When the Bill & Melinda Gates Foundation announced a donation in October 2000 to establish the Gates Cambridge Scholars program, the Foundation was thinking big. It envisioned a network of future leaders drawn from around the world. A Cambridge education would be the common link, but the vision looked beyond Cambridge to imagine a community of citizen leaders and scholars who would bring innovation and commitment to improving the life circumstances of those in their respective countries and beyond. The Foundation anticipated that Gates Cambridge Scholars would contribute to the political, economic and social conversations in their own countries, as well as in the international community, that will ameliorate global problems related to ‘health, equity, technology and learning,’ among other areas.

Now in its fourth year, the Scholarship is still in its infancy, yet well on its way, toward achieving the Foundation’s intended goals. The Gates Scholars Council, a governing body of scholars elected by their peers, serves an important role in achieving those goals. During a recent Council meeting, members reaffirmed the vision for this year’s Gates Scholars Council and discussed the work planned and progress made to date toward realizing their vision.

A conduit among the Cambridge community of scholars, alumni and the Gates Trust, the Council is well placed to represent the interests of all Gates Scholars. The Council’s principal aim is to represent the interests and needs of scholars wherever and however it can by working with Dr Gordon Johnson and other members of the Gates Trust, while seeking at the same time to build an ever-more cohesive, vital and permanent community. In ways both big and small, the Council is making progress toward these goals.

A focus on community means an investment of time and shared experience with one another. Toward this end, the beginning of the year saw a continuation of social events begun in the Michaelmas term. Each month, scholars are welcome to enjoy the company of their peers at pub nights as well as movie nights held in the Gates Room. Moreover, recent bus trips took a number of scholars to historic Warwick Castle, Stonehenge and Woodhenge as well as to the countryside towns of Avebury and Marlborough. On 21 February, the Gates Scholar Colloquia Series launched with great success. Fellow scholars Shishir Nagaraja, Sarah Dry, Shiladitya Paul and Benedikt Mandl presented their research in a lively and engaging afternoon where ‘networks’ proved to be the pervasive theme. From self-organizing networks to network systems, the audience learned about networks in IT, aspects of networks in communication of weather in Britain in the 1800’s and the formation of communication networks in that most studied of all biological systems, the fruit fly!

Additionally, the Council continues to elaborate an interesting, multidisciplinary program of talks through the Gates Scholars Distinguished Speakers Series. Scholars will also note a range of improvements both to the Gates Room and to the Website. Daily maintenance of technology, furniture and the library often goes unnoticed. The Council, however, has made it a priority to care for the Gates Room and enhance it as well as the Website and alumni database, so that each is available and in good condition for current and future scholars.

These initiatives represent only a portion of the work the Council has on its agenda. The remainder of the academic year will witness, among other endeavors, the annual distribution of a revamped Gates Scholar Survey, a garden party with Dr Johnson and formal planning of the upcoming orientation for newly elected 2005 Gates Scholars.

Michael Motto is currently reading for an MPhil in Criminological Research at the Institute of Criminology. He is the Secretary of the Gates Scholars Council and a member of King’s College.
Bearing in mind the commitment Gates Scholars share for improving the lives of less fortunate people, Dr. Pandula Athauda-Arachchi took it upon himself to use his network within the UK and Sri Lanka to help with the relief efforts in the wake of the devastating tsunami that occurred on Boxing Day 2004. Over the last few months, he helped fund-raise and planned an awareness programme held at Darwin College. Staff at Addenbrooke’s Hospital, well-wishers in University Colleges, and members of the sympathetic general public in Cambridge helped raise more than £2500 in the initial phase. The majority of these donations have been directed to the Government approved Sri Lanka Disaster Relief Fund established at the Sri Lanka High Commission in London. Several donations have also been made to government-approved charities in Sri Lanka. These include a 100-houses rebuilding project launched by the Senkadagala United Tsunami Relief Fund and a school and library rebuilding project near Pothuwil in the South-Eastern corner of Sri Lanka. Children of all ethnic backgrounds will study there to signify the appreciation of national unity at times of devastation in Sri Lanka. If you would like to help with Dr. Pandula’s ongoing efforts, contact him at: pma29@cam.ac.uk. The support of the fellow Gates scholars can go a long way to help those in need.

Dr. Pandula Athauda-Arachchi is a PhD student in Brain and Neuronal Regeneration at the Cambridge University Medical Research Council (MRC) Centre for Brain Repair (Department of Clinical Neurology).
As graduate students, it is easy to get submerged in our particular interests. Opportunities to dabble in other domains no doubt exist through the vast number of lectures and seminars for which Cambridge is renowned. Yet, when it comes to actually doing research, our opportunities to explore new and unrelated directions, can feel quite constrained. And while, one of the greatest joys of pursuing advanced studies is being able to really delve into the strong passions and interests that guide us, as diverse and multi-faceted individuals, there are times when the opportunity to do something other – other than our passion, other than what may be our “life’s work”, other than the thing we do – at times that otherness is not only welcome, but it is a vital change. Or at least, it was for me.

Having spent last year researching in Paris, France as a US Fulbright grantee, I built upon work that I’ve been doing since the summer after my junior year at MIT - investigating issues of identity, collective action and social ambition among young people of African origins born in France – otherwise put, methods, degrees and outcomes of social integration for 2nd generations. This research, integrating my varied interests in race relations, public perceptions and (empowering) social movements, oriented both of my thesis projects at MIT (urban studies, writing) and serves the basis for my MPhil dissertation project. Working on these issues, willingly, for nearly three years, to say that they drive me, seems a bit of understatement. Still, applying to come to Cambridge last year, one of the more appealing aspects of the Social and Developmental Psychology MPhil was the opportunity not to work on this topic, or at least, not just these issues. For in addition to the coursework and dissertation, the MPhil also incorporates a mandatory apprenticeship that allows and encourages students to engage in topics outside their specified areas – which is exactly what I did.

What’s higher about higher education?
Think for a moment – how would you respond to that question? Perhaps you might cite student age, curriculum depth, living in a thought-focused community… that seems about right. But surely, some of those features exist in other educational paradigms – adult education engages mature students and contemporary secondary school curriculum broaches a range of complex issues. So what again is distinct? Is higher education really so unique or higher at all?

These questions were the point of departure for the apprenticeship facet of my MPhil. The project emerged from questions Dr. David Good, SPS faculty member and UK Program Director of undergraduate education for the Cambridge-MIT Institute, has been putting to colleagues at both universities for some time: what is that we do and is it really distinctive from other forms of education? His impromptu investigation suggests academics, despite being intimately engaged with higher education’s development, have just as much difficulty articulating its distinct features. Thus, a project was envisioned to examine academics’ teaching practices & strategies, characterizations of higher education, and evolutions they’ve witnessed and anticipate in its future, to explore the relationship between perceptions of higher education and pedagogic practice.

As an alumna of MIT now at Cambridge, interested in higher education at least in part due to aspirations of being a professor, the project was a perfect fit. Having been at Cambridge for the last few months, I’ve found myself pondering just what constitutes the learning culture here, what drives things, propels people forward? A question surely posed, in no small part, due to my frequent mindful comparisons between Cam and the hyper-paced world of my alma mater. Thus the opportunity to conduct face-to-face interviews with faculty at both institutions – provided me with the personal opportunity, not only to participate in a provocative research effort, but to get the story of what’s really going at these two places, straight from the horses’ mouths!

Although only in preliminary stages of analysis, interesting themes have already emerged. First, perceived differences between higher and secondary education seemed to be revolve around the student-teacher engagement both in teaching aims (instruction/ imparting knowledge vs. development/facilitation of critical thinking) and responsibility for learning (onus on teacher vs. student). Secondly, professors’ broad depictions of higher education as “facilitating thinking” or “developing reasoning capabilities” may be linked to one activity mentioned by all as essential to the higher educational experience – even despite different teaching arrangements at Cambridge (supervisions) and MIT (seminars and recitations) – namely, conversation. How so?

One respondent recalled a film in which a reserve warden gathers orphaned cranes at the end of the summer and runs down the length of his garden flapping his arms until they, following him in imitation, take off. Cranes, you see, don’t naturally fly, but must be taught to use their wings. Teaching, the respondent suggested, was something like that; you flap your arms and then they fly. Thus we might hypothesize that professors provide students with an example of “how to” think – an activity considerably more difficult to model. Yet, through questions, debate and discussion, we could see conversation as the mechanism for bringing the otherwise hidden realm of thought into the social world, providing a voiced exemplar of reasoning in which students are invited to participate and engage. And so it seems, whether or not faculty members at either institution ever capture the features precisely distinct to higher education, they certainly managed to grasp the essence of teaching – their students, like the cranes, continue to soar.

Like the students of the faculty I interviewed, my apprenticeship has definitely facilitated my development. On one hand, joining an inquiry into areas quite distant from what I typically do, it illuminated the many paths available to me (this one, coincidentally, I intend to keep travelling in research this summer!). More importantly, the shift in focus rekindled my passion for what it is that I do, leaving no doubt of its intrinsic significance to who I am and hope to become. For, even as I worked to prepare my apprenticeship paper, I was continually lured (and distracted!), by the promise of new books, articles and news on my chosen area. And so, having stepped off my path, I return to it, engaged and renewed and back to Paris, again ready to take off and soar.
Mr. Hellmut Hoffmann has served as Political Counsellor at the German Embassy in London since 2000, covering primarily the EU and the transatlantic relationship. He read history and political science at the University of Heidelberg, King’s College in London, and Johns Hopkins School of Advanced International Studies in Washington, D.C. He joined the German Foreign Service in 1982, and his postings have included: Vienna (1986-89 German Arms Control Delegation); Windhouk, Namibia (1992-96 Deputy Head of Mission); and the Foreign Ministry, viz. NATO Desk, Conventional Arms Control Desk, Russia Desk, and Foreign Cultural Relations Desk.

During his talk, Hoffmann expressed understanding of Britain’s distinct position in Europe, namely its unique relationship with the United States, a relationship the UK does not wish to jeopardise. Mr Hoffmann was emphatic, however, that Britain should recognise a common destiny with Europe, and be willing to make sacrifices toward the realisation of a greater union. He cited as comparison German acceptance of the burden of reintegration with its Eastern brethren to achieve unity, even at heavy cost to its domestic economy. Mr Hoffmann explained the significance of the EU to German post-war reconstruction of its identity, and hence Germany’s eagerness to promote a common EU agenda. To counter observations that the German economy shows signs of weakness, Mr Hoffmann cited Germany’s high performance in exports relative to its gross domestic product, as well as its high standards of living and education.

While acknowledging that the UK has achieved better performance on its own in some quarters, Mr Hoffmann reiterated his belief that full British participation in the EU is necessary to achieve common policy priorities. He indicated that original British accession to the Treaty of Rome, which had formed the European Community in 1957, prefigured greater British involvement in addition to economic cooperation. The framework had provided for a common defence strategy, among other concerns, even though the military force was infeasible at the time. Mr Hoffmann believes that British scepticism of a common Europe has arisen more recently, and does not adequately consider British interests in Europe over the long term.

Mr. Hellmut Hoffmann’s discussion was one of many opportunities that the Gates Scholars Distinguished Speaker Series has afforded Scholars to better acquaint themselves with pressing issues in international affairs, development, science, and health. The lectures are an innovation this year, developed by the Gates Scholar Council under the leadership of Moncef Tanfou, current Council President.

As part of this series, the Scholars had the pleasure of hearing the Rt Hon Michael Portillo, former Conservative MP for Kensington and Chelsea and former UK Secretary of Defence, who delivered the inaugural address on British Foreign Policy in October 2004. Subsequent lectures featured a global leadership discussion with Professor Dame Sandra Dawson (Director of the Judge Institute of Management) and Professor Jonathan Haslam (Centre of International Studies). This was followed by Dr Stephan Halper’s talk on Anglo-American relations and American neo-conservatism.

In Easter Term we look forward to further talks with internationally renowned figures, such as Mr Bill Gates, Sr., Co-Chair of the Bill & Melinda Gates Foundation; Professor Gahan Amarasinghe of the Department of Engineering; Professor Alison Richard, Vice-Chancellor of the University; Sir Richard Dearlove, Master of Pembroke College and former Head of MI6; and Professor Konrad Osterwalder, Rector of the Swiss Federal Institute of Technology in Zurich and President of UNITECH International, who will all address the Gates Scholars in May. All Gates Scholars are warmly invited to attend and participate in the speaker series. Stay tuned for more news on these and other events.

Augustine Lo is an MPhil student in Chinese Studies at the Faculty of Oriental Studies. He is researching British involvement in late 19th century industrialisation in China. He is External Liaison Co-Officer.

As the end of my PhD is nearing, I feel hugely grateful to the Gates Trust for having supported me throughout my studies at Cambridge. The scholarship has allowed me not only to pursue my research, but also to participate in my college MCR and the organisation Architecture Sans Frantèîres as well as playing on the basketball blues team. It is exciting and inspiring to see what my fellow Gates Scholars from the first year are now moving on to do throughout the world.

Max Gwiazda (Germany)
This past January, I had the opportunity to do a micro fieldwork project at a Malaria research unit in the Gambia. Beginning in 2001, the Farafenni research station had been engaged in a series of Malaria Vaccine Trials funded by the Gates Malaria Partnership and under the auspices of the British Medical Research Council. Developed by immunologist Dr. Adrian Hill, with the support of the Oxford Malaria Vaccine Trials Group, the vaccine was tested on a small population of malaria-naïve patients in the UK and had shown promising results. Thus, with the collaborative efforts of African researchers and Gambian nurses and fieldworkers, Hill and his colleagues took the trial to the Farafenni Research unit and selected a series of villages in the surrounding area to conduct the study.

However, it immediately became clear that securing an adequate population was not so simple. Recruitment took weeks of lengthy discussions with village leaders and the MRC’s promise of free health care provided not only to the volunteers but also to the community as a whole. There is evidence of increasing resistance to medical research in Africa; in recent years, several Western scientists have been accused of using research as a pretext for stealing blood from local African populations and selling it to wealthy white patients abroad. However, in the context of the MVT study, the villagers’ uneasiness was not a matter of unfamiliarity with western research practice. In the Gambia, the Medical Research Council has, for some time, been a permanent part of the landscape. The first MRC research unit was established in the 1950s, and several of the young men involved in this study had been born into earlier MRC cohorts. Thus, the anthropologists with whom I was working, Robert Pool and Wenzel Geissler, argued that the suspicion of the MVT trial was in fact the product of a longstanding distrust of the MRC’s practices and a weariness with medical research that has offered little by way of tangible benefits.

In order to explore these dimensions of the trial, the Gates Malaria Partnership agreed to support an anthropological project that would focus on people’s beliefs and attitudes relating to malaria vaccines, their understanding of the vaccine trials in particular and of the research process in general. My visit coincided with the conclusion of the trial. I spent three weeks speaking with the nurses and fieldworkers who had worked for the study and visiting the participating villages, speaking to volunteers and non-volunteers about their experiences. The overwhelming sense I got from these conversations was one of abandonment. Though villagers certainly understood that the trial had come to an end, because the Medical Research Council unit was still in place in Farafenni, they could not grasp why the nurses they had stationed in their study had to leave. This complaint was reiterated by the nurses and fieldworkers, who at the completion of the trial, found themselves once again, out of work.

Counter to the disengagement of research ethics, formalized by procedures such as blinding and randomization, the Malaria Vaccine Trials were characterized by an intimate relationship between staff and participants. Rather than a strict adherence to universal codes of accountability, it was the project’s ability to pragmatically negotiate the demands of the trial protocol and the needs of the volunteers based on an ethics of kinship that made its efforts of recruitment so successful. Now, after the trial has concluded, and the malaria vaccine proven ineffective, the popularity of the MRC is rapidly declining. The removal of the MRC health care workers from their villages have lead people to conclude that their suspicions about the self-interested motivations of western researchers in African communities might not be far off the mark. One might argue that the long-term benefit of the development of a malaria vaccine should be compensation enough for the villagers’ compliance in research. However, from the point of view of someone who has to wait with relatively no health care to speak of, this seems a rather lacklustre benefit when the fulfilment of this promise is most likely a considerably long way off.
Magnetic Resonance Imaging of Small Articular Joints

Seth Goldstein

When the phrase "magnetic resonance imaging" or "MRI" is mentioned, the first thing that often comes to mind is a patient lying on a table being slid into a large whole-body magnet for a brain scan. In fact, MRI can be used to image any tissue in the body that contains water or lipid. My research in Cambridge centers on using smaller niche role magnets and harnessing the quantitative power of MRI.

Radiologists today generally use MRI as a visualization tool and one element of my project is to display joints such as the human finger with as much detail as possible in two and three dimensions. However, MRI can also be used as a powerful quantitative measurement tool. Tissues have unique relaxation times, which essentially describe how quickly their protons snap to align with a powerful magnetic field. For future clinicians, determining the relaxation times of a tissue may reveal the state of a joint and facilitate the diagnosis of diseases such as osteoarthritis. Thus, another facet of my research is developing a clinical package that will measure relevant parameters in a clinically useful time, generally thirty minutes or less.

Arthritis is a crippling disease that is affecting a progressively larger proportion of the population as the average lifespan increases. Although there is not yet a cure, preventative measures exist that can make the disease easier to live with. However, diagnosis is the first step in any treatment plan and current identification of arthritis is primitive and often comes too late.

This year I hope to contribute a small piece of the puzzle that is the approach to degenerative joint diseases. Already my time here has been invaluable; I have been able to freely create a project that blends the technical aspects of medical imaging with the clinical realities of working with patients. I truly expect that the lessons I have learned in Cambridge will allow me to contribute both directly via published research and indirectly by strengthening my commitment to medicine and my desire to justify the generosity that has allowed me to be here.

Seth Goldstein is an MPhil student in Medicinal Chemistry at Emmanuel College.
The Medievalists’ Tale
Anke Timmerman

It was a dark, wet, stormy February night in Cambridge. Flickering candles on the tables in Pembroke College hall dimly illuminated the faces of a dozen graduates, huddled around some bottles of a dark, red liquid spirit aka wine. Eager faces shone more brightly than the freshly polished glasses they dipped their noses into, and an accidental eavesdropper of the mysterious conversation, which wafted up and down the long table, would have been bewildered by the words surfacing above the murmur: ‘Templar’, ‘romance’, ‘Kalamazoo’. Such a listener might have caught snippets of song and chanted Latin. And he would have wondered whether he was witnessing something strange and wonderful, or whether he had had one glass too many.

Turn the clock back one year. Three graduates in the Faculty of English decide to form a reading group to discuss medieval literature and related topics. A few informal meetings in local cafes later I join them, coffee in hand and head full of questions. The Faculty of English was to me – a historian of science – a separate world working which functioned according to its own rules. Every so often the conversation would drift to more general issues and problems: how could one find out about courses and lectures on medieval topics in Cambridge? Which bibliography was the best to use? Did anyone know of anyone else working on the same period or topic as oneself? And where the heck was Kalamazoo, site of the biggest medieval congress on the planet?

Even though we did not come up with answers immediately, we came up with a solution: it was time that Cambridge had an interdisciplinary forum, a database and a contact list for medievalists. The name of the idea – for in the beginning it was no more than an idealistic concept – was: ‘Marginalia’. Such a listener might have suspected – but still no less wonderful. Our four protagonists are well into the second year of graduate representative of the Medieval Academy of America, who is currently finishing his PhD at St Cross College, Oxford, got in touch to see if there was any way that the MRG and the graduate committee of the MAA could collaborate in future events. He was invited to give a talk to the MRG in Cambridge, followed by a formal hall in Pembroke, an idea that was enthusiastically received by medievalists across the University (we ran out of chairs in the lecture room) and by the College (which was kind enough to provide us with liquid sustenance at the meal). Which brings us back to the beginning of this little story, and it turns out to be less esoteric than you may have suspected – but still no less wonderful.

Epilogue: looking ahead
Our four protagonists are well into the second year of their PhDs, and continue extending the web they have spun with Marginalia. Listen hard and you will hear the never-ending internet traffic of medievalists chatting in the Marginalia internet forum and via email. You will see Marginalia posters everywhere, flyers and posters handed out at massive medievalist conferences like the ones in Leeds and Kalamazoo – which is east of Chicago, by the way. Meanwhile, the first enquiries about our journal, also called Marginalia, are coming in. But that is a story that shall be told another time. A tradition has been established, the sceptre will be passed to the next generation of medievalists. And the world of Cambridge medieval studies will never fall back into the ‘dark ages’ that preceded Marginalia.

Anke Timmermann is a second year PhD student at the Department of History and Philosophy of Science. Her research focuses on late medieval alchemy. (www.marginalia.co.uk)
Where a Gates Scholar Comes From: Canberra, Australia

Rochana Wickramasinghe

Gates Scholars come from diverse backgrounds, with around 250 Scholars at any one time in Cambridge from 58 different countries. One of the greatest attributes of Cambridge is its tremendous diversity of cultures, exemplified by the Gates community.

I thought it would be beneficial for the broader Gates community to appreciate some of the subtleties and intricacies of countries from which Gates Scholars come and how those countries contributed in shaping the people they are today. Although I am Australian, and Australia is admittedly a very well known country, I am going to talk about its capital city in which I grew up, Canberra, which is not as well known.

I come from a diverse background, having been born in Edinburgh, but only spending six weeks there, and then moving to Australia. My parents are Sri Lankan, which gives me a unique perspective on living in Australia. After finishing my schooling in Canberra, I commenced tertiary studies at the University of Melbourne, and subsequently moving to Cambridge to begin a PhD.

Canberra is a very misunderstood city. The name Canberra is derived from the aboriginal term canberry, which means meeting place. In the modern context, this is quite appropriate given that Canberra is the capital city of Australia, and as such the rendez-vous point for the nation’s politicians. The city – three hours southwest of Sydney and seven hours drive north of Melbourne – is home to around 350,000 people. Canberra was a planned capital city much like Washington, D.C.

Canberra is a very young city having only been built in 1913. A worldwide architectural competition was held for the design of the new nation’s capital, with the proposal of Chicago architect Walter Burley Griffin and his wife Marion Mahoney Griffin winning. They had a grand vision for a modern planned city with wide, tree-lined avenues, and a geometrical arrangement for all of Canberra’s monuments. All of these fall within the Parliamentary Triangle, which comprises New Parliament House at its apex and Lake Burley Griffin at its base. These include the National Museum, the Old Parliament House, the War Memorial, the National Library, and the High Court of Australia.

One of my fondest memories of growing up was going to a spring flower festival called Floriade, which is held annually in October. Floriade is held in a park near the city centre, and walking through there on a warm day with an ice cream, smelling and marvelling at the intricate flower arrangements was simply as serene and enjoyable an occasion as one can experience in Canberra.

The greatest thing about Canberra is its open plan living. Canberra is the only city I have been to where one can live surrounded by bushland (similar to a forest, but populated with eucalyptus (gum) trees and shrubs), yet still be within 5-10 minutes of modern amenities. This of course can be a mixed blessing, as was experienced only a few years ago by bushfires that destroyed several outlying suburbs, gutting hundreds of homes and causing millions of dollars of damage. Many houses are still to be rebuilt.

Canberra is also a very cultural and academic city. It is home to the National Gallery of Australia, one of the country’s premier universities, and to the Australian National University, one of the country’s premier universities. Ethnic cuisine in the city includes an amazing variety of Vietnamese, Thai, Indian, Malaysian, Greek, and Italian foods.

An aerial view of Canberra showing Lake Burley Griffin in the background

This relaxed yet intellectually and culturally rich environment was essential for instilling in me the necessary skills to cope with university life and study. Whatever adventures we may experience or accomplishments we may achieve in the future, or indeed, wherever we may end up in this amazing and wonderful world, I believe it is vitally important not to forget our roots, as it is through reflection of our past that we can learn how we became who we are, and build on these experiences and grow as people.

Rochana Wickramasinghe, 3rd year PhD student in Cancer Research/Biotechnology at the Hutchison/MRC Research Centre, Addenbrooke’s site. His research is focused on the development of peptide aptamer technology in the study of matrix-metalloproteinase cancer biology.