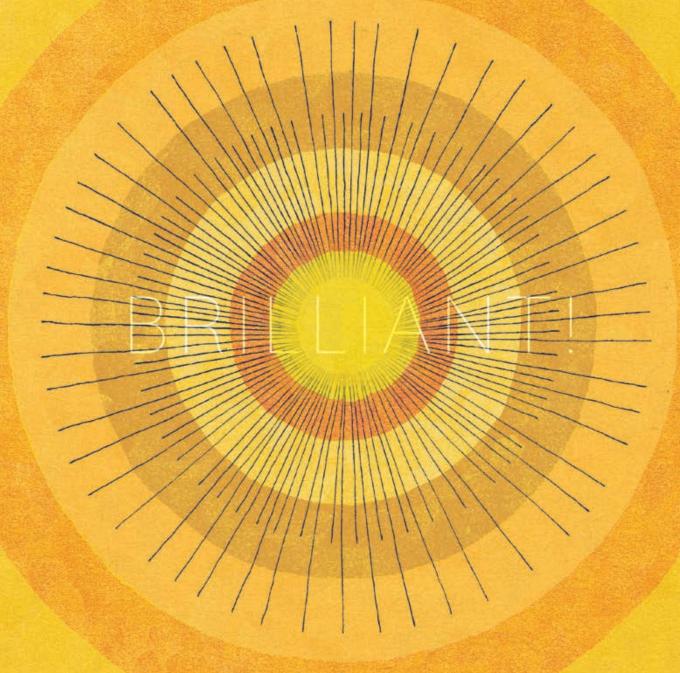
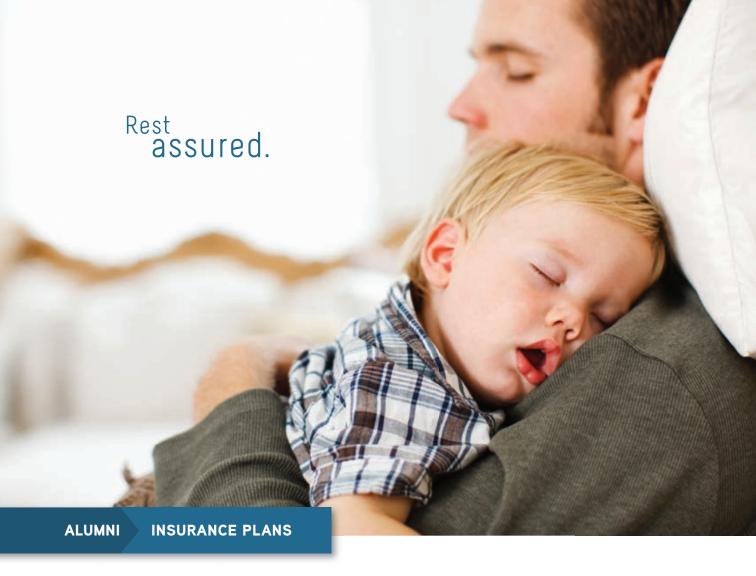
Transforming Regent Park A community rebuilds / **Oxford Bound** A Rhodes trio / **Machinespeak** Computers that translate **Urban Crusader** CivicAction's Mitzie Hunter / **Global Observatory** Munk School's new digs / **Lady Godiva** The band plays on

UofTMagazine spring 2013

SPRING 2013



10 young profs whose ideas could change the world



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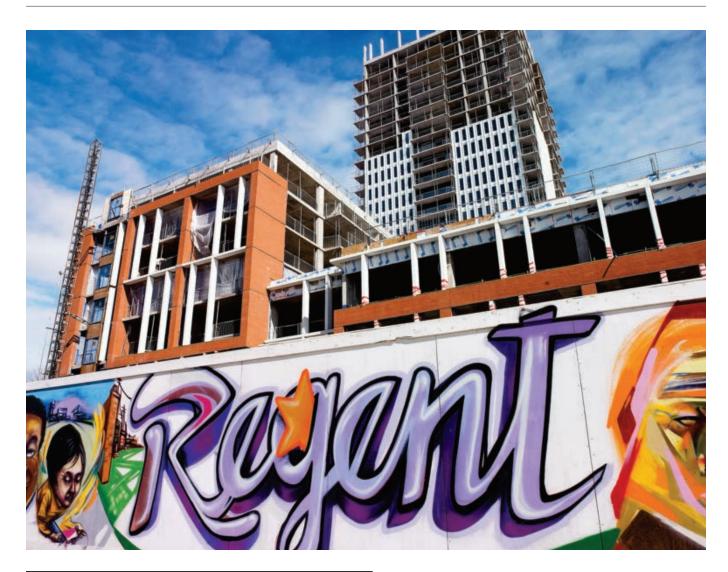
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A university community helps a neighbourhood transform

BY JOHN LORINC

30 Sparks of Brilliance

Meet U of T's next generation of scientists, thinkers and inventors by scott anderson, patchen barss, stacey gibson and nadia van

UofTMagazine

SPRING 2013 VOLUME 40 NO.3

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U of T Magazine, with a circulation of 320,000, is published quarterly by University Advancement. All material is copyright © 2013 Governing Council, University of Toronto, and may be reprinted with permission. Alumni receive the magazine free of charge. Donations accepted at magazine. utoronto.ca under "Support Us," or send a cheque payable to the University of Toronto at the above address.

Publications Mail sales agreement

No. 40065699

Non-profit postage paid Buffalo, NY

Permit No. 3415. U.S. Postmaster send address corrections to P.O. Box 29, Lewiston, NY 14092

Printed in Canada by TC Transcontinental Printing Inc. ISSN 1499-0040

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Departments

To be chosen to lead U of T during a time of great change in our sector is both challenging and exhilarating

- University of Toronto president-designate Meric Gertler, p. 14







21 A U of T project aims to bring better mental health to a nation where most illnesses go untreated



15 Meet the three U of T students who this year earned prestigious Rhodes Scholarships to study at Oxford University

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Letters





Poor mental health is the most important potential human-made catastrophe of the 21st century

JAMES MAUNDER

BASc 1953, GRAVENHURST, ONTARIO

Healthy Minds

In the early 1950s, engineering and business students were lucky to have a psychology class taught by Prof. Bill Line. His lectures were so entertaining that you had to arrive early to get a seat. But he had a very serious message: He felt that without a revolution in attitude, poor mental health would pose a great danger to civil society. He rightly predicted the increase we are now seeing in multiple murders and gun violence.

He spoke about the importance during a person's formative years of feeling safe and secure, and of the societal need to devote more resources to mental-health education. With respect to the authors of "Apocalypse How?" (Winter 2013), poor mental health is still the most important potential human-made catastrophe of the 21st century.

JAMES MAUNDER

BASc 1953, GRAVENHURST, ONTARIO

Green Living

On the subject of human-induced climate change ("Apocalypse How?"), it is important to note that North Americans and Europeans presently enjoy a high standard of living and consume a large fraction of the world's resources. We will have to be sympathetic to the expectations of people in developing countries for raising

their own standard of living. This presents a difficulty because we will be hard pressed to make substantive lifestyle changes to accommodate these desires, and because developing countries will account for most future population growth. Unfortunately, green technology – although much advanced in recent years – will not be able to generate enough clean energy to replace greenhouse-gas emitting sources.

JON VAN LOON

PhD 1964, MARKHAM, ONTARIO

No Food Shortage

In the section of "Apocalypse How?" on world hunger, Prof. Harriet Friedmann implies that there is a shortage of food in the world. But present food-supply problems arise mostly from corrupt governments and their irresponsible policies. If she thinks industrial farming uses too many resources, she should explain how small farms can produce enough food – especially without chemicals.

FRED LANGFORD

BA 1953 VICTORIA, SIDNEY, B.C.

Professor Friedmann responds:

While there is not a shortage of "food" in the world, there is a growing number of hungry people, and a new problem of malnourished people who have enough calories but lack essential nutrients

from a balanced diet. The causes are far more complex than implied by Mr. Langford. One could start with the fact that more than half of the world's production of grains and oilseeds are fed to animals or used to fuel cars. These same "food crops" are drastically reduced in genetic diversity, and displace mixed cropping systems that renew soils and waters. Of course, it is not a question of extremes – ever more chemical inputs or none; it is rather a question of moving in sustainable directions as quickly and as intentionally as possible.

Climate Change

I found "Apocalypse How?" an interesting read. However, I take issue with the idea that human-induced climate warming is causing the oceans to rise.

Is our climate changing? Almost certainly. Are humans the cause? Highly unlikely. Scientists have found a great deal of evidence that Earth's northern latitudes were once much warmer: a "mummified" forest on Ellesmere Island, the remains of magnolia and fig trees in northern Greenland, and corals, which only grow in tropical waters, on the polar fringes of Alaska, Canada and Greenland. Great changes in the Earth's climate took place in the distant past without our influence, so why should we conclude that we are the cause of such changes now?

Let's not permit our governments to be coerced by ill-informed climate-change alarmists into adding carbon taxes to our already onerous tax burden. Let's keep our planet clean but let's not cripple our economy because of an imaginary crisis.

KEN STOUFFER

BA 1978 UTSC, ALLISTON, ONTARIO

A Propensity for Violence

Speaking of apocalypses, one of the best apocalypse-threat movies I know is *The Day the Earth Stood Still*. The alien Klaatu arrives with a giant robot, Gort, which destroys weapons on sight. Should mankind plan to colonize other planets and export its propensity for violence to them, it will be in for a shock: "This Earth will be reduced to a burntout cinder," says Klaatu. And we won't have to wait for a bloated sun billions of years hence to do the same thing.

The film ends with Klaatu and Gort flying off, having left that sobering message ringing in the ears of humanity. I suspect that the National Rifle Association would not have a link to this movie on its web page.

GEOFF RYTELL

BEd 1975 OISE, TORONTO

Theatrical Genius

Thank you for the article about the

brilliant Jeremy Hutton ("Enter Stage Left," Winter 2013). As an actor who has worked with Hutton in numerous productions, I have a word for young actors: if you ever have a chance to work with him, *grab it*! He's extremely demanding, endlessly patient and wonderfully articulate; if you are an uncertain young actor, you could not possibly have a better director or teacher. And a word to U of T's governors: the geniuses aren't all in the science labs. This one's in the theatre. Imagine that!

THOMAS GOUGH

BA 1983 WOODSWORTH, OSHAWA, ONTARIO

A Play Worth Seeing

Regarding "Nightmare in Nanking," by Diana Tso (Winter 2013), I had the great pleasure of seeing a production of *Red Snow* about a year ago. I came away with a deeper sense of the tragedy of war, how it shapes our futures and how

we must heal in order to move forward. There was a standing ovation when the play ended. I would highly recommend that every college and university in Canada give readings of *Red Snow*.

BARBARA CHERNIN

BA 1978 VICTORIA, TORONTO

Immortalized on a Stamp

The Toronto Argonauts' commemorative stamp shows a picture of the famous Mud Bowl at Varsity Stadium in 1950 ("Ephemera," Winter 2013). Your readers may be interested to know that a former University of Toronto football player, my father, is also on that stamp. Alexander E. "Ted" Toogood (BPHE 1948) played for the Blues from 1945 to 1948 and then for the Toronto Argonaut Club from 1950 to 1955. He is the man carrying the ball, about to be tackled.

SHIRLEY TOOGOOD

BPHE 1982, TORONTO

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If you'd like to receive an e-mail message each quarter with a link to the new issue of *U* of *T Magazine* online instead of being mailed a print copy, please visit: www.magazine.utoronto.ca/gopaperless

University of Toronto Magazine is committed to keeping alumni and friends connected with the spirit of today's U of T. We're also dedicated to using our resources wisely and reducing our environmental footprint.

Stunning Architecture

The reclamation and repurposing of the historically significant One Spadina Crescent will give the Daniels Faculty the space it needs to continue to assert itself as a strong contender in architectural academia ("City Building," Winter 2013). The plan to bring together design-related disciplines under one roof holds the promise of an even brighter future for the Daniels Faculty. The extra space will foster growth, innovation and continued excellence in research – and also help establish an exciting design culture at U of T.

I have faith that the leaders at the faculty, working in tandem with NADAAA's expertise, will pull off an exceptional project that will be considerate to the cultural, historic and ecological environments – a gem for the university and the city!

JEREMY STAM

Canadian Mint

I believe the article "Tossing a Coin" (Winter 2013) should have stated the Royal *Canadian* Mint. The Royal Mint strikes the U.K.'s coinage, last time I checked.

BERNIE TORBIK

BA 1975 TRINITY, HUNTINGTON BEACH, CALIFORNIA

Tablet Love

I took the iPad edition of your Summer 2012 issue with me recently on a bus trip to Toronto and read it from cover to cover. I really appreciated the multimedia options throughout, particularly being able to see a selection of the late Doris McCarthy's wonderful paintings.

MARNIE BEAUBIEN

BASc 1980, OTTAWA

Buddha's Insights

The article "A Shift in Perception" (Autumn 2012) describes a musician who can "see" musical sounds. Western

research is apparently still trying to figure out this phenomenon, but the Buddha offers some insight. In his view, there is a sixth sense – the mind sense – at the base of the other five. One can see "a G in orange" because hearing and vision share a common base.

Buddha lived two centuries before Aristotle, whose model of the five senses guides Western thought. Buddha had a profound understanding of the mind's intricacies, which many western scientists are now discovering. Perhaps *U of T Magazine* will consider an article on Buddhist psychology?

SUWANDA H. J. SUGUNASIRI

MEd 1971, PhD 1978, MA 1992, TORONTO

WRITE TO US! Got an opinion about an article? *U of T Magazine* welcomes letters at uoft.magazine@utoronto.ca. Not every letter can be published due to space constraints; those that are published may be edited for clarity and length.



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Helen Huang, Master of Science in Planning candidate, U of T, 2014

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The Myth of the Ivory Tower

New schools show U of T is engaged, adaptable and more relevant than ever



The university-as-ivory-tower remains a popular myth, but the reality is very different. Great universities are always in a process of evolution. They are hotbeds for innovation, profoundly influenced by, and influencing in turn, their societies and the wider world.

So it is at the University of Toronto. In a world moving at light speed, excellence in the cornerstone academic disciplines remains important. But the boundaries between those disciplines are dissolving. What's emerged at U of T is an impressive range of extra-disciplinary units with the diversity and agility needed not just to keep up, but to set the pace. Here, I'll highlight four of these exciting new centres.

Three years ago, with transformative support from alumnus Peter Munk, U of T's highly regarded Centre for International Studies became the Munk School of Global Affairs. The word "global" implies a view of the world in which nations are more interconnected than ever and issues increasingly demand multilateral action. To address such global complexity, the Munk School is forming partnerships with faculty throughout the university as well as with a network of international institutions and governments. Students are thriving, and the Munk School professors are in the news every week for their influential research and commentary.

For decades, U of T's School of Hygiene was a North American leader. The school was absorbed into the Faculty of Medicine in the 1970s partly to help integrate health promotion with disease treatment. What became clear, however, was that health required integration not just within but beyond Medicine. With a visionary gift from Paul Dalla Lana, U of T was able to establish a new School of Public Health in 2008. Now, in addition to its core strengths in public health sciences, the Dalla Lana School is developing cross-disciplinary excellence in healthy cities and communities, global health, and healthy public policy.

A similar integrative theme characterizes U of T's new School of the Environment. It will gather academic work on the environment under one big tent, giving the subject greater focus and a higher profile, and creating new opportunities for our students. While U of T is already very strong

in environmental science, the school also has an opportunity to forge links with the Dalla Lana School and the School of Public Policy and Governance in order to translate our knowledge about the environment into practices that protect health and policies to foster sustainable development.

For its part, the School of Public Policy has been multidisciplinary from its inception. It brings together scholars from economics, sociology, political science, law, medicine, philosophy and business, among others. It also forges links between these researchers and practitioners of public policy from government and non-profit organizations. The biggest winners, however, are students. They get to develop a rich conceptual framework for policy development and analysis.

In a way, then, we've come full circle. We talked a lot for years about external partnerships to give students and faculty valuable opportunities. Now we've realized the importance of internal partnerships – the ones we're making across faculties and schools. And here, in a time of accelerating social and technological change, U of T's size and disciplinary strengths are proving to be a distinct advantage. We have broad and deep foundations on which our new schools are building to create dynamic trans-disciplinary programs that meet students' – and society's – fast-changing needs.

Readers will note the article on page 13 about the appointment of Professor Meric Gertler as my successor as president. The Search Committee and the Governing Council are to be congratulated for an excellent decision. They have placed our university in the hands of an outstanding scholar, a strong and experienced academic leader, a gifted teacher, and an individual of vision and integrity who is deeply committed to this institution and its special role in Canada and the world. There will be further coverage of the transition in subsequent issues. For now let me say that I look to the future with great confidence that the President's Office is in very capable hands.

Sincerely, David Naylor

PHOTO: ©2011 GUSTAVO TOLEDO PHOTOGRAPHY

SPRING 2013

Calendar

MORE EVENTS!

Check out the latest campus happenings at www.utoronto.ca.



WEDNESDAYS, APRIL 10 TO MAY 15

Academy for Lifelong Learning Spring Talks

Experts host talks at Innis College this spring in everything from health, art and politics to the environment. Dr. Bruce Lampard, president of Médicins Sans Frontières, discusses humanitarian action in the 21st century; psychologist Guy Proulx lectures on the aging brain; journalist and author Alanna Mitchell addresses the critical ecological state of the world's oceans; and more. \$10, or free for academy members and the U of T community (with ID). Coffee at 9:45 a.m. Speaker at 10:15 a.m. Innis College Town Hall, 2 Sussex Ave.

For info, contact Ann Mummenhoff at 416-785-0004 or amummenhoff@rogers.com or visit allto.ca.

Alumni

April 8 and 11

Engineering alumni events with Dean Cristina Amon. April 8: Singapore. Straits Trading Building, 9 Battery Rd. April 11: Hong Kong. Club Lusitano, 16 Ice House St. For info: Sonia De Buglio, 416-946-8143 or sonia@ecf.utoronto.ca.

April 9 London, UK Rotman Strategy Experts Speaker Series. Alumni and friends are invited to a reception and presentation on business strategy by Rotman School dean Roger Martin and A.G. Lafley, former CEO, Procter & Gamble. £17.99. 3:30−6 p.m. Thomson Reuters, 30 South Colonade – Canary Wharf (auditorium). Deirdre Gomes, 416-978-1669 or deirdre.gomes@utoronto.ca, or rotman.utoronto.ca/events.

April 10 and May 8

Skule Lunch and Learn Speakers Series is a monthly luncheon and talk for engineering alumni. \$30 per luncheon. 12–2:45 p.m. The Toronto Plaza Hotel, 1677 Wilson Ave., North York. Contact Tom Vosper, (416) 946-0566 or tomv@ecf. utoronto.ca. To register: alumni. utoronto.ca/skulelunchandlearn.

April 12 Chestnut Conference Centre

MIE Momentum: An Evening of Celebration with Alumni and Industry. Speaker: Som Seif, CEO of Purpose Investments. \$100 (Classes of 63 and 88 receive one complimentary ticket). Reception at 6 p.m. and dinner at 7 p.m. 89 Chestnut St., Grande Colony Ballroom. RSVP: mie.utoronto.ca/alumni.

April 29 Boston

Rotman Strategy Experts Speaker Series. Alumni and friends are invited to a reception and presentation on business strategy by Rotman School dean Roger Martin and Jan W. Rivkin, a professor at Harvard Business School. US\$27. 5:30–8 p.m. Fidelity, 245 Summer St. For more info, contact Deirdre Gomes at 416-978-1669 or deirdre. gomes@utoronto.ca, or visit rotman.utoronto.ca/events.

May 9 Ottawa

President's Reception. Join fellow alumni and friends at a reception hosted by U of T president David Naylor. Free. 6:30-8:30 p.m. Location TBA. Contact Teo Salgado, 416-978-2368 or teo.salgado@ utoronto.ca, or alumni.utoronto.ca/events/regional.

November 24 Hong Kong

Asia-Pacific Graduation Ceremony for alumni who graduated in 2011 and 2012. Time TBA. The Ritz-Carlton, Hong Kong, International Commerce Centre, 1 Austin Road W., Kowloon. Contact Teo Salgado, 416-978-2368 or teo.salgado@ utoronto.ca, or alumni.utoronto. ca/events/regional.

Spring Reunion

May 29 to June 2 Toronto

Spring Reunion 2013. If you graduated in a year ending in 8 or 3, visit the Spring Reunion website to learn about the tailored events hosted in your honour by your college, faculty or department, as well as U of T-wide events. While honoured alumni are special guests, all U of T alumni are welcome. Highlights of central Spring Reunion events are listed below. Contact 416-978-5881 or

Untitled 10, In the Scream of Things (series), is part of the Janieta Eyre: Constructing Mythologies exhibition at UTAC starting April 30



spring.reunion@utoronto.ca, or visit springreunion.utoronto.ca to learn about divisional and other U of T-wide events.

May 29 Location TBA

LGBTQ Pride Kick-Off. Alumni and friends are invited to enjoy drinks, and get a head start on Pride, on the eve of Spring Reunion. Free. Location TBA. 6–9 p.m. alumni. utoronto.ca/alumni-groups/lgbtq

May 30 Location TBA

SHAKER for Young Alumni.

A networking event for all young professionals and recent grads, with a special shout-out to those who graduated in 08, 03 or 98. Free. 7–10 p.m. Location TBA. alumni.utoronto.ca/events/shaker

May 31 Convocation Hall

Chancellor's Circle Medal Ceremony. For the graduating classes of 33, 38, 43, 48, 53 and 58. Chancellor Michael Wilson honours alumni celebrating their 55th to 80th anniversaries. Free. 9:30–11 a.m. 31 King's College Circle.

May 31 Convocation Hall

50th Anniversary Ceremony honours grads from 1963. Free. 3:30–6 p.m. 31 King's College Circle.

May 31 and June 1 Sidney Smith Hall

Stress-Free Degree Lectures by U of T profs, grads and authors.

Free. May 31: 1–3 p.m. June 1: 9–11 a.m. and 1:30–2:30 p.m. 100 St. George St. (See back cover.)

June 1

Convocation Hall

U of T Alumni Association Annual General Meeting. The brief business portion of the meeting will be followed by an address by U of T chancellor Michael Wilson. All alumni are welcome. Free. 11 a.m.–12:30 p.m. 31 King's College Circle.

June 1

Front Campus

Alumni BBQ, sponsored by the U of T Alumni Association. Join us for lunch following the Annual General Meeting (see event above) and take in the entertainment.

Free. 12:30–2:30 p.m. Front campus, King's College Circle.

Exhibitions

April 30 to June 29 UTAC

Andrew Wright: Penumbra,

organized by UTAC and the Scotiabank Contact Photography Festival. Janieta Eyre: Constructing Mythologies, a featured exhibition of the Scotiabank Contact Photography Festival, curated by Master of Museum Studies students. Free. Tues. to Fri., 12–5 p.m., Wed., 12–8 p.m., Sat., 12–4 p.m. 15 King's College Circle. utac.info@utoronto.ca or utac.utoronto.ca

May 22 to August 30 Thomas Fisher Rare Book Library

A death greatly exaggerated: Canada's thriving small and fine press. An exhibition of books drawn from the Thomas Fisher collections. Exhibition and catalogue by John Shoesmith. Mon. to Fri., 9 a.m-5 p.m. 120 St. George St. 416-978-5285 or library.utoronto. ca/fisher/exhibitions/current.html

Lectures and Symposia

April 10 The Faculty Club

The Brain and Us. The Senior College Symposium features brain experts such as Dr. Donald Stuss, president of the Ontario Brain Institute. \$45 (includes lunch). 9:30 a.m.-3:30 p.m. The Faculty Club, 41 Willcocks St. Register early. 416-978-7553, senior. college@utoronto.ca or faculty. utoronto.ca/arc/college/2013_Symposium.htm

April 18 Hart House Theatre

R.W.B. Jackson Lecture: First Nations' Education in Canada featuring former prime minister Paul Martin and Shawn Atleo, National Chief of the Assembly of First Nations in Canada. Hosted by OISE. Free. 7–8:30 p.m. 7 Hart House Circle. RSVP: tinyurl.com/jacksonlecture

April 30 FitzGerald Building

Lessons From Abroad. Speakers: Patricia McCarney, director of the Global Cities Institute, and Andre Sorensen, chair of the UTSC geography department. Final session of the 2013 Governance in Toronto series from Cities Centre. Free, but online RSVP required. 6:30–8:30 p.m. 150 College St., rm 103. 416-946-3688, citiescentre@utoronto.ca

Music

April 6 MacMillan Theatre

U of T Symphony Orchestra season finale. Victor Feldbrill, conductor. \$20, \$15 seniors, \$10 students. 7:30 p.m. 80 Queen's Pk. Tickets: 416-408-0208. Visit www.music. utoronto.ca.

April 7 UTSC

Spring Awakening. Students in the UTSC Concert Choir and UTSC Concert Band along with the Alumni & Community Concert Band perform classical and contemporary music. Free. 3 p.m. Meeting Place, 1265 Military Trail. 416-208-4769 or aep@utsc.utoronto.ca

May 24 Walter Hall

Random Walks and Cosmic Conceptions: Music of Xenakis and Beyond. Join the Fields Institute for Research in Mathematical Sciences to celebrate its 20th anniversary with concerts of Iannis Xenakis'

music and talks on the use of math in his music. Concerts at noon and 8 p.m. Walter Hall, 80 Queen's Pk. For tickets: fields.utoronto.ca/ programs/scientific/12-13/xenakis

Special Events

April 17 Faculty Club School of the Environment.

Research Day features work by faculty and students, during Earth Week. Free. 1–3:30 p.m., followed by refreshments. 41 Willcocks St., second floor. For info and registration: www.environment.utoronto. ca/ResearchDay.aspx or m.elhaddad@utoronto.ca.

May 11

St. George Campus

Science Rendezvous is a day-long showcase of Canadian science, and features interactive events for people of all ages. sciencerendezvous.ca/ 2013

June 6 Hart House

U of T Sports Hall of Fame honours athletes, teams and team builders for their impact on intercollegiate sport. Reception: 6 p.m. 7 Hart House Circle. uoft.me/hof2013

Theatre

April 5

Helen Gardiner Phelan Playhouse Drama Showcase and Cabaret features 10-minute acts by students, followed by a cabaret. Free. Showcase: 6–8 p.m. Cabaret: 8–10 p.m. 79 St. George St. 416-978-8099, dramacentre.utoronto.ca

May 2 to 5 Robert Gill Theatre

Life? Or Theatre? This multimedia performance is inspired by the life and art of Charlotte Salomon. \$10. Thurs. to Sat., 8 p.m. and Sun., 2 p.m. 214 College St. 416-978-7986 or dramacentre.utoronto.ca

PHOTO: COURTESY OF GALERIE SAMUEL LALLOUZ SPRING 2013

How to plan your Spring Reunion in 5 easy steps.

If you graduated in a year ending in 8 or 3, this is your spring reunion and now's the time to plan it.

STEP 1.

Visit

http://springreunion.utoronto.ca to sign up for events at your college, faculty or department.

The website is your one-stop source for all things Spring Reunion and using it is like shopping online. Simply enter your grad year plus your affiliation, and a list of personalized possibilities will instantly appear. Register, pay and print your itinerary for a jam-packed reunion weekend.

STEP 2.

Get a Stress-Free Degree: Two days of fascinating lectures by U of T professors, grads and authors.

Friday, May 31

1 p.m.

- Misconceptions About the Big Bang
 Michael Reid
- Ontario's Seniors Strategy: Where We Stand, Where We Need to Go
 Samir Sinha
- Libraries in the Digital AgeLarry Alford

2 p.m.

- Nature, Anyone? Toward a Compassionate Ecology
 Stephen Scharper
- The First 2000 Days of Life:
 Optimal Development as a Foundation for Lifelong Health, Learning and Social Function Stephen Lye
- Celebrating an Icon: The Lash Miller Building, Fifty Years of Place, People and Chemistry – John Polanyi and Scott Mabury

Saturday, June 1

10 a.m.

- Engineering Today Jonathan Rose,
 David Sinton and Christopher Wilmer
- Food, Culture and Identity in Italy
 Sara Maida-Nicol
- Global Poverty and Social InnovationJoseph Wong

2 p.m.

- Responsibility for Children's HealthAmy Mullin
- The Breaking Down of Categories and Social Barriers in 21st Century Classical Music: A Personal Reflection
 - Christos Hatzis

GO BACK TO SCHOOL FOR THE WEEKEND

Spring Reunion 2013
May 29-June 2

http://springreunion.utoronto.ca



STEP 3.

Don't forget about the U of T-wide signature events for alumni of every description.

Wednesday, May 29 LGBTQ Pride Kick-Off

Thursday, May 30 SHAKER for Young Alumni

Friday, May 31

- Chancellor's Circle
 Medal Ceremonies for
 55th to 80th Anniversaries
- 50th Anniversary Ceremony

Saturday, June 1
Campus Bus Tours

STEP 4.

Get to know your University of Toronto Alumni Association.

Annual General Meeting Saturday, June 1 11 a.m.—12:30 p.m. Convocation Hall 31 King's College Circle

KEYNOTE SPEAKER:

Chancellor Michael Wilson

Alumni BBQ 12:30—2:30 p.m. Tent, Front Campus

Join us at the FREE BBQ immediately following the AGM and meet our president, Professor David Naylor.

See ad on page 12 for details.

STEP 5.

RSVP, find out more & check the website often for updates:

1-888-738-8876 spring.reunion@utoronto.ca http://springreunion.utoronto.ca

Please note that lecture programming is subject to change and additional lectures may be added. For the most current Spring Reunion Stress-Free Degree lecture information, please visit the events page at springreunion.utoronto.ca.



Join us for the

Uof T Alumni Association Annual General Meeting

Saturday, June 1, 2013

alumni.utoronto.ca/utaa

Keynote Speaker:

The Honourable Michael Wilson

Chancellor (BCom 1959 Trinity)



U of T's Impact on the Advancement of Mental Health

- The 33rd Chancellor of the University of Toronto, Chairman of Barclays Capital Canada Inc., and former Ambassador to the United States.
- Former Minister of Finance, Minister of Industry, Science and Technology, and Minister for International Trade.
- Actively involved with several organizations, including the Centre for Addiction and Mental Health, the Canadian Cancer Society, the Canadian Council for Public-Private Partnerships, the Canadian Coalition for Good Governance, and the Canadian Institutes of Health Research. A recipient of recognition awards from the Conference Board of Canada, the Public Policy Forum and the Rotman School of Business.
- Companion of the Order of Canada and a recipient of several honorary doctorates.

UTAA AGM

Brief business meeting followed by keynote speaker

11 a.m. - 12:30 p.m.

Convocation Hall, 31 King's College Circle

FREE ALUMNI BBQ

Immediately following the AGM 12:30 – 2:30 p.m. on the front campus

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"Men are saying a lot, consciously and unconsciously, with their facial hair"

Prof. Allan Peterkin

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Meet Our Next President

World-renowned urban expert Meric Gertler will succeed David Naylor and serve as U of T's 16th president

MERIC GERTLER, A WORLD-RENOWNED expert on urban issues, will be the next president of the University of Toronto, Richard Nunn, chair of the university's Governing Council, announced early in March.

The appointment, for a five-year term, is the result of an international search that began last summer. Professor

Gertler will become the 16th president in the 186-year history of the university. He will succeed Professor David Naylor, president since 2005.

Gertler has been dean of the Faculty of Arts and Science – U of T's largest and most diverse academic division – since 2008. He joined U of T in the department of geography in 1983 after receiving his doctorate from Harvard University. A fellow of the Royal Society of Canada and a member of the Academy of Social Sciences in the United Kingdom, he is the author, co-author or co-editor of more than 80 scholarly publications and six books. His academic work focuses on the economies of cities, the urban foundations of innovation, and the role of creativity, culture and diversity in urban life.

"Dean Gertler has an outstanding track record at the >

PHOTO: DEREK SHAPTON SPRING 2013 13

university for academic excellence and strong administrative leadership," said Nunn. "We are pleased those qualities will now be put to use in a new role as president."

"After an extensive international search, the fact we were able to find someone of Professor Gertler's stature right here is a testament to the depth of this great university," added David Wilson, chair of the presidential search committee.

Gertler said he is deeply honoured to be appointed to this position. "Over the years, the University of Toronto has, time and again, proven to be a place of unparalleled learning and discovery for the best students and the best faculty," he said in a statement. "To be chosen to lead U of T during a time of great change in our sector is both challenging and exhilarating. I am following in the footsteps of President Naylor – a leader who has combined vision, hard work and dedication to propel the university to compete with the best institutions in the world. This is a tremendous foundation upon which to build."

At a news conference in March announcing his appointment, Gertler recognized the contributions of the university's graduates to the life of the university and broader society. "The 500,000 alumni of the University of Toronto – alumni who are found in every corner of the world – are making contributions in all fields of human endeavour," he said. "They are our most valuable ambassadors and the most generous supporters of the university. I'm looking forward to sustaining their connection to the university and their justifiable pride in their alma mater."

Gertler's appointment will ensure the university can build upon its reputation as a world leader in research, innovation and academic achievement, said Naylor.

"Professor Gertler is a gifted scholar, teacher, mentor and administrator whose advice on urban issues has been sought

"Meric Gertler brings to the presidency an unwavering dedication to excellence" by governments around the world," Naylor said. "Along with an extraordinary breadth of knowledge and experience, Meric Gertler brings to the presidency an unwavering dedication to excellence in post-secondary education and advanced research."

Internationally renowned as a distinguished academic, Gertler's research focuses on the geography of innovative activity and the economies of city-regions. He has been a frequent adviser to government agencies at all levels, both in Canada and abroad, as well as to multilateral organizations such as the European Union and the OECD. He has held visiting appointments at Oxford University, University College London, UCLA and the University of Oslo. In 2012, he was awarded an honorary doctor of philosophy from Lund University in Sweden for his exceptional contributions to the fields of economic geography and regional development.

"I have been impressed by Professor Gertler's leadership at the Faculty of Arts and Science," said Michael Wilson, who was installed as the 33rd chancellor of the University of Toronto in November. "As dean, he has worked to ensure the highest quality academic experience for students. I look forward to working with him in his new role."

Since 1999, Gertler has held the Goldring Chair in Canadian Studies in University College and the department of geography. He was also the founding co-director of the program on globalization and regional innovation systems at the Munk School of Global Affairs and has served as director of the geography department's program in planning.

To read more about president-designate Meric Gertler, please visit news.utoronto.ca/profile-professor-meric-gertler.

Building a Virtual Jukebox

UTM entrepreneurs win \$2,500 for their eJuked app



A team of U of T Mississauga computer science students had 10 minutes to sell their business idea to a panel of corporate executives, *Dragons' Den* style – and they impressed, coming away with \$2,500 at the 2013 Young Entrepreneurs Challenge.

Fourth-year students Sabin Sadeh, Mark Zaky and Andrew Kim won first place for a virtual jukebox app called eJuked. The group competed against 14 shortlisted teams from universities across Ontario at U of T Mississauga in January.

EJuked shapes "the way people experience music in a public venue," says Sadeh. The Android app allows business owners, club DJs and party hosts to create a customized music playlist and publish it for their guests. Patrons then vote for their favourite songs via their

mobile apps. They can also view songs in the playlist queue and how others have voted.

"If a crowd comes in to a pub, they can play the music they want to hear by voting for songs they like and making requests," says Sadeh. "Ultimately, the music in the venue becomes a function of the people who are gathered there."

In addition to the cash prize, the award includes lunch with potential investors. The eJuked team intends to develop its app for commercial sale, and hopes the resources and know-how of industry experts can help make that happen.

"We plan on adding more features – kind of like a special sauce," says Sadeh. "We want the sauce to give it a little kick, so that once users vote for a song, they will still be engaged with the app." – KIMBERLEY WRIGHT

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PHOTO: ISTOCK/MARK HOWELL



A Trio of Rhodes

Three students have earned prestigious scholarships to study at Oxford

THREE U OF T STUDENTS will be headed to the august halls of Oxford University next fall, after being named Rhodes Scholars for 2013. The prestigious postgraduate scholarships are given to outstanding all-round students – and, this year, U of T is the only Canadian university with more than one Rhodes Scholar. The recipients are Joanne Cave, who majors in women and gender studies and sociology, Connor Emdin, a biochemistry and global health undergrad, and Ayodele Odutayo, who studies medicine. "U of T consistently produces outstanding young people who meet the demanding criteria laid out by Cecil Rhodes: intellect, character and a publicly spirited commitment to service," says Krista Slade, director of development at the Rhodes House in Oxford, England. "Leadership defines Rhodes Scholars and clearly Joanne, Ayodele and Connor are exceptional."

At the age of 12, Joanne Cave wanted to help girls develop self-esteem and take action in their communities – so she founded Ophelia's Voice, a girls' leadership organization. Since then, Cave has won a Governor General's Award for her work for women and girls' equality, and has interned with a women's microfinance NGO in India. "A feminist perspective is often not thought to be strongly represented at institutions

like Oxford," says Cave, who attends Woodsworth College. "I'm proud to offer that perspective – especially since some colleges at Oxford did not allow women until 40 years ago."

At Oxford, Cave hopes to earn a master's in comparative social policy. She would like to work as a government policy analyst, or for a think-tank interested in social sector innovation. "I also haven't written off running for public office one day – I just find politics too exciting," says Cave.

One year ago, Connor Emdin headed to sub-Saharan Africa and conducted research that influenced his career path enormously. He worked on a clinical trial that tested whether taking an antiretro-

viral drug before having sex would inhibit HIV transmission. He also analyzed the results of 50,000 patients who underwent HIV treatment to show that nurses could provide the same quality of HIV care as physicians. "If you believe you can make a valuable contribution to a research project, working to develop drugs or tools or policies for people living in developing countries can be one of the most fulfilling things you can do," says Emdin, who attends Trinity College.

Now, Emdin would like to examine the relationship between public policy and health outcomes in developing countries through a master's in development studies at Oxford. One day, he hopes to work as a development specialist for the World Bank or the International Monetary Fund.

Before moving to Brampton, Ontario, the first 12 years of Ayodele Odutayo's life were divided between Nigeria and the British Virgin Islands. This sparked his interest in improving health care both in Canada and internationally. As a nephrology research trainee at Sunnybrook and former intern with the World Health Organization, he hopes to improve the management of kidney disease locally and abroad.

At Oxford, Odutayo will pursue a master's degree in epidemiology and health policy. He plans to work as a physician at a tertiary care centre, and eventually take on a leadership role within an academic institution or non-profit organization to contribute to health-care delivery in nephrology. "From managing the precursors of kidney disease to treating patients with chronic kidney disease and end-stage renal disease, nephrology involves the entire spectrum of health care," he says. - NICOLE BODNAR, JESSICA LEWIS, LAURIE STEPHENS



Kayla Bonkowski, a Michigan college student, was recently charged for spiking her roommate's iced tea with bleach. Why? She was angry about the dirty dishes



Someone to Watch Over Us

For more than half a century, renowned literary critic Northrop Frye (BA 1933 VIC) made Victoria College his intellectual home: he graduated with a bachelor of arts in English and philosophy, taught English to students from 1939 to 1991, and wrote such influential works as Fearful Symmetry and Anatomy of Criticism. Fittingly, this bronze sculpture – located near Northrop Frye Hall on the Victoria College campus – shows the esteemed professor in a state of contentment, surrounded by beloved books.

The life-size statue, created by artists Darren Byers and Fred Harrison, was unveiled in October,

in honour of the centenary of Frye's birth. (The centenary was also the occasion of an international Frye conference at Victoria.) The figure is a modified version of a sculpture in Frye's hometown of Moncton, New Brunswick.

The artists adapted the statue so it reflected Frye's time at U of T and in Toronto: Among his stack of books is a class planner, and in his right hand is his wife Helen Kemp Frye's sketch of a party. The book he holds contains images of an angel, the Leviathan and the divine creator, which allude to his religious background and to poet William Blake – whose work is the focus of Fearful Symmetry.

SOUND BITES

What is your college best known for?

Vic is known for the best library on campus, hands-down.

> New College is best known for having an amoeba-shaped quad and the nicest people. @MominAhmad

Innis has a beautiful theatre and screening rooms!

@JessOffTheHeezy

We hope Trinity is best known for its traditions and close-knit community.

@TrinHeads

Join the conversation at twitter.com/uoftmagazine.

Poll | Do you get along with your first-year roommate?

Roommate battles may be touted as a hallmark of undergraduate experience – but a sweeping 91 per cent of first-year U of T students living in double dorms say that they get along with their assigned partner. Many students credited the initial surveys that residences conducted to determine compatible pairings, which assessed them for similar living habits and personalities. "We're from the same engineering science program, so we're both nerdy," says Greg Peniuk, a Vancouver native who shares a common hometown with his roommate. "He does band and choir, and I do piano and choir."

And while it may not be all rainbow and butterflies for the other nine per cent who were not jibing with their roommates, most were hesitant to say it was unpleasant. "We rarely spoke to each other," says computer science student Zeng Xing, "so it was more an absence of conflict than not getting along." - NADIA VAN

This highly unscientific poll of 100 U of T students was conducted on the St. George campus in January.



91% Yes



9% No

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PHOTO: DIANA TYSZKO



The average Guinness drinker with a moustache wastes a pint-and-a-half a year, because it gets absorbed by his facial hair

Moustache Maven

Professor Allan Peterkin is the world's leading facial-hair expert



SPEND SOME TIME WITH PROF. ALLAN PETERKIN, and you may never look at male facial hair the same way again. Hidden in those tufts south of the nose are a wealth of cultural meanings.

"Men are saying a lot, consciously and unconsciously, with their facial hair," says Peterkin, a professor of psychiatry and family medicine at U of T. Those statements range from an anti-corporate, I'm-my-own-man ethos to a response to feminism (playful, Peterkin insists) by cultivating one of the few remaining things a man can do better than a woman.

Peterkin has become the world's leading facial hair expert. He is the author of One Thousand Mustaches - both a lighthearted cultural history and an earnest style manual - which was released this fall. The book is a followup to his popular One Thousand Beards (2001).

Peterkin's insight into facial hair-related news stories (they exist!) has been sought by everyone from ESPN (on the playoff beard) to the New Yorker (on Hollywood writers' "strike beards") to a swath of media outlets hoping to decode the meaning of Al Gore's postelection-loss beard. And what's Movember like for a man of his talents? "Very busy."

Peterkin insists he's "a reluctant pogonologist"; his real scholarly passion lies in uncovering what the health sciences can learn from the arts. To wit, he heads up the University of Toronto's Health Arts and Humanities program. The goal, he says, is to deepen an interdisciplinary dialogue around human experience, suffering and dignity. For example, hospital staff members - doctors, chaplains and social workers – have worked with the program's poet-in-residence to learn to express their feelings and better understand each other's perspectives.

He has fun with the opportunities that come his way, like the chance to judge the annual parade of extreme face fur that is the National Beard and Moustache Championships, which took place in Las Vegas in November. Finalists strutted, posed and stroked their monumental handlebar staches and dangerously sculpted chinstraps through 18 categories. "These men took it very, very seriously," Peterkin savs.

He likes that men are "freer to express themselves in the way they groom and dress nowadays" but he does feel it can go too far. "To me when it becomes overly serious, something is lost in translation."

As much fun as he's had with his side career. Peterkin has faced his own scrutiny – or, rather, his face has. Journalists demand explanations for his lack of facial hair, which is surely a pointed statement of some kind. "Some of us just aren't blessed!" he says, describing a recent failed attempt at a classic chevron. ("Patchy" is how he describes that effort.)

Still, he seems wistful as he recalls the Freudian beard he sported as a first-year psychiatry resident. "I was honouring the master." - LISA BRYN RUNDLE

Read an excerpt from Allan Peterkin's book One Thousand Mustaches on U of T Magazine's iPad edition, available at the app store.

People



Prof. Kimberly Strong, a physicist who leads investigations of the Earth's atmosphere, will lead U of T's new School of the Environment, beginning in July. Strong's research relates to climate change; she has directed groundbased, balloon-borne and satellite projects to study the Earth's atmosphere, particularly in the Arctic.

Rose Patten, a banking industry leader, has joined the Rotman School of Management as an executive-in-residence. She will work with students, teach in leadership and corporate governance programs, and more. Patten will

continue in her role as Special Advisor to the President and CEO of BMO Financial Group.

Prof. Rosemary Sullivan of English was recently named an officer of the Order of Canada - one of the country's highest civilian honours. Sullivan was recognized for her contributions to Canadian literature as a biographer, poet and author of fiction. Named members were Prof. Rebecca Cook of law, a legal scholar on issues of women's rights, and on sexual and reproductive health law, and Prof. Stephen Ralls of Music, an instrumentalist and co-founder of the Aldeburgh Connection.



In 1995, during a protest in Queen's Park against Mike Harris's government, Sarah Polley lost two teeth after being struck by a riot police officer

P.O.V.

The Stories She Tells

Actor, writer and director Sarah Polley is spending a lot of time at University College this academic year as the Barker Fairley Distinguished Visitor in Canadian Studies. She's been meeting frequently with students, and in January organized "Toronto: City on Screen," a panel discussion at UC featuring some of Canada's most recognized filmmakers. She spoke recently with *U of T Magazine*.

What advice are you giving to students who want to make films? The most important thing is to keep working. It's so easy to make short films now with very little budget. There is no reason not to start making films instead of just thinking about them.

Have students shown you any scripts? What do you think?

The scripts I've read and ideas I've heard have generally been better than what is out there being made right now. It's been encouraging to meet people with really original ideas. The main issue is that students lack confidence to move forward with their projects. They feel that they don't know what they are doing or that they have a lot to learn before they can begin to make their own movies. I would say that anyone who is interested in movies, watches a lot of them and is writing a screenplay – and handling a full university course load – knows more than enough to begin making their own films.

What do you like most about making films? Screenwriting is my favourite part of the filmmaking process because everything is still possible and not mitigated by the exigencies of production. I find it to be a joyful process as well as agonizingly lonely. It is so magical, later, to have dozens of extremely talented people make those ideas you've had alone in a quiet room become tangible and real.



How do you choose your acting roles? I used to choose them based almost exclusively on the screenplay. Now that I understand more about the process, I make the decision almost entirely on who the director is. It's been interesting to learn over the years that a great script means nothing if it's not in the hands of a great director. On the other hand, I've occasionally seen directors take mediocre scripts and turn them into great films. It's interesting how important the director's hand is.

What is the most challenging aspect of directing for you?

Thinking visually has never come naturally to me. It's a constant project of mine to think in images as opposed to words but I've definitely come a long way from where I started. I think the key to directing is having the courage to admit what you don't know, to not try to hide your weaknesses and to find collaborators who you can trust enough to be honest with about those deficiencies.

Can you say anything about the next project you're working on? Right now I'm adapting *Alias Grace* by Margaret Atwood.

Watch an interview with Sarah Polley on the $\it U$ of $\it T$ Magazine iPad edition, available at the app store, or at magazine.utoronto.ca.



The name for U of T's medieval and Renaissance drama group – Poculi Ludique Societas – was conceived in a pub one Saturday night in 1966.

The acronym PLS had existed since 1964: students had dubbed a medieval drama class "Professor Leyerle's Seminar." The group was born from that class, and members wanted a name that used the same acronym.

The brainstorming over beer began. L would stand for *ludus* or "play," and S for "society" – but "P was the tricky one," says professor

emeritus David Klausner, who has been with PLS since its early days. The moment of enlightenment happened as one member stared deeply into his beer mug. He stated that *P* should stand for *poculum* – a drinking cup. And thus, Poculi Ludique Societas – the "drinking and playing society," which mounts medieval plays – came to be. – NADIA VAN

Curious about how a building, place or group on campus got its name? Send the name to uoft.magazine@utoronto.ca!



A Global Observatory

The Munk School expands into a restored heritage building on Bloor – and extends its reach around the world

MEDICAL STUDENTS UNDERGO extensive training in hospitals before they become doctors, engineers undertake a "professional year" and law students article before they're licensed to be lawyers. Now, students pursuing a master of global affairs at the Munk School are getting their own version of professional experience – a three-month placement at an international organization outside of Canada.

Janice Stein, the Munk School's longtime director, says she and her colleagues have forged dozens of international partnerships in the private, public and volunteer sectors, with a view to providing students with a variety of relevant opportunities in their field. "Ours is explicitly a professional program," says Stein. "It's designed to give students real-world experience that will give them an advantage when they start looking for work."

The placements are one of a number of recent, far-reaching changes meant to position U of T's Munk School of Global Affairs among the world's top international studies programs. Last fall, the Munk School expanded from its existing location at Trinity College into an additional site at Bloor Street and Devonshire Place – a renovated and restored heritage building that doubles the amount of space for students, faculty and staff. It's also home to the new Canada Centre for Global Security Studies. The Munk School's physical expansion and

hiring of new faculty were made possible by a landmark \$35-million gift in 2010 from Peter and Melanie Munk, and \$25-million contributions from the federal and provincial governments.

Peter Munk, a businessman and humanitarian, earned a degree in electrical engineering from U of T in 1952, after immigrating to Canada from Hungary via Switzerland. As one of Canada's leading philanthropists, he is proud of this country's record on freedom of speech, multiculturalism and health care – and in the Munk School's role in transmitting these values around the world. His and Melanie's gift is the largest-ever individual donation received by the University of Toronto.

At the official opening of the new building in September, U of T president David Naylor praised the Munks' vision: "Only with outstand-

ing intellectual leadership can the advantages of globalization be maximized, and the threats, constrained," he said. "Thanks to the prescience and generosity of Peter and Melanie Munk, Canada's leadership capacity has been significantly enhanced."

To train the next generation of leaders in a way that recognizes the interdisciplinary nature of challenges facing the world, the Munk School has forged links with other U of T faculties to offer new courses and degrees. With the iSchool, it will offer a course about analyzing big databases to make cities "smarter," and with the Dalla Lana School has developed a course on human rights in global health. Students can already combine their master's degree in global affairs with a law degree or an MBA. Starting in 2015, they will also be able to combine it with a master of applied science. "These initiatives," says Stein, "build on core disciplines at U of T to create strength in new cross-disciplinary topics."

A similar idea infuses the Munk School's approach to faculty research. The Citizen Lab, led by Prof. Ron Deibert, continues to investigate cyber-security from political, economic and technological perspectives, while the new Innovation Policy Lab brings together faculty from across the university – including Rotman, medicine and engineering – to study how innovation occurs. The group, headed by Prof. David Wolfe of political science, is asking the question, what difference do business strategy and volunteer-sector and government policy make in generating successful innovation? As the name of the lab implies, researchers aim to crack open the role policy plays in successful innovation. "It involves deciding how we define what an innovation is and the factors that enable it," says Wolfe, "and how to replicate these across many different industries and cultures." – **SCOTT ANDERSON**

PHOTO: JOHN HRYNIUK SPRING 2013 19

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Leading Edge

"The goal is to dramatically increase voter participation at all levels of government"

PhD candidate Cliff van der Linden on Vote Compass p. 22



Peace of Mind

A U of T project aims to bring better mental health to a country where most illnesses go untreated

OFTEN COMPARED TO AN UNTAMED LION, mental illness ravages families and communities worldwide but takes a particular toll in low-income countries. Of the estimated 450 million people globally with mental health disorders, three-quarters live in the developing world, where they're woefully underserved. Of these, 85 per cent receive no treatment at all, according to the World Health Organization.

While treating mental disorders is a challenge anywhere, it's particularly complex in low-income countries. Infectious diseases such as HIV-AIDS and malaria often overshadow

them. War and poverty can cause or exacerbate mood disorders. Rural patients may have little or no access to care. Moreover, the stigma can be huge, extending to families and even health workers. Going to a psychiatrist is often a last resort, after treatments involving prayer groups or indigenous healers. In addition, there's a brain drain of trained health professionals to developed countries.

A single effort at restraining this rampaging beast may be as flimsy as a spider's web. But as an Ethiopian proverb says, "Together, we can weave enough spiders' webs to tie a lion." That's the philosophy behind Grand Challenges Canada's \$19-million investment in health projects in 14 lower-income countries. The government-funded non-profit group, headed by Peter Singer, a U of T professor of medicine, supports bold ideas that offer the biggest bang for the buck.

One initiative is the Biaber project in Ethiopia (*biaber* means "together"). It aims to improve access to treatment and remove the stigma surrounding mental illness. >

ILLUSTRATION: ELEANOR DAVIS SPRING 2013 21



Youth with some university education are significantly more likely to vote than those who have attended college or those with a high school education, according to a 2011 Elections Canada survey

The project emerged from a decade-long collaboration between U of T and Addis Ababa University that has helped quadruple the number of psychiatrists in Ethiopia to 44 – still inadequate in a country of 84 million people. (Canada, with less than half the population, has more than 4,000 psychiatrists.) A \$1-million Grand Challenges grant will help train 300 mental health professionals in 20 locations, reaching 15,000 new patients over the next three years.

The project uses interpersonal therapy – a structured, short-term form of talk therapy. "There's strong evidence that this can be a powerful treatment for depression," says Paula Ravitz, a U of T psychology professor and co-principal investigator. Ravitz helped adapt the therapy for Ethiopians in collaboration with Dr. Dawit Wondimagegn, a psychiatrist at Addis Ababa University, integrating cultural traditions, which may involve healers and community elders. She adds that other countries, including Uganda, India and South Africa, are now studying its implementation.

Keeping medical professionals remains a problem for Ethiopia. Last July, the country's minister of health announced that there are more Ethiopian doctors working in Chicago than in all of Ethiopia. Dr. Solomon Teferra, a psychiatrist and a professor at Addis Ababa University, is completing a year-long fellowship at U of T and was looking forward to returning to his country in March. "Although I may not have the material and financial benefits a western country provides," he says, "I believe I can contribute a lot to my country." And he's pleased by the government's recent expansion of medical schools in Ethiopia – a significant strand in a growing web to control the lion. - MARCIA KAYE

The Right Candidate for You

Vote Compass helps citizens sort one politician's views from another's. Now, municipal voters will get to try it



OVER THE PAST TWO DECADES, Canadian voter turnout has been drifting lower – a result, say political observers, of an electoral process that many Canadians find unresponsive and exclusive. Younger voters, under the age of 25, are especially disillusioned: only 39 per cent voted federally in 2011, compared to 61 per cent of eligible voters overall.

Cliff van der Linden, a doctoral candidate in political science, is interested in using new media to re-engage Canadians, especially younger ones, with the electoral process. In 2010, he created Vote Compass – an online educational tool that helps voters determine how the parties' platforms align with their own views. Users provide their opinions on 30 issues relevant in an election and can then compare their responses to each party's positions on the same issues.

Launched during the 2011 federal election in partnership with CBC, Vote Compass attracted nearly two million users over the five-week campaign, including many under 25. Van der Linden has since redeveloped the application – which now allows users to rank the relative importance of each issue – and deployed this version in three provincial elections. He also teamed up with the *Wall Street Journal* to make the tool available nationally in the U.S. during last November's presidential election.

This year, van der Linden plans to roll out the app at the municipal level in Montreal and Calgary. He believes voters will find it even more useful in civic elections, since the candidates in most cities don't belong to political parties and tend to have less codified positions. "It's often harder for voters to compare candidates' platforms at the municipal level than at other levels of government," he says. He also plans to ask citizens to help choose the 30 key issues, rather than relying only on academic advisers to select them. "Ultimately, the goal is to dramatically increase voter participation at all levels of government," he says. - MARK WITTEN

LINGO K-POD





For a while last fall, it seemed as if the whole world had gone "Gangnam Style." The song, by South Korean musician Psy, topped music charts in some 30 countries, and the video, with its giddy-up dance style, spawned countless YouTube parodies. K-Pop, as South Korean pop music is known, had found the global spotlight.

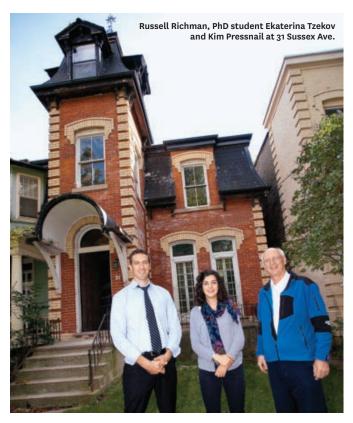
Initially inspired by the Japanese pop stars of the early 1990s, K-Pop's ascendancy has been helped along by social media, expatriot Korean communities and the growing influence of Asian pop culture through anime, manga and fashion, says Ken McLeod, a professor of history and culture at U of T Scarborough. K-Pop has an upbeat, techno dance style, with

a mixture of English and Korean lyrics – sometimes for subversive effect, but also to increase the odds of a breakthrough in the mainstream North American market, says McLeod. It remains to be seen whether Psy's success opens the door for other South Korean artists, he adds, but for now, at least, the country's music industry is thriving. – SCOTT ANDERSON

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The principle for how a heat pump works was laid out in 1852 by Lord Kelvin in his second law of thermodynamics, which states, among other things, that heat always travels from a warmer area to a colder area



THE BIG IDEA

A House Divided

Creating "thermal zones" in a home could reduce energy costs by as much as 80 per cent

WITH ITS RED BRICK EXTERIOR, Edwardian entryway and small tower rising above the second storey, 31 Sussex Avenue looks run down, but still possessed of its 19th-century stateliness.

This university-owned house, though, has become part of a research project that makes its future much more interesting than its past. Kim Pressnail, a professor of civil engineering, and one of his former students, Russell Richman, a professor at Ryerson University, are stripping the house to its bones and rebuilding it with "nested thermal zones" that should make it up to 80 per cent more energy-efficient.

"Normally within a single family dwelling, there is one zone – everything is heated to the same temperature," Pressnail says. "Our concept is to create two thermal zones within that building – a core zone and a perimeter zone – and insulate them both. Occupants then have the option of heating only

the core." He adds that the perimeter zone can be heated in a matter of hours, meaning the occupants don't have to say goodbye to their guest bedroom for the entire winter.

Building thermal zones into new homes is easier, but this project is meant to test how well houses can be retrofitted. "This house is probably the toughest assignment we could have. It was built in 1879," says Pressnail. "It's a listed historic property, so we can't change the facade. There are also internal architectural features we don't want to change."

If thermal zones prove viable at 31 Sussex, it will demonstrate that the concept is viable for almost any home, he says.

Pressnail and his research team plan to augment energy savings through the use of a heat pump. Unlike conventional heating methods, heat pumps don't actually generate heat. Instead, they move existing heat from one place to another – extracting heat from one area and releasing it in another.

Refrigerators and air conditioners use heat pumps to remove energy from a contained space and expel it into the environment. But that process can be reversed: a heat pump can draw energy from cooler air and pump it into the core of the house to warm it.

Heat pumps run on electricity, but it takes less energy to move heat than to generate it. In fact, the closer the inside and outside temperatures are, the more efficient a heat pump becomes. In a conventional house, a heat pump would draw energy directly from the outside, meaning that on a cold day, it would not be much more efficient than other heating methods. But in a zoned house, the pump can draw heat efficiently from the perimeter zone, which is warmer than the outside.

In these circumstances, a heat pump can be up to three times as efficient as other methods. (And during hot summer months, heat pumps can work in the opposite direction, creating energy-efficient cooling.)

Pressnail's team plans to complete the retrofit by June. For the following year, a designated occupant will live in and operate the house as efficiently as possible – providing a best-case scenario. Subsequently, the property will become a home for visiting faculty with less stringent operating instructions – allowing the researchers to assess how people actually make use of the options available to them.

At current electricity rates, Pressnail says, it would take about 15 years to recoup the additional costs of building thermal zones in a new house, and longer for a retrofit. But he believes energy costs will rise faster than inflation, meaning the savings become more significant over time. He also points out some side benefits. "The walls are warmer, the house is less drafty and it's quieter," he says. "A low-energy home is more comfortable." - PATCHEN BARSS

PHOTO: COURTESY OF RYERSON UNIVERSITY

SPRING 2013 23

PROTOTYPE

Machine Translation

Understand and speak Mandarin? If not, a computer may soon do it for you



THE IDEA OF A "UNIVERSAL TRANSLATOR," a device that can instantly translate words from one language into any other, is a popular science-fiction conceit.

But the technology, involving speech recognition and machine learning, may be moving into the realm of reality.

Rick Rashid, Microsoft's chief research officer, recently demonstrated near-instantaneous translation of spoken English to Mandarin speech – with software that maintained the sound of the speaker's voice. The technology was developed in part by U of T grad students working in the labs of computer science professors Geoffrey Hinton and Gerald Penn.

The software, which has an error ratio of about one in seven words, compared to one in four in earlier systems, relies on a technology using simplified mathematical models of neural circuits in the brain called "deep neural networks." This enables computers to better recognize phonemes, the small units of sound that comprise speech.

Graduate students Abdel-rahman Mohamed and George Dahl began applying deep neural networks to speech recognition in 2009. They presented their research at a 2009 academic workshop, which drew the attention of Microsoft, and yielded invitations for both students to intern at Microsoft Research in Redmond, Washington. There, Mohamed and Dahl successfully applied their methods to speech tasks involving much larger vocabularies.

Another computer science graduate student involved in the research, Navdeep Jaitly, has worked with Google to implement voice search in the Android "jellybean" operating system, comparable to the iPhone's Siri.

Today, most top speech labs are embracing deep neural networks, including IBM, a longtime leader in speech recognition research, where Mohamed has also worked. Penn's speech lab has also since developed an alternative neural network model in collaboration with York University professor Hui Jiang and graduate student Ossama Abdel-Hamid.

The U of T researchers say the new business opportunities they've helped create are just the beginning. Hinton's lab has already used deep neural networks to win several pattern-recognition competitions, including recognizing objects in images and predicting how well a potential drug molecule will bind to a target site. And Penn's speech lab is in the process of digitizing the last 23 years of CBC *Newsworld* video to develop search algorithms for large collections of speech. Unlike Google Voice Search, which uses voice queries for hunting through web pages of text, this work uses text queries to search through large volumes of speech.

"This is important not just for speech researchers," says Penn, "but for journalists, historians and anyone else who is interested in documenting the Canadian perspective on world affairs. Having all of this data around is great, but it's of limited application if we can't somehow navigate or search through it for topics of interest." - SARA FRANCA

Findings

Gain Years Back



Smokers who quit when they are young adults can live about as long as people who never smoked, new research has found.

Smoking cuts at least 10 years off a person's lifespan. But an analysis of U.S. health and death records by Dr. Prabhat Jha, of U of T's Dalla Lana School of Public Health, found that people who quit smoking before they turn 40 regain almost all of those lost years. That doesn't mean it's safe for young people to smoke. "Former smokers still have a greater risk of dying sooner than people who never smoked, but the risk is small compared to the huge risk for those who continue to smoke," he says. Jha's team found that people who quit smoking between 25 and 34 regained the full 10 years of life, while quitting between 35 and 44 brought back nine years. Those who quit later regained fewer vears. - LESLIE SHEPHERD

Heart Smart



Tired of trying to remember all of your online passwords? Bionym, a Toronto-based tech company founded by U of T grads, has developed a new way to secure online information that's just a heartbeat away – literally.

Bionym's HeartID software uses sensors to detect a person's unique cardiac signal. The technology can be used with a variety of devices and is accurate 99 per cent of the time, or about the same as fingerprint-enabled security, says co-founder Foteini Agrafioti (MASC 2008, PhD 2011).

With a desktop computer, users grip a device resembling a mouse, and the computer recognizes the authorized individual's unique cardiac rhythm, allowing the user to log in without a password. Agrafioti foresees an era where many of the devices we use – tablet, phone, game console, or even a car or gun – will know who we are, simply by holding them. – **DOMINIC ALI**

WWW.MAGAZINE.UTORONTO.CA



Last December, a U.S. jury ordered computer chip maker Marvell Technology to pay \$1.2 billion to Carnegie Mellon University in what is believed to be the largest patent verdict ever. The case was related to hard disk drive technology



Patent Wars

Intellectual property rights are intended to foster innovation. But could they actually be stifling it?

Last year, a California jury sided with Apple in a patent trial that saw the iPhone-maker awarded \$1 billion from rival Samsung. Editor **Scott Anderson** asked law professor **Ariel Katz**, who specializes in intellectual property, about how companies are using, or abusing, the patent system.

Please explain the different kinds of intellectual property rights. Patents cover the invention of machines, composition of matter and manufacturing processes. What the Americans call "design patents" and Canadians call "industrial designs" are different. These cover the aesthetic, non-functional elements of products. In Canada, patents for inventions are granted for 20 years; for industrial design the term is 10 years. They cannot be renewed. Copyright protects written, musical and artistic works, and typically lasts for the life of the author plus 50 years. Infringement of copyright requires copying. In theory, you could have identical works but if they were independently created, then there's no infringement and both may be protected. Trademarks apply to words or symbols that are used to distinguish the products or services of one seller from those of another. Trademarks can remain valid as long as they are used for that purpose and remain distinctive.

Companies' products often resemble each other. When is "copying" a product allowed and when isn't it? We sometimes have the sentiment that if something is not original – if it's a copy – then there's something wrong with it. But our legal tradition – the common law – has generally resisted those intuitions. Once we think about those intuitions further, we see that this is how society develops. We copy to learn and improve, and we copy to compete. That is the norm. Restriction of copying is actually the exception. We justify intellectual property rights in situations where we want to encourage investment in new inventions or designs, and where without protection (where people can immediately start copying what you do and you have no opportunity to



recoup your investment) people would refrain from investing in the first place.

Would technology companies invest in new products if they were unable to acquire patents? Quite plausibly. There are few areas in which patents are necessary for investment in R&D, and smartphones are probably not among them. However, if, as a company, you have the ability to patent something and use this to prevent competition, then why wouldn't you take advantage of it? You may also know that your competitors would try to do the same thing to you. This helps explains why tech companies are trying to amass large portfolios of patents – so they can use them offensively to raise the costs of their competitors and threaten them. Or use them defensively, to countersue.

Apple's lawyers accused Samsung of copying the iPhone's rounded corners. Can "rounded corners" be protected? It's questionable. BlackBerry devices had rounded corners before the iPhone, and one could argue that this has a useful function and therefore could not be subject to a design patent. When you put a phone in your pocket you want it to slide easily. There's nothing new about making things with rounded corners for these purposes.

How has intellectual property law changed recently? Over the last 300 years, and particularly in recent decades, protections increased – expanding what can be covered and for how long, and what remedies are available against infringers. But we're seeing signs that the pendulum may be swinging back. Last July, the Supreme Court of Canada issued decisions on five important copyright cases that weren't that favourable to copyright owners. The court affirmed that all the exceptions and limitations to copyright are, in fact, "users' rights" and should be given a liberal interpretation. The Copyright Modernization Act, while expanding some copyrights, also expanded the scope of many users' rights.

PHOTO: ISTOCKPHOTO SPRING 2013 25



In the 2006 action movie *Crank*, the main character is poisoned and must keep his adrenalin flowing in order to stay alive. The movie has no scientific basis

What Do the Adrenal Glands Do?



A team including a PhD student and two U of T alumni have won a challenge by *Scientific American* to create a two-minute video explaining a body part or process in a fun and engaging way using common household objects such as string, rubber bands and paper clips.

The video is jointly narrated by PhD candidate Dorea Reeser (MSc 2009) and Raluca Ellis (PhD 2011), and also features Nigel Morton (BA 2011 VIC). The team explains the role and importance of the body's adrenal glands, which help regulate how the body responds to stress.

In awarding the top prize, the judges uniformly praised the educational value and clarity of the video. Their comments, published at the *Scientific American* website, emphasize the team's inventive use of props and humour, clear message and polished production values. "Not only did the team elegantly and creatively incorporate all of the required props into their story," commented Chad Cohen, a science documentary producer, "they revealed the inner workings of an important body system with clarity and pizzazz."

Winning the competition did not come with a cash award, but the judges' encouraging comments were prize enough for Reeser. "That's really rewarding and motivating," she says.

– JENNIFER LANTHIER

Watch the winning video on the iPad edition of U of T Magazine or at magazine.utoronto.ca.

Arms and the Prehistoric Man

Discovery suggests human ancestors began hunting with stone-tipped spears far earlier than previously thought



A U OF T-LED TEAM OF ANTHROPOLOGISTS has found evidence that human ancestors used stone-tipped weapons 200,000 years earlier than previously thought – a discovery that could change ideas about how ancient peoples evolved.

Attaching stone points to spears – known as "hafting" – was an important advance in hunting weaponry for early humans. Hafted tools require more effort and planning to build, but a sharp stone point on the end of a spear can increase its killing power.

Hafted spear tips are common in Stone Age archeological sites starting 300,000 years ago. This new study, by Jayne Wilkins, a PhD candidate in anthropology, shows that they go back 500,000 years to the early Middle Pleistocene, a period associated with *Homo heidelbergensis*, the last common ancestor of Neanderthals and modern humans. "It now looks like some of the traits that we associate with modern humans and our nearest relatives can be traced further back in our lineage," says Wilkins.

Wilkins and colleagues from Arizona State University and the University of Cape Town examined 500,000-year-old stone points from a South African archeological site and determined that they had functioned as spear tips.

The researchers compared wear on the ancient points to the damage inflicted on modern ones in an experiment in which a springbok carcass was repeatedly speared. The ancient stone points exhibit certain types of breaks that commonly occur when they are used as spear tips. "The archeological points have damage that is very similar to replica spear points used in our spearing experiment," says Wilkins. "This type of damage is not easily created through other processes." Wilkins' study was published in *Science*.

- SEAN BETTAM





"This scholarship meant I had time to serve on student government, where I learned the skills I'm now using at law school."

LINA NIKOLOVA BA 2012, JD 2015

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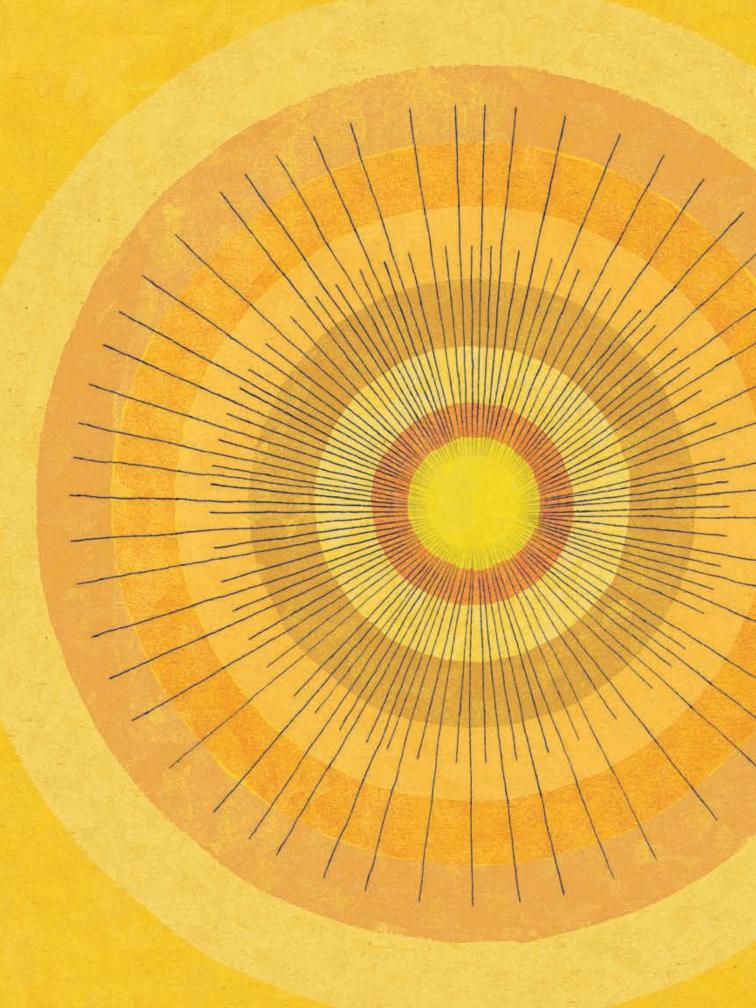
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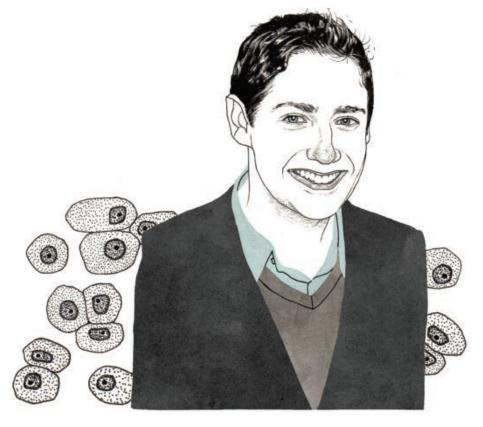
Prices are in Canadian dollars (unless otherwise noted), per person and based on double occupancy. Dates and prices are subject to change. Individual tour brochures are available approximately 6 – 9 months prior to departure.



Welcome to a bright tomorrow! The impressive young scholars you'll meet in these pages are seeking answers to some of the world's most pressing challenges. Some offer a fresh perspective on the human condition - why we behave unethically or become activists, and how we communicate through words and song. What they share with all of their U of T colleagues is a deep curiosity about the world and a passion for inquiry. We hope you enjoy their stories.

STARVING CANCER CELLS

Many scientists work for years to find a cure for a single type of cancer. Patrick Gunning has his sights set on four



IN HIS OFFICE AT U OF T MISSISSAUGA, medicinal chemist Patrick Gunning is showing a visitor two images that generated a lot of excitement in his lab a few months ago. In the picture on the left is a mouse with leukemia; a tumour shows up as a small brown smudge on the animal's white fur. The image on the right depicts the same mouse after just one week of treatment with a new compound that Gunning has designed to fight the cancer. In the second image, the tumour has vanished.

Gunning has achieved similarly promising results in mice with multiple myeloma – a rare blood cancer – and breast cancer. He's eradicated brain cancer in human tissue samples. His findings have adorned the covers of prominent academic journals, he's filed seven patents, and venture capital and pharmaceutical companies have come knocking. In a world where scientists can toil for decades to get a single drug approved, Gunning, 33, acknowledges that his lab has been making rapid progress on potential treatments for four types of cancer: "I honestly can't believe how lucky we've gotten," he says.

Luck may be part of it, but cancer research is highly competitive. Gunning works 14 hours a day, supervising a lab of 22 students and post-docs who help design, synthesize and evaluate potential cancer-fighting compounds, to stay ahead of the few other labs around the world pursuing the same goals. Spending long hours on challenging problems seems to be part of his DNA –or a function of his Scottish upbringing, surrounded by Type A personalities. "My sister, my grandfather, my mother – we are all workaholics," he says.

Several years ago, while doing his post-doc at Yale University, Gunning became intrigued by a protein called "Stat3,"

which promotes growth in normal cells but in cancerous cells drives tumour formation. What was interesting, says Gunning, was that even though normal cells can survive without Stat3, cancer cells can't. He realized that if he could find a way to disrupt the production of Stat3, he should, in theory, be able to stop cancer cells from replicating.

Gunning's success so far suggests he's on the right track. But even the most promising compound has many hurdles to clear before it can become a bona fide cancer drug. Among the potential problems: the treatment might not work in humans, or it might be toxic at levels required to be beneficial. As a medical chemist, he can modify the compound to make it more effective, but this takes time and money. Gunning lost a grandmother and grandfather to cancer; he knows that patients and their families need better treatments as soon as possible. So he spends significant time speaking with potential donors and completing grant applications, in the hope of securing enough funding to accelerate his quest to find new drugs. "I really want to see a Stat3 drug in clinical trials," he says. "If I'm able to do that, I think I'll have done my job." - SCOTT ANDERSON

ROLE MODEL: My grandfather Joseph Nixon

ALTERNATE CAREER: Artist

BEST PART OF BEING A PROF: Interacting with students

ADVICE TO STUDENTS: Work hard

BOUNDLESS... Dedication

LITERARY SONGBIRD

Katherine Larson infuses her study of English with a passion for music to find new meaning in literature



AS AN UNDERGRAD AT ST. OLAF COLLEGE in Minnesota, Katherine Larson was an accomplished soprano working on a degree in vocal performance *and* earning a BA in English and women's studies. With grad school looming, she hit a fork in the road: should she further her training in singing, or pursue her love of literature? Then, she won a Rhodes scholarship to study English at Oxford and realized academia was the right fit.

Larson is now a professor of English at U of T who specializes in 16th- and 17th-century literature and culture – and she brings her love of music into the fold of her academic work.

Larson is currently writing a book about music and song performance in the literature and culture of early modern England. Song performance is a relatively new area of study in literature, and Larson considers all elements of it – why the writer turns to song at particular moments, and the visual and acoustic impact of the physical body during performance. She also considers the relationship between music and gender. Singing contained an inherent conflict at that time: while it was emphasized as a part of a genteel upbringing and was a popular form of recreation for both men and women, in performance song was often associated with sensuality and seduction.

Larson's first book, *Early Modern Women in Conversation*, explores how women writers in 16th- and 17th-century England experimented with language and conversation in their work. At the time, the ideal of the woman was to be silent: opening her body symbolically, verbally or through writing, threatened her virtuous reputation. Larson's book shows that despite this stereotype, women used their writing to test out the kinds of authoritative voices that men used.

Larson relates her research to today's online environment, where textual conversation becomes a stand-in for oral communication. She notes that modern technology, like women's writing from the past, allows the marginalized to communicate, and lets people experiment with different conversational codes (think of teenagers using text shorthand) and create fantasy spaces where they take on different identities. And while some argue that we're losing the ability to converse as we hide behind our computer screens, she says this isn't so. "If you think of conversation as fundamentally engaging in relationship through language, conversation is alive and well," says Larson, who is associate chair of the department of English at U of T Scarborough.

In the future, Larson hopes to build on her award-winning research into song performance: she wants to create a collaborative online project in which people can access bibliographies, watch video clips of performances, and collaborate with literary scholars, musicologists and singers – "so that people are engaged in discussions about what it means to bring early music to life." – STACEY GIBSON

ROLE MODEL: My mother, Rebecca Voigts Larson

PROUDEST MOMENT: The day I got the call offering me a job at U of T

HIDDEN TALENT: Downhill skiing

WORDS I LIVE BY: "Be patient toward all that is unsolved in your heart and try to love the questions themselves" (Rainer Maria Rilke)

BOUNDLESS... Curiosity

SPEED **OF LIGHT** Joyce Poon is developing optical devices that could make computers vastly more powerful and a whole lot faster



TECHNOLOGY COMPANIES such as Google, Facebook and Amazon are investing millions of dollars in data centres to power their vast computing enterprises. These sprawling complexes contain thousands of servers that allow the public to exchange pictures, emails, videos and more online. Trouble is, the wires that run inside these servers and between them aren't always ideal for communicating huge amounts of data in a fast and energy-efficient way.

Joyce Poon, a professor of electrical and computer engineering, is working on a potential solution. Light is much more efficient than conventional copper wiring for transmitting data over large distances, such as between cities or continents. But so far, creating the devices that use light to relay data over short distances, such as within a data centre or an individual computer, has been difficult. This is because the fibre optic cables and components used to transmit light are costly and difficult to manufacture at a small scale.

The challenge, says Poon, 32, is to come up with photonic devices - made from electronic and new types of materials that can be scaled down to the incredibly small dimensions of modern micro-electronic components. She is collaborating with academic and commercial partners in Canada, the U.S., Asia and Europe, and, in a recent experiment with IBM Research, demonstrated a compact, energy-efficient optical switch that worked twice as fast as what was conventionally thought to be the limit. Eventually the switch could operate as much as 100 times faster, says Poon, recently named by MIT's Technology Review as one of the world's top 35 innovators under 35.

Poon notes that aside from the ongoing technical challenges

market. She and her team must find a way to manufacture them so they work with an array of existing electronics equipment and are cost-effective. Both elements are crucial.

As more and more everyday things – such as cars, roads, even refrigerators – are embedded with computer chips, the amount of data that needs to be processed, communicated and stored (and the electricity required to do this) will continue to grow at an exponential rate. At some point in the not-distant future, our computer networks will buckle under the ever-growing torrent of data – unless current limits of speed and energy-efficiency are surpassed. Poon is working to achieve a breakthrough, and is excited about the possibilities that even faster communication and more powerful computing will open up – particularly in such complex fields as cosmology, climate change and proteomics. "If this all comes together, I think we can solve some really big problems in science - and our society," she says. - scott anderson

Find out more about Joyce Poon's groundbreaking research in U of T Magazine's iPad edition, available for free at the iTunes store.

HIDDEN TALENT: Drawing

words I LIVE BY: Be grateful

BEST PART OF BEING A PROF: Independence

ADVICE TO STUDENTS: Find something you're passionate about

BOUNDLESS... Opportunity

GOODBYE TO PLASTIC?

Emma Master imagines a world with much less garbage, thanks to new organic materials she's researching



PLASTIC IS AN AMAZING MATERIAL: it is light, strong, flexible and cheap to produce. But it has two big drawbacks: it's made from petroleum, of which we have limited supplies, and it doesn't decompose easily. Humans throw away billions of tonnes of plastic every year. A tiny portion of it is now biodegradable, but the vast majority will sit in landfill sites for centuries.

What if we could make plastic from renewable biomaterials instead of petrochemicals? This possibility intrigues Emma Master, a professor of chemical engineering. In her lab in the Wallberg Building's "Biozone," she is investigating how to use plants to create new materials and chemicals.

The implications could eventually affect large segments of the economy: research by Master and others in the field could lead to new kinds of organic packaging to replace Styrofoam, plastic wrap and drink cartons – and new markets for wood and other fibres. Although her immediate goal is to create plant-based materials that behave like existing plastics, in the longer term, she hopes to design these new organic materials to respond to external stimuli. Imagine drug casings that release their active ingredient only when in the vicinity of certain types of cells, and textiles that adapt to their conditions. Master thinks that other possibilities will come to light as research progresses. "We'll have advanced, versatile materials for beneficial uses we haven't imagined yet," she says.

At the same time, Master, 39, wants to ensure that the *processes* for making these new materials are also environmentally friendly. "Making new materials from a plant isn't necessarily sustainable if the conversion of the plant to the product isn't itself sustainable," she notes.

As a graduate student, Master worked in bio-remediation, which uses biological processes to transform waste into non-toxic compounds. This experience made her wonder whether biology could one day be harnessed to prevent waste in the first place. Now, she envisions a future in which our understanding of plant polymers allows us to construct and engineer materials that propel society forward in a sustainable way. Indeed, it's her hope that our grandchildren may one day look at all that plastic lingering in landfill sites and wonder what we found so appealing about it.

- SCOTT ANDERSON

ALTERNATE CAREER: Wilderness expedition guide or mountaineer

PROUDEST MOMENT: When my first PhD student graduated

WORDS I LIVE BY: Be persistent

BEST PART OF BEING A PROF: Always learning

worst: Not having enough time to do everything you want to do

ADVICE TO STUDENTS: Pursue quality over quantity

THE ART OF ACTIVISM

Naisargi Dave investigates what inspires someone to take up a cause



ON PROFESSOR NAISARGI DAVE'S office door is a sticker promoting veganism, and a postcard denouncing a coat company for killing coyotes for fur trim. The writings of Gandhi and *Eating Animals* by Jonathan Safran Foer sit on her bookshelf. All signs point to an activist, but the anthropology professor says she isn't "wired to be one." Instead, she mulls over the questions: What is the nature of activism, and what makes someone an activist?

In her first book, *Queer Activism in India: A Story in the Anthropology of Ethics* (2012), Dave traces the lesbian rights movement in India from 1987 to 2008. While Dave's research centres on India, her work is also important in helping North Americans understand the nature of their own activism. The book tackles universal questions, such as how activism emerges and how activists' practices and ethics shift when they are negotiating with social institutions, including ones that they themselves have created.

Dave is currently in India researching a book on animal activism, for which she has won a Chancellor Jackman Research fellowship. With this new work, she is exploring animal-human relationships from a post-humanistic standpoint (a perspective that does not put people at the centre of the universe) and she wants readers to imagine the world in a new way: one that does not make a division between those who "matter" (certain humans and companion animals) and those who don't.

One of her important findings is that many people who live on the streets of India hold a post-humanistic perspective: they have strong relationships with animals on the streets, take care of them and value their lives alongside their own. This throws cold water on a prevalent belief in India that the rights of animals concern only the upper class or Westerners. "I think India's upper class and Westerners see it as a class-sensitive move to say that we should care about humans and not animals – why care for animals in a place where people are suffering? – which is actually not necessarily the value system of the people we think we're speaking for. That's all about our own elitist, humanistic perspective that I think is condescending, because it assumes that everybody has the same value system."

Dave – who grew up in Atlanta, Georgia (her parents are from Ahmedabad, India) – teaches courses ranging from the anthropology of South Asia, to gender and sexuality, to posthumanism, and aims to make her classes very dialoguedriven. She points to an anthropology class of 80 students modelled on the graduate seminar, which led to a vibrant discussion every day. "For me, it is just about having conversations, and the most important thing is always learning how to think critically, creatively and imaginatively about the world." – STACEY GIBSON

ROLE MODEL: The *X-Files'* Fox Mulder, for his single-minded dedication

PROUDEST MOMENT: My first marathon

ADVICE TO STUDENTS: Multitask less. Read novels more

words I LIVE BY: Relax

ALTERNATE CAREER: Sportswriter

ASIA RISING

As global power shifts to Asia, Canada's success will depend on seeing more than just business opportunities in the region, says Joseph Wong



BY 2030, ASIA'S ECONOMY will surpass that of the United States and the European Union combined, according to a recent report by America's National Intelligence Council. This expected shift in global economic power could harm Canada's future prosperity and international position – unless we truly come to understand the region and learn to navigate our way in an increasingly Asia-centric world, says Joseph Wong, a political science professor and director of the Asian Institute at the Munk School of Global Affairs.

Wong, 39, wants to ensure that U of T students have the real-world skills and connections to meet this challenge. He and his colleagues at the Asian Institute are the leading force behind the Contemporary Asian Studies program, which was established last year and provides a multidisciplinary, region-wide lens through which students critically explore the continent's socio-economic trends. Students learn about the region's economics, cultures, geography, history, politics and sociology – via textbooks, but also, importantly, by visiting the region itself.

Since 2009, the Asian Institute, in collaboration with the political science department and Woodsworth College, has offered an experiential learning program in Shanghai where U of T students visit Fudan University, and, alongside Chinese students, look at international issues from Western and Chinese perspectives. "There is no shortage of global conversations about the rise of Asia," says Wong, who teaches the study-abroad program with Fudan professors. "But our goal with the Asian Institute, and the Contemporary Asian Studies program in particular, is to expose students to conversations being generated *within* Asia about the world."

Rather than dividing Asia into countries, the Asian Institute examines larger thematic questions that span the region, says Wong. Much of his own current research focuses on health innovation in "the poorest of poor regions" in the Global South – and on determining which technologies and social policies can most help those living on less than a dollar a day. He is particularly interested in rural health care and the management of global public health crises, such as the HIV-AIDS pandemic.

Wong, who holds a Canada Research Chair in health and development, makes a point of telling students about his fieldwork in the Asian countryside and interviews with international labour leaders on the one hand and venture capitalists on the other. He hopes this will encourage students to travel to places that are outside of their comfort zone. "To have them be passionate about arguing, debating and engaging in the global conversation – *that* is the most important learning experience that we can facilitate as academics," says Wong. – NADIA VAN

Watch a video interview with Joseph Wong in $U\,of\,T\,Magazine$'s iPad edition, available for free at the iTunes store.

ALTERNATE CAREER: NBA basketball player, or lawyer

ADVICE TO STUDENTS? Have fun

HIDDEN TALENT: I can recite the alphabet backward as swiftly as I can forward

BEST PART OF BEING A PROF: Being a lifelong student

worst: Doing anything lifelong

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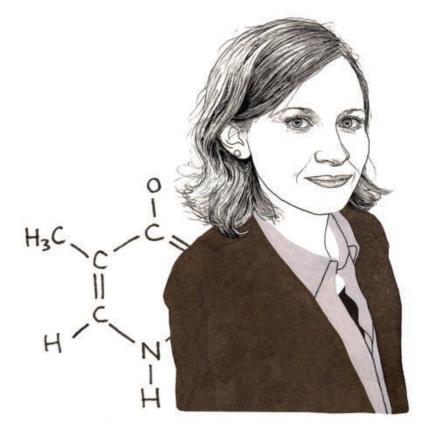
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ARGONAUTES!

Julie Claycomb is researching a group of proteins that may yield new treatments for a variety of genetic and viral diseases



JULIE CLAYCOMB TALKS ABOUT HER RESEARCH INTO RNA INTERFERENCE the way a college football star might talk about getting drafted into the NFL - as though she'd trained her whole career to be the best at what she does, and now can't quite believe she's made the big leagues.

Claycomb discovered a love of lab science at MIT. In grad school and during a post-doctoral fellowship she was mentored by global leaders in molecular biology, including Nobel Laureate Craig Mello, who inspired her to devote her career to the field. Today, at 35, she's helping to create a whole new playbook of therapies that might one day tackle genetic diseases before they ever have a chance to go on the offensive.

Claycomb studies a group of proteins known as Argonautes. These proteins could be powerful tools in the effort to pre-emptively disrupt damaging genetic processes. Her work challenges the very idea that DNA determines destiny.

A strand of human DNA is a blueprint containing instructions about everything from eye colour and hormone levels to predisposition to certain cancers. Claycomb researches how that genetic information gets turned into an actual living organism - and how that process can be controlled.

DNA is a type of nucleic acid. It copies itself to another type of nucleic acid molecule known as messenger RNA through a process called "transcription." The messenger RNA molecules are then "translated" from the molecular language of nucleic acid into the proteins that are the building blocks of life.

Transcription and translation turn genetic information into bones and flesh, neurons and blood, eyelashes and teeth. They help the body defend against illness, but also make the

organism vulnerable to genetic diseases. "There's a lot we need to learn about how those processes work," Claycomb says. "If we can understand the mechanisms regulating these processes, maybe we can exploit them to make more potent therapeutics."

When it comes to running genetic interference, Argonaute proteins are a triple threat. "They can degrade messenger RNAs, recruit other RNAs that stop translation, or muck about with the DNA in the nucleus to stop the process of transcription," she says. This means, for instance, Argonautes could "silence" a breast cancer gene, rendering it harmless to the woman who carries it.

RNA interference is already being clinically tested as a treatment for conditions such as macular degeneration and respiratory syncytial virus. (Viruses work by attacking the DNA in an organism's cells. This makes them potential targets for RNA interference.)

Thousands of illnesses, from hepatitis to HIV-AIDS to Huntington's disease might be mitigated with RNA interference research. "We're reaching an age where we can do so much with the information that's out there," she says. "More and more people are learning how we might harness RNA interference research for therapeutics." - PATCHEN BARSS

BEST PART ABOUT BEING A PROF: Seeing your students succeed

WORST: Administrative duties

ALTERNATE CAREER: Bed and breakfast owner

BOUNDLESS... Energy

MARKETS WITHOUT BORDERS?

Deborah Cowen investigates what happens when governments sacrifice the rights of their citizens to protect the flow of goods across national lines





IN AN ERA IN WHICH transnational corporations rely heavily on the unimpeded flow of goods and energy across borders, many governments now view anything that interrupts this flow as a threat to economic – and therefore national – security. So what happens when governments seem willing to sacrifice civil rights in order to keep goods moving across borders? That's a question that intrigues Deborah Cowen, a geography professor.

In practice, Cowen notes, the interests of large corporations protecting their global supply chains through various territories often clash with the interests of citizens and workers who live there. She points to security clearance programs in Canada that violate the privacy rights of port workers and their families, allowing them to be suspended from work based on "reasonable suspicion" of terrorist affiliation – with little opportunity to appeal. "These new security regulations threaten to institutionalize racial profiling and directly undermine collective agreements and civil rights," says Cowen, 36.

The ways in which governments and corporations work together to create a "supranational" system of security to ensure the global flow of goods also intrigues Cowen. She sees the Gulf of Aden off the coast of Somalia – with a growing number of military actions in response to piracy – as a place where experiments in public and private forms of security are underway. Because the gulf carries a significant volume of world trade, the UN Security Council authorized the deployment of multinational warships within sovereign Somali waters due to the looting. What's overlooked, says

Cowen, is how these efforts resemble 19th-century European military strategies used to lay imperial claims to territory.

Cowen's doctoral dissertation – which eventually became her first book, *Military Workfare: The Soldier and Social Citizenship* – focused on the relationships between social welfare and state militaries. Historically and in the present, the practice of exercising authority over transnational space to ensure commodity flows has been crucial to imperialist efforts, she says. Her new book, *Rough Trade*, aims to expose how the military pervades civilian life, and promote a rethinking of security and labour rights practices in the face of globalized production. – **NADIA VAN**

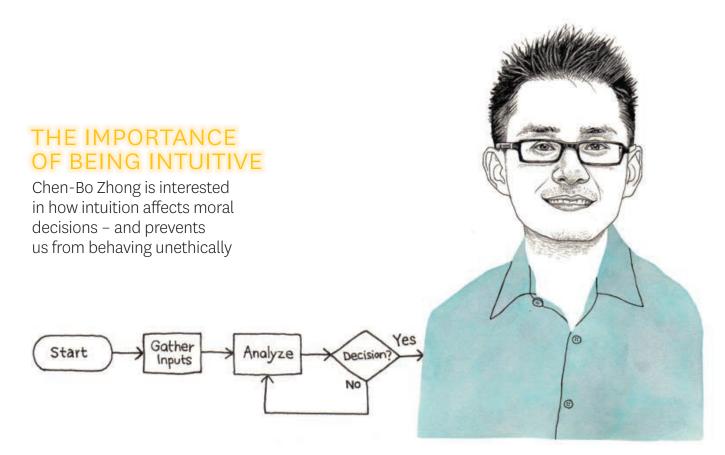
BIGGEST PROFESSIONAL CHALLENGE: Time - and sometimes space

ALTERNATE CAREER: A grunt in Jim Henson's Muppet studio

WORDS I LIVE BY: "Run from fear; fun from rear" – Bruce Nauman (1972)

BEST PART OF BEING A PROF: Being constantly challenged by the creative, diverse and brilliant people that surround me in the classroom, in my department, in the discipline and in the city

THE WORST: Feeling constantly challenged and always surrounded



THINK WITH YOUR HEAD, and not with your heart, the old adage goes. In the corporate world, this is especially true: decisions are often made through deliberation, careful attention to facts and statistics, and systematic thinking – while emotions are seen as biasing.

However, Chen-Bo Zhong, a professor of organizational behaviour and human-resource management at the Rotman School of Management, is examining the role of intuitive decision-making – which he believes can sometimes prevent people from acting unethically. "Morality is both a process of reason and intuition," says Zhong, who studies ethical decision-making and moral psychology. Take fraud, for example: When a person is thinking of misreporting company performances, he may experience self-disgust or guilt – emotions that may prevent him from engaging in these activities. "These intuitive functions of morality really play a role in signalling to ourselves the value of the choices we are going to make. If we feel disgusted at the thought of cheating, what does that say to you?"

Zhong hopes that his work will help people make better ethical decisions, both in business (such as a manager contemplating accepting outside gifts) and in everyday life (such as someone deciding whether to lend money to a friend). He wants people to understand different decision-making processes (both rational and intuitive ones) and how intuition can inform moral values and behaviour.

Zhong is now looking at how physiology affects people's moral decisions. In a recent experiment, Zhong and colleagues provided participants with false feedback of their heart rates.

Those who listened to an average heartbeat were much more likely to cheat in a deception game than those who listened to a fast heartbeat. Why? Because when people think of behaving badly, the heartbeat is a strong signal of stress and helps indicate the nature of the behaviour. (Zhong points to Raskolnikov, the main character in *Crime and Punishment*, who couldn't slow his racing heart when he thought about murder.)

In the classroom, Zhong tackles another element of ethics – in business negotiations. He wants students to think not only about financial outcomes, but about the welfare of people who are affected by the decisions, such as the buyer of a product (think of the financially disadvantaged patient who needs an expensive cancer drug). Zhong – who has received several Excellence in Teaching Awards from Rotman – also teaches strategic negotiation, and gives students experience by having them engage in simulated negotiations. They then reflect on their performance. "These are the most enjoyable parts of teaching – to get to know what students think and what their standpoints are," he says. "The good classes are the ones in which every student wanted to volunteer their voice." – STACEY GIBSON

ADVICE TO STUDENTS: Read broadly

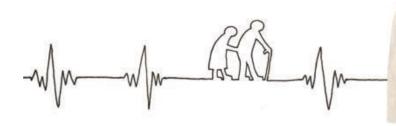
ULTIMATE RESEARCH GOAL: To understand human psychology within social structures and relations

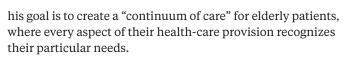
BEST ASPECT OF BEING A PROF: The exploration of ideas

THE WORST: Can't think of one!

AGING WELL

Samir Sinha wants to help keep older Canadians healthy and independent for longer. As the population ages, the viability of our health-care system depends on it





Is the plan working? So far, he says, noting that since the launch of the strategy in 2010, elderly patients from Mount Sinai return home more often, return home faster and have a lower chance of being readmitted. All of this results in lower health-care costs.

Sinha, who grew up in Winnipeg and whose parents and brother are also doctors, hopes this kind of tailored care eventually becomes available to all older Canadians. "I'd like to see a system where we always give older adults the right care in the right place at the right time," he says.

In a sense, he's already helping to make that happen. Sinha is the expert lead for Ontario's Seniors Strategy, which earlier this year released the report, *Living Longer, Living Well*, containing several recommendations about improving care for older Ontarians. It's a blueprint, essentially, for creating the health-care system we want and need over the coming decades "We're trying to challenge deeply ingrained ways of working," says Sinha. - SCOTT ANDERSON

Watch a video interview with Samir Sinha in U of T Magazine's iPad edition, available for free at the iTunes store.

WOULD YOU RATHER LIVE LONGER or in good health? Samir Sinha, a professor of medicine at U of T, hopes most Canadians will achieve both. The reality, though, is that many older people develop a complex mix of health problems. It is these patients Sinha sees frequently as the director of geriatrics for Mount Sinai Hospital and the University Health Network.

While a younger patient may get 15 minutes with their family doctor on a followup visit, Sinha spends three times as long with his older clients. First-timers get two hours. This level of commitment helps to ensure high-quality care and is meant to keep elderly patients healthy and independent for longer. "In order to really support these patients, you need to address each and every one of their health and social issues," he says.

But as the older population doubles over the coming two decades, the costs of caring for them will balloon. Sinha, 36, notes that the five per cent of Ontarians with the most complex health issues – often elderly patients – account for a whopping two-thirds of all health-care costs in the province. So hospitals have begun looking for ways to meet the needs of this group more efficiently; under Sinha's direction, Mount Sinai and the University Health Network have recently developed teams of health professionals who are helping to keep older patients out of emergency wards and intensive care units.

One such team – consisting of family doctors, geriatric specialists, therapists, a nurse practitioner and others – is currently caring for 400 frail and homebound patients annually through a community-based House Calls program. Another initiative screens elderly people who visit the emergency department to determine if they're high- or low-risk patients to better tailor care to their needs. Sinha says

ROLE MODEL: My parents

WORDS I LIVE BY: Understand your own gifts and do your best to share them

BEST PART OF BEING A DOCTOR: The privilege of helping people

BOUNDLESS... Dreamer

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By John Lorinc Photography by Rita Leistner

THE NEW REGENT PARK

A university community helps a neighbourhood transform

ROSITA BILAS ARRIVED IN CANADA from the Philippines in 1990, and a few years later took up residence in a three-storey public housing apartment in Toronto's Regent Park, east of the city's downtown. She's worked as a caregiver while raising two sons. Recently, however, Toronto Community Housing Corporation (TCHC) officials told Bilas that her apartment building, a deteriorating walk-up, would soon be demolished as part of a sweeping redevelopment of the 28-hectare public housing complex. The agency said it would offer her a replacement unit until a new one is completed.

Bilas had a couple of options, the officials added. She could apply to live in one of the new TCHC apartments, where rents are tied to the occupants' income. Or, if Bilas could muster the down payment, she could buy one of the condos that would be built within Regent Park as part of the agency's strategy to increase density and bring a broader mix of

residents into the area. At the time, Bilas's income had been rising, so she was paying the maximum rent – about \$1,100 per month. "I said to myself, I'm paying more rent so why not move to the new condo?"

For Bilas, who has never owned a home, it will be a big move in every way. If a tenant's income drops due to illness or job loss, TCHC will reduce the rent accordingly. But mortgage lenders are not so forgiving. "Because I'm a first-time buyer, I'm nervous," she says. "I pray I always have a job and good health. It's a big responsibility."

As it happened, the Daniels Corporation, the developer founded by John Daniels (BArch 1950) that was chosen to lead the \$1-billion redevelopment, had helped create a financing program for Regent Park tenants who almost have the savings and income to make the move from renting to owning - but aren't quite there yet. Through the "Foundation Program,"

buyers can borrow up to 35 per cent of the purchase price of their condo or townhome, but the loan is structured so that the owner only has to pay it off with the proceeds of the eventual sale of the unit. Bilas applied, and qualified for, a loan towards a unit in a condo due to be finished next year. "That was a big help for me," she says.

Now, Bilas is looking forward to living in a clean building with new appliances. And after 15 years of hauling groceries up three flights of stairs, she particularly relishes the prospect of being able to use an elevator to get to her unit. As a single woman who sometimes works nights, the security in the condo will provide additional protection in a neighbourhood with more than its fair share of crime. Indeed, she is hopeful that the influx of new condo owners will improve the Park's overall safety.

Like thousands of other Regent Park tenants, Bilas is living through a closely watched transformation of Canada's oldest housing project, a place that had become synonymous with derelict apartments, gang rivalries, drug crime and, for a time, aggressive policing. Though situated just blocks from the upscale streets of historic Cabbagetown, Regent Park often seemed like a world apart, its 7,500 residents consigned to navigate a parallel universe characterized by a dearth of amenities and economic hope, as well as deeply disturbing – and all too common – incidents of violence.

But like all stereotypes, the negative reputation that has tailed this neighbourhood doesn't tell the whole story. By the early 2000s, almost 60 languages were spoken in the Park, which had become a hive of artistic, cultural and educational activities. The physical transformation that's been underway for several years is now reconnecting Regent Park with the adjacent neighbourhoods and bringing in a mix of market and subsidized housing. "It's been a very challenging road to get here," remarks Mitchell Cohen, a former co-op housing developer and musician who has worked for the Daniels Corporation since 1984, and is a volunteer with U of T's John H. Daniels Faculty of Architecture, Landscape, and Design. "On the ground, things are feeling really fantastic. We're at a great moment where we can see the results."

he story of Regent Park closely tracks aspects of the city's evolution during much of the past 80 years. But it is also a tale in which members of the University of Toronto community have played a long and involved role that begins at the very outset of the political movement to improve the city's Depression-era housing conditions.

Early in 1934, Toronto city council established a commission to investigate the development of so-called "slums," including Moss Park, a dense working-class enclave northeast of Queen and Sherbourne. The idea for the inquiry came from Herbert Alexander Bruce, a former professor of surgery at U of T and founder of the Wellesley Hospital who, by that point in his career, was also serving as the province's lieutenant-governor.

An outspoken figure, Bruce warned that Toronto's slum districts needed to be blotted out in favour of a program of "planned decentralization." Surveys and interviews conducted by the Bruce commission found hundreds of neglected, overcrowded houses in need of repairs, many without baths or central heating. Backyards were filled with junk, while the rear laneways didn't conform to fire regulations. Some factories in the area operated around the clock, forcing residents to "tolerate the noise of the machines and trucks day and night." The commission's conclusion: Moss Park was "unsuitable as a residential district."

While social reformers such as Leonard Marsh, father of Canada's social safety net, began pushing for a federal housing authority in the mid-1930s, there was no meaningful progress until the post-Second World War years, when the City of Toronto bulldozed south Cabbagetown and built what came to be known as Regent Park North.

"The designers did what was good design for the time," says urban housing and poverty expert David Hulchanski, the Dr. Chow Yei Ching Chair in Housing at U of T's Factor-Inwentash Faculty of Social Work. Following modernist planning principles sweeping across the West, the new apartments, geared at low-income working families, were situated in a park-like setting, with plenty of open space, ventilation and sunlight.

A decade after Regent Park was built, affordable housing advocate Albert Rose, also a professor (and later dean) in U of T's Faculty of Social Work, completed a detailed review of the project. Rose – a towering figure who served as the vice-chair of the Metro Toronto Housing Authority – said the Regent Park experience clearly indicated that such large-scale, publicly funded housing projects only came about as a result of concerted pressure from local citizen groups. On the eve of the 1960s, he declared the experiment a success: "The name [Regent Park] has become a symbol of successful public action and public housing experience."

Rose's optimism, while justifiable at the time, eventually missed the mark. What initially appeared to be a successful approach to social housing gradually morphed into a poverty trap for generations of low-income Torontonians.

oft-spoken and casual in comportment, Cohen, president of the Daniels Corporation, certainly does not cut the figure of a major developer in a city where developers have played a significant role in recent years. Sitting in a cluttered conference room in Daniels' sleek showroom on Dundas Street, in the middle of Regent Park, Cohen comes across as the anti-developer, often sounding as much like a social advocate as a businessman.

He comes by that pedigree honestly. Raised in Regina, he graduated from McGill University and the London School of Economics and Political Science before taking up a job with the Co-operative Housing Federation of Toronto in the late 1970s, facilitating the development of non-profit co-ops.



Rosita Bilas is looking forward to moving from a rental apartment in the old Regent Park to a condo in the redeveloped neighbourhood. Bilas was able to become a homeowner thanks to an innovative financing program the developer, the Daniels Corporation, helped create.

After Brian Mulroney's conservative government cancelled the federal government's co-op housing development program in 1984, Cohen went to work for John Daniels at the Daniels Corporation. The two continued to develop social housing projects until Mike Harris's Tory government in Ontario killed the province's program. At the time, two-thirds of the Daniels Corporation's revenues came from affordable housing projects, and so the company had to refocus its strategy. But Cohen and Daniels didn't turn their backs on the nearly moribund non-profit housing sector; as Cohen well knew, there was still plenty of need.

In the three decades since Albert Rose declared Regent Park a success, much had changed in the social housing world. Monolithic public housing complexes in many North American cities had fallen into the grip of crime and entrenched poverty. In Regent Park, Hulchanski says, the demographics shifted radically. The first wave of residents – the white working poor – was succeeded by visible minority residents, and a growing concentration of welfare recipients. The initially lauded design – apartments in a park setting – proved to be highly problematic. Because the city had erased the old block network during the construction, Regent Park lacked so-called "eyes on the street"; with its many blind spots, the Park became a haven for gangs.

During the 1970s and 1980s, reform-minded mayors such as David Crombie and John Sewell promoted an entirely different approach to affordable housing. They championed higher-density, mixed-income communities such as St. Lawrence, with its co-ops and in-fill housing projects designed to blend in with their urban surroundings.

Meanwhile, the problems at Regent Park and other older social housing complexes began to pile up. Due to waves of economic uncertainty from the 1970s to the 1990s, urban poverty rates began to grow as well-paying manufacturing jobs disappeared. Tens of thousands of people, many of them recent immigrants, languished on waiting lists for subsidized apartments. But as the tenant population in social housing complexes became poorer, crime and drug-dealing escalated. And to make matters even more complicated, the agency faced a crushing backlog of deferred maintenance on its aging apartments, including Regent Park; the current cost is estimated to be at least \$750 million.

In the mid-2000s, when TCHC and the City of Toronto embarked on the plan to redevelop Regent Park instead of fix it up, the math looked promising: the area had relatively low densities but the land was valuable due to mounting demand for downtown condo living. The idea was to use the proceeds of the sales of condo units to underwrite rebuilding the subsidized units. Chicago's housing authority had made similar moves, demolishing notorious public housing complexes in desirable locations and selling the land to private developers. In this case, however, TCHC pledged to replace all of the subsidized apartments within Regent Park by boosting the area's density. The plan called for increasing the population of the area to 12,500, and aiming for a 60-40 mix of market-rate and subsidized apartments.



Herbert Alexander Bruce, a former professor of surgery at U of T, in 1934 led a survey of the neighbourhood south of Cabbagetown that found hundreds of neglected, overcrowded houses in need of repairs.





Towers of Song

A U of T music grad runs an innovative program to bring affordable music lessons to Regent Park youth

In the eight years she's taught vocals at the Regent Park School of Music, Toronto opera singer Zorana Sadiq has learned that many of her students, despite growing up in large, lowincome families, live inside towers of song.

"There's a lot of music in the home, and a lot of languages," she says. Indeed, Sadiq's students soak up music at church, in the choir, from parents – and even from grandparents who share musical traditions from their countries of origin.

The scrappy, entrepreneurial music school, which offers heavily subsidized music instruction to kids whose parents couldn't otherwise afford it, moved into the Daniels Spectrum last fall. Decked out with soundproof rehearsal spaces and donated instruments, the new facility enables Sadiq and the other teachers to give students one-on-one instructional time without fighting the constant ambient sound that filled the school's previous home, a cramped row-house on Queen Street East.

A local priest offered his church basement to the music school in the late 1990s, with

the goal of providing local youth with the kind of enrichment activity that can be tough to come by in a public housing project. The school moved into the row house in 2004, says executive director Richard Marsella (BMus 2003, MMus 2005). The space, though larger, posed all sorts of challenges. With only a handful of rooms, they couldn't keep up with demand and the sound carried through old walls. "We couldn't rehearse more than four kids at the Queen Street location," says Marsella. "You couldn't focus."

In 2005, Mitchell Cohen, president of the Daniels Corporation and a volunteer with U of T's Daniels Faculty of Architecture, Landscape, and Design, stumbled across the school on his way to work during the revitalization planning process and became intrigued. "It was an unbelievably beautiful thing they had happening," he says. "I was very, very inspired." A lifelong musician, Cohen immediately recognized the value that music education has on the lives of children and youth. "Music is a pathway to a bigger world outside the confines of a barriered community."

Now ensconced at the Daniels Spectrum, Marsella says the school is in a much better position to meet the community need for music training. Enrolment has jumped from 800 to about 1,100, including satellite classes and summer music camp programs in Parkdale and Jane-Finch. Its goal is to reach 3,000 youth by 2015.

The waiting area, he adds, is abuzz with activity between 4 and 8 p.m. on most days, with older students coming by just to hang out and play. "Every family is different," Marsella says. "They all have a unique set of challenges, but they all come for the same reason: they want the best education for their child."

- JOHN LORINC



After the Second World War, the city bulldozed the "slums" south of Cabbagetown, and constructed new three-storey apartment buildings in a park-like setting. But the neighbourhood, which was geared toward low-income families, eventually became a poverty trap.



Don Schmitt (BArch 1977), a principal of Toronto's Diamond Schmitt Architects, and planner Ken Greenberg (BArch 1970) both played key roles in drawing up TCHC's master plan. They pushed for basic urban design principles meant to reconnect Regent Park to the rest of the city: a conventional block-based street grid and a mix of housing forms, including townhouses, mid-rises and a few towers (including one highrise that encases the exhaust stack of a district heating system). Where the old Regent Park had no commercial amenities, Schmitt says the new plan re-established Dundas, which bisects Regent Park, as the area's commercial spine and social focal point.

"I think a lot of those lessons from 1970s and 1980s-vintage mixed-income communities have been integrated into the Regent Park master plan," observes Schmitt. He notes that the residents, during extensive community consultations, stressed that they wanted to live in a normal neighbourhood, not an architectural showcase that drew attention to itself. "The most important decision the community made was to reshape the former public housing project into a neighbourhood like any other," says Greenberg. "That meant above all complete connectivity - let the streets run seamlessly through the site making all possible links and erasing boundaries."

When the Daniels Corporation won the bid to redevelop Regent Park, Cohen had to transform that elegant redevelopment strategy into a marketable bricks-and-mortar reality, meaning the firm had to build and sell condos in an area long seen as best avoided. In its first phase, the company used a variety of architects to create visual variety, and also brought in commercial amenities such as a supermarket, a bank and a coffee shop - all services conspicuous by their absence in the old Regent Park.

"People in this neighbourhood said, 'This is missing, this is not normal," Cohen says, noting that dozens of Regent

Park residents now work in those new businesses. Indeed, once Phase One opened in 2010, "we couldn't tell where a condo is and where a rent-geared-to-income building is. They're indistinguishable and they're on a public street." (TCHC planners toyed with the notion of creating buildings with both rental and condo units, but decided such an approach would be difficult to market.)

Yet the Daniels Corporation has sought to blur the social lines with two innovative financing programs designed to help moderate-income, first-time homeowners put together a down payment. The company says about a third of the 469 condo units in two of the first market buildings were purchased by such buyers, using a mortgage assistance program. Another 13 owners, Bilas among them, had been Regent Park tenants, and made use of a second financing scheme – the Foundation Program. "With a little assistance, they can buy and move out of social housing," says Cohen. "This is one of the strongest tools for breaking the cycle of poverty."

But the Regent Park revitalization isn't just about residential buildings, shops and a rebuilt street grid. Various public institutions have made parallel investments designed to create a more complete neighbourhood. The City of Toronto last fall opened a new aquatic centre, while the Toronto District School Board mounted an extensive renovation of Nelson Mandela Park Public School. TCHC and Maple Leaf Sports and Entertainment are also collaborating on a large new sports field for the community, to be built in 2015.

The Daniels Corporation, for its part, tweaked the master plan to create other public spaces and amenities. During a thorough public consultation into Regent Park's social and cultural development, residents had told TCHC and the City about dozens of local groups working in basements and corners of Regent Park. But the master plan made no allowance for an arts and cultural hub. What's more, the development



"The inspiration came from the neighbourhood. It came from the ground"

Mitchell Cohen,
 president of the Daniels Corporation,
 is a volunteer with U of T's
 John H. Daniels Faculty of
 Architecture, Landscape, and Design

timetable delayed the construction of a central park until 2020, which meant the first new residents would be waiting for years for a public space. "We said to TCHC, we need to fix this," Cohen says.

After rejigging the phasing strategy to accelerate construction of the park, which will now open this spring, the company decided to carve out space for a new cultural centre that would provide a venue for all those local organizations. Designed by Diamond Schmitt Architects, the colourful three-storey structure includes several state-of-the-art performance spaces, a locally run café, a green roof, and two floors for various educational, arts and community groups that have long operated in and around Regent Park. Many relied on informal or rented space, and some had been uprooted when the demolition began. The need for this kind of social infrastructure remained. "The inspiration came from the neighbourhood," says Cohen. "It came from the ground."

ne of Regent Park's most enduring self-help organizations is the Toronto Centre for Community Learning & Development, which was founded in 1979 as East End Literacy and administers a friendly storefront space known as the Daniels Centre of Learning, located kitty-corner to the Spectrum. In the mid-1990s, the group decided to move beyond one-on-one literacy training and began to offer a broader range of services, including job-readiness training and immigrant women's integration programs, says its long-time executive director Alfred Jean-Baptiste. Last year, almost 9,000 people participated in the centre's programs, including an innovative course designed to train local teens to teach their parents to speak English.

The learning centre has also cultivated active partnerships with several post-secondary institutions, including U of T. The link dates back about a decade, when Sheldon Levy, then a U of T vice-president (and now president of Ryerson University), approached Frank Cunningham, a professor of philosophy and political science at Innis College, about

improving the university's community outreach. After asking around, Cunningham found out that New York University and the University of British Columbia offered non-credit lecture courses in some of those cities' low-income neighbourhoods, with UBC's operating from a space in the Downtown East Side.

The partnership between the community learning centre and U of T went ahead in 2003 and in the years since, it's thrived. Professors from a variety of disciplines have volunteered to deliver lectures as part of seminar-style courses ranging from starting a business to the history, economics and culture of fashion.

The participants are predominantly immigrant women, many with degrees; the lecturers often come away from those seminars having learned as much as the students, says Cunningham. "It really is a two-way exchange." He recalls how, during a lecture about multiculturalism, a woman from Somalia raised her hand and asked, "How come there are so many homosexuals in Canada?" There were none in her home country, she continued. Suddenly, another participant interjected: "What part of Somalia do you live in?" There were many openly gay and lesbian residents in the Somali city where the second participant had lived. That exchange, Cunningham says, precipitated a spirited debate about attitudes towards sexuality, both in Canada and Somalia. "Those are no-holds-barred discussions."

Today, the U of T partnership is overseen by Shauna Brail, a senior lecturer and director of the Experiential Learning Program at Innis College, which places urban studies students in apprenticeships at the Regent Park learning centre and other organizations across the city. "It's very much a mutual, two-way learning activity," she says. "What my students come back saying is, 'I've never met people who lived in Regent Park and didn't realize the challenges and struggles, and what's needed to survive in Canada."

Another, more recently established program at U of T's School of Continuing Studies is aimed at Regent Park residents with a university degree who want to improve their work skills.

50 WWW.MAGAZINE.UTORONTO.CA PHOTO: ALEX FELIPE

One such resident, Nyla Khan, was a teacher in her native Pakistan before she arrived in Toronto as a landed immigrant in 2005. Despite eight years of experience in her native country, Khan has struggled to restart her career as an educator. Last year, through the Continuing Studies program, she enrolled in two professional English courses to help prepare her for a language proficiency exam that she needs to obtain a teaching certificate in Canada. Ultimately, Khan wants to work as an educator so she can fully support her daughters. One is now at university and intends to be a physician; the other, in Grade 9, aspires to become a police officer. "I pray for them that every day they'll achieve their goals," she says.

uch messages are hardly lost on Mitchell Cohen, who has had to preside over a wrenching process that involved dismantling the physical infrastructure of a community in order to rebuild and, hopefully, improve it. In fact, Cohen, who has been writing and performing music for decades, found himself moved to compose three songs about the dramatic and, at times, unsettling transformation of Regent Park. The first song, "My Piece of the City," is a jazzgospel piece about the anxiety, fear and even the sense of loss precipitated by the first tranche of demolition activity. The second and third are more forward-looking and hopeful, and focus on the moments in 2010 and 2012 when the former residents moved back to a community outfitted with streets and gleaming new buildings.

While these sentiments may at first seem forced coming from a successful businessman, they appear to be widely shared by residents such as Rosita Bilas, who says she

definitely wants to return to Regent Park and take up residence in one of the new rental buildings. Compared to other parts of the downtown, she says, "I feel the air is fresher in Regent Park."

Sixty years ago, social reformers such as Albert Rose and hundreds of working class families felt much the same way about the development of the original Regent Park and the demolition of the crowded, impoverished and heavily polluted neighbourhood that it replaced.

So who's to say the current revitalization won't also succumb to the law of unintended consequences? "I've thought about that a lot," admits Hulchanski, who has spent the past several years closely charting the historic patterns of poverty in Toronto. He is, nonetheless, optimistic, because the new neighbourhood has turned its back on the "extremism" of modernist, 20th-century planning, which regulated urban texture and diversity right out of such communities, leaving them barren and vulnerable to social dysfunction.

The current redevelopment, by contrast, has sought to physically bring the city back into Regent Park. Like much of Toronto's downtown, the neighbourhood will feature city streets, compact blocks, businesses, community services and residents from across the socio-economic spectrum. What's more, the investment in community amenities will attract development in the areas adjacent to the Park. "As time passes," Hulchanski predicts, "people won't know where Regent Park begins and ends."

Journalist and author John Lorinc (BSc 1987) writes about politics and urban issues for the Globe and Mail and Spacing magazine.

Pathways' Progress

A homework support program involving OISE students has more than doubled high school graduation rates in Regent Park

When Carolyn Acker, executive director of the Regent Park Community Health Centre, and Norman Rowen (MEd 1977), established a homework support program called Pathways to Education in the neighbourhood in 2001, their goal was straightforward. They wanted to reduce the area's dropout rates, and all the associated social crises that accrue when young people fall between the cracks of the school system. They decided to try a novel formula: group mentoring and intensive tutoring, as well as TTC tickets and a \$4,000 scholarship for those who complete the program and go on to post-secondary education.

Over the years, OISE students have volunteered to tutor in the program, and a handful, such as PhD candidate Robert Kohls, have

invested hundreds of hours. "He's worked with our students with learning challenges to really support their progress," says program director Sharmini Fernando.

OISE scholars, Fernando notes, are working with the Pathways tutoring team on a research project looking at whether vocabulary enhancement leads to improved academic performance among youth from the Regent Park area, especially those who have English as a second language or whose parents are newcomers to Canada. Over 40 Pathways students are involved. "It's important to have this community-campus connectivity and to do work that OISE and our students will get something out of," she says.

While that research isn't complete, the overall Pathways program is increasingly recognized as a model for improving educational outcomes among at-risk kids. More than a decade after its inception, the model has been adopted in several communities across Canada, including Halifax and Winnipeg.

According to data collected by Pathways that compared student cohorts before and after the introduction of the voluntary program, high

school graduation and attendance rates increased across the board, often dramatically. In Regent Park, pre-Pathways graduation rates hovered in the 25 per cent range. In the years since the program began, those figures have more than doubled. And participation in postsecondary education and training has skyrocketed - a 300 per cent jump.

Nor are those results limited to Regent Park. In low-income communities in suburban Toronto, Ottawa, and Kitchener, Ontario, the introduction of Pathways programs has led to similarly sharp increases in graduation rates.

The program has attracted millions in private, corporate and foundation support, as well as funding from Queen's Park and the federal government. In 2007, the late David Pecaut and the Boston Consulting Group conducted a costbenefit assessment. The group's report focused on "identifiable and quantifiable benefits," such as higher taxes paid (on higher incomes earned) and reduced government transfer payments, and found, according to Pathways, "that for every one dollar invested in Pathways, a \$24 social return on investment was generated for the broader community." - JOHN LORINC

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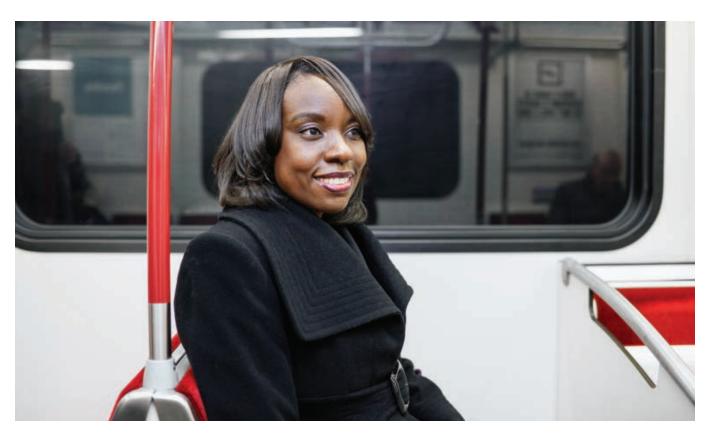


All About Alumni

"To attend lectures and exams in Syria is equal to risking your life"

Leen Al Zaibak, co-founder of Jusoor

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Urban Crusader

CivicAction CEO Mitzie Hunter is a champion for a better Toronto

when mitzie hunter was an undergrad at U of T Scarborough, she had her sights set on a law career. But due to the recession of the early 1990s, Hunter couldn't find a summer job that would help her underwrite the costs. Instead, she secured a small business startup loan from the Ontario government and launched her own firm – an event management and talent agency that later morphed into a business that did marketing for commercial property owners.

Starting a business in her early twenties was an "incredible experience," says Hunter, CEO of Greater Toronto CivicAction Alliance. It was also something she juggled while completing her degree on a part-time and then full-time basis. Her

parents, who emigrated from Jamaica and eventually settled in Pickering, wouldn't have it any other way. "I always worked and studied," she says. "It was drilled into my head that education was critical."

Yet her entrepreneurial instincts proved to be a launching pad for a career that allowed Hunter (BA 1999 UTSC, MBA 2009) to put her marketing and communication savvy to use in the corporate, not-for-profit, government and advocacy worlds. As CEO of CivicAction, Hunter helps bring diverse stakeholder groups together to solve stubborn urban policy issues and promote economic and social development in the GTA.

Her skills will be put to the test in the coming months as Hunter and CivicAction chair John Tory quarterback the group's campaign to persuade Greater Toronto residents to back new taxes and fees meant to underwrite billions of dollars in transit investment in the region. She relishes the prospect of being at the eye of this political hurricane. "It's the place you want to be," says Hunter, 41, who is pushing >

PHOTO: CHRIS THOMAIDIS SPRING 2013 53

The Kite Runner

Tarik Kadri gives hope to orphans in India



TARIK KADRI (MSW 2012) had been studying yoga in India for a month in 2008, but he couldn't calm his mind. He kept picturing the faces of the orphans he had seen in Bihar, in northeast India. The children, their feet bare and hair uncombed, didn't have clean water, fresh produce or medical necessities. "It was the first time I felt compassion in a physical way," he recalls.

Kadri, 33, was raised in a low-income, single-parent household in London, Ontario. "When I was a kid, there were people helping me at the food bank and the community centre," says Kadri, who is a military social worker. "I always said, 'When I grow up I'm going to beat this poverty." It was that sense of hope that he couldn't find within the walls of those orphanages.

When he came home to Canada, Kadri founded the Paper Kite Children's Foundation in 2009; the first branch was in Vancouver and others soon opened in Ottawa and Toronto. Paper Kite's volunteers buy fruits and vegetables in Bihar to stimulate the local economy, and reduce water-borne diseases by educating caregivers about clean hygiene and working to improve existing water systems. They also provide school supplies, bedding and essential medical items. More than \$22,000 in supplies have been purchased in the last two years. They're still looking for help, through donations, volunteers and corporate sponsorships. Paper Kite's work is particularly important in a region of India that has a 64 per cent literacy rate, and where more than half of all children are malnourished.

Kadri goes back to Bihar every year to check on the progress made and to purchase supplies there, instead of sending money. With Paper Kite's help, two orphanages have expanded to accommodate more children in safer, cleaner conditions. "Our hope is that some of these kids will go on to college or university," Kadri says. "We just want to provide opportunities that wouldn't be there if we weren't there."

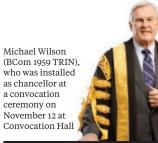
- SARAH TRELEAVEN

OVERHEARD



Why is diversity so important? It is important in the same way a library is important – we can't learn everything from one book.





•



commuters, civil society groups and policy-makers to participate in a broad dialogue about the issue.

There was no shortage of dialogue around the dining-room table in the Hunter household – she has three brothers – when she was growing up. Mealtimes featured lots of talking, laughing and, as she admits with a broad grin, a fair amount of noise. Indeed, Hunter loved to be in the thick of things, and was involved in student government at UTSC, where she gained experience in advocacy by promoting cultural awareness events to counter xenophobia.

After serving in management positions at Bell and Goodwill, Hunter completed an executive MBA at Rotman. She then did a short stint as chief administrative officer for Toronto Community Housing before stepping into the top

job at CivicAction. Some insiders have suggested she run for public office, but she says she's had no serious backers.

While at Goodwill, she attended a presentation by David Pecaut, who had launched CivicAction (then known as Toronto City Summit Alliance). She was struck not only by his arguments, but also his determination to promote collaborative approaches in his advocacy. "He always made you feel included."

Like Pecaut (who died in 2009), Hunter sees her role as that of a convener who will help forge some kind of consensus among the many disparate groups that influence policy in the GTA. But, she adds, the transportation issues "won't be solved 'over there.' Citizens have to be part of the discussion. That's how change occurs." – JOHN LORINC



Edwin Boyd confessed to director Nathan Morlando that he was responsible for more than 30 bank heists



Cry the Beloved Country

A network of Syrian expats is bringing youth abroad to study in safety

SHE SENDS ME A PHOTO of wreckage: a building bombed to nearly nothing, just some swaying frames of former walls, pages of books floating around, people searching desperately through the rubble. "Today there was an airstrike on the University of Aleppo," Leen Al Zaibak (BA 2006 TRIN) writes in an email. "Seventy-seven have been killed with the count rising still. To attend lectures and exams like the rest of us do is equal to risking your life in Syria, my beautiful Syria."

A few months after the government quashed the first protests in the spring of 2011, and the unrest began, Al Zaibak and nine other expats started Jusoor to find ways that the 20 million ethnic Syrians living abroad might help the 20 million Syrians there. "Jusoor means 'bridges' and we want to set up bridges. There are some experienced organizations concentrating on the crucial immediate needs of the citizens, providing humanitarian aid," says Al Zaibak, who came to Canada with her Syrian family from Saudi Arabia when she was four. "We wanted to look to both the short term and long term, and decided to start by paying for some Syrians to begin or continue studying abroad, out of harm's way."

The fledgling organization has raised more than \$600,000 to help about 80 students from Syria start or continue studies abroad – at least five of them would otherwise have been enrolled at the University of Aleppo. Some of Jusoor's 4,000 members around the world have helped 300 Syrian students navigate the process of applying to universities. (The Toronto branch, led by Al Zaibak – a policy adviser to the Minister of Children and Youth Services at Queen's Park – is its most active; its 15 members, five of them U of T students, meet monthly.) And it has partnered with other organizations, such as the Institute of International Education, to find emergency funds for Syrians studying abroad whose families suddenly were unable to foot their tuition bills.

After attending U of T and graduate school in England, Al Zaibak worked for two years in Damascus, on a project supported by the World Bank to help kids who'd dropped out of high school get into vocational schools. "I realized in general the textbooks they were sometimes using were 40 years out of date. You're a pharmacy student and you're studying what was current in the 1970s?" she says. "When the crisis ends, that's something we want to work on – the education in Syria, as well as helping students to get out. Reopening the closed universities and high schools. Brain drain is not what we're about, but saving brains that will help rebuild after this is over." - ALEC SCOTT

Canada's Most Wanted



In the movie Edwin Boyd: Citizen Gangster, Toronto bank robber Boyd has a flare for the theatrical. "Welcome to the show," he yells as he flirts with the tellers and his gang fills pillowcases with cash.

Fascinated by the dashing bad boy who robbed at least 11 banks between 1949 and '52, Nathan Morlando (BA 1992 VIC) started writing a screenplay about him in 1995. Recently, he directed the biopic, starring Scott Speedman, which won Best Canadian First Feature at the 2011 Toronto International Film Festival. Morlando's wife, Allison Black (BA 1998 NEW), was the film's producer.

After serving 15 years in prison, Boyd had been paroled on the condition that he leave Ontario and live under a pseudonym. Morlando was able to track him down, and, from 1995 until Boyd's death in 2002, the filmmaker spent hundreds of hours on the phone with him. "We became good friends," says Morlando. "I really liked him."

The film, now on DVD, is not a typical cops and robbers movie. "It's a tragic love story," he says. The movie – which chronicles events beginning with Boyd's return from the Second World War through to his release from prison – uses a pastel palette to reveal how tender the gangster was with his children and how deeply he was in love with his wife. Eventually, Boyd's criminal lifestyle cost him his family.

When Morlando visited Boyd at his home on Vancouver Island, he realized his sadness hadn't come through on the phone. "When I met Edwin I could see true regret in his eyes. He had lost everything." – SUSAN PEDWELL

PHOTO: TOP, HUSSAM KHIAMI; BOTTOM, BRYCE DUFFY SPRING 2013 55



Tanya and Adam may never have met in today's world of online video streaming. Blockbuster Canada was ordered to shut down the last of its stores in 2011, and only 500 stores remain in the U.S.

THE TWO OF US

Tanya Koivusalo and Adam Nayman

For Tanya Koivusalo (BA 2006 VIC) and Adam Nayman (BA 2005 UC, MA 2009), it was a "blockbuster" beginning for a slow and steady romance.



TANYA (BA 2006 VIC): We met 10 years ago, the summer before I was about to start at U of T, at the Blockbuster store that Adam worked at. I was there to buy Doritos with a few girlfriends, and Adam and I started talking about Stanley Kubrick. It turned out he was going into his third year of Cinema Studies – the same film program I was about to enter. I worked at a competing independent video store down the street and I later got his number from our database – which is probably illegal. We went out for coffee and had a few movie dates. I found Adam to be thoughtful and generous, as well as a great listener. After graduation, we both went on to film-related careers. Adam is a film critic and writer,

and I've worked as a publicist for the Toronto International Film Festival and the National Film Board. We got married two years ago, in the former Toronto movie theatre (the Eglinton Grand) we both used to frequent as children. The marquee read "It Happened One Night – Tanya & Adam." Seemed like a perfect location.

ADAM (BA 2005 UC, MA 2009): It's very fortunate that I was covering someone else's shift that day at Blockbuster. Around Christmas that year, I was putting together a year-end list of the best films in a campus café and Tanya went through each one with me. I remember thinking that if she has the patience to sit through this, then that probably bodes well for the future. From the beginning, she was so friendly and smart, and got along with all of my friends. We met young, but we've always given each other a lot of space and pursued different things: for example, Tanya studied Italian Culture in Siena, Italy, during one of our first summers together and I've travelled a lot for film festivals.

When I went back to do my MA, it made me feel more happily adult, and I proposed to Tanya within 48 hours of turning in my final paper. We're now talking about buying a house and having a family. We're not old-fashioned but the very conventional progression of meeting someone, getting married and starting a life together just seemed right for both of us.



UC's Bright Lights

University College celebrated 100 of its distinguished graduates at the first annual UC Alumni of Influence Awards in November.

Honourees included some of Canada's brightest lights in education, science, business, law and the arts, including Anne Golden (BA 1962 UC), a proponent of social justice and former CEO of the United Way of Greater Toronto; Rosalie Abella (BA 1967 UC), Supreme Court Justice and one of the nation's foremost experts on human rights law; and artist Charles Pachter (BA 1964 UC), whose signature representations of the Canadian flag and the Queen with moose have become popicons of Canadian art.

Nearly 400 guests, including 58 of the award winners, descended upon the restored art-deco theatre Eglinton Grand in Toronto for the event. Among the highlights was the Fanfare of Illumination, a classical music piece composed by U of T student Massimo Guida and performed by Faculty of Music members in honour of UC students.

The awards banquet marks the start of a new UC tradition; 10 alumni will be honoured each year. Read about all the award winners at uc.utoronto.ca/100-alumni-influence.

- YVONNE PALKOWSKI



FIRST PERSON

An Education

In 1940, Joyce Taylor graduated in physiotherapy – and soon set off to war

ALMOST 75 YEARS AGO, I was a young prairie girl heading off to the big city to attend the venerable University of Toronto.

When I graduated from high school in Regina in 1938, I asked my parents if I could train to become a doctor, but my father said no. It was the Depression years and too expensive. A neighbour knew that I was anxious to pursue my education and said that she heard U of T was starting a new two-year course in physiotherapy. My parents agreed to let me take this program, so within a few weeks I was on the train to Toronto.

My two years at U of T were very exciting and the next best thing to training to become a doctor. I had to learn anatomy and physiology, medical and surgical conditions, physics and psychology, and, of course, massage and remedial gymnastics. Just like the medical students, we fledgling physiotherapists had to observe procedures such as open-heart surgery and autopsies – which were more than some could handle. Suffice to say that I had a stronger stomach than others!

I graduated in June 1940, and worked at the Regina General Hospital in its first physiotherapy department. On weekends, my friends and I used to walk around the provincial legislative building where we met many young men who were in early training for the Royal Canadian Air Force.

We had to observe procedures such as open-heart surgery – which were more than some could handle By 1942, during the Second World War, I felt I was old enough to join the army – much to my parents' dismay. At the age of 22, I enlisted with the Royal Canadian Army Medical Corps, which needed trained physios. I went to the training facility Camp Borden in February 1943 where I was happy to

meet up with two of my physio friends from Regina. We were now members of the corps, and were given our first uniforms.

We were posted overseas to England, travelling across the Atlantic in May 1943 – by ship, of course. Eventually I was sent to Marston Green in the West Midlands. It was a busy time with many injured Allied soldiers to treat. Whenever I heard a squadron of planes fly overhead, I would leave the patient I was treating for a minute or two and watch the planes, wondering whether any of them held our friends from Regina. Rather than feeling afraid, I thought about how exciting it was and how proud I felt serving my country.

Occasionally when we had a leave, we would catch the train to London to meet our RCAF friends. We would go out to dinner or a movie. During this time, I fell in love with Doug Watterson. Doug, an RCAF pilot, was handsome and smart and had a wonderful sense of humour. We got married in April 1944; we were both given a short leave for a honeymoon, which we spent in lovely Stratford upon Avon. A week after our honeymoon, Doug was flying a night mission and was shot down over Holland. He is buried in a small village there; the two survivors of the crash said that Doug should have been awarded the Victoria Cross for his efforts to save the crew. As it turned out, I had gotten pregnant on our brief honeymoon. I was sent home that summer and gave birth to our son, David Douglas, in January 1945.

When my father died shortly after the war, I moved to Calgary with my mother and infant son to take a position at the Colonel Belcher Hospital. I then started a private practice with a partner. It was a big step to take on the enormous responsibilities of a business, particularly as a young woman, mother and widow; however, I am proud to say that ours was, I understand, one of the first private physiotherapy practices in Alberta. In time, I became sole owner.

In the mid-1950s I remarried to Michael Taylor, a widower with a son, Paul. We had two more children, Elizabeth and John. Yet I continued to run my physiotherapy practice until we moved to England in 1971. When we returned to Canada a few years later, I practised at a clinic in Coquitlam, B.C.

At the age of 92, I still feel grateful that my Regina neighbour told me about the U of T physiotherapy program.

Joyce Taylor (née Traub) earned a Diploma in Physical Therapy in 1940. View more images of Taylor in U of T Magazine's iPad edition.

PHOTO: COURTESY OF JOYCE TAYLOR SPRING 2013 57

60 SECONDS WITH

Lorne Bozinoff

Eight Degrees of Education



With two bachelor's degrees, five master's and one doctorate in subjects ranging from commerce and industrial relations to psychology and statistics, **Lorne Bozinoff** is a very well educated man. Bozinoff (BCom 1976 VIC, MBA 1977, PhD 1980, MEd 1982, MA 1983, MSc 1985, MIR 1989, BA 1993 VIC) holds the record for the highest number of degrees earned at U of T. He's currently the president and CEO of Forum Research, a market research company he founded. **Lisa Bryn Rundle** caught up with him in the hopes of learning a thing or two.

Three degrees are generally the max. Why go for the fourth? It's really a matter of where my interests took me. My PhD is actually one of my earlier degrees. (I did five after that.) And the later ones are based on things that I was interested in while I was conducting my doctoral research on how consumers perceive

products. It's like pulling a thread. You're looking at one area of interest and that leads to another.

Your email signature must be very long. No, no. I don't list my degrees. Too long and a little ostentatious.

It's an enormous amount of work. Does it get any easier after the fifth or sixth degree? Definitely.

You run a market research firm. How do all your degrees feed into your work? It's a big competitive advantage for us. If you look at those degrees you can see some obvious connections with the commerce, marketing and business administration. With the psychology, there's a big interest these days in cognition and memory as it pertains to how people conceptualize commercial brands. That's directly relevant to what I was studying 20 years ago.

As you mentioned, you had a PhD early on. Is it a challenge to be a student when you're already an expert? No, not really. I learned a long time ago that you don't learn very much when you're doing the talking. I never talked about my academic background. I really wanted to hear what other people had to say – the professors and other people in the class.

Some argue that the financial and time investment in graduate education isn't always worth it in a tough economy. What do you think? I can only speak to my own experience but in my case – despite the heavy investment – it's been well worth it. It lets my company do more than just redo someone else's research. We can look at a problem with a depth of knowledge. I use all of it, not just the business degrees, in my day-to-day experience.

You haven't completed a degree in a while. Are you getting itchy? Sneaking peeks at course calendars? No! Once you get a little older and you have a family you become extremely busy. But who knows, once the kids are out...

So you wouldn't say for sure that you're done. I never say never about anything, especially something like this.

And just to confirm my imagined version of you – have you ever lost at Trivial Pursuit? Because in my mind you always win. I'm pretty good at it.

Milestones



Composer **Mychael Danna** (BMus 1986) has called *Life of Pi* "a film of a lifetime" – and in February, he won an Academy Award for best original score for his work on it. He was also nominated for best original song for "Pi's Lullaby." In January, Danna received a Golden Globe Award for best original score.

Thirteen alumni have been named to the Order of Canada, one of the country's highest civilian honours. Named officers are Michael Fullan (BA 1963 STM, MA 1966, PhD 1969) who promotes education reform, Veronica Lacey (BA 1967 VIC, MA 1971, MEd 1981), a teacher who advocates for quality public education and Roderick Macdonald (LLM 1975), a legal scholar who contributes to the advancement of law and policy. Named members are William Aide (LICD 1959), a professor emeritus in the Faculty of Music, pianist and writer, John Cassaday (MBA 1981), a volunteer and business leader, Jane Coop (ARTD 1971, BMus 1972), a pianist, performer and educator, Beverley Diamond (BMus 1970, MA 1971, PhD 1979), an ethnomusicologist, Murray Enkin (MD 1947) who has contributed to maternal care and midwifery, Albert Greer (BA 1960 UC), a conductor, composer and teacher, Harold Kalant (BSc Med 1948, MD 1945, PhD 1955), a pioneering researcher on substance abuse, Jocelyn Palm (BSc 1964 UC, BEd 1977), who has contributed to water safety, youth development and women's health, Linda Silver Dranoff (BA 1961 UC), a lawyer, writer and activist, and Beverley Wybrow (MSW 1975) who has served as president of the Canadian Women's Foundation.









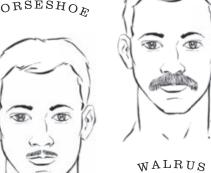




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Time Capsule



March 29, 1973

The Lady Godiva Memorial Band serenades students on Founder's Day With trumpets and trombones blaring, the Lady Godiva Memorial Band led the hijinks on Founder's Day – the 100th anniversary of the School of Practical Science, later named the Faculty of Applied Science & Engineering. The engineering students played "The Skule Song" as their classmates lifted a Volkswagen up the steps of University College and deposited it squarely in the main hallway. They provided a drum roll when the judges took to the stage to announce that engineering professor F. A. De Lory had won the faculty beard-growing contest. And while fellow students imbibed beer (10¢ a glass), the clarinet player squealed through "Little Brown Jug."

Named after Lady Godiva, the patron saint of engineering, the band has been entertaining on campus since 1950. Its history is chronicled with stories of showing up unannounced – at everywhere from a chemistry class to

Varsity football games. No musical ability is required to join the band, which adds to the group's unique sound.

On this anniversary of Founder's Day, the band celebrated engineers – but a century earlier, some people wanted to keep the field of study out of U of T. In a 1973 article looking back at the faculty's origins, the U of T Bulletin reported that "the advent of an engineering school was not welcomed by the more traditional academics and the Senate is said to have refused to give the first professor a classroom to lecture in."

The engineering faculty, now celebrating its 140th anniversary, ranks first among such schools in Canada and boasts alumni who invented the plug-in radio, engineered the alkaline battery and co-invented the Imax projection system. And back on campus, the Lady Godiva Memorial Band plays on. - SUSAN PEDWELL



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Friday, May 31

1 p.m.

Misconceptions About the Big Bang Prof. Michael Reid

Ontario's Seniors Strategy: Where We Stand, Where We Need to Go Dr. Samir Sinha

Libraries in the Digital AgeU of T chief librarian
Larry Alford

2 p.m.

Nature, Anyone? Toward a Compassionate Ecology Prof. Stephen Scharper

The First 2,000 Days
of Life: Optimal
Development as a
Foundation for Lifelong
Health, Learning and
Social Function
Dr. Stephen Lye

Celebrating an Icon: The Lash Miller Building, 50 Years of Place, People and Chemistry Profs. John Polanyi and Scott Mabury Saturday, June 1

10 a.m.

Engineering Today
Profs. Jonathan Rose
and David Sinton,
and Christopher Wilmer

Food, Culture and Identity in Italy Sara Maida-Nicol

Global Poverty and Social InnovationProf. Joseph Wong

2 p.m

Responsibility for Children's Health Prof. Amy Mullin

The Breaking Down of Categories and Social Barriers in 21st Century Classical Music Prof. Christos Hatzis