

LONDON'S









UCL




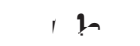









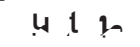






our year

06/07

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UCL's MISSION

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Welcome to UCL's annual report for

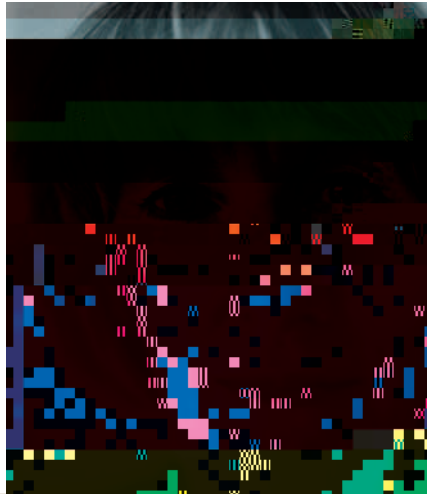
TEACHING AND OUTREACH

While UCL ranks among the pre-eminent research-led universities



blindness worldwide. The project initially developed a new technology for visualising nerve-cell damage in the retina, called detection of apoptosing retinal cells. The new technique enabled the team to discover that the protein beta-amyloid, responsible for plaque lesions in the brain in Alzheimer's patients, also causes nerve-cell death in the retina.

Finally, the UCL Institute of Ophthalmology is leading a project to develop a therapy that could restore the sight of a quarter of over-60s in the UK. The London Project to Cure Blindness will develop a surgical therapy to stabilise and restore vision in people who go blind due to faulty retinal cells. Blindness affects around a quarter of people over the age of 60 in the UK, and 14 million people across Europe. Supported by a £4 million private donation, the London Project to Cure Blindness is led by Professor Peter Coffey (UCL Institute of Ophthalmology) and run in partnership with Moorfields Eye Hospital and the University of Sheffield. The radical approach of the London Project to Cure Blindness will involve producing a cell-replacement therapy from human embryonic stem cells. Trials using patients' own cells indicate strongly that this approach can work.

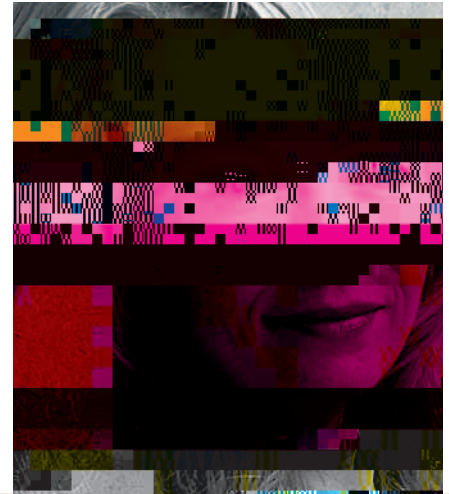


OBESITY

The dangers of obesity were widely reported in the UK press in 2007 and UCL research featured prominently in many of these reports. UCL researchers cast light on how the brain controls appetite, on the link between waistline and PE lessons, and on the epidemiology of childhood obesity.

Research led by Dr Rachel Batterham (UCL Medicine) identified the circuits in the brain that control how much we eat. Using functional magnetic resonance imaging Dr Batterham's team showed that the hormone that controls appetite operates through two areas of the brain. The primitive homeostatic regions of the brain, which control feeding, and the cortico-limbic regions, which determine the rewarding and pleasurable aspects of eating, were both found to become active in the presence of peptide YY, a naturally occurring hormone that regulates appetite. The research – which could have a dramatic impact on the treatment of obesity and eating disorders – provides insights into how biological signals affect not only how full we feel, but also the enjoyment of eating.

Professor Jane Wardle, director of the Cancer Research UK Health Behaviour Unit at UCL, led an important new study of UK schools which showed that pupils who do more physical education at school have markedly smaller waistlines. The research showed that boys in secondary schools that provide three PE sessions a week have waists around 3cm slimmer than those whose schools only provide one or two sessions. The study is significant as it uses waist



measurements rather than Body Mass Index, which Professor Wardle believes is a much purer indicator of fatness and is also a better indicator of the risk of coronary-artery disease in adolescents.

Researchers from UCL Population Health have been working with the Department of Health on a project to gauge parental reaction to the results of school weighings. The research found that among 500 children in nursery and reception classes in the outer London area, only 6% of parents with overweight or obese children described their child as overweight.

ECONOMICS

The work of UCL economists has been recognised this year by a number of awards.

Professor Wendy Carlin was elected a member of the council of the European Economic Association, an international scientific body that aims to contribute to the development and application of economics as a science in Europe.

Professor Christian Dustmann, Director of CReAM, the UCL Centre for Research and Analysis on Migration, was elected President of the European Society for Population Economics. Professor Dustmann was also named among the elite of German economists by 'Handelsblatt', Germany's heavyweight financial newspaper, alongside Professor Steffen Huck, Deputy Head of UCL Economics. The two were both in the top five German economists in terms of quantity and quality of publications, with Professor Huck ranked the highest of any economist under 40.

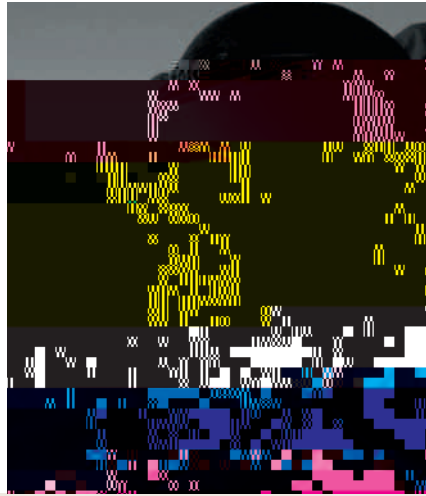
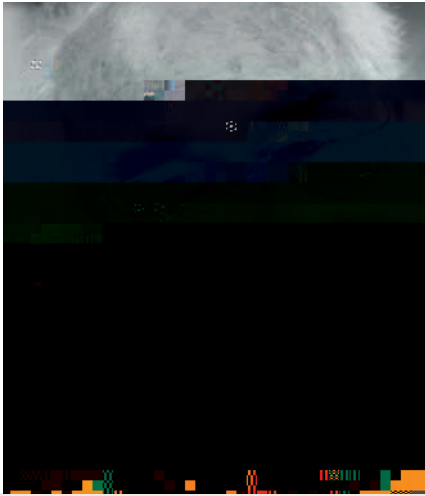
Professor Mark Armstrong won the inaugural COMPASS Prize for best paper in an academic journal for his paper, 'Competition in Two-Sided Markets', which was selected as having made the most significant contributions to the understanding and implementation of competition policy. Working with collaborators from Northwestern University, Chicago, he developed a theoretical framework for systematically analysing markets with a structure that is widely applicable across many industries. The paper illuminates the different and interrelated impacts of competition between platforms and competition among sellers on one side of a given platform.

Professor Armstrong was also elected a Fellow of the British Academy, while Professor Jean-Marc Robin was elected a Fellow of the Econometric Society and Professor Steve Machin was appointed a member of the Low Pay Commission.

UCL Economics has an outstanding international reputation in the areas of

facilities. Professor Agostino Pierro, Head of the Surgery Unit at the UCL Institute of Child Health and Professor Mohan Edirisinghe (UCL Mechanical Engineering) led teams that successfully bid for grants with a combined total of £500,000. Professor Pierro's team will create state-of-the-art tissue-engineering laboratories through the refurbishment of existing facilities at the UCL Institute of Child Health. These will house the Gut Tissue Engineering Research Group, made up of five distinct teams within UCL (Paediatric Surgery, Muscle Tissue, Neural & Epithelial Tissue, Biomaterials and Functional Integrity). Professor Edirisinghe's bid was for the physical renovation and modernisation of tissue-engineering research laboratories

ANNIVERSARIES



to their students. I note also our enduring popularity with students the world over, another source of satisfaction, as we work hard to create an environment at UCL that is both challenging and welcoming.”

IN THE NEWS
2007's top stories included a UCL-led medical expedition to Mount Everest, the discovery that male-killing bacteria make female butterflies more promiscuous and the first anniversary of the national hearing test for newborns originated at UCL.

The Caudwell extreme Everest expedition was led by Dr Mike Grocott, Co-Director of the UCL Centre for Aviation Space & Extreme Environment Medicine based at the UCL Institute of Human Health & Performance. The lead team reached the summit of the world's highest peak on 24 May 2007. The scientists and doctors were investigating hypoxia (a deficiency of oxygen in the blood) to help future patients in intensive care and have set a world record by taking arterial blood samples near the summit of the world's highest mountain. The samples were taken at 8,400 metres rather than the summit for safety reasons, due to low temperatures and high winds. In addition, the Caudwell Xtreme Everest team constructed the world's highest laboratory at 8,000 metres on the mountain's South Col.

A study led by biologist Dr Sylvain Charlat (UCL Biosciences) found that a high prevalence of male-killing bacteria active in many species of insect including the butterfly actually increases female promiscuity and male fatigue. The team found that when the male insect population drops – killed off by the bacteria – the female butterfly becomes more sexually rampant. Males, on the other hand, show signs of fatigue and put less effort into mating. The male-killing bacterium is transmitted from mother to

son and actually kills the son before the embryo hatches into a caterpillar. Only female offspring of female carriers of the bacteria can survive, which can lead to the male population being as low as one male to every 100 females in some areas.

Spring 2007 marked the first anniversary of the introduction of national hearing tests for newborns, a process that looks set to revolutionise the lives of the 900 children with permanent hearing loss born in the UK every year. The test was made possible after Professor David Kemp (UCL Ear Institute) discovered in 1977 that the ear actually gives out sound when it hears. Since then Professor Kemp has refined and developed the technology – a combination of a minute microphone inserted in the ear and a computer receiver – which has been adopted by hospitals and research laboratories around the world. The UK's adoption of the test means that the average age of diagnosis of deafness has fallen from two and a half years to three months, a vital time saving as late diagnosis can have a devastating effect on language, social and educational development.

Dr Bahador Bahrami (UCL Institute of Cognitive Neuroscience and UCL Psychology) found the first physiological evidence that invisible subliminal images do attract the brain's attention on a subconscious level. The implication is that techniques such as subliminal advertising, now banned in the UK but still legal in the USA, certainly do leave their mark on the brain.

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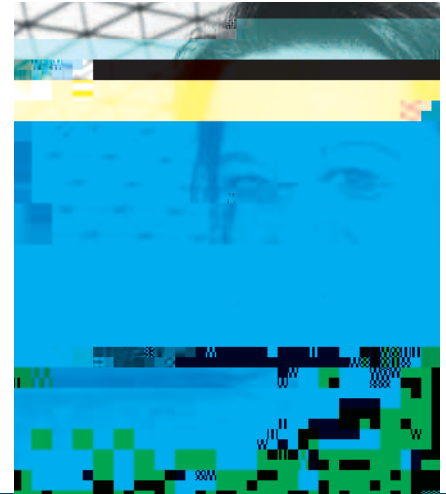
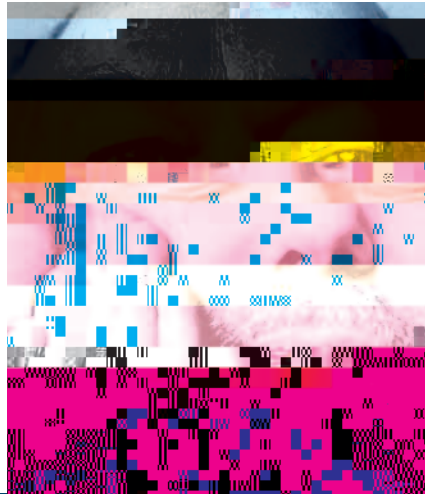
Professor Chris McManus (UCL Psychology & Language Sciences)

Professor May Cassar (UCL Bartlett School)

Professor Dave Delpy (UCL Medical Physics & Bioengineering)

Professor Davd Bogle (UCL Chemical Engineering)

Professor Steffen Huck (UCL Economics)



AWARDS & APPOINTMENTS

Fellows: Professor Robin Ali (UCL Institute of Ophthalmology), Professor Timothy Cole (UCL Institute of Child Health), Professor Anthony Dickenson (UCL Biosciences), Professor Elizabeth Fisher (UCL Institute of Neurology), Professor Chris McManus (UCL Psychology & Language Sciences) and Dr Tilli Tansey (Wellcome Trust Centre for the History of Medicine at UCL)

BC C
Vicky Speck Memorial Leadership Award: Professor Anthony Watkinson (UCL School of Library, Archive & Information Studies)

Max Planck Research Award: Professor Ray Dolan (UCL Institute of Neurology)

&
Foreign Honorary Member: Professor William Twining (UCL Laws)

UK Science & Heritage Research
Programme Director: Professor May Cassar (UCL Bartlett School)

Woman of the Year: Dr Usha Menon (UCL Elizabeth Garrett Anderson Institute for Women's Health)

Research Prize: Dr Helen Killaspy (UCL Population Health)

Dr Stephen Baigent (UCL Mathematics), **Dr Murad Banaji** (UCL Mathematics and UCL Medical Physics & Bioengineering), **Professor Dave Delpy** (UCL Medical Physics & Bioengineering) and **Dr Ilias Tachtsidis** (UCL Medical Physics & Bioengineering)

B B C
Research Award: Professor Linda Franck (UCL Institute of Child Health)

B
Fellows: Professor Mark Armstrong (UCL Economics), Professor Rachel Bowlby (UCL English Language & Literature) and Professor Mary Fulbrook (UCL German)

B
Isambard Kingdom Brunel Prize: Dr Tiziana Rossetto (UCL Civil, Environmental & Geomatic Engineering)

B &
Alexander Nove Prize: Dr Andrew Wilson (UCL School of Slavonic & East European Studies)

B
St Peter's Medal: Professor Christopher Woodhouse (UCL Surgical & Interventional Sciences); **Gold Telescope Award:** Mark Emberton (UCL Surgical & Interventional Sciences)

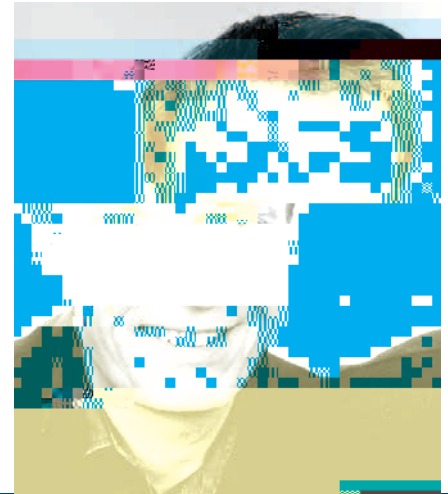
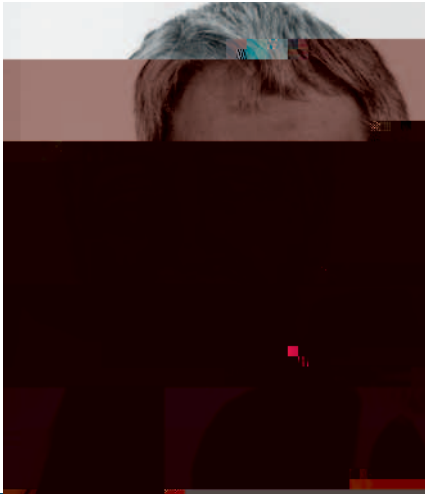
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Roger Needham Award: Dr Mark Handley (UCL Computer Science)

B
Public Health Section First Prize: Professor Sir Michael Marmot and Professor Richard Wilkinson (UCL Population Health); **Cardiology Section First Prize:** Professor Robert Anderson and Dr Andrew Cook (UCL Institute of Child Health)

B
MacKeith Prize Co-Winner: Dr Richard Chin (UCL Institute of Child Health); **President-Elect:** Dr Helen Cross (UCL Institute of Child Health)

B
Chairman: Professor Roger Matthews (UCL Institute of Archaeology)

B
Outreach & Education Committee 2007 Image Prize: Dr Joe Cain (UCL Science & Technology Studies)



2007

Co-Director: Dr Mark Lythgoe (UCL Institute of Child Health and UCL Medicine)

Honorary Adjunct Professor:

Professor Theo Hermans (UCL Dutch)

Honorary Secretary:

Dr Andy Garrard (UCL Institute of Archaeology)

Editorial Board Member:

Dr Patrizia Ferretti (UCL Institute of Child Health)

External Reference Group Member:

Professor Wisia Wedzicha (UCL Medicine)

Fellow:

Professor Jean-Marc Robin (UCL Economics)

Chief Executive and Deputy Chair:

Professor Dave Delpy (UCL Medical Physics & Bioengineering); **Senior Media Fellowship:** Dr Andrea Sella (UCL Chemistry)

Research Prize:

Dr Bleda During (UCL Institute of Archaeology)

Council Member:

Professor Wendy Carlin (UCL Economics)

President:

Professor Christian Dustmann (UCL Economics)

Gold Prize:

Dr Steven Manos (UCL Chemistry)

Henry Stopes Medal:

Mark Roberts (UCL Institute of Archaeology)

Sixth Place and First Place Under 40:

Professor Steffen Huck (UCL Economics); **Eleventh Place:** Professor Christian Dustmann (UCL Economics)

Dumbarton Oaks Research Library & Collection 2007/2008 Resident Fellowship:

Dr Elizabeth Graham (UCL Institute of Archaeology)

Clinical Senior Lectureships:

Dr Persis Amrolia (UCL Institute of Child Health), Dr Anna David (UCL Elizabeth Garrett Anderson Institute for Women's Health), Dr John Hurst (UCL Medicine), Dr Rajeshwar Mookerjee (UCL Medicine), Dr James Moon (UCL Medicine), Dr Neil Sebire (UCL Institute of Child Health), Dr Stuart Taylor (UCL Medicine), Dr Russell

Viner (UCL Institute of Child Health), Dr Nicholas Ward (UCL Institute of Neurology), Dr David Werring (UCL Institute of Neurology) and Dr Martin Widschwendter (UCL Elizabeth Garrett Anderson Institute for Women's Health)

Publications Prize and History Book of the Year:

Dr Philipp Mueller (UCL School of Slavonic & East European Studies)

Dr Philippa Mills:

(UCL Institute of Child Health)

Board of Governors:

Professor Alwyn Seeds (UCL Electronic & Electrical Engineering)

Council Medal:

Professor David Bogle (UCL Chemical Engineering)

Research in Prevention Travel Awards:

Dr Francesco D'Aiuto (UCL Eastman Dental Institute)

Ambassador for Epilepsy:

Dr Helen Cross (UCL Institute of Child Health)

Ernst Chain Prize:

Professor Robin Weiss (UCL Infection & Immunity)



Dr Hasok Chang (UCL Science & Technology Studies)



Philip Leverhulme Prize: Dr Daniel Feltham (UCL Earth Sciences), Dr Maria Loh (UCL History of Art) and Dr Andrei Yafaev (UCL Mathematics);

Research Fellowship: Professor James Croll (UCL Civil, Environmental & Geomatic Engineering), Professor Julian Graffy (UCL School of Slavonic & East European Studies), Dr Andrew Hemingway (UCL History of Art), and Professor David Tuckett (UCL Psychology & Language Sciences);
Early Career Fellowship: Giancarlo Gavioli (UCL Electronic & Electrical Engineering), and Kristin Kovarovic (UCL Anthropology);
Emeritus Fellowship: Professor William Twining (UCL Laws)



Member: Professor Steve Machin (UCL Economics)



Academic/Scientist Woman of the Year: Dr Marilena Loizidou (UCL Surgical & Interventional Sciences)



Cardiovascular Innovation Award: Professor Alex Seifalian (UCL Surgical & Interventional Sciences)



General Interest Winner: Dr Cecil Helman (UCL Population Health)



Endocrinology Section Prize: Dr Lin Lin (UCL Institute of Child Health);
Young Investigator Award: Dr Hayden HomerS2rr06TT2 1 Tf10.469earchvDr



Top 40 Power Players 2007 Number
10: Professor Dame Carol Black (UCL
Medicine)



Quiz of the Year Winner: Dr Tony
Harker (UCL Physics & Astronomy)



Global Advisor: Professor Peter Morris
(UCL Bartlett School)



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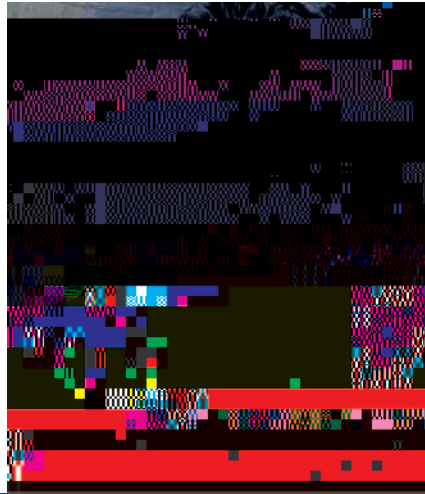
Professor Matthew Gandy (UCL Geography)

Professor Zhaoping Li (UCL Computer Science)

Professor Timothy Arnett (UCL Biosciences)

Professor Andrew Coates (UCL Mullard Space Science Laboratory)


Professor Véronique Munoz-Dardé (UCL Philosophy)




PROFESSORIAL APPOINTMENTS & PROMOTIONS

 Professor of Medical Anthropology: Dr David Napier; Professor of Social Anthropology: Dr Nanneke Redclift

 Chair of Facility & Environment Management: Dr Alexi Marmot; Chair of Urban & Regional Development: Dr Nick Phelps; Professor of Architecture & Art: Dr Jane Rendell; Professor of Architecture & Cultural Design: Mr Chwen Lim; Professor of Architecture & Cybernetics: Dr Ranulph Glanville; Professor of Building Physics & Environment: Dr Michael Davies


 Professor of Cellular Neurobiology: Dr Patricia Salinas; Professor of Evolutionary Biology: Dr Jeremy Field; Professor of Mineralised Tissue Biology: Dr Timothy Arnett; Professor of Molecular Pharmacology: Dr Neil Millar; Professor of Pharmacology & Molecular Neuroscience: Dr Ralf Schoepfer; S A Courtauld Chair of Biochemistry: Professor Gabriel Waksman

 Professor of Haematology: Dr Rosemary Gale; Professor of Medical Oncology: Dr Daniel Hochhauser


 Professor of Computational Chemistry: Dr Nikolas Kaltsoyannis; Professor of Computational Materials Science: Dr Nora De Leuw

 Professor of Environmental Engineering: Dr Caroline Fitzpatrick

 Professor of Computational Neuroscience: Dr Zhaoping Li

 Professor of Molecular Microbiology: Dr Peter Mullany; Chair of Dental Public Health: Professor Richard Watt

 Chair of Economics: Professor Guy Laroque

 Professor of Microwave Electronics: Dr Paul Brennan


 Professor of Perinatal & Neuroscience: Dr Gennadij Raivich

 Professor of English Language & Literature: Dr Richard North



 Professor of French: Dr Andrew Leak



 Professor of Human Geography: Dr Matthew Gandy

 Professor of Latin American History: Dr Nicola Miller

 Chair of Clinical Immunology: Dr Bodo Grimbacher; Chair of Experimental Immunology: Dr Tessa Crompton; Professor of Medical Microbiology: Dr Christopher Kibbler


 Professor of Aegean Archaeology: Dr Todd Whitelaw

C  **C** 
Potter Chair of Nephrology: Dr Robert Kleta; Professor of Clinical Epidemiology: Dr Ruth Gilbert; Professor of Paediatric Neurobiology: Dr Helen Cross; Professor of Paediatrics & Immunology: Dr Hubert Gaspar; Professor of Public Health & Epidemiology: Dr Catherine Law





C  **C** 
Chair of the Molecular Biology of Neurological Disease: Professor John Hardy; Professor of Cognitive Neuroscience: Dr Eleanor Maguire; Professor of Motor Neuroscience: Dr Brian Day; Professor of Neurology: Dr Sanjay Sisodiya; Professor of Neurology: Dr Matthew Walker; Professor of Neuropsychology: Dr Lisa Cipolotti; Professor of Neuroscience: Dr Dmitri Rusakov


C 
Professor of Modern Italian History: Dr John Foot


C
Professor of Comparative Law: Dr Jorg Fedtke



C 
Professor of Mathematics: Dr Robb McDonald



C  **C** 
Professor of Cardiovascular Medicine: Dr David Patterson

C  **B**  &
B  **B** 
Professor of Medical Physics & Clinical Neurophysiology: Dr David Holder

C 
Professor of Experimental Rheumatology: Dr Michael Ehrenstein; Professor of Molecular Cell Biology: Dr Justin Hsuan

C 
Professor of Philosophy: Dr Marcus Giaquinto; Professor of Philosophy: Dr Véronique Munoz-Dardé; Professor of Philosophy: Dr Michael Otsuka

C  & **C** 
Professor of Astrophysics: Dr Raman Prinja; Professor of Physics: Dr Peter Barker; Professor of Physics: Dr Sougato Bose; Professor of Physics: Dr Ian Ford

C  **C** 
Chair of Social Epidemiology: Professor Mika Kivimäki; Professor of Primary Care for Older People: Dr Stephen Iliffe

C  & **C** 
C  **C** 

VITAL STATISTICS

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FACULTY	ACADEMIC AND RESEARCH STAFF	UNDERGRADUATE STUDENTS	GRADUATE STUDENTS
UCL ARTS & HUMANITIES	342	1,962	758
UCL BIOMEDICAL SCIENCES	1,838	1,285	1,577
UCL BUILT ENVIRONMENT	214	647	750
UCL ENGINEERING SCIENCES	400	1,170	1,089
UCL LAWS	83	545	426
UCL LIFE SCIENCES	649	2,418	1,068
UCL MATHEMATICAL & PHYSICAL SCIENCES	427	1,774	460
UCL SOCIAL & HISTORICAL SCIENCES	309	2,129	1,307
TOTAL	4,262	11,930	7,435

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RESEARCH GRANTS AND CONTRACTS	201,698
FUNDING COUNCIL GRANTS	178,623
OTHER OPERATING INCOME	110,055
ACADEMIC FEES AND SUPPORT GRANTS	97,795
ENDOWMENT INCOME, DONATIONS AND INTEREST	8,965
TOTAL	597,136

UK-BASED CHARITIES

OST RESEARCH COUNCILS

UK CENTRAL GOVERNMENT,

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LEADERSHIP 1 JANUARY 2008



Lord Woolf of Barnes (Chair)

Sir John Birch (Vice-Chair)

Ms Anne Bulford (Treasurer)

Professor Iain Borden

Professor Robert Brown

Professor Malcolm Grant

Mr Victor Chu

Lord Hart of Chilton

Mr Andy Fernando

Mr Rob Holden

Mr Jim Hunkin

Mr Mark Knight

Ms Vivienne Parry

Professor Chris Thompson

Sir Stephen Wall

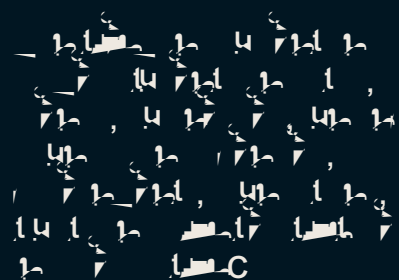
Dr Mark Lancaster

Dr Benet Salway

Dr Andrea Townsend-Nicholson

Secretary to Council Mr Tim Perry

CONTACT UCL



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