



*H*onorary *D*egree

Ceremony
King's College London
26 November 2008



The Marquess of Douro

Chairman of the College Council



ON BEHALF OF the College it is my great pleasure to welcome you to this King's College London Honorary Degree Ceremony and to extend a special welcome to those on whom we will be conferring honorary degrees today.

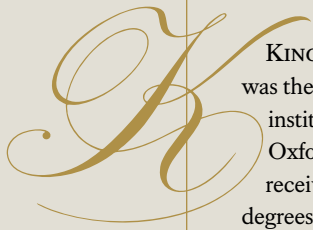
Ceremonies have always played an important part in the College's long and distinguished history, and this occasion is particularly significant because it is the first full scale ceremony, although not the first event, at which King's has conferred honorary degrees in its own right. In February I was particularly fortunate to confer in South Africa an honorary degree on Helen Suzman DBE, that extraordinarily brave politician who for so long was the sole parliamentary voice raised against the apartheid regime. In June we conferred an honorary degree on Kofi Annan, the former Secretary General of the United Nations, on the occasion of the delivery of his Commemoration Oration at King's.

Today's honorary graduates represent international distinction across a very broad and eclectic range of academic disciplines which includes various branches of history, environmental science, biomolecular science, medicine, dentistry and cosmology. We greatly value their relationship with King's, knowing that the College will benefit from the sharing of their experience and expertise and their contributions in a variety of ways, and we hope that this ceremony heralds the beginning of a long and inspirational association between them and the College.



The Marquess of Douro
Chairman of the College Council

King's College London



KING'S COLLEGE LONDON was the third higher education institution in England, after Oxford and Cambridge, to receive a royal charter to award degrees. It was founded by King George IV and the Duke of Wellington in 1829 as a university college in the tradition of the Church of England, and it now welcomes students of all faiths and beliefs. When the University of London was established in 1836, King's became one of its two founding colleges. Today it is ranked as one of the world's top 25 universities.

From the outset the College's commitment to education was practical and wide-ranging. King's was among the first higher education institutions to provide education for women and to offer evening classes; it was a pioneer of modular degrees, and has played a major role in many of the advances that have shaped modern life. Today it has a particularly distinguished reputation in the humanities, law, international relations, medicine, dentistry, nursing and the sciences, and is the largest centre for the education of healthcare professionals in Europe.

Nine people from King's and its associated institutions have been awarded the Nobel Prize, including most recently Professor Sir James Black OM for the development of life-saving drugs, Desmond Tutu for his role in the anti-apartheid campaign in South Africa, and Professor Maurice Wilkins (1916-2004) for his pioneering work on the structure of DNA. Other famous King's people, past and present, include Sir Charles Lyell, founder of modern geology; Florence Nightingale, who established the first



professional school of nursing, from which King's current School of Nursing & Midwifery is directly descended; W S Gilbert of Gilbert and Sullivan fame; James Clerk Maxwell, whose equations defined magnetism and laid the basis for modern telecommunications; Iverson Macadam, founder of the National Union of Students; neuroscientist Dame Nancy Rothwell; authors Sir Arthur C Clarke, Hanif Kureishi, Michael Morpurgo and Susan Hill, and Olympic rower Katherine Grainger.

Two major successful mergers in the late 1990s brought into the College institutions with their own highly distinguished histories, and the College now has some 20,000 students and over 5,000 staff. The Institute of Psychiatry, which merged with King's in 1997, is closely associated with the South London and Maudsley NHS Trust which includes the famous Bethlem Hospital

dating from the 13th century. The United Medical and Dental Schools of Guy's and St Thomas's Hospitals (UMDS) merged with King's in August 1998, incorporating a tradition of medical education which dates back to the 16th century (at St Thomas's) and the beginning of the 18th century (at Guy's).

King's £500 million estate development programme – the largest undertaken recently by any university – has in the last few years provided new and refurbished buildings at the Guy's, Denmark Hill and Waterloo campuses, the transformation of the former Public Record Office building in Chancery Lane into the Maughan Library, and the complete renovation of the south range of the Main Building at the Strand Campus.

While remaining part of the University of London, King's has enjoyed financial and academic autonomy since 1994, and from 2008 onwards is awarding its own degrees.

Programme

COLLEGE PROCESSION

Heads of Schools

Members of the Academic Board

Members of the College Council

Dean of the College

The Reverend Professor Richard Burridge MA PhD FKC

Acting President of the Students' Union

Mr Peter Ellender LLB

Deputy College Secretary & Academic Registrar

Mr Brian Salter BSc FKC

Head of Administration & College Secretary

Mr Ian Creagh BA DipED MA

Vice-Principals

Professor Sir Lawrence Freedman KCMB CBE FBA FKC

Professor Keith Hogart BSc MSc PhD FKC

Professor Robert Lechler PhD FRCP FRCPATH FMEDSCI FKC

Mr Chris Mottershead BSc MSc

Professor Philip Whitfield BA MA PhD FKC

Mr Harry Musselwhite BA FKC BARRISTER

Honorary Degree Presentees

Professor Michael Bishop MD

Professor Peter Brown FBA

Professor James Lovelock CH CBE FRS

Baron Rees of Ludlow OM KT FRS

Professor Junji Tagami PhD

Professor Romila Thapar PhD

Professor Tu Wei-Ming PhD

Citation readers

Professor Robert Lechler PhD FRCP FRCPATH FMEDSCI FKC

Dr Jan Palmowski DPHIL

Professor Denise Lievesley BSc CSTAT

Professor Mike Yianneskis BSc MSc PhD CENG CSci FRSA

FIMECHE FICHEME FKC

Professor Nairn Wilson PhD MSc FDS DRD FKC

Principal of the College

Professor Richard Trainor BA MA DPHIL FRHistS ACSS FKC

Chairman of the College Council

The Marquess of Douro MA OBE DL

PROGRAMME

Welcome and Opening Address

Chairman of the College Council

Presentation of Honorary Degrees

Professor Michael Bishop MD

presented by Professor Robert Lechler PhD FRCP FRCPATH FMEDSCI FKC, Vice Principal (Health)

Professor James Lovelock CH CBE FRS

presented by Professor Denise Lievesley BSc CSTAT Head of the School of Social Science & Public Policy

Professor Junji Tagami PhD

presented by Professor Nairn Wilson PhD MSc FDS DRD FKC Head of the Dental Institute

Professor Peter Brown FBA

presented by Dr Jan Palmowski DPHIL Head of the School of Humanities

Professor Romila Thapar PhD

presented by Dr Jan Palmowski DPHIL Head of the School of Humanities

Professor Tu Wei-Ming PhD

presented by Dr Jan Palmowski DPHIL Head of the School of Humanities

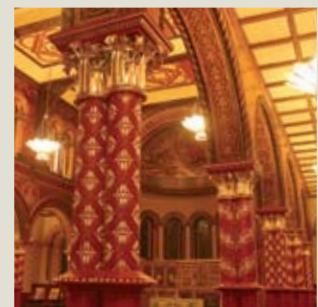
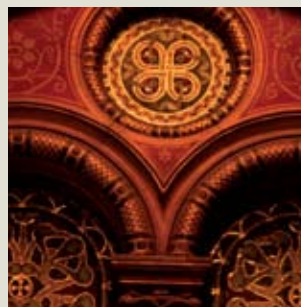
Baron Rees of Ludlow OM KT FRS

presented by Professor Mike Yianneskis BSc MSc PhD CENG CSci FRSA FIMECHE FICHEME FKC, Head of the School of Physical Sciences & Engineering

Response from Baron Rees of Ludlow

Closing Address

Principal of the College



Awarded the Nobel Prize for the discovery of the oncogene, Chancellor of the University of California, San Francisco.

Professor Michael Bishop



NOBEL LAUREATE PROFESSOR MICHAEL BISHOP is a world-leading medical researcher and dedicated advocate for science education. He is Chancellor of the University of California's San Francisco (UCSF) campus.

Born in Pennsylvania, to a Lutheran minister, John Michael Bishop's elementary education was more concerned with music and history than science. His interest in medicine was sparked by the family's physician during his high school years, and in 1957 he entered Harvard Medical School. During independent studies in the pathology department of the Massachusetts General Hospital he discovered his passion for molecular biology. After working as a house physician he became a postdoctoral fellow at the National Institutes of Health in Bethesda, Maryland, studying the replication of poliovirus. He then spent a year at the Heinrich-Pette Institute in Hamburg before, in 1968, taking a post as Assistant Professor of Microbiology at the UCSF, soon proceeding to Associate Professor and then Professor.

Professor Bishop's early work at UCSF included research into the replication of retroviruses and viral DNA. In 1970 he was joined by postdoctoral fellow Harold E Varmus and together they directed the work that discovered that normal cellular genes (proto-oncogenes) can be converted to cancer genes if they malfunction. Their research, which won them the Nobel Prize for Physiology or Medicine in 1989, has enabled over 100 oncogenes to be identified and has led to breakthroughs in the diagnosis and treatment of cancer.

At UCSF Professor Bishop has served as Director of both the George Williams Hooper Research Foundation and the Program in Biological Sciences – now the national model for training graduate students. He has twice received UCSF's Kaiser Award for Excellence in Teaching and has been awarded a University Professorship, the highest honour of the University of California. In 1998 he won the American Society for Cell Biology Public

Service Award, for service including that on the Joint Steering Committee for Public Policy, which advocates for federal funding for biomedical research.

He has been elected a member of the National Academy of Sciences, USA; the American Academy of Arts and Sciences; the Institute of Medicine; the American Philosophical Society and the Federation of American Scientists. He has received an Honorary Fellowship of the American Association for the Advancement of Science and is a non-resident fellow of the Salk Institute. He was appointed to the National Cancer Advisory Board by former President Clinton in 1994 and served as Chair of the Board from 1997 to 2000. He currently serves as Scientific Advisor to the Congressional Biomedical Research Caucus.

He has been a recipient of many awards including the Albert Lasker Award for Basic Medical Research; the Armand Hammer Cancer Research Award, the American Cancer Society Medal of Honour and the National Medal of Science. In 2004 he received an honorary degree from Harvard University.

Professor Bishop is the author and co-author of more than 400 publications, including *The Rise of the Genetic Paradigm* (1995); *Proto-oncogenes and Plasticity in Cell Signalling* (2003) and *How to Win the Nobel Prize: An Unexpected Life in Science* (2003).

Leading Late Classical and Medieval historian, Rollins Professor of History and Director of the Program in Hellenic Studies, Princeton University.

Professor Peter Brown



PROFESSOR PETER ROBERT LAMONT BROWN is a leading historian of Late Antiquity. Since 1986 he has been the Philip & Beulah Rollins Professor of History and Director of the Program in Hellenic Studies at Princeton University.

Born in Dublin, Peter Brown was educated in County Wicklow and at Shrewsbury School, and then read history at New College, Oxford. He developed his early career at Oxford, becoming a Fellow of All Souls College, Lecturer in Medieval History at Merton College, and University Reader in Late Roman & Early Byzantine History. In 1975 he took up the position of Professor of History at Royal Holloway College, University of London, and in 1978 he moved to the USA as Professor of History & Classics at the University of California at Berkeley. In 1986 he joined the History faculty at Princeton.

Professor Brown has been instrumental in creating and popularizing the historical period of Late Antiquity (the period from 250 to 800 AD). This era includes the fall of Rome, the development of Judaism, the foundation of Islam and Roman Catholicism and the spread of Christianity across Europe. In his book *The World of Late Antiquity* (1981), he argued that, rather than being viewed as a period of decline after the cultural flourishing of the Classical era, Late Antiquity should be seen in positive terms, as a time of immense innovation, when many of the roots of our current cultures began to emerge.

Within this period, Professor Brown has pursued a wide range of interests, from the body and sexuality in his book *The Body and Society: Men Women and Sexual Renunciation in Early Christendom* (1988), to the cult of holy men and women in *The Cult of the Saints: Its Rise and Function in Latin Christianity* (1981). His work demonstrates the strength of his studies in social anthropology, his feel for language, place and people, and his extensive travels (he speaks 15 languages). He has written 12 books. His first book,

a biography of *Augustine of Hippo*, was published in 1967 and his latest, *Poverty and Leadership in the Later Roman Empire*, in 2002. He is an influential and popular teacher, renowned for his passion, wit and spontaneity and for bringing erudition to life. In 2000 he received the President's Award for Distinguished Teaching at Princeton.

Professor Brown's scholarship has been recognised with distinctions and honours from around the world. He has been recipient of a MacArthur Fellowship, the Ralph Waldo Emerson Award, the Vursell Award, the Heineken Prize, Amsterdam, the Chevalier de l'Ordre des Lettres et des Arts, and an Andrew W Mellon Fellowship. He has been awarded honorary degrees from the University of Fribourg, Switzerland, the University of Chicago, Trinity College, Dublin, Wesleyan University, Columbia University, the University of Pisa and Harvard University. He is also a Fellow of the British Academy, the Royal Historical Society, the American Society of Arts and Sciences, the American Philosophical Society, the Medieval Academy of America, the Royal Netherlands Academy, and the Academia de Bones Artes, Barcelona.

A key figure in thinking about life and climate change, and developer of the Gaia theory.

Professor James Lovelock



PROFESSOR LOVELOCK is an outstanding independent scientific thinker, inventor and author, best known as the proposer of the Gaia Hypothesis and the inventor of the electron capture detector which provided crucial evidence about the role of

chlorofluorocarbons (CFCs) in the depletion of the ozone layer.

James Ephraim Lovelock graduated from Manchester University with a BSc in Chemistry, received his PhD in Medicine from the London School of Hygiene & Tropical Medicine in 1948 and a DSc in Biophysics from the University of London in 1959. He worked as a scientist for the National Institute for Medical Research in London, holding fellowships at Harvard and at Yale, and was Professor of Chemistry at Baylor University College of Medicine in Texas from 1961 to 1964. He has since practised as an independent scientist. He was visiting professor at the University of Reading from 1967 to 1990 and has been an honorary visiting fellow at Green College, Oxford since 1994.

In 1957 Professor Lovelock invented the electron capture detector (ECD), a high sensitivity gas chromatography detector which could identify extremely low levels of certain chemicals. This enabled the demonstration that the pesticide DDT had contaminated all the world's oceans and air, and, in general, to show the extent of the pollution caused by human activities, providing crucial evidence which contributed to the birth of the environmental movement. He went on to establish the first atmospheric halocarbon monitoring station in Adrigole, Ireland, which was active between 1978 and 1984 and demonstrated the persistence of CFCs, subsequently identified as a major source of damage to stratospheric ozone.

In the 1960s, as a result of work for NASA concerning the possibility of life on Mars, Professor Lovelock proposed that the Earth's atmosphere, unlike that of Mars, was self-regulating through a complex interacting system that can be conceived as a single organism. Named after the Greek

goddess of the Earth, the Gaia Hypothesis (now Gaia Theory) postulates that the Earth is capable of maintaining its own climatic and chemical conditions suitable for living organisms.

Professor Lovelock has written more than 200 scientific papers and has published seven books, including *Gaia* (1979); *The Great Extinction* (with Michael Allaby 1983); *The Greening of Mars* (with Michael Allaby 1984); *The Ages of Gaia* (1988); *Gaia: The Practical Science of Planetary Medicine* (1991); his autobiography *Homage to Gaia: The life of an independent scientist* (2000); and *The Revenge of Gaia* (2006). His contributions to science have been recognised with many distinguished awards and prizes, including eight previous honorary doctorates; the Amsterdam Prize of the Royal Netherlands Academy of Arts and Sciences; the Volvo Environment Foundation Prize; the Nonino Prize of Italy; the Blue Planet Prize from the Asahi Glass Foundation, Tokyo; the World Meteorological Organisation Norbert Gerbier Prize; the Wollaston Medal of the Geological Society and the Royal Geographic Society Discovery Lifetime Award.

Professor Lovelock was elected to the Fellowship of the Royal Society in 1974 and was awarded a CBE in 1990. In 2003 he was made a Companion of Honour by Her Majesty the Queen.

Cosmologist and astrophysicist,
Astronomer Royal, President of the
Royal Society, and Master of Trinity
College, Cambridge.

Lord Rees of Ludlow



MARTIN REES, BARON REES OF LUDLOW, is one of the world's most eminent cosmologists and astrophysicists. He is the Astronomer Royal; the President of the Royal Society and Master of Trinity College, Cambridge. Martin Rees studied at

Cambridge University and then held post-doctoral positions at Cambridge, California and Princeton before becoming a Professor at Sussex University. In 1973 he became a fellow of King's College Cambridge and Plumian Professor of Astronomy & Experimental Philosophy at Cambridge: a post he held for 18 years. For ten years he was director of Cambridge's Institute of Astronomy.

He has been a visiting professor at many universities including Harvard, Caltech, Berkeley, Kyoto and the Institute of Advanced Studies at Princeton, where he is now a trustee. He was Regents Fellow of the Smithsonian Institute, Washington, between 1984 and 1988 and is a foreign associate of the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Philosophical Society. He is a member of the *Academia Europaea*, and an honorary member of the Russian Academy of Sciences, the Pontifical Academy, and a number of other foreign academies. He is also a visiting professor at Leicester University and at Imperial College London.

He was knighted in 1992, was appointed Astronomer Royal in 1995, and was nominated to the House of Lords in 2005 as a cross-bench peer. In 2007 he was appointed a member of the Order of Merit.

Lord Rees' current research deals with cosmology and astrophysics, especially gamma ray bursts, galactic nuclei, black hole formation and radiative processes (including gravitational waves). He is also interested in cosmic structure formation, especially the early generation of stars and galaxies that formed at the end of the cosmic 'dark ages' more than 12 billion years ago. He has authored or co-authored some 500 research papers and is the

author of several books for a general readership, including *Gravity's Fatal Attraction: Black holes in the universe* (1996); *Before the Beginning: Our universe and others* (1997); *Just Six Numbers* (1999); *Our Cosmic Habitat* (2001); *Our Final Century?* (2003) and *What We Still Don't Know* (2007).

Lord Rees's recent awards include the Royal Society's Michael Faraday Prize and lecture for science communication (2004), and the Royal Swedish Academy's Crafoord Prize (2005). Other notable awards include the Heinemann Prize (1984), the Balzan Prize (1989), the Bower Award of the Franklin Institute (1998), the Einstein Award from the World Cultural Council (2003) and the UNESCO Neils Bohr Medal (2005). He was elected a fellow of the Royal Society in 1979; served as a member of its Council twice between 1983 and 1995 and held a Royal Society Research Professorship between 1992 and 2004. He became President of the Society in 2005.

He has been President of the British Association for the Advancement of Science and of the Royal Astronomical Society, and a trustee of the British Museum, NESTA and the Kennedy Memorial Trust. He is currently on the Board of Trustees of the National Museum of Science and Industry, the Institute for Public Policy Research and the Princeton Institute for Advanced Study, and has served on many bodies connected with education, space research, arms control and international collaboration in science.

An international opinion leader in the field of applied dental biomaterials science, Dean of the Tokyo Medical and Dental University.

Professor Junji Tagami



PROFESSOR TAGAMI is Dean of the Tokyo Medical and Dental University, and an international opinion-leader in the field of applied dental biomaterials science.

Junji Tagami was educated at Tokyo Medical and Dental

University (TMDU), achieving his DDS in 1980 and his PhD in 1984. From 1987 to 1988 he spent a year as an assistant professor at the Medical College of Georgia, USA, and in 1994-5 was professor in the Department of Operative Dentistry and Periodontics at Ohu University. He then returned to TMDU as Professor and Chairman of the Department of Operative Dentistry there. From 1998 to 2005 he was also Principal of the School for Dental Technicians at TMDU, and in 2000 he became Professor of Cariology and Operative Dentistry in the Department of Restorative Sciences in the Graduate School. Since 2005 he has been Dean of the Faculty of Dentistry at TMDU and this year he also became Dean of the University's Graduate School.

Professor Tagami's special interest and expertise is in the fields of tooth-coloured dental restorative systems, the bonding of materials to dental tissues, and dental education. He has held many senior positions, including as President of the Japan Society for Adhesive Dentistry and the Stomatological Society of Japan; Past President of the Japan Academy of Esthetic Dentistry; Director of the Japanese Society for Laser Dentistry and the Japanese Society of Conservative Dentistry; a board member of the Japanese Society for Dental Materials and Devices, and as a member of the Dental Material Group and the Biology Group of the International Association for Dental Research. He serves on several Japanese governmental committees, including as Chair of the Conference of Deans of Japanese Governmental Dental Schools and as Chairman Elect of the National Examination Board for Dentistry. He is on the editorial boards of the *American Journal of Dentistry* and *Dentistry in Japan*. In 2006 he received the Academic

Distinctive Merit Award of the Japan Society of Adhesive Dentistry.

Tokyo Medical and Dental University is one of the most prestigious and largest dental clinical academic centres in the Far East and, like King's College London Dental Institute, is one of the world's top five dental clinical academic centres. As the Dean of the University's Dental Faculty and Dean of the Graduate School Professor Tagami is a man of great power, influence and potential in academic dentistry. He has been instrumental in developing important links between the King's Dental Institute and TMDU, offering important opportunities for high-level international collaboration in oral and dental health sciences.

Professor Tagami is a prolific author who has contributed more than 240 papers to peer-reviewed international journals and some 150 papers to Japanese academic journals. He is a champion of excellence in academic dentistry, and widely recognised as one of the principal driving forces in the modernisation of the clinical practice of dentistry. Above all, he is an exceptional and inspirational researcher, most worthy of recognition for his contribution to dental biomaterials science.

One of India's most eminent historians,
Emeritus Professor in History at the
Jawaharlal Nehru University.

Professor Romila Thapar



PROFESSOR THAPAR is one of India's most eminent historians.

After graduating from Panjab University, Romila Thapar obtained a doctorate of the University of London in 1958, following research at the School of Oriental and African Studies. She

was appointed Reader at Delhi University and then Professor of Ancient Indian History at the Jawaharlal Nehru University, New Delhi, and is now Professor Emerita there. In 2004 the United States Library of Congress appointed her as the first holder of the Kluge Chair in Countries and Cultures of the South.

Professor Thapar has received international recognition for her scholarship. She has held visiting professorships at Cornell University, the University of Pennsylvania and the Collège de France; she was elected General President of the Indian History Congress in 1983, and she has served as a vice-president of the International Committee of Historical Sciences. She is an honorary fellow of Lady Margaret Hall, Oxford, and of the School of Oriental and African Studies and holds honorary doctorates of the universities of Chicago, Oxford, Edinburgh and Calcutta, and of the Institut National des Langues et Civilisations Orientales, Paris. In 1999 she was elected a corresponding fellow of the British Academy and in 2000 she gave an acclaimed plenary lecture at the 19th International Congress of Historical Sciences at Oslo.

Professor Thapar's innovative approach is grounded in inter-disciplinarity, since she draws her evidence from archaeology and textual sources. She uses the methodologies of related disciplines such as anthropology in her analyses. She began her career with the publication of her thesis, *Ashoka and the Decline of the Mauryas* (1961) making important arguments about the social context and the nature of the polity of the first Indian empire. This approach was continued in her ground-breaking book, the *Penguin History of India* (published in 1966), still a seminal work, written for a popular

audience and encompassing the period from India's early history to the arrival of Europeans in the 16th century.

In subsequent years, Professor Thapar has become an important voice advocating secular and pluralistic understandings of Indian history, and she has been critical of attempts to represent South Asian history as a clash between monolithic Hinduism and Islam. She has defended these insights with great moral courage, despite often bitter and defamatory attacks from those who disagreed with her, often on political grounds.

Among her many other publications are *Ancient Indian Social History: Some interpretations* (1978); *From Lineage to State: Social Formations of the Mid-First Millennium BC in the Ganges Valley* (1984); *Indian Tales* (1991, a book for children); *Sakuntala: Texts, Readings, Histories* (1999); *History and Beyond* (2000); *Cultural Pasts: Essays in Early Indian History* (2000); *Early India: From the Origins to AD 1300* (2002, a new discussion replacing the earlier general history). *Somanatha: The Many Voices of a History* is her most recent work, published in 2004. It revisits the story of Sultan Mahmud of Ghazni's raid on the Hindu temple of Somanatha/Somnath in Gujarat, presented by the British and by Hindu nationalists as a trauma for the Hindu population. Professor Thapar uses sources such as local Sanskrit inscriptions, biographies of kings and merchants of the period, court epics and popular narratives, to produce an account that undermines the traditional version of what took place.

Widely recognised as a leading scholar in Confucian studies, Harvard-Yenching Professor of Chinese History and Philosophy, Harvard University.

Professor Tu Wei-Ming



PROFESSOR TU WEI-MING is widely recognised as a leading scholar in Confucian studies and a towering figure in the revitalization of the Confucian tradition in China today.

In 1999 he became the first professor of Confucian studies in the

English-speaking world. He is now Harvard-Yenching Professor of Chinese History and Philosophy and of Confucian Studies in the Department of East Asian Languages and Civilizations at Harvard University. He was Director of the Harvard-Yenching Institute from 1996 to 2008.

Born in China in 1940, Tu Wei-Ming obtained his bachelor's degree in Chinese Studies at Tunghai University in Taiwan and his master's degree and PhD at Harvard. He lectured at Tunghai and then at Princeton, and rose from Assistant Professor to Associate and full Professor at the University of California, Berkeley, before becoming Professor of Chinese History and Philosophy at Harvard in 1981. From 1983 to 1986 he was Chairman of the Committee on the Study of Religion at Harvard.

For 40 years Professor Tu has studied Confucian humanism as both an academic subject and a living tradition, and through his teaching and writing he has been instrumental in creatively transforming Confucian humanism from an outmoded political ideology into a vibrant philosophical discourse. He has exerted a shaping influence on the newly-emerging Chinese cultural identity throughout the world, and his inspiring work on the dialogue among civilizations encourages the formation of such a cultural identity in an open, pluralistic and self-reflexive spirit.

Professor Tu has been a visiting professor at Peking University, at Taiwan University, at the Chinese University of Hong Kong, and at the University of Paris. He holds honorary professorships from Zhejiang University, Renmin University of China, Zhongshan University and the Shanghai Academy of Social Sciences, and has been awarded honorary degrees by Lehigh

University and Michigan State University in the USA, and by Shandong University in China. He is a fellow of the American Academy of Arts and Sciences and the recipient of the second Thomas Berry Award at the United Nations and the tenth Toege Prize in South Korea.

In 2001 Professor Tu was appointed by Kofi Annan to be a member of the United Nations' 'Group of eminent Persons' to facilitate a 'Dialogue among Civilizations', and he was a major contributor to the book, *Crossing the Divide*, which emerged from this project.

Among Professor Tu's many books, in Chinese and in English, are *Humanity and Self-Cultivation* (1979); *Confucian Thought: Selfhood as Creative Transformation* (1985); *Confucianism in a Historical Perspective* (1989); *Way, Learning and Politics: Essays on the Confucian Intellectual* (1989); *The Living Tree: Changing Meaning of Being Chinese Today* (1994); *China in Transformation* (1994); *Confucianism and Human Rights* (1998); and *Confucian Spirituality* (2002). There is a five-volume edition of his collected works in Chinese. He is a member of the editorial board of the *Harvard Journal of Asiatic Studies and Philosophy East and West*.



News highlights of 2007-8

Top of the world

King's position as one of the world's leading universities was reinforced in October when the prestigious *Times Higher-QS World University Rankings* placed the College 22nd in the world, up from 24th in 2007 and 46th in 2006. The ranking confirms King's as a centre of global academic excellence for both research and teaching and is particularly impressive because it shows how the College is rated by thousands of academics around the world. The table brings together the views of academics and graduate employers with data on the ratio of staff to students, citations of academic work, and international staff and students. Among UK universities King's was ranked fifth (up from sixth last year).

Complete success

King's is the most successful university in the country in terms of PhD completion rates. The first report of the Higher Education Funding Council for England to show this data for individual higher education institutions, published in October 2007, showed that King's achieved a completion rate of 92 per cent for home and EU students: of the 190 students who started, 174 completed their theses between 1999 and 2005.

Global centre for medicine and health

In April King's strengths in medical and health sciences received a further boost with the announcement of plans

for the College to join with the Guy's and St Thomas', King's College Hospital and South London and Maudsley NHS foundation trusts to create an Academic Health Sciences Centre. Bringing together one of the world's leading research-led universities and three of London's most successful NHS foundation trusts will create a Centre that integrates world-leading research, teaching and clinical service – so that patients benefit from breakthroughs in medical science and receive leading-edge treatment at the earliest possible opportunity.

Medals for King's Olympic threesome

Two King's graduates and one current student won silver for the UK in the Beijing Olympics – all in the same boat. Katherine Grainger MBE, Frances Houghton and Annabel Vernon rowed together with teammate Debbie Flood in the quadruple skulls event. Katherine, who is currently completing a PhD in Law at King's, became the first British woman to win medals at three consecutive Olympic Games and is Britain's most successful female rower, having also won the World Championships four times. She was awarded an MBE for services to sport in 2006. Frances graduated with a BA in Hispanic Studies in 2003 and is also an Olympic medalist and three times World Champion. Annabel, who graduated with a King's MA in International Relations in 2007, had also achieved a gold medal at the 2007 World Championships.



Top: King's Olympic rowers Katherine Grainger MBE, Frances Houghton and Annabel Vernon.

Above: This previously unknown portrait of Mozart has been authenticated by Professor Cliff Eisen.

'Virtual water' concept honoured in Stockholm

The concept of 'virtual water', devised by Professor Tony Allan of King's Department of Geography, led him to be named the Stockholm Water Prize Laureate for 2008. The award was conferred upon Professor Allan by HRH Crown Princess Victoria of Sweden in August. Professor Allan's concept measures all the water that is involved in the production of foods and industrial products. Behind a single cup of coffee, for example, 140 litres of water have been consumed to grow, produce, package and ship the beans. For a single hamburger, an estimated 2,400 litres of water are needed. Application of the virtual water concept has shown how water-intensive commodities can be traded from places where high returns to water can be achieved to economies that cannot produce so efficiently.

£2 million for medical humanities research

King's has won a highly prestigious award from the Wellcome Trust to support research in medical humanities. Over five years the College will receive around £2 million to establish an international centre of excellence in this emerging field. Brian Hurwitz, King's Professor of Medicine & the Arts, and his colleagues will undertake multidisciplinary studies involving philosophy, literature, film, history and art history, as well as medicine, nursing and psychiatry. Under the umbrella 'The Boundaries of Illness' they will look at personal and cultural

representations of health and illness and the boundaries between them, exploring people's experiences of health and their responses to illness. They will also develop a research collaboration with Columbia University's Narrative Medicine program, based in the College of Physicians and Surgeons, New York.

Hybrid embryo research approved

King's was one of only two institutions in the UK to be granted permission in January by the Human Fertilisation and Embryology Authority to create hybrid animal embryos by fusing human cells with animal eggs. King's scientists will be able to use these embryos to boost research into some of the most debilitating and untreatable diseases, including Alzheimer's, Parkinson's and Spinal Muscular Atrophy. They can now derive human embryonic stem cells using adult cells from patients with genetic forms of neurodegenerative disorders. Instead of using human eggs, the researchers will remove the nuclei from animal eggs and replace them with cells from the patients, thus creating cloned stem cell lines that contain the same genetic mutation that results in these neurological disorders. Leading stem cell scientist Dr Alan Colman – part of the team that created 'Dolly the sheep' – joined King's as the new Director of Stem Cell Research in May.

Mozart portrait discovered

A previously unknown portrait of Mozart has been authenticated by King's Professor Cliff Eisen, a world expert on the composer. Painted in oils, the portrait shows Mozart in profile in a red jacket that corresponds to one described by the composer to his father in 1782, even down to the buttons. It is the single most significant Mozart artefact to come to light in the last 200 years and could be worth several million dollars. The portrait's provenance, letters from Mozart and his family, and archival documents including Salzburg wills and estate auction records have all helped to authenticate the portrait, which was probably painted by Joseph Hickel, painter to the Imperial Court of Austria, about 1783. It was previously owned by the family of Johann Lorenz Hagenauer, the Mozarts' close friend and one-time landlord in Salzburg, and was bought in 2005 by an American collector who was unaware of its significance until the Hagenauer connection was established.

King's top for MRC Funding

King's received more funding from the Medical Research Council (MRC) than any other university in 2006-7, with an income from this source totalling nearly £23.7 million. The College is home to five MRC centres: a number unsurpassed by any other university. The King's MRC centres specialise in social, genetic and developmental psychiatry; in developmental neurobiology; in the allergic mechanisms of asthma; in neurodegeneration research, and in

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organ transplantation. Also linked with these is the College's Biomedical Research Centre, funded by the National Institute for Health Research. All are focused on research that can be translated into treatment for patients.

Kofi Annan

Kofi Annan, former Secretary General of the United Nations and Nobel Peace Prize winner, gave the King's annual Commemoration Oration at the College in May. Mr Annan spoke to an audience of staff, students and invited guests about the major achievements and continuing challenges for Africa. He also received the second honorary degree to be awarded by King's since the College gained the power to award its own degrees in place of those of the University of London.

Prime Minister

Prime Minister Gordon Brown has visited King's twice in 2008. In January the Prime Minister chose King's to unveil his plans for the future of the NHS, warmly praising the College's Florence Nightingale School of Nursing & Midwifery for its 'outstanding professionalism, excellence in research and world leadership in the training of nurses'. In February the Prime Minister returned to King's to launch the Cicely Saunders Institute of Palliative Care: the world's first international academic institute to focus specifically on the care of those with terminal illnesses.

Environmental achievements

In September 2007 the Principal, Professor Rick Trainor, was appointed one of 15 'London Leaders' by the London Sustainable Development Commission, and in June King's became one of the first 12 organisations in England and Scotland to achieve the Carbon Trust Standard, a new certificate for those who can prove they are tackling climate change and have made genuine reductions in their carbon emissions. King's is one of the first universities in the country to have 100 per cent of its electricity sourced from renewable large-scale hydro generation and has received a 'Green Gown' Award for sustainable construction methods used in the refurbishment of a major building at the Strand Campus. In January 2008 the King's Environmental Research Group published its research demonstrating that the London Congestion Zone may have had a modest effect on the health of the capital's inhabitants.

Graduating from the war zone

The first graduates of a unique course, including military personnel who have studied while serving in a war zone, graduated from King's in July. The *War in the Modern World* MA, offered by the Department of War Studies, is the College's only entirely non-residential web-delivered master's programme, with no rival in the quality and richness of its online content, and with academics providing continual feedback throughout the course. Students

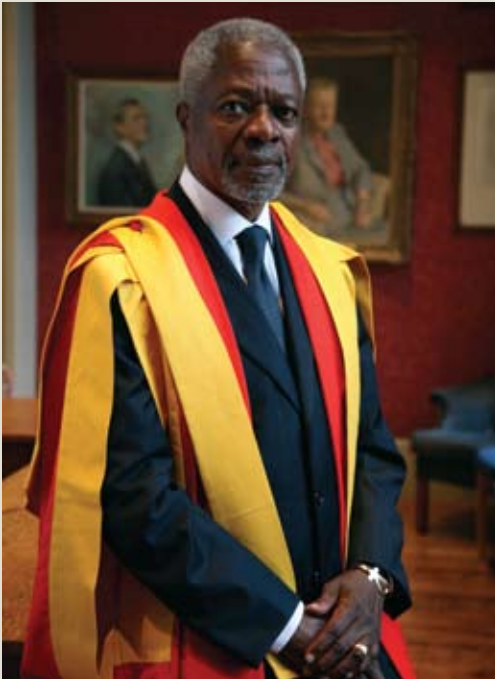
gain an understanding of military campaigns and operations since 1945, in the light of the wide-ranging economic, social, technological and political changes in the world between World War II and today.

Scholarships

In February the King's Graduate School announced a package of over 100 new graduate studentships and bursaries, including 15 PhD and 20 taught master's scholarships targeted at the US, India, Pakistan, China, Malaysia, Hong Kong, Singapore, Russia and selected countries in the Middle East and Africa. With these and the King's International Partnership Scholarships, which will encourage mobility between King's and its key global partners, the College will continue and build upon its reputation for international excellence and attract the world's best students.

Largest-ever genetics study

Four research teams at King's will play a leading role in continuing the largest-ever study of the genetics behind disease, focusing on common disease areas and learning difficulties in children. A seven-fold increase in the number of samples to be analysed will allow researchers to look at 25 diseases such as multiple sclerosis, schizophrenia and asthma, as well as studying the genetics of learning problems in children and individuals' responses to statins. With £30 million funding from the Wellcome Trust, this will be one of the most ambitious studies ever undertaken, aiming to analyse DNA samples from 120,000



Top: Kofi Annan became the recipient of the second honorary degree awarded by King's, on his visit to the College in May.

Above: The Prime Minister at King's in January 2008.



people, the largest number of individuals ever to be studied. It will bring together leading research groups from 16 institutions in the UK and internationally.

Historic FCO library comes to King's

An extensive historic collection of the Foreign & Commonwealth Office (FCO) Library – described as the most exciting print acquisition the College has received in the last century – was transferred to King's in November 2007 by Sir Peter Ricketts KCMG, Permanent Under-Secretary and Head of the Diplomatic Service. The transfer will ensure that this unique archive (comprising some 60,000 volumes, valued at some £4.5 million) will be fully accessible to the research community. Spanning over four centuries, the FCO Library offers matchless coverage of Britain's role as a trading nation, imperial and diplomatic power and as a member of the Commonwealth.

Digitising the Dead Sea Scrolls

The Dead Sea Scrolls – the oldest-known copies of the Hebrew Bible or Old Testament – are being digitised by a team led by King's Centre for Computing in the Humanities. The scrolls were written between 250 BCE and 68 CE and discovered in 1947 on the northwest shore of the Dead Sea. They throw immensely important light on the origins of both Judaism and early Christianity and consist of thousands of extremely brittle fragments which have not been photographed since the 1950s. The

Israeli Antiquities Authority has convened an international committee of experts, led by Simon Tanner of King's, to digitise them for the web, bringing one of the great treasures of the world out of the museum and within easy reach for anyone who wants to see them.

The worm turns

A species of tapeworm new to science (*Oochoristica whitfieldii*) has been named after Professor Phil Whitfield, Vice-Principal (Students) at King's and internationally renowned parasitologist. The tapeworm, which lives in the gut of black iguanas of Mexico, was discovered by Dr Sergio Guillen-Hernandez, Head of Marine Biology at the University of Yucatan, a former PhD student of Professor Whitfield. Professor Whitfield commented: 'It is a great honour to have one's name chosen for a new animal species.' His own research seeks to understand the mechanisms that bring about and modulate the penetration of human skin by the invasive cercarial larval stages of the parasite *Schistosoma mansoni*. These parasites infect more than 200 million people in over 70 countries worldwide.

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Virtual underground ride tests paranoia

A computer simulation of a tube-ride developed by King's Institute of Psychiatry showed that almost 40 per cent of 'normal' participants experienced at least one paranoid thought during the four-minute ride. Wearing virtual reality headsets, 200 volunteers broadly representative of the general population walked around a virtual London Underground carriage which contained neutral computer people (avatars) who breathed, looked around and sometimes met the gaze of the participants. One read a newspaper, another would occasionally smile if looked at. This virtual reality scenario allowed researchers to study how different people interpret exactly the same social situation. While most participants found the avatars friendly or neutral, nearly 40 per cent experienced at least one paranoid thought. In future, virtual reality may be used in the clinical assessment and treatment of paranoia as part of cognitive behavioural therapy.

Carbon award: world first

King's was one of 12 organisations in England and Scotland to achieve the Carbon Trust Standard, a new certificate launched in June that aims to put an end to 'greenwashing', and the world's first to require an organisation to measure, manage and reduce its carbon footprint and make real reductions year-on-year. Through its Carbon Management Strategy the College has already cut its carbon emissions by 9.4 per cent in the last three years and by 15 per cent since 2004. It has also achieved the

recycling of some 70 per cent of its dry waste and a 10 per cent reduction in energy use in its residences over one winter. Future targets include 100 per cent recycling of dry waste by 2012 and a 40 per cent reduction in CO₂ by 2012. Last year King's won the Green Gown award for sustainable construction for its refurbishment of the south range of the King's Building at the Strand Campus.

Keats statue at Guy's

Romantic poet John Keats, who studied to become an apothecary at Guy's in 1815-16, has been commemorated by a bronze statue near the Colonnade at the Guy's Campus. The statue by Stuart Williamson was commissioned by the Guy's and St Thomas' Charity and the Friends of Guy's and unveiled in October 2007 by Andrew Motion, Poet Laureate and Keats biographer.



Top: This computer simulation of a ride in a London Underground train helped to test paranoia among members of the public.

Above: Romantic poet and alumnus John Keats is commemorated by this new statue at the Guy's Campus.

The Chapel

THIS GRADE I LISTED BUILDING was designed by the eminent Victorian architect George Gilbert Scott, and completed in 1864 with, as Scott said, 'the form and, in some degree, the character of an ancient basilica'. Scott's original decorative scheme, probably executed by Clayton & Bell, illustrates the College's motto: *Sancte et Sapienter* ('with holiness and with wisdom'). The organ, by Henry Willis, dates from the 1860s. It was rebuilt in the 1930s, and again in the 1970s and the 1990s.

In 1931 the original pitched roof was replaced by a coffered flat ceiling to allow the construction of the Hambleton Building of Anatomy above. Most of the stained glass was lost or damaged during the Second World War, and in 1948 the remaining stained glass was removed and the original designs on the aisle and apse walls were painted out.

Between 2000 and 2002, with the help of nearly half a million pounds raised by friends and alumni of the College, the Chapel underwent a major refurbishment, largely restoring Scott's decorative scheme and colours, replacing the stained windows with new designs by Joseph Nuttgens, and incorporating a more flexible seating arrangement, sound system and lighting. These have created a space that is not only well-suited to the worship that takes place here each day, but also provides a quiet space in the heart of the College and a venue for concerts, lectures and presentations for many groups within and from outside the College.

The Chapel is also the base for the College Choir, one of the leading university choirs in England, who sing coral evensong and the College Eucharist here every week.



The College Choir performing in the Chapel.

King's College London

King's College London is one of the UK's most historic and prestigious university institutions, renowned for excellence in both research and teaching. A multi-faculty university college based in the heart of London and one of the founding colleges of the University of London, King's has nearly 20,000 students, of whom more than 6,600 are graduates.

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