit will be given to attendees for a future UofT CDE course.

Register by October 12 at my.alumni.utoronto.ca/agm2018.

BOUNDLESSLEGACY

Thank you to our benefactors who have made important gifts of \$25,000 or more to the Boundless Campaign. These gifts have helped lift the Faculty to new heights and support our faculty, staff, students and patients. Thank you for your investment in the Faculty’s mission to provide the highest level of educational experience and patient care, and to perform vital health research.

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LASTING LEGACIES

The Faculty of Dentistry recognizes those donors whose gifts of \$25,000 or more have been made through bequests, trusts or insurance through May 30, 2018.

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\$100,000 TO \$999,999

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Since 1992, UofT has welcomed hundreds of individuals to the King’s College Circle Heritage Society, which recognizes alumni and friends who have remembered the University through a provision in a will or other form of future gift commitment.

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LEADING GIFTS MAY 1, 2017 – APRIL 30, 2018

Our annual donor listing recognizes the generosity of donors who have made new gifts or pledges to UofT Dentistry of \$1,000 or more.

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PRESIDENT'S CIRCLE MEMBERS*

The President's Circle is the Leadership Annual Giving Society for the University of Toronto. To commemorate the University's Royal Charter of 1827, all individuals who make annual gifts of \$1,827 or greater and organizations who make annual gifts of \$10,000 or greater are acknowledged as members of the President's Circle and enjoy unique opportunities to attend lectures, the President's Garden Party and the President's Holiday Party.

GIFTS OF EXPERIENCE

UofT Dentistry students gain much from the wisdom and experience of those who have come before them. Thank you to our friends and alumni who have made gifts to the Dentistry Annual Fund, which supports initiatives such as peer mentorship nights and alumni lectures.

We also appreciate the many wonderful volunteers and instructors in dentistry who have shared their time in service to our community of patients and students. Thank you!

We strive to make our lists as accurate as possible. For more information or if you have questions about the donor listing, contact Miriam Stephan at 416-864-8202 or miriam.stephan@dentistry.utoronto.ca

WE REMEMBER...

JOHN PEDLER

John Pedler passed away last February at age 97. He was a faculty member at UofT Dentistry and was known as the "architect of hospital dentistry" in Toronto. Pedler began medical training at just age 16 at the University of London. He then served in the RAF while doing his degree in dentistry and then served as a dental officer. He moved to Canada in 1961 and served as professor of Oral Medicine and Pathology and head of the department of oral diagnosis in the Faculty of Dentistry. He also worked as dental surgeon in chief at Toronto General Hospital from 1961 to 1986. In that post, he ensured cardiac patients were given dental examinations before surgery, reducing deaths from dental-related bacteria to zero. He also ran a private practice that was known for offering pro bono services and treating patients with hemophilia.

GORDON CHONG 6T7



Gordon Chong began working as a dentist after graduation in 1967, then built a lengthy career as a politician and community activist. He first ran for office in 1979, becoming an

alderman (now called a city councillor) in Toronto. He then held a position on Metro Council, the amalgamated city council, from 1994 to 2000. He served on boards, often holding key positions, for the Toronto Transit Commission, GoTransit, Metro Toronto Housing Authority, Toronto Police Services, the YMCA of Greater Toronto and numerous others. He was active in the local Chinese community, serving on the board of governors for the Mon Sheong Foundation and was founding director of the Federation of Chinese Canadian Professionals and a charter member of the Toronto Cathay Lions Club, the first Chinese Lions Club in Toronto. He also served as a citizenship judge in the Canadian Court of Citizenship. He was awarded the Queen's Diamond Jubilee Medal by the Office of the Governor General of Canada.

PETER BECK 4T9



Peter Beck was born in Winnipeg and attended St. Michael's College School in Toronto and then the Faculty, graduating in 1949. He died last March after a

forty-year career in dentistry, providing patient care and pioneering innovations in implant and electrosurgery dentistry. He served as an instructor at UofT Dentistry, and held patents in implant dentistry and electrosurgery. Beck was a founding member of the American Academy of Electrosurgery and a longtime member of the American Academy of Implant Dentistry. He served for thirty years on the editorial board of *Oral Health Magazine*. His long-time practice was in Toronto at Yonge and Eglinton.

THOMAS ROUTLEDGE 8T0



Known as Dr. Tom to his patients, Thomas Routledge passed away last March. Vancouver-born Routledge came to Toronto for dental school and worked as a dentist in the Canadian Armed Forces after graduation. In 1984 he returned to Coquitlam to open up a general practice. His work in forensic odontology with the British Columbia Forensic Odontology Team led to him receiving the British Columbia Community Achievement Award in 2015. Routledge was a highly engaged UofT alumnus who led the fundraising efforts

for the generous class of 8T0 for their 30th anniversary.

BRIGITA MERCS WEAVER 6T2



Brigita Merces Weaver died last July in her 79th year. Back in 1962, when there were few female dental students, she graduated at the top of her class at UofT Dentistry. She then became the first female dentist on staff at the Children's Hospital in Vancouver. She also ran a successful Vancouver practice for many years and was known for her gentle touch. ■

WE MOURN THE LOSS

Norman Baird 5T2
Barry Collis 7T6
Frank Compton 4T9, 5T3 Dip
DPH, 7T4 Dip Perio
John Crooks 6T3
Paul Coulombe 6T0
Barbara Fletcher 4T3 Dip DN
Peter Gold 7T2
Emerson Jones 6T9
Mary McConney 4T8 Dip DN
William Pellow 6T4
John Ponikvar 7T3
George Sciuk 5T8
Stewart Sigismund 5T8
Gerald Stitt 5T1
Paul Yeung 8T2

Listings are as accurate as possible as of press time.

UPCOMING EVENTS

SEPTEMBER

NOMINATIONS WELCOME FOR THE 2019 AWARD OF DISTINCTION

Recognize colleagues who are making a difference for the Faculty, research, the dental profession or society as a whole. Nominations are due November 1. The 2019 Faculty of Dentistry Award of Distinction will be presented next spring at a dinner with the dean. Tickets will be available.

For nomination details and forms, visit forms.dentistry.utoronto.ca/award-of-distinction-2019-nomination or contact advancement@dentistry.utoronto.ca.

OCTOBER 16

FACULTY OF DENTISTRY ALUMNI ASSOCIATION – ANNUAL GENERAL MEETING WITH CATEGORY 2 CE LECTURE: UPDATE ON INFECTION PREVENTION AND CONTROL BY CHRIS SWAYZE, RCDSO

6:30 p.m. – 8:30 p.m.
Rm 170, 124 Edward St
Toronto

All Dentistry alumni are members of the Dentistry Alumni Association. We invite you to attend the

Annual General Meeting with special speaker Chris Swayze of the Royal College of Dental Surgeons of Ontario. Come meet your Alumni Association Board, fellow classmates and colleagues to hear about the exciting changes the Board has planned, plus a lecture with Q&A on the new standards of practice for infection control. A reception will follow in the Student Commons. The lecture is eligible for one point, category two. Additionally, a \$100 credit will be given to attendees for a future UofT CDE course.

Register by October 12 at my.alumni.utoronto.ca/agm2018.

OCTOBER YOUNG ALUMNI MENTORSHIP LECTURE SERIES

Location TBA, Toronto

Alumni who graduated between 2013 and 2018 and current students are invited to hear about the speakers' early career experiences that helped to inform decisions regarding career path and community

engagement. More details to come.

NOVEMBER 26

DR. GEORGE ZARB CLINICAL RESEARCH LECTURE

5 p.m. – 8 p.m.
Room 170, 124 Edward St., Toronto

UofT Dentistry is delighted to announce a lecture by Michael MacEntee, past president of the Royal College of Dentists of Canada and specialist in geriatric oral health. A reception will follow the lecture. Please register at my.alumni.utoronto.ca/zarblecture2018

FEBRUARY 12, 2019

RESEARCH DAY

124 Edward St., Toronto

Join us for this annual symposium to highlight the Faculty's innovative research. Connect with fellow students, faculty, staff and alumni as we feature student posters, lectures and a keynote address followed by a reception. All are welcome.

MARCH 7

VANCOUVER ALUMNI RECEPTION PACIFIC DENTAL CONFERENCE

5 p.m. – 7 p.m.



*Pan Pacific Hotel,
Vancouver*

Dean Daniel Haas will be hosting an event for UofT Dentistry alumni. Whether you live on the West Coast or you're in town for the Pacific Dental Conference, we hope to see you. Please register at my.alumni.utoronto.ca/PDC2019

MARCH DENTANTICS

Enjoy the 98th annual Dentantics with classmates or your entire practice. Watch for further details in the next issue of UofT Dentistry.

MARCH

WORD OF MOUTH NETWORKING EVENT

6 p.m. – 8 p.m.
Student Commons,
124 Edward St., Toronto

Connecting our graduating DDS students with UofT alumni, clinical instructors and experts from the UofT Career Centre, to help prepare them to launch careers as healthcare professionals in a rapidly changing landscape.

MAY 9 – 11

ODA ANNUAL SPRING MEETING

*Metro Toronto
Convention Centre
South Building, Toronto*

Come see us and the dean in our booth on the convention floor. You may just get an extra drink ticket for the Great Alumni Event!

MAY 10

GREAT ALUMNI EVENT

5:30 p.m. – 9 p.m.
Steam Whistle Brewing

*255 Bremner Blvd,
Toronto*

Don't miss the all-alumni reunion for UofT Dentistry. Located just across the road from the ODA ASM. Get your class together to celebrate your friendships from your time in dental school. For more information visit www.dentistry.utoronto.ca/the-great-alumni-event.

MAY

DDS CLASS REUNIONS

If you graduated in a year ending with a 4 or a 9, don't miss your class reunion! For information, or if you are interested in organizing your reunion, please contact advancement@dentistry.utoronto.ca.