

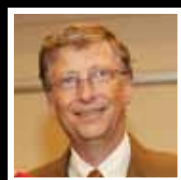


THE
GATES
CAMBRIDGE
YEARBOOK 2012



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 1,164 Scholarships to citizens of 95 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 2012/13 consists of 88 outstanding Scholars from 21 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.

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FOREWORD



As I start my third year as Provost, each new entering cohort reinforces my admiration for what this extraordinary programme offers both the University of Cambridge and its élite of Gates Cambridge Scholars. You deserve congratulations for becoming one.

What is clear is that, after the extremely competitive process which results in these prestigious awards, it is the Scholars themselves who enrich the experience and opportunities afforded by the vision and founding generosity of the Bill & Melinda Gates Foundation.

The now-established formal Welcome and Graduation occasions here in Cambridge further serve to strengthen the sense of community which is a distinct feature of the Gates Cambridge Scholarships. And the evidence of that community's extension beyond Cambridge is to be found both in the work of the Alumni Association and in our meetings with former Gates Cambridge Scholars around the world. All of them remain deeply committed to the Gates Cambridge Trust. We can be confident that each new generation of graduates will further enhance the profile of the Scholarships.

Academic brilliance, allied to leadership potential and a commitment to improving the lives of others, justified their original selection. Their work, across so many disciplines, will change the ways in which important global challenges are met. The Gates Cambridge Scholars of 2012, like their predecessors, have the responsibility and privilege to shape the future.

Professor Robert Lethbridge,
Provost

TRUSTEES, OFFICERS AND STAFF

TRUSTEES



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GATES CAMBRIDGE SCHOLARS' COUNCIL 2012–2013

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.



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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



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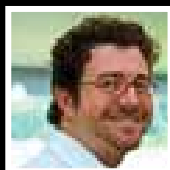
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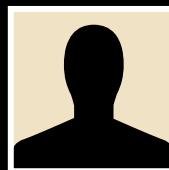
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Magazine Alumni Editor



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Justin Bangs
Director of Membership



David Bard
Director of Professional Development
and Public Interest



Eliza Ridgeway
Director of Professional Development and
Public Interest



Greg Jordan
Director of Technology

Jane Abbottsmith

USA

COURSE IN CAMBRIDGE

MPhil Theology and Religious Studies,
Clare College

PREVIOUS UNIVERSITY

Princeton University



My interest in theology led me as an undergraduate from Princeton's Religion Department to the Princeton Theological Seminary to Oxford's Faculty of Theology, opportunities that enabled me to link Biblical and pre-modern theology with contemporary normative ethics. I am also involved in the field of social entrepreneurship, where I have found the focus on systemic solutions to injustice both compelling and energizing. Standing at the confluence of theology and social entrepreneurship, I have found my academic niche in the field of Christian ethics. Being a part of the Cambridge and Gates communities this year will undoubtedly shape my thinking and prepare me for a lifetime of engagement with the study of faith and the enactment of ideas.

INTERESTS: Reading, knitting, riding, cooking, and piano.

Chidiebere Akusobi

Nigeria

COURSE IN CAMBRIDGE

MPhil Biological Science (Biochemistry),
Churchill College

PREVIOUS UNIVERSITY

Yale University



I was born in Aba, Nigeria, immigrated to the United States at the age of 2, and have been living in New York City ever since. I was the class of 2012 at Yale University, where I majored in evolutionary biology. I am interested in microbial evolution and medicine and at Yale conducted research examining how phage (viruses that infect bacteria) can be engineered to better kill their hosts. At Cambridge, I will pursue an MPhil in Biochemistry and study phage abortive infection, an altruistic mechanism bacteria employ that protects them from the ravages of phage attack. I plan to obtain more knowledge on the molecular dynamics of phage-host interactions. It is my hope that my work will be applied to the growing research on treating antibiotic resistant infections with phage. After my time at Cambridge, I plan to apply to MD-PhD programs. I hope to build a career as an infectious disease specialist and a scientist committed to developing new treatments for microbial diseases.

INTERESTS: Microbiology and evolution, virology, dance music, reading (especially sci-fi), teaching, exploring new cities and subway systems, performing arts, and meeting new people.

Samuel Allchurch

Australia

COURSE IN CAMBRIDGE

Mmus Choral Studies,
Gonville and Caius College

PREVIOUS UNIVERSITY

University of Melbourne



I am undertaking an MMus in Choral Studies, having completed my undergraduate studies at the University of Melbourne, Australia. As a choral musician, I have been fortunate to have been heavily involved with Gondwana Choirs, Australia's national choral organization for young people. I have also worked with the acclaimed Sydney Children's Choir. At Cambridge, I hope to combine my academic interests in choral music with the practical conducting training. The opportunity to observe different choral musicians at work will provide essential experience to fulfill my aspiration to work as a professional conductor. I am passionate about increasing access to music education and performance opportunities for young people regardless of their physical location or socio-economic circumstance. I am keen to support musical outreach projects with an awareness of historical precedent and rigorous research processes.

INTERESTS: Running, swimming, architecture, and travel.

Albert Arhin

Ghana

COURSE IN CAMBRIDGE

PhD Geography, Emmanuel College

PREVIOUS UNIVERSITY

University of Leeds, Kwame Nkrumah
University of Science and Technology



My central motivation in life has been to improve human life by fighting poverty and injustice, imparting knowledge and building capacities of (disadvantaged) people to 'fish for themselves'. This interest has led me to study Development Planning and Sustainability where I have sought to understand the dynamics and politics surrounding policy-making and how poor people can be given a voice in both macro level and micro level policy making. I am actively involved in: evidence-based national debates and advocacy for improved policy and practice; campaigning for free health care and zero maternal mortality rate and building adaptive capacity of poor men and women in the Northern Ghana. My PHD research aims to find out the empowerment pathways of international climate policies and how such policies will benefit the poor to manage natural resources in contexts where institutions are weak and entitlements seem absent.

INTERESTS: My interests involves policy analysis, teaching, taking photographs and spending time with my family.

Sarah Armitage

USA

COURSE IN CAMBRIDGE

MPhil Economic and Social History,
Jesus College

PREVIOUS UNIVERSITY

Yale University



I'm honored to be studying for an M.Phil. in Economic and Social History at Cambridge, having graduated from Yale University last spring with a B.A. in history. At Yale, I became interested in the opportunities available in cities to capture the value created by environmental sustainability initiatives and certain social programs, and spent time studying sustainable urban planning in Copenhagen and Hong Kong. At Cambridge, I will focus on the urban history of Britain during the 20th century – specifically Britain's urban health policies during the interwar period – with the intention to become an urban historian or work in the field of city planning or policy research.

INTERESTS: Running, hiking, cooking, visiting art museums, exploring new places and meeting new people.

Andrew Asten

Australia

COURSE IN CAMBRIDGE

MPhil International Relations,
Jesus College

PREVIOUS UNIVERSITY

Monash University



Since 2007 I have been developing an interest in and passion for public policy and governance. My undergraduate studies in law and economics in Australia, combined with my work at the Australian youth-run aid & development organisation The Oaktree Foundation, gave me many opportunities to develop these interests. After graduating I spent 15 months as a solicitor at Freehills, a leading Australian commercial law firm, before moving to The Boston Consulting Group, a global management consulting firm that has a strong public sector practice. My hope is that studying the Cambridge MPhil International Relations with the help of the Cambridge Gates Scholarship will continue to equip me with the knowledge and capability to have a substantial impact for the public good through public policy & governance.

INTERESTS: I enjoy distance running, cooking, reading biographies, playing the trumpet, spending time with friends, and spending time with my wife Grace. I also enjoy working with not-for-profits and I'm a member of the Board of the Oaktree Foundation.

Daniel Barson

USA

COURSE IN CAMBRIDGE

MPhil Medical Science,
St John's College

PREVIOUS UNIVERSITY

Princeton University



I recently graduated from Princeton University where I concentrated in Molecular Biology. At Cambridge, I will pursue an MPhil in Clinical Neurosciences. I plan to study the genetic basis of the interaction between neurons and astrocytes in the injured central nervous system. This work aims to identify new targets for biochemical and genetic therapies for regenerating functional connectivity of neurons at the injury site. After Cambridge, I will return to the United States to pursue a joint MD/PhD and continue researching treatment modalities for central nervous system injury and disease. Eventually, I hope to work as a physician-scientist in a setting similar to the Brain Repair Centre at Cambridge, searching for and then implementing a "cure" for previously debilitating or fatal diseases and injuries of the brain and spinal cord.

INTERESTS: Skiing, snowboarding, hiking, wilderness medicine.

Hanna Baumann

Germany

COURSE IN CAMBRIDGE

PhD Architecture,
King's College

PREVIOUS UNIVERSITY

Oxford University, Barnard College



The PhD research I am beginning this year under the supervision of Dr. Wendy Pullan is concerned with examining how urban residents who have been sidelined by the planning process can participate in determining their surroundings in a meaningful way. In particular, I will be examining the divided city of Jerusalem, where Palestinian neighbourhoods are often excluded from municipal planning processes, resulting in lack of land and access to infrastructure, severed ties between communities, and displacement. While the marginalisation of the Arab residents of Jerusalem has been widely documented, the agency of locals to shape their own spaces and make them liveable through informal means is often overlooked. It is my hope that a study of the coping mechanisms Jerusalemites use in the face of marginalisation will yield insights into how the city's space may be shared more equitably in the future.

INTERESTS: I enjoy photography, getting lost in strange cities, yoga, terrible museums, and coffee.

A PASSION FOR SCIENCE

Chidi Akusobi

As a promising young student, Chidiebere Akusobi took part in a programme for inner city students in New York which gained him entry to an elite private school.

From there it was a short step to Yale, where he has been studying evolutionary biology for the last four years.



Now he is about to embark on an MPhil at the University of Cambridge, focusing on the interaction between viruses and bacteria. But allied to his studies is a strong desire to infuse public school children with an enthusiasm and appreciation of science.

Born in Nigeria, Chidi's academic success is in part a result of his parents' focus on education. At the age of two he moved to the Bronx in New York to join his father who was studying to be a registered nurse. His mother had been a teacher in Nigeria, but was unable to teach in the US so for 10 years before she qualified as a registered nurse, she dedicated herself to the family, reading to Chidi every day until he started kindergarten. As a result, he loved learning and, as a child, was always reading or learning new things.

Because of his academic aptitude, he was chosen for a Prep leadership programme for inner-city students and won a place at the elite private Horace Mann School where he excelled at science.

"Science is not a main focus for many public schools in the US due to a lack of materials and resources. That's why I wanted to give back and get public school students excited by science."

In the summer after his senior year he took part in a National Institutes of Health internship programme which led to him taking part in a research project at Weill Cornell Medical School. "What I knew about science before that was what I had learnt in the classroom," he says. "It was about information that had already been discovered. The internship was the first time I had done research and discovered things for myself and I got to present my findings to the National Institutes of Health." It was to prove a defining experience.

He was also involved in outreach work, with his experience on the Prep for Prep programme acting as a spur. The first group

he joined at Yale was Demos, the largest science education community service organisation on Yale's campus which puts students who want to teach science into inner city public schools.

Once a week, he went into a school and worked on science projects with the students. It was the first of a series of outreach programmes he was involved with. He says: "Science is not a main focus for many public schools in the US due to a lack of materials and resources. The science experience students have is not great compared to somewhere like Horace Mann where science classes were phenomenal and taught by excellent teachers. That's why I wanted to give back and get public school students excited by science."

Biology

At Yale Chidi's studies concentrated on evolutionary biology. "When I was little I played with bugs and was fascinated by animals and plants. I was always interested in the history and origins of life and in evolutionary change," he says.

He became interested in viruses as he felt they were a good way to study evolutionary biology. "Viruses are numerous and have high mutation rates, so they make good systems to study adaptation and evolutionary change," he says. He is currently focusing on how viruses can be engineered to better attach to and kill bacterial hosts. His research, which was funded through a Bouchet-Robertson Fellowship, adds to the growing field of phage therapy, an alternative treatment to antibiotics.

Chidi decided to apply to the University of Cambridge because he was interested in doing phage research from a more biochemical standpoint. He says: "I wanted to learn about the molecular detail of phage-host interactions and found a lab at Cambridge that does exactly that type of work. My research experience beforehand looked at such interactions from an evolutionary biology perspective, but if phage are to be utilised as drugs, their evolutionary biology as well as biochemical interactions with host bacteria are important to understand." His MPhil in Biochemistry will focus on the evolutionary dynamics and biochemistry of phage abortive infection, a mechanism that allows bacteria to gain immunity to viral attack.

Michael Baumer

USA

COURSE IN CAMBRIDGE

MPhil Physics,
Churchill College

PREVIOUS UNIVERSITY

University of Chicago



For several years now I have been working as a member of the ATLAS Collaboration, analyzing the results of high-energy proton collisions produced by the Large Hadron Collider at CERN in Geneva, Switzerland. My work thus far has focused on testing the so-called "Standard Model" of particle physics, in order to assess the performance of the ATLAS detector and corroborate our understanding of "known" physics processes. By summer 2012, ATLAS and her sister experiment CMS had amassed enough data to independently announce discovery of a new particle(!) that looks suspiciously like the long-sought Higgs boson. Combining my previous experience with the resources at Cambridge this year, I hope to probe the nature of this newly-discovered particle as well as conduct searches for more exotic phenomena.

INTERESTS: STEM Education, science policy, fly fishing, backpacking, jazz, strategy games, and travelling (but no planning allowed!).

Mia Bennett

USA

COURSE IN CAMBRIDGE

MPhil Polar Studies,
Fitzwilliam College

PREVIOUS UNIVERSITY

University of California, Los Angeles



The vivid histories and bleak landscapes of the poles have long fascinated me. At Cambridge, I will pursue an M.Phil in Polar Studies, comparing the development prospects for the Northern Sea Route and the Northwest Passage. By studying the Arctic, I unite my interests in geopolitics, resource management, and the Nordic countries. In college, I learned Swedish at Lund University and interned at the U.S. Embassy in Oslo, Norway. To deepen my knowledge of the circumpolar north, I started the Foreign Policy Association's Arctic Blog. I have also written articles and designed maps illustrating Arctic issues with a special emphasis on northern Canada. During my senior year in college, I analyzed Arctic sea ice data and projections to study how melting ice would affect polar settlements and ports in the 21st century. After my time at Cambridge, I hope to undertake a PhD in Geography, studying the broader implications of climate change on governance, society, and infrastructure.

INTERESTS: I enjoy running across New York's many bridges while listening to 80s music, exploring ethnic eateries in the outer boroughs, and planning the next great backpacking adventure.

Rebecca Berrens

Germany

COURSE IN CAMBRIDGE

PhD Biological Science,
Trinity College

PREVIOUS UNIVERSITY

University of Heidelberg



My name is Rebecca Berrens and I'm from Germany. Driven by my curiosity and fascination for the field of life-sciences, I began my studies in biology with focus on molecular- and cell biology at the University of Heidelberg where I'm currently doing my Masters in Molecular Biotechnology. I am very happy about the opportunity to return to Cambridge the summer internship at LMB in Cambridge was a wonderful experience for me, as I got in contact with excellent students and research scientists from all over the world in a unique setting which enabled the exchange of ideas about science, society and allowed for fruitful discussions about the challenges in medicine, food and climate. My PhD studies in the group of Wolf Reik will be about epigenetic reprogramming in mammalian development, as well as human diseases. Besides my studies, I got involved with two student networks: AEGEE Heidelberg, a network for the interconnections of young students and "Biology @ Heidelberg – Mentoring and more"

INTERESTS: Diving, sailing, snowboarding and traveling!

Vaibhav Bhardwaj

Zimbabwe

COURSE IN CAMBRIDGE

PhD Plant Sciences,
Magdalene College

PREVIOUS UNIVERSITY

University of Cape Town



I will be studying for a PhD in Plant Sciences at Cambridge. I am looking forward to getting started soon. My area of focus will be understanding algae microbe interactions with the goal being to better understand how to grow algae on a large scale. Algae are an important source for biofuel and other important molecules such as vitamins. They have risen to prominence as a source for biofuel as the use of food crops for biofuel becomes unsustainable. One of the challenges of growing algae on a large scale is contamination by bacteria and other protozoans. Broadly my research seeks to understand symbiotic relations between algae and bacteria, the goal being to increase algal biomass in open pond systems. I hope this work advances our understanding of large scale algae production, making biofuel from algae a competitive alternative energy source.

INTERESTS: I enjoy reading (biographies, fantasy and historic fiction). Running, hiking and playing football (soccer) are some of my other favourite hobbies.

Julia Bolotina

Canada

COURSE IN CAMBRIDGE

PhD Anglo-Saxon, Norse and Celtic,
St John's College

PREVIOUS UNIVERSITY

University of Cambridge, (previous MPhil
Gates Scholar)



I have just completed an MPhil in Anglo-Saxon, Norse, and Celtic at Cambridge as a Gates Scholar, and am continuing on to a PhD in the same department. My thesis focuses on medicine as it was practiced in Anglo-Saxon England outside of monastic circles, particularly by those who are under-represented in the written record; with this I hope to address issues of the access to and dissemination of information.

Rachel Bolten

USA

COURSE IN CAMBRIDGE

MPhil English Studies,
Clare College

PREVIOUS UNIVERSITY

Princeton University



I graduated from Princeton University with a degree in English & American Studies. Since then, I've been living in Brooklyn, writing for magazines and online, and working in publishing. I'm so excited to pursue my MPhil in English Studies, and to be a part of the Gates community at Cambridge!

John Brown

USA

COURSE IN CAMBRIDGE

MASt Pure Mathematics,
Churchill College

PREVIOUS UNIVERSITY

Indiana University



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, and theology.

Richard Butler

Ireland

COURSE IN CAMBRIDGE

PhD History of Architecture,
St John's College

PREVIOUS UNIVERSITY

University of Cambridge



I grew up in Bantry, a small town on the west coast of Ireland. I originally applied to the University of Cambridge to read Engineering, which I did for two years until I found that my interests lay more with history. This led me to complete my undergraduate studies through the History of Art department, with a thesis focusing on the architecture of nineteenth-century Bombay. I continued this theme in my MPhil where I wrote about an Anglo-Indian architect who worked in Delhi. In the meantime I got more and more involved in conservation and heritage in my own country, and worked with the Irish government to have some remaining fragments of Ireland's nineteenth-century industrial architecture listed and protected. I also work with the government on the opening of greenways on former railroad tracks. For my PhD I hope to write a history of Irish public architecture from the Act of Union (1801) to the late 1860s. In my spare time, I enjoy cycling, rock-climbing, kayaking, playing the piano and the accordion, cartography, and following Irish and international politics.

DIVIDED CITY

Hanna Baumann

Can culture act as a bridge to connect groups who are in conflict? How do divided cities operate on a day to day basis? And how do people negotiate contested spaces in cities as politicised as Jerusalem?

Hanna showed an early interest in the intersection between culture and conflict. Growing up in what was then East Berlin, she was five when the Berlin Wall fell. "In some ways, it was a formative experience," she says, "and was part of my interest in divided cities. Even after the Wall came down I could see the long-term effects on family and friends."

As an undergraduate she completed a dual major in Art History and the History of the Middle East. Her thesis on Art History dealt with conflict and the exclusion of marginalised groups in the shaping of public space in recently reunified Berlin. In her thesis on Middle Eastern history, she explored the conceptualisation of landscape in the history of the Israeli-Palestinian conflict. "I was interested in the point where art and politics intersect," she says.

Having already pursued photojournalism, Hanna considered using documentary photography as a political art form during a semester of study abroad at the American University in Cairo. While volunteering as an English teacher for refugees in Egypt, she came into close contact with displaced people from various parts of Africa and the Middle East. She set out to record her students' personal histories in a documentary project that aimed to create a better understanding of how people become refugees. For this project, she visited other areas of the Middle East including Jerusalem. In this divided city – which called to mind her native Berlin – she was struck by how the ethno-national struggle impacted the urban landscape. "I could feel the tension in the streets of the old city, where Jews and Muslims uneasily shared spaces holy to both groups," she says.

After graduating from Barnard, Hanna returned to the Middle East to work with Iraqi refugees in Jordan through the UNHCR. She then joined the humanitarian organisation ACTED in Jerusalem, working on agriculture, shelter and food security projects. She says it was striking to see how in the Israel-Palestine context even seemingly innocuous activities like agriculture were deeply intertwined with questions of belonging and ownership. So, when she won a Mortimer Hayes-Brandeis Travelling Fellowship, which financed a year-long photography project, she chose to focus on the meaning of land and agriculture to both Israelis and Palestinians.

From there, she applied for a Master's in Refugee and Forced Migration Studies at Oxford University, focusing specifically on Jerusalem and once again on the intersection of art, history and politics. She was particularly interested in the politicisation of



Creative Commons and delayed gratification

archaeology in the Old City of Jerusalem and its surrounding areas, where some of the archaeological work threatens local residents with displacement. "Next to this physical effect of archaeology, the implications of the excavations are also highly political – touching on questions of who was here first and who this land belongs to," she says. "It's the combination of those two aspects, the physical and the metaphysical, that interested me."

She then won a Mercator Fellowship on International Affairs, which allowed her to follow her research interests for a year while working with international organisations. She chose UNESCO and the Office of the High Commissioner for Human Rights (OHCHR).

She worked as Programme Officer in UNESCO's New Delhi office, dealing primarily with the preservation of urban heritage and minority rights in the context of India's ever-growing cities and then became UNESCO's consultant for culture in Sri Lanka. She has been monitoring cultural rights in conflict-affected areas in the North and East of the country, looking at what people consider as their joint heritage. "Ideally we want to use culture as a means of reconciliation, as a bridge to connect different groups," she says.

For her PhD in Architecture, she will return to the conflict in Israel and Palestine and study how Jerusalem's residents participate in shaping urban space in the city, "I am interested in highlighting the agency of marginalised groups," she says. "How do they demarcate their areas? How do they use the spaces they inhabit and navigate on a daily basis? What are their daily routines and coping mechanisms in a city that is so divided by conflict?"

Brittany Chao

USA

COURSE IN CAMBRIDGE

MPhil Biological Science,
Churchill College

PREVIOUS UNIVERSITY

Cornell University



I recently graduated from Cornell University with a B.A. in Biology. I am interested in the interplay between hosts and pathogens during the course of infections, as well as in the use of biologics, such as vaccines, in the prevention and treatment of disease. At Cambridge, I will continue studying these topics by researching host entry by gamma-herpesviruses. By looking at the mechanisms used by the viruses to initially attach to and enter the host, my research may be useful in the development of a vaccine against gamma-herpesviruses in the future.

INTERESTS: I enjoy reading, dance, and photography. I also love traveling and trying new foods.

Sara Clarke-Habibi

Canada

COURSE IN CAMBRIDGE

PhD Education, Homerton College

PREVIOUS UNIVERSITY

University of Cambridge
(MPhil Gates Scholar)



For my PhD, I am investigating the role of education in promoting reconciliation following violent inter-group conflict. I will be exploring the issue through social-psychological, sociological, and political perspectives. My MPhil research centred on a phenomenological study of peace educators in post-conflict Bosnia-Herzegovina, and the mediating influence of their personal and social identities on their peace education practice.

INTERESTS: I enjoy cooking gourmet vegetarian food, gardening, choral music, painting, psychology, and the integrative study of world religions.

Joshua Cohen

USA

COURSE IN CAMBRIDGE

MPhil Computational Biology,
Trinity College

PREVIOUS UNIVERSITY

Massachusetts Institute of Technology



Growing up in the suburbs of Atlanta, Georgia, USA, I loved to tinker. Naturally, my predilection for building (and at times, unintended destruction!) steered me towards exploring the field of engineering. I recently graduated from the Massachusetts Institute of Technology with a degree in Chemical-Biological Engineering and have aspirations to explore the interface of biology and engineering as a future physician-scientist. At Cambridge, I will pursue an MPhil in Computational Biology to gain formal training in applied mathematics so that I can better apply mathematical modeling and computational methods to tissue engineering research. After my year in the UK, I will enroll in the MD-PhD Program at the Johns Hopkins University School of Medicine to train as a physician-scientist. Ultimately, as a future physician-scientist, I aspire to develop innovative therapeutic technologies and translate them from “bench to bedside” and in doing so, help make regenerative medicine a reality.

INTERESTS: Road cycling, backpacking, hiking, skiing, computational biology, and regenerative medicine.

Camille Cole

USA

COURSE IN CAMBRIDGE

MPhil Historical Studies,
Trinity Hall

PREVIOUS UNIVERSITY

Pomona College



At Cambridge, I will be building on undergraduate work I did examining the British Empire in nineteenth-century Iraq. In particular, I looked at how local environments and populations in southern Mesopotamia shaped and diverted imperial attempts to penetrate the region through mapping and steam-based trade. For my MPhil, I hope to focus on Arabic-language sources dealing with essentially the same issues and time period. Local voices have largely been excluded from previous studies, leaving existing accounts lopsided and often incomplete. Through an analysis of non-imperial viewpoints, I hope to better understand how “old” marsh and riverine worlds were increasingly enmeshed in imperial structures, and how local resistance persisted, shaping imperial goals, projects, and experiences.

INTERESTS: Flying single-engine airplanes; hiking, kayaking, and other outdoor adventures; traveling; artisan cheeses.

Sean Collins

USA

COURSE IN CAMBRIDGE

PhD Materials Science,
Trinity College

PREVIOUS UNIVERSITY

University of Michigan



I recently completed a dual degree program at the University of Michigan in chemistry and piano performance. While at Michigan, I led research in the preparation of nanostructured semiconductor films for solar energy conversion applications. I have also worked on projects developing new processing methods for semiconductor purification. Since graduating, I have worked at the National Institute of Standards and Technology (USA), conducting research on the role of atmospheric aerosols in climate change. I will pursue a PhD in Materials Science and Metallurgy at Cambridge with a focus on electron microscopy and spectroscopy. By visualizing materials and their properties at length scales approaching individual atoms I will be part of a drive to develop more efficient and more powerful technologies in a variety of fields. In particular, I hope to lead research throughout my career aimed at understanding and solving materials challenges to renewable energy.

INTERESTS: Science infrastructure and policy, social and political organizing, waterskiing, all kinds of music, and cooking.

George Cristea

Romania

COURSE IN CAMBRIDGE

PhD Classics,
Gonville and Caius College

PREVIOUS UNIVERSITY

University of Leeds, Universitatea Bucuresti



I spent 2009–10 at Cambridge as a visiting student, carrying out research on rhetoric and discourse analysis. With a broader perspective on life, I decided to return to my former passion about Classics and to build up an academic career in this field. A new master's was imperative as I needed to refresh my knowledge of Latin and Ancient Greek, so that I might be able to continue with a PhD. My PhD project, which I shall commence at Cambridge, is about Latin rhetoric: it deals mainly with rhythm as an auditory means of attaining theatricality in oratory and, more specifically, with the manifestation of this rhetorical component in Cicero's speeches. After finalising it, I intend to continue with a career in academia and / or journalism either in the UK or in Romania, where the study of classics has been overshadowed by other disciplines and marginalised by narrow-minded people.

INTERESTS: Apart from my work, I enjoy travelling, listening to symphonic and opera music, skating, swimming and driving.

Kathryn Crowcroft

Australia

COURSE IN CAMBRIDGE

PhD English, Jesus College

PREVIOUS UNIVERSITY

University of Cambridge
(MPhil Gates Scholar)



My MPhil research examines Geoffrey Chaucer's reception in English Renaissance texts, employing linguistic approaches to uncover evolving theological ideas about language and speech during this period. Chaucer's influence extended across the Protestant Reformation, and this raises questions about cultural memory, and our understanding of historic (and academic) periodization. I have always been fascinated by the lessons we can learn from history, and I aim to champion the Humanities in social outreach projects within and beyond the university sphere.

INTERESTS: Learning languages; literacy education projects; writing short fiction and poetry; Qi Gong; travel and the outdoors.

Evelyn Denham

USA

COURSE IN CAMBRIDGE

MPhil European Literature,
Gonville and Caius College

PREVIOUS UNIVERSITY

Williams College



I am studying for an MPhil in European Literature and Culture, concentrating on Early Modern German. As an undergraduate, I spent the past two summers researching eighteenth-century ceremonial diplomatic encounters between the Habsburg and Ottoman Empires. This research challenges essentialized views of the relationship between the Ottoman Empire and Central Europe and contextualizes today's debates about European culture. At Cambridge, I will continue to study the early modern world, now focusing on early modern German literary and historical representations of alterity as part of a project that looks at the construction of German nationalism. Ultimately, I am interested in questioning how societies structure knowledge and how they arrive at historical consensus, both in early modern Europe and in our world today.

INTERESTS: Besides my coursework, I enjoy cooking, hiking, US politics, and Bollywood film.

POLAR EDUCATION

Mia Bennett

Mia Bennett, whose interest up to now has been on how climate change is affecting the infrastructure and governance of the Arctic region, wants to focus specifically on the consequences for the two main potential shipping routes in the Arctic for her MPhil in Polar Studies.

Eventually, she hopes to broaden her focus to look at climate change adaptation globally.

She has been fascinated by the northern countries of Europe for many years.

At college, she spent a summer in Sweden learning about Swedish culture and language, partly because of her family background. Her father is from Minnesota and his background is part Scandinavian. "My relatives still cook Swedish food," she says. She was also drawn to Scandinavian countries' strong sense of environmentalism.

"I had always been into art," she says. "Doing the political cartoons was a way to combine my interest in drawing and illustration with current affairs."



The following summer she did an internship at the US embassy in Oslo and had a crash course in the political issues linking the US and Nordic countries. One of these is energy resources. She attended the International Geological Congress which discussed circumpolar oil and gas resources and became more and more interested in the kind of issues this threw up, including multilateral relations, the environment and potential boundary disputes.

She began to delve more into the region and in 2009 started a blog on geopolitical and strategic issues in the Arctic region through the Foreign Policy Association.

Despite being born many thousands of miles away in San Francisco Mia has always been interested in international affairs and different cultures. Although her family are steeped in law – her mother is a paralegal and her father is an attorney – the legal profession never interested Mia. "The aspect of my dad's work that most interested me was international travel," she says.

Mia, an only child, adds that her father was very interested in history and political science and these were the subjects she was drawn to at high school, spurred also by a good teacher.

At the University of California Los Angeles she was a political cartoonist for the main student newspaper, The Daily Bruin. "I had always been into art," she says. "Doing the political cartoons was a way to combine my interest in drawing and illustration with current affairs."

Her cartoons tended to be issue related and about national current affairs. "I was not too interested in campus politics," she says.

At UCLA she majored in political science and European studies. Given her background and experience, she was particularly interested in the Nordic countries' relationship with the European Union.

Since she graduated in 2010 she has been working as a recruiter in a high-frequency trading firm. "I wanted a break from academia and to experience New York," she says. "I wanted to make sure I really wanted to stay in academia." Now she is sure, she is very much looking forward to arriving at Cambridge.

Elizabeth Evans Blanchard

USA

COURSE IN CAMBRIDGE

MPhil Environment, Society and Development, King's College

PREVIOUS UNIVERSITY

Occidental College



I am honored to be studying at Cambridge this year as a Gates Scholar. I am pursuing 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. 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, swimming, cooking great meals, reading intriguing books, and being with friends.

Hilary Fabich

USA

COURSE IN CAMBRIDGE

PhD Chemical Engineering, Churchill College

PREVIOUS UNIVERSITY

Montana State University



As an undergraduate in Chemical Engineering at Montana State University, I began using magnetic resonance (MR) techniques to study fluid dynamics in alginate gels. Intrigued by the many applications for MR, I continued to study and implement MR techniques at Chalmers University, in Sweden, for six months prior to my arrival at Cambridge. At Cambridge, I will use MR techniques with the intent of reducing measurement time, allowing a non-invasive collection of data to better understand fluid dynamics in multiphase flows.

INTERESTS: Skiing, backpacking, hiking, piano, cooking and traveling.

Weerahannadige Fernando

Sri Lanka

COURSE IN CAMBRIDGE

MPhil International Relations, St John's College

PREVIOUS UNIVERSITY

London School of Economics & Political Science



My chosen course of study in MPhil in International Relations while being a primary area of academic interest is also directly linked to my future career goals of working towards better governance and policy formulation in Sri Lanka. My primary research interests are in the determinants of foreign policy formulation and the impact of regional and global powers on developing nations. While the rational state actor model of states' pursuing interests, has been critiqued due to the globalization of international politics through the development of international institutions and subsequently international norms, the competing forces within the state and their influence on foreign policy remains opaque. Hence, highly contentious international incidents such as the international response to war crimes allegations in the final stages of Sri Lanka's civil war provide unique cases to study the competing forces that clash in the formulation of foreign policy.

INTERESTS: My interests include choral music performance (both classical and contemporary) reading, public speaking and theatre.

Jakob Foerster

Germany

COURSE IN CAMBRIDGE

PhD Engineering, Christ's College

PREVIOUS UNIVERSITY

University of Cambridge



I graduated with a Masters degree in Physics from Cambridge University, a degree which I started with the goal of eventually working in Neuroscience. With this in mind, alongside my coursework I carried out research internships in both experimental and theoretical neuroscience at institutions around the world, including MIT, Munich and the Weizmann institute in Israel. In my PhD I hope to use both the experimental and theoretical training I have had in order to help bridge the gap between abstract concepts and measurable predictions, for example by applying optimality principles to neural circuits.

INTERESTS: Outside my research I enjoy running, wind surfing and other sports as well as reading.

Ben Fried

Canada

COURSE IN CAMBRIDGE

MPhil English Studies,
Trinity College

PREVIOUS UNIVERSITY

McGill University



I studied English literature at McGill University, graduated in 2011, and spent last year teaching English in the south of Spain. Following earlier flings with journalism and arts administration, my ambition turned to academia – and to a fascination with evocations of, and meditations on, the past in twentieth-century literature. At Cambridge I will complete an MPhil in Modern and Contemporary Literature and write a dissertation on the intersection of fiction and history in the novels of Penelope Fitzgerald and W. G. Sebald. The imagined past takes one back to a basic impulse of fiction and forward to the fate of the novel in contemporary writing: with the support of the Trust, I aim for a not dissimilar combination of teaching and writing, the study and the practice of the ways in which people deal with unquiet histories.

INTERESTS: My time is taken up by poetry, pubs, theatre, jazz, camping, and the latest issue of The New Yorker.

Julien Gagnon

Canada

COURSE IN CAMBRIDGE

PhD Economics,
Trinity College

PREVIOUS UNIVERSITY

Oxford University, Université de Montréal



Born and grown up in Montreal, Canada, I completed a Bachelor's degree (BSc) and a Master's degree (MSc) in economics at the University of Montreal. Passionate of international development, I then completed a second Master's degree (MPhil) in Development Studies at the University of Oxford, focusing my research on microfinance and housing microfinance. I intend to pursue my doctoral studies at the University of Cambridge in economics. More precisely, I intend to use the tools of microeconomics (notably network economics, institutional economics and identity economics) in the building of a theoretical model applied to the study of the construction of information networks and their implications for sociological and institutional change, notably in terms of social norms and identity.

INTERESTS: Politics, international development, ice hockey, beer brewing and I also quite like scotch.

Linda Gichuyia

Kenya

COURSE IN CAMBRIDGE

PhD Architecture, Hughes Hall

PREVIOUS UNIVERSITY

University of Cambridge
(MPhil Gates Scholar)



I recently completed a Bachelor of Architectural studies and Bachelor of Architecture degrees from the University of Nairobi and I am profoundly humbled and honored by being one of the 2011 Gates scholars. I am excited to continue my studies at Cambridge where I will be pursuing an MPhil in Environmental design in architecture. I wish to focus my study on the Impact of Buildings on Climate Change seeing that evidence suggests that buildings under construction and in use play the greatest contributory role in global warming. I am keen to investigate this to Phd level since with regard to the global warming debate, little if any attention has been paid to the construction industry as a source of CO2 emissions, compared to the much attention that has been focussed on the role of transport and industry in their contribution to global warming.

INTERESTS: Sharp shooting, making new friends, traveling, reading and watching detective literature, photography and swimming, design and definitely watching discovery channel.

Samantha Godwin

USA

COURSE IN CAMBRIDGE

PhD Law, King's College

PREVIOUS UNIVERSITY

Georgetown University,
University College London



I am most interested in finding new ways to reexamining issues of social justice and power. In my recent article, Children's Oppression, Rights and Liberation in the Northwestern Interdisciplinary Law Review (2011), I challenge basic assumptions about the legal status of children, arguing that children should be understood as an oppressed class of people, and that this oppression is rendered invisible by popular discourse and ideology about childhood. For my PhD thesis, I hope to expand and further develop my research on children's legal status. In so doing I will consider more generally how legal regulations and unexamined social expectations of the family subjugate both parents and their children. In my project I plan to continue to draw parallels with other forms of social hierarchies and expose previously unrecognized forms of social power to show that these social arrangements are not neutral or necessary but reflect de facto policy choices that might be improved upon.

AN ANTHROPOLOGY OF OURSELVES

Rachel Bolten

Rachel Bolten is fascinated by the crossover between politics, literature and history. It is that fascination which brings her to the University of Cambridge to study the British Mass Observation Study, an ongoing oral history archive started during the Second World War.

It provides a “compelling analog” to Rachel’s undergraduate thesis on the American Guide Series, which were begun during the Depression and involved unemployed people across the US writing about where they lived.

Rachel believes that both projects are valuable resources for historians. “There is a power in asking people to consciously reflect through the act of writing about what it means to live in a certain place at a certain historical moment,” she says.

Rachel embraced literature at an early age and was fascinated as a child by the intersection between literature and history.

At her all girls high school she was very involved in the student council, edited the student newspaper and wrote for a political magazine about wider political issues and debates.

Outside of school life, she became involved in 826 Valencia, a national non-profit organisation which ran writing classes taught by established writers.

At Princeton she took English and American Studies. The American Studies course was interdisciplinary, covering history, politics and literature. “It shaped how I wanted to write and what I wanted to write about,” she says. She was drawn to the 1930s and studied artworks as well as transcripts of President Roosevelt’s speeches and political manifestos.

Early on in her studies, she attended a seminar where reference was made to the American Guide Series produced by the



University of Sussex, British Mass Observation Study

Depression-era Federal Writers’ Project. It involved seven thousand unemployed men and women - among them future-famous writers like Zora Neale Hurston and John Cheever - who were set to work creating guidebooks to their home states and cities.

“There is a power in asking people to consciously reflect through the act of writing about what it means to live in a certain place at a certain historical moment.”

The project piqued her interest. A year later, when she was starting to think about her undergraduate research thesis it was still on her mind and she chose to focus on it. “The 1930s was a very exciting period in terms of the political conversations that were happening and the art that was being produced,” she says. “Artists were very self-consciously political. The Guide Series was enmeshed with governmental ideas about the shaping of the American national identity. It contained a lot of primary source material which was fascinating.”

At Cambridge she will do an MPhil in English Studies and will study an oral history archive in the UK, the British Mass Observation Study, which she says is “a compelling analog” to the American Guide. “Both were begun in periods of crisis - the Depression and World War II - and can be read as works of national literary auto-portrait,” she says. “Mass Observation recruited everyday citizens to keep diaries in order to create an ‘anthropology of ourselves’. But where the Guide project ended with the 1930s, Mass Observation continues today - the written reflections of contemporary Brits are kept in an ever-growing archive at the University of Sussex.”

Rachel continues: “The idea underlying the American Guides was to produce a vast guide to the US that was created by Americans to help them reflect and understand the place where they lived. That tension is also there in the Mass Observation Study.

“In writing about Mass Observation, I’m excited to continue to explore the interrelationship between literary production and citizenship, and the intersection of politics with democracy and art.”

Grecia Gonzalez

USA

COURSE IN CAMBRIDGE

PhD Biochemistry,
Churchill College

PREVIOUS UNIVERSITY

Harvard University



My name is Grecia Gonzalez. I grew up in La Puente, CA, USA, the youngest of five children to immigrant parents from Nicaragua. I have just earned my B.A. degree in Chemical and Physical Biology at Harvard University. I will pursue my PhD in Biochemistry at Cambridge under the supervision of Professor Ben Luisi. Beyond my coursework I am an avid researcher and educator. I have been very fortunate to work with amazing researchers in many top-ranked research institutions, including the National Institute of Standards and Technology (NIST), the California Institute of Technology, Harvard University, and the University of Cambridge. I am a published author and my thesis research at Harvard is on the cutting edge of RNA NMR spectroscopy and of great importance to current HIV research. In the future, I hope to one day work at the crossroads of science and education policy. Teaching and thinking of new ways to help others understand science are great passions of mine.

INTERESTS: I enjoy traveling, playing the violin, and great discussions.

Alison Greggor

USA

COURSE IN CAMBRIDGE

PhD Experimental Psychology,
King's College

PREVIOUS UNIVERSITY

University of California, Berkeley



After graduating from the University of California Berkeley, I spent a year pursuing research with animals ranging from spinner dolphins to inter-tidal hermit crabs. I aim study social learning from the combined perspective of psychology and biology through my PhD in the Department of Experimental Psychology. There I plan on investigating the potential fitness benefits and/or drawbacks of learned neophilia in wild jackdaws. My research will focus on how specific populations of jackdaws respond with learning to human-induced changes in the environment.

INTERESTS: Running, scuba diving, reading almost anything, immersing myself in different cultures, and exploring the wonders of the wilderness in any form.

Alexandra Grigore

Romania

COURSE IN CAMBRIDGE

PhD Nanotechnology,
St Edmund's College



I was born in Constanta, a town near the Black Sea in Romania. I graduated simultaneously in Chemical Engineering and Business Administration in Bucharest and I am currently enrolled in the international MSc. of Advanced Materials and Processes in Erlangen, Germany. Besides my studies I conducted two research projects and two internships in fields ranging from nanotechnology, biomaterials, chemistry and biophysics. I am inclined towards applying my knowledge for practical purposes to create devices that will improve human life. This year I will start my Phd. in the Nano Science & Technology Doctoral Training Centre in Cambridge. I am very excited to apply my knowledge, exploit my curiosity and improve my skill skills in an interdisciplinary environment in the field of nanosciences. My dream is to lead my own research group, working in collaboration with companies and hospitals to develop lab-on-a-chip devices for low cost diagnosis and tissue engineering applications.

INTERESTS: Theater, dancing (esp. Argentinean tango), reading, travelling, watching TED, capoeira, learning languages, social games, and hiking.

Zachary Guiliano

USA

COURSE IN CAMBRIDGE

PhD History,
St John's College

PREVIOUS UNIVERSITY

Harvard University, Evangel University



At Cambridge, my PhD research considers how royal and ecclesiastical leaders used biblical interpretation to form their peoples and governments in the Carolingian era, by focusing on the diffusion and use of the homilies of Bede, whose work was described as "a new sun dawning" for the illumination and instruction of the Latin West. I hope to use the study of this subject as a lens on the relationship between human government and religious practice in European civilization, particularly as the effects of Carolingian legislation on religious practice were felt for centuries.

INTERESTS: Cooking (and eating) new recipes, travel, music performance, cycling. Creative writing, religious art and culture. Research interests: history of law and human government; history of scriptural interpretation; contemporary theology and hermeneutics.

Oliver Haardt

Germany

COURSE IN CAMBRIDGE

PhD History, Trinity College

PREVIOUS UNIVERSITY

University of Cambridge,
Jacobs University Bremen



My studies in modern constitutional history focus on how constitutions develop an independent systemic dynamics directly affecting political reality. After completing a BA in Politics and History at JUB, I read for the MPhil in Historical Studies at Cambridge where I researched the constitutional evolution of the German imperial office. Currently, I am a fellow of the International Max Planck Research School of Comparative Legal History. My PhD explores the comparative federal evolutions of Germany, the U.S. and Switzerland in the 19th century. I hope to deduce patterns of federal constitutional design that can help framing sound constitutional orders on the national and supranational level. My ambition is to overcome disciplinary divides between history and law to treat constitutional developments as holistic historical phenomena that offer us lessons for today's constitutional problems. Hence, I work on founding a research forum for interdisciplinary constitutional historiography.

INTERESTS: Apart from my academic interests in history and law: politics, competitive debating, theology, literature, classical music, any sport involving rackets or skis, and cultivating the art of old fashioned gentleman manners at Trinity.

Christopher Higgins

USA (Deferred from last year)

COURSE IN CAMBRIDGE

MPhil Development Studies,
St John's College

PREVIOUS UNIVERSITY

Harvard University



My name is Chris Higgins and I am from East Setauket, NY. At Harvard I concentrated on Social Studies. I wrote my senior thesis on Sino-African relations based on research I conducted in China and Uganda this past summer. Since 2007, I have worked with New Hope Orphanage, a small, Ugandan-run charity that cares for orphans and vulnerable children in Uganda and Kenya. In college, I was an active member of the Catholic Student Association and tutored at-risk youth in disadvantaged neighborhoods around Boston. At Cambridge, I plan to study for an Mphil in Development Studies. After completing my academic work, I will serve as an Infantry Officer and pursue a career in the Army.

INTERESTS: I am also in my final year of training as a U.S. Army ROTC Cadet and currently serve as battalion commander for my unit.

Allison Hinckley

USA

COURSE IN CAMBRIDGE

MPhil Micro and Nanotechnology,
Trinity College

PREVIOUS UNIVERSITY

Massachusetts Institute of Technology



As a tree hugger from Portland, Oregon with a passion for chemical engineering, I naturally gravitated toward sustainable energy. As a pragmatist and student at MIT, I realized nano-scale engineering was the only way to achieve economic viability in my field of interest. My research at MIT focused on nano-engineered fuel cells, but I have also developed novel carbon nanotube-based chemical sensors with medical and military applications. I will pursue an MPhil in Micro- and Nanotechnology Enterprise Cambridge. I will later leverage this knowledge and the skills I accrued in the Gordon Engineering Leadership Program as a future entrepreneur in alternative energy. Together with a team of scientists and engineers, I plan to develop commercial alternative energy systems to end global dependence on fossil fuels.

Ian Hsu

USA

COURSE IN CAMBRIDGE

MPhil Social Anthropological Analysis,
King's College

PREVIOUS UNIVERSITY

Johns Hopkins University



I graduated from the University of Michigan in 2009 with a degree in neuroscience and in interest in medical anthropology. I just finished my third year of medical school at Johns Hopkins. I plan to specialize in psychiatry after completing my MPhil at Cambridge. During my studies at Cambridge, I hope to further my understanding of theory, methodology, and analysis in social and cultural anthropology. I am interested in particular in concepts of stigma, blame and guilt, and the way our society's understanding and attitudes toward mental illness are reflected in health policy and the way we approach psychiatric care. I'm also interested in the lived experience of cancer, how that is affected by the way our culture has framed cancer using a war metaphor, and how cancer patients seek meaning in their diagnosis and illness.

INTERESTS: Instrumental music, yoga, stories, reading, writing, spontaneity, conversing, languages, laughter, and adventures.

DIFFERENT PERSPECTIVES

Sean Collins

Sean Collins is used to straddling different cultures and disciplines. As a young boy he grew up in Germany, but moved to a German school in the US where the students spoke a hybrid English/German language to each other. At university he did a double major in chemistry and piano, combining research on renewable energy with public piano recitals.

Sean was born in Berlin where his father, an Air Force officer, was stationed.

The family lived in several parts of Germany and in Belgium while he and his sister were young. When he was nine the family moved to Washington and he went to a German school there for two years. It was not too difficult to adapt to living in a different country since he was used to moving around, "After a couple of years it was home and being at a German school helped bridge the gap since the school was a hybrid of the two different education systems and there were students from a wide variety of backgrounds there. We spoke a hybrid language to each other," he says.

At school he had taken piano lessons and played violin in a youth orchestra. Academically, he was also very interested in science and applied for an international baccalaureate programme which offered him a unique opportunity to do an extra year of chemistry and biology which set him up for university level study.

Finding it hard to choose between science and music, he applied to do both subjects at the University of Michigan and was accepted on both courses. Rather than choose one or the other, he opted to do a double major in piano and chemistry. As part of his course in piano, he had weekly one to one piano lessons and gave public recitals. He says music and science have very similar demands. "They both require a lot of creativity and practice. There's a lot of overlap in the skillset and dedication they require."

During his undergraduate degree, he applied for a summer programme at the National Institute of Standards and Technology laboratory. He was accepted onto a project that was looking at the substance of particles in the atmosphere. Using imaging techniques, the project aimed to discover how particles floating around in the atmosphere come together.

Sean says: "There are 10,000 particles in a single cubic centimetre of air and they are very diverse. The science community does not have a good understanding of how they affect climate change. I was looking at single particles to see how they were put together in order to study how they interact with light. I found there was a lot of mixing going on and that the interactions taking place could affect the air temperature and therefore could have an impact on climate change."



Sarah Fletcher Photography

The experience was to prove pivotal to his later career. After completing the research project, Sean applied to two different research groups within his university which were focused on renewable energy technology and energy storage. He started working for both laboratories and built up his technical skills, including his use of electron microscopy skills.

During the summer of 2010 he returned to the NIST to follow up on his previous research. He then joined the Maldonado research group at Michigan and got his own project creating a new material system for solar energy applications.

At Cambridge, he will join the electron microscopy group where he will do a PhD in materials science. This will be a continuation of his work on imaging of small features.

"I will be developing a new technique for understanding very, very small structural features of materials," he says. He hopes this will provide new insights into how materials work.

He is particularly focused on plasmonics and will use high resolution imaging methods to see how small metal particles interact with light.

"My interest is in understanding the fundamental science of how light and matter interact," he says. "I want to work in renewable energy, but to do that I need to understand how light and materials interact. My PhD will help give me the skillset I need to do that."

Madeline Huberth

USA

COURSE IN CAMBRIDGE

MPhil Music Studies,
Darwin College

PREVIOUS UNIVERSITY

University of Michigan



I grew up in a small town in upstate New York. My research is in music performance and perception, I'll be studying in the Center for Music and Science this upcoming year. I recently graduated my undergraduate degree in cello performance and physics. Receiving the scholarship is an immense honor, and I'm grateful to the Trust for this incredible opportunity.

INTERESTS: Running, traveling, and music.

Darja Irdam

Estonia

COURSE IN CAMBRIDGE

PhD Sociology, Hughes Hall

PREVIOUS UNIVERSITY

University of Cambridge
(MPhil Gates Scholar)



Born in Sillamäe, Estonia, I graduated from Tallinn University, Estonia and Koç University, Turkey. As president of the student council and a member of Estonia's Youth Parliament, I carried out many social and educational projects for marginalized people, abandoned children, alcohol and drug addicts, ethnic and social minorities. I have closely worked with migrant enterprises in four European countries and I continued my research at MiReKoç, the Centre for Migration Research at Koç University. At the University of Cambridge I study socio-cultural marginalization and how people recreate their status through shuttle migration and suitcase trade between the post-Soviet states and Turkey. Some of my professors changed my life with their teaching, support and guidance. Therefore, I want to be a professor to help young people find their ways in life. I hope to make people believe they can create change and improve not only their own lives, but also the lives of others.

INTERESTS: Apart from my academic interests, I am also a passionate tailor, I love cinema, baking and reading.

Stephanie Hyland

Ireland

COURSE IN CAMBRIDGE

MASt Applied Mathematics,
St John's College

PREVIOUS UNIVERSITY

University of Dublin Trinity College



Having finished a BA (Mod.) in Theoretical Physics at Trinity College Dublin, I am now studying for Part III of the Mathematical Tripos in Cambridge. My undergraduate specialisation was in particle physics, particularly lattice quantum chromodynamics, on which my final year research project focused. While I find the physics of fundamental forces fascinating, I wish to use my time in Cambridge to widen my focus and gain experience in other applications of mathematics. Doing academic work which is socially and intellectually relevant is of importance to me, and it is my hope to find a field where my skills can make an impact.

INTERESTS: A lot of things! Art – photography, graphic design, drawing. Music – playing the violin, singing. Politics – gender issues, environmentalism, free speech and freedom of information among others. Cycling and playing computer games with friends.

Mona Jebiril

Palestine

COURSE IN CAMBRIDGE

PhD Education, Queens' College

PREVIOUS UNIVERSITY

Oxford University,
Al Azhar University-Gaza



Hello! I am from Jaffa-Occupied Palestinian Territories, was born in Kuwait, and since 1990 (Gulf War) became a resident of the Gaza Strip. My general interest is in studying the transformative effect of Education and its use as soft power. I strongly believe that Education can play a key role in changing the life of both the individual and the community. As an MSc in Educational Studies (Higher Education) at the University of Oxford in (2005–06), I researched a topic which was linked to this theme. My thesis was entitled 'Reflections on Higher Education in Palestine: Barriers to academic Dialogue in the Palestinian-Israeli Context. And through the opportunity of studying at Cambridge for PhD in Education, I shall work on a research which focuses on the relationship between Egyptian university cultures and academic practice in Gaza and how this relationship, combined with the events of the Arab Spring, might shape the future of Gazan universities.

INTERESTS: Reading on Leadership & psychological analysis, learning languages, attending computer courses, and drawing my feelings and personal reflections.

Siddhartha Kar

India

COURSE IN CAMBRIDGE

PhD Public Health and Primary Care,
Hughes Hall

PREVIOUS UNIVERSITY

University of Texas – Health Science Center,
Houston B. J. Medical College, Pune



I am doing my PhD under the supervision of Dr. Paul Pharoah at the Centre for Cancer Genetic Epidemiology, Strangeways Research Laboratory. My PhD research seeks to further unravel the genetic associations and mechanisms that underlie the development of ovarian cancer. The research builds on a wealth of data that has been collected in recent years from genome-wide association studies of this particularly lethal and common cancer that afflicts women around the world. The deeper understanding of ovarian cancer that will be gained from such work has the potential to fundamentally impact the way this disease is prevented and treated in the future.

INTERESTS: Photography, quizzing, technology, coffee, travelling, and teaching.

Erin Kara

USA

COURSE IN CAMBRIDGE

PhD Astronomy, St John's College

PREVIOUS UNIVERSITY

Columbia University,
University of Cambridge
(MPhil Gates Scholar)



After graduating from Barnard College in May 2011, I moved from New York City to Cambridge to start my MPhil degree in Astrophysics. My time here has been wonderful, and I am so glad for the opportunity to stay on for the PhD. I work at the Institute of Astronomy, under the advisement of Andy Fabian. Specifically, I am looking at observations of X-ray variability in accreting black holes systems, in order to understand more about the geometry and dynamics of these extreme environments. In addition to my research, I have enjoyed getting involved in astronomy outreach events at my department, and am continually impressed and inspired by the curious Cambridge public.

INTERESTS: Apart from astronomy, I am completely smitten with the Cambridge music scene, and have also taken up badminton. I look forward to my next three years in Cambridge.

Leah Katzelnick

USA

COURSE IN CAMBRIDGE

PhD Zoology,
Emmanuel College

PREVIOUS UNIVERSITY

University of Cambridge, Williams College



I am ecstatic to continue studying antigenic variation among dengue viruses as a PhD student in Zoology. I had the privilege doing an MPhil last year in the the Department of Zoology at Cambridge, with research at the NIH in the USA, and will continue working with both groups during the PhD. We use a technique called antigenic cartography to make 'antigenic maps' that depict the relationships between viruses and antibodies. I hope to build on our preliminary findings for dengue viruses to develop a more complete picture of the antigenic variation within and between dengue serotypes.

INTERESTS: Running, writing, Truman Capote, and espresso.

Halley Keevil

Canada

COURSE IN CAMBRIDGE

MPhil Earth Sciences, Darwin College

PREVIOUS UNIVERSITY

University of British Columbia,
Laurentian University



I graduated from the University of British Columbia in 2011, earning an Honours BSc in Geological Sciences. For my undergraduate honours thesis I studied the mineralogy and geochemistry of a recently discovered class of mineral deposit in British Columbia. The goal of my work was to assist in creating an exploration model for this deposit type. My main geologic interests involve the processes behind the formation of various ore deposits, and I have worked for Canadian mining companies, completing geologic mapping to explore for economic mineralization. At Cambridge I will work under Dr. Marian Holness, studying the textural and geochemical signatures of late-stage magmatic liquids at the Skaergaard Intrusion in Greenland. I will relate the mineralization processes of the Skaergaard Intrusion to those of the Bushveld Intrusion in South Africa using microstructural analysis and geochemistry. After completing my MPhil in Earth Sciences I plan to pursue a career in economic geology.

INTERESTS: Snowboarding, canoeing, rock climbing, music, and travelling.

PARK LIFE

Elizabeth Evans

Libby's interest in conservation started early. When she was born her parents were working as park rangers at the Grand Canyon National Park in Arizona. Before she was eight she had lived in a variety of national parks in places such as Hawaii and the Rocky Mountains.

This, and her parent's stints in retirement teaching in Australia and Japan, gave her a taste for travel and adventure. "It was an ideal way to grow up," she says. "Buffalo would walk past our backyard. We lived among volcanoes in Hawaii. Mostly people visit national parks for less than a week, but I got to live in them."

Libby was a keen horsewoman as a teenager and had dreams of competing in the Olympics. Between high school and college she moved to Switzerland to be coached by a five time Olympic medalist. She says it was "an eye-opening experience". "I had idealised this woman. She was about to retire from the Olympics and faced a life beyond that, beyond something she had invested her whole life in. I felt there must be more to life and it made me think about the broader picture and what I wanted to achieve."

She says she knew early on that she "wanted to make a difference to the world" and do something that was meaningful in environmental conservation or social change. At Occidental College, having stopped riding, she had a lot of time to reflect. She was interested in environmental science, but didn't think she needed to study that as she had had such an environmentally focused upbringing. She decided to focus on developing the skills she would need to be a fundraiser, so that she could run environmental or social projects. She majored in took English Literature and Comparative Literature to develop her writing skills.

She also took advantage of opportunities offered by her university to travel abroad and won two fellowships to do so. This enabled her to reconnect with environmental and conservation issues. She went to southern Africa for eight weeks, for instance, to study the social and environmental controversies concerning boundary fences in African national parks, and the displacement of populations which sometimes results.

She also won a fellowship to study community-centred conservation at Namibia's Cheetah Conservation Fund. "It was an amazing experience," she says. "I met people I wanted to be like."

Libby also studied in the Dominican Republic for seven months. "I wanted to learn Spanish and be in the developing world," she says. Soon after, she met the president of Sustainable Harvest Coffee Importers, an organic and fair trade coffee

importing company who was interested in expanding more extensively into Africa, but wanted to do so in a sustainable manner. Libby petitioned him to let her try to get development grants for farmer development projects on the basis that she would only stay on if she could raise enough money to fund herself. A few months later she helped the company win a big grant for a three-year project in Tanzania. For the next six years, she has been and is currently the company's Director of Farmer Development Programmes.

"Buffalo would walk past our backyard. We lived among volcanoes in Hawaii. Mostly people visit national parks for less than a week, but I got to live in them."

It was on her way back from a trip to Africa last year that she visited a friend who was at Cambridge, and sat in on some classes. She decided to apply. "It was the right time to start something new and it will allow me to move on to broader development work," she says, although it will mean being separated from her new husband who is starting his medical school residency in the US.

She says: "The MPhil programme is the next step to prepare me for a career creating effective policies that reinforce poverty alleviation and biodiversity conservation – two of the most critical global challenges of our time."



Nehel Khalid Khanani

Pakistan

COURSE IN CAMBRIDGE

MPhil Education (Thematic route),
Fitzwilliam College

PREVIOUS UNIVERSITY

University of Karachi, Stanford University



After graduating from Stanford University in 2009 with a B.A. in History and International Relations I returned home to Karachi, Pakistan to work in education and development. These past three years, as an educator and reformer, I have found myself confronting and tackling an educational landscape deeply scarred by inequity, political repression and poor policy. At Cambridge, I hope to critically examine theoretical, local and global conversations on policy in relation to democracy and justice. My key research interests are methods to address inequities in education at the class and gendered level by increasing access and quality. After completing the MPhil I intend to return to Pakistan and pursue a career in education policy and planning.

INTERESTS: Painting, art, travelling, swimming, reading (mostly non-fiction), and nature.

Albert Kim

USA

COURSE IN CAMBRIDGE

MPhil Advanced Computer Science,
Churchill College

PREVIOUS UNIVERSITY

University of California, Berkeley



I spend most of my free time working on research. Projects that I am a part of include DAGS, Robin, and Tessellation OS. DAGS (Distributed Assembly Genome Software), is a project on improving state-of-the-art genome assemblers to scale better, more memory-efficient, and run on Amazon AWS EC2. The goal of the project is to allow biologists world-wide to cheaply assemble genome using the cloud. Robin is a microblogging service that is designed to work in the face of an adversarial government which may impose an Internet blackout on the country. This work is motivated by the recent events in the Middle East in which repressive governments have censored or completely disconnected the Internet to subdue the flow of information from protesters. T Tessellation OS is a real-time, responsive, high-throughput, many-core operating system. It's goal is to improve utilization of resources on multi-core platforms while providing real-time guarantees to make sure the user experience is smooth.

Timothy Kotin

Ghana

COURSE IN CAMBRIDGE

MPhil Engineering for Sustainable
Development, Queens' College

PREVIOUS UNIVERSITY

Harvard University



My career objective is to develop innovations that address various development challenges, whether in healthcare, education, agriculture, energy or clean water. After my undergraduate studies in Electrical Engineering and Computer Science, I joined Dalberg – a strategy advisory firm focused exclusively on international development. My horizon of key issues in global development has widened through various projects in education and global health for large US-bases foundations, the US government and UN Foundation. Graduate studies in Engineering for Sustainable Development will equip me with the technical skills to translate my knowledge of and passion for development into locally-relevant technological solutions for the developing world. Outside the classroom, I spend my spare time on a community development non-profit in Ghana, and an ICT for Education start-up I co-founded a few high school friends.

INTERESTS: I also love teaching, playing soccer, and tinkering with or hacking technology.

Lucinda Lai

USA

COURSE IN CAMBRIDGE

MPhil Social Anthropology,
Pembroke College

PREVIOUS UNIVERSITY

Stanford University



I grew up in a hub of Southeast Asian American cultures and communities in San Jose, California. At Stanford, I studied Human Biology and completed an honors thesis investigating barriers to organ donation in Thailand. For my lifelong interest in the health and human rights of refugees, I won Stanford's International Public Service Fellowship and began work for a community-based organization on the Thai-Burma border dedicated to the mental health of Burmese refugees. An MPhil in Social Anthropology will build upon my fieldwork with Burmese refugees, so I can better understand how sociocultural differences impact the success or failure of health interventions for specific vulnerable populations. I have plans for medical school after Cambridge. In Thailand, I discovered a love for Muay Thai kickboxing sustained by regular training at a charmingly rustic half-farm/half-gym and the recent purchase of my first pair of shiny red gloves.

INTERESTS: Muay Thai kickboxing, basketball, soccer, waterfalls, This American Life and RadioLab podcasts, music, coffee shops, and being welcomed as a guest in others' lives.

Anthony Lamb

Australia

COURSE IN CAMBRIDGE

PhD Zoology, Trinity Hall

PREVIOUS UNIVERSITY

University of Melbourne,
University of Western Australia



I have bachelor degrees in physics, mathematics and engineering and some experience working in the finance sector. I hope that this varied background will prove useful at Cambridge where I am taking a PhD in conservation science, with a focus on the environmental impact of farming. With global demand for food forecast to double by 2050, it is important to consider both the environmental and social impacts of increasing agricultural production. This is particularly the case in developing countries, where environmental degradation can impose a significant social cost. My research therefore focuses on ways to meet increasing food demand at least cost to the environment.

INTERESTS: I enjoy a range of outdoor activities including surfing, camping and hiking. I also play a few sports including cricket and football. When at home I enjoy reading and playing classical guitar.

Binh Thanh Le

Vietnam

COURSE IN CAMBRIDGE

MBA Business Administration,
Sidney Sussex College

PREVIOUS UNIVERSITY

Foreign Trade University



My current fields of interest are educational business and social entrepreneurship. In many developing countries, it's not easy to develop social enterprises because of limited social perception of business, corruption issues, etc. but I strongly believe in the idea of providing market solutions to social issues. I started EcoFire, a social enterprise producing cleaner coal from agricultural waste. This idea won the First Prize of a competition held by McKinsey & Company. After graduating from Foreign Trade University (Hanoi, Vietnam), I co-founded an organization of valedictorians and young talents of all universities and majors in Hanoi. We worked together on educational and charity projects. I also had the chance to work for The World Bank headquarter, U.S National Bureau of Economics Research. After the MBA program at Cambridge, I plan to further develop EcoFire and contribute to the launch of the first business incubator dedicated to social enterprises in Mekong countries.

INTERESTS: About my hobbies, well, I love East Asian music, books in applied game theory. I also like to be a part of anything sustainable: sustainable friendship or sustainable business.

Diana Leca

Canada

COURSE IN CAMBRIDGE

PhD English, St John's College

PREVIOUS UNIVERSITY

Free University of Berlin,
Concordia University



I was born in Romania and grew up in a lakeside town near Toronto, Ontario. After completing my BA in English Literature in Montreal, I pursued a Master's degree in Berlin, Germany. During my graduate studies, I developed an interest in postcolonial theory and environmental criticism and the ways in which these seemingly disparate modes of inquiry can inform the contemporary novel. My research during this time explored the ethical ramifications of human-animal encounters in the works of J. M. Coetzee. To complement my academic engagements, I have served in various editorial capacities for publishing bodies such as National Geographic, Peter Lang, and Brick. Such opportunities have shaped my academic inquiries into the interfaces between ecology and literature. Building upon previous research, my dissertation addresses the intersections between systems of power, environmental and social justice, and the politics of representing the natural world in contemporary postcolonial literature.

INTERESTS: Reading, the outdoors, Tae Kwon Do, French New Wave, the theatre, and Romanian cuisine.

Raphael Lefevre

France

COURSE IN CAMBRIDGE

PhD Politics and International Studies,
King's College

PREVIOUS UNIVERSITY

University of Cambridge,
Institut d'Etudes Politiques



As an MPhil student in International Relations at Cambridge, my dissertation explored the ways in which the Muslim Brotherhood opposed Ba'athist rule from 1963 until its crushing at Hama in February 1982. I strive to serve my knowledge of the organization and of its leaders to the public benefit by giving lectures, briefing UK government officials from the Foreign Office and the Ministry of Defence, writing two book chapters and a book on it. Often dismissed as an "extremist" organization for its alleged involvement in jihadist activities in late 1970s Syria, the local branch of the Muslim Brotherhood has attracted little interest from policy-makers and researchers. However, a deeper understanding of the socio-economic and ideological circumstances into which the organization radicalized its tactics would provide a re-assessment of the organization's ties to political violence. A PhD at Cambridge will allow me to benefit from the university's expertise in Middle Eastern studies.

THE EDUCATIONAL IMPACT OF THE ARAB SPRING

MONA JEBRIL

What will the wider impact of the Arab Spring be on social policies around the Middle East region? Gates Cambridge Scholar Elect Mona Jebril is interested in looking at the effect of changing attitudes to education in Egypt on higher education in Gaza.

"Egypt and Gaza have a close relationship. From 1948 to 1994 Palestinian schools followed the Egyptian curriculum. Many of today's leaders and academics were educated as Egyptians at school level and a large number went to university in Egypt. A large percentage of our political leaders are Egyptian graduates," she says.

"After the Arab Spring Egyptians have been questioning their own universities' practices and systems. I want to trace the historic educational link between Egypt and Gaza, to compare and contrast how Egyptian and Gazan universities are run and to study how the Arab Spring might influence the future of Gazan universities," she says.

Throughout her childhood, Mona's parents gave her a strong sense of the importance of education and this was driven home in particular when the family was forced to move back to Gaza after her parents lost their jobs following the end of the Gulf War. "My parents left everything they had, but what remained was their education," she says. "My father is a great believer in the power of education both for individuals and for communities. It is about educating yourself and about changing the world around you."

Mona did her undergraduate degree in English and her aim at the time was to be a translator, but there were no jobs. She began teaching in governmental schools. Her interest was not in teaching methodology, but in the potential transformative effect of education on society. "I am interested in education as a soft power and in what it can do, whether it is a weapon for good or bad," she says.

She was keen to improve the schools in Gaza, but found that schoolchildren there were very controlled either by their families or the school environment which was fairly traditional. She grew increasingly disappointed. "It was not an environment that was conducive to creativity or innovation".

Mona felt that students in higher education might be more able to think for themselves and be more open to new ideas. The students came from different regions whereas at schools they tended to all be from one neighbourhood and to have the same mentality, she says. "Students at university are starting to mix with different people and with their lecturers. They are exposed to a diversity of ideas," she says.

She applied for and won a Said Foundation scholarship to study for a masters in higher education at Oxford University. Her thesis was on barriers to intellectual dialogue in Palestine and linked education to conflict, society and politics. She looked at the debate around calls for an academic boycott of Israeli universities. Mona believes any dialogue is important as it creates the ground for new ideas which might lead to a better life. "From a practical point of view dialogue is not easy, though," she says. "There are barriers – violence, indoctrination, language barriers, travel restrictions on Palestinians – but most important of all is the education gap caused by a lack of resources and the constant disruption caused by the political situation. The difference in educational experience between Palestinians and Israelis creates complications for dialogue."

She herself is only too aware of the complications. On her way back from Oxford, the border between Egypt and Gaza was closed due to the conflict and she was stuck in an Egyptian village for a month until it reopened.

"I decided that I would not travel out of Gaza again unless it was for something really serious," says Mona. Having spent five years teaching at Palestinian universities she is finally preparing to travel out of Gaza again to do her PhD in Education at the University of Cambridge.

Her aim is not only to educate herself, but to move into shaping educational policies in Palestine. She is looking forward to being in Cambridge and having the resources she needs to study. "In Gaza resources are limited," she says. "We have regular power cuts which last several hours. At Cambridge I will have the opportunity to work as much as I want to."



Xiuyun Liu

China

COURSE IN CAMBRIDGE

PhD Clinical Neurosciences,
Newnham College

PREVIOUS UNIVERSITY

Tianjin University



I'm a master of Biomedical Engineering (BME). I have been studying this major for 7 years. It is a new major emerged in recent years and it employs engineering methodology combined with the knowledge of science, physics and medicine to design various diagnostic and therapeutic medical devices. It's so significant for human health and it is also a symbol of the development level of one country. In the past 3 years, my research mainly focused on rehabilitation devices. We developed intelligent walkers to help patients with disabilities walk normally. In the future, my job will concentrate on clinical neuroscience which will be more useful in clinical practice. After, I will study to develop a new software, called ICM+, which could collect data from bedside monitors to help doctors make an assessment as soon as possible. It bridges the gap between lab and clinical application. My motto is "Cease to struggle and you cease to live".

INTERESTS: Sports: Swimming\ Playing badminton and table tennis
Music: Singing and dancing\ Playing harmonica and piano
Other Interests: Collecting stamps\ Drawing\ Reading books.

Harold McNamara

USA

COURSE IN CAMBRIDGE

MPhil Micro and Nanotechnology,
Jesus College

PREVIOUS UNIVERSITY

Yale University



I'll be starting at Cambridge after finishing my undergraduate degree at Yale in May 2011 (double majoring in physics and a combined program in ethics, politics, and economics) and then spending a year working with a biotechnology start-up. At Cambridge I'll pursue the MPhil in Micro- and Nanotechnology enterprise. I'm interested in the application of fundamental physics to the solution of problems with immediate human interest, especially in the fields of energy and medicine. After completing the MPhil I hope to continue to a PhD and to eventually pursue a career in nanotechnology development (either in academia or in the entrepreneurial sector).

INTERESTS: Travel, technology, Arabic, and the Boston Celtics.

Marie Rose (Katia) Mehu

USA

COURSE IN CAMBRIDGE

LLM Law, Wolfson College

PREVIOUS UNIVERSITY

Arizona State University,
Brooklyn College



My name is Katia Mehu and I was born in Port-au-Prince, Haiti. I leave behind a career in appellate prosecution in the United States (Phoenix, Arizona), to pursue a LL.M. at the University of Cambridge. I am committed to upholding the principles of human dignity, equality, and equity at the global level and believe that promoting the rule of law at the national and international levels provides one mechanism to achieving those ideals. Academically, I will be pursuing a specialisation in international law at the Faculty of Law. My post-graduate programme will encompass coursework in international criminal law, international human rights law, law of armed conflicts, and international environmental law. I will obtain theoretical knowledge of legal principles unique to public international law, encompassing its core values, concepts, practices, and terminology. Once I complete my studies, I hope to pursue a career in the field of public international law.

INTERESTS: World music, cinema, and cuisine; travel; nature photography; scientific developments; spectator sports, voluntary simplicity.

Evan Miles

USA

COURSE IN CAMBRIDGE

PhD Polar Studies,
Trinity College

PREVIOUS UNIVERSITY

Oregon State University



I was born and raised in Portland, Oregon, in the beautiful northwest USA. My academic background is in hydrology (MS), mechanical engineering (HBS), and international studies (HBA) with minors in mathematics and Spanish. I am also an avid mountaineer and global traveller with strong humanitarian leanings. These recreational pursuits have inspired me to focus my academic interests to glaciology and alpine hydrology. My proposed research at the Scott Polar Research Institute investigates the retreat of Himalayan glaciers to predict the formation of hazardous lakes, which can have catastrophic impacts on downstream communities. Glaciology and hydrology will increase in importance through the 21st century as the impacts of climate change become more profound and marginal communities are increasingly affected.

INTERESTS: Climbing (mountaineering, rock, ice), skiing, backpacking, travel, wilderness medicine, and ultimate frisbee. Growing interests in sailing, whitewater rafting, cycling, and trail running.

Tashfina Mirza

Bangladesh

COURSE IN CAMBRIDGE

PhD Pathology, Clare College

PREVIOUS UNIVERSITY

Queen Mary, University of London,
Primeasia University



I completed my MSc in Molecular Pathology and Genomics with a research project on integrin-binding peptides applied to cancer therapeutics and imaging, and continued to work for two years as a research assistant in the same lab in Barts Cancer Institute. My PhD project in the Department of Pathology at Cambridge, starting this year, will involve investigating the function of several significant chromosome rearrangements in breast cancer that have been identified by my supervisor's team. This work aims to further categorize breast cancers and hopefully improve their diagnosis and treatment by better characterization. Breast cancer in Bangladesh and other developing countries has greater mortality rates than the developed world does because diagnosis and treatment are expensive enough to exclude the majority of those at risk; I hope in the long run my work will improve this situation.

INTERESTS: I enjoy travel, fitness, hiking, literary criticism, singing classical Bengali music (Tagore), and Woody Allen films!

Eileen Moison

USA

COURSE IN CAMBRIDGE

MPhil Biochemistry,
King's College

PREVIOUS UNIVERSITY

University of Pennsylvania



I graduated from the University of Pennsylvania with a BA in Biochemistry and a BS in Economics. At Cambridge, I am pursuing an MPhil in Biochemistry. My research focuses on understanding polyketide antibiotic biosynthesis and its implications for less toxic antibiotics.

INTERESTS: Hiking, kayaking, cooking, and reading.

Sarah Mummah

USA

COURSE IN CAMBRIDGE

MPhil Public Health,
St John's College

PREVIOUS UNIVERSITY

Stanford University



During college, I majored in Human Biology and helped carry out a randomized controlled nutrition trial for my honors thesis. Outside of the classroom, I dedicated my free time to founding DreamCatchers, a nonprofit aiming to provide a highly effective afterschool model for improving the education and health outcomes of low-income youth. After graduating from Stanford in 2010, I spent a year living in Oaxaca, Mexico with the support of a Fulbright grant to examine interventions aimed at promoting physical activity and better eating habits among indigenous elderly women. I am excited for the opportunity to continue my studies at Cambridge, where I hope to deepen my understanding of health behavior change interventions in order to prevent obesity and associated chronic illness. My work will be supervised by Dr. Theresa Marteau, the director of the new Behaviour and Health Research Unit.

INTERESTS: Good food, yoga, photography, tea, running, chocolate, and friends.

Nathan Nakatsuka

USA

COURSE IN CAMBRIDGE

MPhil Biological Science,
Churchill College

PREVIOUS UNIVERSITY

Harvard University



I was born in Honolulu, Hawai'i and lived there for all of my life before college. I then moved to the frigid northeast and spent four years at Harvard, graduating in May 2012 with an AB in Chemical and Physical Biology. I have done research in different laboratories since eighth grade, and I plan to do biomedical research in genetics for my career. Outside of academics, I spend much of my time doing community service and athletics. I have been playing tennis since I was four years old, and I also did cross-country from sophomore to senior year in college, instilling in me a love for long distance running. At Cambridge I plan to get an MPhil in Biological Science in the Genetics Department at Cambridge, doing research at the Wellcome Trust Sanger Institute in the laboratory of Dr. Ines Barroso. Ultimately, I hope to become a physician scientist doing biomedical research and clinical work at a university in Hawai'i.

INTERESTS: tennis, running, and watching the Lakers.

POSITIVE ROLE MODELS

Erin Kara

Women mentors have played a big role in Erin Kara's career in the male-dominated world of astrophysics and she is determined eventually to return the favour.

Erin, whose PhD research at the University of Cambridge will center on supermassive black holes, previously studied at Columbia's Barnard College and singles out one professor who she met early on in her university career as having had a significant influence on her future career.

She sat in on a class given by Reshmi Mukherjee, an astronomy professor, early on in her time at Columbia. At the time she was majoring in physics and the class made a big impact. She got to know Professor Mukherjee who asked her to do research in astrophysics in her first summer. "I fell in love with astronomy from then," she said.

"I totally admire Reshmi. She has done it all. She shows that as a woman you can have a family, a partner, friends, and still be top in your career. She was also particularly influential because she is a woman in astrophysics and showed me that there really can be a place for me in this field."

"The physical sciences are lagging behind other sciences in terms of the number of women students they attract. There need to be more female mentors."

Erin was dedicated to science from an early age. Her parents are both in medicine so it was expected she would follow suit. "Everyone was very surprised when I leaned towards the physical sciences, but when I took physics at high school I loved it. I loved that I could use formulae and maths to describe nature. It seemed to offer real explanations for how things worked, using fundamental forces," she says.

She chose to go to Barnard College, although she was not set on going to a single sex college. "Once there, though, I developed a strong sense of feminism and an appreciation of an all-female education. I'm very thankful for that now, especially being in a field where there are not many women," she says. Erin was one of only two women in her graduating class of around 40 physics majors.

Being at Barnard College provided her with the supportive environment she needed at the start of a course that was so male-dominated and competitive. "The physical sciences



are lagging behind other sciences in terms of the number of women students they attract. There need to be more female mentors," she says.

Erin did a number of summer internships during her course. One was at NASA's Marshall Space Flight Centre in Alabama where she studied Gamma-ray Bursts. She was looking at data that no-one else had seen before and loved the element of discovery involved.

In her third and fourth years she worked on research projects with Reshmi, looking at super massive black holes. "They are the most extreme environments in the universe. They emit a lot of radiation," she says.

At Cambridge she has been completing an MPhil, working with the Cambridge X-ray Astronomy group and researching the broad iron K- and L- emission lines from Active Galaxies in the hope of better understanding the turbulent environment surrounding the central black hole.

She says: "In general, I am trying to understand how black holes work, and how they feed energy into the whole galaxy."

For her PhD she will continue this work. Her aim is to create a laboratory for testing gravity in the most extreme environments to see if it behaves in the way it is expected to. She was drawn to Cambridge by the reputation of the Institute of Astronomy and by its academics.

In addition to her studies, she is music director of a Gates a cappella group. She also sings in the Trinity College singers.

She hopes eventually to teach astrophysics and to be a mentor to other students. "I want to encourage others," she says. "The Institute of Astronomy is very focused on public engagement. I think it is really important to communicate to the public that astrophysics is not just a cool subject they can hear about once in a while, but it can also be a fruitful career that encourages innovation, discovery and understanding."

Jill Paterson

Grenada

COURSE IN CAMBRIDGE

MPhil Theoretical & Applied Linguistics,
Hughes Hall

PREVIOUS UNIVERSITY

University of the West Indies,
St Augustine Campus



As a Grenadian native, I am currently championing the documentation of the main vernacular in Grenada – Grenadian English Creole (GEC). My previous work in this area deals with rudimentary description of GEC phonology and thus, I intend to expand my research at Cambridge with a more detailed phonological analysis. This study is very dear to my heart since it not only aids in the validation of a grossly undervalued language, but it also constructs the very foundation upon which innovative and efficient educational materials can be created. As a former teacher, I am certain that in Grenada, linguists are needed for the development of new educational policies which cater for students’ native tongue in the teaching of Standard English. Hence, the nature of my research the targets linguistic situation in my country and seeks to forward the study of creoles within the Caribbean region.

INTERESTS: Theatre, Teaching, Christian Dramatic Poetry, Tennis, Playing the Clarinet, Cooking, Bible Translation and Language Documentation. Above all, I love spending time with close friends and family!

Thomas Paul

USA

COURSE IN CAMBRIDGE

Dip Economics,
Hughes Hall

PREVIOUS UNIVERSITY

United States Naval Academy



As a student in Cambridge’s Diploma in Economics program, I hope to focus on the relationship between the United States and China. The interactions of these two countries will be the most influential in shaping the landscape of global diplomacy in the future, and I hope to have a positive impact on them. I plan to apply for the MPhil in Economics program next year to continue pursuing this goal. After finishing my studies at Cambridge, I will serve on a Guided Missile Destroyer as a Nuclear Surface Warfare Officer in the US Navy.

INTERESTS: Rowing, reading, basketball, football, baseball, singing, piano, viola, running, and camping.

Katrin Pfeil

Germany

COURSE IN CAMBRIDGE

PhD Criminology, Selwyn College

PREVIOUS UNIVERSITY

University of Cambridge, Otto-Von-Guericke
University of Magdeburg



I graduated from the University of Magdeburg with a degree in Psychology. Subsequently I worked in a forensic psychiatric hospital for two years and started my further professional education in legal psychology before coming to Cambridge. Last year I started a Master’s programme in Criminology, followed by a PhD. I am especially interested in eyewitness psychology and ways to improve witness performance of older adult witnesses. During my PhD I will look at a new investigative interviewing technique and will conduct a series of experiments with older adults. In future, I hope to contribute to German and international investigative interviewing and help minimize wrongful convictions. After finishing my further professional education I also intend to work for law courts as a chartered forensic psychologist and furthermore, provide training for judges and lawyers concerning the psychological and psychiatric overlap with the legal system.

INTERESTS: Apart from my research my interests range from sports like horseback riding, rowing and squash to photography of especially flora and fauna, languages and travelling.

Julianne Pigott

Ireland

COURSE IN CAMBRIDGE

PhD Anglo-Saxon Norse and Celtic,
Trinity College

PREVIOUS UNIVERSITY

University College Dublin



I graduated first in my faculty, in 2011, with a BA in History and Political Science, a combination which incorporated my passion for both research and activism. This year I completed my master’s thesis on the framing of female sanctity in Early Irish hagiography. My proposed doctoral research expands upon this project, to interrogate the role of vernacular saints’ lives in identity formation. I am particularly excited about the opportunities for interdisciplinary research afforded by my Cambridge department. The experiences and challenges encountered, in returning to education as a mature learner, have been among the most difficult and rewarding of my life. The professional validation and personal fulfilment arising from my studies have been, and continue to be, an immense privilege and I am confident that in my future career I will aid other mature students negotiate their university years.

INTERESTS: I currently forget what I do in my free time because, this summer, I haven’t had any! While editing my dissertation I also participated in Latin ‘boot-camp’ and though I can recommend both experiences, I would not suggest partaking simultaneously.

Jacquelyne Poon

Canada

COURSE IN CAMBRIDGE

PhD Plant Sciences, Churchill College

PREVIOUS UNIVERSITY

Swiss Federal Institute of Technology,
Queen's University



With increasing global food demands, chronic hunger and coinciding crop damages, food security is an important issue that requires the attention from all corners of the world. Crop availability is constantly being challenged by multiple factors, including, but not limited to, environmental impact, pests, and pathogens. My current interest in promoting food security largely developed out of my MSc work on cassava, a staple food for Sub-Saharan Africans. As I pursue my PhD studies at Cambridge, I aim to better understand how plants could increase their resistance to pathogens, including viruses, bacteria, and fungi. Plants have defence mechanisms that counter the attacks imposed by the aforementioned pathogens. However, the exact methods employed by various plants are not entirely known up to date. Additionally, I hope to work at the interface between the scientific community and the public, by using my scientific knowledge and bridging the gap between the two communities.

INTERESTS: Yoga, squash, skiing, tobogganing, scuba diving, travelling, and learning new languages.

Alexandra Reider

USA

COURSE IN CAMBRIDGE

MPhil Anglo-Saxon, Norse and Celtic,
Wolfson College

PREVIOUS UNIVERSITY

University of California, Berkeley



After growing up in San Francisco, California, I moved not very far away to go to UC Berkeley, where I studied Comparative Literature and French. At Berkeley, I developed a particular interest in early medieval literature, and I am delighted to continue this course of study at Cambridge. My research looks at the use and literary potential of the catalogue form in Old English, Old Norse, and medieval Celtic poetry. I also have an ongoing interest in French language, literature, and landscape: I spent my junior year abroad studying and Alp-gazing in Grenoble, and I just got back from another year in France – this time teaching English in Cherbourg.

INTERESTS: Literature; languages, dead and living; baseball; architecture; translation; movies; and Monty Python.

Derrick Roberts

Australia

COURSE IN CAMBRIDGE

PhD Chemistry,
Trinity College

PREVIOUS UNIVERSITY

University of Sydney



I am looking forward to starting a PhD in supramolecular chemistry with Dr Jonathan Nitschke at the University of Cambridge. My research will focus on the construction of self-assembled porphyrin cages, and subsequent exploration of their physical chemistry. By designing these cages with specific geometries and chemical recognition motifs, it may be possible to encapsulate biologically relevant guests for targeted drug delivery, or to modulate the reactivity of small molecules within the confined space of the capsule's internal cavity. Before arriving at Cambridge, I completed an MSc and BSc Adv. (Hons) in physical/organic chemistry at the University of Sydney, Australia. After completing my graduate studies at Cambridge, I aim to secure a fellowship to continue work on molecular self-assembly for nanomaterials synthesis, with a long-term goal of entering academia as a research group leader.

INTERESTS: Fencing, double bass, piano, science outreach, and chemistry demonstrations.

Said Saab

USA

COURSE IN CAMBRIDGE

MPhil Translational Medicine and
Therapeutics, Trinity College

PREVIOUS UNIVERSITY

New York University, Emory University



My ultimate goal is to develop a career in Obstetrics and Gynecology (Ob/Gyn) that is specifically aimed at going beyond translating science into applicable pharmaceuticals that are affordable, so as to promote patient health at the level of underserved communities and large city hospitals. I plan to perform my clinical duties in the context of these communities, while simultaneously using my clinical and research skills to close the gap in access to healthcare and novel experimental therapies. As a Gates scholar, I will partake in the Translational Medicine and Therapeutics Program, both taking courses and completing a research component in a laboratory of my choice. I will then transition to the PhD track as a USA National Institutes of Health Cambridge-Oxford scholar, for an additional three years of training. Following my studies at Cambridge I will return to NYU School of Medicine for the final year of training, and subsequently to pursue a residency program in Ob/Gyn.

INTERESTS: I enjoy playing the cello, running, swimming, opera, cooking, and drawing.

THE POLITICS OF HEALTHY EATING

Sarah Mummah

Sarah Mummah was just an undergraduate when she set up her own non-profit tutoring and mentoring organisation and has built it up into an award-winning project with a team of over 30 undergraduates at its command.

DreamCatchers aims to tackle the academic resources gap faced by poorer children in the Palo Alto area of California. It is now launching a healthy behaviours programme which she hopes to evaluate through her research.

Both the mentoring and healthy eating issues are personal ones for Sarah, and that personal experience helps drive all her work.

Sarah's parents split up when she was 13 and she says she became very independent as a result. "I had to grow up very quickly," she says. "It served me well later down the line."

However, in high school she developed anorexia and her weight fell to just 90 pounds. "One of my best friends was hospitalised with the disorder. For me it was a cry for help," she says.

Her recovery process sparked her interest in healthy eating and in taking care of her body. By extension, she started worrying about her mother's and great grandmother's health. Her great grandmother had diabetes. "I watched what poor health can do to a person, especially in old age," she says. She realised that healthy eating was about changing behaviour, something which was much more complicated than just telling someone to eat good food. "It's not just about rational decision making," she says. "I tried to change both my mother's and great grandmother's behaviour, but realised I could not do so just through persuasion."

During her time at Stanford, Sarah volunteered for a healthy eating group which aimed to teach children about better nutrition and exercise to help them build healthier behaviour.

She would ask the children if they had a family member with diabetes, talk to them about the importance of eating well, and try to grab their attention by showing images of clogged arteries, but she found the experience frustrating. "I thought I had their attention, but after leaving the classes they would flock to the ice cream truck. I realised that we needed to do a lot more to stop these children from ending up with diabetes in 30 or 40 years."

Early on, she thought she would follow in her mother's footsteps and become a doctor. But as she majored in human biology at Stanford, she became more and more interested in public health and healthcare policy. "My interest was in broader societal issues," she says. "The more I learned, the more it seemed far



Michelle Lei/The Almanac

more effective to tackle issues like obesity at a community level rather than on an individual basis like you would as a doctor."

Her degree focused on addressing inequities in health and education through social interventions. In the summer of 2007, she delivered healthcare and health education to underserved communities in Guatemala and Honduras, her interest in health issues in Latin America being in part sparked by a visit to El Salvador with her mother.

After her sophomore year at Stanford, Sarah was accepted for a summer job at an organisation which provides affordable housing. She came across lots of children who, due to poor access to educational resources, were struggling in school compared to those from wealthier backgrounds.

She decided to make use of the resources at her university and in 2008 founded and led DreamCatchers, a non-profit tutoring and mentoring programme serving low-income middle school students in Palo Alto. "It was a very steep learning curve," she says. Over the last four years, she has led the organisation's growth to 45+ students across two sites, developed a multi-year partnership with the YMCA of Silicon Valley and received several local awards for her work, including a Community Star Award from the Mayor of Palo Alto.

She hopes her work will deepen her understanding of how best to improve health behaviours and outcomes and help her to create interventions that effectively prevent obesity and chronic illnesses.

Rebecca Sauderson

Australia

COURSE IN CAMBRIDGE

MPhil Medical Science (Medicine),
Corpus Christi College

PREVIOUS UNIVERSITY

University of Sydney



I am excited to be undertaking a MPhil in Medicine at the University of Cambridge which will investigate the mechanisms of infection and treatment of invasive *Staphylococcus aureus*, a bacterial infection leading to high morbidity and mortality across the world. Prior to coming to Cambridge, I was working in internal medicine in Australia. My previous studies were Bachelor of Medical Science with honours in molecular genetics, and M.B.B.S. (honours), both undertaken through the University of Sydney. My greater goal is to be a research clinician, and through research reduce disease burden and contribute positive changes in clinical practice.

INTERESTS: Reading, Music, Dark chocolate, Running, and Travel.

Callum Shakespeare

Australia

COURSE IN CAMBRIDGE

PhD Applied Mathematics and
Theoretical Physics, Trinity College

PREVIOUS UNIVERSITY

Australian National University,
University of Western Australia



I'm excited to be beginning a PhD in Physics at the University of Cambridge, topic yet to be determined. The university sounds fantastic and the weather absolutely dismal! Nonetheless, I look forward to exploring the UK (by foot and by bike) and taking advantage of the many academic opportunities that will no doubt present themselves. It is an honour to be a 2012 Gates Cambridge Scholar!

INTERESTS: Woodwork (model/furniture construction), reading (fantasy and historical fiction novels), bushwalking and road cycling.

Suhasini Sen

India

COURSE IN CAMBRIDGE

LLM Law, Trinity Hall

PREVIOUS UNIVERSITY

NALSAR



Working as a Junior Advocate to Ms. Nitya Ramakrishnan in New Delhi has given me a strong interest in criminal law. A large portion of the work I've done has involved the representation of persons charged under regressive national security and anti-terrorism statutes and the experience has thrown up several questions in my mind. For example, while policy makers quote the pragmatic justification for enhanced police power as being the fact that the effects of certain crimes are either more acute or are likely to be felt by society on a much larger scale, does the need to protect public security also provide us with a valid moral justification for the curtailment of civil liberties? At what stage or in what context does it become morally and legally permissible to dilute principles of presumption of innocence and personal liberty? I believe that it is essential for a to have some answers to these questions, and I hope to be able to find them while I pursue my LL.M.

Anand Shrivastava

India

COURSE IN CAMBRIDGE

PhD Economics, St Edmund's College

PREVIOUS UNIVERSITY

University of Cambridge
(MPhil Gates Scholar)
Indian Institute of Technology, Madras



My undergraduate qualification is in Mechanical engineering and before coming to Cambridge I was working as a Manufacturing Manager for Unilever in India. I had also worked for a few months with an NGO on the issue of human-elephant conflict, its economic impact on farmers and the efficacy of various mitigation measures. I decided to change my career path and study economics as I found that I had an aptitude for research and was interested in issues relevant to the social and economic problems facing India. I am particularly interested in the assessment of the costs and benefits of forest land, the variation in these costs and benefits across the population and the political economics of the conversion of forest land for industrial use. I completed a Graduate Diploma in Economics at Cambridge this year and am looking at the MPhil course as preparation for embarking on a PhD and conducting relevant and innovative research on these issues.

INTERESTS: Reading, writing, and playing musical instruments.

Pedro Spivakovsky-Gonzalez

USA

COURSE IN CAMBRIDGE

MPhil Economics, King's College

PREVIOUS UNIVERSITY

University of California, Berkeley,
Albert-Ludwigs-Universitat Freiburg



Like my three siblings, I was born in Boston, Massachusetts, and I was fortunate to grow up in different places: the United States (in Massachusetts and Vermont), Canada, and Spain. I studied Economics and Political Economy at UC Berkeley and graduated in 2010. I was fortunate to receive a John Gardner Fellowship, which gave me the opportunity to work at the Council of Economic Advisers (CEA) at the White House. After my Fellowship, I was hired as a Research Economist at the CEA for issues in international economics and trade. At Cambridge, I hope to complete an MPhil in Economics, with a focus on Development Economics. I am interested in using tools such as randomized controlled trials and regression analysis to assess development policy outcomes.

INTERESTS: In my spare time I enjoy reading, watching movies, traveling, playing soccer, and listening to Elvis Presley.

Brielle Stark

USA

COURSE IN CAMBRIDGE

PhD Clinical Neurosciences,
Gonville and Caius College

PREVIOUS UNIVERSITY

Bryn Mawr College



The ability to regenerate language after stroke is intrinsically important. My work centres on utilizing one method of rehabilitation, inner speech rehearsal (talking to oneself), on brain reorganization following stroke. In previous work, two interconnected neural networks underpinning inner speech and overt conversational speech have been demonstrated in the brain. Further, a double dissociation of these types of speech has been shown in patients left aphasic following stroke. My project, in correlation with preceding findings from Dr. Elizabeth Warburton's team, builds on these findings. My research will aim to investigate the effects of inner speech rehearsal on plasticity within neural networks using fMRI and neuropsychological examinations.

INTERESTS: Coxing/rowing, traveling, cooking, volunteering with the Red Cross, blogging, and disability awareness.

Daniel Storisteanu

Canada

COURSE IN CAMBRIDGE

PhD Medicine, Clare Hall

PREVIOUS UNIVERSITY

University of Toronto,
University of Cambridge



With a background in environmental biology and after a number of stints in tiger, bat, and marine conservation research with universities and NGOs like the WWF, I've changed scope and species and am now starting a PhD in Medical Science. I intend to investigate a novel strategy that certain pathogens may use to manipulate the immune system. Our lab has recently discovered that a disease-causing virus exploits the signals released by our immune cells, causing other cells to be more permissive to viral infection and weaken the immune system's anti-viral strategies. My research will investigate the mechanisms this virus uses to take advantage of the immune system, and investigate whether they are used by pathogens such as tuberculosis and influenza. The long-term aim of this research is to identify points in the immune system where we may be able to intervene with therapies to treat and prevent these diseases, and to help identify individuals at higher risk of complications.

INTERESTS: Travel, caving, diving, fiction, music, and cake.

Daniel Strassfeld

USA

COURSE IN CAMBRIDGE

MPhil History, Philosophy and Sociology of
Science, Peterhouse

PREVIOUS UNIVERSITY

Princeton University



For as long as I can remember I have been interested in science. In college I majored in chemistry, completing a total synthesis of the natural product ineariifolianone in the lab of Prof. Erik Sorensen for my senior thesis. While I ultimately plan to pursue a PhD and academic career in the sciences, over the last year and a half I have found myself becoming increasingly curious about the process of scientific research and thought – questions such as how we are able to know what we (claim to) know, how competing theories can be tested against each other, and the ways in which scientific research is shaped by the wider society and vice versa. This coming year I will be pursuing those interests by studying the history, philosophy, and sociology of science, technology, and medicine at Cambridge.

INTERESTS: Music, travel, hiking, Cleveland sports, reading, teaching, and organic chemistry blogs.

LANGUAGE RECOVERY

Brielle Stark

Brielle Stark's uncle suffered a bad stroke in her first year at university. Indeed he still has no movement on his right hand side. "I observed that and saw the effect that his road to recovery had on my family," she says. "It had a big impact on me."



Such a big impact that it has influenced the subject of her research at the University of Cambridge where she will begin a PhD in Clinical Neurosciences in October.

Brielle's PhD will focus on trauma recovery, specifically clearer methods of language recovery and clinical neurorehabilitation following stroke.

She has been interested in disability awareness from a young age. "When I was 12, I convinced my parents to let me volunteer on a programme for children with autism," she says. "At 14 I took part in a recreational camp for children with disabilities and did so for the next six years. I have always been interested in disability from an equality perspective and the importance of seeing the person first rather than seeing their disability as a defining factor. It's part of my interest in psychology and an interest in how people perceive each other."

Brielle comes from a socially engaged family. Her mother is associate dean at a small community college and runs an alternative university programme in prison and her father, who is retired, teaches in prison.

She says she learnt early how to study and that helped free up her time for voluntary work. "I am very much a visual and oral learner," she says, "and by knowing early on that I learnt best by speaking things out, I freed up time for other things."

At high school she played Varsity soccer and got involved in the Red Cross. She was impressed by the way it involved youth volunteers and has been a member ever since, drawn by how it engages the community's youth and makes them feel they can have an impact locally and nationally. She currently sits on the Leadership Team of the American Red Cross National Youth Council.

At Bryn Mawr College, she wanted to study something that was medically oriented, but wasn't sure whether she was more drawn to being a doctor or to doing research. She chose to study psychology and was particularly interested in the action of medicines and therapies on the brain. Her interest in

neuroscience was heightened by her experience of her uncle's stroke and the time she spent with individuals with acquired head trauma at the recreational camp.

As part of her course she had the opportunity to study experimental psychology for a year at St Anne's College, Oxford University, although she says she was more drawn to abnormal psychology such as post-traumatic stress disorder and depression. For her undergraduate thesis she has been focusing on memory processing, using neuropsychological examinations of the brain to find out what is going on in the brains of young adults when they make subjective judgments about "how" they remember something, ie whether something is recalled with details or without. Using electroencephalography [EEG], she has been looking for the neural correlates of this subjective judgment in recognition memory, focusing on regions within the frontal, parietal and medial temporal lobes.

She says the technology can only show the general location of the activity, but it is very good at depicting the time it takes for memory to occur. "It happens extremely fast," she says.

Her experience at Oxford, which included being the Men's First Boat Coxswain at St Anne's (which won blades in Summer VIIIIS 2011), and particularly of the one-to-one tutorial system made her look around on graduation for other opportunities in the UK. "I had enjoyed myself so much in the UK and a member of the American Red Cross National Youth Council lives in London and was looking to set up youth consortia in different countries. I intend to become involved in the British Red Cross," she says.

At Cambridge she will study stroke patients and specifically how the brain changes and reorganises in order to recover language. "The aim is to find out the most successful recovery mechanisms so that we can use them to better inform rehabilitation," she says.

She sees her Red Cross and research work as complementary. "My research is about fixing a specific problem whereas my work with young volunteers in the Red Cross is about creating a better future. Both teach me about leadership."

Maxim Tabachnyk

Germany

COURSE IN CAMBRIDGE
MASt Physics, Trinity College

PREVIOUS UNIVERSITY
Ludwig-Maximilians-Universitat
Munchen



In my opinion, being part of some progress which helps society is the criteria by which a life can be judged successful. 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 result in a new and sustainable energy source. Furthermore I have deepened into the field of quantum optics especially in the context of ultracold quantum gases. After cooling down atomic gases to very low temperatures quantum behavior of the system becomes important. Moreover, by trapping the atoms in an optical lattice you are able to investigate many body systems in lattice potentials. This is e.g. interesting to simulate quantum many body systems which are essential in solid state physics. During the MAST program in Cambridge I intend to extend my knowledge by attending lectures of world leading scientists and carry out research on organic electronics and ultracold quantum gases.

INTERESTS: Travelling, basketball, and chess.

Valentina Tabbasum

Romania

COURSE IN CAMBRIDGE
PhD Pharmacology, Darwin College

PREVIOUS UNIVERSITY
University of Cambridge,
University of Medicine Craiova



I was born and brought up in Romania where I completed my medical studies. I have always been fascinated and inspired by innovation in research, particularly in my field of study. Therefore, I decided to pursue a career in research. Hence, I quit my medical career in Romania and embarked upon a challenging journey which brought me to Cambridge. The Gates Cambridge Trust has given me the great opportunity to fulfil my lifelong career dream. I would like to think that my work at the Department of Pharmacology will contribute to the development of new strategies to fight disease.

INTERESTS: Cycling, swimming, tennis, reading, and travelling.

Victoria Tobolsky

USA

COURSE IN CAMBRIDGE
MPhil Human Evolutionary Studies,
Fitzwilliam College

PREVIOUS UNIVERSITY
Princeton University



I was born and raised in Philadelphia, PA, where I developed an early interest in science and anatomy. I focused on human evolutionary science in my undergraduate career and aim to pursue those interests in my graduate work. With the integrated understanding of the human biomechanics afforded by evolutionary studies, I hope to engage in biomedical research in paediatric orthopaedics. An understanding of what specific evolutionary purpose our musculoskeletal system serves for normal functioning may assist me in isolating and repairing abnormalities before they result in the impairment of movement in a child. It is my hope that this intricate perspective on human orthopaedics will enable me to develop and normalize procedures that enable children to move freely.

Todd Tucker

USA

COURSE IN CAMBRIDGE
PhD Development Studies, Queens' College

PREVIOUS UNIVERSITY
Cambridge University,
George Washington University



After graduating from Cambridge's Development Studies M.Phil. programme in 2002, I worked at Public Citizen and CEPR in DC. There, I worked to ensure that U.S. policies allow countries to grow adequately and sustainably. In the fall of 2012, I will begin writing my PhD dissertation on the implications of the investor-state dispute settlement system for development policy. Few social scientists have studied this mechanism – whereby corporations can sue governments over financial and environmental policies. Rightsizing these agreements – mostly written before recent natural and man-made disasters reminded us of the virtues of sensible public interest safeguards – will be one of the central tasks for international governance in the 21st century. I hope to help train the next generation of policymakers, business leaders and advocates on how to design democratically accountable and effective global solutions to our most pressing problems, from climate change to income inequality.

INTERESTS: Non-fiction, punk rock, and travel.

Daniel Walden

USA

COURSE IN CAMBRIDGE

MPhil Music Studies, King's College

PREVIOUS UNIVERSITY

Oberlin College, Intercollegiate Center for Classical Studies



Originally from Berkeley, California, I graduated from Oberlin College and Conservatory with degrees in Classics and Piano Performance and a minor in Historical Performance. I have published articles on the relation between music and visual representation in illustrated manuscripts by Felix Mendelssohn and Paul Hindemith, and on the ways the study of performance on historical keyboards can shape interpretation on the modern piano. My primary MPhil research project at Cambridge will consider the dynamic intersections between music, Classical philosophy, and the visual arts. I will investigate how 16th-century Italian composers and philosophers turned to Classical antiquity to develop a unique culture of scientific, musical, and even magical experimentation that had an enduring influence on music theory and architectural practice. I also look forward to participating in the vibrant musical community at Cambridge as a performer on harpsichord and piano.

INTERESTS: I am an avid performer of contemporary and 20th-century music, and have worked with composers in the United States and Europe in introducing new works. I also enjoy reading and writing, film, art, food, hiking, and swimming.

Njoki Wamai

Kenya

COURSE IN CAMBRIDGE

PhD Politics & International Studies, Queens' College

PREVIOUS UNIVERSITY

King's College London, University Of Nairobi



My experiences as a human rights worker during the Kenyan Post Election Violence in 2007/08 motivated me to dedicate my scholarship to the pursuit of peace and security in Africa. My main areas of interest are Mediation, Peacebuilding, Women, Peace and Security. My current research area which I hope to focus on for my PhD is how to improve mediation processes to prevent conflict in Africa. My research focuses on how to improve election-conflicts related mediation processes in Africa taking into consideration the unique contextual factors that mediators often find themselves in. I have experience in managing advocacy and research programmes on governance, peace and security in Africa having worked as a researcher and programme associate in several organisations which include: the Institute of African Studies at the University of Ghana, Legon; the Centre for Humanitarian Dialogue in Nairobi; the Kenya Human Rights Commission and the Ministry of Youth Affairs.

INTERESTS: I spend my free time writing fiction, politics and travelling.

Elizabeth Wilder

USA

COURSE IN CAMBRIDGE

MPhil English Studies, Trinity Hall

PREVIOUS UNIVERSITY

Reed College



I grew up in Tucson, Arizona, and recently graduated from Reed College with a BA in English literature. In 2011, I received a Fulbright grant to Montenegro, where I taught English language and composition in the public university system and helped to coordinate education and outreach programs at American Corner Podgorica. I missed being a student, though, and am glad to be headed back to the stacks. My primary research interests include law and literature; nineteenth-century women's writing; the intersection of cultural studies and narrative theory; and the Victorian novel. I am especially looking forward to exploring the Cambridge archives, which contain materials relating to the unorthodox family arrangements of early feminist, queer, and social reform communities. In addition to writing critically about the representation of wardship in British literature, I can make a toast in Serbian, sing carols in Latin, and mispronounce words in French.

Ke Wu

USA

COURSE IN CAMBRIDGE

MPhil Education (Thematic route), St John's College

PREVIOUS UNIVERSITY

Arizona State University



My name is Ke Wu. Though I was born in Wuhan, China, I grew up in the lovely desert city of Tucson, Arizona in the United States. I graduated from Arizona State University with a Bachelor of Science in Biochemistry and currently teach chemistry at an inner-city high school in Los Angeles as part of Teach for America. During undergraduate I received a grant to travel around the world studying education initiatives for disadvantaged children. I plan to continue investigating education models through an MPhil in Politics, Development, and Democratic Education to deepen my understanding of inequity and expand my global perspective. I intend to become an education policy expert using legislation to effect change in the United States.

CAN PROGRESSIVE POLITICS AND PROFIT CO-EXIST?

Todd Tucker

How free are countries bound by international investment agreements to choose their own environmental policies if they interfere with future profit margins?

Todd Tucker says international investment agreements have been around since the late 1950s, but have rarely been invoked. There were only two cases a year from the 1980s to 2000 at the main arbitral centre at the World Bank, but over the last decade that number has been growing and in 2011 there were almost 40 cases. Argentina accounts for a large number of them.

Todd aims to focus his PhD in Development Studies on exploring whether there are any steps that can be taken to align company interests with national interests around issues such as poverty alleviation.

He is also keen to look for patterns in the cases which have come before judges. He says, for instance, that there is evidence of conflicts of interest between the judges and lawyers for the private companies involved. "It's a bit of a rotating door," he says. "The lawyers can serve as both judges and counsel for the companies and yet the judges are making rulings on issues that are crucial for economic development. Many of them have no economic training either."

Todd's interest in Latin America stems from spending most of his primary school years living in Costa Rica and Argentina not long after the fall of the latter country's military dictatorship. His parents – his father worked in social services and his mother in journalism – had moved there from Kentucky because they were Baptist missionaries for a nearly five-year term. In Buenos Aires, where he lived for around two and a half years, he went to a Spanish language school because his parents wanted to integrate into the community.

When he returned to the US at the age of 10, Todd felt very much an outsider because he had identified so much with Argentine culture. "I felt like I stood out quite a bit," he says. For that reason he got involved in the Sister Cities International community programme. "I had a little home there with people who had travelled internationally and been in developing countries," says Todd. "I was chomping at the bit to talk to people who had had similar experiences to me."

In high school he also took part in the Anytown USA project run by the National Conference for Christians and Jews (now called



the National Conference for Community and Justice) which was outspoken about issues such as racism, classism and sexism. He became a coordinator of their summer camp and facilitated workshops to bring young people together in a place where they could feel comfortable talking about their prejudices. Todd also helped to recruit other teenagers to the organisation.

His high school had a very experimental curriculum which allowed students to choose many of the subjects they wanted to study. This meant Todd could study Latin American issues even though they were not on the state curriculum.

In 1997 he went to George Washington University where he studied International Affairs. During his course he had the opportunity to study abroad in Argentina and Brazil and worked with local economic justice advocates.

After graduating he won a Bender scholarship to do an MPhil in Development Studies at the University of Cambridge where he studied with the economist Ha-Joon Chang who will supervise his PhD. The MPhil focused on issues such as economic growth and international trade agreements.

He went on to work for the Centre for Economic and Policy Research researching international trade and development issues with a Latin American focus, including Argentinian national development policy.

He is currently research director of the Public Citizen think tank's trade division where he works closely with members of Congress on issues such as the Obama's administration's ban on flavoured cigarettes which was recently overturned by the World Trade Organisation. He also studies US trade policy towards developing countries and says the Argentinian example is very relevant. "The Argentinian example of dealing with collapse and catastrophe shows that sometimes if you bite the bullet you can get the economy growing again," he says.

CLASS OF 2012/13 BY COUNTRY

Australia	7	Ghana	2	Palestine	1
Bangladesh	1	Grenada	1	Romania	3
Canada	8	India	3	Sri Lanka	1
China	1	Ireland	3	USA	43
Estonia	1	Kenya	2	Vietnam	1
France	1	Nigeria	1	Zimbabwe	1
Germany	6	Pakistan	1		

Total countries: 20

CLASS OF 2012/13 BY COLLEGE

Christ's College	1	Magdalene College	1
Churchill College	9	Newnham College	1
Clare College	3	Pembroke College	1
Clare Hall	1	Peterhouse	1
Corpus Christi College	1	Queens' College	4
Darwin College	3	Selwyn College	1
Emmanuel College	2	Sidney Sussex College	1
Fitzwilliam College	3	St Edmund's College	2
Gonville and Caius College	4	St John's College	10
Homerton College	2	Trinity College	13
Hughes Hall	5	Trinity Hall	4
Jesus College	4	Wolfson College	2
King's College	9		

Total Colleges: 25

CLASS OF 2012/13

BY DEPARTMENT

Anglo-Saxon Norse and Celtic	3	History	4
Applied Mathematics and Theoretical Physics	3	History of Art	1
Architecture	2	History, Philosophy and Sociology of Science	1
Biochemistry	3	Human Evolutionary Studies	1
Biological Science	3	Judge Business School	1
Centre of Politics & International Studies	4	Law	3
Chemical Engineering	1	Linguistics	1
Chemistry	1	Materials Science and Metallurgy	3
Classics	1	Medical Science	4
Clinical Neurosciences	2	Modern and Medieval Languages	1
Clinical Pharmacology Unit	1	Music	3
Computer Lab	1	Pathology	1
Criminology	1	Pharmacology	1
Development Studies	2	Physics	3
Divinity	1	Plant Sciences	2
Earth Sciences	1	Public Health	2
Economics	4	Pure Mathematics	1
Education	4	Scott Polar Research Institute	2
Engineering	2	Social Anthropology	2
English	5	Sociology	1
Experimental Psychology	1	Zoology	2
Geography	2		

Total Departments: 43



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