



GATES SCHOLAR NEWSLETTER

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HM The Queen meets Gates Scholars

HM The Queen meeting Gates Scholars at the Fitzwilliam Museum, 8 June 2005.

Photos courtesy of Nigel Luckhurst



L-R: Pierre Far, Anna King, Su-Yin Tan, Asbjorn Steglich-Petersen, HM The Queen, Mihai Brezeanu, Dr Gordon Johnson, Moncef Tanfour.



L-R: Alex Bremner, Sarah Dry, HM The Queen.

Perspectives on the first instalment of orientation 2005

Compiled by Paul Franklyn



Michael Dodson - Diploma in Computer Science

I love athletics. Watching them is enjoyable, simply out of appreciation for the effort and skill involved, but playing them is a much more fulfilling experience. The sport

itself, however, is less significant than the people next to you. The intense interaction during training, practising, winning, and losing results in unbreakable bonds between teammates, and is precisely the kind of interaction experienced during the Gates Orientation 2005.

These friendships are independent of the sport or activity and are primarily the result of shared experience. If permitted, they transcend ethnic, social, economic, national, and racial lines. Though orientation wasn't an "intense" experience, it was a constant and dynamic interaction among an international group that lasted the better part of three days. The orientation was focused around group activities, challenges, competitions, and problem solving which provided the base of shared experience, trial, error, and success resulting in friendships which developed and progressed very quickly.

In hindsight the orientation was a blessing in several ways. We were exposed to new activities, like rock climbing and caving. We

explored the Peak District, one of the most beautiful parts of England (in my limited experience), hiking through the hills, going on night walks to the pub (a mere 2 and a half miles), canoeing, etc. Most importantly, however, I believe we had a distinct advantage over other new graduate students coming to Cambridge. By the beginning of the first week, when everyone else is just showing up, we already had a large group of close friends for socializing, exploring, experiencing the nightlife, and even just for talking about home. We had senior scholars to show us around Cambridge and help get us settled into our new homes. Finally, we had the comfort of knowing that we wouldn't be alone in a new place, we would make friends, we would have people to go out with, and we had a very good year (or three) to look forward to.



Ashleigh Hildebrand - MPhil Environmental Policy

Like all of the new Gates Scholars, I wasn't sure what to expect from the Orientation Camp in the Peak District. I knew that I would meet other scholars and spend some time outdoors. What I found was a much more

stimulating experience than I had anticipated.

Stop Press: Gates Scholars' Alumni Association established - see page 13 for details

Standing in the crowd waiting to board the buses, I heard accents from all corners of the world. I realized that as a small-town girl from Kansas, there was much I could learn from the people surrounding me. I then made a plan to get to know each and every person there. I figured that three days would be plenty of time.

The outdoors experience we received was rather intense and it certainly initiated the relationship building process. Within hours of arriving at the camp, my group for the teamwork activities was holding hands to manoeuvre across an Adventure Course. Natural leadership came through when reconstructing the Towers of Hanoi, and we later all gasped in mutual astonishment as one member dangled upside-down just inches above the rocks during Stream Crossing. (We then worked as a team to rescue his cell phone when it plunged from his pocket into the water!)

We also bonded through various activities of our own choosing, which challenged us both mentally and physically. Though some activities, such as caving and weaselling, are inherently silent, there's something about crawling through tunnels below the ground that fosters a sense of kinship with those around you. Other activities, like archery and hiking, provided plenty of time for conversation. The camp kept us pretty busy, but we did have some free time, which was mostly spent speaking with scholars over cups of tea or on long walks to the local pub.

Though I spent many hours socializing, I quickly discovered that my plan to know every scholar would fail. This was no stuffy cocktail party, where you drift around the room, briefly acquainting yourself with each person and making small talk. These were Gates Scholars. Each of us was chosen to receive this honour for a reason, and as I delved into each conversation with a new friend, those reasons became apparent. I found myself constantly drawn into lengthy and inspiring discussions with intelligent, experienced people.

Though I certainly did not get to talk with each person, my plan was not a complete failure. Instead, I discovered that it will take many more weekend trips, pub nights, and random run-ins on the street for me to fully appreciate each one of the scholars and understand what motivates them. I look forward to continually learning what makes a Gates Scholar. In the meantime, I will learn what it is to be a part of this community of inspired and inspiring people – to be a Gates Scholar.



**Anthony Hylick –
PhD in Computer Science**

The Gates Orientation trip was great. From the very beginning, as we were assembling behind Queen's College, the new scholars had the opportunity to meet the other scholars for the first time and congratulate the scholars that one may have met in Annapolis or elsewhere. This informal setting for

finding out where people were from, what they were studying, whether they were doing a PhD or MPhil, and what one's plans were once the program was completed continued on the bus ride up to the Peak District.

Once we arrived at the Peak District, everyone seemed to be equally as fascinated with the beauty of nature at its finest. The hills, animals, and the purity of the rural setting captivated us all. However, we soon found out how deceptive the steepness of the hills was as we began the orienteering activity. It was a workout to say the least. The other activities and team building exercises were amazing. Personally, I have always wanted to do something of this nature, but I never had the opportunity before the orientation trip.



A group of new and returning Gates Scholars in the Peak District

The entire trip was so helpful in generating friendships and helping each of the new and old scholars to meet and learn everyone's names and interests. It was a great way to welcome international students to England.

**Jonas Neher –
PhD in Biochemistry**



On the morning of October 26th, a group of about 100 new (and some returning) Gates Scholars set out to explore the mountains of the Peak District and to engage in a variety of sports, which we didn't know at this point would include crossing rivers in the dark, taking a little bath in a pond (fully clothed) and jumping from 6 metre high poles...

During the journey, we had a first chance to meet the people sitting close to us and waited while the bus drivers had to deal with a bridge just broad enough to allow the buses to cross. But as everyone knows, suffering bonds people together, and arriving in Edale the initial uneasiness some of us may have experienced had been overcome.

As most of us had only arrived in Cambridge one or two days before, some of the poor overseas people were still suffering from jetlag, but were not shown any mercy. We were sent out directly to engage in an orienteering exercise, which also posed a problem in terms of remembering the names, colleges



The first instalment of Orientation 2005 took place in the picturesque Peak District



Dr Gordon Johnson, Provost of the Gates Cambridge Trust, welcomed the new scholars

and courses of all the people we met along the way. Having dealt with these initial questions, additional information about each person's life had to be stored somewhere in our overloaded brains.

During the next two days, however, the various sports and team-building activities led to reformation of the groups. And while the tight schedule during the day did not leave us much freedom to talk to each other, (queuing up for) the meals and the nightly walks to the nearest pub – which was about 45 minutes away – did provide us with the opportunity. Even if the person you thought you were talking to along the (dark) way turned out to be a different one in the light of the pub... Thus, we eventually managed not only to know the others' names without glancing at the ever-present name tag but also remembered some more personal details. After an exhausting two and a half days, a group of quite diverse strangers had been transformed into a community – thanks to the Gates Cambridge Trust, the organizing committee and the open-mindedness of everyone on the trip!

Tripping the road scholastic

By Aidan Craig

O God, I could be bounded in a nut shell and count myself a king of infinite space, were it not that I have bad dreams.

Hamlet, Act 2, scene 2

Breaking out of Cambridge into the rest of England is strangely arduous; a wall of speeding cameras, “leaves on the track” and the siren songs of London stand between enterprising Gates Scholars and Merry Olde England. Of course, Ryanair and orientations in the Peak District and elsewhere offer some relief, but it’s entirely possible – even probable – that limestone halls by the side of the Cam are all many Scholars will ever see of their host nation. Cambridge can be a magnificent confinement.

However, if you’re willing to get up at 8:00 in the morning, there is a hope of escape, courtesy of the Gates Scholars Council. Just hop on a bus full of sleepy, giddy, and friendly Gates Scholars, and get ready to be whisked away to some of Albion’s finest destinations, or at least those within four hours of East Anglia. What follows is a partial account of some of the Scholars’ recent trips: more are soon to come.

Warwick

Castles should not have websites. The collision of bits and buttresses is ugly, and prone to kitsch even when handled delicately. This goes double for Warwick Castle, now owned by Madame Tussaud’s and advertised by a gaudy web page that declaims “England’s largest standing castle!” before getting down to the business of entry fees, medieval re-enactments, “fares” and snack bars. So, it was with a hefty measure of apprehension that I sent the e-mail that would put me in the cigarette-and-pine cleaner-scented interior of a Grey’s of Ely bus to Warwick on Saturday, December 4th. At best, I figured, it would be a chance to go to a semi-authentic, Legoland vision of the Castle Age, and hey, the ride was free.

In fact, Warwick proved a delight; not only did the last bits of fog and rain drive away the tourist throngs, but the castle is a limestone wonder, left largely intact since its foundation as a hill stronghold in 1068 by William the Conqueror. Warwick’s true character is now tied to its late fourteenth-century barbican and gatehouse, which saw it through Earl Richard Neville’s role as “Kingmaker” in the era of Richard III. Touches of the modern also blend seamlessly into the castle, as one winds through damp, lichen-crusting catwalks into a palatial, trophy-mount-encrusted nineteenth century hall decked out for Christmas, through a Victorian electricity station, and down into a Tussaud’s-inspired museum that presents leftover statues from the London attraction in reasonably realistic-looking (and –smelling) medieval displays. As often happens during Gates Scholars trips, we had to leave all too soon, before exploring the Capability Brown-designed grounds or fully appreciating the lovely market-town character of adjacent Warwick, which remains unblighted by the industrial creep of the Midlands. I shouldn’t trust web sites.

Bath

As academic twin to Cambridge, Oxford is a lovely city, but there is a certain inescapable sameness about the Other Place. One might never suspect that a short drive away from Oxford there lies a completely different British gem, a second home to British aristocracy and a poem of pristine peach stone and Regency architecture. That town is Bath, first a Celtic settlement, then Roman religious centre, and eventually home to Jane Austen and a panoply of pastries.

Unlike the Warwick trip, our excursion to Bath came with the sunshine that’s synonymous with the end of August, which warmed the town’s acres of orange-cream coloured stone wonderfully. Our first target was the Roman baths right at the heart of town, now screened from the tourists by a Victorian reception hall and buried 15 feet below street level. Fire-eaters and the famous climbing angels of Bath abbey compete for your attention on the way in, but these distractions are soon overcome by the charms of a quiet pool of green water, still bubbling with dissolved gases. As the excellent audioguide explains, the waters fell as rain shortly after the last Ice Age, and have since been percolating through the limestone until heat and fissures in the rock lead them to the surface in Bath. After touring the modest but extensive ruins for a morning, we dispersed for pub lunches (or the equivalent meal replacement of a sugary Bath bun), and wandered through the town to see the posh Regency-era apartments of the Crescent, the shop-covered Pulteney Bridge (a distant second to the Ponte Vecchio as shopping-bridges go), the Jane Austen home, and gourmandiseries, tree-lined parks, and all the other little pleasures of a town devoted to entertaining Britain’s bluebloods.

Stonehenge

It’s a bit odd, seeing Stonehenge from the window of a car. Though the “ages-old” tales surrounding the place are mostly all fabrications (according to John Aubrey, locals in the 17th century thought chips from the henges would drive toads from wells at best), there’s a sense of mystery to the monoliths that should defy drive-by tourism. In fact, Stonehenge lies right off the A344, and while the scope of the monument is indeed impressive, especially when one imagines the now-rotted wooden structure that surrounded it, it had to stack up against the other destinations of Gates Scholars bus trips: the now-empty circles of Woodhenge, the white chalkstone horse carvings of Wiltshire, and most impressively, the stone circles of Avebury, a massive concentric array of embankments, ditches, and 15-foot stone posts. By the time we hit the market town of Marlborough, one had to wonder whether modern humans could even conceive of projects of such scope without bulldozers and backhoes, concrete and Caterpillar. At the very least, one’s thesis is placed in context.

So, having conducted our periodic escapes, we return to Cambridge, hungry, decaffeinated, and perhaps enriched. Perhaps it’s just the joy of taking some time off from the thesis, maybe it’s the opportunity to bond with other scholars, possibly it’s something as profound as connecting with the historical sinews of our host land, but each trip is rejuvenating. We may be Cambridge men and women first, but we can learn to be a little bit English as well.



Aidan Craig is a third-year PhD student in theoretical biophysics. He also captains the CU Blind Wine Tasting Society and its Oxford-beating tasting Team, and enjoys hiking, martial arts and philosophy when not studying or sipping.

Bridging the gap between science and policy

By Andrew Robertson



Andrew Robertson with the U.S. Capitol building in the background in Washington D.C. at the start of his fellowship

On 7 October 2005 health ministers from 80 countries and 8 international organizations gathered at the U.S. State Department in Washington D.C. for a one day Senior Officials meeting to discuss policies and actions relating to the overshadowing threat of highly pathogenic avian influenza (HPAI). As a member of the U.S. delegation for the Department of Health and Human Services (DHHS), I heard via a translator Thailand's representatives relate their success in combating the avian influenza. I also heard the lessons that Canada learned from containing SARS and an impassioned plea from the UN to increase disease surveillance in animals. Throughout the day, one overarching idea was constantly reiterated and became a common theme to all speeches: preparing for an influenza pandemic requires a collaboration of scientific and regulatory agencies.

The American Association for the Advancement of Science (AAAS) Science & Technology Policy Fellowships address this collaboration by helping bridge the gap between science and policy. The AAAS is a leading non-governmental organization that promotes science in the U.S.; they are best known as the publishers of Science magazine. Their fellowships are designed to establish and nurture critical links between federal decision-makers and scientific professionals in order to support public policy that benefits the well-being of both the U.S. and the world. By bringing scientists into government service in a variety of Federal agencies and in Congress, scientists get a first hand look at the policy making process while contributing their scientific expertise and background.

I was fortunate to receive one of two 2005–06 AAAS/NTI Global Security Fellowships, which focus on the issues concerning global health such as biological weapons proliferation and international epidemics/pandemics. The nature of this fellowship allowed me to choose the government agency within which I wanted to work. After a number of interviews and discussions, I took a position within the Office of the Secretary at DHSS on the advice of my interview panel, who believed that my three years at Cambridge would be valuable to the international scope of their work. They may have been right – my first instinct is almost always to consider the international impacts of an issue, a trait I attribute to my time spent in England.

I've also found that the Gates Scholarship is an excellent conversation starter with European delegates.

Currently, my work is primarily focused on pandemic influenza. The H5N1 HPAI outbreaks in Southeast Asia are on the minds of almost all politicians and officials around the world today and Washington D.C. is no different. The WHO estimates that the pandemic could result in 150 million fatalities worldwide and the U.S. places their national estimates between 2 and 20 million deaths. Within 2 weeks of each other, the President, the DHHS Secretary Michael Leavitt and Congress all publicly acknowledged this as a top priority of the U.S. government. However, the reality is that the U.S. and the international community are both grossly under prepared to respond to an outbreak.

The broad policy approaches discussed by the U.S. and international agencies are almost identical: we should, for example, promote public communication, build stockpiles of medical countermeasures and increase disease surveillance. The details of these issues, however, are much more complex. When we engage the public, are we seeking to inform them or frighten them? Is our communication confined to the U.S., or should public messages transverse international borders? Should we build stockpiles of medical supplies on a regional, national or international level? Are we focusing too much on stockpiling Tamiflu, an anti-viral drug that may or may not be effective against H5N1? Should our disease surveillance be focused on human influenza carriers, or should we extend surveillance to all sentinel animals?

My personal interests lie in the engagement of the private sector to promote drug and vaccine development, which brings its own questions regarding intellectual property, liability and government incentives. This is especially important in the case of avian flu where the development of a vaccine is our best hope for saving countless lives. Currently, there isn't time to produce a vaccine to avian flu for the 2005–2006 influenza season – if HPAI hits, we will have no medical defence to stop the spread of the disease. Our best hope is to develop a vaccine within 15–18 months through a crash course with industrial companies, adding incentives and safeguards to encourage their participation (vaccine production is usually avoided by pharmaceutical companies due to high liability and low profitability). I'm currently working on the development and implementation of several industrial incentives to increase the U.S. capacity for vaccine production. Approaches that we are taking include Emergency Use Agreements (EUAs) to reduce liability for non-FDA approved drugs in emergency situations, extensions on existing patents for companies who dedicate resources to vaccine production, and seeking advance purchase agreements from countries that will be using the vaccine during a pandemic. This work will take me to many Federal agencies and send me on a number of delegations to Europe and across North America.

Regardless of which of these very difficult questions a government is addressing, the answer to how we can prepare for and respond to an influenza pandemic will be influenced by a number of legal, political, academic and industrial factors that will engage a vast array of actors and communities. It can be a safe bet, however, that an effective response can only come if there is a strong collaboration between scientists and policy-makers.

Andrew S. Robertson was a 2001 Gates Scholar, and earned his PhD in Genetics and Biochemistry in 2005. He is a 2005–06 AAAS/NTI Global Security Fellow at the U.S. Department of Health and Human Services Office of the Secretary. He can be contacted at andy@gatesscholar.org. Details of The AAAS Science and Technology Fellowships can be found at <http://fellowships.aaas.org/>.

BioVision world life sciences forum

By Rochana Wickramasinghe

For this piece, I decided to write about a conference to which myself and 3 other Gates Scholars, Andrew Robertson, Sally Gras, and Eva Casal went. This conference was quite unique, dealing with issues of which we should all be aware as Gates Scholars.

The BioVision World Life Sciences Forum was held in Lyon, France. I was quite fortunate to receive a fellowship which provided for the hotel and conference expenses.

It was structured in quite an interesting fashion. The conference itself was huge, with several thousand people on peak days, but within that were 90-odd other people who had also received the fellowship and were either PhD students like myself, post-docs, or MBAs. These other BioVision.Nxt fellows (as we were called, supposedly representing the future leaders of tomorrow – although I'm not exactly sure how I fitted into that) were from all over the world, from countries as diverse as India, Australia, Egypt, Hungary, the USA and Israel. About the only area that wasn't represented was South America, although I am told that this will change for the next forum in 2007.

We all got to hang out for the week and each of us was paired with a roommate (mine was an Indian PhD student studying in Basel, Switzerland). It was a great experience (and a lot of fun too) to interact with such highly intelligent people from all parts of the world, each with their different views on topics.

The day before the conference started, we were all carted off to the Ecole Supérieure in Lyon for a series of round-table discussions, which were highly stimulating. The two that I'll remember the most were a talk on whether science can be both altruistic and profitable, and one by Victoria Hale, the founder of the world's first non-profit pharmaceutical company, One World Health, which incidentally is in existence because of a substantial grant from the Gates Foundation. In addition to opening my eyes to the gigantic issues to do with global health, something that was to be reinforced many other times during the forum was the fact that it was rather ironically preceded by a talk on the billions of dollars that the US is spending on anti bio-terrorism effort against viruses that may not even exist.

The proper conference started the following day, and on an intellectual level, the most interesting day was the Nobel Laureates' Day, celebrating the 50th anniversary of the Salk polio vaccine. Twelve Nobel Laureates spoke on concepts as diverse as how the immune system works to how neurons function. However, the talk which summed up the essence of the forum was given by Rigoberta Menchù Tum, who won the Nobel Peace Prize in 1992. Although not a scientist, having won her prize for work in Guatemala for the rights of

Indian peasants, her talk was so full of humility, celebration of the past, and hope for the future. Her unwavering faith conveyed so passionately in her talk that scientists will find the cure to many debilitating diseases, such as malaria and cancer, reminded me of why I became a scientist, before the focussed nature of research on a specific aspect of a problem made me forget the big picture.

In fact, one of the greatest things to come out of the conference was that my ideals hadn't changed too much since I was a kid, which was nice. I also discovered how huge the problem of global health is, something to which I admit I was rather oblivious in Cambridge, where my major concerns usually centred around experiments. The fact that millions of children in places like Africa die every year to preventable (I repeat, preventable) diseases was truly shocking, especially when pharmaceutical companies have the tools to save so many lives but choose not to use them in the name of too little profit. And the sad thing about it all is that these children could contribute a huge amount to society, but are denied the chance.

Plus, I found issues like comparatively reduced funding by companies for research into diseases like malaria (as they are primarily third world diseases and wouldn't generate enough profit for those companies) quite shocking, especially given the billions of dollars of profit certain companies make. When I posed such a question to someone in such a company about why a portion of their profits couldn't go into funding free drugs made by them to third world countries, the response I was given was as follows: too much profit is never enough given the highly cut-throat competitiveness of the market place, plus

they have to satisfy their shareholders. Needless to say, I was quite shocked (and replied back saying surely their shareholders would be happy to have their company make a little less profit if it saved tens of thousands of lives). Sadly, it doesn't appear that the values of companies will change overnight, or even in the next few years, although non-profit pharmaceutical companies like One World Health will hopefully shift those ideals one day.

I would like to end this article on the following note. Although our PhDs can be extremely stressful and perhaps depressing at times (which were the early days for me), it is often helpful to put things in perspective, which is what this conference did for me. There are millions of people way worse off than us, so at the end of the day, a failed experiment isn't such a big deal, is it?



Australian Immunologist, Professor Peter Doherty, Winner of the Nobel Prize for Physiology and Medicine in 1996, speaking at the Nobel Laureates' day during BioVision 2005



Rochana Wickramasinghe is in the final year of his Biotechnology/Cancer Research PhD at the Hutchison/MRC Research Centre on the Addenbrookes site. His research is focussed on the use of peptide aptamers against the cytoplasmic tail of MT1-MMP, a key proteinase involved in cancer metastasis, to study the biology of MT1-MMP.

An unlikely linguist in the world of branding

By Peter Manasantivongs

Arts Ph.D. holders: there is hope. You can indeed find gainful employment in the real world. And even in the private sector, with a bit of good fortune.

After four fulfilling years of cultivating friendships that will last beyond our time in the UK, learning where the fish and sorbet courses go in the order of a formal dinner, and finally understanding what the difference is between fricative and affricate consonants, I left Cambridge in September 2004 and headed back home to California. Growing up in the southern part of the state in suburban Los Angeles, it was time to explore new ground, so I went up north to San Francisco to do an unpaid internship at the Rosetta Project, a linguistic-related non-profit organisation, while hunting for jobs.

This is where the luck comes in: during the final month of my internship in January 2005, Rosetta sent me to the Linguistic Society of America's annual conference, which happened to be taking place in the area that year. Having decided rather early on during my Ph.D. studies that academia wasn't the route for me, this was an event that normally wouldn't have attracted my interest, much less inspired me to travel out of my way for. But it was being held in Oakland, across the bay from San Francisco, my registration fees were being covered, and Borders and Barnes and Noble bookstores never called me back to do seasonal work during the Christmas holidays, so the aligning stars were trying to send me a message.

To make a long story (and conference) short: I went to the job centre to see whether there were any jobs posted in my area of specialisation (out of curiosity only; I had no intention of actually applying for any of them), and amongst the clutter, I came across the sole non-academic job advertised there.

I am now the Director of the GlobalTalk® cross-linguistic and cultural evaluation programme at Lexicon Branding, a brand name development company located across the Golden Gate Bridge from San Francisco. (And in case you were wondering, no, there were no jobs in my field of academic research listed at the conference.) My primary responsibility at Lexicon is to ensure that the brand names that we come up with for various products do not have negative or offensive connotations in other languages. Some of the names that Lexicon has developed over the years include Pentium and Centrino for Intel, PowerBook for Apple, BlackBerry for RIM, and blueyonder for Telewest. These do not have problems in the languages of the world's major markets. By the way, here's a dinner-table tidbit that you can throw into the conversation at an opportune moment, from someone in the industry: the Chevy Nova thing is an urban myth. That car actually sold quite well in Latin America, and no one in Spanish-speaking markets linked the name to the phrase 'It doesn't go', just as most English speakers would not be reluctant to buy a dining furniture set just because it had the name Notable.

The first two linguistic assignments I did when I joined the company in February were for the following recently-launched products: Elexa, a new female condom offered by Trojan (<http://www.elexabytrojan.com/index.aspx>), and Viiv, a new technology that Intel is coming out with in 2006 (<http://www.intel.com/personal/desktop/viiv/>). Yes, the diverse range of products that we name certainly does



Peter Manasantivongs enjoying views of the Golden Gate Bridge during a day off with a friend from Cambridge.

keep the job interesting. These names too are unproblematic in the languages that the companies care most about, which means my spot at Lexicon is still safe for the moment.

I never thought I'd ever end up here. When it became clear to me that I didn't want an academic life in linguistics, I concentrated on looking for jobs in university administration, with no success. If you had told me upon my departure from Cambridge that I would end up working in the field of branding, I would have responded: (1) Uh, what's that?; (2) Oh, you mean such a field actually exists?; (3) Companies really pay other companies to do this?; and (4) Um, yeah right, and how would I even get into the industry in the first place? The most striking thing is that I could now see myself doing this sort of work throughout my career, beyond just the first job.

I never regretted my time in Cambridge, but I do remember wondering when I decided to abandon academia whether I would feel some disappointment in the fact that I spent four years studying a discipline that I would never make use of again. There is an immense sense of satisfaction in knowing that, first, I ended up putting my linguistic knowledge to practical use, and second, I can walk through an aisle in a store and spot a product name that I helped bring to fruition.

And life indeed does come full circle: linguistic conferences and paper submissions were never a priority for me during my graduate student days, but in January 2006, at the American Name Society's annual conference, held with the one for the Linguistic Society of America, I will be presenting my first-ever paper, a talk titled "The optional use of tonal markers in the transliteration of foreign brand names into Thai". Yes, I am doing this fully voluntarily. The truly shocking aspect of this is that I am willing to travel out of my way from San Francisco to Albuquerque, New Mexico, to do this.

So those of you who get bombarded with questions from well-meaning (sometimes) family, friends and strangers about what on earth you are going to be doing with that arts Ph.D. of yours, keep the faith. You can get a real job, and that's not an urban myth.

Peter Manasantivongs, Ph.D., was a graduate student at Peterhouse from 2000 to 2004, and is a member of the inaugural class of Gates Cambridge Scholars. During the academical year 2002–2003, he served as Treasurer of the Gates Scholars Council and President of the Peterhouse MCR. You can reach him at peter@gatesscholar.org.

From C to shining C

By Antonia Ruppel

When I first came to Cambridge as an undergraduate in 1998, neither I nor my parents, uncertain whether they wanted their daughter to attend university in a different country, a long way away, would have expected I would stay for seven years. When my time as an undergraduate came to an end and I began applying for graduate study and funding, I would never have thought that the generosity of a single man would enable me to do not only my MPhil, but also my PhD. (I can still remember that moment in 2001 when I received the e-mail from the



Cornell University, Ithaca, NY.

Gates Trust, telling me they would fund my MPhil; the girl at the computer next to me looked rather alarmed by the sounds coming from my mouth, sounds that expressed utter delight, shock, giddiness and disbelief all at the same time.) And finally, when my time as a PhD student came to an end, I would never have expected that my long-time dream of being able to stay on in academia, to make the gathering and disseminating of knowledge and understanding my profession, might come true even before the submission of my thesis. Yet here I am, having just taken up a lectureship in Classics at Cornell University.

All of this was, of course, much less straightforward than it sounds. There were times when my PhD seemed completely stuck and I could not find any way to think myself out of my mental dead ends. There was the time when I realised things really could not stay the way they were, and changed supervisors (a step generally shied away from far too much – but if you know it will help you, do it! I certainly profited from it immensely). And then there was the time when I began applying for jobs. I spent weeks, if not months, on preparing applications for the various Junior Research Fellowships that had been advertised. My being short-listed twice was hailed as a great success by those in the know – but as most third-year PhDs (particularly in the Arts) will experience, you either have to be utterly brilliant (waves to Robinson

College – you know who you are!) or alternatively hope for a miracle to get a JRF in your first round of applications. Anyone involved in this application process right now: don't be disheartened by rejection after rejection. These do not say anything about your achievements or abilities. As the Roman poet Martial would have put it: We live in an age where you not only have to be good, but you also have to be lucky. If Martial had known JRFs, he would have said 'extremely lucky'.

I certainly was unhappy as my pigeonhole kept greeting me with one negative response after another. Yet two things that people kept telling me held true: in your job search, you only need to be lucky once – and you will be lucky when you least expect it. When the (negative) outcome of all my applications was certain, I settled to the thought of staying in Cambridge for at least an additional six months, finding accommodation outside college, supporting myself by giving supervisions, and most of all: taking whatever time I'd need to finish my PhD properly and be ready for the next round of applications in the coming fall. Then, one day in April, an opening in my field was advertised at Cornell; by the end of May I had been offered the job, and had accepted it. (So much for a quiet summer of burying myself in the library. And yes, when I think back to getting that job offer, I am still inwardly jumping up and down!)

It is particularly at times of concentrated negative feedback that a typical grad student phenomenon kicks in: Feeling useless. Anyone doing a PhD on a topic without any 'practical' applications will experience this, and will question whether they are wasting their energy and potential, and their life in general.

Research should improve our lives in some way. In principle, it makes no difference whether these improvements occur on a practical level (all the way from curing illnesses to developing cheaper

mp3 players and the like) or a theoretical one – a better understanding of a certain phenomenon, whether encountered in nature, or in culture.¹ This latter research may lead to practical applications; it may also 'just' have the effect of uncovering something that is beautiful – the methods of an artist, the structure of a language, the symmetry of a formula. Yet often, research aiming at knowledge for the sake of knowledge and understanding (or rather: knowledge for the sake of the delight that comes with that knowledge) will focus on something that can be understood by and thus can delight only very few people. PhD students have brains that we can and love to use – why do some of us use them on research that no one apart from our supervisors may ever read, rather than on a project which people around us may actually profit from?

Quite simply. On the one hand, whatever jobs we may go into, our brains will be up for them. Whatever we look at, we will understand links, systems, connections; we will spot the exact nature of problems or weaknesses; used to approach any one thing from at least 23 different perspectives, we will be able to improve and innovate, and we will be able to communicate our thoughts and findings easily and efficiently. But perhaps even more importantly: It is in the nature of our research that we can never know just where it will take us. Who can tell that we won't discover something that will be beautiful in the eyes of not just our immediate colleagues, but a much wider public?



University of Cambridge, Newnham College

Of course I was abstractly aware of both of these possibilities. Yet now – even though I cannot credit myself with the latter (yet!) – at least the former has become an actuality for me. Having studied the exceptions to language systems for so long, the actual systems have by now become deeply familiar to me. When I teach a language, I

mostly teach those systems, and by now I can explain exactly what they involve, consist of, what characterises them. The better my students understand these systems, the less they will have to depend on memorisation of facts and rote learning, and the quicker they will become comfortable with the language as a whole. And hopefully, this experience will lead them to keep looking for systems rather than disparate bits of information, no matter what they may be focusing or working on. Not once since I started my work here have I felt the slightest bit useless.

I have been lucky – I got exactly the kind of job I had been hoping for. The ups and downs of the PhD and also of job search have proven worth it. And if a Classicist specialising in Indo-European philology, whose research has been described as ‘so wonderfully 19th-century’, can make a living by teaching her beloved dead languages (and that at a fantastic university), the chances for the rest of you should be rather good!

I hope these ramblings of mine may have been interesting not only for those still engaged in the mad and wonderful enterprise that is the PhD, but also to those among you who have left Cambridge, PhD in hand, and have lived to tell the tale. And who knows – maybe I have even been able to motivate someone to get from a current down to the next up of their PhD. I am looking forward to reading their account after their dream job has just appeared out of the blue.



Antonia Ruppel was a graduate student at Newnham College from 2001 to 2005 and is a member of the inaugural class of Gates Cambridge Scholars. During her time in Cambridge, she pursued a MPhil and a PhD in Classics and Comparative Philology. You can reach her at antonia@gatesscholar.org.

Simon & Shuster to publish Levey ('03) book in 2006



Hilary Levey, a 2003 Gates Scholar, recently signed a contract with major publishing house Simon & Shuster for the release of her book titled “Here She Is: My Journey Through the World of Child Beauty Pageants as Miss America’s Daughter.” The book, which is scheduled to be released in Fall 2006, draws on Levey’s personal experience, as well six years of extensive interviews and surveys

she conducted of pageant “moms”. The book offers a behind-the-scenes perspective of the child beauty pageant, something unique to American society, and questions commonly held beliefs about such pageants. It also questions traditional conceptions of what it means to be a child in today’s media-saturated world.

While Hilary has completed the research involved in the book, she’s currently in the final stages of writing. Regarding the process, she says, “It’s amazing that most books are in production for over a year once they are written.”

She credits her success in signing a publishing contract in

part to her time spent in Cambridge as a Gates Scholar. “I doubt [the contract] would have happened without the confidence and encouragement I received in being named a Gates Scholar. The community of scholars that surround the Gates program, along with the ideals of the fellowship itself, such as encouraging public intellectuals have had a profound effect on my writing as I strive to write a narrative based on academic research that will reach a broad audience.”

Hilary came to Cambridge as a Gates Scholar in 2003 to study for an MPhil in Modern Society and Global Transformations at the Faculty of Social and Political Sciences. The topic of her MPhil dissertation was the Scottish kilt, considering the relationship between national identity and costume. Hilary’s time at Cambridge as a Gates scholar provided her with the opportunity to travel in the UK and in Europe for her research, and to work with an MP from Cambridge in London.

Hilary also had the opportunity while at Cambridge to attend the 2003 Academy of Achievement Summit in Washington, DC. She described the experience as ‘the most incredible I had as a Gates Scholar. ... I met amazing graduate students from around the world and heard from a range of luminaries ... like [the] Pulitzer-prize winner A. Scott Berg and poet M. Scott Momaday; having the opportunity to speak with these writers filled me with a sense of awe and encouraged me to pursue my own writing goals.’

Since completing her degree at Cambridge, Hilary has moved to Princeton, NJ, where she is currently in the third year of a PhD programme in sociology. The topic of her current research concerns the culture of beauty in Western society, especially in the United States.

Never mind: Cambridge Alumni that the world forgot

By **Benedikt Mandl**

Five years after the Gates Cambridge Scholarship program was initiated, it is slowly becoming apparent what many first anticipated: not all of us will turn into future world leaders. However, this is anything but reason to despair – graduating from Cambridge and still not making it into the “Who’s Who” has been a Cantabrigian tradition for centuries. Even those who try really hard to leave a humble mark in history are often forgotten by now – or known for things only vaguely related to their professional background.

Tragic but conclusive is the case of Rosalind Franklin: the Newnham College graduate worked obsessively at King’s College in London on the analysis of the DNA molecule’s structure using X-ray diffraction, until cancer ended her life and her research. Her death in 1958 came four years before her collaborators James Watson, Francis Crick and Maurice Wilkins were awarded the Nobel Prize. They, of course, are now worshipped obligatorily in Cambridge for spending considerable amounts of time in the “Eagle” and writing insulting books about their fellow scientists. The moral of the story is obvious – but unfortunately comes a bit too late for poor Rosalind.

Not quite forgotten is the poet Rupert Brooke – since he was never known anywhere outside of England in the first place. Along with studying at King’s College and exploring his sexuality in a diligently empirical fashion with the assistance of other members of the Bloomsbury group, he produced excessive numbers of pompous, affectionate poems, before he discovered that “the one thing God wants of me is to get good at beating Germans.”

Tragically, he didn’t: only one year after he had traded the pen with a gun to join the army in 1914, he was killed in Greece and the world of literature tragically lost...well, a really handsome man.

Ambitions, courage, dedication – what is left out there that could provide a challenge to a Cambridge alumnus? For George Mallory of Magdalene College it was climbing Mount Everest. When he was asked why he planned to make this move from England’s flattest county to the roof of the world, he responded with the scholarly remark: “Because it’s there!” He died in 1924 on the way to the mountaintop, though significantly below it. His body was found no earlier than in 1999. Never mind.

Living a more successful life, but nevertheless punished with a similar fate as Rosalind, is Sir John Harrington of King’s College. His case is especially tragic, since his opus magnum actually had a huge impact on the course of history: a statesman and godson of Queen Elizabeth I, Sir John was the inventor of the flushable toilet. The two prototypes he built in 1596 – one for himself, one for Elizabeth I – were quickly forgotten and so was he. His invention, however, was refined by Thomas Crapper in the 19th century, who thereby added fame to his name and vice versa.

The struggle with making one’s name known was also an issue for John Montague of Trinity College. A statesman himself, he was a passionate gambler who used to eat a snack with one hand whilst holding his card with the other. Montague, the fourth Earl of Sandwich,

thereby invented just that – the sandwich. Today only few know the man with the funny title, whilst the one thing that could have added immortality with at least a dash of dignity to his name, the “Sandwich Islands”, are now simply known as “Hawaii”.

Not really a Cambridge graduate in the strict sense of the term, but nevertheless a questionable failure is the Cantab Terrier. At those days when the Fens were wet marshes and students still slept in dormitory halls, mice were a serious issue when it came to food storage. To tackle the problem, local terrier variations derived mainly from northern English and Irish breeds were combined to create a compact, but quick and nippy blend that was perfect for chasing mice and rats. Today, hundreds of years later the rodents are still around, but the Cantab Terrier has long gone. Furry little loser. The closest thing to a proper Cantab Terrier still bred, by the way, are Norfolk and Norwich Terriers – little Ewoks on four legs that are very popular in East Anglia to this day.

Another zoological enterprise with an unfortunate ending was an attempt to study butterflies of the Krim in 1919. Following a publication on this topic, a young Russian scientist and member of Trinity College quit his entomological ambitions, and pursued studies in Russian and French. Today, hardly anybody with less than six legs remembers the zoological roots of Vladimir Nabokov.

German writer Thomas Mann was quite dissatisfied with Cambridge in general. After receiving an honorary doctorate in literature, he reported with German precision in his diary: “Lame food, modest lodging.” Not the only one grumbling about the place – Erasmus of Rotterdam complained about high prices and warm beer, whilst poet Thomas Gray left us the immortal words: “Know the master of Jesus – does hugely displease us.”

Also of doubtful nature was the early fame of John Milton. The gentle, longhaired undergraduate of Christ’s College was nicknamed “the lady of Christ’s” for his feminine side and wondered: “Why do I seem to those fellows insufficiently masculine?”

This insufficiency, of course, was nothing compared to the academic twists and turns of his fellow Christ’s-man Charles Darwin. Between Edinburgh and Cambridge, Darwin studied a bit of this and that, collected beetles and fossils, and eventually graduated with a degree in divinity. Later he married his devoutly Christian cousin, only to become the most hated icon of 19th century science for Christian fundamentalists. Long forgotten are his religious foundations.

Gates Alumni – are you still lacking the fame that you deserve? The petrol to ride on the road of destiny? Is there still no wikipedia article on you? Do not despair! At least you have a degree from Cambridge, which is still more than Tony Armstrong Jones, now Lord Snowdon, or Rajiv Gandhi. Both of them dropped out of their courses just before they were meant to finish and they still found their way up. Some are born great, some achieve greatness, and some have greatness thrust upon `em – but it is no shame at all to die in merry mediocrity!



Benedikt Mandl (King’s College) is doing a PhD in Zoology. His feature “Schnappschuss aus Cambridge”, for which he ruthlessly intends to re-cycle most of this article, is frequently published at the German newsmagazine Spiegel Online. He can make yogurt, likes watching squirrels and the great outdoors.

Rethinking multiculturalism

Written by Su-Yin Tan with contributions from Robert Clay Rivers

Opening the can of worms

When discussing multiculturalism, there exist both the supporters and the critics. The supporters back the ideology behind multiculturalism, as an approach that values diversity, encouraging people to be tolerant and indiscriminating. As an idea, multiculturalism depicts a nation in which cultures are perfectly preserved and peacefully coexist together – where racial diversity is not seen as inherently problematic, but rather a positive resource for a society.

Yet, to many of us, discussing multiculturalism can be like opening a can of worms – exposing a source of unpredictable trouble and complexity, but which is a matter that is so close to many of us – too close, in fact, that we twiddle our thumbs and slyly switch subjects just to avoid talking about it.

In a Gates context...



Do we open the can of worms or face the consequences?

Given that the Gates Scholars community is, in itself, comprised of an international group of young intellectual minds and future leaders, we feel that this is an appropriate setting to encourage discussion about contentious issues surrounding multiculturalism. Despite a disproportionate number of scholars coming from particular nations, we are like a microcosm of the global village – multi-racial and multi-coloured with varied cultural backgrounds. For current scholars, even though we come from abroad, it is unforgivable to ignore what is occurring in one's own backyard – especially since events like the London bombings or 9/11 are exerting a global impact, forcing people to rethink multiculturalism and how to handle heightening racial tensions.

By writing this article, we hope to kick start the discussion and ongoing debate about multiculturalism. These are our personal opinions, illustrated by examples of personal experiences that have helped to shape our views. We leave the rest open as an invitation for further discussion.

A Canadian perspective

Canada's government has adopted policies of multiculturalism and official bilingualism, attempting to preserve a "cultural mosaic" of separate ethnic groups coexisting in a society. As a Chinese Canadian living in Edmonton, the capital of the province of Alberta and home to more than a million people belonging to over 50 cultures,



Buddy Beaver with his multicultural friends at the Edmonton Heritage Festival

my perspective of multiculturalism grew from observation and experience.

Alberta's ethnic diversity is so celebrated that the first Monday in August is declared an annual holiday and dubbed "Heritage Day". Year after year, I have attended the Edmonton Heritage Festival, where ethnic pavilions showcase a tapestry of cultures through entertainment, food, educational material, and crafts. Multicultural dance extravaganzas are often the highlight for over 350,000 festival goers each year.

Last August, I watched featured performances from across the world, from Aboriginal to Welsh – yet all the performers were Canadians. If you bumped into them on the street, they would be speaking English with or without a discernible accent, depending on whether they were first or second generation Canadians. On stage, however, these Canadians represented the country of their heritage and the language representing their roots. They looked strikingly "authentic". Watching the performances, I felt the diversity not only among cultures, but within cultures themselves. Strangely enough, a feeling of empowerment grew, as I felt myself and the country being enriched by our diversity and multifariousness.

Other performances I attended showcased choirs and folkloric groups singing traditional songs. English, French, German, Croatian, Dutch, Chinese, Filipino, Laotian, Ukrainian, Polish, Romanian – you name it, it was there.

Many groups consisted of young people; second generation Canadians and some who had come to Canada as babies and toddlers many years ago. Most only spoke English and had to learn the language of their origins to sing songs to the audience of "Canadians" of all stripes and



The Chinese Lion introduces itself to the Cultural Show's audience members



A lively band from Barbados performing at the Edmonton Heritage Festival

colours. Despite mistakes and the pronunciation sounding different from perhaps what it ought to be, their parents looked on with pride. Some groups even taught the multi-coloured audience to sing along. Despite who we were or where we came from, we soon found ourselves laughing and singing enthusiastically in broken German, Dutch, or Vietnamese.

To me, this is multiculturalism – it is enriching and it is interesting. It reminds us that diversity does not have to be cast in a negative light. It can be a cause for celebration, allowing people to better understand us and for us to better understand ourselves. It can be a form of education – personally, I would prefer this in place of a Hollywood movie any day.

Each culture has the potential to contribute something unique and valuable to shape the collective culture of a society. What would happen without cultural diversity? The world would be reduced from a rich chromatic hue to stark black and white.

A view from the melting pot

In 1782, the French-born American farmer, Jean de Crèvecoeur wrote:

“Here [in America] individuals of all nations are melted into a new race of men, whose labours and posterity will one day cause great changes in the world.”

Today, the persistence of the melting pot image is evidenced best by the societal pressures of assimilation. It is often put forward as an alternative to multiculturalism and is a metaphor most strongly associated with the United States.

The crucible of American identity or the “melting pot” has two aspects. The negative aspect involves relinquishing ethnic cultures and acquiring characteristics of the majority culture in order to socially connect. In essence, one leaves the past behind in order to become an American citizen. The positive aspect of advancing the melting pot involves embracing the substance of American culture – we are tied together by our desire to live the American Dream. Separated by social and ethnic boundaries, destinies become meshed together in a melting pot of hopes and dreams.

As an African-American from the state of Kentucky, my perception of multiculturalism is heavily influenced by personal interactions in the small town of Frankfort. To me, melting pot is a metaphor in which the ingredients in the pot (people of different cultures) are combined, losing some of their discrete identities, and yielding a product that is uniform in consistency and flavour.

Nowadays, I feel that the US is not so much a melting pot of this nature, but a loose collection of individuals who are connected by the fact that we all live in America. The host of minority and other ethnic groups may be identified as “Something-American”, but at the end of the day, we are connected by the fact that we are Americans.

In daily encounters in Kentucky, I have come across individuals initially fearful of cultural differences. Although learning about other cultures enables people to learn about themselves, by simply being in the vicinity of cultural or other differences does not automatically provoke people to actively learn how to appreciate them. By nature, I believe most people tend to naturally gravitate toward similarities and shy away from differences.

To change our natural tendencies of avoiding differences, it is necessary to take serious and intentional steps towards learning more about what makes us uncomfortable about other cultural differences. How do we perceive and react to certain races and why do we feel the way we do? From personal experience, making an effort to learn about other cultures is one of the ways I discovered I could learn and appreciate our inherent “uniqueness” and differences.

Essentially we all need to brush aside fears of finding out why people are different and make a conscious effort to find out and to understand the nature of our differences. Therefore, I view multiculturalism as an idea that is extremely worthwhile in practice, but must engage all of the population in order to have substantial impact on a society.

Emptying the can of worms

Recently, the challenges facing multiculturalism have been underscored by the London bombings. The four men who carried out the July 7 bombings were young Britons, some of Pakistani origin. Despite being British citizens, it is evident that they did not really take to the British way of life.

Some community leaders say that problems will inevitably arise when minorities are expected to embrace a local culture that still discriminates against them or does not represent their worldview. Scary evidence points

to the fact that cultures can grow apart and turn on their own country.

Clearly, multiculturalism is a tricky challenge. No matter how uncomfortable it is to discuss the issue, we feel encouraging dialogue and initiating debate is of utmost importance. If left on the back burner for too long, such issues brew and burst after reaching a boiling point.

In the Gates Scholars community, we are ideally situated to discuss a raft of contentious issues. The best we can do is be interested. After all, we live here and we support the ideals of freedom, equality, and respect. Can we afford to turn a blind eye? What kind of world do we want for ourselves? What kind of world do we want for our children? Perhaps it is the right time to consider these questions.



Multiculturalism and its diverse colours



Su-Yin Tan is a PhD student in the Department of Geography. She is the Alumni Officer of the Gates Scholars Council and a member of Wolfson College.

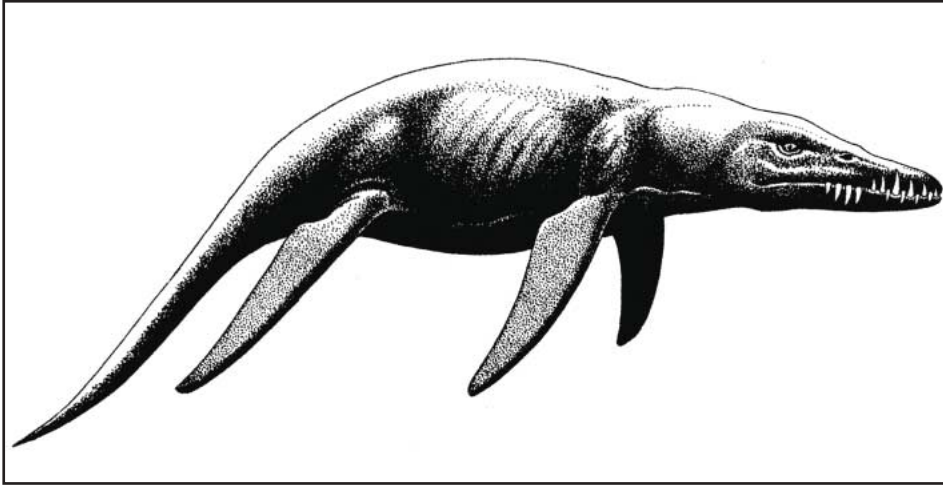


Robert Clay Rivers is currently doing a PhD in Biophysical Chemistry with Professor Chris Dobson. He is in his third year in residence in Cambridge.

Did you say "palaeobiology"?

By **Marcela Gómez-Pérez**

It doesn't seem that long ago when I was waiting on the backs near Queen's College for the bus to go to my first Gates Scholars event – the Kent orientation in 2004. What a wonderful idea: take a group of new Scholars away to interact with each other by participating in different activities. "What are you studying?" was the



Pliosaur reconstruction, taken from R. Ellis "Sea dragons predators of the prehistoric oceans" 2003

most frequent question, to which we heard many interesting answers across a wide range of subjects, from engineering and natural sciences to humanities and the arts. A fascinating microcosm of the cultural and intellectual richness we were very soon going to be part of, in both the University and the College. We had a fabulous time in Kent during which I made some very good friends, including one that I now share an office with!

I am doing a PhD in Palaeobiology at the Department of Earth Sciences, a world centre of excellence for the study of fossils and the history of life on Earth. Fossils often recall an image of gigantic dinosaurs like T. rex; however, there is a huge variety of other fossil groups, equally as intriguing and awe inspiring, such as the magnificent marine reptiles (ichthyosaurs, plesiosaurs and pliosaurus) that ruled Mesozoic oceans for at least 100 million years. These beasts captured the imagination of palaeontologists and the general public alike; from Jules Verne's "Journey to the Centre of the Earth" to the BBC's "Walking with Dinosaurs" and inspired many myths, such as the supposed monster in Scotland's Loch Ness.

Fossil marine reptiles were the focus of intense scientific interest when first discovered in England in the 1820's and played an important role in the development of vertebrate palaeontology as a science. My study will concentrate on an exceptionally well-preserved example of a pliosaurus, one of the top predators of the Mesozoic seas. Pliosaurus were extremely successful, reaching 'adult' body sizes in excess of three metres. They had a large crocodile-like head, a short neck, a thick streamlined body, and four limbs modified into paddles for swimming.

Fossils are normally incomplete; this makes work difficult for palaeontologists who are interested in

visualizing complete skeletons. However, nature sometimes produces very well preserved three-dimensional animals – as is the case of the fossil, which is the focus of my project. This fossil was found during the 1960's in my home country of Colombia. It is very rare, because it is almost uncrushed and substantially complete, making it one of the best preserved pliosaurus from anywhere in the world. My aim is to try to understand this fossil as a living animal, by reconstructing the soft part anatomy of the cranium and body, as well as to locate this new pliosaurus within a wider phylogenetic context, by investigating its evolutionary relationships.

In order to achieve my aim, I am using techniques developed in medicine that are now available to

palaeontologists, such as Computed Tomography scanning. These techniques allow me to "see" inside the fossil and to answer many questions, which would otherwise be impossible to explore. For instance, the Colombian pliosaurus has all the bones that surround the brain, which also enclose the hearing and balance system, exquisitely preserved. I am particularly interested in complicated labyrinths found within these bones, which can be visualized using CT scan images and 3D computer modelling programs. I generated a

model, for the first time in pliosaurus, of the semicircular canals which contain the balance and orientation system.

By creating a clear image of the organs of balance, further comparison will be made with living and fossil relatives of the pliosaurus in order to investigate wider questions. For example the evolution of hearing and balance system in reptiles can be elucidated, and questions concerning the transition from land back to water researched in these animals, as well as their adaptations to this new medium. This is the essence of palaeobiology; fossils give us the evidence to fill another little piece in the puzzle of the history of life on Earth.

I am very proud to be one of the 2004 Gates Scholars. A year ago, I came to Cambridge with very high expectations, and the first year has been memorable in so many ways. I have been able to develop my research skills and learn completely new techniques to understand fossils. I have already obtained some very interesting results and this makes me even more eager to continue with my studies. But Cambridge is not just about hard work. It has been a good year full of big things, meeting a wide variety of people from different backgrounds, all with something in common – the curiosity and determination to make things better for ourselves and others.



Marcela Gómez-Pérez is a PhD Student at the Department of Earth Sciences. She is a member of Newnham College.

Newly formed Alumni association plays integral role

By Pierre Far and Jennifer Gibson

Over the past five years the Gates Cambridge Trust and each successive class of new scholars have worked hard to fulfil the vision of the scholarship's benefactor, the Bill & Melinda Gates Foundation. This vision was to not only bring some of the brightest and most talented young people from every corner of the globe to study at one of the world's most prestigious universities, but also to create a network of future leaders that would show the way in addressing many of the global problems, such as health, equity, technology and learning, with which the foundation is deeply engaged.

As the fifth class of Gates Scholar prepared to take up spots in various departments throughout Cambridge, the Gates Cambridge Trust took the next step in achieving the second half of this vision. In August 2005 it announced the development of an independent Alumni Association that would form an integral part of the Gates Scholars Society and keep the almost 300 scholars who have already completed their time in Cambridge in touch with both each other and future classes.

In addition to announcing the launch, Dr. Gordon Johnson, Provost of the Gates Cambridge Trust, designated four scholars from the inaugural year with the task of setting up the organisation: Alex Bremner ('01), Pierre Far ('01), Jennifer Gibson ('01) and Andrew Robertson ('01). Over the next year, these four will work with the Gates Scholars Council, the Trust and Alumni from all over the globe to design a formal structure for the organisation, ensure accurate contact information is on record for each scholar, plan alumni activities and contribute an Alumni perspective to the current bi-annual scholar newsletter.

To clarify the new organisation's purpose and find out how you can get involved, below are some answers to some commonly asked questions.

Where does the Alumni Association fit in with the Trust? All Gates Scholars belong to the Gates Scholars Society. The Society is divided into two groups: the current Scholars, who are represented by the Council, and the Alumni, who are former Scholars and are represented by the Gates Scholars Alumni Association. This division allows us to focus on Alumni matters and interact more formally with the Trust and the current Scholars.

Why do we need an alumni association? Quite simply, because we are a community. Over the past four years the creation of the Gates Scholars Council and initiatives such as a three-day orientation for new scholars, bus trips and speakers, have created an increasingly strong Gates Scholars community. As a result there is a need to facilitate the continuation of this community beyond Cambridge, a goal which can best be achieved through the creation of a lively and active Alumni organisation. It will provide former scholars with an easy way to stay in touch, assist with alumni events and allow Alumni a channel through which they can voice opinions, ideas and concerns with the Trust. It allows us to keep in touch with each other. Finally and probably most importantly, an effective Alumni Association will enable scholars as they progress in their careers to connect with other scholars who may be in the same field or have similar interests. This network will play a crucial role in helping

scholars achieve the second half of the Bill & Melinda Gates Foundation's vision – to create leaders who engage in solve global problems.

What does the Alumni Association do? Currently, the Alumni Association is working on several things. For starters, they have several events planned in different U.S. cities over the next four months. These coincide with other Cambridge alumni events organized by Cambridge in America, the organization which promotes the interests of Cambridge University in the USA, and will include small dinners with the Provost of the Gates Trust. There will also be an event that coincides with the American selection process in D.C. Details of these events can be found on the back cover of this newsletter and online at <http://gates scholar.org> under the Alumni section.

Secondly, the primary focus of the association is setting up a structure for the Alumni Association. We envision this to have an Alumni Council or similar body, alongside a structure to represent the diversity of Alumni. The latter will involve class and geographical representatives for the Alumni. Over the next year a formalised constitution and structure will be designed and all Alumni will be given a chance to give input and vote.

Finally, the Alumni Association will also be working with the current scholars through the Gates Scholars Council to continue producing a bi-annual newsletter that contains articles and news by alumni, a regular section on alumni events and Alumni updates.

Of course, this is all new, and the Alumni Association wants everyone to be involved. While four people have been tasked with the organisational end, they will need A LOT of help and everyone is strongly encouraged to get involved so that it can become a truly representative Alumni Association. This will be especially important when discussions begin regarding the structure and design of the organisation. The Alumni Association wants everyone to be involved, whether running for the Alumni Council, becoming a representative or just keeping us up-to-date on what you're doing. Please do get in touch at any time by emailing gatesalumni@gates scholar.org.

Above all, The Alumni Association wants you to keep in touch with both us and each other. To keep informed about the great things coming up from the GAA, you need to give us your current contact details. You do that by using the gates scholar.org website. If you're not familiar with the website, the back cover of this newsletter has further information and instructions on how to update your contact information.

Finally, if you have any questions or even just want to say hi and let the Alumni Association know where you're currently at, the best way to do this is to email either Alex, Andy, Jen or Pierre at gatesalumni@gates scholar.org. Please get in touch!



Jennifer Gibson is a U.S. scholar from the inaugural class of 2001 Gates Cambridge Scholars. While at Cambridge she pursued a PhD in International Studies, focusing her dissertation on regionalisation and the security implications of the HIV/AIDS epidemic in Southern Africa. She also served as co-founder and 2003–04 Chair of the Gates Scholars Council.



Pierre Far is a Jordanian scholar from the inaugural class of 2001 Gates Cambridge Scholars. While at Cambridge, Pierre pursued a PhD in Microbial Genetics. He also served as Technology Officer for the Gates Scholars Council, including development of the scholars' website.

Gates Alumni events

Below are some of recent events held for Gates Alumni. While these were in the USA as a result of the Provost's travel schedule and selection interviews in Annapolis, MD, we are also hoping to announce events in several other countries. Please get in contact with us if you would be willing to serve as the country contact point for your respective home country.

PREVIOUS ALUMNI EVENTS

San Francisco, CA

Date: 12 November 2005
Event: Dinner
Time: 7:30p.m.
Venue: E & O Trading Company, a Southeast Asian modern fusion restaurant

New York City, NY

Date: 19 November 2005
Event: Dinner
Time: 7:30p.m.
Venue: Carmine's (200 West 44th Street between 7th & 8th Aves)

Washington, DC

Date: 1 February 2006
Event: Dinner
Time: 7:30p.m.
Venue: Old Ebbitt Grill

FORTHCOMING ALUMNI EVENTS

Washington DC

Date: 7 March 2006
Event: US Press and Public Affairs Conference
Time: 6–7.30p.m.
Venue: H.M. British Embassy, Massachusetts Ave, Washington DC.
Contact: Andrew Robertson (andy@gatesscholar.org)

Further information about future Alumni events, including how to register, can be found at www.gatesscholar.org under the Alumni section.

To get the latest alumni updates, be sure to switch your status to 'Alumni' on the www.gatesscholar.org website.

Have You registered your current details on the website?

Below is a list of former scholars who have not yet registered on the Gates website. If you're on this list, it may mean that we do not have accurate contact information for you. To register, please follow the instructions detailed in the website story. If you know one of these people, please send us an email at gatesalumni@gatesscholar.org so that we can get in touch with them personally. Even if you're not on this list, please remember to keep your details up-to-date on the website so that we can keep you informed of news and upcoming events.

Rashad Abbasov (02)	Onsaran Manuamom (01)
Hisham Abu-Rayya (01)	Efstathia Margaritas (01)
Gil Alexandrowicz (01)	Roman Martinez (01)
Michael Anderson (01)	Henrique Martins (02)
Nushin Arbabzadah (01)	Michael Masters (02)
Pandula Athauda-Arachchi (03)	Mark Mathuray (01)
Matthew Baumgart (03)	Joshua Morhart (01)
Tanweer Beleil (01)	Kamilini Mukherji (02)
Anne Berry (01)	Patrick O'Reilly (01)
El'vis Belltullayev (01)	Stacy Porter (02)
Mohit Bhende (01)	David Quinn (02)
Daniel Birdwhistell (01)	Shaparak Rahimi (01)
Angela Breitenbach (02)	Deepa Rajan (01)
Nicholas Bronn (02)	Swajit Rath (01)
Fatemah Caderbhoy (01)	Jay Reddy (02)
Joseph Califf (01)	David Rybicki (01)
Rodrigo Caputo (01)	Claudia Sanhueza-Riveros (01)
Malivika Chandra (01)	Birke-Siri Scherf (01)
Justin Chenevier (03)	Jonathan Schoenfeld (02)
Debajyoti Datta (02)	Alan Schoenfeld (02)
Eli Diamond (01)	Bedra Sharif (01)
Ludmila Du Bouchet (03)	Lishan Shi (03)
Yaacob Dweck (02)	Khe Sim (01)
Isil Erol (01)	Wilatuk Sinswat (01)
Patricio Feres (02)	Nicolai Slywka (01)
Liyanage Fernando (02)	Jessica Stebbins (02)
Michael Geline (01)	Simoni Symeonidou (01)
Aubrey Gilbert (01)	Peterjan Van Nieuwenhuizen (01)
Dehn Gilmore (02)	Matthew Varilek (01)
Anna Gola (02)	Patrice Wan Hok Chee (01)
William Greenleaf (02)	F. Wang (03)
Pierre Guillot (01)	Wim Weymans (01)
David Haskall (01)	Joel Willis (01)
Yung-Gi Hong (01)	Mattias Wohlfarth (01)
Amy Jones (02)	David Zipper (02)
Mekondjo Kaapanda (01)	Benjamin Zweibel (01)
Scott Katalenich (02)	
Vallerie Keller (02)	

Alumni Events in Pictures



◀ *Gates Alumni and the Vice-Chancellor at the reception to launch Cambridge University's 800th Anniversary campaign in San Francisco. L-R: Kateri DuBay, Anne Berry, the Vice Chancellor, Rachel Giruado, Peter Manasantivongs*

▶ *Gates Alumni dining out at E & O Trading Company, a Southeast Asian modern fusion restaurant in San Francisco. Clockwise from L-R: Rachel Giruado, Joshua Davidson, Sarah Tierney, Nathan Arrington, Julie Harkness Cooke, Rena Patel, Nathan George, Kateri DuBay, Peter Manasantivongs, guest, Anne Berry.*



The Gates Scholars website: What it has to offer

As you may know, the Gates Cambridge Scholars have an online presence at <http://gatesscholar.org>. The website is central to the communication between all Scholars: through its facilities, Alumni are able to keep in touch not just with fellow Alumni, but also with current Scholars. In the following article you'll find instructions on how to register and information features the website has to offer. If you have any questions, please email Pierre Far at gatesalumni@gatesscholar.org.

First and foremost, you will need to know your username. All scholars have a username assigned to them. If your name is Joe Bloggs, your default username is "j.bloggs". You can change your username, as we shall see later.

Alongside a username, you will need your password. If you do not know your password, please contact the website administrators at gatesalumni@gatesscholar.org. We will then reset it for you. You can also have your password emailed to you. Of course, you will need a valid email address. The default email address is the one you provided to the Trust, which is most probably your Cambridge address. If for any reason you do not remember your email address or you no longer have access to it, please email us. We will change your email address and request your password be sent to you.

The first time you log into the website, you will have to fill in a series of forms asking you for the basic information we need to keep in touch with you. Please fill everything in correctly so that we can tell you about Alumni events, and so that other Scholars and Alumni can contact you. You can always update your information by logging into the website and then clicking the "Edit My Profile" link on the left menu.

The "Edit My Profile" section allows you to keep your contact information updated, change your username, upload a personal photograph (a standard passport size photo: 35x45mm, 1.375x1.778", 99x128px), upload up to three other files (such as your CV), and change your Gates mailing list preferences. There are two important mailing

lists of which you should be aware. Public@gatesscholar.org is used by anyone in the community, including and most often, by current scholars who want to let others know of exciting things going on, interesting articles or other general interest items. In the past, Alumni have also used it to draw attention to points of interest in the news relevant to the community. You have the option of removing yourself from this list under the profile section by clicking no when asked if you want to receive those emails. The second important list is alumni@gatesscholar.org which allows alumni to email one another. You need to make sure you check yes next to the question "Are you an Alumnus?" to ensure that you are accurately recorded on this list. In general, the best advice is to thoroughly explore the Edit My Profile section!

Beyond this, there are several other features of our website. Of particular interest to the Alumni is the Alumni section. This section is constantly updated with the happenings of the Gates Alumni Association and Alumni. We are currently undertaking a number of new developments on this page and in the future you shall see a box where you can submit a brief update of what's going on in your life, i.e. marriages, new jobs, births, etc., as well as a database of Alumni publications and networking opportunities. Visit this section often to stay in touch.

The forums, identified as Message Boards on the section menu on the left of the screen, are where you can talk to, and fight with, other Gates Scholars. There are several forums to immerse yourself in, and of course, we have one for Alumni to discuss life after being a Gates Scholar. Simply click on the forum you want to register for and you will receive an email every time a new post is made to that particular forum. Don't be stranger!

Beyond that, the website has lots of other goodies to explore. All the sections are linked to from the navigation menu on the left. Play around and have fun.

And as always, if you get stuck, email the alumni website administrators at gatesalumni@gatesscholar.org.

Photography

By Sean McHugh

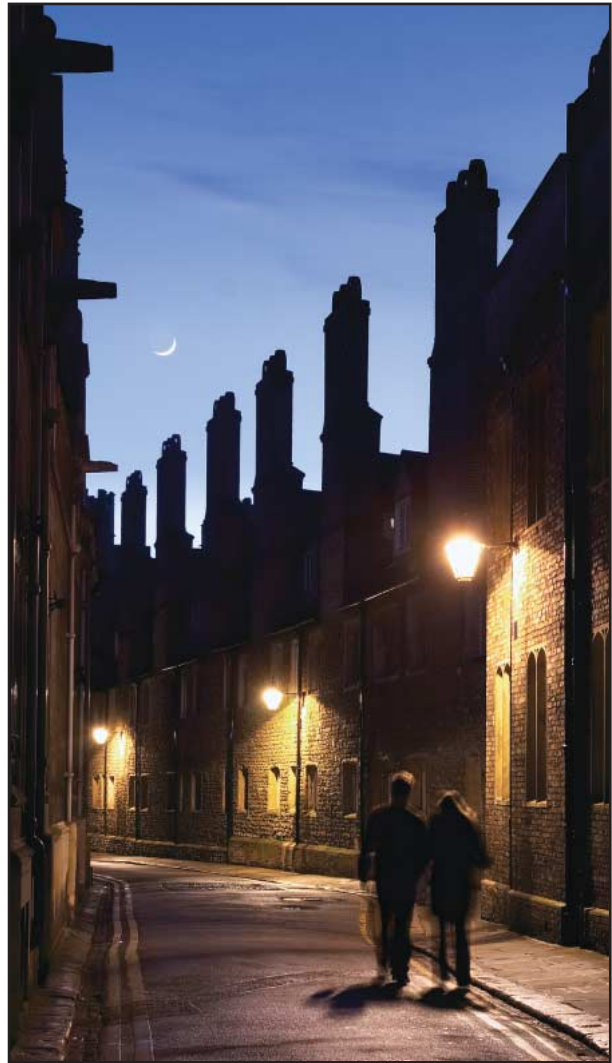
To me, a defining aspect of the Gates Cambridge Scholarship is that it not only allows one to pursue their choice of study at an internationally known University, but that one can also be involved in a diverse array of activities that may only be possible at a place as unique as Cambridge. Each scholar utilises this opportunity differently, whether it be by developing/refining a musical interest, achieving a Cambridge Blue, rowing towards a set of blades and/or participating in a variety of social, cultural and entrepreneurial societies.

For me, Cambridge has afforded the chance to establish and develop my passion for photography. This is, however, probably not the type of photography that many are accustomed to. I previously attended undergraduate studies in sunny southern California and also lived in Florida and Texas my entire life, so one thing which struck me about England like a ton bricks in fact – is the dreary darkness in winter. This, combined with what I feel best suits much of Cambridge's gothic architecture, led me to focus on night and low-light photography – much of which consists of exposures that are 30 seconds or more.

Although photography started out as what I considered to be a seasonal therapy, it has since expanded beyond its initial scope (to what some now may call an obsession). This past year I have been the digital photography workshop instructor for Phocus, a Cambridge photographic society for students. Further,



Window light



Trinity Lane

additional photographs may be viewed publicly at my new website (www.cambridgeincolour.com), along with numerous tutorials on photography and digital imaging.

Sean McHugh was born in San Antonio, Texas and attended the California Institute of Technology where he received his BS in chemical engineering. He is currently finishing his PhD in chemical engineering, and is a member of St. John's College. His research project deals with understanding reactive multiphase flow, with implications for sequestering CO₂ in oil reservoirs and the ocean.



Through the willows