

# Gates Cambridge Scholars Alumni Newsletter

Volume 1 Issue 1

www.gatesscholar.org

August 2003

**SCHOLAR-ELECTED  
COUNCIL MAKES  
RAPID PROGRESS**

**3**

**PATRONS CORNER  
INTRODUCES:  
FAITH JOHNSON**

**4**

**THE PUNT: HELPING  
GRAD STUDENTS  
PROCRASTINATE  
FOR DECADES**

**5**

**SCHOLARS FIND  
INSPIRATION IN  
RURAL EGYPT**

**7**

**CURRENT SCHOLAR  
JOINS NASA'S  
COLUMBIA  
INVESTIGATION**

**8**

## Bill Gates Senior Visits Cambridge

**A May reception at the University Botanical Gardens gave scholars and trustees a valuable opportunity to meet and share ideas**

**BY: Jennifer Gibson, '01**

A forty-acre haven filled with exotic flowers, rock gardens and bubbling water fountains provided the ideal backdrop on 1 May 2003 to a Trust-sponsored reception honouring William H. Gates, Sr.'s third and final visit to Cambridge during the 2002-03 academic year.

Over 150 scholars and their guests attended the two hour event to meet and speak with Gates, the co-chair and CEO of the Bill & Melinda Gates Foundation and one of seven Trustees serving on the Gates Cambridge Trust.

"I am impressed with the calibre of the scholars, their diverse backgrounds and their skills," said Gates. "You know how devoted the Foundation is to the concept of education. The aims of the Foundation and the scholarship are identical. I do not want to sound presumptuous, but over time our vision is that this program will have an effect on world conditions. I am very intrigued with all of [the scholars'] initiatives which have the same spirit."

Since the Foundation's US\$210 million dollar grant establishing the scholarship scheme, Gates has shown an active interest in meeting and talking with each year's group of scholars during his various visits to Cambridge.

"He was very warm and natural, as he always is. There was one bright moment which I will remember for a very long time, a certain moment of insight for me. Mr. Gates Sr. asked me what my parents thought about all this, were they proud of me, and I suddenly

realised how proud he is of us and how he hopes others are too," said Oksana Ruzak ('01), a scholar from Ukraine who is working toward a Ph.D. in Engineering.

The scholars were joined at the reception by a variety of University officials and academics, including Sir Alec Broers, Vice Chancellor of the University and Chairman of the Gates Cambridge Trust; Anne Lonsdale, Pro Vice Chancellor of the University and President of New Hall; Dr. William Gerberding, Former President of the University of Washington.

"Having a large contingent of Gates Scholars and Trustees interact will always produce a worthwhile and inspiring experience," said Roger Galindo ('01), a U.S. scholar pursuing a Ph.D. in Social and Political Sciences. "At the Garden Party there was a great feeling of optimism with so many interests and capabilities convening at one point."

This was the second time the Gates Trust has held a spring reception in the Cambridge Botanical Gardens and it hopes to make it an annual event.

*Jennifer Gibson (Michigan, U.S.A.) is working toward a Ph.D. in International Studies.*



**In the evening's hot seat, Bill Gates Sr. welcomed questions and news from all scholars in attendance**

# EDITORS

**BY:** Pierre Far, Jennifer Gibson, Napoleon Katsos, Hunter Keith

Hey everyone. It's summer in Cambridge all over again. Gleeful undergraduates are seaward bound and the cows are back on Midsummer Common. Spaniards and Italians are vacationing *here* for a change, ice-cream trucks are open for business and, after months of darkness, college sundials are finally keeping time. Down south, like a herald for the season, Tim Henman is back on serve, trying to recover that big, fat, Wimbledon saucer for Mother England. Everything (except the weather, of course) is heating up.

More than two years have passed since the first group of Gates Scholars received notification of their awards. Since then thirty-five members of the class of 2001 have left Cambridge. An even larger number will graduate this year, more than doubling the size of an active alumni community that spans the globe. In all, there were two hundred and thirty-six Gates Cambridge Scholars in residence this year, an increase in the inaugural class by more than fifty percent. Soon a whole new gaggle of wide-eyed Gatesians will bus into Cambridge, resolve never to take the bus again, then gather up their bags and ask themselves "What in the world do I do now?"

For those of you who have left: congratulations. You've put behind you the Manichean fluctuations of Cambridge weather, never to carry an umbrella and a parasol on the same day again. Words like "cuisine" and "efficiency" are back in your vocabularies, and cars have returned to the *right* side of the road, at least for most of you. More importantly, you graduated. You got all dressed up, pinched the chaplain's finger, knelt before the powers that are, and made tracks

with some kind of advanced degree. Good show!

For everyone else: don't worry. The weather and the food aren't quite as bad as you'll remember them. Cambridge bureaucracy has charm, not inefficiency; and you still have in front of you all those storied walks to Grantchester, all those lazy punts down the Cam, and all those heady seminars, with wine and cocktails waiting in the wings. Drink up. We're sure to miss it when we're gone.

This newsletter will interest scholars in Cambridge, as well as those of you who are making headway in the great beyond. It is an open document. The editors encourage all scholars and alumni to contribute regularly with project news, personal dispatches, travelogues, interviews and other tales of discovery. Doing so will help to keep our community in touch with itself, and help us stay aware of the most important developments concerning the Gates Scholarship in Cambridge.

This year has seen an extraordinary number of scholar achievements to tell about, including the formation of a thirteen-member Gates Scholars Council, which itself is responsible for bringing you this newsletter. The council also conducted a comprehensive survey of student needs and interests, shaped an active social calendar aimed at building community among scholars, and formed an advisory Patron's Committee of leading personalities at the University. Individual scholars have gone on to top positions everywhere, carrying their experiences at Cambridge into such diverse contexts as NASA and a New Jersey school district. In the following pages you'll hear in detail about these experiences and others.

With our intensely international character and the great breadth of everyone's interests, it's good to keep in tune with the progress that Gates Scholars are making as a whole. This newsletter will reach you regularly with that objective in mind. Happy sailing.

- Eds.

## NEWSLETTER STAFF

### Editors

Jennifer Gibson ('01)  
Napoleon Katsos ('01)

### Design and Photo

Hunter Keith ('01)

### Technology

Pierre Far ('01)

*Special thanks to Miss Charli Smith, the Gates Cambridge Trust and to Cambridge Printing, the printing business of Cambridge University Press, for enabling us to produce this newsletter*

# Scholar-Elected Council Makes Rapid Progress

BY: Andrew Robertson, '01 and Sean Bennett, '01

This year, in an effort to foster a growing community consisting of both past and present Gates Scholars, a few of the returning scholars have taken it upon themselves to create the Gates Scholars Council (GSC). The GSC consists of thirteen elected council members, one of whom is elected to act as Council Secretary in order to arrange meetings and help co-ordinate various projects. The other twelve council members are elected to serve as co-chairs of one of six committees: Alumni, External Affairs, Internal Affairs, Social, Technology, and Treasury. Although the six subcommittees each have different specific responsibilities, the council maintains the collective goal of strengthening the Gates Scholars community in order to facilitate and encourage the exchange of ideas between both current and alumni scholars.

In just seven months the thirteen elected Council members, with the priceless aid of over eight additional scholars assisting in voluntary, 'helper' roles, have taken great strides toward ensuring the long-term effectiveness of the Gates Scholars community. We set up elections with the help of the Graduate Union, established and approved a written constitution, and opened a bank account. Scholar communication has improved through the creation of the [gatesscholars@yahoo.com](mailto:gatesscholars@yahoo.com) email list (complete with Data Protection Act waivers), through a

database consisting of emails and phone numbers for alumni and current scholars, and through an updated website (currently under construction) containing information about upcoming community activities at [www.gatesscholar.org](http://www.gatesscholar.org). We have worked hard to cultivate an active social community through events like wine tastings, sponsored parties in co-operation with various other Cambridge societies, and day trips to locations such as Stonehenge, Dover, and the Parliament building in London. Usage of the Gates

*"In just seven months the thirteen elected council members have taken great strides toward ensuring the long-term effectiveness of the Gates Scholars community"*

Room, located in the University Centre near Mill Pond—and still accessible to alumni—has increased exponentially thanks to the addition of three state-of-the-art computers and our organisation of weekly movie nights, which take advantage of our 48-inch plasma screen, DVD player, and Bose speakers. Current projects include a black-tie ball at the end of the year, a five day orientation/

retreat for incoming scholars, a speaker series that would be open to all University members, and the alumni newsletter that you are currently reading.

We are proud of our accomplishments this past year, and hope that the GSC will become a permanent fixture within the Gates Scholars community. As always, we welcome any suggestions, input and/or assistance from anyone who wishes to help, whether incoming, current or alumni scholars. For those who would like

GATES SCHOLARS COUNCIL

## Council Secretary

Sean Bennett

## Alumni Co-Chairs

Jennifer Gibson  
Napoleon Katsos

## External Co-Chairs

Albina Shayevich  
Chris Tooley  
Christopher Kirchoff\*

## Internal Co-Chairs

Kate Franko  
Andrew Robertson

## Social Co-chairs

Rob Perrons  
Luis Briseno-Roa  
Enrique Martins\*

## Technology Officers

Bill Hollingsworth  
Pierre Far

## Treasury Co-chairs

Pete Manasantivongs  
Anna Bayona

\* Resigned

2002-2003

to get involved, or who would like to know more about the council in general, please don't hesitate to contact either myself (Andrew Robertson), acting internal liaison at [asr26@cam.ac.uk](mailto:asr26@cam.ac.uk), Jennifer Gibson, the alumni liaison, at [jmg61@cam.ac.uk](mailto:jmg61@cam.ac.uk), or Sean Bennett, the council secretary, at [sb394@cam.ac.uk](mailto:sb394@cam.ac.uk).

*Sean Bennett serves as the current Chair of the Gates Council. Originally from Illinois, USA, he is pursuing a Ph.D. in Cognitive Musicology. Andrew Robertson serves as the Internal Liaison for the Gates Council. Originally from California, USA, he is in his second year of a Ph.D. in Genetics.*

## Survey Results In

Arguably our greatest achievement has been the creation, distribution, and compilation of a survey conducted on the Gates Scholars now studying at Cambridge. The GSC worked many hours to input the data collected from the survey, and then spent many more analyzing the results and incorporating them into a single report that we then distributed to members of the Gates Cambridge

Trust. This report highlighted three requests made by the GSC: that the Trust hire a permanent staff-assistant to aid scholars in communicating with both the Trust and the University; that the Trust support our efforts to increase publicity for past, present and incoming scholars; and that the Trust recalculate the stipend based on the different living-costs associated with various colleges in

Cambridge. The Council personally addressed these issues to Bill Gates Sr. during his last visit, who received them very warmly. In response to our report, the Trust has appointed a staff member to act as a point of contact for the Gates Scholars, and has promised to make official any public statement we present as long as it accurately reflects the views of the Trust.

## New Jersey: From Cambridge to K-12

BY: Ramón Galiñanes, Jr., '01

*"...to begin always anew, to reconstruct, and to not spoil, to refuse to bureaucratize the mind, to understand and to live life as a process—live to become..."*

—Paulo Freire

"That's unfair," exclaimed one insightful student. Tension builds up among the students as they play a simulation game on a sunny Friday afternoon in world history class. The game, Star Power (intended to stimulate discussion on the industrial revolution and the



Ramon (standing second from right) and one of his classes at Patterson

political economy), triggers intense debates over the game, its rules and the issues of fairness, equity and justice. The young students, considered, by and large, the crème de la crème of the inner city, are future pioneers of the city of Paterson, New Jersey.

As a first year educator, teaching in the city of Paterson has been an extraordinary experience, involving both experiential bliss and significant challenge. At the public high school, the students bring an abundance of enthusiasm, energy and passion to the classroom. However, it is often directed towards social, rather than academic, pursuits. Therefore, one of the difficulties of teaching this past year has been employing the vigor of the students in an effort to facilitate a classroom community that, in turn, fosters academic skills, excitement and critical thinking. The ability to teach passionately and creatively on a daily basis has also been a tremendous test and an enduring struggle while working in an inner-city environment.

Although an ocean separates the city of Paterson from Cambridge (England), there is indeed one very striking resemblance between the two distant locations. In both cities, life-long education and learning predominantly occurs outside the classroom. The social interaction between the faculty members and students throughout the corridors of the educational structure has been a remarkable and an enduring communing experience.

In the days of yesteryear, Alexander Hamilton envisioned tremendous potential and possibility emanating from the city of Paterson because of its geographical good fortune of containing the Paterson Falls. The future of the city now stems from the talent, potential and fervor of these young students, many of whom will be the first in their family members to attend higher education.

*Ramón Galiñanes, Jr. (New Jersey, U.S.A.) is Teacher of Social Studies at Paterson Public School.*

## Patrons Corner

*During its creation, many of the scholars predicted that the Gates Council will benefit greatly from assistance, advice, and representation from prominent members of the University. This year, one of our first tasks has been to invite four well-respected individuals to become members of the Gates Scholars Patrons Committee.*

*We are grateful to Lady Mary Broers, Mrs. Faith Johnson, Prof. Martin Rees, and Mr. Duncan Robinson for each having offered both time and effort to assist the council in establishing itself as a creditable representative body of the Gates Scholars.*

*The Patrons have warmly welcomed the newsletter as a means of communication with the scholars and we expect to host their articles in what we have called "the Patrons' corner". In this issue **Faith Johnson** writes about her life in Cambridge:*

I arrived here in 1967 to do a BA in English at Girton. I had graduated in 1965 from Bryn Mawr College, where I majored in History of Art and then did some school teaching. After my two years in Cambridge, I moved to London, but came back in the summer of 1973 to marry Gordon Johnson. I have lived here ever since, first in our thatched cottage in Barton and then since 1994 at Wolfson College. We have three sons and go to North Haven, Maine in the summer. I am interested in English Romanesque Sculpture and have an MPhil (1984) from the Courtauld Institute in London.

I vividly remember how foreign I felt when I first arrived here as a student and how much this surprised me. Having grown up in New England, I had expected to feel instantly at home. I did not. Slowly and with difficulty I began to figure things out. It was not easy but it was an adventure and I am very proud of my Cambridge degree. Never did I imagine that I would spend the rest of my life here or be so involved in both College and University life.

I am thrilled that the Gates Scholarship program enables so many graduates from all over the world to come to Cambridge University. I know that if scholars arrive with open minds they will benefit enormously from the experience: in ways both expected and unexpected - as did I.



The good weather is here, the punts are out, and we are itching to enjoy both! We embark on a tour of the River Cam.

Just what is punting? Apart from being a primitive form of transportation, punting is Cambridge's favourite pastime. Physically, it is composed of a punt (the boat) and a pole. Motion is achieved when a person, standing at the back of the punt, pushes the pole off the riverbed. In Oxford, the punter stands at the front of the punt, but they don't know how to do anything anyway.

Let's go on tour. We start off from the Scudamore's at Quayside, near Magdalene College. We reverse out of the long row of punts. It is a bit narrow, but we manage to avoid crashing into Magdalene's River Court. Magdalene Bridge is now ahead and the current is against us. Magdalene Bridge is the site of the first Roman bridge across the Cam. We punt ahead, duck underneath the black metal bridge and come out on the other side. This is the deepest part of the river (in the city), so the best approach is to punt on the left side because it is shallower. To our right is Magdalene's Benson court,

STATUS: HQ

## A Master Boatsman Tours the Cam

BY: Pierre Far, '01

the site of the Roman colony that started Cambridge centuries ago.

St. John's College is now towering on both sides, and we punt under the Bridge of Sighs. Shortly afterwards there is another bridge. As we cross that the sun bursts from the right. The famous Backs of Cambridge will now keep us company for awhile.

*"Perhaps the most famous scene is King's College Chapel ... The scene is the same as on the cover of The Double Helix, James Watson's famous book."*

We manage the first serious turn of the river to find the back of the Wren Library of Trinity College appearing on the left. This is the spot of the river that everyone crams into when Trinity May Ball puts on the fireworks display.

The river is straight now, and looks like it will be like that as far as we can see. We are managing bridges that arch the river marking every college along the way: Trinity, Trinity Hall, the nice Clare College Bridge, King's college, and then the famous Mathematical Bridge of Queens' College. Although supposedly first built without any nuts and bolts, if you look closely now, you can see strategically-placed supporting pieces of metal.

Our left is padded with college courts. Perhaps the most famous scene is King's College Chapel. As we pass it on the river, we see its main doors facing us. The scene is the same as on the cover of *The Double Helix*, James Watson's famous book.

The popular Backs trace our route on our right. They are covered in lush green grass peppered with trees and hedges. It seems that everyone has a favourite spot at which they relax and indulge in sunshine and a good drink. Friends meet up to chat, drink, eat, play frisbee, and just waste time. Be careful not to break any college rules though!

As we approach the end of this stretch, the noise from Silver Street above reminds us that we are still in the town. The bridge we are about to drift under is quite wide, and the river is widening. It is possible to punt under it, but for maximal effect on the other side, gain speed beforehand and drift underneath it against the current. As you emerge from the darkness, you will be overwhelmed with scenery: The Anchor pub will be immediately to your left, the University Centre a little ahead to the left, the waterfalls straight ahead, and the green grass of the Mill ahead and to the right.



Towering at well over six feet, Pierre assures us that punters of all sizes can easily learn the proper technique

The river widens now, and becomes shallow. This is the easiest part to punt in – but the pole tends to bore into the riverbed (just let go!). As we punt along following the river, Darwin College's library keeps us company on the right, and the Cam splits into two: If we want to go to Granchester, we would turn left now, pull the punt up the rollers and keep going, which is an experience in its own right.

We, however, are going to the Granta pub. We follow the narrow winding river along the Darwin's riverfront, negotiating trees and low bridges, and make a straight run to a dead end. We make a sharp U-turn to the right and the Granta's punt parking spaces greet us. We park and go upstairs for a drink. Cheers!

*Pierre Far (Amman, Jordan) is working toward a Ph.D. in microbial genetics.*

## An MCR President Plumbs the Cambridge 'System'

BY: Peter Manasantivongs '01

Most graduate students at the University of Cambridge will point to their colleagues when asked to identify the most rewarding aspect of studying at this historic institution. As the majority of those studying here have done their first degree back in their respective native countries, Cambridge is, for many students, the first occasion to interact with peers from other parts of the world. Indeed, with such a large and vibrant international community present, and a comfortable balance between the number of British students and of those from overseas, it is virtually impossible not to take advantage of the rich opportunities derived from being at a university where the people you live with, your sports teammates, and your fellow researchers are more likely than not to be from countries spread across the world's continents.

It would be worth explaining briefly the structure in effect in Cambridge to those who are unfamiliar with it, as the unique organisation of this university is present at very few other institutions of higher learning, and is one of the university's notable idiosyncrasies. All those who come to Cambridge to pursue a degree are affiliated to the University in two ways: first, through the faculties and departments



that administer the programme in which students are registered, and second, through membership in one of Cambridge's thirty-one colleges.

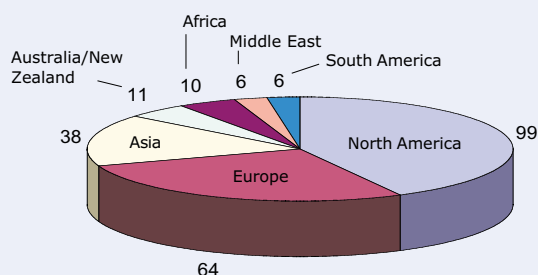
The types of interaction you have within your faculty or department - seminars with professors sharing your research interests, lectures given by some of the most prominent thinkers in your field, passionate debates with fellow students - is not exclusive to this university. But much can be said about how difficult it would be elsewhere to match the enthusiasm and achievement of the academic staff and student population found here.

Moreover, all students belong to one of the colleges, and it is usually within this setting that they get the most benefit of learning about other nationalities and interests. Whereas at other universities, most of the interactions you have would be through your department and it would take some effort to meet people in other fields, each college already has a graduate community in place, known generally as the Middle Common Room (or MCR for short, although some colleges have slightly different names for the same concept). The term MCR represents both the physical common room within their colleges that all graduates have access to, as well as the graduate student body of that college.

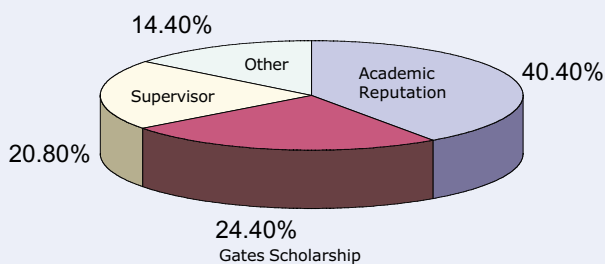
Since most colleges will admit students affiliated with any department or faculty, graduate students at Cambridge have numerous occasions through their MCR to get to know those studying other subjects from other parts of the world, through social dinners and events organised by the officers of the MCR. Those who get actively involved with the running of their MCR can count among their most delightful experiences in Cambridge the friendships and acquaintances made. As a third-year member of the Peterhouse MCR Committee and currently serving as the Peterhouse MCR President, I value the fact that I have learned so much from the other members of our relatively small MCR, not only about the variety of fascinating topics they are researching, but also what life is like back in their home countries, and the different perspectives on cultures, traditions, and opinions they hold.

*"It would be difficult elsewhere to match the enthusiasm and achievement of the academic staff and student population found here"*

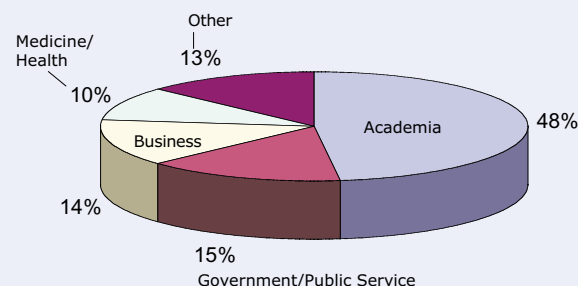
### Where do Gates Scholars Come From?



### Why do they come to Cambridge?



### Where are they going?



See complete results at: [www.gatesscholar.org](http://www.gatesscholar.org)

*Peter Manasantivongs (California, U.S.A.) is President of Peterhouse MCR, and working on a Ph.D. in Linguistics*

# Egypt: A Very Gates Safari

BY: Hunter Keith, '01

There is a village along the Nile where sugar cane grows.

No Pharaoh's tomb snakes under the ground here, no columns balance ancient pediments in the sky, and no pyramids saw across the horizon. This is not a place where tourists go—it's not an Egyptian "destination". This is an Egyptian home, just like the hundreds of others up and down the river. This is where, shortly after September 11<sup>th</sup> and the beginning of the Afghan war, scholars Sean Bennett, Michael Geline, Aubrey Gilbert and I became guests.

You can approach the village from the waterside, walking along upturned wrinkles of earth that weave among the crops and banana orchards. Between the river and the Sahara there are a couple thousand meters of fertile soil, a whole lot of humanity, and very little else. Arriving in December means that you've come between harvests, after the fall crops have fought their way through European and American farm subsidies, and just as the spring ones have broken earth, making the place green again.

As you go eastward, careful not to trample the village's sprouting livelihood, a man and his donkey will likely spot you, then perhaps two or three of his hard-working friends. These men will lay down their day's work and guide your way toward the dusty, unpaved main-street of village life. They will be proud.

From inside unglazed windows and around the corners of buildings will peep the eyes of young boys. They will rush forward to have their photographs taken and to see entertainers, like Mike, juggle stones. They will grapple onto you. Later the girls will come, nervous at first, some holding babies. They will crowd the rafters of this theater you've created—always watching from behind, unsure of entering on the mainstage. It will be difficult to put down everyone's excitement.

Scores of people will guide you through town, with twenty-something boys arguing over who's in the lead. They'll point out the utilitarian school and the makeshift mosque. Then they'll lead you to a makeshift concrete home. There, a grandmotherly lady will ask you to sit. She'll shoo out the children and the chickens with a stick, then serve you a glass of Tang. You'll be left to speak with the adults, in Arabic, about what it's like to live in this place.

The discussion will be enthusiastic. They'll talk

about the schools that Mrs. Mubarak built, and identify the singers whose posters hang on the walls. They'll ask about life in America and tell you that Americans never visit them. Occasionally they'll refer to a hardship—that classrooms are overcrowded, that students don't have writing instruments and that people are poor. But generally they avoid the topics that don't make them smile.

To determine how this village suffers, then, is up to your own observation. The home that you've visited has no roof, and its floor is made of dirt. Next-door the young woman is mentally handicapped and requires round-the-clock care. The river is polluted, so drinking its water—as you've just done—risks dysentery. There doesn't seem to be a hospital nearby. Between the thousands of animals and the thousands of people, this place is overcrowded, with limited sources of food and income. And yet it cannot compete with Cairo's seventeen million people for government attention, assistance and investment. The situation here is not quite dreadful, but it is far from just.

Four principles motivate Gates Foundation projects, including our scholarships at Cambridge: education, equity, health and access to technology. Places like Egypt, with its seventy million people and bite-sized tracts of arable land, must become resting grounds for such principles if they are to survive and remain at peace. Increasing literacy and workers' skills will help diversify local economies and reduce demographic pressures on supplies of food and shelter. Ensuring equal treatment under the law and equal access to world agricultural markets will help rural communities become more independent of government favors and coercion. Improving public health infrastructures will prevent the often-fatal effects of minor illnesses; at the same time they will protect against the discriminating onslaught of third-world epidemics. And yes, though the spread of technology includes unrealistic commodities like computers, the internet and MRI machines, effective water treatment and

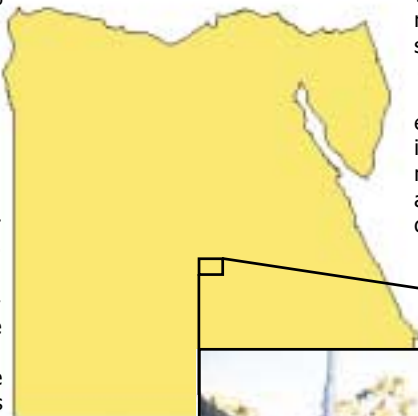
*"The biggest challenge may be to ensure that those like ourselves personally witness the plight of no-name villages that are flush with distress."*

boxes of ballpoint pens can do just as much good in the short term for a village like this one.

The biggest challenge may be to ensure that those like ourselves, who are flush with opportunity, personally witness the plight of no-name villages that are flush with distress. Education is

not only a matter of third-world concern. It also includes those experiences through which *we* become aware of, and motivated by, the world's most important humanitarian struggles. For those of you who are interested, take a look around al-Mansuriyya. The people there will be happy to show you around.

*Hunter Keith (Iowa, USA) is pursuing a Ph.D. in Middle Eastern History.*



Welcoming faces in al-Mansuriyya hint at the first-world's inattention toward third world villages like this one. Some of these children have never met a 'Westerner' in person.

# NASA: The Inner Space of an Investigation

BY: Christopher Kirchhoff, '01

The phone rang around eight in the evening on a Tuesday late in February. Theron Bradley, Chief Engineer at NASA, was on the other end. Hardly 30 seconds into the call, he asked whether I would work as Editor of the Columbia Accident Investigation's public report, a position my former boss, the Presidential Science Advisor, put my name forward for. Six days later I found myself in Houston, Texas, beginning the immense task of writing up results of the largest accident investigation in history. Our audience: the White House, Congress, NASA and members of the public and press.

The first thing I should say about the investigation is that it is enormous: One chairman, thirteen highly distinguished Board Members, an immediate staff of 140 investigators, 400 NASA support personnel, 5,000 debris searchers and some 200 government agencies are all trying to establish why the Space Shuttle Columbia broke apart upon re-entering the earth's atmosphere on February 1<sup>st</sup>. As one board member said, "I've never seen so many rocket scientists running around in my life."

The second thing I should say is that finding the "widget that broke" will not be sufficient to prevent the next disaster. Space Shuttles involve over 6 million working parts. Nearly 20,000 people labour to prepare them for launch. Somewhere in this massive technological chain, something went horribly awry. That something involved the machine, but also the people who repair and maintain it, the people who oversee those who repair and maintain it, and those at the very top in NASA and Congress who make this whole process go. The investigation, then, is trying to solve a technological riddle, the management failures that underpin it, and the policy climate that enabled those management failures to occur.

The third thing I should say is that spaceflight is hard. The public appearance of routine launches



Christopher Kirchhoff kneels by the Shuttle Discovery in the Orbiter Processing Facility, Kennedy Space Center, Florida

conceals what every NASA engineer and astronaut knows all too well: space is an unforgiving place. Human spaceflight is in its infancy. Reusable spacecraft are radical technologies that push the very limits of engineering know-how.

Even given all the risks and the tremendous expense, launching people toward the heavens in rockets delivers certain intangibles that, to my mind, are well worth paying for. I've come to think of the costs of spaceflight in terms of those famous credit-card commercials: Launching a shuttle, \$500 million. Building the International Space Station, \$100 billion. Viewing our blue planet from above, and building our capacity to reach the stars beyond: priceless.

*Christopher Kirchhoff (Ohio, U.S.A.) is on leave from the Social & Political Sciences Faculty, where he is pursuing a Ph.D. Photos and information about the investigation can be found at [www.caib.us](http://www.caib.us)*

## Whither the Cam

From an interview with Dr. Gordon Johnson, by: Napoleon Katsos, '01

"Cambridge was singled out by the Bill and Melinda Gates Foundation for the Gates Cambridge Scholarship because of its high reputation for research, because of the international mix of its students, and because of the opportunities Cambridge affords, through its Colleges and Departments, for making life-long friendships and connections across the world.

"Gates Scholars themselves are responsible for making a success of the programme - first by their

commitment to study in Cambridge and then by their willingness to dedicate their particular skills to the common good in whatever career or profession they choose. The reputation of the programme will grow with the progress of the Scholars.

"It is right that Gates Scholars should get to know each other; but the purpose of being in Cambridge is to become fully integrated into College and Departmental life as well. The Scholars must be outward-looking and seize every opportunity to get to know and work with other equally distinguished and committed graduate students.

"This coming October, the third cohort of Gates Scholars will arrive in Cambridge - about forty from the United States and sixty from other countries. We look forward to welcoming them and helping them to engage actively with Cambridge in all its splendid, if sometimes challenging and baffling, manifestations."