



Global Ideas Institute

Health Innovations in the Global South

APRIL 17, 2012 | ASIAN INSTITUTE AT THE MUNK SCHOOL
OF GLOBAL AFFAIRS

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UNIVERSITY OF
TORONTO

ASIAN INSTITUTE



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Global Ideas Institute

We live in one of the world's most diverse cities, and we are experiencing a time of dramatic change. We see a more deeply interconnected world, fuelled by technology, with momentum enough to change corporations, media, and governments in every country. At the same time we see deep divisions politically and economically, and an ailing planet. The imperatives for a renewed sense of global citizenship and global engagement are clear and unequivocal.

We know that our best students in their final years of high school are not being offered enough opportunities in the conventional curriculum to develop those hard and soft skills that they will need to meet the challenges already present in their world. They suffer from this lack of stimulation, and as a country we miss the opportunity to benefit from their freshness, their technological expertise, their passion, and their global-mindedness. Students are our future leaders and we would do well by ensuring that they engage their world in intellectually imaginative ways.

The University of Toronto Schools and the Asian Institute at the Munk School have jointly planned a symposium for motivated, self-selected high school students to take place in April 2012. The symposium will be the culmination of over six months of organized group study, research, and continual dialogue. Toronto students from twelve schools, in grades eleven and twelve, are studying and discussing the challenges and opportunities of innovating and scaling up health technologies in the Global South. They have benefited from a series of lectures and interactive seminars with the world's leading scholars of health and development.

For the 2012 Global Ideas Institute, students are focusing on the Bill and Melinda Gates Foundation's challenge to "reinvent the toilet." They are considering not only the technical dimensions of a toilet that is off the electricity and water grids and affordable for the world's poor, but also the social, political, and economic factors for a sustainable sanitation program. Working in teams and led by mentors from the Asian Institute and Munk School's graduate programs, the students work in a distributed learning model to share readings

and online and face-to-face discussions. In April, their teams will identify and pitch their preferred approach to reinventing the toilet. The symposium will take place at the Munk School and will feature a panel of experts in the health and development field.

The work the students do is fully integrated across the many fields and disciplines involved in such a complex problem. They are reading and grappling with everything from academic research papers to news clippings, from sophisticated demographic materials to the personal stories of those directly working in the field. They are struggling with real-world problems through multidisciplinary lenses. They are learning about advocacy, empathy, and other-regarding global citizenship. They, along with their U of T mentors, receive no credit for their work, other than the gratification of studying a pressing problem that has not yet been resolved, together generating solutions that can potentially better the lives of hundreds of millions in the world's "bottom billion."

U of T's Peter Singer, the CEO of Grand Challenges Canada, best summed up the aims of the Global Ideas Institute when he conveyed the following to students and their mentors: "So I just want to end by saying how humbled I am to be with you, because you're going to solve this problem. And what you're learning, reflecting on, and doing in your project here is going to help solve the problem. You're focused on something extraordinarily important. Not just to provide better care in the developed world and innovate there, but also to solve some of the problems your neighbours are facing ... Good on you and good luck; what you're doing is extraordinarily important and is itself innovative."



Welcome to the Global Ideas Institute

MUNK
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UNIVERSITY OF
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ASIAN INSTITUTE

**ASIAN INSTITUTE
AT THE UNIVERSITY
OF TORONTO**

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The Global Ideas Institute is at the cutting-edge of research, teaching, and citizen engagement. The GII exposes young people – future global leaders – to prevailing challenges in global affairs, and compels them to discover ways to address these pressing challenges. Over the past year, high school students in the Greater Toronto Area have participated in a world class seminar series featuring leading scholars at the University of Toronto, engaged in workshops with U of T graduate student mentors; and worked together in research teams to develop solutions to pressing problems.

This year’s challenge is to reinvent the toilet. As outlined by the Bill and Melinda Gates Foundation, GII students have been asked to contemplate and develop a toilet which is “off the grid,” energy producing, inexpensive, and user-friendly. The challenge is not an easy one, and the stakes are extremely high. We know that sanitation is one of the basic needs provisions that can drastically improve the life-chances of tens of millions of people in the Global South. The work of the GII is relevant and impactful.

One of the key aims of the GII experience is to encourage young leaders to take risks. The regular curriculum – and indeed the education system more generally, including the university experience – rewards success, but discourages riskier endeavours that are more prone to fail but have the potential to have a greater impact. Simply put, we have yet to figure out a way to reward intelligent risk-taking. And it seems to me that intelligent risk-taking is the fount of creativity and the basis for real leadership.

To be sure, the GII, which was launched in 2011, was a risky endeavour undertaken by the Asian Institute, University of Toronto Schools, the Munk School of Global Affairs, and the various partner secondary schools in the GTA. We had no model of success. There was no template from which we could borrow. And resources were limited. However, there was a good idea, plenty of enthusiasm, and a sense of urgency to make this project work. And it has. And I am pleased to know that there are plans to eventually scale up the GII model to other parts of Canada, and that already partners in Asia are interested in plugging in to the University of Toronto’s GII.

Congratulations to everyone involved in the 2012 Global Ideas Institute. And most important, congratulations to the many students who have participated in the GII, for your voice is critical in shaping a very dynamic global dialogue.

Joseph Wong
Professor and Canada Research Chair
Director, Asian Institute

Message from the University of Toronto Schools



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The University of Toronto Schools, as secondary school partner with the Asian Institute of the Munk School of Global Affairs, has acted as a hub connecting the Global Ideas Institute to schools throughout the Greater Toronto Area. This year approximately sixty students from twelve schools, both public and independent, enjoyed the unique opportunity to tackle the real-world research problem labeled by the Gates Foundation as “reinventing the toilet for the developing world.” Supported by their teachers and university mentors, the students worked together on both school-based and cross-school teams to tackle the intractable issues involved in developing an effective sanitation system that could be adopted throughout the Global South. International experts from across the university community presented their insights on the challenge and engaged with the students. Exposure through readings and lectures to both discipline-based knowledge and interdisciplinary insights enlivened their discussions.

Teacher candidates from OISE and students from the Asian Institute and the Munk School jointly guided the high school students as they formulated questions, conducted further research, and gradually refined their own solutions. Ellie Avishai from the Rotman School of Management introduced the students to the Integrative Thinking approach. Students were encouraged to question their assumptions and to relish the complexity of the challenge they were confronting. They were introduced to strategies for moving beyond simplistic models.

Students were excited by the opportunity offered through the Global Ideas Institute to work on the same problem that university scholars are currently tackling, and were encouraged to see their proposals truly valued and indeed welcomed by these scholars as important contributions to the research and problem-solving process.

Rosemary Evans
Principal
University of Toronto Schools



PRIME MINISTER . PREMIER MINISTRE

I am delighted to extend my warmest greetings to everyone participating in the Global Ideas Institute symposium, hosted by the University of Toronto's Asian Institute at the Munk School of Global Affairs and the University of Toronto Schools.

The issue you are focussing on this year — reinventing the toilet — is a critical one for improved global public health. For the past year, a group of Toronto-area high school students has had an opportunity to interact with mentors at the University of Toronto to develop solutions for providing simple and effective waterless sanitary facilities at low cost in the developing world. Better sanitation reduces disease and saves lives — especially children's — improves overall health and enhances human dignity. Throughout this project, you have been challenged to think creatively to solve a basic problem in imaginative, yet pragmatic ways. I am sure that you have found your involvement in this pursuit both stimulating and rewarding.

I would also like to commend the organizers of this symposium for sharing their interest in resolving global challenges, while also taking the time to mentor this group of motivated and promising young students.

On behalf of the Government of Canada, I wish everyone a most productive session of deliberations.

The Rt. Hon. Stephen Harper, P.C., M.P.



OTTAWA
2012

Minister of Health



Ministre de la Santé

Ottawa, Ontario K1A 0K9

As Minister of Health, I am pleased to welcome you to the 2012 Symposium of the Global Ideas Institute.

Health knows no borders. There will always be health problems for which we must find global solutions.

In the developing world, 2.6 billion people (40% of the world's population) do not have access to a toilet and, as a result, their drinking water is contaminated. About 1.2 million children, under the age of five, have died from diarrhea-related diseases. Poor sewage also causes other infections like schistosomiasis, trachoma, viral hepatitis and cholera.

In July 2011, the Bill and Melinda Gates Foundation put forward the *Reinventing the Toilet Challenge*, as a way to help battle these health problems. The Foundation offered \$3 million to eight international research teams, including a team from the Centre for Global Engineering, at the University of Toronto, to develop a new kind of toilet. It will not rely on water and a sewage system. It must cost less than 5 cents per day. And it should be able to transform human waste into fuel and fertilizer.

Today's symposium will focus on this *Challenge*. After months of collaboration and discussion, some of Toronto's brightest high-school students, along with University of Toronto mentors from different research backgrounds will share their plans with experts to see if there is a way to reinvent the toilet.

As you can imagine, solutions for this kind of a health problem will require innovative ideas that extend beyond the realm of science. Inventing a new toilet is only the beginning. Implementing it across the world will bring social and economic challenges.

I commend the youth who have participated in this symposium. As a new generation, you have the chance to help revolutionize sanitation, using science, technology and, above all, creativity.

I would like to thank both the Asian Institute at the Munk School of Global Affairs and the University of Toronto for hosting this symposium.

On behalf of the Government of Canada, best wishes for an exciting symposium!

A handwritten signature in black ink, appearing to read 'Leona Aglukkaq'.

Leona Aglukkaq
Minister of Health / Ministre de la Santé
Government of Canada / Gouvernement du Canada



加拿大國會參議院議員



THE SENATE OF CANADA

利德憲
安省多倫多市

The Honourable Vivienne Poy
Toronto, Ontario

April 17, 2012

On behalf of the Senate of Canada, I am delighted to welcome everyone to the Global Ideas Institute Symposium at the University of Toronto, jointly sponsored by the University of Toronto Schools, and the Asian Institute at the Munk School of Global Affairs.

This Symposium is the chance to share the results of the work you have done over the past six months to investigate the problem of reinventing the toilet for the developing world, one of the Grand Challenges identified by the Gates Foundation.

As students, you have prepared for today by listening to international experts provide insights into the challenges inherent in developing and successfully implementing a safe, clean and sustainable sanitation system which can be used in a variety of settings. You have read, researched, and engaged in discussions, both online and in person.

Today, your teams will pitch your approach to a panel of experts to address the sanitation needs of some of the world's most vulnerable populations. These presentations will be complemented by a poster session where you will engage in critical conversations with other students and our expert panel.

As Chancellor Emerita of the University of Toronto, I congratulate the organizers, lecturers, experts, and of course, the 60 students, from 12 schools, involved in this innovative educational pilot project. What a wonderful opportunity for hands on learning. I hope this collaborative project will be the catalyst for further learning.

Yours sincerely,

Vivienne Poy





Premier of Ontario - Premier ministre de l'Ontario

April 17, 2012

A PERSONAL MESSAGE FROM THE PREMIER

On behalf of the Government of Ontario, I am delighted to extend warm greetings to everyone attending the Global Ideas Institute symposium, Health Innovations in the Global South.

After four months of research and analysis, participating students are gathered here today to present their solutions to a complex real-world global health and development problem. Mentors from the University of Toronto have devoted time and energy to guiding the students, helping them find innovative solutions to some of the complex challenges facing the world today.

I would like to commend organizers with the University of Toronto Schools and the Asian Institute at the University of Toronto's Munk School of Global Affairs for your hard work in ensuring the success of this event. I am confident that this project has helped students become more aware of their responsibilities as global citizens — and has given them knowledge and experience that will prove invaluable to their education.

Please accept my sincere best wishes for an informative and productive symposium.

A handwritten signature in black ink that reads "Dalton McGuinty".

Dalton McGuinty
Premier



Mayor Rob Ford

A Message from the Mayor

It gives me great pleasure to welcome everyone to the GII Project forum hosted by the Asian Institute and the Munk School of Global Affairs in cooperation with the University of Toronto Schools (UTS).

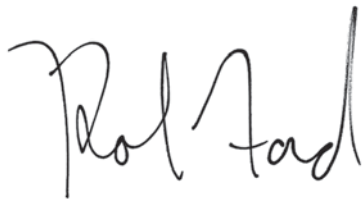
The Asian Institute is the largest Asia-focused research and teaching centre in the country and is committed to promoting awareness of Asian societies and showcasing academically-driven events that appeal to students as well as the community.

Projects like Global Ideas Institute is integral to raising awareness of the challenges faced in improving and finding solutions to public health in the developing world. It is a form that would facilitate the exchange of creative ideas between students, facilitators and other attendees.

Students are given a unique opportunity to contribute solutions to public health development and sustainability through the lens of engineering, politics, economics, public health, chemistry and global affairs platforms.

On behalf of Toronto City Council, I thank everyone involved in organizing this event and extend my best wishes for an informative, enjoyable and successful conference.

Yours truly,



Mayor Rob Ford
City of Toronto



BILL & MELINDA GATES *foundation*

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March 16, 2012

Dear Global Ideas Institute Participants:

In July 2011 at the AfricaSan3 in Kigali, Rwanda we officially launched the “Reinvent the Toilet” Initiative. Our inaugural video about toilets posted on YouTube received over 160,000 views, positioning it as the most viewed video for the foundation. The popular interest and excitement produced by our launch showed us that we could get a general audience excited about toilets.

A toilet is something that many high school students don't think about having problems having access to in Toronto or any other developed area; however 2.6 billion people in the world don't have access to improved sanitation. In more than two centuries since Alexander Cummings patented the S-bend – the revolutionary water seal that allowed the outhouse to be upgraded to an indoor water closet – we have learned a few things in science and engineering that can inspire smart innovators among us to come up with the “cellphone of sanitation.” Not a toilet that is only good enough for poor people, but an aspirational product that leapfrogs flush toilets. A product that all of us would want to use.

Our strategy at the foundation has three initiatives that include Science and Technology, Delivery at Scale, and Policy and Advocacy. At this time our Science and Technology initiative is investing in a large number of small, one-year projects across a wide range of technical options. Our Delivery at Scale team is ensuring that we are focusing on a sustainable and replicable solution that can reach millions of people. This also includes at the foundation making sure that our other teams that are working on Cholera and Rotavirus are involved in large scale solutions. Effective Policy and Advocacy has to also be at the heart of all the work we do, because at the foundation we know that we cannot achieve our long-term goals without the help of civil society, donor agencies, and government.

All potty humor aside, at the foundation we believe that all lives no matter where you live deserve the chance to live a healthy and productive life. We want to ensure that all people have access to sanitation, and that is where we come to reinventing the toilet. A toilet that is off-the-grid, not connected to sewer lines, water lines, or electricity lines, and that costs less than \$0.05 per person from initial investment, ongoing maintenance, and all other costs associated with use.

It is very exciting to see young people take on global issues such as these and wish you the best with your event.

Sincerely,



Frank Rijsberman
Director, Water, Sanitation and Hygiene



Symposium Schedule

8:00 AM – 9:00 AM

**Registration and
Continental Breakfast**

**Global Ideas Institute Poster
Exhibition (set up in cloisters)**

9:00 AM – 9:25 AM

Welcome

The Honourable David Peterson
(Chancellor, University of Toronto)

Meric Gertler
(Dean, Faculty of Arts and Science)

Janice Gross Stein
(Belzberg Professor of Conflict
Management and Negotiation;
Director, Munk School of Global
Affairs)

Opening Remarks

Joseph Wong
(Canada Research Chair,
Democratization, Health, and
Development; Director, Asian
Institute)

9:25 AM – 10:40 AM

**Student Approaches to the
Reinventing the Toilet Challenge**

Pre-prototype proposal pitches
Round 1

10:40 AM – 10:55 AM

Break

10:55 AM – 12:10 PM

**Student Approaches to the
Reinventing the Toilet Challenge**

Pre-prototype proposal pitches
Round 2

12:10 PM – 12:45 PM

Lunch

12:45 PM – 2:00 PM

Pitch Exhibition (in cloisters)

Informal presentations by students

2:00 PM – 3:00 PM

**Experts Weigh In
on Student Proposals**

Yu-Ling Cheng
(Professor of Chemical Engineering
and Applied Chemistry)

William Mitchell
(Visiting Professor of Strategic
Management and Anthony S. Fell
Chair in New Technologies and
Commercialization, Rotman
School of Management)

Joseph Wong
(Professor of Political Science)

3:00 PM – 3:20 PM

Keynote Address

Janice Gross Stein
(Professor of Political Science)

3:20 PM – 3:50 PM

Closing Remarks

Rosemary Evans
(Principal, University of Toronto
Schools)

Certificate Ceremony

Led by Joseph Wong and
Rosemary Evans

3:50 PM – 5:00 PM

Reception

SYMPOSIUM LOCATION

Vivian and David Campbell Conference Facility, Munk School of Global Affairs, University of Toronto, 1 Devonshire Place

Speakers and Discussants

YU-LING CHENG is Professor of Chemical Engineering and Applied Chemistry and Director of the Centre for Global Engineering at the University of Toronto. She is working on enlarging the impact of technologies on the developing world through her work as a researcher and engineering educator. Her research team received a grant from the Bill and Melinda Gates Foundation earlier this year. They will focus on reinventing the toilet in order to provide sustainable sanitation to the Global South. This grant has brought considerable press coverage and excitement to the University of Toronto.

ROSEMARY EVANS is Principal of University of Toronto Schools. She received her BA in history from the University of Western Ontario and her MA, BEd, and MBA from the University of Toronto. She served as a teacher, department head, and subject coordinator in the Peel Board of Education, and later as a vice principal in the former East York Board of Education. During her time as an instructor in the Initial Teacher Education Program at OISE, Rosemary was the recipient of a Teaching Excellence Award. She later accepted the role of Academic Head at Branksome Hall, where she oversaw the implementation of the International Baccalaureate Programs from junior kindergarten to grade twelve. Rosemary is the author of a number of history textbooks, and has presented locally and internationally on such topics as assessment and evaluation, critical thinking and inquiry based learning, and global education.

MERIC S. GERTLER is Professor of Geography and Planning and Goldring Chair in Canadian Studies at the University of Toronto. He is co-founder of a large research program at U of T's Munk School of Global Affairs, investigating the role of city-regions as sites of innovation and creativity in the global economy. His work engages in comparative analysis of North American and European cities to understand how local social and cultural dynamics create the foundations for economic success and prosperity. He is a frequent advisor to local, regional, and national governments in Canada, the United States, and Europe, as well as to international agencies such as the Organisation for Economic Cooperation and Development (Paris) and the European Union. He has authored or edited six books, including *Manufacturing Culture: The Institutional Geography of Industrial Practice* and *The Oxford Handbook of Economic Geography* (with Gordon Clark and Maryann Feldman). He has held visiting appointments at Oxford, University College London, UCLA, and the University of Oslo. He is a Fellow of the Royal Society of Canada, and received the 2007 Award for Scholarly Distinction in Geography from the Canadian Association of Geographers. He currently serves as Dean of the Faculty of Arts and Science, the largest faculty at the University of Toronto.

WILLIAM MITCHELL holds the Anthony S. Fell Chair in New Technologies and Commercialization at the University of Toronto, where he currently serves as a Visiting Professor of Strategic Management in the Rotman School of Management. Will Mitchell is the J. Rex Fuqua Professor of International Management at Duke University's Fuqua School of Business. Will is a faculty associate of Duke's Health Sector Management Program, Global Health Initiative, and Center for Entrepreneurship and Innovation, as well as a faculty associate at Rotman's Center for Health Sector Strategy. He studies business dynamics in developed and emerging markets, investigating how businesses change as their competitive environments change and, in turn, how the business changes contribute to ongoing corporate and social performance. He teaches courses in business dynamics, emerging market strategy, corporate strategy, health sector management, entrepreneurship, and pharmaceutical strategy. Will is a co-editor of the *Strategic Management Journal* and a board member of Neuland Laboratories, Ltd. (Hyderabad).



Speakers and Discussants (continued)

THE HONOURABLE DAVID R. PETERSON, P.C., Q.C., O. Ont., C. St. J., L. d'H., D.U., L.L.D., is Chairman of the Toronto law firm Cassels Brock & Blackwell LLP. In 1975, he was elected as a Member of the Ontario Legislature, and became the leader of the Ontario Liberal Party in 1982. He served as Premier of the Province between 1985 and 1990. Mr. Peterson has been active in a large number of charitable, educational, and environmental organizations and is currently the Chancellor of the University of Toronto and Director of St. Michael's Hospital. He was the Chairman of the successful Toronto Bid for the 2015 Pan Am Games. He is a director of a number of public and private companies in Canada including Rogers Communications Inc., Franco-Nevada Corporation, and Shoppers Drug Mart, and was the Founding Chairman of the Toronto Raptors Basketball Club Inc. and Chapters Inc. He has been named to the Order of Ontario and the Ordre de la Pléiade. The Government of France appointed him a Knight of the Order of the Legion of Honour of France and he was summoned by Her Majesty to the Privy Council in 1992. Mr. Peterson has received honorary doctorates from a number of universities.

JANICE GROSS STEIN is Belzberg Professor of Conflict Management and Negotiation in the Department of Political Science and Director of the Munk School of Global Affairs at the University of Toronto. She is a Fellow of the Royal Society of Canada and a member of the Order of Canada and the Order of Ontario. Her most recent publications include *Networks of Knowledge: Innovation in International Learning* (2000), *The Cult of Efficiency* (2001), and *Street Protests and Fantasy Parks* (2001). She was the Massey Lecturer in 2001 and a Trudeau Fellow. She was awarded the Molson Prize by the Canada Council for an outstanding contribution by a social scientist to public debate. She is an Honorary Foreign Member of the American Academy of Arts and Sciences. She has been awarded Honorary Doctorate of Laws by the University of Alberta, the University of Cape Breton, and McMaster University.

JOSEPH WONG is Canada Research Chair in Democratization, Health, and Development and Professor of Political Science at the University of Toronto, where he is also the Director of the Asian Institute, Munk School of Global Affairs. In addition to journal articles and chapter contributions, Professor Wong has published three books: *Betting on Biotech: Innovation and the Limits of Asia's Developmental State* (Cornell University Press, 2011); *Healthy Democracies: Welfare Politics in Taiwan and South Korea* (Cornell University Press, 2004); and *Political Transitions in Dominant Party Systems: Learning to Lose* (as co-editor, Routledge, 2008). His current research focuses on poverty, invisibility, and health welfare in the Global South. He has advised governments in Asia, Africa, Europe, and the Americas. Professor Wong has been a visiting scholar at Harvard University, the University of Oxford, Seoul National University, and the Institute for National Policy Research in Taiwan, and was recently named Senior Fellow at the Asia Pacific Foundation of Canada.





When I look at people of the Global North who go into the Global South, and think about launching new products and services, I talk about something I call the last mile problem. And what is the last mile problem? We tend to spend a lot of time, money, and effort developing new products and services, but we don't spend enough time, money and effort in getting people to use them.

— DR. DILIP SOMAN

University of Toronto Mentors

Mark Anderson

Mark Anderson is a student at the Ontario Institute of Studies in Education, University of Toronto. He holds an honours BA in philosophy and computer science and an interdisciplinary MA in global change. He is hoping to enter the Dynamics of Global Change doctoral program at the Munk School of Global Affairs in the fall. His current research interests concentrate on critical analysis of neoliberalism from a structuralist perspective. Mark has experience in computer programming, web design, writing, and filmmaking. His current film project focuses on the crisis of education in the Western world. Mark is also a global educator with teaching experience in Canada, France, Japan, and the Czech Republic. He is fluent in English, French, and Japanese.

Beverly Bradley

Bev Bradley is a second year PhD student in the Centre for Global Engineering (CGEN) whose home department is Chemical Engineering and Applied Chemistry. She holds an NSERC Canada Graduate Scholarship for doctoral studies. Before joining CGEN, Bev completed a BASC in Systems Design Engineering at the University of Waterloo (2006) and an MASC in Biomedical Engineering at Carleton University (2008). After her master's she worked for the UK Medical Research Council in The Gambia, West Africa, as a research assistant in the Biomedical Engineering department. Bev has worked in several other healthcare and research settings, including the Children's Hospital of Eastern Ontario, the Grand River Regional Cancer Centre, and the Ottawa Hospital Research Institute. She has also been a member of Engineers Without Borders (EWB) since 2003, for which she coordinated the Carleton chapter's School Outreach Program in 2007-2008. Bev was a Program Assistant for the Shad Valley program in July 2009 and enjoys volunteering for activities promoting women in engineering.

Nick Buffo

Nick Buffo is a teacher candidate in the Bachelor of Education program at the Ontario Institute of Studies in Education, University of Toronto. He previously studied English and cultural studies at the graduate level at McMaster University, where his research focused on apocalyptic discourse in the popular culture of climate change.

Hormuz Dadabhoy

Born and brought up in Bombay, India, Hormuz moved to Canada in 2008 for his final years of high school. His lifelong interest in radio plays led him to work as a radio actor for the BBC in 2006. Hormuz is a second-year undergraduate student at the University of Toronto, studying Asia-Pacific studies, environmental biology, and semiotic anthropology. Through his undergraduate studies, Hormuz hopes to both pursue his long-held passions and develop new interests as he seeks fresh ways to understand the rapidly changing world. It is Hormuz's fundamental belief that education can change the world by uniting people from different regions and cultures for peace and a sustainable future.





Kristen Dahl

Kristen Dahl is an intermediate/ senior teacher candidate at the Ontario Institute for Studies in Education, University of Toronto.

Andrew Do

Andrew Do holds an Honours BA in peace and conflict studies from the University of Toronto, where his academic interests revolved around investigating social mobilization, nationalism, and identity politics. He has been a mentor and research assistant with the Global Ideas Institute since October 2011. He has worked in the policy sphere as a student legislative attendant at Queen's Park and as a special assistant in community outreach and stakeholder relations in the office of a Member of Provincial Parliament. He hopes to one day broaden his academic interests through graduate studies in public policy. For now, though, he is enjoying his time as a mentor for the GII, which exposes him to provocative ideas while also allowing him to stay involved in the university community.

Supriya Joshi

Supriya Joshi is an undergraduate student at the University of Toronto working towards a double major in international relations and political science, with minors in Canadian studies and history. She has been working with the Ontario Ministry of the Environment as a junior policy analyst since May 2011. Through this position, Supriya has further developed her interest in the intersection of law and governance in a policymaking environment. She is also an executive member of the South Asian Development Council and hopes to pursue further studies in the politics of that region. Supriya is looking forward to attending law school and pursuing a policymaking career at the national and international levels.

Nessa Kenny

Nessa Kenny is a third-year peace and conflict studies student at the University of Toronto. She is greatly interested in global health and health policy, and hopes to pursue a graduate degree in the field. Her involvement in the Global Ideas Institute merged both her interest in health and her passion for working with youth.

Sara Lee

Sara Lee is currently in her final year in the peace and conflict studies specialist program at the University of Toronto. She is a strong proponent of interdisciplinary education, which she pursues in her study of food through the lenses of nutritional sciences, anthropology, geography, politics, and policy. Although her plans for next year are in the works, she is considering an MD/PhD combined degree in order to study the ways in which culture affects cognition and health and also contribute to the world through the practice of medicine.

University of Toronto Mentors (*continued*)

Mimi Liu

Mimi Liu is a second-year student pursuing a joint specialist in international relations and peace and conflict studies on a Loran scholarship. Mimi has worked as a public policy intern for the Mosaic Institute, a think-and-do tank which works with Canada's ethnocultural communities to promote peace and reduce conflict around the world. She has also been a legal intern in China for International Bridges to Justice, a non-profit that works to strengthen developing countries' criminal justice systems. She is the founder and director of Vivace, a youth-driven, community-based non-profit that seeks to provide holistic music education to empower under-privileged children and their communities. Currently, she is a research assistant for Professor Joseph Wong, exploring demand-side barriers to the adoption of health technologies in middle- and lower-income countries. She is very excited about being part of the Global Ideas Institute.

Erik MacKinnon

Erik MacKinnon is a recent graduate from the Master of Science program in the Department of Molecular Genetics at the University of Toronto, where he studied a novel type of antibiotics. He now attends the Ontario Institute for Studies in Education to gain his teaching credentials in biology and mathematics. His undergraduate background was in molecular biology and history at the University of Guelph. Erik has worked in the life sciences in molecular and clinical research, science outreach, tutoring, and at a birds of prey centre. He hopes to use his passion for science and the environment to help his current and future students become global-minded, critically literate citizens.

Robert Meynell

Robert is the author of *Canadian Idealism and the Philosophy of Freedom* (McGill-Queen's University Press, 2011), and is currently a teacher candidate at OISE, University of Toronto. His curriculum specialties are history and politics. Robert has a longstanding commitment to education, having taught political studies at the University of Ottawa, the University of Waterloo, and Trent University.

Danielle Pacey

Danielle Pacey is currently completing a Bachelor of Education at OISE, University of Toronto. Following a combined degree in political science and peace studies at McMaster University, Danielle went on to complete a Master of Arts in globalization studies. She hopes to teach English and politics at the high school level with a focus on global education.

Casey Panning

Casey Panning is an intermediate/senior teacher candidate at the Ontario Institute for Studies in Education, University of Toronto.

Richard Park

Richard Park is an alumnus of the life sciences program at the University of Toronto. Since graduating, he spent a year teaching English at a middle school in Korea and has returned to Canada to pursue a Bachelor of Education at OISE. His current enrolment in the Initial Teacher Education Program (where his teachable subjects are biology and general science) has granted him the opportunity to serve as a mentor to high school students involved with the Global Ideas Institute's reinventing the toilet challenge. This chance to guide students in fostering their intellect and curiosity through a global lens has helped Richard further develop his personal pedagogy and gain valuable experience working with a diverse population of proactive students. Richard is looking forward to a fruitful career as a teacher in either the Toronto or Peel district school board.

Rufina Park

Rufina Park is a fourth year Honours BA student concentrating on International Relations and Asia-Pacific Studies at Trinity College, University of Toronto. This is the second year she has participated in the Global Ideas Institute as a mentor and now as a research assistant. After graduating this spring, she plans to work in a field related to education, innovation, and economic development in Asia.



Emman Rahman

Emman Rahman is a third-year student at the University of Toronto pursuing a double major in international relations and employment relations. She is greatly interested in politics in the Middle East and the changing role of human resource management in the globalized workplace. Last summer she studied the Arab-Israeli conflict at the Hebrew University of Jerusalem. Thanks to the Global Ideas Institute, she has now discovered a passion for social entrepreneurship and development in Asia. Emman hopes to combine all her interests in the future by working for the Canadian government while pursuing further study.

Jashpreet Saini

Currently pursuing a Bachelor of Education at OISE, Jashpreet has a background in history, anthropology, and marketing. She is a firm believer in keeping an open mind and remaining optimistic while encouraging others to do the same. She has been inspired by the speakers and young minds she has encountered through the Global Ideas Institute and appreciates the opportunity to facilitate forward-thinking ideas in the rapidly changing world.

Lindsey Spencer

Lindsey Spencer is a teacher candidate at OISE, where she is studying to be a high school biology and business teacher. After completing a BA in science and business from the University of Waterloo, she became interested in sustainable international development. Lindsey then worked alongside many non-profit international organizations, including World Vision, The Leprosy Mission, and Ten Thousand Villages, and decided that teaching would be the best way to effect change in the world. She believes that an interdisciplinary, collaborative approach is critical to solving the most pressing global issues.

Kerry Sun

Kerry Sun is an undergraduate student at the University of Toronto majoring in history and political science. Originally from Calgary, Kerry's academic interests include international security, international law, the history of the Cold War, and American foreign policy in Asia and the Middle East. Kerry is actively involved in organizations on and off campus, including Model United Nations, the OECD Research Group (where he is a research analyst), Habitat for Humanity Toronto Chapter, and the CNIB. In his spare time, Kerry enjoys skiing, hiking, and traveling. He hopes that the students who participated in the Global Ideas Institute reinventing the toilet challenge had a rewarding experience.

Sean Verigin

Sean Verigin is completing the specialist program at the Trudeau Centre for Peace and Conflict Studies, University of Toronto, with a focus on the political economy of human security. He studies existential threats to human security in the twenty-first century and how societies adapt to disruptive ecological, economic, and technological change. His research is interdisciplinary, drawing on comparative public policy, heterodox economics, and security studies. Sean recently interned at the Asia-Pacific Foundation in Vancouver. He also worked at the Mosaic Institute, where he published reports on Canadian international development policy. These include a "Smart Map" report for the Department of Foreign Affairs and a forthcoming cross-national report for the Walter and Duncan Gordon Foundation. Sean was shortlisted for the Rhodes Scholarship in 2011-2012.



The challenge that you need to consider is making the invisible visible. Because if you can't, you're going to have lots of toilets sitting around not getting to the people they need to get to.

— JOSEPH WONG

High School Participants

LAUREN ABRAMSKY is a grade twelve student at St. Clement's School. She hopes to pursue a career in digital arts.

SAMANTHA BENNETT is in her last year at Havergal College and has interesting prospects for her further studies. Next year she plans to study philosophy and history along with Latin in university somewhere in the Western world. She adores sailing and her summer job is teaching children to sail. Above all, Samantha revels in reading and discussing interesting books.

SARAH BOWMAN is a student at Branksome Hall.

ANGELA CHEN is a grade eleven student at the University of Toronto Schools. She believes that it is our experiences growing up – whether they are successes or failures – that shape who we are. The GII has provided Angela with a unique opportunity to understand the hardships of people lacking sanitation. She aims to help the unfortunate in the world.

VANICE CHEUNG is a grade eleven student at Branksome Hall who is fascinated by theories in economics and possibilities in the visual arts. Her volunteer commitments include working with Canadian immigrants, minorities in northern Thailand, and children with mental and physical disabilities. The Global Ideas Institute has transformed Vanice's understanding of a "solution" by redefining the parameters of possible compromises and decisions. The emphasis on marrying seemingly disparate solutions has transformed Vanice's mentality about problem solving.

BRUCE CHI is a student at Upper Canada College. He attended the GII because he wants to foster his innovativeness, creativity, and leadership. He believes that the world needs innovators to struggle against the formidable challenges, to solve the many underlying puzzles and problems, and to make life better for everyone. He thinks young people should always be

prepared to change the world. The GII is one of the best ways for him to get ready for this big task. His favourite subjects are history and economics because he believes they are essential for humans to overcome the challenges that lie ahead. Knowing history, we can prevent making the same mistakes that our ancestors have made. On the other hand, knowing how to improve the economics of third world countries can partially reduce poverty.

LABIBA CHOWDHURY is a grade eleven student at Branksome Hall who has been proud to be a part of Global Ideas Institute this year. Through her academics and co-curricular activities, she maintains a keen interest in global issues. She was the plenary head of World Affairs Conference 2012 and recently traveled to the Netherlands to participate in The Hague International Model United Nations. Labiba has been inspired by the numerous excellent speakers who took part in the Global Ideas Institute, and she hopes to make a significant contribution to the program.

CHARLOTTE (CHARLY) COLEMAN has been a student at Pickering College for two years, but this is her first time participating in the GII. She is a competitive dancer who has been dancing since she was two years old. She is always looking to make a difference in the world. This year she went to Kenya through a Me To We trip. She also participates in a variety of issues and teams closer to home.

SHANNON CUMISKEY is in grade twelve at Pickering College. She is part of the Student Committee, various sports teams, and the Big Brothers Big Sisters program. Shannon recently completed her Gold Duke of Edinburgh Award and went on a Me To We Trip to Kenya with her school.

LAURA DIMONTE is a student at St. Clement's School.

JUSTIN ELIAS is a grade eleven student at Upper Canada College. Aside from the Global Ideas Institute's reinventing the toilet initiative, he is heavily involved with his school through athletics, the school newspaper, and community service. He recently represented the Junior Ontario Rugby Squad at the 2011 Alberta summer games, and is training diligently in the off season. In addition to playing basketball and soccer for his school, Justin is a committed member of the Out of the Cold Program, which provides a warm meal for the homeless once a week.

SAJA ELSHAIKH attends David and Mary Thomson Collegiate Institute. Her interests revolve around the business angle of international issues. Her future goals are to attend university and continue pursuing her interests. GII has motivated her to look outside of the box when it comes to finding a solution to a huge issue.

MITRA FAKHRASHRAFI is a grade twelve student at Ursula Franklin Academy, where she was elected Student Council Executive Representative and co-founded the first African Heritage Conference. She is of Persian descent and spends her summers in Iran. Her travels have highly influenced her worldview and made her very passionate about social activism on a local and international scale. She strongly believes that the world is deeply connected and that it is important to contribute actively and positively to the global community. Mitra joined the Global Ideas Institute project to have a positive impact on a real world problem that affects us all.

DARIAN FARD is a grade eleven International Baccalaureate student at Upper Canada College, studying biology, chemistry, economics, Latin, English, and math. He plays badminton and competes in swimming. He looks forward to becoming heavily involved in the sciences when he reaches university.

SIERRA FULLERTON is a student at Monarch Park Collegiate.

ANUSHAYANA GAUTAM is in grade twelve at Northview Heights Secondary School. Her strong interest in science and the humanities prompted her to participate in the reinventing the toilet project through the GII. She hopes to graduate from high school this year and continue her postsecondary education at the University of Western Ontario studying biological and biomedical sciences. In the future, she wishes to pursue her dream of working with Doctors Without Borders.

HELIA GHAZINEJAD is a grade twelve student at Northview Heights Secondary School. She is passionate about science, music, and literature. Helia wishes to attend medical school and work for Doctors Without Borders. She enjoys discussions about global issues and ways to try to solve them. This project has helped her to look at complicated global issues from different angles and try to find appropriate approaches.

DENNIS HO is a Canadian-born grade eleven student attending Richmond Hill High School and a member of the RHHs Science Council representing the Engineering Club. His main interests are engineering and pathology, though he also enjoys reading, writing, and drawing. In the future he is looking to work as an engineer, researcher, or architect.

DAVID HU is a student at Bloor Collegiate Institute. His passion for the sciences stemmed from his early childhood and he hopes to pursue further education involving life sciences or engineering. He delved into the complex process of designing a cost-effective product for third world countries while participating in the Global Ideas Institute and hopes to apply what he learned to similar projects later on in life.

High School Participants (continued)

MARGARET IRWIN is a grade eleven student at St. Clement's School. Margaret has always been interested in the sciences and hopes to have the opportunity to study medicine someday. In particular, Margaret hopes to become a paediatrician. She has loved having the opportunity to participate in the GII this year.

AHMAD JEGBIR is a student at David and Mary Thomson Collegiate Institute.

GANAPATHIRAM KARUNAKARAN is a grade eleven student at Bloor Collegiate Institute. Ram is interested in pursuing a career in biology, particularly neuroscience. He is an immigrant from India who moved to Canada just over four years ago. He is currently involved in debate club, playing the keyboard, volunteering at Big Brothers Big Sisters, and Air Cadets. Ram speaks Tamil and English. Participating in the GII has inspired Ram about the possibilities available to help third world countries.

DANISH KHAN is currently studying the sciences at Northview Heights Secondary School. His interests in chemistry, biology, and computer science have led him to rise up to the challenge of reinventing the twentieth-century toilet. During his free time he is an avid photographer, graphic designer, and landscape painter. With his strong background in science, expression, and design, he believes that aesthetic overhaul and custom, area-specific interfacing are the key components in achieving sanitation in the Global South through the toilet medium.

ALYSSA KIM is a grade eleven student at Ursula Franklin Academy. She has a strong interest in the sciences and the humanities and hopes to become a doctor or an engineer specializing in sustainable development. She loves traveling, Kurt Vonnegut novels, mixed martial arts, and the little things in life.

CYDNEY KIM is in grade eleven at the University of Toronto Schools. She became interested in the GII due to her passion for world affairs. As creative thinking and innovative solutions are essential in addressing some of the world's most pressing issues, she participated in the GII in order to further her knowledge and understanding of the problem-solving process.

DARIA KOSHEVEROVA is in grade eleven at Havergal College. At school she prefers math and social sciences. She hopes her subject preferences will lead her to become a businesswoman and lawyer. She has always wanted to participate in a project like the GII. She believes this experience has helped her to develop integrative thinking. Also, her hope is that her team's work will inspire someone to find a solution for sanitation and energy-saving problems all over the world.

TENZING KUYEE is a student at Ursula Franklin Academy who is interested in pursuing civil or infrastructure engineering. His academic interests include biology, world history, physics, and English. During his spare time he enjoys photography, contemporary painting and design, archery, and more. Participating in the Global Ideas Institute has taught him how to become a critical thinker and problem solver, and how to apply theoretical knowledge in real life.

MICHELLE LEUNG is a student from Bloor Collegiate Institute. Coming from a family with broad interests, she loves to learn just about anything, especially subjects within the sciences. Outside of school, she works as a graphic design intern for the University of Toronto's Environmental Science Mentorship Program, and in her spare time at home, she likes to read or work with glass and precious metals.

STEPHANIE LIM is a grade eleven student at the University of Toronto Schools. Through the GII experience Stephanie has built on her interests in global health, politics, and economics. She hopes to eventually major in international relations or political science while at university.

SARAH LIU is a grade eleven student at the University of Toronto Schools. She plans on pursuing business but would also like to do work with non-profit organizations. The Global Ideas Institute has given her the opportunity to explore the processes of international businesses and organizations. She hopes to take what she has learned and apply it in the future to make the world a better place.

OLIVIA LONG is a student at Monarch Park Collegiate.

PEN LONG is a grade twelve student at Havergal College. She greatly enjoyed the lectures and discussions at the Global Idea Institute as they have offered her fresh perspectives on the role technology plays in society and familiarized her with current efforts in dealing with global issues. She intends to pursue an academic career in the social sciences.

AZAD MEMON is a grade twelve student at Northview Heights Secondary School. His interest in engineering is what motivated him to take part in the reinventing the toilet challenge with the GII. He has gained a considerable amount of experience through his participation in this initiative and has come to appreciate the complexity of factors to be considered in the engineering process. He hopes to pursue his postsecondary education at the University of Waterloo in the mechatronics program and continue to participate in similar initiatives in his career that will improve the state of the world on a large scale.

KYLE MINNITI is a grade twelve student at David and Mary Thomson Collegiate Institute. Outside of school he carries two jobs, one for the City of Toronto and the other for the Scarborough Youth Hockey League as a timekeeper. He enjoys playing hockey and baseball for local leagues. He aspires to be well traveled and learn several languages.

ABDULLAH NAEEM is currently in grade twelve at Northview Heights Secondary School. He completed grade ten in Malaysia and realized that learning theory alone was not the best way to learn science. His interest in research-based science and its applications to real life grew. Consequently, he became part of the Northview Heights Engineering Club which resulted in his affiliation with the Global Ideas Institute to take part in the reinventing the toilet challenge. He believes that one learns from each and every experience in one's life, and this experience was worth it. He is also an editor for the Canadian Young Scientist Journal. He strives to be a successful engineer one day.

TARIQ NOOR attends David and Mary Thomson Collegiate Institute. He hopes to attend the University of Waterloo and specialize in political science, a choice that was influenced by his opportunity to travel to Afghanistan this past summer. While there, Tariq learned about the delivery process of development projects.

TRISHALA PARIKH is a sixteen-year-old student at Ursula Franklin Academy with a passion for human rights issues, public speaking, and debating. With a strong interest in science, along with social justice issues, she hopes to one day make a difference in the world as doctor. Participating in the GII has been a great learning opportunity where she has learned to approach seemingly intimidating tasks in an innovative manner and with an open mind.

HEEJAE PARK is a student at Richmond Hill High School. Before starting the program, Heejae had the chance to live and attend school in France, an opportunity which ignited her interest in global affairs. Heejae aspires to become a hotel manager one day. The Global Ideas Institute program has influenced her aspirations in life by expanding her horizons and knowledge of current economic, political, and technological conflicts in the world.

VIVIEN PAT is a student at St. Clement's School interested in the sciences and arts. Following her studies, she would like to pursue a career in health sciences. The Global Ideas Institute has deepened her understanding of the complex processes required to integrate new technologies and innovations into society, especially in the developing world.

ADRIANNA PINEDA is currently completing her final year at Ursula Franklin Academy. Born and raised in the Philippines, she is particularly interested in Southeast Asian politics and hopes to study international development and art history in university. She enjoys long walks on the beach during sunset, kittens, and romantic candlelit dinners.

ELLEN POILE is a student at Havergeral College.

BUSHRA RAHMAN is a grade eleven student at Bloor Collegiate Institute. When she first joined the GII program, she thought it would simply involve designing a toilet. But the program has allowed her to broaden her understanding of the importance of sanitation and realize that it's not just about a toilet, but so much more.

KATHARINE RESZETNIK is a student at St. Clement's School.

ABIGAIL RODRIGUES is in grade eleven at Branksome Hall. Her academic and personal interests overlap through her enjoyment of mathematics, economics, music, chemistry, and physics. In the future, she hopes to pursue a career in business, most likely in finance and management. From participating in the Global Ideas Institute, she has gained much insight into the process of problem solving, and from many of the presenters she has learned how a small product can create a large change in society.

HENRY VON SCHROETER is an avid student at Upper Canada College. In addition to the reinventing the toilet challenge with the Global Ideas Institute, his main focuses right now are tennis, ski racing, and football. Henry is training hard for all three of these sports, clocking in about twenty-three hours per week. He went to China during March break to work with the elderly and will attend the Shad Valley university experience this summer.

JADE SCRYMGEOUR is a grade twelve student at Pickering College. By participating in the Global Ideas Institute, Jade has gained a better understanding of the sanitation crisis around the world and what tools are needed to combat it successfully. Jade plans to study political science at university and is confident that her experience here at the Munk School will help prepare her for next year.

CHRISTINE SHEN is a grade eleven student at Branksome Hall who has interests in a variety of subjects such as history, physics, psychology, and art. Her volunteer experiences include math tutoring and working with kids with disabilities from Best Buddies and Holland Bloorview Rehabilitation Hospital. The Global Ideas Institute has altered Christine's vision about her future studies and career. By working with an issue that prevails in developing countries and affects an immense sector of the population, Christine is able to see how different areas of study unite

to help shape a better solution. The experiences she has gained from the GII have encouraged Christine to think critically, pragmatically, and innovatively.

AIDAN NICOLAS SLIND was born in Toronto in 1995 and has attended Pickering College in Newmarket since 2007. Aidan is an Army Cadet and member of the Monarchist League of Canada, and sits on the Student Committee of Pickering College. He completed his Bronze Duke of Edinburgh's Award in 2010 and is currently working on his Silver.

RICHARD SONG is a student at Richmond Hill High School, currently in his grade twelve year. His interests lie primarily in biological studies, and he hopes to pursue a career related to that. In addition to his academic pursuits he is an active member of community groups such as the Royal Canadian Air Cadets, through which he has gained many valuable experiences.

NICHOLAS SOPUCH is an avid internet enthusiast and active in athletics. With the recommendation of his teacher and peers he decided to participate in the Global Ideas Institute this year. He aims to challenge himself through thought-provoking discussions and enlightening lectures to achieve success with his fellow group members.

MADISON STEPHANS is a student at Havergeral College.

JANE SU is enrolled at University of Toronto Schools in grade eleven. She enjoys learning about chemistry, art, and world issues. In her spare time she does oil painting and volunteers at the public library as a reading tutor. Jane hopes to study life sciences in university and become a paediatrician. The Global Ideas Institute has shown her the wide range of factors involved in solving world issues and has inspired her to take action by doing a volunteer project next summer.

KHADIJA THOMAS is a student at David and Mary Thomson Collegiate Institute.

LAUREN WILDGOOSE is a grade twelve student at St. Clement's School. She hopes to pursue a career in journalism.

JEREMY WU is a grade eleven student at Upper Canada College, studying mathematics, biology, chemistry, English, Mandarin, and economics. His favourite course is math and he hopes to indulge his passion for the rest of his life. He enjoys playing the piano and flute, and his favourite sports are swimming and badminton.

VICTOR YING is a student at Upper Canada College.

EDWIN ZHAO is a grade eleven student at Bloor Collegiate Institute. He intends on studying business, biology, or aeronautical engineering in university. He does Tae Kwon Do, plays the violin, and is an Air Cadet. Edwin speaks English, Mandarin, and two dialects of Chinese. Through the GII he gained insight into real world problems in third world countries and is inspired to broaden his vision of the future.

ALAN ZHONG is a senior at Richmond Hill High School pursuing studies in both the natural sciences and the social sciences. The GII offered him more experience in using interdisciplinary studies to solve modern-day problems. In his spare time, Alan is actively involved in his school community as Vice President of the Model United Nations, an executive in Student Council, and an executive in DECA. Upon graduation, Alan will continue his education at the University of Chicago where he will study mathematics and economics.



We can't afford the health system we have. In the United States, \$5,700 per person per year is spent on healthcare, which is greater than the per capita income of 2.5 billion people in the world. So we can't afford to export our crummy, expensive healthcare system to the rest of the world. We're going to need health innovation on a major scale over the course of the next forty years ... We're handing your generation a set of problems that are going to require enormous ingenuity to resolve.

— DR. ANITA M. MCGAHAN

Expert Speaker Series

OCTOBER 25, 2011

Global Public Health Challenges

Dr. Anita M. McGahan

Associate Dean of Research, Rotman School of Management, University of Toronto

NOVEMBER 15, 2011

Appropriate Technologies and Reinventing the Toilet

Dr. Yu-Ling Cheng

Director, Centre for Global Engineering; Professor, Department of Chemical Engineering and Applied Chemistry, University of Toronto

DECEMBER 6, 2011

Solving Tough Problems Through Integrative Thinking

Ms Ellie Avishai

Director, I-Think Initiative, Rotman School of Management, University of Toronto

JANUARY 19, 2012

The Psychology of the Last Mile Problem: Why End Users Don't Adopt Innovative Solutions and What We Can Do About It

Dr. Dilip Soman

Director, India Innovation Institute; Professor, Rotman School of Management, University of Toronto

JANUARY 31, 2012

Involvement of the Public, NGO, and Private Sectors in Knowledge Translation, Implementation, and Scaling

Dr. Stanley Zlotkin

Professor, Paediatrics, Public Health Sciences, and Nutritional Sciences, University of Toronto; Vice President, Medical and Academic Affairs, The Hospital for Sick Children

FEBRUARY 14, 2012

New Models for Financing Innovative Technologies and Entrepreneurship in the Global South

Dr. Murray Metcalfe

Professor, Globalization, Faculty of Applied Science and Engineering, University of Toronto

TUESDAY, MARCH 6, 2012

Blind Spots in the Welfare State: Lessons from the Global South

Dr. Joseph Wong

Canada Research Chair, Political Science; Director, Asian Institute, University of Toronto

Over the past several months, the Global Ideas Institute speaker series organized by the Asian Institute at the Munk School of Global Affairs has brought together leading professionals and academics to talk about their experiences in addressing complex global problems. High-profile experts have provided extraordinary insights and imparted their world-class knowledge to high school and U of T students, inspiring them to think creatively about global health challenges and solutions. What are the successes and failures in global health innovation? Why are such obvious global health challenges so difficult to resolve? How can young people – including high school students – contribute to these globally pressing conversations? We are very pleased to have had Professor Anita McGahan of the Rotman School of Management, Dr. Yu-Ling Cheng of the Faculty of Applied Science and Engineering, Ellie Avishai of the I-Think Initiative, Professor Dilip Soman of the Rotman School of Management, Dr. Stanley Zlotkin of Sick Kids Hospital, Professor Murray Metcalfe of the Faculty of Applied Science and Engineering, and Professor Joseph Wong of the Asian Institute engage with students this past year. This incredible line-up has inspired, challenged, and encouraged students to think globally, to share ideas, and to understand the importance of informed advocacy. Their efforts are very much reflected in today's important symposium about reinventing the toilet as an appropriate technology for the Global South, an initiative that has tremendous promise in addressing head-on the sanitation-related health issues that affect so many in the world.



Expert Speaker Series (*continued*)



Global Public Health Challenges

Dr. Anita M. McGahan

Associate Dean of Research, Rotman School of Management, University of Toronto

TUESDAY, OCTOBER 25, 2011 | 4:00 PM – 6:00 PM
MUNK SCHOOL OF GLOBAL AFFAIRS, 1 DEVONSHIRE PLACE,
ROOM 208N (SIMULCAST IN ROOM 108N)

Professor McGahan's research on global health deals with a wide range of topics, including the application of new business models to health issues in the Global South. In this session she will provide a picture of changing global demographics, from hundreds of years ago through the present and into the future. Population dynamics are changing the game. Professor McGahan argues that innovative and technically sophisticated approaches are essential, but insufficient on their own for creating better health outcomes. Innovative organizational approaches are equally important for improving global health.

Anita M. McGahan is Associate Dean of Research, PhD Director, Professor, and Rotman Chair in Management at the Rotman School of Management, University of Toronto. She is also cross appointed to the Munk School of Global Affairs, a Senior Associate at the Institute for Strategy and Competitiveness at Harvard University, and Chief Economist at the Massachusetts General Hospital Division for Global Health and Human Rights. A passionate advocate for liberal undergraduate education, McGahan has championed the introduction of a history curriculum into business schools.



Appropriate Technologies and Reinventing the Toilet

Dr. Yu-Ling Cheng

Director, Centre for Global Engineering; Professor, Department of Chemical Engineering and Applied Chemistry, University of Toronto

TUESDAY, NOVEMBER 15, 2011 | 4:00 PM – 6:00 PM
MUNK SCHOOL OF GLOBAL AFFAIRS, 1 DEVONSHIRE PLACE,
VIVIAN & DAVID CAMPBELL CONFERENCE FACILITY

Engineering innovations must occur with the end user in mind. This talk will focus on engineering design for the Global South and understanding the needs of users in order to support appropriate, sustainable technology. In addition to the technical design criteria of functionality, safety, robustness, and maintainability, we will explore the social, cultural, economic, educational, environmental, and political contexts in which Third World end users relate to technology. Examples will be drawn from healthcare technologies, energy, ICT, water, and sanitation to illustrate what constitutes appropriate or inappropriate technology. The Reinventing the Toilet project at the University of Toronto will also be discussed.

Professor Yu-Ling Cheng is Professor of Chemical Engineering and Applied Chemistry and Director of the Centre for Global Engineering at the University of Toronto. She is working on enlarging the impact of technologies on the developing world through her work as both a researcher and an engineering educator. Her research team received a grant from the Bill and Melinda Gates Foundation earlier this year. They will focus on reinventing the toilet in order to provide sustainable sanitation to the Global South. This grant has brought considerable press coverage and excitement to the University of Toronto.



Solving Tough Problems Through Integrative Thinking

Ms Ellie Avishai

Director, I-Think Initiative, Rotman School of Management, University of Toronto

TUESDAY, DECEMBER 6, 2011 | 4:00 PM – 6:00 PM
MUNK SCHOOL OF GLOBAL AFFAIRS, 1 DEVONSHIRE PLACE,
VIVIAN & DAVID CAMPBELL CONFERENCE FACILITY

Integrative thinking can be used to solve complex problems. It involves considering conflicting ideas and perspectives simultaneously in order to explore alternative solutions that may not be obvious at first. Developing integrative thinking skills will allow students to generate novel, innovative ideas that are appropriate for large-scale, global challenges. In this workshop, school groups will anticipate tensions they may come across as they prepare for the symposium. Using integrative thinking, students will work through one identified tension to see what ideas become possible when the either/or frame is lifted away.

Ellie Avishai, MBA, is Founder and Director of I-Think, a unique initiative at the Rotman School of Management at the University of Toronto. I-Think adapts Rotman's pioneering curriculum, which aims to engender self-reflective thinking and problem-solving in MBA students, to the K-12 world. Ellie has taught for over a decade in both public schools and education-focused NGOs. She was a 2005 recipient of the Bealight Fellowship for Social Entrepreneurs.



The Psychology of the Last Mile Problem: Why End Users Don't Adopt Innovative Solutions and What We Can Do About It

Dr. Dilip Soman

Director, India Innovation Institute; Professor, Rotman School of Management, University of Toronto

THURSDAY, JANUARY 19, 2012 | 4:00 PM – 6:00 PM
MUNK SCHOOL OF GLOBAL AFFAIRS, 1 DEVONSHIRE PLACE,
VIVIAN & DAVID CAMPBELL CONFERENCE FACILITY

In domains as diverse as healthcare, financial well-being, education, and technology, the last mile problem refers to the difficulty of getting end users to adopt a new technology or innovation and embrace a change in behaviour. The last mile problem is a problem of psychology, not technology. In this session, we will discuss the concept and nature of choice architecture – the science of designing choice environments that facilitate changes in behaviour and adoption. Drawing on examples from various domains and countries, we will build a framework for designing environments that nudge individuals to the appropriate choice.

Dilip Soman is a professor at the Rotman School of Management and Director of the India Innovation Institute at the University of Toronto. He studies interesting human behaviours, explains them, and uses the insights to develop products and programs to help people help themselves. His interests include behavioural economics, social media, marketing strategy, and consumer psychology.

Expert Speaker Series (*continued*)



Involvement of the Public, NGO, and Private Sectors in Knowledge Translation, Implementation, and Scaling

Dr. Stanley Zlotkin

Professor, Paediatrics, Public Health Sciences, and Nutritional Sciences, University of Toronto; Vice President, Medical and Academic Affairs, The Hospital for Sick Children

TUESDAY, JANUARY 31, 2012 | 4:00 PM – 6:00 PM
MUNK SCHOOL OF GLOBAL AFFAIRS, 1 DEVONSHIRE PLACE,
VIVIAN & DAVID CAMPBELL CONFERENCE FACILITY

Preventing child malnutrition has been a priority for governments, NGOs, and UN agencies. The last of the major nutritional problems yet to be solved is iron deficiency and its accompanying anemia. Close to 200 million children are affected globally. Our research group has developed an intervention to fortify foods in the home to prevent iron deficiency. Over the past ten years the intervention has been shown to be efficacious and safe. It has been produced by the private sector, championed by the UN, and implemented by the NGO, public, and private sectors. In 2010, 400 million units were procured by UN agencies alone for use in over thirty countries. However, the success of the scaling-up process has been quite variable and is contingent on a host of social, political, and economic factors. This discussion will use multiple country examples to illustrate the complexity of home-fortification scaling.

Stanley Zlotkin, MD, PhD, is a professor of Paediatrics, Public Health Sciences, and Nutritional Sciences at the University of Toronto. He was appointed Vice President of Medical and Academic Affairs at SickKids in July 2010. His program, the Sprinkles Global Health Initiative, has focused on research and advocacy to control micronutrient malnutrition in children. Professor Zlotkin has been awarded the CIHR National Knowledge Translation Award, the HJ Heinz Humanitarian Award, and the Order of Canada for his contributions to improving the health of children globally. In 2011 he was awarded a Fellowship in the Canadian Society of Health Sciences.



New Models for Financing Innovative Technologies and Entrepreneurship in the Global South

Dr. Murray Metcalfe

Professor, Globalization, Faculty of Applied Science and Engineering, University of Toronto

TUESDAY, FEBRUARY 14, 2012 | 4:00 PM – 6:00 PM
MUNK SCHOOL OF GLOBAL AFFAIRS, 6 HOSKIN AVENUE,
TRINITY COLLEGE 2ND FLOOR, SEELEY HALL

The development of the Global South in the twenty-first century will look nothing like what twentieth-century models based on foreign aid and multilateral agencies envisioned. Instead, real development will stem from two things: technological innovation and local entrepreneurship. The current trickle of financial support for these new approaches will rapidly expand as twentieth-century models of aid are abandoned. What are the cutting edge examples of this trend, and what will propel them forward?

Murray Metcalfe is Professor of Globalization in the Faculty of Applied Science and Engineering at the University of Toronto. He holds a BASC in Industrial Engineering from the University of Toronto and an MS and PhD in Engineering-Economic Systems from Stanford University. He began his professional career at McKinsey & Company, the management consulting firm, and then spent over twenty years in the venture capital industry in the United States before returning to academia in 2008. In the spring of 2008 he was a Visiting Scholar in the Department of International Development Engineering at the Tokyo Institute of Technology. He is a faculty member in the Centre for Global Engineering at the University of Toronto. Dr. Metcalfe also serves as a senior advisor in the private equity area at Lee Munder Capital Group, an investment management firm in Boston. He is involved in a number of not-for-profits in the areas of international development and social entrepreneurship.



Blind Spots in the Welfare State: Lessons from the Global South

Dr. Joseph Wong

Canada Research Chair, Political Science;
Director, Asian Institute, University of Toronto

TUESDAY, MARCH 6, 2012 | 4:00 PM – 6:00 PM
MUNK SCHOOL OF GLOBAL AFFAIRS, 1 DEVONSHIRE PLACE,
VIVIAN & DAVID CAMPBELL CONFERENCE FACILITY

The disparity between rich and poor continues to increase even as developing countries experience economic growth. At the same time, inherent structural inequality that exists within the welfare state creates a problem of invisibility for seasonal, migrant, and informal sector workers. To successfully address the sanitation needs of the most vulnerable populations, we must consider the unique challenges associated with being “invisible.”

Joseph Wong is an Associate Professor and Canada Research Chair in the Department of Political Science at the University of Toronto. He is also the Director of the Asian Institute at the Munk School of Global Affairs. Wong’s research interests are on public policy and political economy in East Asia. His recent research focuses on public health disasters. Wong received his PhD from the University of Wisconsin-Madison in 2001 and has been a visiting scholar at Harvard University, Seoul National University, and the Taiwan Institute for National Policy Research. He was recently elected Senior Member of St. Antony’s College, University of Oxford.



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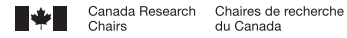


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In the Gaze of Democracy Perspectives on the 2012 Taiwan Election

IN JANUARY 2012, five undergraduate students from the University of Toronto travelled to Taiwan to study and observe the presidential and legislative elections. They gained insight into Taiwan's political dynamics and the significance of the election for Taiwanese democracy and identity. In this session, the student delegates will share their research experiences as well as a sneak peek from their forthcoming documentary film.

- » **Tuesday, April 24**, 2:00–4:00 PM
Munk School of Global Affairs, Room 108N
1 Devonshire Place
- » **Opening remarks** by Professor Joseph Wong
- » **Presentations** by Melinda Jacobs, Remi Kanji, Mimi Liu, Aaron Wilson, and Betty Xie
- » **Q&A discussion** to follow
- » **Register at www.utoronto.ca/ai**