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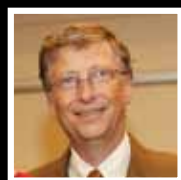
THE  
GATES  
CAMBRIDGE  
**YEARBOOK 2013**

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UNIVERSITY OF  
CAMBRIDGE

## PATRONS



In 2012, Bill and Melinda Gates generously agreed to become Honorary Patrons of the Gates Cambridge Trust. The Trust is delighted to reinforce a direct link between the Gates Cambridge Scholarships and the Gates family and the Foundation.

## ABOUT THE SCHOLARSHIPS

The Gates Cambridge Scholarship programme aims to build a global network of future leaders committed to improving the lives of others.

Gates Cambridge Scholarships are one of the most prestigious international scholarships in the world. The programme was established in October 2000 by a donation of US\$210m from the Bill and Melinda Gates Foundation to the University of Cambridge; this is the largest ever single donation to a UK university.

Scholarships are awarded to outstanding applicants from countries outside the UK to pursue a full-time postgraduate degree in any subject available at the University of Cambridge.

Scholars are selected on the basis of their outstanding intellectual ability, leadership potential, commitment to improving the lives of others, and a good fit between their qualifications and aspirations and the postgraduate programme at Cambridge for which they are applying.

The Gates Cambridge Trust administers all aspects of the programme, including supporting the important work of the Scholars' Council and Alumni Association.

The first class of Scholars came in to residence in October 2001; since then the Trust has awarded 1,239 Scholarships to citizens of 96 countries. During the 2012/13 academic year there will be over 200 Scholars from more than 45 countries studying and researching a wide range of subjects in Cambridge.

The class of 2013/14 consists of 92 outstanding Scholars from 23 countries who will be widely distributed amongst Cambridge's Colleges and Departments. The following pages highlight their achievements, activities and aspirations.

Full details about the Gates Cambridge Scholarships are available from [www.gatescambridge.org](http://www.gatescambridge.org).

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# FOREWORD

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I am delighted to begin my first year as Provost of the Gates Cambridge Trust. I especially look forward to welcoming the new Scholars in October and getting to know the Scholars currently in residence in Cambridge.

It is already clear to me that this unique programme, established through the vision and great generosity of the Bill and Melinda Gates Foundation, provides a wonderful opportunity for you, the Scholars, who have earned your places here through an exceptionally competitive process. I am especially grateful to my predecessor, Professor Robert Lethbridge, for the superb work that he has undertaken as Provost to enhance the standing and international visibility of the Gates Cambridge Scholarships.

The formal Welcome and Graduation occasions here in Cambridge, as well as events in the Scholars' Room and the excellent work of the Scholars' Council, all serve to strengthen the sense of community which is a distinct feature of the Gates Cambridge programme.

I hope very much to be able to reinforce the Gates Cambridge community beyond Cambridge through the work of the Alumni Association and in meetings with former Scholars that I plan to hold around the world. Alumni remain deeply committed to the Gates Cambridge programme and its aims and I encourage you – as future alumni – to remain part of this active and increasingly important global network once you leave Cambridge. Without doubt, each new generation of graduates will further enhance the profile of the Scholarships. Outstanding academic success together with leadership potential and a commitment to improving the lives of others, justified the original selection of Scholars past and present. Their work across many and varied disciplines will change the ways in which major global challenges are met. The Gates Cambridge Scholars of 2013, like their predecessors, have the responsibility and privilege to shape the future. I wish you every success in doing so.

Professor Barry Everitt FRS  
Provost

# TRUSTEES, OFFICERS AND STAFF

## TRUSTEES



**Professor Sir Leszek Borysiewicz, FRS**

Vice-Chancellor of the University of Cambridge and Chair of the Gates Cambridge Trust



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Former Director, Seattle Art Museum and Yale University Art Gallery



**Dr Andrew Robertson**

UC Berkeley School of Law, and Gates Cambridge Scholar 2001



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**Lord Rees of Ludlow, OM, FRS**

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**Dr David Runciman**

Reader in Political Thought at Department of Political Science and International Studies, University of Cambridge and Fellow of Trinity Hall, Cambridge



**Andrew Thompson, MBE (Honorary Treasurer)**

Fellow (and Senior Bursar Emeritus) of Magdalene College, Cambridge

## OFFICERS



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Provost



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(Accounts Officer)



**Dr Jonathan Nicholls (Secretary)**  
Registry of the University of Cambridge



**Jim Smith**  
(Programme Director)



**Joanna Hughes**  
(Programme Assistant)

# GATES CAMBRIDGE SCHOLARS' COUNCIL 2013–2014

The Gates Cambridge Scholars' Council was established to enrich the academic, social, and professional lives of Scholars while in Cambridge, as well as to help create a global network of future leaders committed to improving the lives of others.

The Council puts on a range of events for current Scholars, including: a multi-day orientation event new Scholars, the Gates Cambridge lectures by distinguished figures, Scholar colloquia and regular social and academic events throughout the year.



**Andrew Gruen**  
President & Chair



**Marie Burnet**  
Vice President & Secretary



**Richard Butler**  
Treasurer



**Haliki Voomla**  
Alumni Officer



**Devani Singh**  
Communications Officer



**Mia Bennet**  
Gates Scholar Magazine Editor-in-Chief



**Sean Collins**  
Academic Affairs Officer



**Vaibhav Bhardwaj**  
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**Andrew Asten**  
External Officer



**Hanns Goetzke**  
Social Officer



**Katrin Pfeil**  
Social Officer



**Rebecca Berrens**  
Technology Officer



**Tashfina Mirza**  
Welfare and Community Officer

# GATES CAMBRIDGE ALUMNI ASSOCIATION (GCAA)

The GCAA was established in 2005 by members of the inaugural class of Scholars and works closely with the Trust to create a global network of future leaders committed to improving the lives of others.

All Gates Cambridge Scholars automatically become members of the GCAA upon completion of their Scholarship and are encouraged to become involved in its activities.

The GCAA is funded by and fully aligned with the strategic aims of the Trust: its Board of Directors work to ensure that Alumni continue to feel part of the Gates Cambridge community upon completion of their degree.



**Nathan George**  
Co-Chair



**Mamta Thangaraj**  
Co-Chair



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**David Bard**  
Director of Professional Development  
and Public Interest



**Eliza Ridgeway**  
Director of Professional Development and  
Public Interest



**Greg Jordan**  
Director of Technology

## Nouran Abdelfattah

### Egypt

#### COURSE IN CAMBRIDGE

MPhil, Clinical Science,  
Sidney Sussex College

#### PREVIOUS UNIVERSITY

Worcester Polytechnic Institute



Growing up in Cairo, in the midst of the overwhelming inequalities in the healthcare system, I wanted nothing more than to become a practicing physician focused on improving healthcare quality for all. As I became integrated in the science behind the medical field, I was hooked. During my undergraduate studies at Worcester Polytechnic Institute, I have become fascinated by the field of cancer biology and its vast molecular processes. For my senior thesis at Harvard Medical School, I chose to focus on stem cell biology and cancer using the genetically-tractable zebra fish model of T-cell Acute Lymphoblastic Leukaemia. Since then, my passion is to understand the molecular underpinnings governing the genesis of tumours and be able to relate my studies in human patients. I am very honoured to become part of the Gates community and I hope to one day contribute to the growth of translational research and become a leader in the Oncology field.

**INTERESTS:** Swimming, teaching, reading Stephen King books, outdoor adventures and travelling/exploring the world.

## Felix Barber

### New Zealand

#### COURSE IN CAMBRIDGE

Mast, Applied Mathematics,  
Trinity Hall

#### PREVIOUS UNIVERSITY

Victoria Univeristy of Wellington



Recently I completed my honours degree in physics at Victoria University. This was both a challenging and stimulating experience, largely due to the insight it gave me into a present area of research interest – High Temperature Superconductors. My intent for the future is to produce research in a dynamic area of physics displaying potential to have a positive impact on serious world issues. Such issues include the alleviation of world inequality, and the development of new technologies to facilitate a sustainable human existence. These are issues in which I believe scientific research will play a critical role. Examples of the research areas of interest to me include condensed matter physics and biophysics. I recognise the tremendous challenge in providing solutions for the problems I have mentioned, but I believe that my capacity to produce constructive work in these fields will be nurtured by the knowledge and experience that Cambridge will offer me.

**INTERESTS:** Music, singing, running, football, politics, reading, cycling.

## Genevieve Barrons

### USA

#### COURSE IN CAMBRIDGE

MPhil, Education, St John's College

#### PREVIOUS UNIVERSITY

University of British Columbia



Malawi has long held a special place in my family's story: it is where my parents met as volunteers; the source of my middle name, Chimwemwe; and the other home I returned to during college to run a camp for primary students. At Cambridge, I will pursue an MPhil in Politics, Development and Democratic Education, with a focus on the promise and problems of education in Malawi. In college, I majored in English and International Relations, taking special pleasure in the unexpected places where these fields intersected. I wrote my thesis on the ethical and aesthetic possibilities of literature bearing witness to genocide. After Cambridge, I plan to return to Malawi. I want to design a school that not only meets the minimum requirements of benchmarks like the Millennium Development Goals, but also combines the best of modern technology and Malawian culture in a way that provides advantage rather than mere adequacy. In the meantime, I am thrilled to join the Gates Cambridge community.

**INTERESTS:** I enjoy self-guided walking tours (especially of Shanghai), watching BBC period miniseries, baking, and taking ballet classes.

## Paul Bergen

### USA

#### COURSE IN CAMBRIDGE

PhD Pathology,  
Churchill College

#### PREVIOUS UNIVERSITY

Auburn University



I first grew interested in the interactions between pathogens and hosts while I was an undergraduate researcher at Auburn University working in a lab that studied antibiotics produced from soil bacteria. Although my research focused on the effects of antibiotics on major bacterial pathogens, I quickly grew interested in how the antibiotics effect the interactions between the host, the host microbiota, and invading opportunistic pathogens. At Cambridge, I will be completing a PhD in pathology researching bacterial modes of infection and environmental interactions using E. coli and Salmonella as model systems and the host-microbe interactions that occur because of these systems. My hope is that my research will lead to better understanding of pathogens' modes of infection and, eventually, better treatments that utilize a holistic approach to combat bacterial pathogens.

**INTERESTS:** Exploring new places and experiencing new cultures, spending time with friends and family, cooking, reading, sailing, and football (both types).

## Elizabeth Blanchard

### USA

#### COURSE IN CAMBRIDGE

PhD, Geography,  
King's College

#### PREVIOUS UNIVERSITY

University of Cambridge  
(MPhil Gates Scholar)



I feel honored to have received a second Gates Scholarship to pursue my PhD at Cambridge. I arrived at Cambridge in 2012 to pursue an MPhil in Environment, Society and Development to learn how best to negotiate environmental pressures when alleviating poverty through economic growth. I am particularly interested in developing policies that address both extreme poverty and biodiversity loss – two of the most critical challenges of our era. Starting this autumn, I will be pursuing a PhD that addresses climate change policy. Before coming to Cambridge, I worked for six years directing international development and conservation initiatives for a coffee importing company. In this role, I raised over \$4 million for livelihood improvement programs, some of which were featured at the Clinton Global Initiative and in National Geographic's Wild Chronicles series.

**INTERESTS:** Cycling, running, cooking great meals, going to evensong and being with friends.

## Christian Boehm

### Germany

#### COURSE IN CAMBRIDGE

PhD, Plant Sciences,  
Christ's College

#### PREVIOUS UNIVERSITY

University of Cambridge



Morphogenesis arises from the interplay of genetic regulation and physical interactions within a growing network of cells. Control over the underlying spatially patterned gene expression would not only allow us to study biofilm formation and tissue development in unprecedented depth, but enable the targeted engineering of multicellular consortia and plant organs for sustainable production of important drugs, fuel molecules, and commodity chemicals. My doctoral studies in Plant Sciences at the University of Cambridge shall hence be dedicated to the design of self-organizing patterns of gene expression to shape multicellular ensembles. Guided by the principles of systems and synthetic biology, I strive to engineer morphogenesis both in microbial surrogates and in lower plants. By pioneering the chassis *M. polymorpha*, I hope to encourage scientists to further explore the great potential of plant systems for carbon sequestration, global food supply, and sustainable bioproduction.

**INTERESTS:** ballroom dancing, playing guitar, singing, art, photography, ambling in the countryside, and travelling.

## Evelyn Boettcher

### USA

#### COURSE IN CAMBRIDGE

PhD, Politics and International Studies,  
Magdalene College

#### PREVIOUS UNIVERSITY

Harvard University



Originally from Oklahoma, I spent last year studying advanced Mandarin in Inner Mongolia, China as a recipient of a David L. Boren Fellowship. My Harvard master's degree examined the concept of "Military Operations Other Than War," focusing on its evolution in U.S. and Chinese security fields, and the relationship between non-traditional security and security cooperation in the Asia-Pacific. My PhD will focus on security cooperation/engagement platforms in the Euro-American experience and in the Asia-Pacific region. My UPenn Honors paper examined challenges of balancing embassy security with the local outreach efforts of diplomacy. I served internships at the U.S. State Department, U.S. Embassy Beijing, and U.S. Pacific Command, the latter of which was supported by a Harvard Presidential Public Service Fellowship. Listening to Cambridge's choirs on public radio helped me through the long, cold winter of Inner Mongolia. I cannot believe I will listen to them "in person" this winter!

**INTERESTS:** Listening to Classical Minnesota Public Radio and C-SPAN, reading, and singing in musicals.

## John Brown

### USA

#### COURSE IN CAMBRIDGE

MAsT, Pure Mathematics,  
Churchill College

#### PREVIOUS UNIVERSITY

Indiana University (Deferred from  
previous year)



I graduated from Indiana University with degrees in Mathematics and English, completing a thesis entitled "The Induction and the Play It self: Liminality in the Legacy of The Taming of the Shrew." As a lifelong Shakespeare devotee, I am extremely pleased to have a chance to study in England. At Cambridge, I'm doing Part III of the Math Tripos. My mathematical interests are in dynamical systems and geometry. In addition to having a mathematical research career, I hope that my life's work will contribute to justice in education. I am particularly interested in innovative teaching methods that intelligently integrate technology, and policy reform which combats inequality in educational access.

**INTERESTS:** Music (playing), theatre (watching), cycling, writing, theology.



# TALKING TO MAU MAU WOMEN

Katherine Bruce-Lockhart

Despite worldwide publicity about the treatment of the Mau Mau by the British following the recent high court compensation case, women's involvement in the rebellion against the colonial government is poorly understood, says Gates Scholar Elect Katherine Bruce-Lockhart.



Her research, which will draw on oral history, aims to shed more light on the way women were treated by the British in Kenya.

"Even though a lot is known about the Mau Mau and the recent court case has affirmed the massive human rights abuses that took place against them, women's part in the story is very poorly understood. There is not much analysis and lots of ground for new discovery," she says.

"The British perceived Mau Mau women as threatening. They often put women in prison who had only shown an interest in the Mau Mau or were forced to join them. Due to their stereotypes they put them through rehabilitation programmes to make them better housewives and mothers. They labelled women who did not respond to the rehabilitation as insane. They didn't understand why a normal woman might be interested in politics and violence. The British didn't think women would be violent before and this shaped how they treated the women and the women's lives."

Katherine, from Victoria in British Columbia, became interested in Kenya at high school. After being inspired by a school talk by Craig Kielburger, a Canadian activist and founder of the Free the Children programme, she went to Kenya for a month at the age of 16 to take part in a summer programme in the Masai Mara region. She helped to build a school, did some leadership

training and taught some classes. The experience shaped her future career.

When she started at the University of Toronto, she knew she was interested in studying the history and politics of Africa. By her second year she was majoring in African Studies, but studied in an interdisciplinary way. She also worked on an education project in Nepal and was involved in a research group that studied the G8.

Later in her undergraduate degree she went to Namibia on a global health internship and studied women's access to HIV medication with the Namibian Women's Health Network before starting her masters in African Studies at Oxford University.

She chose Oxford because she knew she wanted to work on the Mau Mau and because she wanted to work with Professor David Anderson who had worked on the Mau Mau's court case against the British government.

Katherine says history is vital to understanding current-day issues in Africa. "The Mau Mau uprising and how it was dealt with represented the pinnacle of colonial Africa. It was about the construction of difference between Africans and the West and how the Mau Mau were constructed through propaganda as barely human, as savages. I want to understand about the construction of difference and this was an extreme case," she says.

The court case, which was going on while she was at Oxford, made it all the more relevant and contemporary. Her masters thesis was on the detention of Mau Mau women, looking at one camp in particular and gathering oral history from women about their experiences.

Her PhD will broaden this research, using oral history to capture the experiences of women, many of whom are now very elderly. Two Mau Mau women gave evidence during the recent court case about the sexual abuse they endured in prison. Katherine says the evidence was "a very legalistic cataloguing of abuse". "I want to show a more nuanced perspective with more narrative about how women in detention felt about what happened to them," she says.

## Katherine Bruce-Lockhart

### Canada

#### COURSE IN CAMBRIDGE

PhD, History,  
Trinity College

#### PREVIOUS UNIVERSITY

University of Oxford



I graduated with a BA in History and African Studies from the University of Toronto in 2012, and a MSc in African Studies from the University of Oxford in 2013. I am fascinated by the intersections between history and justice, especially on the African continent. For my master's dissertation, I examined the detention of Kenyan women during the Mau Mau Rebellion in Kenya, analyzing British perceptions of deviancy in the colonial context. My main scholarly interests lie in the construction of otherness; law, punishment and justice; and reparations. I focus primarily on East Africa from a historical perspective, but ground my studies in a broader interdisciplinary approach.

**INTERESTS:** Rowing, long distance running, soccer, yoga, cooking, photography.

## Erica Cao

### USA

#### COURSE IN CAMBRIDGE

MPhil, Music Studies,  
Clare College

#### PREVIOUS UNIVERSITY

Princeton University



I graduated from Princeton University with a B.A. in Psychology and Certificate in Musical Performance. In my research, I ask, what can we learn about human functioning by studying music, and how can we use this knowledge to enhance conventional medical treatment for various disorders? To further understand the therapeutic effects of music, I am pursuing an MPhil in Music Studies at Cambridge, specializing in "Music and Science." I envision the increasing use of music in hospitals and rehabilitation settings both to alleviate suffering and for therapeutic interventions to help overcome various neurological conditions and sensory impairments.

**INTERESTS:** Lyrical and Chinese traditional dance, piano, chamber music, photography, nature, chocolate, Simon & Garfunkel, concerts.

## Hannah Carlan

### USA

#### COURSE IN CAMBRIDGE

MPhil, Social Anthropology,  
King's College

#### PREVIOUS UNIVERSITY

New York University



My primary research interest is the intersection of conversational practice and larger societal understandings of gender and class. My area of expertise is Hindi-speaking northern India, where I have spent nearly a year performing background fieldwork on Hindi conversational practices. Along with researching, I also spent this time as a Fulbright English Teaching Assistant in a New Delhi government school, where I taught low-income middle school students conversational English. As an undergraduate, I performed fieldwork in Queens, NY at a social services agency that aimed to help recently arrived immigrants from South Asia integrate into US society. My thesis analyzed South Asian social workers' joking practices and the impact conversation on how social workers saw themselves in relation to their lower-class, recently arrived immigrant clients. My senior thesis was recognized by the Society of Linguistic Anthropology in their annual undergraduate essay competition.

**INTERESTS:** Travel, learning languages, books, films and music from/related to South Asia.

## Fei Chen

### China

#### COURSE IN CAMBRIDGE

PhD, Education,  
Darwin College

#### PREVIOUS UNIVERSITY

Peking University



I was born in a traditional Chinese family, where I was given a lot of guidance on traditional Chinese culture and spirits. At university, I received a solid educational technology instruction in the Department of Educational Technology and Communication. As an undergraduate, I volunteered as a teacher at rural schools and played a learning role in conducting a research project of investigating how local cultures affect the way of students' learning. As the leader of a group volunteers, I taught in more than five schools and did qualitative research on local professional development. Thereafter, my team was awarded Best Volunteer Group by local Ministry of Education. In 2010, I joined the non-government organization TECC, which is initiated by both students from Peking University and Stanford University. I volunteered to manage the teacher professional development program and gave training to volunteers who were keen on making contributions to education equity.

## Musa Chungu

### Kenya

#### COURSE IN CAMBRIDGE

MPhil, Engineering,  
Wolfson College

#### PREVIOUS UNIVERSITY

University of Waterloo



In April 2013 I graduated with a degree in civil engineering from the University of Waterloo. Over the course of my training I worked for a total of 24 months split between five organizations. This really gave me a feel for the engineering and construction industry. As I grew in experience I began to notice recurring problems; delays, workflow problems, mistakes in design and construction, the difficulties of quality control, wasted resources and poor communication. Like a good engineer, I want to tackle these issues. Through studying an MPhil at Cambridge I hope to find novel solutions to these industry problems by implementing concepts such as augmented reality and real-time object recognition. I can envision a much better industry, and I intend to be part of the push to get there.

**INTERESTS:** Football, LEGO®, Christian apologetics, community outreach, travel.

## José Ciro Martínez

### USA

#### COURSE IN CAMBRIDGE

PhD, Politics and International Studies,  
King's College

#### PREVIOUS UNIVERSITY

University of Cambridge



I grew up in San Juan, Puerto Rico, where my father, a lifelong public servant, infused in me a passion for politics at a very young age. My interest in the Middle East comes from my Iranian mother, who nurtured my study of the region. It is a combination of these two formative influences that has led me to pursue graduate work in Politics at Cambridge. My proposed research project seeks to contemplate questions concerning the construction and development of political legitimacy and nationalist discourse amidst structures of dispossession. It will do so through a comparative theoretical framework that dissects the numerous intersections of nationalism, Islamism and monarchism in the construction of statehood in Morocco and Jordan during the post-independence period. The work will draw upon a broad array of Arabic-language sources and employ theoretical insights from post-structural historiography, critical anthropology and political economy.

**INTERESTS:** Iranian cinema, Real Madrid, water polo, cities as characters, islands, warm weather.

## Alessandra Colaianni

### USA

#### COURSE IN CAMBRIDGE

MPhil, Social Anthropology,  
Clare College

#### PREVIOUS UNIVERSITY

Johns Hopkins University  
School of Medicine



I'm a third-year medical student at Johns Hopkins, and ever since I started medical school I have been fascinated by ethical and anthropological aspects of medicine. In particular, I am interested in the transformation of medical students into doctors, changing historical concepts of the "professional code" of medicine, and how physicians and medical students can use narrative essay to reflect on emotionally intense or disturbing experiences. I am also curious about what happens to doctors who break the professional code, and about aspects of existing medical culture that may paradoxically make it more difficult for physicians to behave ethically. While at Cambridge I look forward to exploring these issues through the Department of Social Anthropology.

**INTERESTS:** Writing, cooking, hiking, fishing, climbing tall things, improvisational comedy, theatre, running, yoga.

## Evandro Da Silva

### Brazil

#### COURSE IN CAMBRIDGE

MPhil, Theoretical & Applied Linguistics,  
Downing College

#### PREVIOUS UNIVERSITY

University of York



I come from Porto Alegre in Southern Brazil. My interest in languages stems from listening to my grandfather who taught himself Spanish and English. As a teacher of English in my community, I would scrutinise the language in search for patterns that could be explained and compared with my students' native tongue, Portuguese. Due to the shortage of linguistic departments in my homeland and to the luck of finding a British benefactor, I undertook a degree in English Language and Linguistics at the University of York. The MPhil in Theoretical and Applied Linguistics at Cambridge will provide me with an opportunity to contribute to a better understanding of this intricate faculty that defines our species and permeates our social lives. I feel specially inclined to investigate the role of linguistic structure in the encoding of psychological states. As a Gates Scholar, my ambition is to implement a linguistic science department in Southern Brazil and stimulate local research in this field.

**INTERESTS:** At a social level, conversing, learning languages, going to the theatre and cooking with garlic. When outside, listening to music, rollerblading, bike-riding, and watching sunsets. When inside, reading, watching films, meditating, and daydreaming.

# AID REVERSED

KERSTIN GOEPFRICH

People in developed countries could learn a lot from those countries which have faced years of having to come up with innovative ways of living on limited resources, says Kerstin Goepfrich.

Kerstin, who starts her PhD in Physics, runs a website called AidReversed which aims to turn the traditional way of looking at development on its head.

Kerstin starts her PhD this autumn and will be researching DNA origami. It's a new field which has only been going since 2006 and involves creating new shapes and structures from short pieces of DNA. Kerstin wants to look at ways it can be applied to biomedicine and used in smart drug delivery systems which target certain cell types, for instance as adaptors that control the function of protein pores in cells.

Kerstin was born in Bavaria, although both her parents grew up in Romania. She was strong in all her school subjects, but was particularly interested in biomedical questions and decided when she left school to study molecular medicine as it involved all the sciences. However, after her first year at the University of Erlangen she realised that physics could deliver interesting new tools for use in medicine and biology. She switched to physics and molecular medicine and combined her studies with vaulting, which involves a team of seven gymnasts performing acrobatics on live horses.

She took part in competitions and came second in the southern German championships and travelled around Europe. The year before she started university she was invited to the US by a contact she had met through vaulting to help set up a sports club for disadvantaged children in Indiana which included vaulting. She spent three months there spreading the word about the project and helping to lay the foundations.

As there is no vaulting tradition in the UK, Kerstin has taken up rock'n'roll, which involves dance and acrobatics and has performed at this year's May Balls.

In addition to acrobatics, while she was doing her undergraduate degree Kerstin took part in an Erasmus scheme in Cambridge, where she has recently completed her masters, and a student exchange with Zambian students. It was the latter exchange in Zambia which was the catalyst for AidReversed. She says: "When the Zambian students came to Germany they asked us how they could be more like Germany. I felt I could not answer the question and realised how complex the problems they were facing were. I suggested they ask the question the other way round. What can we learn from you? Their immediate answer was nothing. However, if you think

about it you can come up with some very valid ideas that might have an impact in developed countries."

Kerstin and her boyfriend wanted to explore this idea and find out if there were opportunities for developing countries to exploit more what they could offer developed countries. They set up a website and then a Facebook page (which actually got more than 1000 "likes" within the first month) – since Facebook is particularly popular in Africa – which they use to gather ideas from around the world and get people to think about the question. They have also established campus ambassadors in Zambia to spread the word. They aim to put those ideas into a book and present them to policymakers and people who might put the ideas into action. They also have plans for conferences and an essay competition to bring in more ideas and have linked up with Cambridge's Humanitarian Centre.

**"In the financial crisis we need to be innovative with limited resources. African countries have been facing this for decades," she says.**



## Talia Da Silva

### South Africa

#### COURSE IN CAMBRIDGE

PhD, Engineering,  
Trinity College

#### PREVIOUS UNIVERSITY

University of Pretoria



I have an honours degree in geotechnical engineering and have been working as a civil engineer for three years for a specialist geotechnical engineering firm in South Africa focusing on projects in the environmental and waste management industry. I am interested in doing a research project on the geotechnical centrifuge at Cambridge incorporating a comparison of numerical and physical models. I would like to conduct research in my PhD study that will open the door for me to be able to enhance research being done locally (in South Africa) in the future, as well as to if possible help create an awareness for and expand applications of centrifuge testing in practicing engineering applications. I am an enthusiastic person and like to get involved. I am looking forward to meeting and interacting with many top academics from around the world during my time at Cambridge.

**INTERESTS:** I love the outdoors and adventure and enjoy running, cycling, swimming, hiking and scuba-diving. I love travelling, reading and spending time with friends and family.

## Ragnhild Dale

### Norway

#### COURSE IN CAMBRIDGE

PhD, Polar Studies,  
Hughes Hall

#### PREVIOUS UNIVERSITY

University College London



Born in the small city of Bergen in Western Norway, I am part of a generation whose need to act is urgent but paths unclear in the face of unfolding climate change. As an anthropologist, theatre-maker and human being, I continually rediscover the value of listening to other voices in the world we are part of. Research shows we need to curb fossil fuel emissions and shift our everyday practices to make a sustainable a future for us and future generations possible, but to find that way, we need to listen to other voices and ways of living than our own. My PhD will pursue research in the Canadian Arctic, where melting ice and permafrost means changing lives and a new scramble for resources in contested areas. I will focus on how artists and indigenous people engage with these processes in ways that travel across common perceptions of local and global in the making of geopolitics. By making these processes visible, I hope to contribute to a better understanding of moving forward with respect.

**INTERESTS:** Walking, reading, writing, and working towards more sustainable lives. I live for my art and the freedom to live as we choose.

## Amrita Dani

### USA

#### COURSE IN CAMBRIDGE

USA, MPhil, Education,  
Pembroke College

#### PREVIOUS UNIVERSITY

Harvard University



I grew up in Newtown, Pennsylvania, the daughter of Indian immigrants to the United States and a student in the local public school system. At Harvard, I studied the intersections between Arabic, French, and English literary traditions and have spent much of my time focused on cross-cultural dialogue and education through my work at the Pluralism Project, the Philips Brooks House Association, and CONTACT peer counselling. Through the Arts, Creativity, Education, and Culture (ACEC) track of the MPhil in Education at Cambridge, I am excited to explore how the arts and creative thinking can teach students to engage across differences. After Cambridge, I plan to return to the United States and work towards becoming a secondary school English teacher through the Boston Teacher Residency program. Ultimately, I hope to translate my experiences as a student and teacher into a career in education policy, focusing on how educators can engage with cultural diversity.

**INTERESTS:** Languages, critical pedagogy, theories of influence, language acquisition, the history of education, postcolonial theory.

## Marlen De La Chaux

### Germany

#### COURSE IN CAMBRIDGE

PhD, Management Studies,  
Selwyn College

#### PREVIOUS UNIVERSITY

University of Cambridge



After completing my MPhil at Cambridge last year, I worked with the German Development Agency in Burkina Faso to evaluate the local implementation of their development projects. Most recently, I am with the UN High Commissioner for Refugees to support the coordination of aid efforts in large-scale crises. These experiences fueled my passion for humanitarian initiatives and motivate my PhD project, which will focus on the dynamics surrounding the creation of humanitarian strategies. I will particularly be studying the realities and challenges that relevant organizations and their decision-makers encounter in the aftermath of natural and man-made catastrophes. Ultimately, I hope to facilitate organizations' efforts in post-catastrophe contexts by improving the availability of managerial tools for humanitarian initiatives.

**INTERESTS:** traveling, outdoors, good conversations, piano, languages.

## Christopher Devine

### USA

#### COURSE IN CAMBRIDGE

MPhil, Clinical Science,  
Trinity College

#### PREVIOUS UNIVERSITY

Harvard University



Born and raised in New Jersey, I graduated from Harvard College in May 2013 with a degree in Neurobiology. As an undergraduate, I became fascinated by development and regeneration of the central nervous system, and focused my thesis research on a salamander species capable of regenerating brain and spinal cord – the axolotl – and developed a passion for understanding the therapeutic potential of these organisms. Through the MPhil in Clinical Science (Translational Medicine and Therapeutics) at Cambridge, I hope to learn critical tools for clinical drug design and gain hands-on experience with translational research, preparing me to help those debilitated by neurodegenerative disorders as a future physician-scientist engaged in translational research and medical practice.

**INTERESTS:** I enjoy photography, travel, skiing, baking, and tutoring/advising. Most of all, I love meeting new people, and am excited to be a part of the Gates community.

## Julien Domercq

### France

#### COURSE IN CAMBRIDGE

PhD, History of Art,  
King's College

#### PREVIOUS UNIVERSITY

University of Cambridge



I was born in Paris and completed a BA and MPhil in History of Art at Cambridge. Alongside my academic interests, I served as president of the Cambridge Union, where my proudest achievement was the introduction of half-price memberships for students on bursaries, thus democratising access to the society. After my MPhil, I worked in London for an independent film production company. My PhD proposes to explore how Europeans depicted the peoples of the Pacific in the eighteenth and nineteenth centuries. When the first explorers returned from the Pacific, its inhabitants were represented as exotic and captivating Rousseauian 'noble savages'. However, those depictions rapidly changed as the growing European Empires strove to assume racial and cultural superiority over them. These images reveal the dramatic shift from wonder at the Pacific and its peoples to disgust and distrust, from the perception of a noble to that of an ignoble 'savage', and ultimately from enlightenment to colonialism.

**INTERESTS:** Travelling, museums, architecture, cooking, winemaking/tasting, and retreating to the south west of France.

## Konrad Domanski

### Poland

#### COURSE IN CAMBRIDGE

MPhil, Micro- and Nanotechnology  
Enterprise, Hughes Hall

#### PREVIOUS UNIVERSITY

Imperial College London



I first got interested in nanotechnology while at high school and this largely influenced the choice of my undergraduate degree. While at Imperial College I completed two summer internships and a project in nanotechnology before graduating top of the class just this June. My primary interests involve using nanostructures to develop novel photonic devices such as LEDs, Lasers and Photovoltaic cells and to improve the performance of the existing ones. Upon graduation from Cambridge I will pursue a PhD on a related topic and direct my career towards academia. I hope my work will contribute to solving the global energy crisis in the future. I'm spending summer 2013 at IYTE, Turkey researching the confinement effects in 1-D polymer nanofibers.

**INTERESTS:** Science, Mountaineering, Caving, Climbing, Being outdoors, English tea and good ale.

## Christy Edwall

### USA

#### COURSE IN CAMBRIDGE

MPhil, English Studies,  
Clare College

#### PREVIOUS UNIVERSITY

University of Oxford



During my studies at Oxford, I developed an interest in the literary representation of, and engagement with, mental distress, specifically by means of poetic form. I first encountered the 18th century 'mad' poet Christopher Smart and his heady fragmentary poem *Jubilate Agno* in a first-year lecture, an introduction which has led to my current interest in the correspondence between 'madness' and poetic form, especially by poets suffering incarceration, as Smart did. My research will pursue the perception of 'mad poets' in 18th century discourse, including later poets like William Cowper and John Clare; private and public modes of writing (and suffering) madness; translation, especially of the psalms; hymnody; and religious enthusiasm.

**INTERESTS:** Book-hoarding, writing, literary journals, playing music, listening to radio plays (especially murder mysteries), sitting in pubs and cafes, dabbling in languages, travelling.

# 21ST CENTURY SOCIAL ENTERPRISE

Isaac Holeman

Isaac Holeman was named one of the top social entrepreneurs under 30 by Forbes magazine for his work in setting up Medic Mobile, an organisation which helps remote health workers to coordinate care using mobile phones. His work on this has inspired his PhD which will build on his masters dissertation on how people use technology on the ground and how technology alters people's behaviour.

Isaac focused in particular on the use of a system for plugging a thermometer into a mobile phone so healthcare workers could monitor if the temperature where vaccines were stored rose to unsafe levels due to power outages. If the temperature rose too high the whole batch of vaccines would have to be destroyed.

Isaac found that many of the healthworkers were often far away from the vaccine facility so even if they used the technology they had to get hold of someone who was nearby to check the vaccines. "You can have award-winning technology, but it becomes very apparent in challenging settings that it won't work unless people are well organised," says Isaac, who is still on the board of Medic Mobile.

His achievements at such a young age suggest a certain level of confidence. In fact, he admits to being "painfully shy" for most of his school years and did not learn to read until he was around nine. As a result of his shyness, he threw himself into sport and excelled at wrestling. But at the end of high school, just when he was expected to win the state tournament, he suffered an injury and had to withdraw. The accident caused a

complete rethink of his life. At around the same time he did an exchange programme to the Netherlands and that gave him time to reflect. He returned with a new desire to do something that would help others.

He chose to study liberal arts and biochemistry at Lewis & Clark, in large part due to the university's study abroad programme. He visited Guatemala and Honduras and in his third year he spent a term Havana working on a research project at a walk-in clinic.

At university Isaac became involved in a number of other activities. He joined an a cappella group which created an a cappella rendition of the Obama campaign's "Yes we can" theme song. Barackappella was loaded on Youtube and got more than half a million views.

Isaac was also one of the first community organisers for The Archimedes Movement, a healthcare reform initiative led by Oregon Governor John Kitzhaber. He helped manage its online presence and with a college roommate Isaac co-founded a social enterprise that aimed to apply pattern matching algorithms to social media. The idea was that people interested in one charity or cause could more easily find like-minded people and causes, much in the way that Amazon recommends new books based on a customer's previously purchased books.

Upon graduating, a Compton Fellowship provided start-up capital for Isaac to co-found Medic Mobile. Isaac met co-founder Josh Nesbit online via a global health mailing list. It was a risk since they didn't know each other, but it paid off: in just three years, the organisation has grown to 25 staff and works with over 40 health projects in 25 countries. Isaac was named an Echoing Green fellow, mHealth innovator of the year and inducted into the Better World by Design hall of fame.

Isaac had, however, never given up on his academic ambitions. He did a transitional masters at the University of Cambridge to move from biochemistry and genetics to a PhD in Management Studies.



## Marcel Elias

### Canada

#### COURSE IN CAMBRIDGE

PhD, English,  
Magdalene College

#### PREVIOUS UNIVERSITY

University of Lausanne



Having completed a Master's degree in English literature and medieval history at the University of Lausanne in Switzerland, I am now very excited to be pursuing my studies with a PhD at Cambridge as a Gates Scholar. My thesis will address the impact of the emotional rhetoric of crusade propaganda on late medieval popular mentalities, accessed through Middle English crusade romances. Through this project, of which one of the principal aims is to explore the connection between emotional characterization and the deployment of violence, I notably wish to contribute to arousing critical awareness of the parameters which define past and current conceptions of legitimate violence and righteous warfare.

**INTERESTS:** Reading novels, playing the cello, snowboarding, hiking, tennis, beach volleyball, kayaking, swimming.

## Maximilian Fries

### Germany

#### COURSE IN CAMBRIDGE

PhD, Oncology,  
King's College

#### PREVIOUS UNIVERSITY

Julius-Maximilians-Universität Würzburg



Before coming to Cambridge, I completed my Bachelor's and Master's degree in Biomedicine at the University of Würzburg in northern Bavaria. Tasting different areas of research, the possibility to observe life at its smallest unit by using high-end microscopy of single living cells fascinated me the most. During my PhD in Oncology, I want to understand how the barriers that prevent a normal cell from becoming a tumour cell are overcome. At the Hutchison/MRC Research Centre, I will therefore contribute to the development of novel microscopy systems that allow us to draw a quantitative network map of the soon-to-be cancer cell at a so far unprecedented spatial and temporal resolution. This map will help us to identify the nodes in the network we have to hit by therapeutic means to prevent and cure cancer.

**INTERESTS:** Exploring nature, politics with special interest in ecological development and sustainability, running, traveling.

## Krzysztof Franaszek

### USA

#### COURSE IN CAMBRIDGE

MPhil, Biological Science (Pathology),  
Churchill College

#### PREVIOUS UNIVERSITY

University of Maryland



As the son of two scientists, I developed an interest in science very early in my life. My interests include molecular genetics and public health, and I am particularly keen to investigate ways to combat virally induced diseases. As an undergraduate student, I worked as a teaching assistant for a sophomore-level genetics course, volunteered for two years as an Emergency Medical Technician and taught English at a school. I have spent my undergraduate research career working in the field of molecular genetics, first on yeast retrotransposons and then on programmed ribosomal frameshifting. I will continue to study the latter as part of my project at Cambridge. I will examine some of the mechanistic aspects of frameshifting in the context of virally infected mammalian cells on a genomic level. My project will hopefully aid in the identification process of new frameshift signals as well as inform the design of antiviral therapeutics that exploit viral frameshifting as an interventional target.

**INTERESTS:** I am an avid reader of The Economist as well as a zealous lightweight rower.

## Catherine Gascoigne

### Australia

#### COURSE IN CAMBRIDGE

PhD, Law,  
Gonville and Caius College

#### PREVIOUS UNIVERSITY

University of Oxford



I was born and raised in Sydney, Australia, and completed a Bachelor of Arts (Honours) and Bachelor of Laws (Honours) at the University of Sydney. After graduating, I worked in an international commercial law firm in Sydney in Environmental Law. I took a leave of absence from the law firm to study the Bachelor of Civil Law at the University of Oxford, where I developed a keen interest in international trade and its impact on non-trade values, such as human rights and the environment. This interest is something that I wish to develop in my PhD. I left the law firm to take up a research position at the University of Melbourne Law School. I have engaged in a wide range of local community service and legal pro bono work, and have taken on several leadership roles in relation to the study of international law in Australia. I wish to express my profound gratitude to the Gates Cambridge Trust for this deeply humbling award.

**INTERESTS:** Music (particularly piano and singing); reading fiction; travelling; psychology; and attempting to cook!



## Kerstin Goepfrich

### Germany

#### COURSE IN CAMBRIDGE

PhD, Physics,  
Corpus Christi College

#### PREVIOUS UNIVERSITY

University of Cambridge



My PhD at the Cavendish Laboratory, the “Home to DNA”, is about smart nano-objects folded out of DNA. I aim to use this so-called DNA origami to create functional molecular machines, inter alia for drug delivery systems. I always found it fascinating how physics brought novel tools into biology and how these tools led to discoveries. Thus, I studied physics and molecular medicine in Erlangen, Germany. As a scientist, I wish to contribute to the controversial discourse on nanotechnology in politics, legislation and society – not to defend a field of science I am passionate about, but to achieve sensible regulations for our future. A student exchange with Zambia directed my interests towards the developing world. I co-founded AidReversed, a platform of ideas on how the Western world can learn from developing countries and how this can drive sustainable development. I am looking forward to be part of the Gates community to share ideas for a sustainable future and to take them forward!

**INTERESTS:** I enjoy learning languages, cooking, traveling and also rock-’n’-roll dancing and acrobatics.

## Jordan Goldstein

### USA

#### COURSE IN CAMBRIDGE

MPhil, Engineering,  
Clare College

#### PREVIOUS UNIVERSITY

Duke University



I graduated in 2010 from Duke University with a Bachelor’s degree in Mechanical Engineering. After receiving my degree, I was commissioned as an officer in the United States Navy, where I served on USS STERETT (DDG 104) for nearly two years as the Electrical and Auxiliary Systems Officer. I then worked as an engineer for Access Midstream, a natural gas midstream company, where I helped design pipelines and facilities for natural gas in the Utica shale in Ohio. Both my experience on a ship and time in the energy industry made me appreciate how important energy is, and inspired me to pursue ways to reduce energy requirements and usage. While at Duke, I did research on smart materials, which piqued my interest in their applications. I will be combining these two interests while pursuing my MPhil in Engineering, which will focus on how materials can be used to improve energy efficiency and reduce both usage and costs.

**INTERESTS:** I volunteer with the creative program solving organization Destination Imagination, a nonprofit which promotes creativity and teamwork skills in children. Being with friends, travel, reading, and photography.

## Hassan Goreja

### Pakistan

#### COURSE IN CAMBRIDGE

PhD, Economics,  
Hughes Hall

#### PREVIOUS UNIVERSITY

Lahore University of Management Sciences



I completed a B.Sc. (hons) and M.Sc. in Economics from Lahore University of Management Sciences. During my time as an undergraduate, I had a chance to spend one year as an exchange student at Waseda University, Japan. I received the Commonwealth Scholarship in 2010 to study for an M.Phil. in Economics at Cambridge. My dissertation focused on exploring the link between openness and institutional quality. After graduating from Cambridge, I pursued a career in the development sector in Pakistan, working with several development sector organizations including J-PAL, World Bank, JICA, AC Nielsen and USAID. For my Post Grad, I intend to research the links between social norms and entrepreneurship. More precisely, I want to research how social norms can affect the behavior of women entrepreneurs.

**INTERESTS:** Research interests: Institutional economics, development economics, behavioral economics, trade and development. Personal interests: Traveling and reading. I want to travel round the world.

## Wesley Hazen

### USA

#### COURSE IN CAMBRIDGE

MPhil, Criminology,  
Selwyn College

#### PREVIOUS UNIVERSITY

New Mexico State University



Since the dawn of mankind there has been a balance between chaos and order. This balance has led to the Criminal Justice System we know today. The system is not perfect but it is continuously being improved and transformed. This continuous need for improvement is what draws me to the Criminal Justice System. At Cambridge I will be pursuing an MPhil in Criminology with a concentration in corrections and penal theory. I believe that a majority of the inmates in correctional supervision are not given an adequate opportunity to correct their behavior to eventually successfully re-enter society upon their release. After Cambridge I would like to start a non-profit organization that connects private sector and public sector resources to provide inmates with job and education training while assisting recently released inmates with reintegrating back into society. For now however, I am honored to have been awarded a Gates Cambridge Scholarship and to join the Gates Community.

**INTERESTS:** Traveling, playing video games, sports, lifting weights, studying ancient Greek and Roman Mythology, cooking, and spending time with friends and family.

## DEMOCRACY IN PRACTICE

ZENOBIA ISMAIL

What is the relationship between political parties and African voters and how does this affect democracy?



Zenobia Ismail has worked on issues relating to governance and democracy in Africa for several years as a former manager of Afrobarometer which conducts surveys across sub-Saharan Africa. She is now about to begin a PhD in Politics and International Studies at the University of Cambridge.

She says: "I am interested in what attracts a voter to a particular party. It is not so ideological as it is in the UK. There is not much difference in parties' ideological position on many of the big issues around development with some small exceptions. Some research suggests it is all about ethnic loyalties rather than government performance. I want to develop a statistical model to assess the links between voters and the parties they support. I hope to challenge stereotypes of voters in Africa."

Her main role at Afrobarometer was to ensure surveys were conducted to a high standard. During her time there she visited 16 countries conducting public opinion surveys on democracy and governance, on how people felt about democracy, how they rated the level of democracy in their country, their president and corruption levels. "The thing that surprised me the most was the high quality of research in different countries. Many South Africans perceive South Africa as superior to other parts of Africa," she says. Botswana came closest, she states, to the theoretical requirements for a consolidated democracy. Zimbabwe, however, was "scary". "If you asked questions about the ruling party in some areas you ran the risk of being beaten up severely. We would often have to delay work there if we felt there was too much tension," she says.

Zenobia herself grew up in a rapidly changing South Africa and with a strong family sense of the importance of education. Zenobia remembers her mother telling her that she was saving up to send her daughter to university even though her school secretary salary was very small. "From a very early age she fully believed I would go to university," says Zenobia.

Zenobia's school was underfunded and there were no extracurricular activities. She was scared to borrow books from the very small school library for fear of losing them.

Eventually her family moved her to an Anglican private high school. All government schools at the time were racially segregated and it was the first time she had mixed with other races.

When she left school she applied to do a Bachelor of Commerce at the University of Witwatersrand.

She specialised in marketing and her dissertation earned her an award. She wanted to stay on to study there, but her aunt had become the first non-white woman to be appointed a diplomat and had been posted to England. Zenobia came to the UK and did an MSc in management at the LSE before returning to South Africa to a market research job where she worked for three years. Her academic mentor – a marketing lecturer - asked her to step into his shoes at Wits University when he started a PhD in the US. She stayed for five years and helped to set up a successful tutorial programme to help improve students' study skills, particularly those from poorer rural areas. After working for an NGO on applied social research, she was offered a job at Afrobarometer as manager for southern Africa.

She left the organisation three years later to do a masters in African Studies at Oxford University funded by a scholarship and won a prize for her dissertation which built on her work for Afrobarometer.

## Isaac Holeman

### USA

#### COURSE IN CAMBRIDGE

PhD, Management Studies, King's College

#### PREVIOUS UNIVERSITY

University of Cambridge



I hail from a big outdoorsy Oregon family and I'm passionate about global health equity. I'm a tinkerer at heart and my fascination with open source software led me to co-found Medic Mobile, a social enterprise that uses technology to improve the health of underserved communities. The organisation has been lauded for impacting the care of some 3 million people in more than 20 countries, yet in some projects our award-winning technologies achieved little or no improvement in health outcomes. My current research seeks to explain variable outcomes by attending to the routine practices of health workers as they use these technologies. Having pursued my interest in health care as an entrepreneur and through degree programs in the liberal arts, biochemistry & molecular biology, and sociology, I'm excited to pursue a PhD in Management Studies at the Judge School of Business. I also enjoy singing in a choir at King's College and pursuing Cambridge's many opportunities for spiritual growth.

**INTERESTS:** Global health, human centred design, creative writing, making music, DIY, entrepreneurship, management, organizational theory, mHealth, Wikipedia, mysteries, the great outdoors and my home in Oregon.

## Zenobia Ismail

### South Africa

#### COURSE IN CAMBRIDGE

PhD, Politics and International Studies, Wolfson College

#### PREVIOUS UNIVERSITY

Oxford University



I grew up in Pretoria, South Africa but studied and worked in Johannesburg. Between 2008 and 2011 I was involved in multi-country research on democracy and governance in sub-Saharan Africa. In 2011 I read for a master's degree in African studies. My dissertation analysed the fall of a dominant political party which had governed for twenty years. I am interested in democratisation in Africa particularly with regard to the efficacy and integrity of elections in dominant party states. My doctorate will examine the relationship between voters and political parties to understand what draws voters to political parties. The influence of government performance, ethnicity, clientelism, leadership and ideology will be considered to determine if voters are making rational choices when they vote or if they are motivated by deeper, intrinsic ties to political parties instead. I hope to write a book on elections in Africa to stimulate debate on how citizens use their right to vote.

**INTERESTS:** I am a proud supporter of South African theater especially musicals and comedy. Recently I have become interested in mindfulness meditation and hope to use these techniques to help with my studies.

## Jose Izquierdo

### Chile

#### COURSE IN CAMBRIDGE

PhD, Music, Clare Hall

#### PREVIOUS UNIVERSITY

Universidad de Chile



I'm from Valdivia, a small city in southern Chile, and since I can remember I have been interested in history and music. For this reason, studying musicology has been a real gift in my life. I have been quite involved in conservation and heritage in Chile, restoring historic instruments and also founding and developing archives and music collections. I have written various books and papers on the way identity and music have been relevant for the development of different communities in my country. For my PhD in Cambridge I hope to write on the changes in cultural life from colonial to republican times in South America, with a special interest in the Viceroyalty of Peru and how European-style music was rethought at this time in such a different place from where it was created. Much of this music has never been heard before, being buried for centuries, so it is always very exciting to find and rediscover old scores for the first time, studying them and the musicians behind the notes.

**INTERESTS:** Music, I have a special interest in historical organs, playing and restoring them. I also love detective fictions, old films, peruvian food and teaching.

## Hosna Jahan

### Bangladesh

#### COURSE IN CAMBRIDGE

MPhil, Development Studies, Queens' College

#### PREVIOUS UNIVERSITY

University of Sydney



Originally from Bangladesh, I graduated from the University of Sydney with a double degree in Science/Arts, reading Chemistry, Government and International relations, and Political Economy. This divergence of my surroundings and educational philosophies challenged my understanding of the 'known' and my 'mode of thought' more than ever. I started questioning the social conditions (such as poverty) that once seemed 'natural' or at its worst, 'tragic' to me. I later realized, it is not 'tragic' to not have access to one's basic rights; it is in fact 'unjust' to be denied of that right. During my Honours year, I examined the extent to which microfinance (small loans) empower women to achieve development outcomes. My degree in Cambridge is an interdisciplinary professional training and research combination course in development. My primary research interest include state's role in alleviating multi-dimensional poverty of children. Eventually, I plan to work in policy sector in Bangladesh.

**INTERESTS:** Poetry, perfume and politics. I love books, the feel, the smell and the escape. I bake to impress my treasured ones.

## Daniel Jimenez

### USA

#### COURSE IN CAMBRIDGE

MPhil, Engineering for Sustainable Development, St John's College

#### PREVIOUS UNIVERSITY

Massachusetts Institute of Technology



My passion for building bridges combines my academic interests in structural engineering with my love of water and the hope I find in our human ability to overcome physical barriers to build integrated communities. After my bachelors in Civil Engineering, I started a social enterprise producing ISSB bricks in Zambia following my work in MIT's International Development Lab. After returning for a Master in Structural Engineering, I worked with NGOs in Bolivia and the Philippines where engineering solutions targeting neglected poor communities could alleviate poverty and reduce casualties from natural disasters. After working in Washington DC, I returned to the Philippines on a Fulbright scholarship to improve indigenous housing to withstand typhoons. My course at Cambridge University will build on my international engineering experiences to support my mission of bridging the gap between engineering solutions and the people who need them most around the world.

**INTERESTS:** In my free time, you can find me in my natural habitat, water. I also love to play romantic era piano, travel, smile, and eat Korean food.

## Vsevolod Kachanov

### Ukraine

#### COURSE IN CAMBRIDGE

MPhil, Materials Science & Metallurgy, Corpus Christi College

#### PREVIOUS UNIVERSITY

University of Sheffield



I was born in Kharkiv, Ukraine and studied at the Lyceum of Physics and Mathematics. When I reached the age of 14 my family moved to Israel, where I developed interest in biotechnology which I took as an elective module during high school. I am currently a final year student on BEng in Biomaterial Science at Sheffield University and I am excited to start an MPhil in Materials Science and Metallurgy within Cambridge Centre of Medical Materials from fall 2013. I am extremely grateful to Gates Cambridge Trust for this opportunity and I am looking forward to develop my skills and knowledge in order to contribute to the innovations in healthcare.

**INTERESTS:** Travelling, books, documentaries, statistics!

## Dominique Kunciw

### USA

#### COURSE IN CAMBRIDGE

PhD, Chemistry, Gonville and Caius College

#### PREVIOUS UNIVERSITY

Salisbury University



I graduated from Salisbury University where I earned my B.S. in Chemistry with minors in Mathematics and Biology. Graduating from the Bellavance Honors Program allowed me to explore other fields besides the sciences to gain a broader understanding of the world. As a freshman, I spent a semester in Ecuador learning Spanish and volunteering at a boy's refuge center. By my sophomore year, I was actively involved in research in the organic synthesis of biologically active compounds at my home institution and abroad. My work on antitubercular compounds led to my first authorship in a publication in BMCL. I spent summer 2011 performing research in peptidomimetics at the École Normale Supérieure. In summer 2012, I worked on the synthesis of an inhibitor of a chemical warfare agent at the TU Kaiserslautern in Germany through DAAD-RISE. After earning my PhD in Organic Chemistry, I will pursue a research career in drug development with an emphasis on diseases in underdeveloped countries.

**INTERESTS:** I love sports including running, tennis, and yoga. My passions include traveling and enjoying the outdoors.

## Rachel Kurchin

### USA

#### COURSE IN CAMBRIDGE

MPhil, Materials Science & Metallurgy, Churchill College

#### PREVIOUS UNIVERSITY

Yale University



I grew up just north of Rochester, NY, a few minutes from the shore of Lake Ontario. I've always held a deep commitment to environmental issues such as climate change and particularly renewable energy. My undergraduate degree is in physics, but I'm pursuing the MPhil in Materials Science in order to gain perspectives from a broader range of scientific fields to inform my understanding of the science behind renewable technologies. This year, I'll be working with Dr. Stoyan Smoukov in the Adaptive and Intelligent Materials Lab. I'm also committed to the causes of scientific communication and outreach as well as women and minorities in the Sciences, and helped organize the 2012 Northeast Conference for Undergraduate Women in Physics.

**INTERESTS:** I'm a fitness enthusiast, rabid knitter, and occasional vegetarian. Additionally, I'm particularly excited to be in England because while I'm a classically trained violinist, I also adore the fiddle music of the British Isles!

# TACKLING TOXOPLASMOSIS

BO SHIUN LAI

Bo Shiun Lai experienced something most scientists take years to achieve – publication of his research in a leading journal – when he was still an undergraduate.

His research on toxoplasmosis was published in the Proceedings of the National Academy of Science. He was nominated for the Cozzarelli Prize, a national award for scientific excellence in a particular scientific discipline. Two other articles, on which he was not a first author, followed and yet another is under review, all before he has begun his PhD.

Toxoplasmosis is a parasite which is hosted by two billion people worldwide, mostly without any visible symptoms. However, if their immune system is suppressed, for instance, if they are newborn or have HIV, it can cause serious problems. In newborns it can cause ocular impairment or brain defects and brain inflammation caused by toxoplasmosis is a major cause of death in people with HIV. It is relatively rare among newborns and has been considered a neglected disease, but since 9/11, it has been classified as a bioterror agent by the US National Institute of Allergy and Infectious Diseases (NIAID) which led to increased interest until the financial meltdown.

Toxoplasmosis takes two forms: active and dormant. When it is dormant it wraps itself in a thick layer of lipid which makes it impervious to all drug treatment and impossible to eradicate.

Bo Shiun's research into toxoplasmosis focuses on two main challenges: how to deliver drugs across the lipid barrier and what specific molecular pathways to inhibit. As toxoplasmosis mainly resides in the eyes and brain, treatment has to cross the ocular membrane or enter the brain. "We also don't know the molecular pathways that turn the parasite on and off," says Bo Shiun.

His research team looked at the first challenge. It attempted to create a molecule that could have an inhibitory effect on the parasite and deliver medication across multiple membranes.

Bo Shiun was born in Taiwan, but at 12 his family moved to Canada. He found adapting to life in Vancouver difficult and said it took at least three years to get accustomed to it.

He was bullied at school and eventually transferred to another more academic school after a few years.

He chose the University of Chicago for his undergraduate studies primarily because of its liberal arts curriculum. This meant that he did not have to specialise immediately



He decided to get involved in scientific research from early on in his undergraduate studies. In fact, he landed a research position at the Toxoplasmosis Research Institute two weeks after arriving at Chicago. "I didn't even know what toxoplasmosis was at the time, but I wanted hands on scientific experience to complement my coursework," he says.

**The lab work involved a huge time commitment throughout his undergraduate degree. "I think the vast majority of undergraduates would not have made the sacrifices I made. I spent a lot of Friday and Saturday evenings in the lab," he says.**

During his time in Chicago, he also found the time to volunteer for a year for Chicago's main aquarium and worked at a free clinic for African American men in the impoverished South side called Project Brotherhood.

Bo Shiun's PhD will deal with the second challenge presented by toxoplasmosis – how to switch the parasite from dormant to active mode, making it susceptible to existing treatment, or shut off essential pathways, killing the parasite effectively. He says: "We know the parasite spits out lots of proteins that infect the host. I want to investigate what these secretory proteins do. Other research suggests they may be responsible for turning the parasite from dormant to active mode."

## David Kurz

### USA

#### COURSE IN CAMBRIDGE

MPhil, Biological Science (Zoology),  
Jesus College

#### PREVIOUS UNIVERSITY

Princeton University



Growing up in rural Maryland, I often entertained myself by capturing and raising a menagerie of local animals – minnows, spiders, newts, crayfish, rabbits, frogs, turtles, mantids, ants, birds... My love for wildlife was further enhanced as I read dozens of books by English conservationist Gerald Durrell, whose work inspired me to consider conservation as a career path. With Durrell's bold, charismatic approach to saving rare animals as something of a guiding light, I studied Ecology & Evolutionary Biology at Princeton and conducted research in wildlife conservation. Also in college, my life was transformed as – for the first time – I truly grasped God's beautiful redemptive narrative and understood its implications for the world and my life. Now, as I pursue graduate training in conservation biology at Cambridge and beyond, I am eager to serve others by bringing both science and faith to bear on some of the most pressing and difficult conservation challenges in the world.

**INTERESTS:** drinking tea, fc barcelona, guitar, kayaking, soccer, tennis, theology, travel, trumpet.

## Bo Shiun Lai

### Canada

#### COURSE IN CAMBRIDGE

PhD, Pathology,  
Jesus College

#### PREVIOUS UNIVERSITY

University of Chicago



*Toxoplasma gondii* is a parasite that infects over one-third of the world's population. Damages as a result of *T. gondii* infections affect the eyes and brains of newborns. Through my undergraduate work, I helped develop a novel paradigm that can deliver medicines across multiple membrane barriers and into the parasite. More importantly, this approach is applicable to deliver inhibitors into encysted, dormant parasites, which are impervious to treatment. The process through which parasites respond to external stress by switching from the active form to the dormant (and incurable) form remains unclear to the scientific community. At Cambridge, I will work in Dr. James Ajioka's toxoplasmosis laboratory. My project will help decipher the molecular pathways involved in such a stress response. Once these pathways are elucidated, medicines can be developed to prevent parasites from becoming dormant (leaving them vulnerable to existing medicines) or kill parasites directly during dormancy.

**INTERESTS:** swimming, playing piano, practising pescetarianism, enjoying multi-ethnic foods, acting, directing, championing social justice, improving education.

## Devinn Lambert

### USA

#### COURSE IN CAMBRIDGE

MPhil, Biological Science (Plant Sciences),  
Churchill College

#### PREVIOUS UNIVERSITY

Rutgers University



I was raised on the Jersey shore and went to my state's University, Rutgers University. There I majored in biotechnology and conducted lab research focused on the molecular genetics of plant-associated bacteria. Overall, I am interested in understanding how biological processes are controlled at the molecular level and re-engineering these systems to create sustainable energy solutions. This is why I am very excited to be working in Professor Alison Smith's lab. My MPhil project will be to integrate a regulatory mRNA sequence called a riboswitch into the diaom *Phaeodactylum tricornutum*. This work is important because while algae, including *P. tricornutum*, show potential as green biomanufacturers of chemical commodities; this goal is complicated by a limited set of molecular genetics tools that can alter the content and regulate expression of the algal genome. After Cambridge, I will be pursuing my PhD at the Watson School of Biological Sciences at Cold Spring Harbor Laboratory.

**INTERESTS:** Playing soccer, reading biographies of scientists, dancing salsa, traveling, and anything adventurous!

## Judith Lebiez

### France

#### COURSE IN CAMBRIDGE

PhD, Modern and Medieval Language,  
King's College

#### PREVIOUS UNIVERSITY

Ecole Normale Supérieure



I graduated in Classics at the Sorbonne and was admitted to the École Normale Supérieure where I studied Philosophy. I completed a Masters degree in Comparative Literature at the Sorbonne and a European Masters degree in Philosophy which led me to Toulouse, Louvain-la-Neuve, Munich and Tokyo. I also trained as an actress, a classical singer and a lighting designer. My aim is to become a theatre and opera director. For my PhD I will focus on opera lighting. The different ways lighting has been used – or not used – in scenic productions reveals much about the kind of being-together we want to create amongst the audience and by extension the kind of society we are hoping to build. My ultimate goal is to stage productions that would help audiences to develop a creative life within a democratic society.

**INTERESTS:** Apart from singing, acting, lighting and directing: writing, eating food from all over the world, drinking green tea, dancing tango, skiing, swimming in the waves...

## Holden Lee

### Taiwan

#### COURSE IN CAMBRIDGE

Mast, Pure Mathematics,  
Trinity College

#### PREVIOUS UNIVERSITY

Massachusetts Institute of Technology



Through the last four years, I've come to appreciate number theory as a field which asks deceptively simple questions with solutions that draw from vastly different areas of mathematics. At Cambridge I'll take Part III of the Math Tripos, and hopefully come away ready to make progress on contemporary research questions such as the relationship between algebraic varieties, Galois representations, and automorphic forms. Besides being a math professor, I want to be a writer. To me, mathematics and writing have a lot in common: they both call on us to be precise, and to ask and answer the "why" questions. My three interests (math, education, and writing) came together during my work at Gliya, an educational startup, where I wrote geometry lessons as stories that encouraged creative problem-solving. We are at an important time in math education. MOOCs are paving the road for universal education, but much is to be desired in their pedagogy. I'm excited to be part of this change.

**INTERESTS:** math, reading, writing stories, playing DDR.

## Jerry Lee

### USA

#### COURSE IN CAMBRIDGE

MPhil, Epidemiology,  
Wolfson College

#### PREVIOUS UNIVERSITY

Stanford University



I'm interested in translational research, specifically the application of stem cell science to cardiovascular medicine. After graduating from Stanford University, I taught high school and conducted research with Dr. John Cooke at Stanford, where I worked on vascular regeneration. A gap in understanding of risk factors for CVD led me to this degree in epidemiology, and I hope to translate the insight gained from population trends to knowledge that would inform basic research. I also wish to learn how basic science can be better applied to improve population health. In the future, I hope to become a physician-scientist, working to develop and standardize the treatment of cardiovascular disease with stem cell therapies.

**INTERESTS:** Public radio, folk music, San Diego sport teams, budget traveling, new food, stories, faith, and adventure.

## Qiaojin Lin

### China

#### COURSE IN CAMBRIDGE

PhD, Physiology, Development and  
Neuroscience, Christ's College

#### PREVIOUS UNIVERSITY

Hong Kong University of Science  
& Technology



Growing up in Guangzhou, a city in southern China, I have spent my four-year University life in Hong Kong. What I benefit most from my undergraduate education is developing my passion towards neuroscience through relevant courses and a project studying how neurons sort out the proteins they produced. I am very excited about starting my PhD study at Cambridge and discovering a world new to me. The project I will engage in at Cambridge investigates how neurons navigate their way in our brain, focusing on the visual system, without making wrong turns or bumping into each other. This study is useful in curing newborn babies with neural developmental defect and to understand our brain organizations. I certainly hope one day my scientific discoveries can help people in bigger ways. I am looking forward to joining the Cambridge community and meet with all these outstanding Scholars.

**INTERESTS:** Reading, swimming, traveling, and cooking.

## Natalia Magnani

### USA

#### COURSE IN CAMBRIDGE

PhD, Polar Studies,  
Peterhouse

#### PREVIOUS UNIVERSITY

Binghamton University



I was born in St. Petersburg, Russia, and moved to the United States when I was five years old. Driven by a lifelong interest in health and healing, I pursued studies of cross cultural perspectives on health at Binghamton University. Currently I am examining the healing practices of the Saami in Norway, Finland, and Russia, investigating interactions of local healing, western medicine, and public policy. I will continue this research through the PhD in Polar Studies at the University of Cambridge, meanwhile leading cultural and linguistic revitalization programs within the Saami communities. My ultimate goal is improve health through the integration of regional and western medicine, thereby fostering health care systems that are accessible to underrepresented populations. I really look forward to pursuing these goals as a member of the Gates Cambridge community.

**INTERESTS:** I enjoy trail running, painting and drawing. I love picking flowers and discovering edible plants. But mostly I like exploring and writing, good food, good movies, and life.

# LAW AND EMPOWERMENT

Lindsey Murray

When she was a child Lindsey Murray said she wanted to be a police officer. Instead she has ended up as a top forensic scientist working in an international war zone and with an interest in the wider issues of how to establish the rule of law in a lawless area.

For Lindsey, that embraces much more than providing the right equipment for forensic analysis. It is about teaching people what the rule of law means and how it can improve their lives if they want it badly enough.

Lindsey, who grew up in Warsaw, Missouri, a small town of less than 2,000 people, was interested in forensic pathology from the start of her degree in biological sciences at the University of Missouri. She volunteered both in a children's hospital and as an on call morgue technician transporting bodies from hospital to the morgue which gave her the opportunity to watch autopsies. She was all set to go to medical school to be a medical examiner. In her third year, however, she spent a term at the University of Lancaster in England which got her interested in molecular biology.

On her return to the US, she decided to do a masters in forensic science at Michigan State University rather than go to medical school, but before she started the course she went back to England and spent six months working in a pub and travelling.

Her two-year masters focused on the social structure of burial grounds in Albania around 3,000 years ago. It included a research trip to Albania to collect bones from an archaeology site for mitochondrial DNA analysis.

After leaving Michigan State University, Lindsey got a job in a private DNA laboratory in Washington DC working on DNA analysis in criminal cases, including homicide and sexual assault

cases. The work included a fair amount of travel to testify in different cases, some of them high profile. One case concerned three 18 year olds believed to be part of a satanic group and accused of having murdered three 10-year-old boys. The case against them rested on testimony about their behaviour. There was no DNA evidence against them. They were in jail for nearly 20 years and have only recently been set free.

She worked at the lab for over five years and then got a job as a government contractor performing DNA analysis and research on Department of Defence projects. She also had opportunities to travel to South Asia as part of an expeditionary forensic capability.

**Lindsey's international experiences opened her eyes to wider social issues as she realised the magnitude of the problems involved in establishing the rule of law in conflict zones. She decided she needed more training in broader social science issues which would take into account the cultural beliefs of people in the countries concerned.**

She applied to do an MPhil in Criminological Research at the University of Cambridge in part because of her experience in Lancaster and because she felt she already knew the US criminal justice system intimately.

Her focus will be on how to establish a criminal justice system that works in the Middle East with a specific focus on Afghanistan. Her interest in Afghanistan is sparked in part by the fact that US troops are withdrawing from the country. "I am interested in the wider picture regarding the rule of law," says Lindsey. "I am interested in empowering young people, creating more awareness of criminal justice and funding for equipment. I'd like to focus on young people and how to inspire them about justice, to get them to want the rule of law."





## Elijah Foo Keat Mak

### Singapore

#### COURSE IN CAMBRIDGE

PhD, Psychiatry,  
Trinity College

#### PREVIOUS UNIVERSITY

University at Buffalo



Upon completing my degree in Psychology, I made my first foray into psychiatry by working as a research assistant to at Singapore's National Neuroscience Institute. While administering neuropsychological assessments for dementia patients, I became fascinated by the global challenge to halt the disease. I decided that fighting against neurodegenerative disorders would be my life endeavor. With a MRI research fellowship at University at Buffalo's Neuroimaging Analysis Center, I am investigating the neural correlates of cognitive impairment in Parkinson's disease. It is just so exciting to be part of a respected team at Cambridge, where I aim to improve early and accurate diagnosis of dementia subtypes. Through the utilization of mulitmodal neuroimaging techniques, I will be working to identify distinctive and signature patterns of cerebral abnormalities associated with specific dementia subtypes.

**INTERESTS:** Backpacking on a budget with a spontaneous itinerary, listening to post-rock music on long road-trips. I also enjoy reading and writing about my travels.

## William Marks

### USA

#### COURSE IN CAMBRIDGE

PhD, Materials Science and Metallurgy,  
St John's College

#### PREVIOUS UNIVERSITY

Harvard University



While a student at Harvard University, I completed a BS in Biomedical Engineering, and an MS in Biomedical Engineering. My research throughout college has included designing medical devices for dialysis patients, new filtration systems for biological fluid disposal, and focused ultrasound work for chemical treatment and biological applications. I dedicated much of my time to the Harvard College Engineering Society, as well as serving as Statistician for the Harvard Varsity Football Team, Finance Director for the Harvard College Entrepreneurship Forum, and Chairman of the Institute of Politics Fellows Selection Committee. In addition, I co-founded American Aptitude, a non-profit, non-partisan group dedicated to improving and promoting civic education throughout the United States. I hope to be able to transfer much of my work in the lab to practical applications in the clinic to help improve access to quality, affordable healthcare solutions worldwide.

**INTERESTS:** Traveling, molecular gastronomy, cooking, spending time with friends, meeting new people, anything athletic (rowing, football, tennis, squash), music, chess, politics, entrepreneurship, innovation, history, art, and dancing.

## Stefano Martiniani

### Italy

#### COURSE IN CAMBRIDGE

PhD, Chemistry,  
St John's College

#### PREVIOUS UNIVERSITY

University of Cambridge



I left home at 16 to become a cadet of the Military School "Teulíe" of Milan where I served for three years until the award of my high school diploma. After a brief encounter with the Italian Higher Education I joined the "Italian Brain Drain" enrolling onto a Chemistry BSc at Imperial College London. I started conducting research in experimental Physical Chemistry as first year undergraduate. Throughout my degree my interests shifted from experimental to theoretical science and I joined the University of Cambridge in fall 2012 for an MPhil in Scientific Computing where I worked on the development of a new Monte Carlo method. As a PhD student in Theoretical Chemistry I will be working on coarse-grained simulations of the formation of filamentous protein aggregates. Such processes are implicated in both normal and aberrant biological processes, including the pathogenesis of Alzheimer's and Parkinson's diseases.

**INTERESTS:** Mainly Physics but I also enjoy Literature and Visual Arts. I love generally being out in the sea, cooking Italian food, travelling and being with friends.

## Joseph McQuade

### Canada

#### COURSE IN CAMBRIDGE

PhD, History, Trinity Hall

#### PREVIOUS UNIVERSITY

Queen's University (Canada)



For my MA in History at Queen's University, I worked on a research project which analyzed the competing discourses through which anti-colonial revolutionaries and colonial officials articulated and justified their use of political violence in early twentieth century Bengal. My PhD at Cambridge will expand upon this research by comparing the revolutionary movements of Bengal and Ireland, both in terms of the way they understood themselves in relation to each other, and in the way that both were understood by colonial officials through the articulation of the new category of the 'terrorist'. This project will seek to explore the origins of modern ideas of terrorism, while also demonstrating the transnational character of revolution and espionage in the British Empire around the time of the First World War.

**INTERESTS:** In my spare time I enjoy creative writing, getting lost in museums, and exploring new places.

## Kelvin Mei

### USA

#### COURSE IN CAMBRIDGE

MPhil, Physics,  
Churchill College

#### PREVIOUS UNIVERSITY

Rutgers University



Born in Brooklyn, New York and currently residing in New Jersey, I obtained my B.S. in physics with a minor in economics at Rutgers University. Propelled by my desire to search for the fundamental truths in the physical reality that we live in, I chose to partake in experimental high energy research. This field is extremely exciting to me because with the completion of the Standard Model in 2012, it is believed that the next discovery will significantly push the boundaries of what we know and enlighten us to what truly are the most fundamental particles of this universe. Having worked with data from the Large Hadron Collider on searching for evidence of supersymmetry for 3 years, I will work on a different experiment at Cambridge's Cavendish Laboratories: the International Linear Collider. With the potential to be the world's largest linear collider, this project is designed to probe high energies with cleaner signals, and of course, to revolutionize the field of high energy physics.

**INTERESTS:** Learning languages, hiking, tennis, Ping-Pong, traveling, experiencing different cultures and exotic food.

## Saalika Mela

### Pakistan

#### COURSE IN CAMBRIDGE

MPhil, Education,  
Newnham College

#### PREVIOUS UNIVERSITY

University of Chicago



A recent graduate in Political Science and Comparative Human Development, along with a minor in Creative Writing, I am deeply committed to improving education in my native Pakistan. Specifically, the goal is curbing Muslim extremism, and empowering young people with their native identity and values. Since I was thirteen, I have been involved with progressive Islamic schooling. A new type of schooling, it aims to combine secular education with Islamic values to develop 'well-rounded' Muslims that abstain from militant extremism. The MPhil in Educational Leadership and School Improvement program at Cambridge, followed by an M.Ed. from Harvard University, will instruct me in various leadership techniques and how they may be adapted to progressive Islamic schools. With this training, I will work at a secondary school and the government in Pakistan. The Gates-Cambridge Scholarship is a lifelong gift, and I hope that I will be able to collaborate with this community wherever I go.

**INTERESTS:** Social entrepreneurship, Russian ballet, interfaith activities, playing with cats, cooking, and reading magazines.

## Alice Meyer

### South Africa

#### COURSE IN CAMBRIDGE

PhD, English, Queens' College

#### PREVIOUS UNIVERSITY

University of London (Royal Holloway)



I am passionate about socially engaged academic work and aspire towards playing a regenerative and dynamic role in South African academia. In line with this, my doctorate seeks to redress the legacy of imperialism and focuses upon the way in which 19th century English poetry has contributed to the sedimentation of contemporary race, gender and economic identities in my country. My research into South Africa's cultural heritage will gain depth and nuance from collaborating with legal experts, economists and historians and I am eager to forge interdisciplinary bonds with Gates Scholars from these academic fields. Ultimately, I hope to utilise the prestige of the Gates Cambridge Scholarship in order to launch a world-class career that is informed by the very cutting edge of philanthropically orientated academia.

**INTERESTS:** Running, hiking, reading, adventure sports, poetry, cultural materialism, history, animal rights, politics, art, theatre, gender studies, feminism, LGBT debates, NGO ethics in South African Townships, the salutary effects of Glühwein and coffee.

## Sarah Mummah

### USA

#### COURSE IN CAMBRIDGE

PhD, Public Health and Primary Care,  
St John's College

#### PREVIOUS UNIVERSITY

University of Cambridge  
(MPhil Gates Scholar)



I grew up in the San Francisco Bay Area and graduated from Stanford in 2010 with a BA in Human Biology. I subsequently spent a year in Oaxaca, Mexico with the support of a Fulbright grant to study intervention models for improving health behaviors. In my free time, I poured my energy into building a nonprofit organization I founded at age 19 to improve the health and education outcomes of low-income middle school students in Palo Alto, California. Last year, I was fortunate to pursue an MPhil in Public Health at Cambridge, where I've been researching innovative 'nudge' interventions in school lunchrooms to promote healthier eating. I'm thrilled to be continuing my studies at Cambridge this year as a PhD student and will be collaborating with researchers at the National Institutes of Health in the U.S. Through my research, I hope to help inform the successful design and implementation of school-based healthy eating interventions, with an eye towards obesity prevention.

**INTERESTS:** Good food, friends, outdoor markets, picnics, yoga, photography, and tea.

# FROM COCKTAIL WAITER TO CAMBRIDGE

JUSTIN PARK

Justin Park dropped out of school at the age of 16 to be a poet, but is now heading to the University of Cambridge to study Anglo Saxon and Norse with the aid of a Gates Cambridge Scholarship.

From this autumn Justin, now 36, will study for an MPhil in Anglo Saxon, Norse and Celtic Studies focusing on Lantfred's text on St Swithin and on whether his interest in the concept of sanctuary for criminals and slaves was a social critique of Anglo Saxon laws and showed how ideas on social justice from Charlemagne's France were crossing over the Channel.

**Justin's achievement in winning the scholarship is all the more impressive given that he never liked school, although he was always fascinated by books. His love of books was in part fuelled by his parents, who separated when he was young. His father had a library of books on subjects ranging from philosophy to medieval alchemy. By the age of 12 Justin was reading Plato.**

He soon got into the Romantic poets and decided poetry was where his future lay.



After moving to San Francisco at 16, he dropped out of school and began working as a dishwasher in a restaurant.

A series of odd jobs followed. He thought he was following in the footsteps of the great poets, but soon discovered he was more in love with the romantic idea of being a poet than the actual reality. Much as he liked reading, writing was something he found an effort. He decided he needed to travel and experience the world so he could have enough experience to put into a novel. So he joined the navy.

After boot camp, he was posted to Japan and toured south east Asia. Four years later his ship returned to the US and he decided to leave the navy. He moved back to San Francisco and got a job cracking crab for tourists. He hung out with poets on North Beach, but slowly realised that writing was not for him. He moved into bar work, working as a bar tender and waiter in high class cocktail bars, but by the age of 29 he decided he wanted more from life. He started community college, although he was worried about returning to an education environment after his experiences at school.

After three years Justin was able to apply to transfer to a university. He was advised to apply to Berkeley and, much to his astonishment, was accepted. In his first semester at Berkeley he studied the poetry and history of Anglo Saxon England and found it "strange and different".

During his course he did some in-depth research on an eighth-century saint and that made him realise he could do a PhD. For his masters he plans to study Lantfred's 10th century text on St Swithin. His main interest is in tracing his views on how the church should act as a sanctuary for an underclass of slaves and criminals. "His interest in the lower class is a departure from the norm of this kind of text," says Justin. "I am curious about how he articulates a new relationship between the law, the church and the underclass."

He says Lantfred came from a monastery in Carolignian France and that Charlemagne's law code drew from an earlier code which protected slaves and criminals who had been mistreated asking for sanctuary from the church. "One of my interests is in the intellectual movement of ideas and in whether Lantfred's text is a social critique of Anglo Saxon law and how it was received by those who read it," says Justin.

## Nicholas Murphy

### USA

#### COURSE IN CAMBRIDGE

MPhil, Biological Science (Pathology),  
Darwin College

#### PREVIOUS UNIVERSITY

Pomona College



My interest in Molecular Biology has at times felt like a mismatch with my drive for pursuing social justice projects. My thesis research about intein-encoded homing endonucleases was distinctly different from my work delivering food to people in need with the Food Recovery Network. Through the Gates-Cambridge scholarship, I am excited to pursue a scientific field of study that can more directly benefit marginalized groups of people. I will pursue an MPhil in Pathology conducting research on the Trypanosome that causes African Sleeping Sickness with Professor Mark Field. African Sleeping Sickness is a neglected tropical disease endemic to sub-Saharan Africa, making it an important target for non-profit institutions intending to stabilize and support communities in these areas. I look forward to the opportunity to simultaneously contribute to the scientific community and global health.

**INTERESTS:** I enjoy cooking, playing Jazz bass, hiking, swimming and just about every outdoor activity I have tried thus far.

## Lindsey Murray

### USA

#### COURSE IN CAMBRIDGE

MPhil, Criminological Research,  
Clare College

#### PREVIOUS UNIVERSITY

Michigan State University



After obtaining a bachelor's in biological sciences and a master's in forensic science I worked as a DNA Analyst – first for a private forensic lab performing analysis on criminal casework, then as a government contractor performing DNA analysis and research on Department of Defense projects. I also had the opportunity to travel to South Asia on multiple deployments where I performed DNA analysis in an expeditionary forensic laboratory. Ultimately, it was this experience that inspired me to seek another degree. After learning about the culture and criminal justice systems in parts of South Asia, most notably Afghanistan, I decided to pursue an MPhil in Criminological Research. At Cambridge, I would like to study the development of justice systems and determine if there is an approach that will aid in the movement of modern criminal justice practices in Afghanistan – one that is sensitive to their cultural beliefs but also functional in protecting citizens from crime and terrorism.

**INTERESTS:** Running, swimming, yoga, traveling and exploring new places, learning about new cultures and languages, and going on adventures with my dog! I also like quiet indoor activities like reading and trying new recipes in the kitchen.

## Florence Nabwire

### Kenya

#### COURSE IN CAMBRIDGE

PhD, Biological Science,  
Queens' College

#### PREVIOUS UNIVERSITY

University Of Nairobi



I was born in Kenya and both of my parents are teachers. After high school in 2001, I really wanted to pursue higher education in the UK but was not successful with my scholarship applications. Twelve years later, my dream has now come true and I am very excited to pursue my PhD at a world class University in the UK courtesy of the Gates Cambridge scholarship. Over the past 3.5 years, I have been working as a nutritionist in the field of HIV/AIDS and this has augmented my research interest in the area of maternal and child health. Thus for my PhD, I intend to investigate the effects of exposure to antiretroviral drugs during pregnancy and lactation on maternal bone health, lactation performance and infant growth, in urban Ugandans. Results of the proposed PhD study will contribute significantly to the evidence base for implementation of WHO PMTCT Option B-Plus Guidelines currently being rolled-out in Sub-Saharan Africa.

**INTERESTS:** Netball and Athletics, reading, hiking and travelling.

## Kyndylan Nienhuis

### Netherlands

#### COURSE IN CAMBRIDGE

PhD, Computer Science,  
Hughes Hall

#### PREVIOUS UNIVERSITY

University of Cambridge



During my study of mathematics, I became aware of the fact that mathematical concepts are unfortunately inanimate. You may regard an idea in your mind and see how it behaves, but as soon as you stop thinking about it, it stops moving. Computers, on the other hand, can bring these mathematical concepts alive. When a concept is represented as a computer program and executed, it will act independently of us, and that fascinates me. This is why I chose to change my career path from pure mathematics to computer science. In my PhD in computer science, I will consider the situation in the opposite direction: what is the mathematical object that underlies a program running on a computer? For most real world programs the answer is not clear and that is a problem. Testing is rarely sufficient to find all the bugs in a program, but if we know the underlying mathematical object, we can use mathematical techniques to find them.

**INTERESTS:** I enjoy dancing (especially Argentinian tango), painting, photography and conducting street interviews. To try something new, I plan to join the impronauts, a society for improvised theater.

## Justin Park

### USA

#### COURSE IN CAMBRIDGE

MPhil, Anglo-Saxon, Norse and Celtic, Wolfson College

#### PREVIOUS UNIVERSITY

University of California, Berkeley



I first encountered Old English poetry in a class at City College of San Francisco and was struck by the strange beauty and unexpected complexity of the words and images. After transferring to Berkeley, I took a class on Anglo-Saxon England. At Cambridge, in the department of Anglo-Saxon, Norse and Celtic, I intend to continue researching hagiography. I am interested in the representations of slaves and criminals within the hagiography of Saint Swithun at Winchester written by Lantfred, a monk originally from Fleury. My research will look at the possible connections between Lantfred's text, Carolingian law codes and the hagiography of Saint Benedict written at Fleury. I hope to show that by redeploying these sources in an Anglo-Saxon context, Lantfred was articulating a new relationship between the saint, law and the slaves and criminals living within the community.

**INTERESTS:** Cooking, philosophy, yoga and science fiction.

## Erin Plisco

### USA

#### COURSE IN CAMBRIDGE

MMus, Choral Studies, Trinity College

#### PREVIOUS UNIVERSITY

Christopher Newport University



For as long as I can remember, my life has been enriched by the study and performance of music. For the past three years I have directed a large high school choral music program in North Carolina. During that time, I have seen the power of choral music to stimulate and transform others. I am dedicated to inspiring my students' realization of this transformative power, and endeavor to illustrate that music is an improvement on life itself. The M.Mus. in Choral Studies at Cambridge will provide a unique intellectual and musical training—one that will allow me to expand my reach to the global community. Cambridge offers a diverse approach to training choral musicians that will provide me with the experience necessary to more effectively work with students on a global level and to make music of the highest caliber. I am excited to immerse myself in a culture that places such a high value on choral music and music education, steeped in a timeless tradition that has thrived for centuries.

**INTERESTS:** Beyond everything music and arts related, I enjoy good food, laughing, rushes of adrenaline, new friends, new adventures, and finding beauty in everything around me.

## Michelle Quay

### USA

#### COURSE IN CAMBRIDGE

PhD, Asian and Middle Eastern Studies, Pembroke College

#### PREVIOUS UNIVERSITY

University of California, Los Angeles



After graduating from UCLA with an MA in Iranian Studies, I will be heading to Cambridge to work on Premodern Persian Literature. With my time as PhD student in Cambridge, I hope to examine the surprisingly diverse body of Persian and Arabic Medieval texts that deal with women's positions and capabilities within the field of Islamic mysticism, sometimes referred to as Sufism. I am particularly interested in female "saint"-type figures (awliya), who find some parallels in the Christian tradition. I began studying Persian informally in 2005 and formally in 2007.

**INTERESTS:** Hiking, Backpacking, Travel, Foreign Languages, Sci Fi.

## Nicholas Rice

### South Africa

#### COURSE IN CAMBRIDGE

MPhil, Advanced Chemical Engineering, Magdalene College

#### PREVIOUS UNIVERSITY

University of Cape Town



South Africa's energy sector is characterised by an unsustainable dependence on coal. In this however, I see tremendous opportunity for the development of sustainable energy technology. At Cambridge I will be pursuing an MPhil in Advanced Chemical Engineering, hoping to reinforce my knowledge of catalysis and computational modelling, and increase my flexibility as a research engineer one day operating within the dynamic field of renewable technology. Through many previous projects and my current research in fuel cell science, I am increasingly passionate about the role chemical engineering has to play in meeting global diversification targets. I want to direct my work to developing modular off-grid electrification solutions, such as biomass gasifiers, for rural and under-developed communities in South Africa as a mechanism to stimulate social development. Advancements in the catalytic cracking of biomass-derived syngas tars could drive gasification technology towards commercialisation.

**INTERESTS:** Playing and listening to music, popular science, technology, conflict history, darkroom photography, cinema, theatre, cooking, and hiking.

# SUSTAINABLE ENERGY

Nicholas Rice

Finding a workable renewable energy solution is a pressing issue for countries like South Africa which are facing urgent development challenges. Although Nicholas Rice is currently working on the fundamental science needed to address the issue, he hopes that his MPhil at Cambridge, which he begins in the autumn, will allow him to look at the associated social, cultural, political and economic aspects of the problem.



He says: "The traditional way to boost development is to push for nationwide electrification through carbon-based energy, but the problem is that this model is unsustainable and will drive climate change."

Nicholas is currently working for HySA [Hydrogen South Africa]/Catalysis, a South African government-funded initiative which focuses on hydrogen and fuel cell technology.

He believes hydrogen-powered vehicles have an important role to play in future diversification and the move towards clean energy, and that they have great potential in stationary power applications too."

His work is focused on the fundamental science of clean energy, but other branches of HySA/Systems are involved in the practical implementation of research, such as building hydrogen-powered forklift trucks.

"Whilst it is very important to focus on long-term technology development, such as fuel cells, I would like to be involved in the development of African-applicable technology which will address short-term development needs sustainably," he says. Nicholas, who is also currently working as a teaching assistant at the University of Cape Town, studied chemical engineering at the University of Cape Town.

The course was four years and in his fourth year he did a three-month research project which involved developing a technique for teaching diffusion by measuring diffusivities using just mobile phone cameras and a laptop.

It's a topic which is covered in the engineering syllabus, but Nicholas says studying diffusion in a lab course requires sophisticated and expensive equipment which is often unavailable due to cost and the size of classes.

"The principle of diffusion affects a lot of things in chemical engineering design. It's vital to get a good understanding of it, but it's a very difficult subject to demonstrate practically," he says.

He and his research partner are writing up a paper on their work which they hope to submit to a peer-reviewed journal. They also hope that their method will be used in undergraduate curricula to help students grapple with diffusion.

The method was developed during consultations with their supervisor who had the idea to visualise diffusion through the use of coloured substances and suggested mobile phone cameras. Nicholas and his partner came up with a simple and inexpensive way to construct the apparatus and conduct the experiments in a home setting.

"A spectrophotometer can cost thousands of pounds, but we did a survey and found that most students have access to a mobile phone camera," he says.

His lecturer will be the first to trial the method on his mass transfer course.

In addition to his academic work at the University, he has been involved in a broad range of other activities, including photography and working for Engineers Without Borders on the African Community Projects in Belhar, a poor suburb of Cape Town. This involved working with a local community centre which wanted to improve its agricultural activities. He helped design an egg incubator and a renewable water heater for an aquaculture project to sell tilapia fish.

"It was a reality check," he says. "It showed me the hard reality of the lives of so many people in my country and gave me the opportunity to help and that is something I want to continue with my research."

## Victor Roy

### USA

#### COURSE IN CAMBRIDGE

PhD, Sociology, King's College

#### PREVIOUS UNIVERSITY

Northwestern University (Deferred from previous year)



Raised amidst a Bengali family in America and educated by journeys and peoples across four continents, I've been privileged to travel between varied worlds. My training has taken me between the worlds of the sciences and the social – I studied political science at Northwestern and earned an MPhil in Modern Societies and Global Transformations from Cambridge; I've also completed a major part of my medical training from Feinberg School of Medicine. In between, I co-founded two social change organizations advancing health, GlobeMed and Article 25. I'm excited at the promise that sociology offers in interpreting our world with fresh lenses and acting with new possibilities. Though I've had the chance for formal training in the tools of this analysis, much of my inspiration stems from the lab of real world experiences: from seeing patients with my grandfather, a physician for the rural poor in India, to building collaborations that stretch from South Africa, to Liberia, to Chicago.

**INTERESTS:** Traveling, chicken biryani, neuroscience, art, the outdoors, writing and poetry, Indian percussion, history, sports, star gazing.

## Ethan Rubin

### USA

#### COURSE IN CAMBRIDGE

MPhil, Education, Fitzwilliam College

#### PREVIOUS UNIVERSITY

Boston University



I have chosen to pursue an MPhil in Educational Leadership and School Improvement, focusing specifically on school culture and its effects on the development of character. Since finishing my undergraduate degree in Philosophy, I have spent two years teaching construction skills and job readiness at an alternative degree program for urban high school dropouts. I have participated in community building and social education efforts that enable my students to maintain their enthusiasm and hold one another accountable to higher standards of behavior and aspiration; this aspect of education is crucial for student success, particularly in urban and low-income communities, and is all too often left to chance. I intend to study how supportive social environments can be deliberately cultivated in a variety of schools, with the explicit aim of integrating character education into the daily lives of students.

**INTERESTS:** I have played music since the age of six and continue to perform in styles as varied as neo-soul, punk rock, and Arabic folk music. I also enjoy woodworking and contributing to academic conferences, primarily in the field of literary criticism.

## Shaina Saint-Lot

### USA

#### COURSE IN CAMBRIDGE

MPhil, Development Studies, Peterhouse

#### PREVIOUS UNIVERSITY

University of New Mexico



Being born and raised in Haiti and moving to one of the richest countries in the world made me clearly aware of the differences in quality of life among people worldwide. It never felt right to me that some people suffered and struggled so much while others lounged in luxury, and just because of the place they were born! I knew as a little girl that I wanted to improve the quality of life in places just like my homeland. As I spent more time in the U.S. though, I came to understand that inequality was a complex issue that directly affected wellbeing and quality of life, an unrestrictive issue affecting poor and rich countries alike. I look forward to researching the effects of inequality on wellbeing and development while exploring the grassroots organizations and state institutions that can both spur and hinder this equitable growth. I am excited to continue to build on my academic and research experience in the stimulating environment at Cambridge.

**INTERESTS:** Eating, traveling, playing sports, going to the beach, learning new languages, and dancing.

## Farhan Samanani

### Canada

#### COURSE IN CAMBRIDGE

PhD, Social Anthropology, Trinity Hall

#### PREVIOUS UNIVERSITY

University of Oxford



For a long time, I have been interested in how people become personally invested in particular political issues – how do we come to experience and approach issues like conflict, climate change, or financial regulation within the familiar spaces of our everyday lives? By looking at the lives of welfare recipients, my research at Cambridge will examine how particular ideas of citizenship, each with particular patterns of affiliation and distance, come to become meaningful within peoples' everyday lives. My hope is that this research will help develop a richer understanding of why many of the contemporary challenges we face today have been unable to generate a strong public investment, and how such challenges might come to become more compelling at a fundamental level. In turn, I hope to use my time at Cambridge, and as a Gates Scholar, to work towards a position where I can put these findings into practice.

**INTERESTS:** Beyond my research, I love the outdoors – from hiking to climbing – photography, nature documentaries, fantasy novels and over-thinking pop culture. I'm also interested in social entrepreneurship and the changing role of technology in our lives.

## Jessica Santivanez Perez

### Peru

#### COURSE IN CAMBRIDGE

PhD, Clinical Neurosciences,  
Selwyn College

#### PREVIOUS UNIVERSITY

University of Edinburgh



I was born and raised in Lima, Peru. I moved to the UK to pursue a career as a research scientist committed to have a positive impact on the quality of life of patients worldwide. With my grandmother having been recently cured from skin carcinoma and a family history of breast cancer, I became actively involved in cancer research. However, I became aware of less treatable, devastating conditions with unknown causes, such as neurodegenerative disorders. These are becoming a major threat to public health due to the phenomenon of the ageing population. My work at Cambridge will therefore focus on the study of the early events that lead to neuronal death in Parkinson's disease. I hope to identify agents that can delay disease progression since current treatments only address the symptoms, rather than the causes of neurodegeneration. Additionally, I aim to establish links with centres in Latin America to promote research and the role of women in science back home.

**INTERESTS:** Dancing, tennis, art history, piano, guitar, volunteering, travelling, and Latin American poetry.

## Rebekah Scheuerle

### USA

#### COURSE IN CAMBRIDGE

PhD, Chemical Engineering,  
St John's College

#### PREVIOUS UNIVERSITY

University of Texas Austin



I am so honored to be pursuing my PhD in chemical engineering at Cambridge! I will be studying biopharmaceutical development and drug delivery in the lab of Dr. Nigel Slater. Although therapeutic development is necessary globally, the world is in desperate need of affordable, optimized therapies and diagnostics for resource-limited environments. Millions of people do not have access to the electricity and refrigeration required for many current medical treatments. I hope to use my experience in polymeric drug delivery from The University of Texas, microfluidic diagnostics from U.C. Berkeley, vaccine commercialization from Merck Sharp and Dohme, and antibody purification development from Genentech to support me in my graduate studies. I plan on using the skills I acquire at Cambridge in a future career developing biotechnology-based solutions to world health problems.

**INTERESTS:** Hiking, karaoke, piccolo/flute/guitar playing, cake decorating, knitting, reading, traveling, fossil hunting.

## Christina Schweitzer

### Canada

#### COURSE IN CAMBRIDGE

PhD, Veterinary Medicine,  
Darwin College

#### PREVIOUS UNIVERSITY

Queen's University (Canada)



My PhD research at the University of Cambridge will focus on understanding how adjuvants, a component of vaccines, can improve the immune system's protective response against HIV infection. I have just completed a BScE in Chemical Engineering at Queen's University in Canada, with a specialization in biochemical and biomedical engineering, and have developed an interest in immunology and cell biology research during summer internships at the University of Calgary and the Babraham Institute. I first became interested in HIV during a volunteer experience in rural Tanzania in high school, helping to build a new classroom with HIV positive students. At Queen's, I became involved in advocating for increased awareness about HIV/AIDS related issues, as a founding member and Co-President of Friends of MSF: Queen's, an affiliate of Médecins Sans Frontières / Doctors Without Borders. This research will allow me to combine my interests in HIV from both a scientific and social perspective.

**INTERESTS:** Travel, photography, figure skating, ice and field hockey, hiking, languages.

## Matthew Shafer

### USA

#### COURSE IN CAMBRIDGE

MPhil, Political Thought and Intellectual  
History, Clare College

#### PREVIOUS UNIVERSITY

Yale University



I'm originally from Atlanta, Georgia. As an undergraduate at Yale, I informally constructed an interdisciplinary course of study around the formal core of the Philosophy Major, drawing on the resources of the university's programs in German Studies, History, Religious Studies, Political Science, Divinity, and "Ethics, Politics, and Economics." These diverse interests were unified by recurring attention to the study of nonviolence as a religious and political phenomenon. I plan eventually to enter academia in the field of political theory, which (I hope) will allow me to help shape the discursive contexts of real-world policy debates and activist movements. I expect that my long-term work will continue to take up questions of violence and nonviolence, moral and political cosmopolitanism, normative ethics, and religion as a political phenomenon.

**INTERESTS:** Other major interests include feminist and queer theory/politics, nuclear weapons policy, dystopia in literature and film, the history of European philosophy, and coffee.



# AFTER THE REVOLUTION

MAHA SHASH

How has the Arab Spring influenced Egyptian society at an everyday level? Maha Shash is interested in the impact social change, international events and political ideas have on patterns of consumption and how the Egyptian experience compares with other cases in history.

She will be one of the first Gates Cambridge Scholars for Egypt when she arrives at Cambridge this autumn and says recent events have had a profound impact on every aspect of life in her country. She herself attended the original protests in Tahrir Square and says the spirit of hope there was very powerful. "Everyone had hope that change would happen," she says. "Before that hope and dreams for the future were dying. There was a sense of freedom and a realisation we could change our country."

Although the focus of her PhD in Sociology will be on patterns of consumption this is part of an ongoing wider interest in the gap between political rhetoric, academic theory and people's everyday reality in her country.

This interest stemmed from her masters research on literacy classes, but also from her experience of doing an undergraduate degree in economics at the American University in Cairo which was generally disconnected from what was happening in Egyptian economics.

Maha applied to do the PhD during the Arab Spring, inspired by a sense of hope for the future. "I wanted to do something for Egypt," she says. She was also interested in the Gates community and the focus on internationalism and creating a community of scholars who are all committed to improving the world.

**Maha was brought up with an international outlook. Her father was a diplomat and the family lived in the Philippines and Serbia, during the Balkan war.**

In Serbia where she lived until she was 11, Maha attended a French and a German school which meant she had to take extra language classes after school.

She studied economics at the American University in Cairo, but she found the course very theoretical and based on the US curriculum.

After her degree and somewhat disillusioned by academia, she started working in finance and accounts at the university, but



soon found the work was not as intellectually challenging as she wanted. She applied for a masters in economics in 2005 and won a full scholarship. Maha worked on a literacy project, observing classes in Alexandria, Cairo and Giza.

As she read the reports on the project written by academic consultants, she felt more could be done to improve the quality of the literacy classes, but that the assessors settled for less so long as the results looked good. "I felt they were quite divorced from the reality on the ground and that the classes could have been so much better if the system was evaluated properly. That was where my interest in the separation between theory and reality crystalised," she says.

After finishing her masters she moved to Malaysia with her family, but returned to Egypt after a year and was offered a higher position back in finance and accounts at the American University in Cairo where she moved up the career ladder. Eventually she moved into teaching economics to high school students at an international school in Cairo and from there she was accepted to study at Cambridge.

"I want to give back and help these young students discover their strengths, to hold on to hope whatever happens and to lead the change they want to see for Egypt. I have been inspired by their dreams and I hope that I will be similarly inspired by the students who form part of the Gates community," she says.

## Maha Shash

### Egypt

#### COURSE IN CAMBRIDGE

PhD, Sociology,  
Queens' College

#### PREVIOUS UNIVERSITY

American University in Cairo



Salam aleikom! Greetings from Cairo, Egypt! My academic background was mainly in Economics. After graduation I felt that a more informed role in contributing to my country required a more interdisciplinary approach. Thus I studied Economics in International Development which included courses from sociology, political science, and management. Through my research at Cambridge I aim at connecting both the realm of ideas and the empirical world while analyzing social change with respect to consumption. Through an interdisciplinary approach I hope to examine economic decisions reflecting pieties that negotiate new social relationships in different geographical and ideological contexts in comparison to Egypt.

**INTERESTS:** Music, arts, drawing, painting, travelling, reading, Arabic and everything about students and family.

## Shobana Sivanendran

### Malaysia

#### COURSE IN CAMBRIDGE

MPhil, Engineering,  
Lucy Cavendish College

#### PREVIOUS UNIVERSITY

University of Melbourne



I grew up in Kuala Lumpur, Malaysia and moved to Melbourne for my tertiary education. I graduated from the University of Melbourne in 2010, earning a BEng in Civil Engineering. At university, I undertook my final year research in a study of the strength and stiffness of anchored bolts in concrete-filled steel columns – an exercise that sparked my interest in research into the behaviour of composite structural systems. At Cambridge, I will be researching the durability of carbon fibre reinforced polymers (CFRP) in prestressed concrete elements under various environmental conditions. I hope that the new knowledge generated from my research will increase the popularity of the use of CFRP prestressed concrete elements in the design of safer, more economical and more durable structures. Following the completion of my MPhil degree, I hope to further my studies through a PhD and continue on into a career in academia.

**INTERESTS:** Playing the piano and violin, reading, squash, baking and am an avid choral singer. I have a food blog where I document my kitchen adventures and experiences.

## Rachel Silverman

### USA

#### COURSE IN CAMBRIDGE

MPhil, Public Health,  
Clare College

#### PREVIOUS UNIVERSITY

Stanford University



After graduating from Stanford University in 2009 with a B.A. in international relations and economics, I spent the past four years working in international development research and practice, most recently with the global health policy team at the Center for Global Development. This year, I am excited to be pursuing an MPhil in Public Health with support from the Gates Cambridge Trust. Driven by the belief that we have an ethical obligation to save as many lives as possible with the resources at our disposal, my interests lie at the intersection of global health and economics, particularly with regard to efficient and equitable resource allocation (priority-setting) and incentive structures to maximize “value for money” in health policy. It is my hope that my studies at Cambridge will enable me to be a stronger advocate for evidence-based public health decision-making.

**INTERESTS:** Anything outdoors, maps, trivia, travel, and college football.

## Zoe Stewart

### Australia

#### COURSE IN CAMBRIDGE

PhD, Clinical Biochemistry,  
Clare College

#### PREVIOUS UNIVERSITY

University of Sydney



Early in my medical training I developed a keen interest in endocrinology and particularly endocrine disorders in pregnancy. These disorders have far-reaching biopsychosocial effects and interventions can improve the lives of women and their children. My PhD will examine whether the “artificial pancreas” can improve glucose control and clinical outcomes in pregnant women with Type 1 diabetes in real-life at home trials. I am also a passionate advocate of sexual and reproductive health and rights, and am currently a Director of Family Planning Victoria and the Australian Youth Representative and a Regional Council Member for the International Planned Parenthood Federation. In the future, I hope to be a clinician-researcher with an active role in policy and advocacy to help on practical and empirical levels to improve the lives of women and their families.

**INTERESTS:** Baking, snow skiing, scuba diving and musical theatre.

## Kaitlin Stouffer

### USA

#### COURSE IN CAMBRIDGE

MPhil, Medical Genetics,  
St Catharine's College

#### PREVIOUS UNIVERSITY

Princeton University



All my life, I've been captivated by the wonders and conundrums of complex diseases. Why do viruses mutate in unpredictable ways? And why would a man mistake his wife for a hat? With a quantitative mind, I longed for mathematical tools I could use to investigate these captivating mysteries and found them in machine learning—dedicated to the discovery of complex computational patterns in a range of applications. At Cambridge, I will have the opportunity to contribute my machine learning background to an ongoing effort to determine the genes involved with pain. Capturing complex relationships among genes and with their environment, machine learning has the potential to discover not just single genes, but how they interact to cause observed symptoms. Ultimately, I hope to pursue an MD/PhD so that as a scientist, I might help further our understanding of complex diseases but as a physician, I might never lose sight of the real patients I'm trying to help.

**INTERESTS:** Dancing, Traveling, Theater, Baking, Walking, and Women in Science Outreach and Mentorship.

## Tara Suri

### USA

#### COURSE IN CAMBRIDGE

MPhil, Multi-Disciplinary Gender Studies,  
Murray Edwards College (New Hall)

#### PREVIOUS UNIVERSITY

Harvard University



My undergraduate research at Harvard has focused on the impact of the United States "anti-prostitution pledge" – an aid conditionality requiring NGOs receiving federal funds to declare their opposition to prostitution – on sex worker collectives in India. A strand of this research has involved tracing the conceptual linkages between the anti-prostitution pledge and imperial policies seeking to govern prostitution. Through the MPhil in Multi-Disciplinary Gender Studies, I look forward to further investigating the historical continuities in the regulation and production of sexualities in the Global South. In particular, I seek to build on existing scholarship mapping the policing of prostitution in the British Empire with a view to understand the contemporary legacies of colonial discourses.

**INTERESTS:** Reading, writing, traveling, making truffles and chocolate frogs.

## Jason Tabachnik

### USA

#### COURSE IN CAMBRIDGE

MAst, Applied Mathematics,  
Churchill College

#### PREVIOUS UNIVERSITY

Case Western Reserve University



I recently completed degrees in mathematics and physics at Case Western Reserve University. There, I was involved in numerous projects ranging across the expanse of physics. Over the course of two summers, I examined entropic forces in soft matter as well as interference phenomena in optical semiconductors. In my junior year, I immersed myself in high-energy theory, studying dualities between string theory, fluid dynamics, and gravity. At Cambridge, I will read Part III Mathematics where I plan to delve deeper into the latter while also expanding my background in unfamiliar areas such as biological physics and quantum computation. In the long-term, I hope to become a scientist focused on the development of new materials, whose unparalleled physical properties can be channeled into viable solutions for global problems.

**INTERESTS:** Skiing, weightlifting, reading, board games, mathematics, physics, meeting new people, and exploring new places.

## Maxim Tabachnyk

### Germany

#### COURSE IN CAMBRIDGE

PhD, Physics, Trinity College

#### PREVIOUS UNIVERSITY

University of Cambridge  
(MPhil Gates Scholar)



During my undergraduate studies in Munich I discovered organic electronics to be a promising field. Specifically, very cheap, flexible and disposable organic solar cells could lead to a new and sustainable energy source. In my PhD in Cambridge I plan to explore the physics behind singlet exciton fission in organic materials and its use in photovoltaics to reach efficiencies beyond the Shockley-Queisser limit. The final goal is to obtain an understanding of the physics behind singlet exciton fission and the dynamics of the resulting triplet excitons. Most importantly, I want to use this insight to design new systems with lower losses in excitonic energy transport and to exploit the potential of singlet fission for the efficiency to go beyond the Shockley-Queisser limit. Considering the cheap production costs, higher efficiencies can make organic solar cells attractive for large-scale use. In my PhD I would like to contribute to such a sustainable energy source.

**INTERESTS:** Travelling, basketball, chess.

# DIFFERENT PERSPECTIVES

Alim Tusun

Ethnic minorities in China could do attain much higher levels of education with more research into bilingual education and bilingual teacher development, says Alimujiang [Alim] Tusun.

He knows this from first hand experience growing up in the Kashgar in the Xinjiang Uyghur Autonomous Region in northwestern China. He hopes his research into how to boost bilingualism teaching can make a difference to thousands of people in China and improve educational standards.

He says: "I am very concerned about the quality of bilingual education in the ethnic minority regions of China. The Government has done its best to put money into resources like buildings and books, but there are not many qualified bilingual teachers and there is a shortage of language teachers and trainers. Students are taught core subjects in Han Chinese by teachers who are themselves learning the language. If they cannot express themselves what can the students get from what they teach? I've got two nephews and one goes to a bilingual school and the other to a Han Chinese school and the first is way behind."

Alim himself attended a Han Chinese secondary school, but his parents had to pay extra for this as these schools were more expensive at the time.

He studied humanities at the North West University for Nationalities, which was originally established as a training school for ethnic minority leaders. The standards needed to be accepted for the University were lower than for other

institutions to take into account how the language issue and other quality issues affected ethnic minority students' education. As a consequence ethnic minority students at Chinese universities have to do two extra years studying Han Chinese in addition to their four years for an undergraduate degree.

When his course was finished, Alim applied to do his masters at Beijing Foreign Studies University after representing his province in a national English debating conference. "It's the best languages university in China and had two Cambridge-trained professors whom I admired greatly. One was a professor of English linguistics who taught in a very applied way relating research to real-life language-related issues. That appealed to me. The debating contest gave me the confidence to apply," he says.

He had to take an exam to get in. His masters took him four years as he had to do an additional year studying Chinese and receiving some training in other foundational subjects. He opted to do linguistics and was particularly focused on bilingual education. Alim taught English phonetics to undergraduates at BFSU and his masters thesis was based on one of the courses he taught. He also taught middle school students English grammar.

**Alim had never thought of studying abroad and certainly not at Cambridge, but with the encouragement of a professor at BFSU, he applied and was accepted.**

He will be doing an MPhil in Theoretical and Applied Studies and will study the links between second language acquisition and second language phonology. "I hope I can boost educational standards in ethnic minority areas in China," he says. Alim would like to be both a teacher and researcher in the future and to be involved in bilingual teacher development and education in China. "I want to reflect on my own teaching practice and find answers to my own concerns and innovate," he says, adding that there is worryingly little good quality empirical research into bilingual education and teacher development in China. "There is a misconception that being able to speak a language means you can be a good teacher of it" he says.



## Yee Siong Tong

### Malaysia

#### COURSE IN CAMBRIDGE

PhD, Development Studies,  
Queens' College

#### PREVIOUS UNIVERSITY

University College London



As the youngest of eight children, I grew up in a small town with little economic activities. Thanks to my late father who continuously invested in his children's education, my siblings and I were able to experience upward social mobility. This shaped my belief in the importance of creating opportunities for others. At Cambridge, I intend to study institutional design and change in China and India, with the purpose of distilling useful lessons pertaining to economic, social and political institutional arrangements for late development. I would like to critically examine the assumptions behind and the limits of theories on institution building by deploying micro-situational case studies on real-life development trajectories. I previously worked as a Research Manager at a Hong Kong-based think tank, the Fung Global Institute, and was a Research Team Leader at Malaysia's National Economic Advisory Council which advised the government on national development policy.

**INTERESTS:** Travelling, cooking, meeting new people.

## Alimujiang Tusun

### China

#### COURSE IN CAMBRIDGE

MPhil, Theoretical & Applied Linguistics,  
Fitzwilliam College

#### PREVIOUS UNIVERSITY

Beijing Foreign Studies University



I did my MA degree in applied linguistics (AL) at Beijing Foreign Studies University. What struck me during my post-grad years is the profound relevance of AL to the many pressing issues of the real world. Major ethnic minority regions in China, including mine, are implementing bilingualism, almost at all levels of education. Despite the huge government support and investment, there is a lot to be desired, especially in terms of qualified language teachers and teacher researchers. It seems unless a more balanced approach is developed, whereon bilingual teachers are informed of the cutting-edge research and theoretical insights of language education and second language acquisition, the quality of bilingual education and that of education as a whole will be compromised. I hope my MPhil in theoretical and applied linguistics at Cambridge will lead me to a PhD, which allows me to get involved in and lead the practice of bilingual education in my home region and language education of China.

**INTERESTS:** Books, popular theology, movies. As a member of the Charter for Compassion which activates the Golden Rule around the world, I'm intent on spreading its compassionate ethos.

## Mohammad Usman

### USA

#### COURSE IN CAMBRIDGE

MPhil, Planning, Growth and Regeneration,  
Wolfson College

#### PREVIOUS UNIVERSITY

DePauw University



I'm honored to be studying for an M.Phil. in Urban Planning, Growth, and Regeneration at Cambridge, having graduated from DePauw University last December with a B.A. in Urban Policy and Conflict Studies. At DePauw, I became interested in the intersection of public health, economic development, and urban planning. My academic interests were also informed by my urban upbringing as well as my professional experiences serving as an advocate for civil legal justice at the City University of New York School of Law. At Cambridge, I will study governance and policy-making at the local-level, focusing on devising solutions for public health and economic problems that plague poor urban communities. I ultimately aim to address such issues in my hometown, the Bronx, by serving professionally in a policy-making capacity for New York City.

**INTERESTS:** Cities, films, casual walks, lively discussions, experiencing new places, and meeting new people.

## Collin Van Buren

### USA

#### COURSE IN CAMBRIDGE

PhD, Earth Sciences, Christ's College

#### PREVIOUS UNIVERSITY

University of Toronto



I grew up in La Salle, Illinois, where I lived until I finished my Associates Degree at Illinois Valley Community College and moved to Western Illinois University. There, I completed my B.S. in Biology (Zoology) with a minor in Functional Morphology and Evolutionary Anatomy. I then completed my M.Sc. in Ecology & Evolutionary Biology at the University of Toronto. My research has focused on the relationship between the form and function of anatomical structures and adaptations. I have then used these data to reconstruct the ecology and behaviour of extinct vertebrates. At Cambridge, I hope to use an integrative approach to explore questions related to the long-term effects of climate change on adaptations and biodiversity using both living and extinct organisms.

**INTERESTS:** Reading, hiking, exercising, cooking, traveling, and trying anything new!

## Kaitlin Veenstra

### USA

#### COURSE IN CAMBRIDGE

MPhil, Architecture and Urban Design,  
Girton College

#### PREVIOUS UNIVERSITY

University of Notre Dame



Born and raised in Saint Paul, Minnesota, I found my passion for architecture in the confluence of calculation and creativity, of structural form and aesthetic delight. I will graduate this spring from the University of Notre Dame with a Bachelor of Architecture and a strong foundation in traditional architecture and urbanism. I have studied abroad before, and am now fortunate for the opportunity to study at Cambridge. I have always been interested in the profound influence buildings can have in shaping urban activity and in representing a region's cultural heritage. I am also committed to reducing the ecological footprint of the built environment. In my career, I would like to design buildings which respect and represent local character and heritage and are accessible to people across economic classes.

**INTERESTS:** Cooking and baking, knitting, sketching, cross-country skiing, hiking, and horseback riding.

## Eric Washkewicz

### USA

#### COURSE IN CAMBRIDGE

MPhil, Energy Technologies,  
Churchill College

#### PREVIOUS UNIVERSITY

United States Naval Academy



As a rower, runner, mountaineer, and naval officer, I am distraught both by how little consideration is given to the preservation of the quality of our water, air, land, and the liberality with which industrial powers consume fossil fuels. We face a triad of challenges contributing to the current energy crisis: insufficient production, consumption inefficiencies, and excessive waste, that I plan to tackle with the expertise provided by a Gates-Cambridge education. I am pursuing an MPhil in Energy Technologies in order to discover which energy sources are the most efficient, inexpensive, and compatible with current power systems, and to discover which new systems can power the future for the Navy and for the world we live in.

**INTERESTS:** Rowing, Cycling, Running, Hiking/Camping, Martial Arts, and all forms of Rock Music.

## Ilana Walder-Biesanz

### USA

#### COURSE IN CAMBRIDGE

MPhil, European Literature and Culture,  
Corpus Christi College

#### PREVIOUS UNIVERSITY

Franklin W. Olin College of Engineering



I spent my undergraduate years studying Systems Engineering, including summers designing software for Microsoft. To complement my engineering education, I also pursued my interests in philosophy, literature and theater, a pursuit I will continue as an MPhil student at Cambridge studying European Literature and Culture. My research focuses on early modern plays that were re-written during the Romantic movement, with a particular emphasis on Spain (Don Juan) and Germany (Faust). I hope to eventually combine my diverse interests—either as an academic endeavor in which I explore questions at the intersection of engineering, philosophy, and literature (for instance, the philosophy of mind and language implications of developments in artificial intelligence) or as a political endeavor in which I help to shape laws and ethical guidelines related to new technologies. I am thrilled to be a part of the Gates and Cambridge communities as I work to realize this dream.

**INTERESTS:** Performance: acting, directing, singing opera, historical dance. Engineering: design, human-computer interaction, ethics of technology. Philosophy: ethics, 19th-century philosophy, existentialism. Literature: Romanticism in Europe, translation.

## Leah Weiss

### USA

#### COURSE IN CAMBRIDGE

MPHIL, Scientific Computing,  
Trinity College

#### PREVIOUS UNIVERSITY

Harvard University



I grew up in Cleveland, Ohio and graduated from Harvard University with an A.B. in Physics. I am interested in research at the intersections of physics, chemistry, and biology. My research experiences in college have thus far focused on solar energy in physical and biological systems. At Stanford University my goal was to decipher principles for the nanofabrication of concentrated solar thermal cells based on “bottom-up” engineering. At Harvard University we sought to probe physical and chemical mechanisms responsible for the seeming miracle of efficient energy coupling in a biological system. Understanding these complementary systems and their rules of operation define broad challenges central to future exploitation of clean energy technologies. In addition to research I am passionate about science education. Building on previous teaching and mentorship experiences, I look forward to getting involved with educational outreach at Cambridge.

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## Mariel Williams

### USA

#### COURSE IN CAMBRIDGE

MPhil, Human Evolutionary Studies,  
Downing College

#### PREVIOUS UNIVERSITY

University of Arkansas



I received my undergraduate degree in biological anthropology and Spanish from the University of Arkansas. During my time there I conducted field research in Costa Rica, Nicaragua, and Tanzania as well as lab research on the dental microwear of Brazilian primates to create an extant baseline series for comparison with fossil teeth in order to infer more about the diets of possible human ancestors. I am interested in human evolutionary science and how it can be significant for issues relevant to our existence today. I am excited to continue by education at Cambridge, where I intend to focus on paleoecology and the role environmental dynamics can play in evolutionary processes, including how climate change could have affected human evolution. I also have a great interest in accurate scientific education in public schools, specifically with regard to climate change and evolution. I intend to be an advocate for thorough and unbiased scientific education throughout my career.

**INTERESTS:** I enjoy traveling, science museums, puns, animals, quirky fashion, and adventures.

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## Naomi Woo

### Canada

#### COURSE IN CAMBRIDGE

MPhil, Music Studies,  
Clare College

#### PREVIOUS UNIVERSITY

Yale University



My MPhil research at Cambridge will be in Performance Studies, as I seek to unite the sometimes disparate fields of musical performance and musical scholarship. I want to use performance as a means of informing and enriching musicology, treating works of music as experiences rather than merely as texts, which will help connect music scholarship more closely to its listeners. These studies will also help me present more informed and engaging performances. As a pianist and conductor, I have performed widely in my hometown of Vancouver and at Yale. My recent performances interests include historically informed practice of early music, multimedia productions, and music by traditionally underrepresented composers. In addition to my academic studies, I look forward to participating in the vibrant musical culture at Cambridge.

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## Christina Woolner

### Canada

#### COURSE IN CAMBRIDGE

MPhil, Social Anthropology,  
Lucy Cavendish College

#### PREVIOUS UNIVERSITY

University of Notre Dame



At Cambridge, I intend to research the impact of war on indigenous Somali conflict resolution knowledge and practice, and the potential for such resources to support peace processes. This research builds on work I completed during my MA in International Peace Studies on the peacebuilding potential of Somali oral poetry, as well as a decade of work with refugees, an internship at the Institute for Justice and Reconciliation in Cape Town, and two years teaching peace and conflict studies. Working with people affected by violence has given me a very human understanding of the impact of war on diverse communities, and strengthened a commitment to use my own scholarship to contribute to both scholarly and practitioner communities working towards peace and justice. I plan to have an eventual career as a peace studies educator and 'engaged' social anthropologist focused on war and peace.

**INTERESTS:** Travelling, gardening, and exploring the wilds of Ontario by canoe.

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## Bingchan Xie

### Canada

#### COURSE IN CAMBRIDGE

MPhil, Clinical Science,  
Trinity College

#### PREVIOUS UNIVERSITY

California Institute of Technology



Growing up, I not only gained a deep appreciation for cultural diversity through living in four different countries (China, Australia, Canada, and the USA), but also became motivated by my fascination with the study of life to discover new knowledge. My innate curiosity and passion for scientific research led me to pursue a B.S. in Bioengineering at the California Institute of Technology, where I gained cutting-edge insights into complex modern diseases and pursued extensive investigations to find therapies for leukemia and diabetes. At Cambridge, my MPhil in Clinical Science (Translational Medicine and Therapeutics) will provide me with valuable knowledge and training in applying knowledge of disease mechanisms to guide powerful therapeutic drug development. I will gain an ideal foundation to become a physician-scientist, translating my research findings into more effective healthcare and providing people with the knowledge and treatments to battle their diseases.

**INTERESTS:** Besides science, I love adventure such as through exploring different cultural and physical landscapes, meeting new people, and eating delicious food. I swim and played water-polo competitively. I play the piano, clarinet and violin.

# INTERNATIONAL PEACEBUILDER

Christina Woolner

International peacebuilding efforts have tended to overlook indigenous knowledge and understanding about conflict resolution, says Christina Woolner.



She hopes her MPhil in Social Anthropology, where she will focus on Somalia, will go some way to addressing issues that have long concerned her and which have been influenced by years of working in different countries, and teaching peace studies, most recently in Somaliland.

She says: "International peacebuilding efforts have tended to be top down and to overlook local resources. We need to better understand the local resources in any given setting. Peace studies texts talk about cultural knowledge as a tool, but I believe culture is much deeper than that. I want to do something that takes seriously how culture shapes our understanding of conflict and peace, and how different forms of knowledge may contribute to peacebuilding efforts."

Christina has always had a very international outlook on life and an interest in social justice. Born in Guelph in southern Ontario, her parents are Mennonite Christians, a pacifist denomination which places a big emphasis on social justice. Her parents spent the first three years of their married life working in northeastern Brazil for Mennonite Central Committee (MCC), a relief, development and peacebuilding organisation. They currently serve with MCC in Ethiopia.

For most of her childhood Christina's family home played host to a series of international guests, including refugees, students and international service workers. Her mother also coordinated

an international exchange programme for MCC. When she was 18, Christina went to China and stayed with a host family in Sichuan province, studying Mandarin, cooking and Tai Chi. The trip inspired her to take a year of Mandarin when she started university.

At Wilfrid Laurier University, Christina studied Global Studies and Religion and Culture. In her third year, having swapped Mandarin for Russian, she went to Russia and did research on how religious institutions could strengthen civil society in the country. For her final year she did an ethnographic study of a local inter-religious dialogue group. After finishing her undergraduate degree, Christina took a year off to go back to Russia where she studied Russian, taught English and volunteered at human rights and environment groups in eastern Russia.

The year after she started a two-year masters at Notre Dame in international peace studies. The masters involved a six-month work placement, which she did at the Institute for Justice and Reconciliation in Cape Town, South Africa, assisted with digital storytelling and oral history projects. She returned to Notre Dame and did a research project on the role of oral poetry in Somali peacebuilding processes.

After finishing her masters, Christina returned home and worked for Project Ploughshares in Waterloo doing research on the arms trade and armed conflict and also worked on a project looking at gun crime in the Caribbean.

Christina then transitioned to teaching peace and conflict studies, using personal stories to bring the issues to life for her students. From there she got the opportunity to teach at the University of Hargeisa in Somaliland at the Institute for Peace and Conflict Studies where, due to the security situation, she was escorted everywhere by a soldier with an AK47. She took a critical approach to the subject matter she was teaching. "The students had a hard time relating to a lot of the writing in the field because it had all been written by white guys," she says. "Where were the Somali scholars?"

For her MPhil in social anthropology, her plan is to look at the relationship between indigenous conflict resolution practices and international peacebuilding efforts with particular reference to Somalia.



## CLASS OF 2013/14 BY COUNTRY

Australia	2	Germany	5	Peru	1
Bangladesh	1	Italy	1	Poland	1
Brazil	1	Kenya	2	Singapore	1
Canada	9	Malaysia	2	South Africa	4
Chile	1	Netherlands	1	Taiwan	1
China	3	New Zealand	1	Ukraine	1
Egypt	2	Norway	1	USA	47
France	2	Pakistan	2		

Total countries: 23

## CLASS OF 2013/14 BY COLLEGE

Christ's College	3	Magdalene College	3
Churchill College	8	Murray Edwards College	1
Clare College	9	Newnham College	1
Clare Hall	1	Pembroke College	2
Corpus Christi College	3	Peterhouse	2
Darwin College	3	Queens' College	5
Downing College	2	Selwyn College	3
Fitzwilliam College	2	Sidney Sussex College	1
Girton College	1	St Catherines College	1
Gonville and Caius College	2	St John's College	6
Hughes Hall	4	Trinity College	9
Jesus College	2	Trinity Hall	3
King's College	8	Wolfson College	5
Lucy Cavendish College	2		

Total Colleges: 27

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# CLASS OF 2013/14 BY DEPARTMENT

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Anglo-Saxon, Norse and Celtic	1	Law	1
Applied Mathematics and Theoretical Physics	2	Linguistics	2
Architecture	1	Materials Science and Metallurgy	4
Asian and Middle East Studies	1	Medicine	4
Chemical Engineering	2	Modern and Medieval Language	1
Chemistry	2	MRC Human Nutrition	1
Clinical Biochemistry	1	Music	4
Clinical Neurosciences	1	Oncology	1
Computer Science and Technology	1	Pathology	4
Criminology	2	Physics	4
Development Studies	3	Physiology, Development and Neuroscience	1
Earth Sciences	1	Plant Sciences	2
Economics	1	Politics and International Studies	3
Education	5	Psychiatry	1
Engineering	6	Public Health	2
English	3	Public Health and Primary Care	1
Geography	2	Pure Mathematics and Mathematical Statistics	2
German	1	Scott Polar Research Institute	2
History	3	Social Anthropology	4
History of Art	1	Sociology	2
Human Evolutionary Studies	1	Veterinary Medicine	1
Judge Business School	2	Zoology	1
Land Economy	1		

Total Departments: 45



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