24,030
full-time undergraduate students

2,714
part-time undergraduate students

4,129
graduate students

927
faculty

289
sessional lecturers

650
administrative 
& technical staff

2,718
Teaching assistants, 
course instructors 
& postdoctoral fellows

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Boundless, the University of Toronto’s historic $2-billion fundraising campaign, captures the limitless potential of our community of faculty, students, staff and alumni for global leadership and impact. Given the unprecedented disciplinary breadth and global reach of the Faculty of Arts & Science, the concept resonates particularly well with us.

We are delighted to invite you to explore some of the ways in which our boundlessness was expressed over 2013-14:

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The continual innovation of undergraduate education is one of the pillars of the University of Toronto's strategy for success. This message, delivered by President Meric Gertler in his inaugural address, resonates powerfully with us at the Faculty of Arts & Science because we are home to the vast majority of students pursuing undergraduate degrees on the St. George campus.

We are educating tomorrow’s global leaders and citizens so our programs must be relevant, forward-thinking and engaging. This is why we are creating more opportunities for smaller classes, interactive group learning and hands-on experience. It’s also why we are expanding research and international learning opportunities for students.

In September we launched STEP Forward, another important innovation in undergraduate education. This series of programs, events and activities will help our students make the most of their time in university — and beyond. Our alumni play a key role as mentors in this initiative, sharing their professional experiences and offering advice.

In his address, President Gertler also underscored the importance of the University’s symbiotic relationship with the city. Research and teaching on livable cities is a priority for many of our faculty members — geographer Paul Hess’s studies of walkability, for example. Meanwhile, our students contribute to — and benefit from — an ever-growing range of internships and service-learning opportunities in businesses, community organizations and government offices, a great many of them located in the Toronto region. And when we have special guests on campus, such as astrophysicist and Cosmos host Neil deGrasse Tyson, we welcome members of the wider community to share in the experience.

Our researchers continue to make path-breaking discoveries, inform public debate and help to shape policy. A study by economist Kory Kroft, for example, informed President Barack Obama’s move to direct the U.S. federal government to ensure its hiring practices do not discriminate against the long-term unemployed. Our faculty members are also entrepreneurs and innovators whose inventions solve global problems. Gilbert Walker of chemistry, for instance, developed a new coating for fishing nets that will reduce pollution and disease in the aquaculture industry. And when they are recognized for their contributions with prestigious awards — a Killam Prize for physicist Sajeev John or the National Humanities Medal for historian Natalie Zemon Davis, for example — we take pride in their achievements.

Graduate education is a distinctive feature of the university and our graduate students play a key role in our mission. They are the life-blood of our research enterprise and, when they serve as mentors or teaching assistants, they are a vital part of our undergraduates’ educational experience. Graduate enrolment continues to grow as part of Ontario’s efforts to develop the top talent needed in the global knowledge economy. This year we launched two graduate programs. Our new PhD program in women and gender studies focuses on feminist-colonial, post-colonial, diasporic and transnational studies. We also launched a PhD in cinema studies knowing that the vibrant film, art and media culture of the city of Toronto will enrich the unique doctoral experience offered by our Cinema Studies Institute.

The Faculty celebrated a major milestone in our Boundless campaign as we surpassed $205 million toward our $250-million goal. More than 9,500 donors contributed to make this possible. Thanks to their generosity and vision, we are bolstering the learning experience and inspiring new ideas and transformative discoveries across the humanities, sciences and social sciences.

Finally, to the faculty, staff, alumni, students and friends who make it a privilege and a pleasure to serve as dean of this great community: congratulations on all you have accomplished and thank you for your commitment, passion and talent.

Sincerely,

David Cameron, FRSC
Dean and Professor of Political Science
Finding a potential treatment for malaria

For first-year student Jessie MacAlpine, finding a potential treatment for malaria was a combination of luck and determination. While still in high school, MacAlpine developed a bioherbicide in her basement lab using molecular compounds found in garlic mustard plants. Shortly after, she read an article speculating that a treatment for malaria might be found in herbicides. The idea was based on a discovery in the 90s that the parasite that causes malaria — a species called *plasmodium* — has plant genes because it evolved hundreds of millions of years ago from an ancient algae. So MacAlpine decided to see if the active ingredient in her herbicide — which is found naturally as mustard oil — would work on malaria.

MacAlpine took the herbicide to a lab in the MaR's Discovery District, where she applied it to samples of human blood infected with malaria. The malaria was eradicated. The fact that mustard oil is relatively common and inexpensive makes it a very attractive treatment option. Further research is needed and MacAlpine, who was recognized as a young Canadian leader with an RBC Top 20 Under 20 Award, is committed to doing it.
“The most valuable lesson I’ve learned is that small steps can take you a long way,” said Tian. “ASSU is built on a history of constructive discourse and it was an honour to not only support great ideas, but witness the talent and drive of our students, faculty and staff.” Tian recently completed his undergraduate degree in psychology and economics and will continue his studies in the Faculty of Law. He joined the ASSU Executive in 2010 and served as president during the 2013-14 academic year.

SHAWN Tian
UNIVERSITY COLLEGE
Economics, Psychology

Building bridges, leading change

Shawn Tian received the Dean’s Student Leadership Award for his energy and initiative in spurring positive change. He helped establish a number of student awards and bursaries at the Arts & Science Students’ Union (ASSU), including the Graduating Student Leadership Award, and was instrumental in creating the Undergraduate Research Fund — a partnership between ASSU and the Faculty which provides students with the opportunity to undertake a research project with a faculty member.

Tian also helped launch Exam Jam — now a regular and very popular stress-busting event held during exams — and participated on a variety of committees and in stakeholder groups in the Faculty.

“The most valuable lesson I’ve learned is that small steps can take you a long way,” said Tian. “ASSU is built on a history of constructive discourse and it was an honour to not only support great ideas, but witness the talent and drive of our students, faculty and staff.” Tian recently completed his undergraduate degree in psychology and economics and will continue his studies in the Faculty of Law. He joined the ASSU Executive in 2010 and served as president during the 2013-14 academic year.

SHAWN Tian
UNIVERSITY COLLEGE
Economics, Psychology
Unlocking the mysteries of neurodegeneration

Alina Guna is headed to the University of Cambridge to continue her research in neurodegenerative diseases thanks to a Gates Cambridge Scholarship, one of the world’s most prestigious academic awards. The scholarships are awarded to outstanding students from countries outside the United Kingdom to pursue a postgraduate degree.

Guna became interested in neuroscience during a summer at Sunnybrook Hospital spent working on a new drug-delivery method for patients with Alzheimer’s disease. Since then she’s joined projects that address cognitive and genetic aspects of neurodegeneration and become very interested in what happens at the protein level.

She will undertake a PhD in biological science at Cambridge’s Medical Research Council Laboratory of Molecular Biology. She will focus on protein quality control pathways, specifically how proteins that have mislocated or improperly folded become targets for degradation.

“A solid understanding of this process is essential for gaining insight into neurodegenerative diseases such as Alzheimer’s and Parkinson’s,” she said.
Conducting international security research

Patrick Quinton-Brown is a passionate researcher and proponent of the Responsibility to Protect, a key principle that was adopted by 150 states at the 2005 UN World Summit. The principle maintains that the responsibility to prevent and halt genocide and mass atrocities lies first and foremost with the state but when sovereign states are unable or unwilling to fulfill this responsibility, the international community has a responsibility to do so. Quinton-Brown served as chair of the Canadian Centre for the Responsibility to Protect, a non-profit research organization based at U of T. In this role, he worked to promote scholarly engagement and political implementation of the principle, creating, for example, the Syria Watch division to generate awareness of that country’s war.

Quinton-Brown has also focused on increasing civic engagement among youth. He has served as executive director of the Ontario Student Trustee’s Association and co-founded the Student Voice Initiative, which promotes and implements the student trustee concept in school boards across Canada.

His achievements as an international security researcher and a voice for students were recognized with a John H. Moss Scholarship which will take him to Oxford University this fall to pursue a master’s degree in international relations.

PATRICK Quinton-Brown
TRINITY COLLEGE
International Relations
Digging deep to unlock the mysteries of our universe

When most people hear the word “astronomy,” they think of outer space. Not experimental particle physicist and IceCube Collaboration member Ken Clark. He looks deep into the thick Antarctic ice for neutrinos produced by violent astrophysical events — exploding stars, gamma ray bursts and cataclysmic phenomena involving black holes and neutron stars.

Clark and his colleagues are hunting neutrinos for the secrets they may hold about the origins of the universe and the inner workings of our own planet. Five per cent of the universe is made up of regular matter like atoms and molecules. The other 95 per cent — which includes dark matter and dark energy — remains a mystery.

Essentially a telescope in the ground, the IceCube observatory consists of more than 5,000 digital optical detectors strung along 86 cables embedded in a cubic kilometre of ice beneath the South Pole. The individual modules detect neutrinos through the tiny flashes of blue light that are produced when they interact with the ice.

“We are at the beginning of a new era for astronomy,” said Clark, who is one of 300 physicists, computer scientists and engineers from 43 institutions around the world who make up the IceCube Collaboration.

Over-fishing of sharks is harming coral reefs

A team of scientists from Canada and Australia have discovered that the decline in shark populations due to commercial fishing is hurting coral reefs.

Jonathan Ruppert and Marie-Josée Fortin were part of an international collaboration doing long-term monitoring of reefs off Australia’s northwest coast. The group found that decreases in sharks led to increases in mid-level predators, such as snappers, which meant a reduction in the number of herbivores such as parrotfishes. The parrotfishes are very important to coral reef health because they eat the algae that would otherwise overwhelm young corals on reefs recovering from natural disturbances.

According to Ruppert, the study comes at an opportune time. “Coral reefs are facing a number of pressures both from direct human activity, such as over-fishing, as well as from climate change.”
When Stacy Costa was a child, her parents would try to stump her with puzzles. Little did they know they were setting her on a career path.

Costa was delighted to discover Marcel Danesi’s course on the history and social functions of puzzles. Danesi, in turn was so struck by Costa’s enthusiasm and creations, he enlisted her to help him make three weekly puzzles, everything from riddles to crossword-hybrids, for the Toronto Star.

“She had me on my toes, asking questions and providing insights that led me to revise some of my ideas and writings,” he said.

Costa has since been hired by different agencies and businesses to create online scavenger hunts and marketing campaigns. This fall, she will teach a continuing education course on memory and imagination.

“Doing a puzzle will always reward you whether or not you finish it. The more you enjoy using your brain, the more you’ll get out of it,” she said.
Chips off the old Macroblock

Biofouling — the accumulation of microorganisms, plants, algae and animals on wetted surfaces — is a serious problem for the fish-farming industry. Fouled nets and cages are a threat to fish health, affect farm yields and can cause equipment failure.

Gilbert Walker and Nikhil Gunari devised Macroblock, a biodegradable means of controlling biofouling, as a safe alternative to the current heavy metal-based technologies that are toxic to the marine environment once they enter the food chain. Their product is easy to apply and makes the nets easier to clean.

“Our green solutions should help the aquaculture industry to more safely and profitably meet the growing demand for fish protein,” said Walker.

Walker and Gunari have co-founded a company, Sylleta, to commercialize the technology and hope to receive approval from Canada’s Pest Management Regulatory Agency soon. In the meantime, their technology has earned a Clean50 Award from Delta Management Group.

Turning the traditional classroom upside-down

Jennifer Campbell and Paul Gries developed and taught one of the first Massive Open Online Courses (MOOC) offered by U of T. A MOOC is an online course, open to everyone and their computer programmer course had over 200,000 students.

The opportunity to teach computer programming to the world was incredibly appealing. But what proved equally interesting was figuring out ways to retool the videos and quizzes prepared for the MOOC to improve the learning experience of students right here on campus.

They did just that by completely “inverting” computer science’s introductory programming course. Instead of listening to lectures during class time, students reviewed new materials online — and at their own pace — beforehand. Class meetings were dedicated to hands-on learning, problem-solving and collaborative work.

“You learn programming by doing,” said Campbell. “We’ve always had labs, exercises and assignments, but the inverted concept takes it a level further: students practise programming with their instructor and TAs on hand to help with new concepts.”
A leading light in photonics

One of Canada’s most prestigious scholarly awards, the Killam Prize, went to Sajeev John in recognition of his pioneering work on photonic crystals. John’s leading research provides the prescription for trapping light and manipulating its flow like electricity in microelectronic circuits.

This enables the development of photonic computers using laser light to carry information, lab-on-chip optical bio-sensors for rapid medical diagnostics and ultra-thin, light-trapping materials for more efficient solar-energy harvesting.

SAJEEV John
PHYSICS
Sloan Fellowship recognizes rising star in marine epidemiology

Martin Krkosek is one of only two Canadians to receive a 2014 Sloan Research Fellowship awarded to promising early-career scientists by the Alfred P. Sloan Foundation.

Krkosek’s work on infectious diseases in the oceans explores problems of sustainability in fisheries, aquaculture and biodiversity conservation. The $50,000 fellowship will allow his lab to do more extensive work in marine epidemiology.

“It will enable us to look, in a much more detailed way, into the transmission dynamics of disease between wild and farmed fish, and use that knowledge to help understand the options for management and policy of aquaculture, fisheries and biodiversity conservation in coastal marine areas of Canada,” said Krkosek.

Colleague Don Jackson said Krkosek’s research is crucial as humanity increasingly turns to aquaculture.

“There is a relentlessly increasing demand on natural wild fisheries, as well as the need to produce fish through aquaculture in order to feed humanity,” said Jackson. “We are only beginning to understand some of the linkages between these two sources and that they cannot be managed independently of one another.”

Chronicling ordinary people leads to extraordinary award

Social and cultural historian Natalie Zemon Davis visited the White House this past year to receive a National Humanities Medal from U.S. President Barack Obama. The award recognizes her “insights into the study of history and her exacting eloquence in bringing the past into focus. With vivid description and exhaustive research, her works allow us to experience life through our ancestors’ eyes and to truly engage with our history.”

Davis, who was appointed a Companion of the Order of Canada in 2012, is known for her ability to make the past come alive. Her work has focused not on the history of “queens and kings” but rather on those previously ignored by historian: workers, peasants, women and outsiders.

“The president spoke of the humanities and hope. His words rang in my ears as he put the medal around my neck for I have tried my best to be not only a truth-teller about the past, but also to be an historian of hope,” said Davis.
Even when people support the goals of movements like environmentalism or feminism, some don’t want to be associated with the activists promoting the cause, according to research by psychology PhD candidate Nadia Bashir and professors Alison Chasteen and Penelope Lockwood. They found that labels such as “militant,” “unhygienic” and “eccentric” are sticking to activists. And those who label the activists are more likely to remain uninvolved, even if they support the cause.

“Rather than admiring their determination to address issues, individuals may avoid affiliating with activists and disregard their pro-change initiatives,” said Bashir. “Ironically, it may be the enthusiasm with which activists promote social change that ultimately undermines their impact. But it’s important to keep in mind that we looked at how activists are perceived rather than how they actually are. The militant and eccentric characteristics do not necessarily describe the actual personality traits possessed by activists.”

**NADIA Bashir, ALISON Chasteen & PENELope Lockwood**

**PSYCHOLOGY**
For some people with autism, sound and vision aren’t linked

You’re watching a movie and the actors’ voices are lagging behind their lips’ movements. The movie’s audio and visual aren’t synced properly. It’s distracting and annoying. This is what it’s like for some people with autism, according to a study by psychology postdoctoral researcher Ryan Stevenson.

“One of the primary issues that individuals with autism face is difficulty with social communication,” said Stevenson. “If you have difficulties perceiving the world around you, it’s intuitive that you may also have difficulties interacting with that world, and the other people in it.”

He hopes such new insights may prove useful in designing treatments for those with autism. He’s optimistic, in part because sensory systems are extremely adaptable. His team is currently testing a new computer-based treatment designed to improve the sensory abilities — and ultimately the social communication — of individuals with autism.

**RYAN** Stevenson
**PSYCHOLOGY**
Influencing White House employment policy

Kory Kroft was surprised and delighted to learn that research he did with colleagues at the University of Chicago and McGill University had caught the attention of the U.S. president’s most senior advisors. Their study found that companies discriminate against people who are unemployed for more than six months.

As a result, Barack Obama directed the federal government to ensure its own hiring practices did not discriminate against the long-term unemployed and he convinced the CEOs of more than 300 major companies to revamp their own hiring practices.

“I conduct research on problems that I find interesting and policy-relevant. I consider myself lucky if I am able to influence other economists. To have President Obama recognize and base his employment policy on this research is not something that I would have ever imagined. It’s a little hard to say how this policy will impact the labour market, but it will be really interesting to see,” said Kroft.

KORY Kroft
ECONOMICS,
PUBLIC POLICY & GOVERNANCE
Discovering a potent greenhouse gas

U of T scientists discovered a novel chemical lurking in the atmosphere that appears to be a long-lived greenhouse gas. The chemical — known as PFTBA, or perfluorotributylamine — has the potential to affect climate more than any other chemical on record.

“Calculated over a 100-year time frame, one kilogram of PFTBA has 7,100 times the climate impact as one kilogram of carbon dioxide,” said Angela Hong, who made the discovery, with Cora Young and Scott Mabury.

Although its potential to impact climate is high, PFTBA currently exists in the atmosphere in very low concentrations — less than one part per trillion. Carbon dioxide, which is used for comparison since it is the primary greenhouse gas responsible for anthropogenic climate change, has been measured at more than 400 parts per million.

Solving the mystery of ripply icicles

Stephen Morris is intrigued by geophysical patterns and the physics of everyday phenomena, so when he noticed that some icicles are smooth and slender while others are ripply, he had to find out why.

Morris and PhD candidate Antony Szu-Han Chen began growing icicles in the lab. Accounting for key factors that influence their shapes as they grow naturally — ambient temperature, speed of the water as it flows over the forming icicle and the motion of the air surrounding it — they experimented with the composition of the water. Of 67 samples grown under a broad range of conditions, only those grown from distilled water with salt added had the conspicuous ripples.

“Our motivation was pure curiosity about natural patterns,” said Morris. “But the study of ice growth does have a number of serious applications, including ice accumulation on airplanes, ships and power lines.”
Shelley Wright is putting new technology to use in the search for extraterrestrial intelligence, commonly known as SETI. Wright leads an international team that will begin scanning the skies this year with a device called a Near Infrared Optical SETI (NIROSETI) detector.

For decades, SETI has been conducted at radio wavelengths. Designed and built at U of T, NIROSETI can detect light signals that pulse for a mere billionth of a second at infrared wavelengths, which can be many thousands of times brighter than a star as a result of its brief yet focused intensity. NIROSETI is also expected to be highly effective since light at infrared wavelengths is less affected by interstellar gas and dust.

“It’s only in recent years that detectors have been getting good enough to do it this way,” said Wright. “If any being out there has sent out a signal, this is one of our best chances ever to answer the call.”
Designing video games for seniors

If they build it, they will learn. That’s the approach Steve Engels uses with students enrolled in his undergraduate research courses on video game design. Engels’ method of “less lecturing, more mentoring” means students initiate and support each other on independent research projects with his guidance.

Second-year student Muna Rahman was part of a group of Research Opportunity Program students tasked with designing video games that could improve the cognitive abilities of senior citizens. The students began with some fundamental computer programming exercises. After they were briefed on some key information about how the brains of seniors work, they began creating games that could help improve memory, perception and logic.

“We got a glimpse of what it would be like working in the technology industry,” said Rahman. “There were no teaching assistants to grade our work. Colleagues shared their opinions and instead of a final exam, we submitted a report reflecting on the experience and what we had learned. And there was no professor giving step-by-step instructions on how to do things. We were encouraged to accomplish tasks by ourselves.”

Explore It pairs undergrads with alumni

Job-shadowing alumni is a great way for students to see how their academic skills and knowledge translate into possible careers. The Explore It program matches students in select second-year courses with mentors in a variety of professions, ensuring students get advice on educational decision-making and find out more about the jobs in which they’re interested. For their part, alumni get to have a transformative impact on a student’s life.

“I had my fair share of anxiety over my future pursuits considering the increasingly competitive environment in which we live and study,” said linguistics and political science student Dylan Fotiadis. “After meeting with my mentor John Sheard (BA, 2001), I saw how a well-organized plan for school and a passion for my pursuits will lead me in a better direction than worry ever would.”

“It is a pleasure to participate,” said Sheard. “I always welcome the opportunity to mentor students with a view to developing long-lasting relationships.”

Explore It is offered by the Career Centre and Arts & Science, drawing on the expertise of the Arts & Science alumni relations team. It is also one of the programs in STEP Forward, a new initiative that helps students connect their academic learning to their personal and professional development.
Pursuing cleaner, safer cooking solutions

Nearly three billion people cook with solid fuels. Exposure to the resulting smoke causes four million premature deaths per year, with women and children being the most affected. Mimi Liu, an undergraduate student in economics and peace, conflict & justice knew better cooking options existed and wanted to find out why they were not being widely adopted. So she joined up with political scientist Joseph Wong, who is the Ralph and Roz Halbert Professor of Innovation and the Canada Research Chair in Health and Development, to put together a team of students and faculty to do some research.

Working closely with Prakti Design, a manufacturer of stoves that reduce indoor air pollution, fuel consumptions and cooking time, the team interviewed various stakeholders in India, including women who cook at home. They found several obstacles to adopting the new clean-stove technology. The potential health benefits of the stoves, for example, do not influence those in rural areas where the smoke from traditional stoves, which have been used for generations, is not seen as a significant health problem. Clean-cook stoves are still prohibitively expensive for many and they could also be better designed with more input from users: some women said the stoves should have larger openings so they would not have to chop wood into such small pieces.

The research was supported by the Dean's International Initiatives Fund — an Arts & Science program in which undergraduate students apply for funding to undertake an innovative international experience — as well as the Asian Institute and the Centre for Global Engineering.
Making cities more walkable

Paul Hess looks out for pedestrians. His extensive investigations of pedestrian environments and design in urban settings as well as access to transportation have made him an advocate for those who rely on walking to get around the city.

Hess is studying how individuals who don’t have a driver’s license or access to a vehicle navigate the car-dependent outer suburbs. He is also collaborating with Metrolinx, Toronto’s regional transportation agency, to investigate areas surrounding transit corridors and whether pedestrians have access to safe, direct routes to planned stations.

“Walking in the urban environment has grown in importance during the last 20 years,” said Hess. “Real estate listings now feature walk scores because walkable places are considered good places to live. If we can get engineers, planners and pedestrian advocates to work together better, then we’ll shift from the old mentality of primarily using cars to get around to a new standard of increased walkability.”

Science superstar rocks Convocation Hall

Renowned astrophysicist and Cosmos host Neil deGrasse Tyson addressed a capacity crowd at U of T in March. He was on campus to receive the inaugural Dunlap Prize, presented by the Dunlap Institute for Astronomy & Astrophysics for remarkable achievements in public outreach.

Both Toronto and students benefit from partnerships

Arts & Science is tremendously lucky to be located in one of the world’s most open, cosmopolitan and globalized cities. To make the most of our diverse urban surroundings, we partner with organizations all across Toronto so that our students can participate in a wide variety of practical learning experiences. In turn, the city benefits from their expertise: a true win-win relationship.

From non-profit organizations and community and cultural advocacy groups to government offices, hospitals and social justice organizations our partners include:

- Regent Park School of Music
- Baycrest Hospital
- Out of the Cold
- Artscape
- Daily Bread Food Bank
- Canadian Urban Institute
- Ontario Black History Society

PAUL Hess
GEOGRAPHY
Connecting Canadians with their painted past

Sara Angel wants Canadian artists to be famous for much longer than 15 minutes — she wants them to become household names. That’s why the PhD candidate and Trudeau Scholar created Art Institute Canada, an organization devoted to disseminating and promoting Canadian art history.

The institute’s pilot initiative is the Canadian Online Art Book Project, a series of e-books celebrating artists less familiar than the Group of Seven and Emily Carr, all freely available in both French and English on the institute’s website at www.aci-iac.ca. Current e-books include a critical biography of London, Ontario painter Jack Chambers written by U of T art history professor Mark Cheetham. Other experts are lined up to contribute texts on more Canadian artists and Angel aims to publish six to 10 books annually to have 40 titles in place by Canada’s 150th anniversary of Confederation in 2017. She also hopes to introduce a lecture series that connects Canadian art history to contemporary issues as well as feature online art exhibitions curated by museum and gallery professionals.

“Canadian artists have crafted vital testimonies of our country’s unique identity,” said Angel. “They have created an aesthetic record of our existence, our hopes and failures, our diversity and our interconnectedness. To know them and their work is to know ourselves.”

Mega-events bolster and challenge cities

Mega-events — the Olympics, the World Cup and next year’s Toronto-hosted Pan Am Games — can bring a range of benefits to their host cities but also often highlight a city’s political and social tensions. A new urban studies course, Cities and Mega-Events, taught by David Roberts, encourages conversation and critical thinking on the pros and cons of hosting a large sporting event in a city, exploring issues such as funding, broadcasting, public space and human rights.

“Mega-events often bring additional government funding that would otherwise be unavailable for urban development, as well as significant international media attention,” said Roberts. “But they can also exacerbate social problems such as chronic inequality or poverty, especially if funds are redirected toward tourism infrastructure. A growing number of voices worldwide are calling for significant change in the approach to hosting mega-events to better integrate issues of social justice and social development. One of the key challenges will be to sustain such attention during and after the events.”
Scholarships honour memory of a perfect student

Jane Trombley was the perfect student. She always did the course readings and participated in class discussions from the front row, where she always sat. She’d found herself at U of T after following many paths — from ballet to mime to Gestalt therapy — and her intellectual curiosity had never been greater. So, after she passed away in 2013, her sister, Gaye Trombley, wishing to honour Jane’s passion for higher education, established two scholarships in the Department for the Study of Religion.

“Jane seemed to have come home in her academic pursuits at U of T,” said Trombley. “She always had deep spiritual convictions and religious studies fulfilled both her intellectual curiosity and her deep spiritual calling.”

The Jane Trombley Undergraduate Scholarship supports a student who has completed the Millie Shime Rotman Academic Bridging Program, for students, like Trombley, who have been out of school for some time.

“It was a challenge and adventure for her to begin her academic path as an adult student and one of the many challenges was financial,” said Trombley. “She felt strongly that there was a need for financial support for adults who did not qualify for student loans.”

The second award, the Jane Trombley Graduate Scholarship, received a match under the Provost’s PhD Enhancement Fund.

Donor’s unique gift intended to inspire more giving

If there’s one thing David Scrymgeour (BCom, 1979) knows about, it’s leadership. The successful entrepreneur has been a consultant to an array of corporate and community organizations — MaRS Discovery District and the Make Poverty History Campaign, for example — and once served as national director of the Progressive Conservative Party of Canada.

In 2013, he established the Scrymgeour Scholarship in Entrepreneurial Management. Then in April of this year, he took the concept of philanthropic leadership a step further. With a $1.5-million gift, he endowed the Building Canadian Leaders Matching Scholarship Program. Under this program, donations of $25,000 or more to establish endowed scholarships at Rotman Commerce will receive a dollar-for-dollar match.

“I have always looked forward to one day returning to the university to reinvest in the program,” said Scrymgeour. “I was so delighted with the result of the first scholarship I set up that I wanted to expand with a matching fund to encourage others wishing to create their own endowments.”

In keeping with Scrymgeour’s feeling that good leadership isn’t just about getting good grades, consideration will be given to things like participation in extracurricular activities and community involvement.

Mining mastermind honoured with scholarship

Canada is known as a bedrock of excellence in mining geophysics, and much of the credit goes to the late Harold Seigel (BA 1946, MA 1947, PhD 1949). He pioneered several methods of mineral exploration, including the technique of induced polarization, which remains one of the primary geophysical approaches used to explore for disseminated ores. He also discovered at least nine mines in Canada and around the world and invented a line of geophysical instruments that are still used today. To honour the professor’s commitment to and impact on the field, and to bolster U of T’s efforts to educate future generations of geophysicists, the Seigel family established the Harold O. Seigel Graduate Scholarship in Applied Geophysics in 2013.

“U of T has a long legacy of developing the applied geophysics techniques for mineral exploration in Canada and globally, including the significant contributions of Dr. Seigel,” said Russ Pysklywec, chair of the Department of Earth Sciences.

“The Seigel Graduate Scholarship will allow us to continue this tradition of research excellence by enabling us to attract top graduate students for exploration geophysics research.”
Hellenic initiative helps students get their Greek on

Thanks to the ambition of U of T’s Greek Students’ Association (GSA) and the generosity of the Hellenic Heritage Foundation, the Centre for European, Russian & Eurasian Studies will pilot a Hellenic studies program devoted to the history, politics, language and culture of Greece.

“The Hellenic program is more than just an achievement for the Greek community and Hellenism; it is a progressive feat for the University of Toronto,” said Kosta Katsanevas, President of the GSA and one of the driving forces behind the initiative. “The launching of a program in Greek studies underscores the integrity of the university and is proof that U of T truly values the needs of its students. This was a student initiative, we did our part in requesting the program, and the Hellenic Heritage Foundation has come on board to get things off the ground. We’re very grateful for that. But we need more donors to step forward and support this program if it is to grow and develop.

The initial program will include three courses — in language, politics and issues in contemporary Greece — as well as a student travel fund and a lecture fund.

Classics student’s passion inspires award

Kate Bosher always had a deep and profound love of classics, inspired by her high school Latin teacher and family trips to Greece, the birthplace of theatre and drama. She went on to study classics at U of T, where she received her BA and MA, and researched ancient comedy in Sicily and southern Italy before teaching Greek and Latin at Northwestern University. After she died of lung cancer in 2013, at age 38, her husband, LaDale Winling, and aunt, Lorna Marsden, an alumna and former professor, worked together with U of T’s Department of Classics to establish the Kathryn Bosher Memorial Graduate Scholarship in Classics.

“Kate was committed to the humanities — humanistic inquiry in her work and a set of values that informed how she lived her life — and she was unwavering in these beliefs,” said Winling. “The fund is our testament to her incredible achievements, her humility and disposition, and the example she set for those around her.”

Bosher believed that no expense should be spared for supporting scholars, teachers and students.

“Kate had made it through graduate school on a small fellowship and with extremely simple living,” Winling said. “Helping make sure classicists don’t have to worry about finances in graduate school will allow them to live more comfortably, do better work and put them on more even footing with colleagues in the hard and social sciences. Kate would approve of this.”
Cressy award winners lead by example

Penelope Angelopoulos, Julia Wilton, Seoren A’Garous and Kathleen Gnocato were among 211 graduating students ushered into a community of achievement and service at the 20th annual Gordon Cressy Student Leadership Awards honouring students’ outstanding co-curricular contributions to U of T. A’Garous and Wilton are both undergraduates at the Trudeau Centre for Peace, Conflict & Justice, while Gnocato and Angelopoulos are in the Master of Global Affairs program.

“Receiving a Cressy Award is a responsibility — a promise to our community that we will continue to do work that is meaningful in order to make the world a better place,” said Wilton, a future human rights lawyer who was head coordinator for the Free the Children Mobilizers program that helped more than 30,000 young people across Canada get more involved in social activism. “It’s wonderful that U of T takes the time to celebrate those who are committed to making a difference, as this award also validates the things we’ve done and motivates us to do more.”

Computer science alumni lead the way at Arbor Awards

Just seven years old and already the Department of Computer Science Alumni Student Mentorship Program is one of the strongest programs of its kind. So it’s no surprise that three computer science mentors were among 112 U of T alumni honoured for their volunteer work at the annual Arbor Awards.

Alena Gondor (BSc 1983, MSc 1995), a senior technical analyst at New Horizon System Solutions, has been involved with the program from the beginning.

“I’ve had mentors in my career so I know how important they can be and the impact they can have,” said Gondor. “It’s very rewarding to be able to pass along to students, particularly female students, some of my experiences as they look to make the transition from university to the work environment and have to deal with issues like work-life balance and the glass ceiling.”

Hooman Bahador (Hons. BSc 2010), the chief technology officer and co-founder of Konrad Group, was recognized for his work as a mentor and sponsor of many student activities. He also established the Konrad Group Award in Computer Science. Bruce Pinn (Hons. BSc 1982), the CIO at Element Financial Corp., was honoured for his mentoring contributions, including hosting two “Dinner with Twelve Strangers” events.

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More than 30 U of T alumni from the petroleum, oil and gas industries gathered to hear Andrew Miall, the Gordon Stollery Chair in Basin Analysis and Petroleum Geology, deliver his sentiments on sediments during an alumni reception in Calgary this past spring. Department of Earth Sciences chair Russ Pysklywec and graduate student Sadeed Hassan also spoke at the event, which coincided with the 2014 GeoConvention. Miall is widely known for his expertise on the responsible development of Alberta’s oil sands — one of the country’s most important science-related public policy issues — and has been a key advisor to governments on ways to improve environmental oversight and management.

“Whether identifying the nature and extent of the earth’s remaining fossil fuel resources, addressing the unintended consequences of their development, or implementing best practices for the disposal and remediation of environments, all these questions are central to the earth science disciplines at the University of Toronto,” he said.
2013–2014
awards & honours

JONATHAN ABBATT
Chemistry
Environment Division Research and Development Award
Chemical Institute of Canada

EMANUEL ADLER
Political Science
Fellow
Royal Society of Canada

JAMES ARTHUR
Mathematics
Foreign Associate
U.S. National Academy of Sciences

SALVATORE BANCHERI
Italian Studies'
Distinguished Service Award
American Association of Teachers of Italian

MORGAN BARENSE
Psychology
McDonnell Scholar Award in Understanding Human Cognition
James S. McDonnell Foundation

ROBERT BATEY
Chemistry
Alfred Bader Award
Canadian Society for Chemistry

STEPHEN CLARKSON
Political Science
Konrad Adenauer Research Award
Royal Society of Canada

CITIZEN LAB
Munk School of Global Affairs
MacArthur Award for Creative and Effective Institutions
MacArthur Foundation

MERIC GERTLER
Geography
Distinguished Scholarly Honors
Association of American Geographers

REBECCA GHENT
Earth Sciences
NASA Group Achievement Award
NASA

MARCO GUALTIERI
Mathematics
Coxeter-James Prize
Canadian Mathematical Society

MIKE HAMILTON
Earth Sciences
Barlow Medal
Canadian Institute of Mining, Metallurgy and Petroleum

JOSEPH HEATH
Philosophy, School of Public Policy & Governance
Fellow
Royal Society of Canada

RAY JAYAWARDHANA
Astronomy & Astrophysics
Rutherford Memorial Prize in Physics
Royal Society of Canada

Outstanding General Audience Book Award
Canadian Science Writers Association

Guggenheim Fellowship
John Simon Guggenheim Memorial Foundation

ERIC JENNINGS
History
Guggenheim Fellowship
John Simon Guggenheim Memorial Foundation

SAJEV JOHN
Physics
Killam Prize
Canada Council for the Arts

THOMAS KEYMER
English
Fellow
Royal Historical Society

ASKOLD KHOVANSKII
Mathematics
Jeffery-Williams Prize
Canadian Mathematical Society

MARTIN KRKOSEK
Ecology & Evolutionary Biology
Sloan Research Fellowship
Alfred P. Sloan Foundation

PETER MARTIN
Canadian Institute for Theoretical Astrophysics
Executive Award for Outstanding Service
Canadian Astronomical Society CASCA

ANDREW MIALL
Earth Sciences
Logan Medal
Geological Association of Canada

MARY NYQUIST
English, Centre for Comparative Literature,
Women and Gender Studies Institute,
Literary Studies, Victoria College
Irene Samuel Memorial Prize
Milton Society of America

ATO QUAYSON
English, Centre for Comparative Literature
Centre for Diaspora & Transnational Studies
Fellow
Royal Society of Canada

KEREN RICE
Linguistics
Officer of the Order of Canada
Governor General of Canada

Member
American Philosophical Society

NICHOLAS RULE
Psychology
Early Career Award
International Social Cognition Network

BRIAN SHUTER
Ecology & Evolutionary Biology
William E. Ricker Resource Conservation Award
American Fisheries Society

MARLA B. SOKOLOWSKI
Cell & Systems Biology, Ecology & Evolutionary Biology
Distinguished Investigator Award
International Behavioural and Neural Genetics Society

DOUGLAS STEPHAN
Chemistry
Henry Marshall Tory Gold Medal
Royal Society of Canada

SALI TAGLIAMONTE
Linguistics
Fellow
Royal Society of Canada

NICHOLAS TERPSTRA
History, Study of Religion, Centre for Medieval Studies
Phyllis Goodhart Gordan Book Prize
Renaissance Society of America

Evan THOMPSON
Philosophy
Fellow
Royal Society of Canada

ANDREI YUDIN
Chemistry
Fellow
Royal Society of Canada

NATALIE ZEMON DAVIS
History, Centre for Comparative Literature,
Centre for Medieval Studies
Paul Oscar Kristeller Lifetime Achievement Award
Renaissance Society of America

National Humanities Medal
National Endowment for the Humanities

A sample of the prestigious awards and honours received by Arts & Science faculty between July 1, 2013 and June 30, 2014.
2013|2014

teaching awards

EXCELLENCE IN TEACHING AWARD
AMERICAN ACADEMY OF RELIGION
Shafique Virani
Study of Religion

PRESIDENT’S TEACHING AWARD
UNIVERSITY OF TORONTO
Don Boyes
Geography

Shafique Virani
Study of Religion

NORTHROP FRYE AWARD (INDIVIDUAL)
UNIVERSITY OF TORONTO ALUMNI ASSOCIATION
Elizabeth Harvey
English

NORTHROP FRYE AWARD (DIVISION/DEPARTMENT)
UNIVERSITY OF TORONTO ALUMNI ASSOCIATION
Writing Instruction for TAs (WIT)
Faculty of Arts & Science

OUTSTANDING TEACHING AWARDS
FACULTY OF ARTS & SCIENCE
Jennifer Campbell
Computer Science
Deborah Cowen
Geography
Emily Gilbert
Geography
Canadian Studies, University College
Jennifer Murdock
Economics
William Robins
English, Centre for Comparative Literature

TATP TEACHING EXCELLENCE AWARD
TEACHING ASSISTANTS’ TRAINING PROGRAM,
CENTRE FOR TEACHING SUPPORT & INNOVATION
Esther Atkinson
History and Philosophy of Science and Technology
Brigida Bell
Study of Religion
Asif Zaman
Mathematics

RANJINI (RIN) GHOSH EXCELLENCE
IN TEACHING AWARD
ARTS & SCIENCE STUDENTS’ UNION
William Ju
Human Biology, New College

Recipient also holds an appointment at:
1 University of Toronto Mississauga

Arts & Science Outstanding Teaching and Staff award recipients

Back row: Beverley Lewis, Administrative Service Award (Faculty Registrar’s Office); Natalia Krencil, Distinguished Service Award (Anthropology); Carolyn Branton, Student Life Award (Political Science); Jennifer Murdock, Outstanding Teaching Award (Economics); William Robins, Outstanding Teaching Award (Classics)

Front row: Emily Gilbert, Outstanding Teaching Award (Canadian Studies, University College and Geography); Shawn Tian, Dean’s Student Leadership Award (Psychology and Economics); David Cameron, Dean of Arts & Science; Jennifer Campbell, Outstanding Teaching Award (Computer Science)

Missing: Deborah Cowen, Outstanding Teaching Award (Geography) and John Hancock, Technical Service Award (Computer Science)

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