

Issue 8 Summer 2003

FELLOWS FEATURE:

Gemini Project

Astronomy Books

Student Finance Today



PRINCIPAL'S COLUMN



We were very saddened early in the New Year to learn of the death of Lord Jenkins, Chancellor of the University and of course also Visitor of the College. His enormous contributions to the University have rightly been much lauded, but here I wish to pay tribute to his real and personal interest in Hertford College. He readily responded to all our requests to be involved in the College's affairs and most notably made a splendid contribution at the opening of our new Graduate Centre in 2000. As Visitor he appointed the Principal and so my formal notice of appointment was a handwritten and most friendly postcard from Lord Jenkins himself. Many of us attended a memorial service to him at St Mary's on 1st March 2003.

Oxford's tradition, as most of you will know, is to elect its Chancellors, all graduates of the University now being eligible electors. Many old Members of the College took the opportunity to visit us and vote on Friday 14th and Saturday 15th March. After a lively campaign on behalf of each of the candidates, which was widely reported in the national press, Mr Chris Patten was elected Chancellor and so will become the new Visitor to the College. We wish Chris Patten a most successful Chancellorship and look forward to welcoming him soon in person to the College as our Visitor.

The pace of change in higher education does not slow down. The long-awaited government White Paper on Higher Education appeared recently and has been the subject of much debate. It contains many proposals concerning teaching and research, access, review of the management of universities and a long chapter on the vexed question of student fees. These latter, however, will make at most a modest contribution to the financial needs of this and other universities. In my view, the student fees question has seriously unbalanced the discussion of the White Paper. In any case, I believe the issue should be one of much more generous and sensitive loan schemes that take into account the widely varying prospects in employment for graduates, depending on their choice of profession. While we should no doubt welcome a relatively generous settlement of government funds for the University, largely because of its research excellence, there remains a major financial deficit if we are to catch up adequately on the need for decent salaries for University staff.

We are pleased to congratulate Professor Andrew Goudie on his appointment as the next Master of St Cross College from October 2003. Andrew has been a most distinguished Professor of Geography and Head of the Department, this chair being one of the longest-established in its association with Hertford College and reflecting the College's major involvement in the teaching of geography. I shall look forward to my interactions with him in his new capacity as Head of House and will, as is customary, be a member of the Electoral Board which will choose his successor as Professor of Geography and Fellow of Hertford College.

We were pleased to welcome Dr David Greaves as a second Fellow in Pre-Clinical Medicine, in his case attached to the Sir William Dunn School of Pathology. Now, with two Pre-Clinical Fellows, and a Clinician Fellow, the College has considerably strengthened its position in the medical area. The intake of medical students each year has increased by 50% and many of them stay with the College and in Oxford in their clinical years, thus providing a very significant presence both amongst the undergraduates and postgraduates.

In my last column I commented on the fact that my portrait was already being painted. It was finished just at the end of last year and now hangs prominently in the main hall after a remarkably well-attended and most enjoyable Guest Night in March.

On one of my now frequent visits to California I was pleased to host a reception for West Coast Hertfordians, joined by Carol McCall, at the University Club in San Francisco on the 21st February.It was a pleasure to meet so many Members there, old friends and new ones.

We are continually grateful to Members of the College who make financial contributions to support our ever-present need to sustain the quality of our academic activities and the infrastructure that supports them. We are most grateful to Ian Brownlie, an Honorary Fellow of the College and a Fellow of our neighbour, All Souls', for his most generous gift of £50,000 with no strings attached. Terry Hughes has continued his generous support of the College with the promise of a further £40,000 to support a Physics Fellowship in recognition of Professor Neil Tanner's long and distinguished association with the College.Richard Parsons has given £20,000 and many former physicists have also contributed generously in support of the Physics Fellowship. We also received a generous bequest of £30,000 from the estate of the late Raymond Bruce who came up in 1944 to study Modern History.

We have had a good response to the Annual Giving Appeal of 2002, which was included in the last issue of College News, and are most grateful to all of those who have sent donations. Sir Bruce Pattullo responded in a most generous manner with a gift of £10,000, and we have also received many donations, large and small, from other old Members. It is not too late still to respond. Please do so if you have not already contributed and help us increase our participation rate substantially to help provide a secure base for the future activities of the College.

As usual we have a number of forthcoming events.Particularly notable amongst these are those associated with the Rhodes Centenary taking place in Oxford in early July when there will be a dinner in Hertford College on 4th July specifically for our former Rhodes scholars.There will be a Hertford College Garden Party in Wadham Gardens on Sunday 13th July, and the next College Gaudy for matriculation years 1990 and 1991 will be on Friday October 3rd. Please also note that the University's next North American Reunion in New York will be on 16th and 17th April 2004.

As always I look forward to seeing many of you when you come to visit the College – you are always most welcome to do so – and also on various occasions away from Oxford.

Walter Boxlust

A Bequest to Hertford



Legacies have shaped Hertford over many years. You can be part of this tradition by including Hertford in your Will. As a way of thanking those who have decided to support Hertford in this way, the College has a society – known as the Geoffrey Warnock Society – to honour those who have included a bequest to Hertford in their Wills. Members of the Society meet once a year at College with the Principal and Fellows.

If you wish to discuss making a bequest to the College, or if you have already included Hertford in your Will, please let the Head of Development know. She will be delighted to hear from you.

Carol McCall Head of Development Hertford College Oxford OX1 3BW England

Telephone: + 44 (0)1865 279440 Fax: + 44 (0)1865 289142 Email: carol.mccall@hertford.ox.ac.uk

There may be tax advantages to your Estate to include a bequest to Hertford in your Will, notably if you live in the UK, USA or Canada. Please contact your financial advisor or accountant for further information about this point. You may find it helpful to know that Hertford College is an Exempt Charity in the UK.

Apology Hertford News - Issue 7

We inadvertently omitted to credit the illustrations which accompanied Dr Stephanie West's article on Robert Plot's "Natural History of Oxfordshire" in Issue 7 of Hertford College News.

Many thanks to Nancy O'Brien Stuart for taking the splendid photographs.

Cover: The Gemini Telescope at Sunset by Patrick Roche



Hertford College News is published by the Members and Development Office for Members and friends of the College. The opinions expressed are those of the writers and not necessarily the official views of Hertford College.

• Editor: Carol McCall • Assistant: Yvonne Rainey Printed by Alden Press, Oxford • Layout by Cox Design, Witney

Members and Development Office, Hertford College, Oxford OX1 3BW Tel: + 44 (0)1865 279428 • Fax: + 44 (0)1865 289142

E-mail: development.office@hertford.ox.ac.uk

Hertford College is an exempt charity. Inland Revenue Number XN4052

Annual Giving Appeal 2003–2003

Where have been delighted by the warm response to our Annual Appeal and are pleased to report that we are already putting the gifts donated and pledged to good use. In the current financial climate, in which our resources continue to be stretched, we must turn to our old Members to help us make provision for the future of Hertford. We would be very grateful if you would consider supporting the College with a gift of £25 per month, for four years. With a regular gift, we can plan ahead, knowing that we will have the funds we need to undertake our projects.

It is also worth bearing in mind that when you donate, as long as you pay at least basic rate tax in the UK, we can reclaim the tax from the Inland Revenue under the Gift Aid scheme at no extra cost to you, making a donation of $\pounds 100$ worth $\pounds 128$. In case you would like to support the College in this way, we have enclosed a donation form.

We want to do more to help with student hardship, the tutorial system, the endowment of fellowships, IT provision, and refurbishment. We must put in place the means to sustain the heritage which you enjoyed, and for Hertford to meet the demands of the future. It is also very important in other major fundraising activities to be able to demonstrate a high level of participation from our old Members and friends in the Annual Appeal.

Thank you to all who have contributed so generously.

Carol McCall Head of Development



Tanner Fellowship in Physics Endowment Fund

To encourage support for the future of Physics at Hertford, a dinner party hosted by Professor Neil Tanner, Honorary Fellow and former Tutor in Physics, was held in College on 22 November 2002 for a number of his former students.

We are delighted to report that, as a result, gifts and pledges of $\pounds 65,000$ have been made towards the endowment of a Professorship in Physics at Hertford. Many students have benefited from Neil Tanner's enthusiasm for the subject, and he is keen to involve them in this initiative.

If you were a Physics student at Hertford and would like to see the subject continue to thrive, please consider making a gift to the Tanner Physics Fellowship fund. You may use the enclosed donation form – please write "Physics" in the top right hand corner. All contributions, whether large or small, are vitally important to the College.

COLLEGE NEWS

New Alumni Website at www.hertford.ox.ac.uk

Tf you have visited the Hertford website recently you will have Inoticed our new and improved alumni pages. We now have redesigned alumni pages to provide what we hope is an informative, enjoyable and user-friendly site.

By logging on to www.hertford.ox.ac.uk and going to the Alumni section, old Members now have the opportunity to keep up to date with news from the College; to find out about forthcoming events; to up-date their contact details; and to read about our fundraising programme.

We endeavour to keep our old Member database as accurate and up to date as possible which, in turn, helps us to improve and refine our communications with you. In due course, we will be creating a page listing old Members with whom we have lost contact. If you can help us trace lost Members we would be very grateful.

By visiting the Events page you can make sure that you do not miss any of the activities organised by the College, the Hertford Society, or other College associations. We plan to have a facility for booking on-line for events.

We hope that you will be interested in keeping up to date with our fundraising plans. Our Giving page outlines the ways in which you can help and provides information on how to make a donation. Eventually, we will be providing the facility to make donations on-line.

The new Alumni pages will be kept under review and we will be looking at ways of making improvements on a continuing basis. Please let us know if you experience any difficulties in gaining access to the Alumni pages so that we can see what is needed to resolve any problems. If you have comments or suggestions, please let us know - you will find our details on the website on the new Contacts page!

Portrait of the Principal

The College recently commissioned a portrait of the Principal by the artist Juliet Wood. This was unveiled on the occasion of the final Tuesday Guest Night of Hilary Term, 11 March, at which nearly 80 members of the Senior Common Room, as well as Honorary and Emeritus Fellows, College Lecturers, and their guests were present.

A champagne reception was held in the Principal's Lodgings, where the unveiling took place, prior to dinner in Hall. This important College event proved to be an interesting, enjoyable and memorable occasion.



Juliet Wood, artist, and the Principal



Rosemary Sloper and Judy Judge Retire

familiar face to many people in the Bursary, Rosemary ASloper has retired after 25 years at the College. A farewell party was held for her on [?] March

Judy Judge also retired at the end of March after 5 years at the College.

Long Service Award for **College Staff**

Three members of the college staff have been honoured for L their long service to Hertford. Judy Mullee, Head Porter is the longest serving member of staff having been at Hertford for 21 years. Pam Horwood who also works in the Lodge and Bob Hart, the Catering Manager have both been here for 20 years.

Caption here



Career Talk -**Patent Agents**

fulian Asquith (1985, Physics) who is a partner with the Patent Attorneys Marks & Clerk, gave a talk at the end of Michaelmas Term 2002 for current Science students at Hertford.

Julian is keen to encourage more recruits to this employment area, which has become particularly important in universities with many flourishing start-up enterprises and spin-out companies. Oxford University has been at the forefront of such activities, and its own technology transfer company, Isis Innovation, has overseen some exciting initiatives. During his talk, attended by nearly 30 undergraduates and graduates, Julian explained the nature of Patent Law, and the many opportunities open to students, particularly those studying science subjects.

Members who would like to give careers presentations are encouraged to contact Carol McCall, Head of Development, who would be pleased to make the necessary arrangements.

Hertford has Welcomed Five New Fellows



DR ANNE HAOUR

A nne Haour is a British Academy Postdoctoral Fellow in archaeology. Her research focus is the complex societies in the West African Republic of Niger (first millennium AD). These are archaeologically unrecorded but are thought to relate to the Hausa cultural sphere which gained widespread fame in trade and architecture in the past few centuries (Kano, together with Fez and Cairo, was one of the three African towns where one could buy anything one wanted, wrote a sixteenth century Italian).

Her undergraduate degree at Hertford College Oxford (1992-1995), Masters at University College London (1996-1997), and DPhil at St Cross College Oxford (1998-2002) have taken Anne to Belize, Switzerland, Mali and five times to Niger to participate in archaeological field seasons, working gradually from pot-washer and bucket-shifter to, last winter, fully-fledged project leader with a team of eight.

Anne will be at Hertford until September 2005, dividing her time between research and publication (forthcoming contributions in The Journal of World Prehistory, Afrique Arts Archéologie, Antiquity, and co-edited volume of British Africanists Conference Proceedings; next field season in Niger planned for early 2005) and serving as tutor for the Hertford undergraduates in Archaeology & Anthropology. Mental balance is retrieved through rock climbing, yoga, and planting tomatoes in Coventry.

KAY DAVIES Election to the Royal Society

Professor Kay Davies was one of 42 new Fellows of the Royal Society from the fields of science, engineering and technology, announced on 19 May. Nine women were elected to the Fellowship this year. Female scientists now make up 21 per cent of the new intake compared to three per cent seven years ago.

Professor Kay Davies (Somerville 1969) is Dr Lee's Professor of Anatomy and Head of the Department of Human Anatomy and Genetics at Oxford. She became a Fellow of the College in 1998 on her election to the Chair, which is connected historically to Hertford.

Professor Davies is a pioneer in the study and prevention of genetic diseases, such as fragile X syndrome and Duchenne muscular dystrophy, and is internationally recognised for her work in the application of molecular biology in human genetic diseases.





DR STEFFI FRIEDRICHS

Dr Steffi Friedrichs did her Diploma in Chemistry at the Technical University of Braunschweig, Germany, from 1994 to 1999, holding a scholarship of the 'Stiftung der Deutschen Wirtschaft' (Trust of the German Industry).

In April 1999, she came to Oxford to carry out a D.Phil. research project on carbon nanotubes in the Inorganic Chemistry Laboratory. During this time, she first held a 'Kekulé-Scholarschip' from the 'Stiftung Stipendien-Fond des Verbandes der Chemischen Industrie' (Trust Fund of the Chemical Industry Federation, Germany) and was later awarded a 'Light Senior Scholarship' at St. Catherine's College, Oxford. After successfully completing her doctorate in April 2002, she became a research assistant at the Interdisciplinary Research Collaboration (IRC) in Nanotechnology, Cambridge.

In October 2002, she joined Hertford College as one of the first 12 Career Development Fellows at Oxford University, to teach Inorganic Chemistry to College undergraduates, whilst continuing her research project on carbon nanotubes.

In collaboration with the Department of Materials in Oxford and the IRC in Nanotechnology in Cambridge, Dr Friedrichs investigates the structure and physical properties of inclusion composites of carbon nanotubes with view to the development of novel nanoscale devices, using High-Resolution Electron Microscopy and Scanning Probe Microscopy techniques. Steffi enjoys painting, hiking, sports and literature.

Continued from page 5

DR CLAIRE VALLANCE

After completing her Ph.D. at the University of Canterbury in Christchurch, New Zealand, Claire came to Oxford in 1999 to take up a Glasstone Postdoctoral Fellowship in the Physical and Theoretical Chemistry Laboratory. From 1999–2002 she held a Junior Research Fellowship at St. Catherine's College, teaching physical chemistry for St. Catherine's and St. Hugh's colleges, with the odd stint at Jesus and Hertford to cover for fellows on sabbatical leave. Last year she was awarded a Royal Society University Research Fellowship to continue her research in Oxford, and made the move from St. Catherine's to Hertford in October to take over the physical chemistry teaching from Keith McLauchlan on his retirement.

Claire's research is in the area of chemical reaction dynamics, essentially the study of the fundamental physics governing chemical reactivity. In her research group they use imaging techniques to reveal the details of reactive collisions through investigation of the product scattering distribution. Outside of science, Claire plays piano and (occasionally!) violin, and does the odd bit of musical directing for an amateur theatre company in Oxford.





DR TOMO SUZUKI

Tomo Suzuki is our new Official Fellow and Tutor in Management Studies. He is also University Lecturer at the Said Business School, where he researches in Philosophy of Economics, Accounting and Corporate Governance.

While reading a BSc in Management in Tokyo, Dr. Suzuki became qualified as a Certified Public Accountant (CPA). He worked at Arthur Andersen as an auditor and consultant for multinational corporations. After four years in the industry, Dr. Suzuki came to England to study for an MSc in the Philosophy of the Social Sciences at the London School of Economics (LSE). He then went on to do his DPhil in the Philosophy of Economics and Accounting, at the School of Management and Balliol College, Oxford. From 2000 to 2002, he was a Lecturer in Accounting and Financial Management at Royal Holloway, University of London.

Dr. Suzuki's main interests are in the rhetorical, social and constitutive aspects of economic and financial data. He addresses questions such as "Why has Accounting been neglected in the Philosophy of Economics?", "How do the globally standardised financial data shape the styles of corporate governance?", "What might be an appropriate means of accounting and accountability for arts organizations?", etc... He is also interested in Japanese corporate and economics issues and their impacts upon society.

PROFESSOR PAUL MULDOON Pulitzer Prize Winner

Paul Muldoon, Professor of Poetry at Oxford University and Fellow of Hertford College, has been awarded the 2003 Pulitzer Prize for Poetry. The award, announced by the Pulitzer Prize Board on 7 April, is for Moy Sand and Gravel, published by Farrar, Straus & Giroux, his 25th volume of poetry and the ninth collection of his poems. The prize, worth \$7,500, is "for a distinguished volume of original verse by an American author."

As reported in The Times Higher Education Supplement of 11 April 2003, Paul Muldoon was shovelling snow when his publisher called. Winning the 2003 Pulitzer prize for poetry came "as a complete shock and surprise and is a terrific honour".

Moy Sand and Gravel traces a journey from Paul Muldoon's native Ireland in the 1950s to present-day New Jersey, where he is Professor of Humanities at Princeton University.

The volume was the Poetry Book Society's recent choice for best book of poems, and has also been shortlisted for the Griffin Prize for excellence in Poetry.

Born in County Armagh, Paul Muldoon read English at Queen's University Belfast, before moving to the USA in 1987. He has published numerous volumes of poetry, drama, criticism, children's literature, and anthology.

In 2000 he was elected unopposed to Oxford's prestigious Chair of Poetry, and is required to give a series of lectures each year during his five year tenure of the post.



PROFESSOR ANDREW GOUDIE New Master of St Cross College

Professor Andrew Goudie, Fellow of the College and Head of the School of Geography, has been elected Master of St Cross College. He will take up his appointment in October 2003 following the retirement of Dr Richard Repp, who has been Master of St Cross since October 1987.

Andrew Goudie came to Oxford in 1970 as Departmental Demonstrator in the School of Geography, after gaining a PhD at Trinity Hall, Cambridge. In 1976 he became University Lecturer in Geography, and in 1984 Head of the School of Geography. He was a Pro-Vice-Chancellor of the University from 1995 to 1997, and was also President of the University's Development Programme.

A distinguished physical geographer, he was awarded a DSc by the University in 2002. In addition he received a Royal Medal from the Royal Geographical Society in 1991 and the prize of the Royal Academy of Belgium for 1992, which he received at a ceremony in Brussels on 14 December. Earlier last year, Professor Goudie was elected President designate of the International Association of Geomorphologists (IAG) for 2005-9.

We wish Andrew every success for his new appointment as Master of St Cross, one of the graduate-only colleges at Oxford. As he said: "These are exciting times for the development of graduate studies in the University".



DR DAVID R. GREAVES Tutorial Fellow in Pathology

David Greaves read Microbiology at Bristol University and then studied for a PhD in Molecular Biology and Biophysics at King's College London. In 1985 he was awarded a Royal Society Fellowship to work at the Netherlands Cancer Institute in Amsterdam. He returned to London to work at the National Institute for Medical Research on the regulation of globin gene expression and sickle cell anaemia. His work in the laboratory of Dr Frank Grosveld led to the description of a new class of genetic regulatory elements called Locus Control Regions (LCRs).

Dr Greaves moved to the Sir William Dunn School of Pathology in Oxford in 1993 and started studying macrophage biology in the laboratory of Professor Siamon Gordon. Macrophages are specialised white blood cells that play an important role in the immune response. In 1999 he was awarded a British Heart Foundation Basic Science Lectureship to investigate the role of macrophages in atherosclerosis, the major cause of heart attacks and strokes. His current research focuses on trying to understand why macrophages are being recruited into arteries and how they cause heart disease.

He teaches Pathology to undergraduate students, but he also visits schools to talk about DNA, cells and disease. Children are fascinated by the idea that they are made up of millions of cells and infected by viruses that you can only see with really powerful electron microscopes. He enjoys listening to music (jazz/trance/rap), reading novels (Saul Bellow/Martin Ford/Douglas Coupland) and drinking coffee (Starbucks/Brothers/Hertford SCR).

Greaves Lab Homepage http://dunn2.path.ox.ac.uk/~greaves/

Professorship of Chemical Biology PROFESSOR HAGAN BAYLEY

Hertford College has been successful in bidding for association with a newly created University Professorship of Chemical Biology within the Department of Chemistry. The College looks forward to welcoming Professor Hagan Bayley, currently Professor and Head of the Department of Medical Biochemistry and Genetics, Texas A&M University System Health Science Center, and Professor of Chemistry, Texas A&M University. He will join the University in October 2003 and will become a Fellow of Hertford.



Gemini Project

Hertford's Fellow in Physics, Dr Patrick Roche, on the latest advances in astronomy

A real sense of excitement permeates astronomical research. Over the last decade, astronomers using telescopes in space and on the Earth have measured some of the fundamental properties governing the age and structure of the Universe. We have gone from being unsure that any stars beside our own sun are circled by planetary systems to now knowing orbital parameters for more than 100 extrasolar planets around nearby stars. Some of this work has relied on measurements made from space, for example the COBE and WMAP satellites that have surveyed the relic microwave background radiation from the Big Bang, but many programmes use data from a number of different telescopes to get as complete a picture as possible of the objects under study. Astronomers continue to rely on Earth-based Paranal and appear to float like an installation from a sci-fi movie over the surrounding dusty and rocky peaks. Near Cerro Pachon, the landscape is less harsh with scrub and an occasional Condor floating above the telescope. Mauna Kea is a 4200m high volcanic summit that rises dramatiaclly out of the Pacific ocean culminating in the peak which houses the greatest collection of telecopes in the world. The altitude combined with the stable, cool and clear atmosphere makes it the best site in the northern hemisphere.

The 8-m telescopes have been designed to take full advantage of the superb conditions available at the sites. Their mirrors, which were meticulously polished at the REOSC factory south of

telescopes operating in the optical and infrared wavebands as core facilities, either supporting observations with satellites or in conducting research for their own programmes.

Telescopes on the Earth's surface are at a disadvantage compared to those on space because the sharpness of the images they deliver suffers from the blurring effects of the Earth's atmosphere and furthermore the atmosphere is opaque at some wavebands. From the best high mountain-top sites, the Earth's atmosphere has good transmission over most of the visible and near-infrared spectrum, and the advantages of telescopes on the Earth's surface come to the fore. Firstly the cost of construction are much lower and the telescope apertures



Exquisite spiral structures in a spiral galaxy (messier 74)

can be made much larger than on a satellite that has to be launched in space. Ground-based telescope are also much more accessible so that new instruments and techniques can be applied much more quickly, and instruments can be upgraded to fix problems or to take advantage of new developments.

Astronomers in the UK have access to the best telescopes in the world. The 8-m diameter telescopes built by the European Southern Observatory and the Gemini Observatory in Chile and Hawaii set new standards for performance. They are located at the best devloped sites in the world on the summits of Cerro Paranal and Cerro Pachon in Chile and Mauna Kea in Hawaii. Cerro Paranal is located in the Atacama desert in northern Chile and is an astonishing sight after travelling for more than 100 miles of completely arid terrain from Antofagusta on the coast. The Very Large Telescope and Interferometer cover the summit of

Paris to ensure that they deliver the sharpest possible images, collect the maximum light (10 times as much as the Hubble Space telescope) from faint stars and galaxies and concentrate it into very sharp images for analysis by the instruments. The telescopes are so finely balanced, that they can be moved by a gentle push, although the moving structure weighs almost 300 tonnes. And they have to continue to deliver this performance, night after night under the hostile with conditions low temperatures and strong winds on their exposed mountain summits.

I have been involved with the Gemini telescopes since the project's inception in 1990 and with ESO since UK negotiations to join the organisation were concluded

in 2001. It has been a real experience to see the projects come to fruition, initially as triumphs of engineering design but now as hugely productive scientific instruments. My own research programmes are using data from the Gemini telescopes to search for the lowest mass objects forming in nearby stellar nurseries, and have already identified objects that are only a few times as massive as Jupiter, the most massive planet in our own solar system.

At Oxford, and many other UK Universities, many of my colleagues also rely on observations with the new 8m telescopes for their research. We are also engaged in design studies for the next generation of instruments for the ESO and Gemini telescopes, and hope to contribute to enhanced capabilities needed to maintain the observatories at the cutting edge of astrophysics beyond the end of this decade.

Profile of Dr Patrick Roche

I am an astronomer with particular interests in astronomical instrument-ation, telescopes and new observational techniques, and with research programmes studying the nature and composition of cosmic dust, the interstellar medium and star formation processes.

At Hertford College, I am one of two physics fellows and tutor undergraduates in the Oxford physics course. I am also the Tutor for Graduates.

I have been involved with the Gemini 8-m telescopes from the inception of the project in 1990 and was the UK Gemini Project scientist from 1996–2002. During that period, the UK Gemini support group was established at Oxford. The Gemini Observatory operates twin 8-m telescopes in Hawaii and Chile.

I am currently a member of the Anglo-Australian Telescope Board and the Science and Technology Committee of the European Southern Observatory.

At Oxford, I have led the development of two infrared cameras: WHIRCAM which was delivered to the William Herschel Telescope in La Palma in 1995 and UFTI, the fast-track imager that was delivered to the UK Infrared Telescope in Hawaii in 1998. An article describing UFTI was published in the PPARC Frontiers magazine, while some of the images obtained can be found in the UKIRT image gallery. One of the programmes conducted with UFTI is a census of low mass objects in the Orion nebula, which revealed a number of objects in the planetary mass regime, and which was selected as astronomy picture of the day in March 2000.



Patrick Roche, Tutor in Physics, Hertford College; Reader In Physics, Oxford University

Astronomy Books in the College Library

Dr Stephanie West, Fellow Librarian, writes that the College Library has a substantial holding of astronomy books published before 1800.

Here is a selection of Material which Dr Patrick Roche has prepared for a recent book display focussed on physics and astronomy.

Galileo Galilei: Sidereus Nuncius

London 1653

rhis book appears to be a London reprint of Galileo's original work from 1610. It is bound with a copy of a work by Kepler (Dioptics). Galileo's work - The Starry Messenger - reports some of the first astronomical observations made with a telescope. The impact of these observations was far-reaching and rocked the prevailing view of the Universe as an Earth-centred system. Galileo announced the results of monitoring of the positions of what are now known as the Galilean moons of Jupiter (and were named the Medician stars by Galileo in Sidereus Nuncius after his patron Duke Cosimo de Medici) through his telescope. He interpreted their motions as orbits around the planet Jupiter rather than around the Earth. He also included sketches of the moon as viewed through the telescope, clearly showing craters and shadows, indicating that the moon is not a perfect smooth body. This was followed later by observations of the phases of Venus, which also providing clear evidence of a heliocentric solar system. Eventually this vindication of the Copernican view of the motions of heavenly bodies was accepted, but not before many heated arguments and trials. Many prominent opponents of Galileo refused to look through the telescope.

All 550 copies of the first edition of Nuncius Sidereus sold out within a week, though it is likely that many were destroyed in the furore that erupted following the claims of heresy that resulted from the exposition of the Copernican view. A modern account of this period written from an unusual viewpoint, can be found in Galileo's Daughter, a novel by Dava Sobel.

The publication of Nuncius Sidereus led to Galileo being appointed Chief Mathematician of the University of Pisa and Philosopher and Mathematician to the Grand Duke Cosimo II de Medici (with no teaching responsibilities!). Getting the politics right was as important then as it is now.

Christianus Hugenius: Systema Saturnium Hagae-Comitis 1659

Early telescopes suffered from aberrations that limited the detail that could be seen in astronomical objects. Galileo had found that the planet Saturn appeared to be a triple system, but also noted that its appearance changed. As telescopes developed, they became extremely long so that they provided high magnification, but also so that the lenses had rather shallow curved surfaces. Christian Huygens was a skilled instrument maker from the Hague in Holland, who developed new ways of grinding and polishing lenses. He built a telescope 123 feet long, but instead of using a long wooden tube, which would mean a very massive instrument, Huygens mounted the objective lens in a short metal tube. A thread was then pulled taut to align the eyepiece to the objective, allowing a much lighter structure to be employed.

Using this telescope in 1656–1659, he was finally able to discern the true nature of Saturn, which he described as being accompanied by a 'ring, thin, plane, nowhere attached, and inclined to the ecliptic'. To facilitate astronomical observations, a method of timekeeping was required, and this led Huygens to invent the pendulum clock in 1656. Huygens was the first astronomer to report the influence of atmospheric conditions on 'seeing' which describes the image quality delivered by the atmosphere and the twinkling of stars.



Student Finance Today

Those of us who went to university before the mid 1990s will remember their time as one of facing some problems, mainly academic, social or perhaps even sporting. However student debt was not large on the horizon. We remember nostalgically when our fees – if we were a UK student – were paid for us by local education authorities and support for battels and living expenses came in the form of a means tested grant and support from parents. Some students graduated with debts but these are as nothing compared with the current generation of students.

The scene has now changed dramatically. All UK and EU students have to pay up to £1,125 each year towards their university fees with some remission for those coming from families with very low family incomes (below $\pounds 20,000$ per annum). Student grants are a thing of the past; they have been replaced by a system of student loans repayable after graduation when the former student's income rises above $f_{10,000}$ per annum at the rate of 9% of income above that figure. They may borrow up to f_{4} ,000 each year of their course. As a consequence of this, a student following a three year degree course starting in October 2003 (many courses are now four years) will expect to graduate with Student Loan Company debts of about £12,000 as well as having paid fees of $f_{3,375}$. This of course excludes any other debts that they may have run up while they were a student. The situation is of course far worse for scientists, medics and overseas students.

The College treats student hardship very seriously. The single most important thing that we can do is to provide college

accommodation throughout a student's career at Oxford, and Hertford is exceptional in being able to do this for all undergraduates and graduate students. This accommodation is subsidised and costs the student £73 per week. Unlike students living privately, this only has to be paid during the weeks of term. The second way in which we can help, is via our hardship funds awarded through our Student Support Committee. This takes the form of either grants or very occasionally loans made on the basis of a means tested application. The Committee is made up of both junior and senior members and disperses nearly £18,000 each year in grants. The money is provided through the benevolence of old Members and from charitable organisations such as The Drapers' Company, The Cutlers' Company and The Keasbey Foundation. The group of students that we are least able to help are our overseas students for whom we have very limited funds.

We recently received a very specific donation from an American resident old member and his wife matching the sums given under the University scheme for those in greatest financial need. This gift was very carefully targeted at those students that Hertford with its adventurous admissions policy has most tried to help. The need for such donations is never greater than now!

The College is always very grateful for any additions that old Members can make to these funds as it has a very real impact on the lives of today's students and avoids adding to their already considerable burden of debt.

Peter Baker Bursar



LORD JENKINS OF HILLHEAD, OM

It was with profound sadness that members of the University of Oxford learned of the death of Lord Jenkins of Hillhead, OM, at his home in Oxfordshire on Sunday 5 January. Lord Jenkins had been Chancellor of the University and Visitor of the College since 1987. We were delighted that he took such an active interest in the College, and it was a particular pleasure that he presided over the opening of the new Graduate Centre in September 2000. (Photo Grad Centre opening).

Lord Jenkins was a great supporter of Oxford, and his time as Chancellor will be remembered as one of the great periods in the life of the University.

NEXT CHANCELLOR – CHRIS PATTEN ELECTED

 $\label{eq:result} For the first time in an election to the Chancellorship of the University, the system of Single Transferable Vote was used. More than 8,000 members of the University cast their votes in Oxford over the two-day election period on Friday 14 and Saturday 15 March. Many Hertford old Members came back to$

Oxford to register their votes, and the College welcomed them with a buffet lunch provided in the Old Hall. At a formal meeting of Convocation on Monday 17 March, it was announced that the Rt. Hon Chris Patten CH, PC, MA, European Union Commissioner for External Relations, had been named as Chancellor-elect of the University.

In his capacity as Chancellor, ha also becomes Visitor of five Oxford Colleges, including Hertford, and we look forward to welcoming him to the College in due course.



DEATH OF HONORARY FELLOW – MAX NICHOLSON

Born in Ireland in 1904, (Edward) Max Nicholson, CB, CVO, came to Hertford as a scholar Din 1926 to read History. He died in London on 26 April 2003, aged 98, after a long and distinguished career as an environmentalist, author and ornithologist, and was a key figure in the founding of the World Wildlife Fund in 1961. He was President of the Royal Society for the Protection of Birds from 1980 to 1985. Max Nicholson became an Honorary Fellow of Hertford in 1993.

.....

EVENTS

Hertford College Lawyers' Association Dinner

The Annual Dinner of the Hertford College Lawyers' Association on 21 March proved to be a sell-out occasion, prompted largely by the fact that Mr Roy Stuart, senior Fellow in Law and Dean, is due to retire at the end of this academic year. Many of his former students returned to the College for this event as well as Emeritus Fellow Professor Stuart Anderson, who came from New Zealand for the occasion. At the dinner representatives of each of the decades since 1969, when Roy first joined Hertford, recalled their experiences of being taught Law at the College.

Roy replied in equally elegant fashion:

"To the ten biblical commandments, I have always wanted to add the sin of sentimentality. But maybe we can suspend this for once if I promise not to covet my neighbour's ox, or even ass. I am very moved by what has been said. To make the best of a worthless case is what all lawyers learn. And it was a hard task tonight. I can truthfully say that I have liked all of the law students since I came here in 1969 and am proud of you although not of myself.

I quote the poet Yeats: "A loving man is blind and drinks his drop What matter if the ditches are impure? What matter if I live it all once more? Endure that toil of growing up. The ignominy of boyhood, The distress of boyhood changing into man; The *unfinished* man and his pain Brought face to face with his own *clumsiness* I am content to live it all again."





San Francisco Reunion

Hertford graduates met together for a reception at the University Club in San Francisco on 21 February 2003. The event, hosted by the Principal, Sir Walter Bodmer, was attended by a number of Members who live or work in the San Francisco area.

In the elegant ambience of the University Club, founded in 1890, Members were able to enjoy drinks and canapés, and conversation. The Principal conveyed greetings and news from the College.

It is hoped to hold North American gatherings in other cities to bring together Members in those areas.

Hertford in London

An informal gathering for Hertford Members who live or work in London took place on 3 April 2003. It was held at the City Pipe wine bar, on Foster Lane, close to St Paul's Cathedral and brought together Hertford graduates who enjoyed exchanging news and views in a convivial setting.

There was a business card raffle, won by John Thorogood, to whom the Principal presented a bottle of champagne.

It is hoped to arrange such events in London on a regular basis.

EVENTS







Caption here

celebrants were Canon Stephen Oliver, soon to be the new Bishop of Stepney, and his son The Revd Dr Simon Oliver, Hertford College Chaplain.

.....

College Choir at St Paul's Cathedral

Hertford College Choir sang at Choral Evensong in St Paul's Cathedral on Monday 7 April. A coach transported choir members, together with supporters, including Members of the College staff, from Oxford to London on a glorious spring afternoon.

In the splendid surroundings of St Paul's, the choir made a wonderful contribution to the traditional Evensong Service. The

April Gaudy

MATRICULATION YEARS PRIOR TO 1946

The College was delighted to host a Gaudy on Friday 4 April for all those old Members who matriculated prior to and including 1946. Over 50 Members from 1931 through to 1946 attended. Dr Robin Mowat (1931) had the distinction of being our most senior Member at 90 and Mr Miles Malleson (1946) at a mere 75 years of age was the youngest! Even disability did not prevent Ronnie Ellen (1939) from attending in his "chariot".

The guests were joined by several Fellows: the Bursar, Peter Baker, Mr Roger Van Noorden, Dr Paul Coones and Dr Emma Smith; Emeritus Fellows: Professor Martin Biddle, Professor Keith McLauchlan, Professor Sir Philip Randle, and Honorary Fellow Professor Neil Tanner.

 behalf of everyone there we thank Matt O'Malley, our Senior Organ Scholar for organising that and all the members of the choir. In gratitude for their wonderful performance, they were invited to dine with old Members in Hall. The undergraduates really enjoyed the opportunity to find out what College life was like up to and during the Second World War.

John Harrison (1938), who came from New York to attend the event, replied to the Principal's speech, and Joseph Butler-Sloss (1944) proposed the toast to the College.

After dinner, those who still had the energy, retired to the Old Library for coffee and drinks.

Naturally, the College has changed tremendously over the last 50 years, the introduction of women being the most notable. One old Member recalls missing curfew at 10 pm and having to climb over a wall, only to find the Dean pacing the Quad looking to catch any latecomers. He had to stay on top of the wall for 45 minutes in the snow until the Dean went in.

There was only one toilet which was located in the Cottage next to the Chapel, scouts lit fires and brought hot water to rooms which had no central heating.



Caption here



Caption here



Ted Perkins, Laurence Halcrow and Brian Sayers

EVENTS



The Geoffrey Warnock Society Lunch

The College was delighted to welcome members of the Geoffrey Warnock Society to lunch on Saturday 24 May. The Society was founded three years ago to honour those who have generously made provision in their wills for a gift to the College. Such gifts, whether large or small, are greatly appreciated and help to preserve Hertford's unique contribution to academic excellence.

The Principal hosted drinks in the Lodgings, which was followed by a buffet lunch also in the Lodgings. This more informal set up ensured that everyone had the chance to speak to each other at some point. Among those present were Baroness Warnock, whose recently published book Nature & Mortality: recollections of a philosopher in public life, received a mention in the Principal's speech, Mr Anthony Garner (1943) and his wife Catherine, Dr Jaqueline Glomski (1982) and her husband Dr Lorne Whiteway (1981), Reverend Trevor MacDonald (1952), Mr John Salmon (1970), Mr Duncan Stone (1980) with his daughter Lisa and Dr John Wells (1970). They were joined by four of the College's Emeritus Fellows - Anthony Cockshut with Mrs Cockshut, Dr Ann Holmes, Mr Richard Malpas and Dr Miles Vaughan Williams with his wife Marie, and three current Fellows - Roger Van Noorden, Tutor in Economics, Mr Roy Stuart, Dean and Dr Charlotte Brewer, Tutor in English together with the Chaplain, Reverend Dr Simon Oliver. At the end of lunch, the Principal proposed a toast to Sir Geoffrey Warnock, in whose memory the Society was formed.

For further information about making a bequest through the Geoffrey Warnock Society or to request a copy of the Society's brochure, please contact Carol McCall, Head of Development (tel: 01865 279440, fax: 01865 289142, e-mail: carol.mccall@hertford.ox.ac.uk).



Summer Reunion

The Summer Reunion on Sunday 25 May was an enjoyable occasion. Members from 1991 to 1994 joined the Principal and some Fellows for a buffet lunch in the Old Hall. Unfortunately, the weather disappointed and the impromptu croquet match on the lawn had to be postponed. A smaller gathering than last year, the group were nevertheless delighted to be back at Hertford and many brought guests. Guests included Dirk Elend (1994) and Felix Küllchen (1994) who have both recently completed D.Phils in Chemistry; Isabelle Mast (1993), her husband Noor UI Islam (1993) and her sister Mariele; Dr John Crook (1991); Katherine Lucarotti (1994); one of our Law Fellows, Dr Alison Young, also a former Member of the College from 1993, came with her new baby; Warren Swain (1992) currently Lecturer in Law, who will be



leaving us for B i r m i n g h a m University in October. Also from the College Dr Paul Coones, Dr Tom Cunnane and Mr Clive Hambler.

Caption here

Eights Week Lunch

On 31 May 2003, twenty-five Members of the Hertford College Boat Club Society gathered at Warnock House for lunch by the river. The AGM which followed was a swift one, as Members were eager to get down to Long Bridges Boathouse to see the races. The women's first VIII were particularly successful, bumping Brasenose to reach the top of the second division.

The Hertford College Boat Club Society exists to raise money for the Boat Club and keep old Members up-to-date with rowing at Hertford. Membership is open to anyone with an interest in rowing. HCBC and 1st VIII silk ties are available to all members for \pounds 15. For further information, please contact the Members and Development Office.



Above: Long Bridges Boat House on 31 May; Below: The Hertford Women's 1st VII set off from the Boat House



STUDENTS

JCR News

By the time you are reading this, most of the JCR will be recovering from Hertford's second annual May Ball. After the memorable success of last years event we have decided to return to the converted barn just outside of Oxford only this time, bigger and grander than before, as this years Hart Ball sees that addition of an A cappella group, a caricaturist, magician and mock casino tables. It



Caption here

promises to be an evening to remember and is swiftly becoming the highlight of the JCR's social calendar – a tradition which seems set to long continue.

The last couple of terms have also seen some significant improvements to college facilities. Most recently, and perhaps most noticeably the college bar has been completely repainted and a gradual process of refurbishment is slowly taking place. We have also continued to invest in our IT provisions with the recent purchase of a high quality colour printer and scanner and the installation of flat screen monitors for all JCR computers. Our IT Facilities are now among the best in the university and they continue to grow.

To the delight of many in the JCR, a decision was taken before Christmas to purchase a DVD player and projector screen television for the common room. This equipment is in the process of being installed and is a superb addition to the JCR.

Last term also saw the completion of the first stage of the new Gym which now boasts a cross trainer and running machine in addition to the equipment which was already there. We are now one of the very few colleges to have a fully functioning Gym within college provided free of charge to JCR members.

A further change in the last couple of terms has been the establishing of an office for the JCR committee, a small room has been converted into a base for operations with our own PC and internet access it is proving to be invaluable. We are also using the newly established JCR Office as a base from which to launch the College Shop which should become operational later this term, with cut price stationary, printer cartridges and other basic supplies we hope it will flourish and provide an invaluable service to the wider JCR.

The biggest event outside of College for the JCR, and indeed for all students, was the Governments White Paper on Tuition Fee's released earlier this year. Hertford JCR came out in strong opposition to the proposal and a motion was passed last term to this end, expressing our concerns of the effect of this proposal on access and mounting student debt. The University Congregation passed a motion over the Easter holiday to become on of the only universities in the country to support the White Paper. This stance has been adopted in the face of strong student opposition and with only 3% of the Congregation electorate turning out to vote, this term also looks set to the be the arena for some fiercely fought disagreements.

Fiona Coady JCR President 2002–2003

MCR News

The first third of 2003 has seen a continuation of the successes reached in 2002, with the MCR enjoying a very fruitful period. We continued our busy social calendar throughout the Christmas holidays, after a fantastic Michaelmas term that welcomed 71 new graduate students.

2003 kicked off with a our stirring concoction of social events, including exchange dinners with St Hilda's and St Peter's, several bops (including a hugely successful Comic Relief bop), guest dinners, video nights, and academic

soirées. Hilary term also witnessed the honing of MCR military prowess in a Laser Quest clash of the Titan's with Keble MCR. The result was a resounding victory for the Hertford MCR mean machine and a crushing defeat for the hapless Keble MCR squad. A rematch is on the cards for the summer ... when will they learn?

A new event, the Supervisors Dinner, was introduced towards the end of Hilary term aimed at encouraging good relations between MCR students and their academic supervisors. An ample crowd of 2nd and 3rd year D.Phil. students attended alongside their supervisors, as well as the Principal, the Tutor for Graduates, and a number of College fellows. The evening was a huge success and was enjoyed by all, so much so that it is hoped to make the Supervisors Dinner an annual event for the Hertford MCR. In the coming term we look forward to an equally varied social calendar, with the 'usuals' alongside a return to Extreme Karaoke and Sunday brunches, an evening with the Hertford Society, and the infamous end of term boat trip ... lovely.

The main functional additions to the MCR in Hilary term have been six new computers and flat-screen monitors for the MCR computer room, while the Tea Room has benefited from a number of small changes and a new oak television cabinet.

Sport in the MCR is, as ever, thriving. Graduates are representing Hertford College in a plethora of sports, competing alongside JCR team-mates to uphold Hertford's proud sporting tradition. A number of MCR members have represented the University throughout the year, as well as in the Varsity competitions. Rowing in the MCR continues to prosper with large amounts of Hertford crews comprising graduates. The MCR rowing crew, established in 2000, also carries on flourishing with the crew currently in training for Summer VIII's (and coached by a lightweight Blues rower). In fact, rowing in the MCR crew has become so popular that there is a possibility of two MCR teams entering Summer VIII's this year!

The Hertford/Merton football team finished off their injuryravaged season in a respectable position in the Graduate league, and were unlucky to narrowly miss out on the latter stages of graduate football Cuppers. A recent sporting venture has been the development of a MCR Squash ladder, as part of our attempt to encourage all levels of sports participation in the Hertford MCR. The squash ladder has been extremely popular and involves graduates of all skill levels, from those who have represented Hertford to those who have never picked up a squash racket before in their lives but have always fancied a go (like me). We hope to expand this project to include other sports such as table tennis and, lawn tennis and badminton, throughout Trinity and the summer.

As for the current committee, the elections draw near and the next committee will soon take over. We have all thoroughly enjoyed our time representing the MCR however, and we look forward to another fine year in Hertford.

> Steven Ward MCR President 2002–2003

A Review of the Sporting Year 2002–3

Hertford sport has continued to thrive over the winter amidst the hectic backdrop of tutorials and essay crises. This continued dedication to Hertford's sporting cause was a more remarkable feat than it may sound, considering the path through the parks to the sports ground was under some three feet of water for most of Michaelmas term. Nonetheless, the efforts of the grounds man meant the pitches were maintained to an excellent standard enabling fixtures to carry on in earnest – even if socks and shoes needed to be removed on the wade to the ground. Hertford's impressive football team failed to live up to its title aspirations in a closely fought premier league, eventually finishing mid-table after briefly flirting with relegation places. However, the young team can only learn from the difficult season with many results offering an unflattering picture of the high standard of football being played.

Hertford's rugby efforts were sadly also slow to get going. Poor league form did not reflect the efforts of all those involved, and was due in large part to the copious number of university players the college now boasts. These players are unfortunately not eligible for league games before varsity. Needless to say, though, the four undergraduates who turned out at Twickenham the Blues U21s, were more than happy with their season's exploits as they showed the full Blues team how to trounce the tabs. The same can be said of the university rugby league team, containing three other Hertford members, as they too won their varsity match convincingly.

Thankfully Hertford's dedication was rewarded on the river. Four members of the college made Blues crews and Torpids was an overwhelming success. A rain cancellation on the fourth day meant the women's second eight were denied blades. The crew was on course for the honour after bumping on the first three days. All together no crew lost their position on the river. In the Oxford City Bumps a Hertford women's four got blades after bumping in every race in the fixture.

In other sport, the team of most note was certainly the women's netball team who were promoted to the first division after a remarkable unbeaten season that saw the team outclass all before them. The girls should be real contenders for topflight supremacy next year.

James Grigg JCR Sports Officer 2002–2003

Whippets Varsity Match Report

Three members of Hertford College started in the Whippets Varsity match on Tuesday 3 December 2002. Back-row Ieuan Owen and centre Chris Whalen were both involved in controversy, receiving the yellow card for alleged infringements at the breakdown. Earlier in the match, the referee had sin-binned two Cambridge players in similarly innocuous situations. A dropgoal just before the interval gave the Oxford side the lead, but the Whippets, captained by Hertford's second row Will Lynn, had failed to take advantage of their territorial dominance. In the second half, Cambridge scored early but could not sustain their narrow lead. However, the one-man advantage in the final minutes gave Cambridge just enough room to touch down for a second time to sneak a 13–9 victory.

Ieuan Owen and Will Lynn then benched for the victorious U21s at Twickenham a week later. Andy Clements started that match in the second row, while the starting hooker Joe Clark scored a try. Joe, a first year, is the younger brother of Alys Clark, who graduated from Hertford in 2002.



Ieuan Owen, Will Lynn and Chris Whalen



Parachute Jump for Charity

Chris Whalen (2001 English), one of the College's rugby players, chose to do a sponsored parachute jump as part of the University's Raise and Give (RAG) Week. On Saturday 10 May, having never before attempted anything quite like this, he was launched from an aircraft over the Cambridgeshire countryside – strapped securely beneath an instructor, as the photograph shows. Chris raised over £400 towards the charities chosen for support by RAG Week organisers.

DATES FOR YOUR DIARY FORTHCOMING EVENTS IN 2003

Friday 4 July	College Rhodes Scholars Centenary Dinner
Sunday 13 July	Garden Party at Wadham College
Saturday 27 September	E.W. Gilbert Society 30th Anniversary Dinner (for Geographers)
Friday 3 October	College Gaudy (for Matriculation Years 1990 and 1991)
Thursday 16 October	Hertford Tyndale Lecture in the Examinations Schools

For further information, please contact the Members and Development Office (tel: 01865 279428)

North American Reunion 2004

A reminder that the next Oxford University North American Reunion will take place at the Waldorf Astoria Hotel in New York on Friday 16 and Saturday 17 April 2004.

Hertford will be hosting a reception to which all North American Members are warmly invited. The Members and Development Office will send information and an invitation in due course.



Simpkins III in charge of the lodge

CONTACT DETAILS

The Lodge Tel: 01865 279400 Fax: 01865 279437 Mrs Judy Mullee, Head Porter

Principal's Office Tel: 01865 279405 Fax: 01865 279437 Mrs Lihua Li, Principal's Secretary College Office Tel: 01865 279423 Fax: 01865 279466 Mrs Jane Webber, Academic Administrator

Admissions Tel: 01865 279404 Fax: 01865 279466 Mrs Edith Spencer, Admissions Secretary

Conferences

Tel: 01865 279456 Fax: 01865 289147 Mrs Julie Dearden, Director, International Programmes and Conference Department

Members and Development Office

Tel: 01865 279440 Fax: 01865 289142 Ms Carol McCall, Head of Development