

UofT Mississauga Magazine

FALL 2013

BUILDING THE FUTURE

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Eat Street

Alumnus James Cunningham
bites into broadcasting

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An Innovation Hub

Training new generations
of human talent

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Cross-cultural Journeys

Elder Cat Criger offers Aboriginal
teachings to students

LETTER FROM LISLEHURST

PHOTO MATTHEW PLEXMAN

FACT: U of T Mississauga contributes \$1.3 billion annually to the provincial economy.

FACT: Students dedicate many thousands of hours of volunteer service in the community every year.

FACT: UTM generates about \$9.1 million in research revenues per year.

FACT: The Mississauga Academy of Medicine, scheduled to reach an enrolment of 216 students, is addressing an urgent need for more physicians in Peel region.

ALL SINGULARLY INTERESTING, without a doubt, but taken together, these and other facts form a comprehensive snapshot of the impact that U of T Mississauga has on our city, region and province. An independent Economic Impact Report, compiled by KPMG LLP, shows just how critical a role UTM plays in shaping the economic future of Mississauga and Peel region. We attract outstanding faculty members and bright, motivated students, drive innovation, advance productivity and

help to build a knowledge-based economy. We cultivate important relationships with our government partners, industry and the broader community and, in so doing, boost economic growth and quality of life. Our impact on the community is pervasive. Now, with the establishment this past summer of UTM's new Institute for Management & Innovation, we hope to foster even more entrepreneurship.

IMI represents a new model for business education. It builds on our core professional graduate degrees geared toward key sectors in our society such as biotechnology, accounting, innovation and sustainability. With its cross-disciplinary undergraduate and graduate programs, highly integrated with external businesses and community stakeholders, IMI will be the prime generator of ideas and leaders who will drive local economic development. Its graduates will have extraordinary management skills and depth in their chosen field, a new generation that possesses keen business acumen, scientific depth and the ability to translate creative ideas into viable commercial initiatives.



IMI will be a signature and defining institute for U of T Mississauga, helping us build a city and a nation ready to meet the future.

DEEP SAINI

Vice-President, University of Toronto
Principal, U of T Mississauga

UofT Mississauga Magazine

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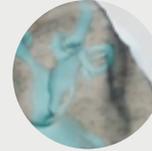
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CAMPUS LIFE

UTM: LOCAL TO GLOBAL

Skilled human capital and a culture of innovation inspire economic growth and social progress. These are the keys to prosperity in the 21st century.

In an increasingly competitive and complex economy, quality of life, job creation and retention and socio-economic well-being

are interlinked with a region's ability to attract and train a qualified workforce and to spur creativity and ingenuity.

Universities play a key role in shaping the economic future of their communities.

Post-secondary institutions driving research and innovation through human capital

development, training and learning create opportunities for new business, investment and economic diversification.

With a growing reputation for high quality, market-driven curricula and research, the University of Toronto Mississauga is a key contributor to the economic futures

Local



Tens of thousands of community members visit U of T Mississauga annually to improve their health, participate in professional and recreational activities, and attend events.



In 2012-13, students dedicated about **45,000** hours of volunteer service, valued at **\$1.1 million**, to enriching programs for at-risk populations, improving protection of the environment and raising awareness about issues of social justice.

Regional



\$1,300,000,000!

U of T Mississauga contributes more than **\$1.3 billion** annually to the economy of the Region of Peel and Province of Ontario.



The Mississauga Academy of Medicine, scheduled to reach an enrolment of **216** students by 2015, helps to address an urgent need for more physicians, including family doctors, in Peel region...

Graphics by Michael Soong, <http://uoft.me/michaelsoong>

of Mississauga and the Region of Peel. In 2013, KPMG LLP undertook an economic impact study to develop an understanding of UTM's value to its municipal, regional and provincial jurisdictions. Here are some of the highlights:



Innovation at Work

U of T Mississauga generates about **\$9.1 million** in research revenues per year, representing 478 active research projects annually.

Faculty have received more than **30** national and international awards and honours since 2009.



U of T Mississauga's new Institute for Management and Innovation will help drive innovation through human talent and research, address perceived workforce gaps and fulfill the needs of key sectors in the city.



Provincial



U of T Mississauga's annual economic impact comprises a total of **\$317.4 million** in ongoing spending through the production of goods and services and through capital spending.



The annual economic impact also includes the creation of an estimated **2,930** full-time jobs in Ontario, generated directly and indirectly.

Global



In 2012, approximately **18%** of new undergraduate intakes were international students.

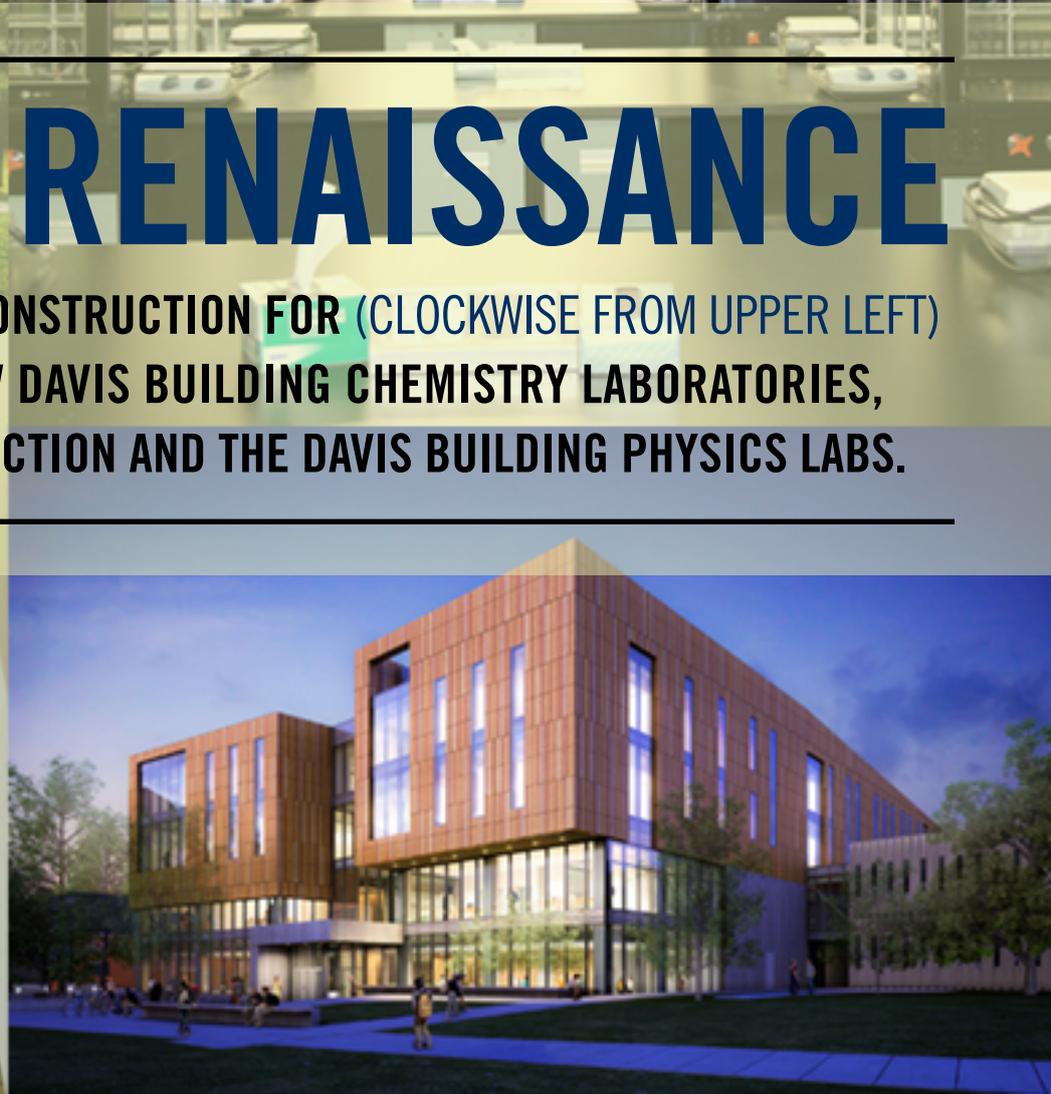


Nearly **2,000** people, including immigrants and newcomers, enroll in courses offered through the School of Continuing Studies at U of T Mississauga to upgrade skills and accreditations.

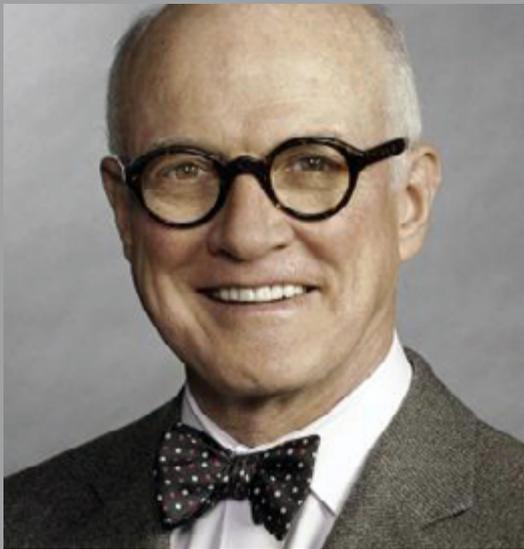


A CAMPUS RENAISSANCE

**CLICK TO GET A PEEK INSIDE THE CONSTRUCTION FOR (CLOCKWISE FROM UPPER LEFT)
THE INNOVATION COMPLEX, NEW DAVIS BUILDING CHEMISTRY LABORATORIES,
THE NORTH BUILDING RECONSTRUCTION AND THE DAVIS BUILDING PHYSICS LABS.**



UTM CELEBRATES FIRST MEETINGS UNDER ITS NEW GOVERNANCE STRUCTURE



U OF T MISSISSAUGA'S NEW governance structure launched in September with the first meetings of its senior governance body and accompanying committees. Campus Council, UTM's senior governance body that oversees campus-specific academic, business and student affairs, was designed to meet the needs of a large, academically diverse campus.

"The suburban campuses are now as big as midsized universities, so this change will

give them greater authority over a number of matters," says John Switzer, chair of U of T Mississauga's new Campus Council and a distinguished alumnus who is a member of UTM's first graduating class of 1970. "But there will still be fairly strong institutional coordination to ensure we are doing things that are appropriate and consistent for the whole university."

The previous governance structure at UTM was largely advisory to the Vice-President and Principal on matters of campus life and had specific authority for particular academic matters. That structure did not provide appropriately for the needs of a large and complex three-campus system. The tremendous expansion in recent years of the Scarborough and Mississauga campuses created a need for a more decentralized approach to university operations and governance. "I envision a U of T system where each campus would be analogous to what would otherwise be a university in its own right, yet woven together by a common university," says Professor Deep Saini, Vice-President, U of T and

Principal of U of T Mississauga, further noting that "the new governance structure is a major and welcome step toward fulfilling this vision."

In 2007, as part of the *Towards 2030* university-wide planning process, Governing Council established the Task Force on Governance to assess the current governance system. Its June 2010 report featured 32 recommendations, including one to create campus affairs committees to handle campus-specific responsibilities. UTM began its own governance review process, in close collaboration with the Governing Council, in the fall of 2011 to determine how to meet this recommendation. In June of 2012, the Governing Council approved the establishment of new governance structures for both UTM and UTSC.

What emerged last July was the new UTM Campus Council (UTMCC), ⇨

STORY SHARON ASCHAIK
PHOTO LISA SAKULENSKY

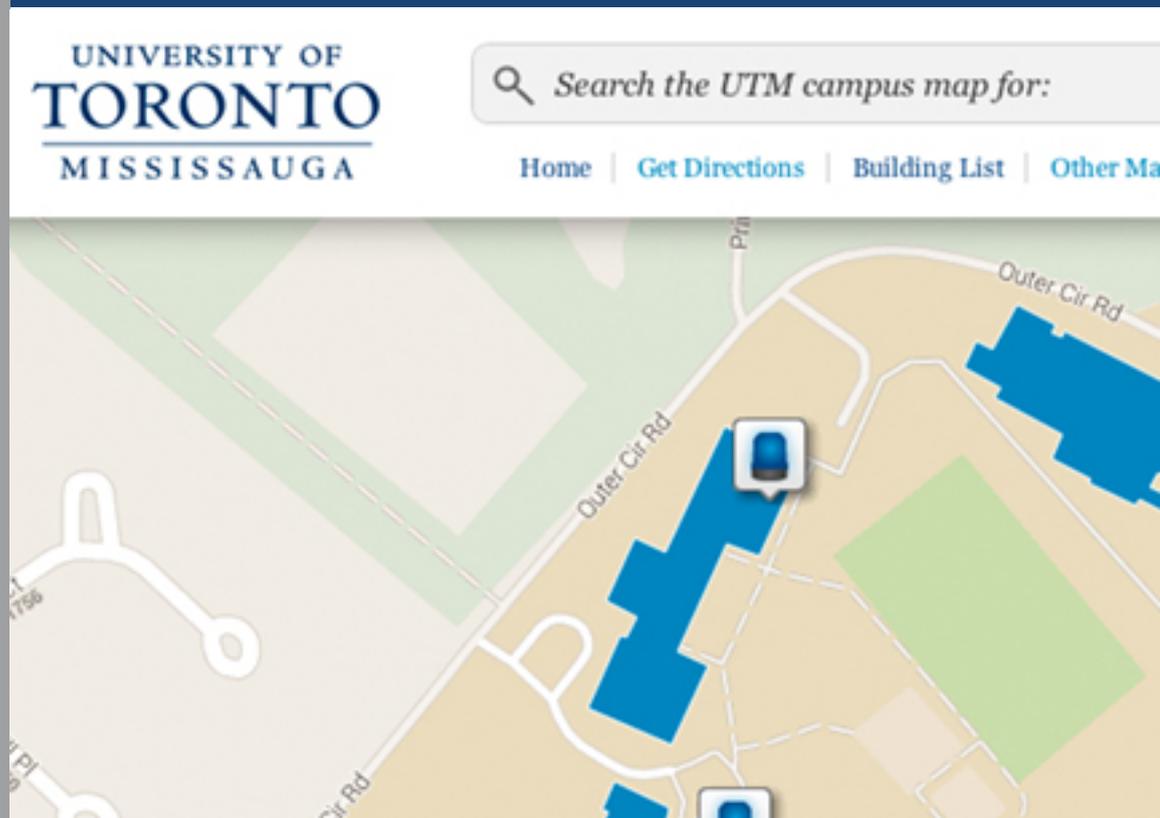
CAMPUS LIFE

⇒ which consists of 28 members from within and outside the university community. Reporting to the Governing Council, the UTMCC will now exercise more decision-making responsibility over areas such as academic affairs, capital projects, fundraising and budgeting. Three groups report into Campus Council: the Agenda Committee, which sets the agenda for Council meetings; the Campus Affairs Committee, which focuses on matters directly concerning the quality of student and campus life; and the Academic Affairs Committee, which deals with matters affecting teaching, learning and research at UTM.

“There’s so much to be proud of at UTM—the quality of programs, the students’ grades, the relationships we have with the community,” says Switzer, a former vice-chair of the University Affairs Board who helped develop the recommendations, and the current Business Board chair. “This new model completes the package—it preserves the unity of U of T, but devolves many authorities to UTM, which is empowering.” The first meeting of the UTM Campus Council took place on September 30, 2013. More information on UTM’s new governance model and its operations can be found on the website of the Office of the Campus Council (www.utm.utoronto.ca/governance/). 📍

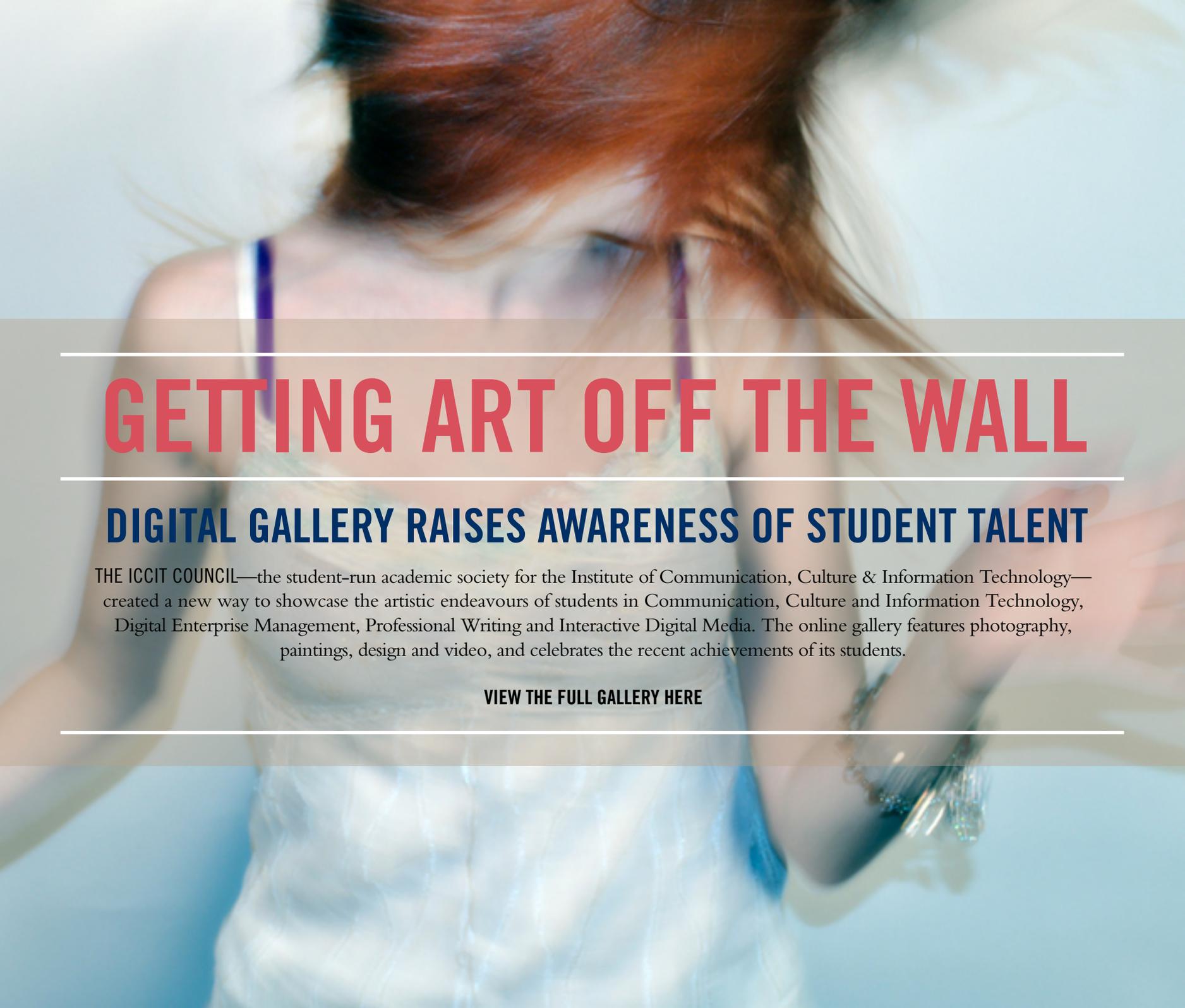
DIGITAL DETAILS

LAYERED MAP REVEALS WIDE RANGE OF CAMPUS SERVICES



It’s 5:10 p.m. on a Thursday night, and a first-year student pauses by the Student Centre, trying to find the bookstore. Glancing at his smartphone, he checks out the new UTM Interactive Map, and toggles the layer for “Student Services”. A quick tap of his finger, and he sees his goal is just down the Five-Minute Walk, inside the Davis Building. He hustles away, noting on the map that it closes at 5:30 on Thursdays.

At its most basic, a map can get you from point A to point B. But using new Google-based software, the UTM Interactive Map arranges information in searchable layers, such as Accessibility, Safety and Food. Looking for halal options? Need a bike rack? Wondering where to recycle your batteries? Everything is at your fingertips. The new map works on desktops, as well as Android, iPhone and iPad devices.



GETTING ART OFF THE WALL

DIGITAL GALLERY RAISES AWARENESS OF STUDENT TALENT

THE ICCIT COUNCIL—the student-run academic society for the Institute of Communication, Culture & Information Technology—created a new way to showcase the artistic endeavours of students in Communication, Culture and Information Technology, Digital Enterprise Management, Professional Writing and Interactive Digital Media. The online gallery features photography, paintings, design and video, and celebrates the recent achievements of its students.

[VIEW THE FULL GALLERY HERE](#)

VISUALIZING THE INVISIBLE

USING AUGMENTED REALITY TO REVEAL THE INNER EAR

HOW DO YOU EXPLAIN something you can't see?

“The inner ear is one of the toughest topics to teach because it is anatomically very complex, very small and buried in the dense petrous bone,” says Professor Emerita Pat Stewart.

So Andrea Zariwny, a biomedical communications graduate student, tackled this teaching problem with an augmented reality iPad app and 3D-printing to visualize the anatomy of the inner ear.

Here's how it works: Launch Zariwny's app. Hold the iPad over Zariwny's illustration of the petrous bone. The illustration acts as a glyph—a high-contrast image recognized by the tablet's camera—and triggers a 3-dimensional digital model on top of the illustration. Look through the digital model to the illustration below and see the cochlea of the inner ear or the spiral ganglion lift off the page.

“The illustration on its own is an informative, didactic tool,” says Professor

Marc Dryer, Zariwny's research supervisor. “But augmented with another layer of information, it becomes a strong educational feature that enhances the learning experience and engages student attention.”

Zariwny and her content advisor, Stewart, used micro CT scanning to create medical images from real anatomical evidence. Zariwny took the data into a medical image viewer and extracted 3D digital models of the petrous bone, and the cochlea and spiral ganglion—internal structures of the inner ear. She ‘cleaned up’ the models and took them into gaming software to create the 3-dimensional digital models.

After Zariwny, who has a background in industrial design, created the augmented textbook illustration, she wanted to work with 3D printing. “I thought augmented reality could be an even more useful tool combined with a physical model,” says Zariwny.

Zariwny 3D-printed two models of the petrous bone—one whole and one sliced in. She created modules for her app that “ghost” the internal structure of the inner ear over the physical models. The apps recognize, track and match the digital models to the position of the physical models. Move the models, or the iPad, and the digital models allow viewers access to different orientations and perspectives.

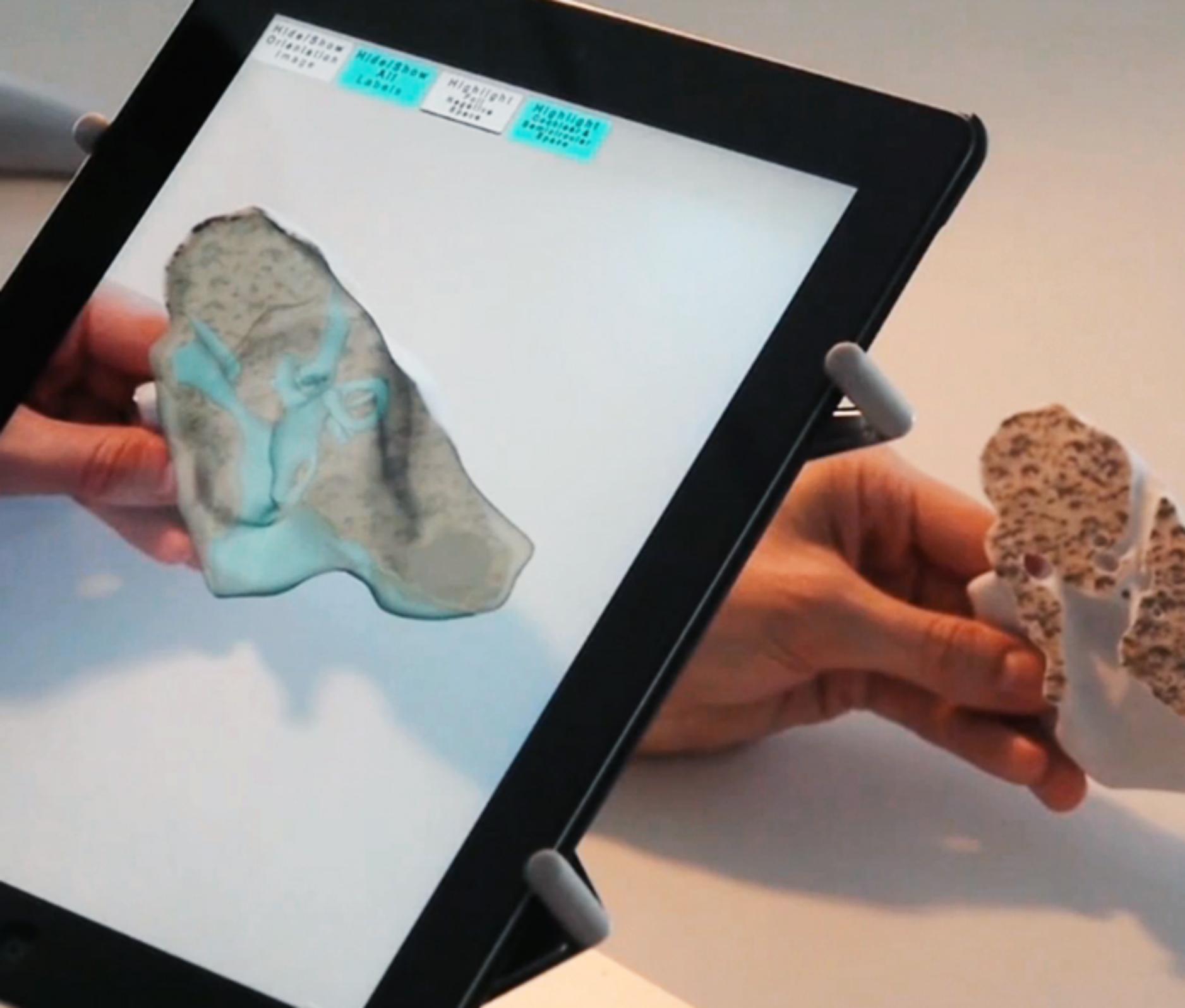
Zariwny's tool accurately conveys the size and position of what is essentially space buried in bone, says Stewart. “The first time I saw the models, I thought, that's it! Exactly what we need.” 🐦

STORY

MAEVE DOYLE

PHOTO

COURTESY ANDREA ZARIWNY



ALUMNI IN ACTION

UTM ALUMNA STEPHANIE VEGA founded her business, Vega Stars, at the age of 19. Leading her first drama workshop, she looked at the expectant faces and thought, *What did I get into?*

“Although it was a new landscape to navigate, I knew it was a wonderful opportunity to develop myself and others,” says Vega. “I was nervous, but eager to go on that journey. Having the chance to try something new made me feel thankful and very blessed.”

Vega Stars brings dramatic and vocal instruction to adult and youth disability groups in the Brampton area. She hopes to expand further into the GTA in the coming years.

Working with small and large groups doing scene and improv is a great way to introduce participants to the power of



REACH FOR THE STARS

drama, language and imagination, Vega says. “I absolutely love having everyone working together to fulfil their creative potential.”

Vega Stars resulted from Vega’s work with Bird Entertainment, a Brampton community theatre company that uses theatre as a positive outlet for youth. Vega received Bird’s Leading Female Performer Award, but wasn’t content with simply saying lines on a stage. As well as mentoring other actors, she volunteered with auditions, set construction, and marketing as a production member.

Vega graduated from UTM in June 2013 with an Honours BA in English and Drama and multiple awards. Top student in the Honours of Bachelor of Arts and her own program, Vega was also nominated for a Governor General’s Award and received

the E.A. Robinson Medal.

As a student, Vega was a program assistant for utmONE, the academic first-year transition program. utmONE provided Vega with opportunities to promote student development, something that keenly interests her. For instance, “Borrowed Shoes”, a utmONE campus equity and diversity initiative, opened conversations about accessibility and poverty on a local and global scale.

Her future plans include academic work in English and Drama studies, specializing in Victorian literature.

“Being a professor would be a wonderful way to share my passion for literature,” she says. “When students see enthusiasm for what is being taught and researched, they become more engaged with what they’re learning.” 🇨🇦

**WHEN STUDENTS
SEE ENTHUSIASM
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STORY LANNA CRUCEFIX
PHOTO COURTESY STEPHANIE VEGA

BIG LEAGUE CHEW

STORY ELAINE SMITH

PHOTO COURTESY PAPERNY ENTERTAINMENT

EAT ST., A TELEVISION show that tours gourmet food trucks throughout North America, reminds host James Cunningham of his university days at U of T Mississauga.

Cunningham, who studied theatre and drama at what was then the Erindale campus, says working on the show, which is broadcast in 40 countries, is as much fun as his student days.

“We have a great crew, and we’re all playing around,” he said. “If you have fun with what you do, you never work a day in your life.”

Cunningham joined the fledgling UTM theatre and drama program in its second year and observes the changes today with awe.

“When we were there, Erindale Theatre was a converted bus garage and we auditioned in Portable Four,” he said. “The program was so small, we all really got to know each other and there was a real closeness and camaraderie.

“I had four fantastic years. It was a great time to discover your [acting] chops, the muscles you were going to use.”

Cunningham has used the lessons he learned at UTM and built on them,

working diligently on his acting and on comedy to achieve success. For years, he paid his dues, toiling away in a retail job by day, honing a comedy act at Yuk Yuk’s at night.

He first added comedy to his portfolio of skills as a way to stand out in a competitive business.

“I thought I needed an edge,” Cunningham said. “There are not a lot of comedians who are classically trained actors. I thought that if I had a foot in both worlds, I’d get an agent’s attention.”

Eventually, his stand-up comedy career took off and acting fell by the wayside. He began doing corporate events and was approached to audition for a role as host of a television show called Wipeout. He didn’t get the job, but his audition tape made so many people laugh, it drew the attention of a producer who was creating a new food series. Soon afterward, a star was born. Five seasons later, Eat St. is still going strong.

“It’s the easiest job in the world,” joked Cunningham. “I get a plane ticket, show up and eat food.”

He has been all over North America tasting food from gourmet food trucks and talking to the chefs and the customers. He’ll

try anything once, he says, impressed by the passion of the chefs and their eagerness to make clients happy through food. He’s tasted perogies in Hoboken, New Jersey, a fish shawarma in Vancouver and a bacon smoothie and red velvet pancakes in Southern California.

“Food is social to begin with and this brings it to the streets,” Cunningham said.

“Food trucks are outside and messy, and you’re in a lineup, talking to people. I call it a gourmet flash mob—it’s a wonderful concept.”

There are more eats to come in Season Five, with 26 episodes on the schedule. Cunningham is proud that the show has loyal followings on the Food Network, TVtropolis, the Cooking Channel and the Scripps Network.

“It’s a little Canadian show that is kicking ass and taking names,” he said. “There are food truck rallies and events and our book is a best-seller.

“There is even an Eat St. app that allows your phone to find the food truck nearest to you anywhere in North America.

Not bad for a man who, by his own admission, “burns water.”



REGALIA HITS THE ROAD

IF THE GRADUAND CAN'T COME TO CONVOCATION HALL, CONVOCATION WILL COME TO THE GRADUAND

KABUTARIE KUNTIE (KATHY) SINGH'S physical challenges kept her from attending her graduation at Convocation Hall. So in June, UTM brought her gown, her hood and her degree to Humber River Terrace, a long-term care facility in Rexdale where Singh, 73, now lives.

Against a backdrop of flowers, draping and a podium, Singh processed alongside Professor Deep Saini, U of T vice-president and principal of UTM, Mark Overton, dean of student affairs, Neil Neebar, Ron Racioppo and Sandra Speller from UTM's Office of the Registrar, and Liz Martin and Teresa Jose from the AccessAbility Resource Centre. 🌸



GIVING BACK

NURTURING DREAMS

JUNE SCOTT'S U OF T roots run deep. So deep, in fact, that she can be forgiven for slipping up every once in a while and calling U of T Mississauga by its founding name, Erindale College.

The 89-year-old's affair with U of T's westernmost campus began in 1968, a year after it was established, when she was hired as a tutor in the Department of Mathematics. Only the second woman in the department, Scott remembers sharing a "little office underneath the stairs" with fellow lecturer Doris Geddes. Over the next 26 years, she taught math and eventually statistics to second-year students. Every step of her journey confirmed the belief she's held since a child growing up in England—that education makes anything possible.

"We were all about education from the word 'go'," Scott says of her family, including late husband David, a professional engineer. Together, the couple has three children and six grandchildren, all of whom have graduated or are attending university. Son Ian and daughters Fran and Jane are U of T graduates and Fran is a faculty member in the Mississauga Academy of Medicine.

Seeing her daughter follow in her footsteps at U of T Mississauga got Scott thinking about making the same education opportunities available to others. She created two endowed funds, both as a lasting legacy to her husband, who passed away in 2012. The David Scott Bursary supports a U of T Mississauga undergraduate student in financial need. The June and David Scott Fellowship will be awarded annually to a psychology PhD candidate pursuing research in the field of child development.

"Every accomplishment in life is due to education," Scott declares. "That's the big thing in our family and I want to make it possible for others. We should all have the chance to pursue our dreams, to study hard and not worry about how to make it happen."

STORY CHRISTINE WARD

PHOTO STEPHEN UHRANEY



BUILDING THE FUTURE



STORY CHRISTINE WARD PHOTOS LIAM SHARP

IT'S A SCENE STRAIGHT OUT OF the CBC television series *Dragons' Den*: Fourteen senior industry executives watch expectantly while Geoff Reid and his teammates pitch their idea—a Bluetooth-equipped glucose metre that relays blood glucose results to a smartphone using a mobile app. In this version, though, the aspiring entrepreneurs aren't vying for money; just the chance to be taken seriously and help the business world do things a little differently.

And maybe, quips Reid, to get a good grade.

A NEW PERSPECTIVE ON LEARNING

Fast-forward six months—and Reid and his partners are now graduates of the University of Toronto Mississauga's Master of Biotechnology program, one of the University's growing number of undergraduate and professional graduate programs focused on providing graduates with the sector-specific knowledge and leadership skills to manage innovation.

"We're offering a whole new perspective on learning," says Jayson Parker, a biotechnology faculty member, who leads the biotechnology in medicine graduate course attended by Reid. "It's all about results. As a result of your project, what is the client going to do differently?"

U of T Mississauga's industry partners—AstraZeneca, Johnson & Johnson, University Health Network and

Sunnybrook Health Sciences Centre, to name just a few—are all looking for the next big innovation: a new product or service, a novel use for an existing product, an alternative market... anything that will help increase revenue or create jobs. But... how to source that innovative thinking?

INTRODUCING THE INSTITUTE FOR MANAGEMENT AND INNOVATION

In July, U of T Mississauga Vice-President and Principal Deep Saini announced the launch of the Institute for Management and Innovation (IMI). The result of four years of consultation with the city, industry and the entire U of T tri-campus network, IMI will produce leaders with the experience and management training to invent, innovate and transform new ideas into practical solutions.

"We asked ourselves, how can we better meet the needs of our community? How can we become a comprehensive university for the western GTA?" explains Professor Ulrich Krull, U of T Mississauga's vice-principal of special initiatives and one of IMI's chief architects, along with management professor Hugh Gunz.

BUILDING AN INNOVATIVE CITY

In an increasingly globalized economy, innovation is hailed as the ultimate source of long-term competitiveness and quality

of life for regions and nations. In its strategic plan, *Our Future Mississauga*, the City of Mississauga identifies "cultivating creative and innovative businesses" as one of its five pillars for the future. Partnerships with business and education are key to achieving the city's goal, says the plan.

"In introducing a new style of sector-specific business education," says Rav Kumar, vice-president of R&D Operations/Business Development at GlaxoSmithKline Inc., "the Institute and its graduates will be essential for economic development across major industries in the City of Mississauga, just as they have been throughout the pharmaceutical sector."

For four decades, U of T Mississauga has worked closely with the city and industry to develop programs that enhance Mississauga's economic and social fabric. According to a report from management consultant KPMG, the campus contributes more than \$1.3 billion a year to the economy of the Region of Peel and the Province of Ontario. U of T Mississauga is committed to strengthening this partnership, both to help build the future envisioned by the city and the western GTA, and to help ensure the University of Toronto and its graduates continue to stand apart.

Recognizing the campus' existing strengths in management and science, including the Mississauga Academy of Medicine, Krull and Gunz proposed IMI

as a way to break down traditional silos and draw together the two fields, with an eye to further supporting the city's thriving biotechnology, pharmaceutical, information and communications technology, finance and insurance sectors. In July, Gunz was named IMI's inaugural director.

"The Institute for Management and Innovation will advance new partnerships with the business community, attract international students to our region, and help the City of Mississauga compete on a global scale to become one of Canada's premier business centres," says Neil Skelding, president and CEO of RBC Insurance. "U of T Mississauga will be a key provider of human talent across a wide range of professions through sector-specific management education."

A HOME FOR INNOVATION

Gunz is exploring how IMI's existing portfolio of programs—the Master of Biotechnology, the Master of Management of Innovation; the Master of Science in Sustainability Management; the Master of Management and Professional Accounting; the Master of Science in Biomedical Communications; the Diploma in Investigative & Forensic Accounting Program; the Bachelor of Business Administration; and the Bachelor of Commerce—can

work together. He's also developing an array of distinctive programs, including a certificate in business enterprise for PhD graduates.

By September 2014, every IMI program and faculty member associated with the Institute will be housed within the 6,300 square-metre Innovation Complex, now under construction at the heart of campus. The facility will provide additional research and classroom space; the Li Koon Chun Finance Learning Centre, an experiential learning and mock trading floor; and a signature atrium for seminars, conferences and informal gatherings.

At the heart of it all are initiatives like Parker's biotechnology in medicine course, which Gunz calls a "model" for the hands-on learning and industry partnerships the Institute will foster across every program.

TALENT, IDEAS AND CREATIVE SPIRIT

"They see things differently," Neil Maresky, vice-president of scientific affairs for AstraZeneca Canada Inc., says of U of T Mississauga's students and graduates, who have had a hand in innovation at his company. The Mississauga-based biopharmaceutical company has partnered with several professional graduate programs over the years, providing projects and co-op

opportunities for up to 10 students a year, and jobs for many more after graduation.

"These are highly talented individuals who have innovative and creative ways of approaching problems. They're an integral part of our ability and of the city's ability to inject next-generation thinking into traditional thought processes."

Geoff Reid would agree. Now a Master of Biotechnology graduate, he remembers his boardroom pitch like it was yesterday. "At least two industry reps were quite impressed. They invited us to speak to their head office in Canada." Johnson & Johnson was also keen to explore the idea. This March, the healthcare manufacturing giant received clearance from the U.S. Food & Drug Administration to market the world's first wireless glucose "smart" metre and OneTouch Reveal™ mobile app.

For Reid, though, the real payoff came this summer when he became part of the 'human capital' that Mississauga needs to become a truly innovative city. He landed a full-time job with pharmaceutical company GlaxoSmithKline Inc., where he also completed an internship.

"Other people from other programs don't have the kind of background knowledge and experience I have. We really put ourselves out there," he says. "It was one of the best learning experiences I had." 🍌



The 6,300 square-metre Innovation Complex will open in September 2014.

EXCELLENCE
LEGACY
BOUNDLESS
OPPORTUNITIES

CROSS-CULTURAL JOURNEYS

STORY MARK WITTEN

PHOTOS LIAM & BRONWYN SHARP

ELDER CAT CRIGER OFFERS ABORIGINAL TEACHINGS TO STUDENTS

A GROWING NUMBER of inquisitive and receptive students are turning to Cat (Mark) Criger, UTM's Traditional Aboriginal Elder in Residence, for holistic learning that nourishes the mind, body and spirit.

"The work I do is helping students to have a healthy, more balanced and respectful life. I help people to walk in a good way through life," says Criger, a mentor who provides guidance and support for each student to find his or her own good path and purpose in life.

In aboriginal teachings, which celebrate and respect the diversity of life, every individual or student is like a bird in the forest, and encouraged to seek and pursue their own direction in life and personal journey through a traditional rite of passage known as the Vision Quest.

"Every bird has its own song to sing. But we need all the songs in the forest to create the music," says Criger, as he describes the

transformational experience where a young aboriginal person spends one to four days secluded in the wilderness and gains an insight, typically in the form of a dream, which relates directly to their purpose and destiny in life.

A calm and engaging presence, Criger is a traditional teacher and healer from the First Nations people. He is Cayuga (Guyohkohnyoh), Turtle Clan from the Six Nations Haudenosaunee or People of the Longhouse on his father's side. He gives UTM students a unique opportunity to learn about aboriginal history, culture and philosophies by participating in the activities he leads: bi-weekly teaching circles, hand drumming circles, and a four-day experiential journey to the Curve Lake First Nations Reserve near Peterborough, held in the autumn and spring.

Criger, 57, is available two days a week throughout the year to meet one-on-one

with students, to advise them and offer guidance to help deal with stress, relationships, family, health, school, career and life direction issues. While they may sit and talk in his office, he frequently invites students to go for a walk along one of the idyllic nature trails on campus, an atmosphere more conducive to open and relaxed conversation about their concerns or difficulties.

The teaching circles he leads give students a chance to listen and learn about traditional Aboriginal stories, ceremonies and teachings in an informal, drop-in setting. He shares the aboriginal philosophies and values of well-being, respect and living in balance with nature, a communal bonding experience that helps students relieve stress and keep centred.

Criger views the teaching and drumming circles as a safe, welcoming place where anyone from any community can come for spiritual support and enlightenment.



“People are there because they are looking for something spiritual. The Mississauga campus has an incredible bandwidth of people from different cultures and faiths. A lot of the students are from particular faiths like Hindu, Sikh, Buddhist, Muslim, Christian and Jewish. I have a special neutral zone, open to all students, and I teach them about walking in the woods with all the different animals,” he says.

Criger’s natural ability and enthusiasm for cross-cultural teaching is rooted in his own upbringing. His dad was a strong, fit man from the First Nations people, who left the Six Nations Reserve near Brantford to become an aircraft instrument technician with the Canadian Army. His mom was a woman of German-English ancestry from St. Catharines. Raised in a multicultural family and moving around to different places in Canada and Europe where his dad was stationed, Criger was social and adaptable. “We were always meeting new people from different backgrounds and cultures, which I enjoyed as a kid, as I do now,” he says.

A technical perfectionist like his dad, Criger worked for many years as an aerospace communications and navigations system technician. But in the 1980s he reconnected with his aboriginal roots by going to cultural events, such as Hoop Dancing, a form of storytelling dance. He was invited to become an apprentice with Aboriginal Elder Roger Jones, and travelled with him for 16 years across Canada, the United States, England and Wales, learning and performing traditional ceremonies and teachings.

After becoming known for his work as an Elder with government and aboriginal agencies, and guest lecturing at U of T in pharmacy, law, aboriginal studies, theology and biomedical sciences, Criger led a group of UTM students on their first experiential journey to Curve Lake in 2010.

The Waawaakte Northern Lights Initiative Experiential Journey, which takes place twice in the academic year, gives students a chance to engage directly with First Nations people and experience teachings on their land. They participate

in the traditional spring or fall ceremonies, a Maple Water Ceremony, sharing of traditional pipes, a singing and hand-drumming circle, and explore with a local Elder the sacred meaning of the ancient aboriginal rock carvings in Petroglyphs Provincial Park.

Criger guides students in hands-on learning as well: “We build a traditional longboat, put up a teepee and build a sweat lodge, a place of spiritual healing and cleansing,” he says, noting that for some the experience becomes a transformational personal Vision Quest.

As a traditional teacher and healer, he seeks to expand students’ awareness of the world around them. “I feel a strong connection with students. These are people starved for knowledge, making decisions that will affect the rest of their life. I help them to get through a super-stressful time, learn, make changes and move forward. I’m also doing something for my culture in reaching young people before their views and images of First Nations people and our history are solidified,” says Criger. 🐾



THE FASTER TOUCH

FIFTY MILLISECONDS IS FAST—about a sixth of the time it takes an eye to blink. For Daniel Wigdor, it's still too long.

“Touch devices such as tablets and smartphones are about two orders of magnitude away from response speeds users would consider instantaneous,” says Wigdor, an assistant professor in UTM’s Department of Mathematical and Computational Sciences. “Our studies show people can perceive even six milliseconds of lag.”

Wigdor was named one of U of T’s inventors of the year for his work in reducing this lag time between user input and system response, known as latency.

Latency depends on factors such as how many applications a device is running, the available memory and the efficiency of the application designs. Currently, latency periods are 50 to 200 milliseconds. Although this seems fast, Wigdor says users greatly prefer more responsive systems, and basic operations are performed more quickly and accurately when latency is low.

Until now, cell phone manufacturers have sidestepped the latency issue by designing software to reduce a user’s perception of it, says Wigdor, who previously worked at Mitsubishi Electric Research Labs and Microsoft Research.

For instance, an object dragged on a screen speeds up and slows down, as though connected to the user’s finger by a spring. Although a pleasing effect, it adds to the inaccuracy and latency of the system’s response.

Wigdor’s solution is the Input Processing Unit (IPU). The IPU reduces latency to less than 10 milliseconds by using computer hardware to generate a response to the user’s action rather than waiting on application software. IPU is being commercialized through Tactual Labs (Wigdor is co-founder), in partnership with the university.

“Users have accepted what we have as ‘good enough’, but it’s really not,” says Wigdor. “It’s like HDTV sports—you don’t realize the difference until you use the better stuff, and then you never want to go back.”

in love with research and decided to pursue a PhD at George Washington University in Washington, D.C. Her first book, *Killing Neighbors: Web of Violence*, addressed the Rwandan genocide.

This year, with assistance from a Russell Sage Foundation Fellowship, a Ford Foundation Fellowship and grant funding from the Social Sciences and Humanities Research Council of Canada and elsewhere, Fujii will be writing a second book, exploring the micro-level dynamics involved in the killing of a prominent Tutsi family in Rwanda, the massacre of a group of Muslim men in a Serb-controlled region of Bosnia and the small-town lynching of a black man in 1930s Maryland.

“These were public killings with significant local level involvement,” she said. “It would be really interesting to find similarities if I dig into the processes at a local level.”

She will also explore the extra-lethal violence involved: mutilation and desecration of the victims or souvenir taking.

“It’s one thing to watch a lynching,” Fujii said, “but what causes people to pull down the victim’s pants or jump on his back?”

While it may sound gruesome, her ultimate goal is to deepen the understanding of how political violence unfolds in order to help policy-makers work more effectively for a peaceful world. ➤

DISSECTING GENOCIDE

STORY **ELAINE SMITH**

GROWING UP OUTSIDE SEATTLE, a region terrorized by the Green River serial killer, perhaps it was no surprise that Lee Ann Fujii, a political science professor at U of T Mississauga, was drawn to the books about true crimes that also fascinated her mother.

But never did Fujii expect that a teenager’s fascination with tomes about serial killer Ted Bundy or the 1937 Rape of Nanking was the first step on a path to a respected research career.

During graduate school, Fujii needed a topic for her master’s thesis, and had just read a book about the genocide in Rwanda—not as part of her coursework, but for personal interest.

“I was riveted,” she said, and a research specialty was born. Fujii examined the violence perpetrated there by the Hutu tribe against the Tutsis, an instance of modern-day genocide.

While working on her thesis, she fell

THE MEETING PLACE

BULLETIN BOARD

IN MEMORIUM

Professor Emeritus Bill Huggett passed away on Wednesday, March 27, at the age of 89.

Professor Emeritus G. Scott Graham, interim chair of Department of Mathematical and Computational Sciences and Dean's Designate on academic integrity, passed away on May 2, 2013.

Longtime staff member Betty Golden, who worked on campus from 1977 to 2006, passed away on June 1, 2013.

1980 TO 1989

NOTES



A new exhibition of the early works of Denyse Thomasos (bachelor of arts, 1987) is on display at the MacLaren Art Centre until Nov. 3. Thomasos, who died at age 47 in 2012, is known for large, abstract paintings with political, social and personal references.

1990 TO 1999

NOTES

Sven Spengemann (bachelor of science, 1990) has taken on the role of BMO Visiting Fellow at Glendon School of Public and International Affairs at York University. Prior to this, he managed the UN Assistance Mission for Iraq's Office of Constitutional Support, a Baghdad-based team of international and national legal and political experts that formed part of UNA-MI's political wing.

2000 TO PRESENT

NOTES

Richie Mehta (bachelor of arts, 2001) presented his newest movie, *Siddharth* at the 2013 Toronto International Film Festival. His first feature-length film, *Amal*, was



named one of the TIFF's top 10 Canadian films of 2007.

Andrea Zariwny (master of science in biomedical communications, 2013) was named the top student scholar in The Vesalius Trust's 2013 scholarship competition for her project "VisuoHaptic Learning of the Cochlea: Using physical optical glyphs with Augmented Reality". (See page 10)

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news.utm@utoronto.ca

BLAST FROM THE PAST



A drawing of President Birgeneau is unveiled at his Welcoming Ceremony (2000)

U of T garden sign commemorating 25 years of Erindale College



Elevated view during construction of Kaneff building (1989-91)



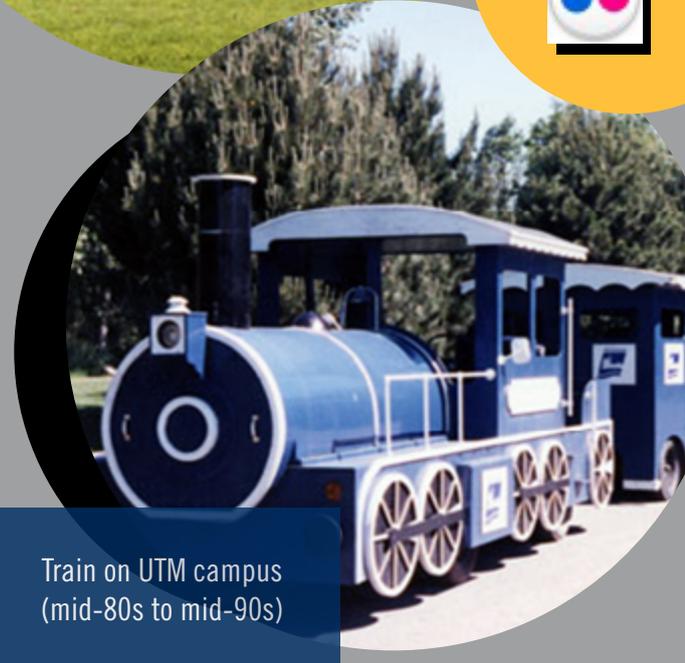
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Campus policeman Tom Kent (mid-1990s)



Train on UTM campus (mid-80s to mid-90s)

THE MEETING PLACE

MARK YOUR CALENDAR

THE EVOLVING MIDDLE EAST AND WHY IT SHOULD MATTER TO CANADIANS WITH UTM ALUMNUS, SVEN SPENGMANN

OCTOBER 24

Canadian Perspectives Lecture Series, 10 a.m. to 11:30 a.m. Erindale United Church. \$12 my.alumni.utoronto.ca/perspectives

CSI SHAKESPEARE: INVESTIGATING THE PORTRAITS OF "WILLIAM SHAKESPEARE" WITH U OF T SENIOR LECTURER, JANE FREEMAN

OCTOBER 31

Canadian Perspectives Lecture Series, 10 a.m. to 11:30 a.m. Erindale United Church. \$12 my.alumni.utoronto.ca/perspectives

GRADUATION RECEPTION FOR FALL CLASS OF 2013 GRADUATES

NOVEMBER 5

The Vice-President, U of T and Principal of U of T Mississauga, the U of T Mississauga Alumni Association and the Office of Advancement invite you to a reception in honour of your graduation. my.alumni.utoronto.ca/utmgrad

MEDICAL EDUCATION IN MISSISSAUGA: NEW OPPORTUNITIES FOR THE PREPARATION OF FUTURE PHYSICIANS WITH DR. PAMELA COATES

NOVEMBER 7

Canadian Perspectives Lecture Series, 10 a.m. to 11:30 a.m. Erindale United Church. \$12 my.alumni.utoronto.ca/perspectives

THE STORIES OF CANADA'S PRIME MINISTERIAL WIVES WITH KEN WEBER

NOVEMBER 14

Canadian Perspectives Lecture Series, 10 a.m. to 11:30 a.m. Erindale United Church. \$12 my.alumni.utoronto.ca/perspectives

October 2013						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
Today						

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2ND ANNUAL COUNTDOWN TO SUCCESS FEATURING A BUSINESS TRADE SHOW AND KEYNOTE SPEAKER AMANDA LANG

NOVEMBER 22

This marquee event will provide students, alumni and professionals with countless business and networking opportunities within the accounting, finance and management fields. 5:30 p.m. to 8:30 p.m. Sponsored by Certified General Accountants of Ontario. www.utm.utoronto.ca/management/2nd-annual-countdown-success

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The Innovation Complex has already broken new ground.

Construction has begun on U of T Mississauga's next architectural landmark—the Innovation Complex, future home to the Institute for Management and Innovation. A new model for business education, the Institute's eclectic range of management disciplines will collaborate to nurture future leaders in science-based enterprises, societal organizations and pioneering professions that drive prosperity.

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