

## LEICESTER RESEARCH GRANTS, BOOKS & PEOPLE

### Press Coverage of Research Grants

The Bulletin is sent to the media as well as other external contacts. As a result, details of grants appearing in this section may stimulate press interest. The Press Office may also actively seek media coverage of particular grants detailed in this section. It is therefore the grantholder's responsibility to request that any grant of a sensitive or confidential nature be excluded from the Bulletin.

This can be done by contacting the Research Office, which has responsibility for compiling this Research section (2495).

#### RESEARCH GRANTS/CONTRACTS ANNOUNCED MAY 2006

##### Archaeology & Ancient History

Hopkinson T Dr  
RA11G0021  
Knowledge Knappers: The Role of the purposeful agent in the transition from the Lower to Middle Palaeolithic and the emergence of prepared stone reduction technologies  
*International Society Science & Religion via John Templeton Foundation* £15,168

Pluciennik M Dr  
RA11G0007  
Clash of Cultures?  
*The British Academy* £700

Ruggles C Prof  
RA11G0013  
Conference grant to attend the XXVth General Assembly of the International Astronomical Union  
*The Royal Society* £1,200

Shipley D Prof  
RA11G0001  
The Periplus attributed to Skylas of Karyanda: Scholarly Edition, Translation and Commentary  
*Loeb Classical Library Foundation* £16,943

Biology  
Jarvis R Dr  
RM48G0021  
Studies on targeting, topology and role of Arabidopsis Toc12, a putative component of the chloroplast protein import apparatus  
*Biochemical Society* £1,600

Cancer Studies & Molecular Med  
Ablett S Dr  
RM60G0043  
Supplement - SIOP Nephroblastoma clinical trial and study  
*Cancer Research UK* £34,095

Ablett S Dr  
RM60G0044  
Supplement - Ewing tumour studies 1999- Trial Co-ordination  
*Cancer Research UK* £44,189

Ablett S Dr  
RM60G0045  
Supplement - Euro Ewing 99 (biological studies)  
*Cancer Research UK* £46,284

Pringle J Dr  
RM60G0042  
Supplement - Investigation of Vitamin D Receptor Polymorphisms on the

response of T-cells to Vitamin D Therapy in Psoriasis  
*Psoriasis Association* £500

Cardiovascular Sciences  
Goodall A Prof  
RM61G0015  
Identification of members of the mGST family in human platelets - vacation scholarship  
*Wellcome Trust* £1,360

Gottlob I Prof  
RM61G0031  
Supplement - Functional magnetic resonance imaging & vision  
*Ulverschroft Foundation* £205,033

Lambert D Dr  
Co-Investigator: Ng L Prof,  
Cardiovascular Sciences  
RM61G0019  
In vitro manipulation of urotensin II receptor expression: Implications of density on ligand efficacy  
*BHF* £79,387

Norman R Dr  
RM61G0016  
Trafficking of ATP sensitive potassium channels - Vacation Scholarship  
*Wellcome Trust* £1,360

Cell Physiology & Pharmacology  
Grubb B Dr  
Co-Investigator: Mulheran M Dr, Cell Phys. & Pharmacology  
RM36G0003  
Anatomical Characterisation of Voltage Gated Sodium Channels in the Mammalian Cochlear Nerve Spiral Ganglia and Dorsal Cochlear Nucleus  
*Meniere's Society* £15,940

Pawlak R Dr  
RM36G0021  
Regulation of protease-activated receptor 1 (PAR-1) in the hippocampus & amygdala by stress - vacation scholarship  
*Wellcome Trust* £680

Computer Science  
Crole R Dr  
RP202G0019  
Midlands Graduate School in the Foundations of Computer Science  
*EPSRC via University Of Nottingham* £4,073

Raman R Prof  
RP202G0009  
8th ACM-SAIM workshop on Algorithm Engineering and Experiments (as PC co-chair) and the 17th ACM-SIAM Symposium on Discrete Algorithms

*The Royal Society* £566

Economics  
Karoglou M Mr  
Co-Investigator: Demetriades P Prof,  
Economics  
RS10G0003  
Detecting Structural Changes in Financial Market Volatility Dynamics-The Impact of Financial Liberalisation  
*ESRC* £29,638

Education  
Jarvis T Dr  
RE10G0009  
Pollen - Seed cities for Science: A community approach for sustainable growth of science education in Europe.  
*CEC* £93,944

Rogers L Dr  
RE10G0015  
PEC: European Science Teachers: Scientific Knowledge, Linguistic Skills and Digital Media  
*CEC* £16,113

Sage R Dr  
RE10G0006  
Three week visit to collaborate on a study of 4 year olds in UK and Japan  
*Daiwa Anglo-Japanese Foundation* £1,700

Genetics  
Dubrova Y Prof  
RM33G0034  
Supplement - Is increased low-dose somatic radiosensitivity associated with increased transgenerational germline mutation radiosensitivity  
*US department for Energy via Columbia University* £46,315

Tufarelli C Dr  
RM33G0040  
Supplement - Antisense - RNA mediated DNA methylation as a mechanism underlying hypermethylation of CpG islands in malignancies  
*Cancer Research UK* £43,349

Geology  
Brewer T Dr  
RP14G0022  
Supplement - FY03-13 The JOI Alliance: Systems Integration and a Riserless Vessel for IODP  
*Columbia University* £71,281

Health Sciences  
Burton P Prof  
RM62G0060  
Supplement - UK Biobank: Scientific Rationale Project  
*Wellcome Trust via UK Biobank* £10,300

Dogra N Dr  
RM62G0059  
Training school counsellors and young people in secondary schools in Ibadan, Nigeria on common mental health problems with an emphasis on tackling stigma  
*Association of Commonwealth Universities* £5,000

Draper E Dr  
RM62G0049  
Supplement - Congenital Anomalies Register  
*Multi Funded* £74,853

Field D Prof  
Co-Investigator: Draper E Dr, Health Sciences  
RM62G0062  
Supplement - Trent Neonatal Survey  
*Multi Funded* £461,825

Tobin M Dr  
Co-Investigator: Sheehan N Dr, Health Sciences  
RM62G0041  
The application & development of methods to combine information in epidemiological studies of cardiovascular traits of major public health importance  
*BHF* £60,389

Vostanis P Prof  
RM62G0061  
Child and Adolescent Mental Health Services Evaluation  
*Anna Freud Centre* £8,000

History of Art  
Lindley P Dr  
RA16G0001  
Sculpture in Crisis: Renaissance and Reformation in English Imagery  
*The Leverhulme Trust* £23,645

Infection, Immunology, Inflammation  
Harris K Dr  
RM63G0037  
Supplement - Funding For Research Associate Renal Unit (Supplement)  
*University Hospitals of Leicester NHS Trust* £43,508

Institute of Lifelong Learning  
Wilson D Mr  
RE03G0003  
Older learners and cultural activities  
*CEC via British Council* £690

Law  
Parry R Dr  
RL10G0015  
China's Corporate Rescue Laws, A





European Perspective  
*Society Of Legal Scholars* £417

### Mathematics

**Tretyakov M Prof**  
**RP201G0002**  
Stochastic numerics: Wiener integrals and SPDEs  
*The Leverhulme Trust* £16,329

### Museum Studies

**Parry R Dr**  
**RA17G0006**  
UK Museums and the Semantic Web  
*AHRC* £12,313

### Physics & Astronomy

**Barstow M Prof**  
**RP16G0044**

Attend IAU General Assembly  
*The Royal Society* £920

### Nelms N Dr

**RP16G0068**  
Supplement - GERB 4 - Detector  
Blackening Programme  
*CLRC-Rutherford Appleton Laboratory*  
£125,000

### Nelms N Dr

**RP16G0069**  
Supplement - GERB 4 - Detector  
Blackening Programme  
*CLRC-Rutherford Appleton Laboratory*  
£106,251

**Robinson T Prof**  
**RP16G0067**

Supplement - SPEAR Operations  
Phase  
*PPARC* £13,000

### Sims M Dr

**RP16G0009**  
Design, build and construction of a life marker chip instrument for the Aurora ExoMars mission  
*PPARC* £371,933

### Sims M Dr

**RP16G0052**  
Design, build and construction of a Life Marker Chip instrument for the Aurora Exomars Mission  
*European Space Agency*  
£346,744

### Politics

**Dumbrell J Prof**  
**RS30G0003**  
United States Foreign Policy Working Group  
*British International Studies Association* £900

### Psychology

**De Lillo C Dr**  
**RM43G0016**  
Schizotypy & the encoding of structure in spatial working memory: are individual differences mediated by executive functions & perceptual grouping skills - Vacation Scholarship  
*Wellcome Trust* £1,360

## RESEARCH GRANTS/ CONTRACTS ANNOUNCED JULY 2006

### Archaeology and Ancient History

**Christie N Dr**  
**RA11G0026**  
Progetto Classe: Archaeologia di una citta abbandonata  
*CEC* £10,861

### James S Dr

**RA11G0015**  
Rome & The Sword: rethinking the role of martial violence in the Roman era  
*AHRC* £26,068

### Biochemistry

**Dickens M Dr**  
**RM31G0030**  
Role of myocyte stress protein 1 during simulated cardiac ischaemia & reperfusion  
*Nuffield Foundation* £1,440

### Eperon I Prof

**RM31G0031**  
BBSRC Vacation Bursary  
*BBSRC* £1,700

### Biology

**Harper D Dr**  
**RM48G0022**  
Supplement - Malewa River and Lake Naivasha, Kenya: diversion of high-part hydrographs for fertilization of agricultural land by reducing nutrient fluxes into the ground - First tranche "UNESCO via International Centre for Ecology"  
£2,133

### Harper D Dr

**RM48G0038**  
TwinBasin exchanges between Kenya - England - Poland  
*Twinbasin* £3,141

### Harper D Dr

**RM48G0040**  
Replicating biodiversity conservation and management at key soda lakes in the Rift Valley  
*Earthwatch Institute* £81,684

### Heslop-Harrison J Prof

**RM48G0039**  
Molecular analysis of the evolutionary diversity and activity of TC1/Mariner mobile DNA sequences in agricultural plant genomes  
*British Council Germany* £2,150

### Smith C Dr

**RM48G0012**  
Alternate male mating tactics in

bitterling fishes  
*British Council Poland* £1,125

### Smith C Dr

**RM48G0029**  
Parasite diversity and MHC Genes in Wild Zebrafish  
*Fisheries Society of the British Isles*  
£3,213

### Smith C Dr

**RM48G0041**  
Alternate male mating tactics in bitterling fishes  
*BBSRC* £1,700

### Twell D Prof

**RM48G0042**  
Cellular and Molecular Mechanisms of Cytokinesis Mediated by the TIO Fused Kinase  
*BBSRC* £326,813

### Cancer Studies and Molecular Medicine

**Ablett S Dr**  
**RM60G0057**  
Supplement - UKCCSG Group - Data Centre  
*Cancer Research UK* £367,665

### Ablett S Dr

**RM60G0061**  
Supplement - Newcastle Pharmacology Studies  
*Cancer Research UK* £16,222

### Konje J Prof

**Co-Investigators: Evans M Dr, Cancer Studies & Molecular Medicine; Bell S Prof, Cancer Studies & Molecular Medicine; Taylor D Prof, Cancer Studies & Molecular Medicine; Cooke M Dr, Cancer Studies & Molecular Medicine; Taylor A Dr, Cancer Studies & Molecular Medicine**  
**RM60G0056**  
*Biomarkers for maternal health*  
Wallac, OY £140,000

### Cardiovascular Sciences

**Davies M Prof**  
**RM61G0033**  
South East Midlands Diabetes Local Research Network  
*Department of Health via UHL Trust*  
£699,963

### Galananes M Prof

**RM61G0040**  
The role of protein kinases in ischaemic & pharmacological preconditioning in human myocardium: sequence of activation &

effect of age.  
*BHF* £97,150

### Goodall A Prof

**RM61G0039**  
A potential mechanism of aspirin resistance in patients with diabetes  
*Heart Research UK* £7,000

### London N Prof

**RM61G0036**  
Supplement - Resident Medical Officer  
*Nuffield Hospital Trust* £94,672

### Cell Physiology and Pharmacology

**Mitcheson J Dr**  
**Co-Investigator: Tobin A Prof, Cell Physiology & Pharmacology**  
**RM36G0017**  
G-Protein coupled receptor regulation of Herg Potassium Channels in cardiac myocytes  
*BHF* £146,188

### Tobin A Prof

**RM36G0029**  
Determination of the role of site specific GPCR phosphorylation in cellular responses  
*Wellcome Trust* £1,328,110

### Chemistry

**Solan G Dr**  
**RP10G0014**  
Sterically variable bimetallic initiators for ring-opening polymerisation - undergraduate research bursary  
*Nuffield Foundation* £1,310

### Woodward J Dr

**RP10G0031**  
Supplement - External Magnetic Fields & Human Health: A Link to Biological Enzyme Reaction Systems  
*The Colt Foundation* £3,250

### Computer Science

**Yang S Dr**  
**RP20G0025**  
WCCI'2006 Vancouver Canada & GECCO'2006 in Seattle  
*Royal Academy of Engineering*  
£1,200

### Engineering

**Bates D Dr**  
**Co-Investigator: Heslop-Harrison J Prof, Biology**  
**RP12G000**

Analysis of biochemical network models using robust control theory  
*BBSRC* £341,407

**Pan J Prof**  
**RP12G0040**

Multi-scale Modelling of Sintering  
*EPSRC* £155,478

### Postlethwaite I Prof

**Co-Investigator: Gu D Dr, Engineering**  
**RP12G0034**  
ASTRAEA - Autonomous Systems Technology Related Airborne Evaluation Assessment  
*BAE Systems* £110,157

### English

**Shattock E Prof**  
**RA12G0006**  
Victorian Geographies: Conference of the Research Society for Victorian Periodicals  
*The British Academy* £300

### Walker G Prof

**RA12G0007**  
Editing Early Modern English and Scottish Texts  
*The British Academy* £1,543

### Genetics

**Borts R Prof**  
**RM33G0046**  
Supplement - Association between defects in meiotic recombination genes and human male fertility  
*MRC* £44,080

### Kyriacou C Prof

**RM33G0030**  
Molecular genetics of biological rhythms in an intertidal crustacean  
*BBSRC* £404,411

### Tauber E Dr

**RM33G0007**  
Seasonal timing and molecular evolution of circadian photoreponsive genes in Drosophila  
*NERC* £368,891

### Health Sciences

**Field D Prof**  
**Co-Investigator: Draper E Dr, Health Sciences; Smith L Miss, Health Sciences**  
**RM62G0038**

Socioeconomic inequalities in the incidence of very preterm birth: understanding why they exist and developing strategies to reduce them  
*Action Medical Research* £33,713

### Jagger C Prof

**RM62G0076**  
Compression or Expansion of Disability? Forecasting future disability levels under changing patterns  
*Kings Fund* £5,184



**McKinley R Dr**  
Co-Investigator: Baker R Prof,  
Health Sciences  
RM62G0075

A pilot study to explore the relationship between patient-centred consultation outcome measures  
*UHL NHS Trust* £9,000

**Tobin M Dr**  
Co-Investigator: Burton P Prof,  
Health Sciences  
RM62G0040

Salt, blood pressure & genes in children & mothers: a study aimed at informing preventive & treatment strategies for high blood pressure  
Sir Jules Thorn Charitable Trust  
£9,929

**Historical Studies**

**Coffey J Dr**  
RA15G0008

Between Reformation and Enlightenment: Presbyterians and the Idea of Religious Liberty 1660- 1789  
*The British Academy* £3,282

**Dyer C Prof**

RA15G0006

Perceptions of Medieval Landscapes and Settlements; New Directions  
*AHRC* £12,571

**History of Art**  
**Barefoot G Dr**  
RA16G0002

The Serial in Hollywood and American Culture 1930-1941  
*The British Academy* £2,225

**Infection, Immunology, Inflammation**  
**O'Callaghan C Prof**  
RM63G0047

Primary Ciliary Dyskinesia  
*NSCAG Team via UHL NHS Trust*  
£513,094

**Law**

**Clarkson C Prof**

Co-Investigator: Cunningham S Dr,  
Law  
RL10G0020

Society of Legal Scholars Symposium 2007: Criminal Liability for Non-Aggressive Death  
*Society Of Legal Scholars* £7,000

**Zemer L Dr**

RL10G0023

Visiting scholar at Boston University in order to pursue completion of book entitled "The Idea of Public Authorship in Copyright" to be published in 2007  
*The British Academy* £2,722

**Mass Communications**

**Youngs G Dr**

RS15G0004

Ethics and the War on Terror: Politics, Multiculturalism and Media  
*ESRC* £15,319

**Mathematics**

**Snashall N Dr**

RP201G0012

Noetherian Koszul Algebras  
*London Mathematical Society* £500

**Museum Studies**

**Dodd J Ms**

Co-Investigator: Sandell R Mr,

Museum Studies

RA17G0001

Rethinking Disability Representation  
*Multi Funded* £419,645

**Dodd J Ms**

Co-Investigator: Sandell R Mr,

Museum Studies

RA17G0011

Evaluation of National /Regional Museum Partnership Programme 2006/07

*DCMS* £89,455

**Sandell R Mr**

Co-Investigator: Dodd J Ms, Museum Studies

RA17G0012

ILLUMINATE

*NESTA* £68,000

**Physics & Astronomy**

**Turner M Prof**

RP16G0031

Supplement - EPIC instrument maintenance  
*ESA* £17,647

**Willingle R Dr**

RP16G0086

Smart X-Ray Optics  
*EPSRC via University College London*  
£137,706

**Psychology**

**Hatcher R Miss**

Co-Investigator: Hollin C Prof,

Psychology

RM43G0021

Supplement - Evaluation of Offending Behaviour Programmes  
*NIO* £3,098

**Young A Dr**

RM43G0009

Assessment of stimulus contingencies determining dopamine release in nucleus accumbens, using fast cyclic voltammetry  
*Wellcome Trust* £117,665

## RESEARCH GRANT SUMMARIES MAY/JUNE/JULY 2006 ANNOUNCED OCTOBER/NOVEMBER 2006

RS30G0003

**Professor J Dumbrell**

Politics

United States Foreign Policy Working Group

Professor John Dumbrell (University of Leicester, Department of Politics and International Relations) is setting up a Working Group on US Foreign Policy within the British International Studies Association. He is co-organiser of the group with Professor Inderjeet Parmar of Manchester University. The purpose of the group is to encourage the academic study of US foreign policy, both in the contemporary world and in a more historical context. The controversial foreign policies of the US Administration of President George W. Bush have stimulated enormous interest in this subject. The new Working Group hopes to stimulate serious academic analysis, as well as to publicise the great expertise which exists on this subject in the United Kingdom. Professor Dumbrell received financial support from BISA for a launching conference at the University of Leicester on 21 September 2006. The conference featured an address from Professor Bob Hathaway, Asia Program Director at the Woodrow Wilson Center in Washington DC, on contemporary US-Chinese relations. There was also a roundtable discussion on the War on Terror, a lecture on 'Empire why not? Rethinking American Power' given by Professor Michael Cox (London School of Economics), and a business meeting on future activities of the group.

RS15G0004

**Dr G Youngs**

Media & Communication

'Ethics and the War on Terror: Politics, Multiculturalism and Media'

This seminar series explores and analyses the theoretical and practical ethical issues raised by the war on terror; for example the nature and justification of such a war and the ethical implications regarding how that war should be fought, reported on, and the impact it should have on connected ethical practices, such as military codes and civil liberties. It seeks to broaden the debate about the nature of ethics to consider how they inform and shape, overtly and covertly, varied perspectives and in turn to problematize understanding of the war on terror and the debates surrounding it. This involves thinking about the kinds of discourses and frameworks of difference and moral imperatives that are used. This series creates a space for researchers and practitioners who are not necessarily expert in ethics to consider these key ethical areas, and to discuss their significance for active citizenship, and other social issues.

RS10G0003

**Mr M Karoglou, Economics**

Co-Investigator: Prof P Demetriades,  
Economics

"Detecting structural changes in financial market volatility dynamics -the impact of financial liberalisation"

Financial liberalisation is a topic that has attracted the attention of a major part of the research community since it is not clear whether the economic gains exceed the losses for the country that engages in such reforms. Especially, the effects of financial liberalisation on stock market volatility have been the subject of controversy ever since emerging market economies began liberalising their financial markets in the 1980s and early 1990s. The reason is that a higher level of volatility results in asset price bubbles

and financial instability. The purpose of this research is to use the concept of structural changes in volatility dynamics and to provide a framework within which a series of advanced econometric techniques can be used in order to measure the impact of financial liberalisation.

RP202G0023

**Dr E Tuosto**

Computer Science

History Dependent Automata for Service Oriented Computing (HiDeA4SOC)

Service Oriented Computing (SOC) is emerging as a particularly suitable metaphor for modelling computations distributed on networks that are more and more wide, pervasive and heterogeneous. The unit of computation in SOC are services equipped with an interface amenable to be published, searched, bound and invoked by other remote services. This will likely lead to extend existing languages with searching mechanisms where queries contain semantic (rather than simply "syntactic") information. This project will use History Dependent Automata (HD-automata) to model behavioural aspects of services to be use in the searching phase. The innovative outcome of HiDeA4SOC will be a framework for verifying uniformly searching conditions (e.g., queries might specify the preferred equivalence together with the behaviour). This is an important feature because services may need different equivalences in different application contexts.

RP201G0017

**Dr E Georgoulis**

Mathematics

Diffusion and convection are fundamental processes in nature and, therefore, of immense importance in mathematical and physical modelling.

The interplay between convection and diffusion poses substantial challenges in the area of numerical simulation. This research aims in the development of a new class of finite element methods that combines the favourable complexity of the standard classical conforming finite elements with the superior stability properties of the discontinuous finite element methods without the excessive increase on the degree of freedom that discontinuous methods are known to suffer from. The new continuous-discontinuous finite element method can provide a framework for the numerical simulation of incompressible fluids in Computational Fluid Dynamics.

RP201G0002

**Professor M Tret'yakov**

Mathematics

Leverhulme Research Fellowship

The proposal has two major objectives: (1) to construct and analyse effective numerical procedures for computing conditional Wiener integrals of integral type and apply them to problems from physics, (2) obtain new numerical methods for stochastic partial differential equations (SPDEs). Wiener integrals are related to problems from quantum and statistical physics while SPDEs are used for describing complex random systems arising in various applications from physics, chemistry, biology, finance as well as in filtering theory. Efficient numerical algorithms for these stochastic objects are vital for both practice and theory.

RP16G0078

**Dr N Nelms**

Physics and Astronomy

Mars-XRD Breadboard

This grant supports our role in the development of the breadboard X-ray diffraction instrument that is being developed by an international consortium



for the ESA Aurora ExoMars lander due for launch in the 2011-2013 time-frame. The instrument will allow the geochemical and mineralogical composition of Martian surface rock and soil samples to be determined which in turn provides important information on the geological evolution and history of the planet.

#### RP16G0008

Mr D Pullan

##### Physics and Astronomy,

Although hugely successful, the NASA Mars Exploration Rovers are constrained by having to be "directed" by human experts on Earth who plan each step based on information acquired from previous steps. Simple operations can take days, thereby imposing limits to overall science return. To address this problem for future missions such as ESA's ExoMars, a consortium of space scientists and robotics engineers from UK industry and academia, have been awarded a PPARC grant to study the requirements of on-board scientific decision making (i.e. scientific autonomy). The University's contribution to the project (via the Space Research Centre, Physics and Astronomy), is to define scientific assessment criteria based on established geological field practice and the objectives of the ExoMars mission (i.e. the search for life). One of the primary goals will be to demonstrate scientific autonomy in action using full size instrumented rovers and simulated Martian surfaces specified by Leicester.

#### RP12G0040

Professor J Pan

##### Engineering

##### Multiscale Modelling of Sintering

Sintering is a process in which powder compacts are fired and consolidated into strong solid. Almost all ceramic products are made by sintering. Accurately predicting the shrinkage and microstructure of sintered products is extremely useful to ceramic manufactures. However modelling sintering is one of the most challenging problems in material modelling. Sintering deformation is fundamentally linked to microstructural evolution and depends on very subtle changes in microstructure and chemistry, sometimes at the atomic level. Consequently, the ability of prediction by the current generation of sintering models (using the continuum finite element analysis for example) is poor. On the other hand, this challenge provides us with an ideal platform for integrating modelling techniques at the atomistic, particle and continuum levels. Bringing together multi-scale elements to create an integrated sintering model is the theme of this proposal. For the first time, the integrated model will be able to take chemical impurity, doping, particle/pore size distribution, agglomeration and anisotropy into consideration. The compaction-sintering interface will take compaction history into consideration. Together these will form the next generation of sintering models with much improved ability of prediction. We will however be integrating the models rather than developing a single computer code which is unrealistic at this stage. The integrated model represents a significant

step forward in improving the predictive capability of sintering models. The techniques developed will also have a widespread and long-term influence on the materials engineering community.

#### RP12G0039

Dr M Pont

##### Chemistry

##### Non-invasive 'safety agents' for embedded processors

Previous work in the Embedded Systems Laboratory has explored a range of different techniques for increasing the reliability of systems which employ embedded processors. Such systems include cars, aircraft and medical equipment: errors in these designs can lead to loss of life or serious injury. The present project will involve the development of a novel form of monitoring unit (a "safety agent") which is expected to lead to significant improvements in the reliability of embedded processors.

#### RP12G0036

Professor S Spurgeon

##### Engineering

The Roberto Rocca Education Program announced that it has awarded the first Roberto Rocca Fellowships of up to 100 thousand dollars each to seven students from Argentina, Mexico and Venezuela for Ph.D. studies in engineering and the applied sciences at leading universities in the US and Europe. The Program is sponsored by the Techint, Tenaris and Ternium companies. In accordance with a competitive process open to students from participating countries, the Fellows were selected by a committee of senior managers from the Program's sponsoring companies. Selection was based on the committee's evaluation of the candidates' previous academic and professional accomplishments, potential for excelling in their designated Ph.D. program and commitment to their home country's economic and industrial development. The Roberto Rocca Education Program was founded on the belief that human resources that can advance industry and technology are critical to a country's success in the global economy. The program also reflects the long-standing commitment of the late Roberto Rocca and the sponsoring companies to supporting education at all levels in countries where the sponsoring companies have a major presence. Each Fellowship consists of two years of financial support to help the student meet all or part of the costs – including tuition, fees and living expenses – of his or her Ph.D. studies. With the approval of the Roberto Rocca Education Program, Fellowships may be renewed for up to an additional two years. Fellows are not required to work or do research for the sponsoring companies. The application period for the 2007 Fellowships will begin in September 2006.

#### RP12G0034

Professor I Postlethwaite

Co-investigator: Dr D Gu

##### Engineering

Certification of Diagnostic Approaches in Fault Tolerant Control Systems Professor Ian Postlethwaite and Dr Da-Wei Gu ASTRAEA (Autonomous Systems

Technology Related Airborne Evaluation & Assessment) is a national programme that focuses on the technologies, systems, facilities and procedures that will allow autonomous vehicles to operate safely and routinely in the UK. It is an industry lead consortium working with UK Government, DTI, academia and regional bodies. Leicester's task is to investigate fault tolerant and reconfigurable flight control systems and to identify the information required in order that potentially critical faults do not go unnoticed until it is too late to act. This should then lead to an approach, or guidelines for, the clearance of flight control systems for autonomous air-vehicles.

#### RP10G0003

Dr S Yang

##### Chemistry

A new frontier in nanochemistry: formation of novel core-shell nanoparticles using liquid helium droplets. A core-shell nanoparticle is an object which is about 10,000–100,000 times smaller than the diameter of human's hair but contains a core and one or more shells consisting of different materials. Potentially, these nanoparticles can possess optical, electrical, surface chemical and catalytic properties that are totally different from either the pure core or shell materials. In this research, we are seeking to develop a new and highly versatile technique to grow core-shell nanoparticles in liquid helium droplets containing billions of helium atoms. Certain selected classes of nanoparticles, such as nanowires and nanodisks, will be grown to prove the new concept. In addition, entirely novel type of core-shell nanoparticles will be grown which are not possible to be produced by any other technique. Our approach offers enormous and revolutionary possibilities in nanochemistry and we will investigate both the fundamental science and potential applications in nanotechnology.

#### RM62G0007

Dr M Tobin

##### Health Sciences

High blood pressure affects around 30% of all adults in England, and its causes are incompletely understood. This research aims to develop and use powerful new methods to identify the genetic variations that cause high blood pressure. Its findings should improve our understanding of how high blood pressure occurs, and how it can be prevented and treated more effectively. The program involves collaborations with researchers from the University of Leicester, the University of Bristol and St. George's Medical School. Following screening studies involving over half a million points in the human genome, Dr Tobin and collaborators will study in detail the blood pressure effects of different kinds of human genome variation in the targeted genomic regions. Through improved blood pressure control, such research should ultimately impact on the rates of strokes and heart attacks.

#### RM61G0016

Dr R Norman

##### Cardiovascular Sciences

Trafficking of ATP-sensitive potassium

##### channels

ATP-sensitive potassium (KATP) channels are sensitive to cellular energy levels and, thereby, can couple metabolic state to the electrical excitability of a cell. In cardiac muscle cells, potassium efflux through these channels serves to dampen excitability and, hence, contraction of the heart. By sensing low energy levels, KATP channel activation can exert a cardioprotective influence by conserving energy in both normal and ischaemic tissue. KATP channels are complex structures composed of four Kir6 and four SUR subunits. Correct assembly is required for functional channels to be inserted in the cell membrane. This vacation scholarship will permit the development of new methods to measure the insertion and removal of KATP channels from the cell membrane and, at the same time, will provide basic laboratory training for the appointed medical student. Methods developed in this study will be applied to ongoing studies to investigate channel subunit interactions and the regulation of channel numbers in response to ischaemic insult.

#### RM60G0050

Professor M Manson

Co-investigator: Dr E Moiseeva

##### Cancer Studies and Molecular

Cancer is an increasing problem all over the world. Some dietary constituents in fruit and vegetables can decrease the risk of developing cancer. Our project will investigate the dietary chemopreventive agent indole-3-carbinol derived from cruciferous vegetables. This dietary agent decreased the toxic side effects of chemotherapy in animal models. It also induces cell death in some cancer cells in the laboratory. Indole-3-carbinol has already shown very encouraging results in phase II clinical trials in patients with intraepithelial neoplasias and respiratory papillomatosis. In the USA it is an approved nutritional supplement, which has very few side effects after long-term consumption. Our project has two main aims. Firstly we would like to investigate whether indole-3-carbinol may decrease the side effects of current treatments with toxic chemotherapeutic drugs and, thereby, improve the efficacy of treatments in patients with metastatic colorectal cancer. Our second goal is to investigate whether indole-3-carbinol can be used for treatment of malignant bowel cancer alone and in combination with other drugs. If this study is successful, it will facilitate the development of more effective treatment for colorectal cancer.

#### RM60G0034

Mr T Griffiths

Co-Investigators: Dr M Kriajevska & Mr H Qazi

Cancer Studies and Molecular Medicine Are transcriptional repressors of E-cadherin and the 'cadherin-switch' pivotal in bladder cancer progression? In England and Wales, bladder cancer is the fourth most common cancer in males and the eighth in females. Non-muscle-invasive tumours show substantial differences in their potential to invade muscle or spread to other organs (metastasize). For patients with 'high-risk' non-muscle-invasive bladder cancer, the major challenge is to identify those



who can safely conserve their bladders, and to identify proteins which could be a target for new therapies. The ability of tumour cells to invade surrounding tissues, and to enter the blood stream or lymphatic vessels is recognised as the main predisposition to progression. The cadherin group of proteins are interlinked with these processes. In particular, reduced E-cadherin expression is associated with bladder cancer progression but there is insufficient data regarding its regulation. We plan to evaluate the expression of factors which reduce E-cadherin expression in bladder cancer cell lines and human bladder tissues, and to determine their biological/clinical significance.

#### RM33G0038

**Dr C Hewitt**  
Genetics

Elite athletes are more susceptible to respiratory infections than untrained individuals. In collaboration with the Department of Sports and Exercise Science at Loughborough University, we have shown that elite athletes suffer a decline in immune response to respiratory pathogens after exercise and that this can be prevented by the consumption of carbohydrate containing drinks during exercise. In this study, we hypothesise that prolonged exercise alters the migratory or lung homing properties of T lymphocytes, the main immune cell responsible for fighting virus infections. In elite athletes, we therefore aim to determine whether carbohydrate supplements consumed during exercise alter T lymphocyte recirculation and trafficking patterns.

#### RL10G0022

**Professor C Clarkson**  
Co-investigator: **Dr S Cunningham**  
Law

#### Conference on Criminal Liability for Non-Aggressive Death

A two day conference is being held at the University of Leicester in April 2007 to consider whether all cases where a death has been caused unintentionally should be classified as manslaughter or whether there should be several specific offences covering such killings.

Currently there are a few such specific offences, for example, causing death by dangerous driving and the new offence causing or allowing the death of a child or vulnerable adult. The main issue for this conference is whether these offences ought to be retained and whether further specific offences such as causing death by careless driving, corporate manslaughter, medical manslaughter and killing through the illegal supply of drugs should be introduced. Papers presented by renowned experts in these various fields will explore whether there are good reasons for the introduction of particularised offences or whether the context of the killing is irrelevant and all should be dealt with as manslaughter.

#### RE10G0009

**Dr T Jarvis**  
Education  
Pollen - Seed Cities for Science

The Regional Science Learning Centre East Midlands at the University of Leicester has secured European Commission funding with organisations in

France, Spain, Italy, Portugal, Estonia, Hungary, Sweden, Belgium, Germany, Netherlands and Slovenia. There will be one 'seed' city in each country in this 3 - year project. Leicester will be the UK 'seed' city. The intention is to support European schools to raise standards in investigative science. Fourteen Leicester city schools will participate in the first year. They will also work with other science organisations such as museums and local industry. The ideas from the group will be disseminated to teachers in the 12 European Countries. Dr Jarvis will be responsible for producing advice for all the European trainers in the project based on her experience of primary science training and research. She will also be responsible, with Sweden and Spain, for the evaluation of impact on teachers, pupils and city organizations.

#### RA17G0011

**Dr J Dodd**  
Co-investigators: **Professor E Hooper-Greenhill & Dr R Sandell**  
Museum Studies

Evaluation of the National /Regional Museums Partnerships in 2006/2007 Since 2003 the Department for Culture, Media and Sport (DCMS) and the Department for Education and Skills (DfES) have jointly sponsored a national programme of museums' education work. From April 2006 to March 2007, 12 national museums will be leading the delivery of education and community-focused projects, working in partnership with over 50 regional museums and organisations. RCMG has been commissioned to evaluate the 12 projects, building upon an evaluation of the 2003-4 programme which generated clear evidence of the impact of the partnerships on learning across the range of individuals, groups and communities. The evaluation for 2006-2007 will document and assess the scope and character of the learning and social impact of the partnerships, exploring, in-depth, a number of specific themes and issues that mesh with government agendas, and seek to further understanding of the partnership process. In this way we seek to capture the richness, success and depth of this unique programme.

#### RA17G0001

**Dr J Dodd**  
**Dr R Sandell**  
Museum Studies  
Rethinking Disability Representation

Funded by the Heritage Lottery Fund (HLF) and NESTA, through their Illuminate programme, Rethinking Disability Representation presents a unique opportunity to reveal the hidden histories of disabled people in the UK. The aim of the project is to create a lasting change in the way museums approach the history of disability and to encourage them to reflect the wide ranging roles that disabled people have played in our history. The project will bring together nine museums and galleries from across the UK to work with a team of disabled and non-disabled professionals to develop a range of ground-breaking displays and other public programmes which engage audiences with (often challenging) ideas linked to disability and to the lives of disabled people. The learning and best practice from the programme will be

evaluated and used to inform practice across the rest of the UK's museums and galleries.

#### RA16G0002

**Dr G Barefoot**  
History of Art and Film  
The Serial in Hollywood and American Culture, 1930-1941

The film serial, or chapter-play, represented a significant part of production at Universal Studios up to 1946, and Columbia and Republic Pictures up to 1956. Some academic work has been done on its emergence in the 1910s, but sustained discussion of the 'sound serial' has been almost entirely limited to fans and collectors. Addressing that gap, this study will examine the narrative, industrial and cultural significance of an episodic structure and cliff-hanging chapter links at a time when Hollywood was otherwise dominated by the narrative closure of the feature film. Funding from the British Academy will enable an examination of the Jack Mathis Papers, a collection of Republic Pictures material recently donated to Brigham Young University in Utah, as well as material held at archives in Los Angeles, including those at the University of Southern California and the Academy of Motion Pictures Arts and Sciences.

#### RA16G0001

**Dr P Lindley**  
History of Art  
The Leverhulme Research Fellowship for 2007

Sculpture in Crisis: Renaissance and Reformation in English Imagery The book will shed light on the major revolutions in art which occurred in the reigns of Henry VII, Henry VIII and Elizabeth I. Anyone interested in Tudor history or in British Art should find this Research project fascinating.

It will be the first book to cover the two fundamental changes which affected sculpture in the sixteenth century. The first section will examine the arrival of the Renaissance in England from c.1500-c.1535, and will include the work of indigenous sculptors and of their continental rivals, examining why Italian sculptors in particular were so successful. The second section will focus on the problems posed by the Reformation - or reformations - under the Tudor monarchs to c.1570. The patronage and reception of religious imagery, and the reasons why so much sculpture was rejected, and ultimately destroyed, will be scrutinised in this path-breaking work.

#### RA12G0011

**Dr G Dawson**  
English  
'Emasculated Sensualities in Art Masquerading as Art for Art's Sake'

Dr Gowan Dawson of the Department of English has been awarded a British Academy Overseas Conference Grant of £300 to attend the annual conference of the Research Society for Victorian Periodicals at CUNY in New York City. At the conference Dr Dawson will present a paper entitled "Emasculated Sensualities in Art Masquerading as Art for Art's Sake": Henry Maudsley, Scientific Theories of Degeneration and Periodical Reviews of Aesthetic Literature".

#### RA12G0007

**Dr G Walker**  
English  
The project aims to produce a critical edition of early-modern literary and non-literary texts from England and Scotland of the period from 1509 to 1660. By editing each of the texts afresh from original manuscript and the earliest printed sources, I hope to explore the wider understandings of Anglo-Scottish literary culture that are possible when such texts are brought into extensive and fruitful dialogue. My earlier work (especially Writing Under Tyranny (2005)) suggested ways in which the resonant prose of statutes or proclamations might find echoes in literary texts of the same period. This project will take those soundings further and examine a range of 'official' texts alongside both private and literary writings. It will also explore the central issue of how far early-modern English and Scottish literary cultures, both prior to and following the Union of the Crowns, were parallel traditions, similar but separate, and how far they influenced each other beyond the well-known examples of the Scottish 'Chaucerians', or the borrowings of English poets such as Wyatt and Surrey from the work of Douglas or Henryson.'

#### RA11G0016

**Dr L McFadyen**  
Archaeology and Ancient History  
Archaeological Architectures

This research aims to explore the character of accounts of architecture within prehistory, historical archaeology and contemporary architectural studies. One of its major aims is to establish a dialogue between scholars of archaeology and architecture in order to identify common interests and outline new approaches. There are currently three distinct disciplinary approaches to the study of architecture: Prehistory, Historical Archaeology and Architectural History. Each is structured around a distinctive body of theory as to what, precisely, architecture is, and each has developed a distinctive suite of techniques to record and understand it. The result is the production of very different kinds of knowledge - three separate narratives concerning architecture in parallel, neither crossing nor overlapping. The irony of this situation is that each of these strands has the potential to inform the other and in so doing generate wholly new, and highly productive ways of thinking about, exploring, and interpreting architecture, both past and present. Outcome: A colloquium with speakers from prehistory, historical archaeology and architectural history, and a monograph on Archaeological Architectures.

#### RA11G0001

**Professor G Shipley**  
Archaeology and Ancient History  
Historical and philological commentaries on the Periplus attributed to Skylax of Karyanda  
Graham Shipley plans to complete two publications on the intriguing 'Circumnavigation of the Inhabited World', a Greek mariner's handbook of the 4th century BC whose authorship is



unknown (it is commonly called 'Pseudo-Skylax'). No published English translation exists, yet the text is of great significance for the ancient Greeks' view of the Mediterranean and their place in it, as well as the ideology of the Greek city-state. The projected publications are a book in English and a contribution to a German multi-volume project on ancient historical texts. The book will comprise extended introduction, Greek text with facing translation, historical notes, and maps, and will be accessible to students and the general reader. The German project is 'Die Fragmente der griechischen Historiker' (Fragments of the Greek historians), a more detailed scholarly edition being prepared by a multi-national team from all over Europe.

RP16G0052

**Dr M Sims**

**Physics and Astronomy**

The Life Marker Chip (LMC) instrument will utilise bio-technology assay techniques to detect specific molecules that may be associated with past or present Life on Mars. It will utilise the development work conducted in bio-technology on protein based receptors and will exploit the highly specific recognition and binding properties of these types of molecular receptors. This can be thought of a "lock and key" approach where the molecule provides the key which fits the receptor lock. The shape of the receptor molecule only allows other molecules of a given shape to fit and "lock" to it. Much work has been done within the biotechnology sector on production of molecular receptors, the LMC project intends to

utilise those existing (commercial and research) receptor libraries, which will be screened for sensitivity against the target molecules. From a brief survey it is already known that some exist for many of the suitable/identified target molecules. DNA and molecular chemistry techniques will be utilised to modify the molecules as appropriate for high sensitivity and selectivity against the target molecules. Binding of the molecules (target and receptor) together will be detected using fluorescent molecules and this will be read out using a solid-state imaging detector (a CCD or APS). Target molecules will include amino-acids, long chain molecules which are associated with Life on Earth for example cell membranes and pigments. The instrument will target past life and present Life based around water-based carbon life chemistry. It will be used in conjunction with other instruments on the ExoMars payload to search for Life and organics on Mars. Within a space mission context, LMC technology is at a low Technology Readiness Level (TRL) and requires development for the unique challenges offered by in situ Mars and planetary exploration. Therefore a rapid development programme is required to raise the TRL to levels where a full engineering model and flight instruments could be easily built. This was the basis for a competitive ESA study call which closed on the 5th October 2005 which was won by the UK led international SMILE consortium with Dr Mark Sims of the University of Leicester as the Principal Investigator. Cranfield University via Dr.

David Cullen provide the bio-technology expertise with vital contributions from other Universities (Aberdeen, ICST, Open University) along with UK industry (SSTL, EADS-Astrium and QinetiQ). Key contributions to the study and the flight instrument will be provided by the Netherlands, Germany and the USA. The 20 month study concentrating on design of a breadboard demonstrator and system engineering aspects of an instrument suitable for the ExoMars mission – an optical waveguide based fluorescent system with an antibody micro-array – started on the 29th March 2006. The study aims to raise the technology readiness level of first generation LMC via: (i) build and test of an end to end demonstrator; (ii) analysis of appropriate biomarker targets; (iii) limited demonstration of sample preparation methods; (iv) demonstration of antibody development; and (v) demonstration of survival of key instrument components under the expected ExoMars mission environment.

RP16G0032

**Dr A Grocott**

**Physics and Astronomy**

Magnetospheric substorms are an explosive phenomenon which occur in the near-Earth space environment. They arise as a result of the interaction between the Sun and the Earth's magnetic field and cause the bright auroral displays commonly referred to as the Northern Lights. Understanding phenomena such as substorms is key to fully understanding the question of how the Sun affects the Earth. By measuring

the ionospheric plasma motion that is driven by substorms we can effectively diagnose energy flow in the solar system, which is a central theme of current UK space research. Such measurements are made by ionospheric radars, a pair of which (called CUTLASS) are currently operated by the University of Leicester. I was invited to the recent International Conference on Substorms to discuss radar observations of substorm-associated convection. This Royal Society award facilitated my attendance and resulted in valuable exposure to UK research on substorms and substorm-related phenomena.

RA11G0013

**Professor C Ruggles**

**Archaeology and Ancient History**

Royal Society Conference Grant to attend the XXVIth General Assembly of the International Astronomical Union. The IAU's triennial General Assembly is the foremost general meeting for astronomers from all over the world, and the 26th General Assembly is being held this summer in Prague. As Secretary of Commission 41 (History of Astronomy), one of fifty Commissions within the IAU, Prof. Ruggles is responsible for the overall organization of the Commission's Science, Business and Working Group meetings. Within these sessions he is delivering a keynote lecture entitled "Fundamental Problems of Modern Archaeoastronomy".



# Books

## Difference and Diversity in Counselling - Contemporary Psychodynamic Approaches

Editor: Sue Wheeler; Publishers: Palgrave Macmillan; ISBN: 1-4039-4327-3; Price: £17.99

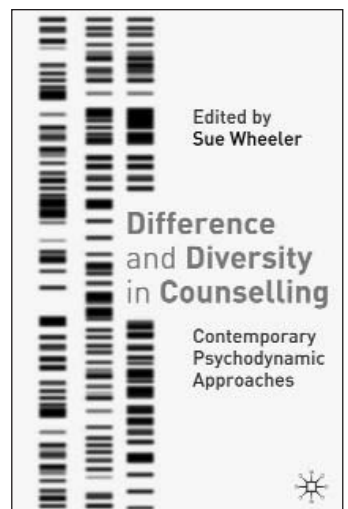
▶ All counsellors are compelled to take account of the diverse society in which they practice and to inform themselves of best practice with all client groups. This book provides a contemporary psychodynamic perspective on difference and diversity to bring practitioners up to date with current thinking when faced with a client who is in some way 'different'.

References to race, culture or disability in classical psychoanalytic literature are few. In a society that embraces diversity and seeks to afford equality for all, theories of male and female identity development need revisiting. Older people make up a large proportion of the population and religious beliefs make headline news,

but psychodynamic perspectives on clinical work with such groups are limited. Indeed, the social context of the twenty-first century, that provides the backdrop for the hopes, fears and aspirations of our clients, warrants attention, as people and organisations are shaped by the social systems that prevail. In the past decade equal opportunities legislation and the need to be proactive in thinking about diversity has begun to make its mark.

This book is essential reading for counsellors and psychotherapists in training and for experienced practitioners whose continuous professional development will be enhanced by re-evaluating how diversity affects their practice.

Sue Wheeler has been a Counsellor and Psychotherapist in several settings over the last 30 years. She has also been training counsellors and psychotherapists for most of those years, and is now the Director of the Counselling Psychotherapy Programme at the University of Leicester, UK. She is the author of many articles in professional and refereed journals and has contributed to many chapters in books on counselling and supervision. She is the sole author of *Training Counsellors: The Assessment of Competence*, the joint author with Janice Birtle of *Personal Tutoring in Higher Education* and with David King of *Supervising Counsellors: Issues of Responsibility*. ☛





## Doctors and Paintings

Authors: John Middleton and Erica Middleton; Publisher: Radcliffe Publishing; ISBN: 1-84619-052-5; Price: £24.95

▶ Health Professionals deal with people. Engagement with works of art may provide insights into humanity and develop self awareness, as well as offering replenishment for the psyche.

Forewords by Sir Liam Donaldson and Peter Wheeler Respectively Chief Medical Officer, Department of Health; Dean, College of Fine Arts, University of Sharjah, United Arab Emirates

John and Erica Middleton guide the reader gently along the interface between art and medicine, in their own inimitable style. Whether in search of an introduction to the world of art, or wishing to consider the role that the formal study of art might play in professional development, reading this book is likely to prove rewarding. Turning these pages will help doctors

to appreciate afresh the window through which they look upon the world. Sir Liam Donaldson, in his Foreword

Great art provides insights into the human condition. If through a systematic engagement with art and literature as an extension of their medical practice, GPs can apply those insights to themselves (know thyself), they can equally apply them when dealing with patients. Doctors and patients are people, subjects. Intersubjectivity is perhaps a better word than empathy to define what this book seeks to promote, the capacity of the doctor to enter into and inhabit the patient's subjectivity Peter Wheeler, in his Foreword

John Middleton is a Leicestershire

GP who was awarded an MD at The University of Leicester in 1997 for research into communication with patients.

Erica Middleton is a painter who lectures in Art History with the Open University and the University of Nottingham.

The book is written as a conversation between three doctors and their art tutor, with interjections by a 'Greek chorus'. Reproductions of Erica's paintings illustrate the text and there are also plentiful references to images of art on the web.

This is an introduction to looking at art in a new way for health professionals and anyone else who wishes to look beyond the surface of paintings. 📖



## Ghosts and Hauntings in and around Leicestershire

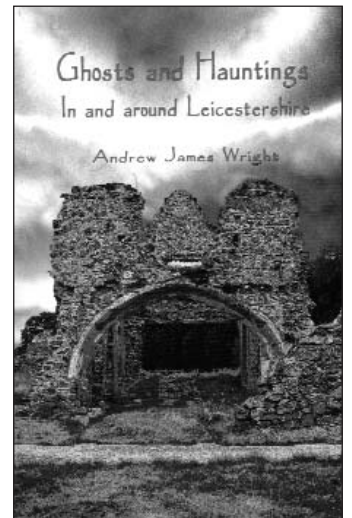
Author: Andrew James Wright; Publisher: Heart of Albion; ISBN: 1-872883-99-0; Price: £7.95

▶ A white lady who waits at a bus stop by the ruins of a nunnery, but vanishes when the bus stops. A coach is drawn through Bradgate Park by four black, headless horses. Factories on frog island that have been exorcised. 'Ordinary' houses with inexplicable sounds of chains rattling and doors slamming. A multitude of pubs and rectories with supernatural 'residents'.

Leicestershire has a wealth of tales of ghosts, hauntings, poltergeists and other anomalous events. In 'Ghosts and Hauntings in and around Leicestershire' the experienced paranormal researcher Andrew James Wright recounts these reports and attempts to understand what is really going on.

Andrew James Wright was born

in Leicester in 1955. He works as a porter at the University of Leicester. His previous publications include 'The Ghost of Braunstone Hall', 'The Lively Ghosts of Leicestershire' and 'Haunted Leicester'. An active ghost researcher for 30 years these days he prefers lecturing about the subject. 📖



## Shattered

Category: Biography & Autobiography Publisher: Arrow Format: Paperback, 320 pages  
Pub Date: September 2006 Price: \$12.99 ISBN: 978-0-09-949851-3 (0-09-949851-0)

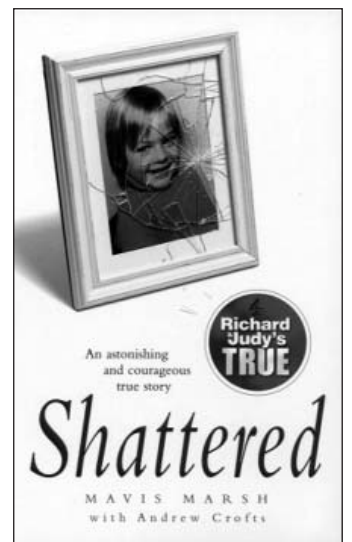
▶ The story of Leicester postgraduate Matthew Marsh, who did a PhD in Astrophysics is told in a new book written by his mother:

Sometimes a family's love can achieve the impossible.

On 12th October 1995, Mavis Marsh was woken to the news every parent dreads most. 'It's your son,' the policeman told her. 'He's been in an accident.'

Only hours earlier Matthew had been set for a dazzling future but, in one terrible night, a devastating tragedy altered everything. Days later, Mavis found herself standing at her son's bedside as doctors told her to give up all hope. According to them, the damage to Matthew's brain was too severe for him to recover, and the boy she had known and loved was gone forever.

But Mavis and her husband Keith couldn't give up on their only son. And refusing to accept the diagnosis, they started to work with Matthew themselves, desperately urging their comatose son to fight. For months they tried, to no avail. But then, almost half a year later, he suddenly started to respond... 📖





## Offending Behaviour Programmes - Development, application and controversies

Editors: Professor Clive R. Hollin and Dr Emma J. Palmer; Publisher: John Wiley and Sons Ltd; ISBN: 0-470-02335-X; Price: £75.00




► The delivery of treatment through the use of programmes as an approach to therapeutic intervention that has been present in clinical psychology for some time. The arguments and debates around programmes, both conceptually and in terms of technology, have thus been widely rehearsed in the broader clinical literature. However, the growth in the use of offending behaviour programmes has been exponential within the criminal justice system over the last decade.

Typically, offending behaviour programmes are empirically-based interventions, aimed to reduce re-offending, for use with either offenders in general, or with particular groups of offenders such

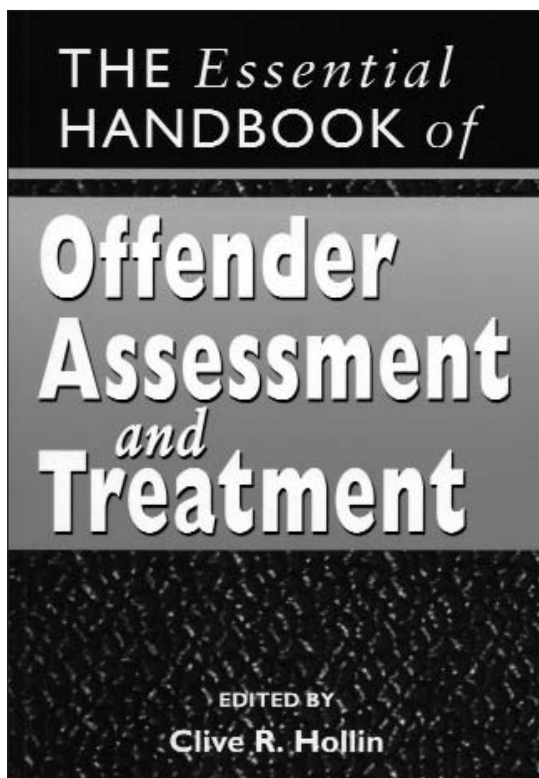
as violent offenders and sex offenders. Offending behaviour programmes are interesting at two levels. Firstly, there are various technical issues, such as the design and implementation of programmes, the accreditation and management of programmes, alongside the critical question of their effectiveness in both motivating offenders to partake in treatment, and ultimately their impact in reducing re-offending. Secondly, there are broader issues such as impact of programmes on traditional forms of practice, the complications associated with a national roll out of programmes, philosophical objections to working in a prescribed manner, and training practitioners to deliver programmes.

This book considers these issues from both a general perspective, as well as containing chapters considering offending behaviour programmes for specific groups of offenders: generic programmes, violent and domestic violence offenders, sexual offenders, and substance-misusing offenders.

Professor Clive Hollin is a Fellow of the British Psychological Society and a Chartered Forensic Psychologist. He is professor of Criminological Psychology at the University of Leicester, and the first recipient of the Senior Career Award from the Division of Criminological and Legal Psychology of the BPS, for his distinguished contribution to forensic psychology. 

## The Essential Handbook of Offender Assessment and Treatment


Editor: Professor Clive Hollin; Publisher: John Wiley and Sons Ltd; ISBN: 0470854367; Price: £26.99



► This Essential Handbook provides the critical elements from its companion volume, the successful Handbook of Offender Assessment and Treatment. A comprehensive review of assessment and treatment, it covers the major offender groups: sex offenders, violent offenders, offenders with mental and personality disorders, and property offenders. A range of treatment approaches is also included, incorporating behavioural, cognitive, skills-based, anger management, school programmes, and family-based approaches.

The Essential Handbook of Offender Assessment and Treatment has also recently been translated into Chinese.

Professor Clive Hollin is a Fellow of the British Psychological Society and a Chartered Forensic Psychologist. He is professor of Criminological Psychology at the University of Leicester, and the first recipient of the Senior Career Award from the Division of Criminological and Legal Psychology of the BPS, for his distinguished contribution to forensic psychology.

Dr Emma Palmer lectures in forensic psychology at the University of Leicester. She is an associate fellow of the BPS, and a chartered forensic psychologist. She has run training events for the National Probation Service and is managing editor of the journal Psychology, Crime and Law. 



## Studies on the Personal Name in Later Medieval England and Wales


Editors: Dave Postles and Joel Rosenthal; Publisher: Medieval Institute Publications, Western Michigan University; ISBN: 1-58044-026-6; Price:

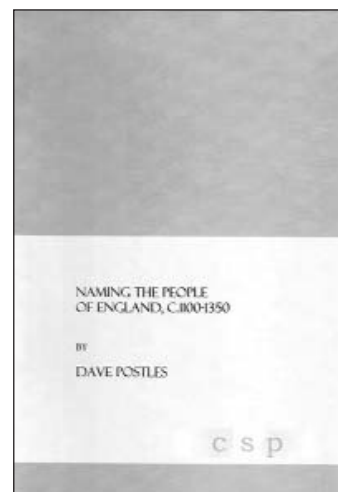
► In recent years, research into the social and cultural significance of names and naming in medieval western Europe has made enormous progress through the coordinated work of a team of scholars in France, the Iberian peninsular and Italy. The continuous stream of volumes produced by that consortium comprised essays by members of the team about particular areas and social groups. Nothing comparable has appeared for England and Wales - that lacuna was the stimulus for this volume. In this present volume,

we attempt to fill this gap with fourteen essays, some reprints of seminal papers, others newly commissioned. Three introductory papers review the context; six consider social groups (women, peasants, gentry, clergy); three approach the importance of location (Wales and the 'North'); and two reappraise aspects of change in the important immediately post-Conquest era. The intention is in this way to bring forward a 'reader' on the implications of naming which, whilst being introduced into recent

medieval social and cultural analysis, has not hitherto had a comprehensive and accessible introduction.

It contains essays by: Joel Rosenthal; Cecily Clark; Dave Postles; Virginia Davis; Michael Bennett; Philip Niles; Louis Haas; Peter Franklin; John Insley; Heather Jones; Chris Lewis; and Stephanie moors Christelow.

Dave Postles is Fellow in the Department of English at the University of Leicester. 



## People



### Staff Distinctions as reported to Senate on 04 October 2006

► The following have been invited to serve as members of the Medical Research Council College of Experts:

► **Professor Peter Andrew** (Infection, Immunity and Inflammation)

► **Dr Shaun Heaphy** (Infection, Immunity and Inflammation)

► **Dr Nicola Royle** (Genetics)

► **Professor Wilhelm Schwaeble** (Infection, Immunity and Inflammation)

► **Dr Doug Tincello** (Cancer Studies and Molecular Medicine)

► **Professor Bryan Williams** (Cardiovascular Sciences)

► **Dr Liz Anderson** (Medical and Social Care Education) and Mr Jon Shears (Audio Visual Services) have been awarded the Gold Award and the Friman Best in Show Prize at the Health and Science Communications Association 2006 Media Festival in Washington, DC, for a DVD commissioned by Dr Anderson with money from the National Patients' Safety Agency.

► **Professor Helen Atkinson** (Engineering) has been invited by the Secretary of State for Defence to serve for four years on the Defence Nuclear Safety Committee.

► **Dr Dai Davies** (Chemistry) has been elected to the Royal Society of Chemistry's Dalton (Inorganic) Council

for three years.

► **Ms Christine Fyfe** (University Librarian) has been elected to the SCOUNL (Society of College, National and University Libraries) Executive Board.

► **Professor Rob Hillman** (Dean of the Faculty of Science/Chemistry) has been elected President Elect of the International Society of Electrochemistry for 2007/08 and 2008/09. He will then serve as President in 2009/10 and 2010/11 and Past President for a further two years.

► **Professor Sir Alec Jeffreys** (Genetics) has been awarded the 2006 Dr H.P. Heineken Prize for Biochemistry and Biophysics by the Royal Netherlands Academy of Arts and Sciences.

► **Ms Erica Mortimer** (Accommodation and Catering Service) has successfully completed the NVQ3 in Hospitality Service.

► **Professor Ian Postlethwaite** (Pro-Vice-Chancellor/Department of Engineering) has been elected a Fellow of the Royal Academy of Engineering. He has also been appointed to the post of Board Director on the Leicester Regeneration Companies Board.

► **Dr Emma Raven** (Chemistry) has

won the 2005 Royal Society of Chemistry's Industrially Sponsored Award in Inorganic Biochemistry.

► **Dr Fernando Schindwein** (Engineering) has been selected by the editors of Marquis Who's Who to have his biographical profile included in the 2006-07 Edition of Who's Who in Science and Engineering.

► **Professor Joanne Shattock** (Dean of the Faculty of Arts/English) has been invited to serve as a member of the AHRC's Research Panel for English Language and Literature from 1 September 2006.

► **Professor Mark Thompson** (Pro-Vice-Chancellor/Department of Law) has been appointed as a Consultant Editor of Halsbury's Laws of England.

► **Dr Jane Wellens** (Staff Development Centre) has been appointed as a Higher Education Academy Accreditor and will serve on accreditation panels for the Academic Practice awards.

► **Dr Shengfu Yang** (Chemistry) has been awarded an EPSRC Advanced Fellowship for five years.

### Student Distinctions

► The following research students have won awards in the UK Grad Midlands Hub Poster competition at the UK Grad Midlands event held at the University of Warwick in July


2006:

Merav Tauber (Genetics) – 3rd prize  
Ameena Camps (Geology) – runner up  
Vincent Williams (Geology) – runner up.

## AWARD FOR PROFESSOR JEFFREYS

► The inventor of DNA Fingerprinting at the University of Leicester, Professor Sir Alec Jeffreys, has been honoured with a prestigious international accolade.

Sir Alec, who is Royal Society Wolfson Research Professor in the Department of Genetics, is to be awarded the Dr H.P. Heineken Prize for Biochemistry and Biophysics 2006 by the Royal Netherlands Academy of Arts and Sciences in recognition of the discovery of the revolutionary technique.

The Dr H.P. Heineken Prize for Biochemistry and Biophysics (\$150,000) is one of six prizes in sciences and arts to be presented during a special session of the Royal Netherlands Academy of Arts and Sciences at the Beurs van Berlage Building in Amsterdam. 



## Obituaries

### ► Martin Löb

We have learnt, with regret, of the death of Martin Löb aged 85. Martin Löb was a former research student at the University and has been described by The Guardian as "...a central figure in the early development of mathematical logic."

### ► David Campton

Mr. Campton, a distinguished playwright, who was awarded an Honorary Doctor of Letters degree by the University of Leicester in January 2006 has died aged 82

David Campton was born in Leicester and educated at what was

then the Wyggeston Boys' School (now Wyggeston and Queen Elizabeth I College).

He gave up a safe job with the East Midlands Gas Board in order to write for a living. Occasional diversions into acting and directing involved him most notably with the Scarborough theatre in the round in its early days, as well as other theatres, including the Phoenix Theatre in Leicester.

In 1958 he received an Arts Council Bursary for playwriting and he has continued to write ever since. More than 100 one-act and 20 full-length stage plays by David Campton have been produced, a handful of

which have settled into the repertoire of the amateur theatre, regularly performed in schools and festivals. Some of his shorter pieces have had West End productions and many have been produced overseas, but for most of the time he has written for, and been performed in, what has been called 'The Other Theatre', including "Jonah", commissioned for and first presented in Chelmsford Cathedral.

David Campton's adaptation of "Frankenstein" was produced in the Leicester Haymarket Theatre's main auditorium, and two other plays: "Dark Wings" and "The Life and Death of Almost Everybody" in the

Haymarket Studio

### ► Professor Charles Rees, CBE, FRS Professor Charles Rees died on 21 September aged 78

Professor Rees was Professor of Organic Chemistry at the University of Leicester from 1965 to 1969, and was awarded an Honorary DSc in 1994.

### ► Emeritus Professor Olive Banks

It is with great regret that the University of Leicester has learned of the death of Professor Olive Banks. Professor Banks was a member of the University's Department of Sociology between 1973 and 1982.

# Lifetime Achievement Award Nomination for Eminent Leicester Space Scientist



**RECOGNITION-Professor Ken Pounds**

► An eminent British scientist, whose work was this year celebrated among '100 Discoveries that Changed the World' has been shortlisted for a Lifetime Achievement Award

Professor Ken Pounds CBE, FRS, Emeritus Professor of Space Physics at the University of Leicester has been identified for the accolade by the Times Higher Education Supplement (THES).

Professor Pounds, a UK pioneer of space science, was among the founders of the space programme at the University of Leicester- now among the biggest academic space research centres in Europe. Having rejected early invitations to join

NASA and the new European Space Research Organization, he embarked on a career-long ambition to help establish the international standing of space science in the UK – and Europe.

Best known for his research in X-ray Astronomy, which led to the discovery that massive Black Holes lurk at the centre of many galaxies throughout the Universe- he is continuing to inspire new generations of young scientists through his dedication to science communication.

Five of Professor Pounds' publications from this research appear in the all-time 1000 most-cited astronomy papers; with some 300 publications overall he is named as a highly cited researcher by Thomson Scientific.

Vice-Chancellor Professor Robert Burgess said:

"Over an extended career Professor Ken Pounds has made important scientific discoveries that have advanced our understanding of the universe, has provided vision and leadership contributing to the strength of UK science, and has been an enthusiastic and effective champion of initiatives to inspire the next generation of scientists and engineers.

"He is among the most eminent academics at the University of

Leicester whose work is world-class."

Professor Pounds said:

"Looking back over 50 years, I appreciate my good fortune in being directed to the new Rocket Research Group at UCL to study for my PhD. That was in October 1956, still a year before the launch of Sputnik 1, and an initiative that pays tribute to the foresight of leading scientists at the time.

"Shortly after coming to Leicester, in 1960, the first Cosmic X-ray source was discovered, giving our

new Space Science group the opportunity to get into an exciting new area of research from the beginning. With the crucial support of many outstanding colleagues (and friends) I believe we were able to take that opportunity, contributing to human knowledge of the cosmos, while helping establish the UK and Europe as major players in Space Science."

The winners will be announced at an awards ceremony in London on November 15. 🗨

## ENTERPRISING STUDENT

► Dipesh Varia, an economics student from the University is one of two people to gain the title Leicestershire's Most Enterprising Students for 2006.

Dipesh took part in the Shell Step programme through Success Matrix, who are the biggest Shell Step delivery agent in the midlands. Dipesh spent the summer implementing the internationally recognised ISO 9001 standard at Iskra Wind Turbines based in Loughborough.

Dipesh's host company Iskra Wind Turbines are going through a period of great change due to ever increasing demand, and needed a

flexible yet robust management system in place capable of dealing with the ever changing challenges of rapid growth and success. Dipesh was given the essential task of identifying and implementing the management procedures required to obtain the international standard of BS IN ISO 9001:2000 certification. Dipesh persisted through difficulties and set backs to produce results which have laid a solid foundation for the company to build upon, and will have a strong impact on the future development of the organisation during these testing times of high growth. 🗨



## Retirements

### Dr Colin Ockleford

▶ Dr Ockleford retired from the Department of Infection, Immunity and Inflammation at the end of August.

Colin came to the University in July 1977 from Dept of Pathology in Cambridge. He carried out research at University of Paris, Jussieu; National Institutes of Health, Bethesda, Maryland; University of Virginia at Charlottesville, USA; Brookhaven National Laboratory, Long Island, USA and the Chinese Academy of Sciences, Beijing, Peoples Republic of China during periods of leave of absence and has ongoing extensive European research collaborations through an EU network of excellence.

Dr Ockleford's research on the

maternofetal interaction won him the premier research award for younger Anatomists the Symington Prize and this formed the basis of his election to Fellowship of the Royal College of Pathologists and the award of a DSc by St Andrew's University.

He is a keen supporter of the Haldane Society and has held all of its major offices including President.

As a licensed teacher of Anatomy he became Secretary of the Company of Anatomists, the holding Company for the Anatomical Society of Great Britain and Ireland and was this Society's Founder Education Chairman and a member of Council and the Committee of Management. He is currently a member of the International Federation of Anatomical Association's Committee on Anatomical Education.

Colleagues wished Colin a happy retirement.



Professor C. Ockleford pictured with Professor P. Andrew.

### Barrie Frankland

▶ Barrie has retired from the University on 30 September 2006. Barrie was the Superintendent of Gardens for over 31 years during which time he has overseen many changes to the horticultural landscape. He was heavily involved in the creation of the Arboretum in Knighton. Barrie has also been responsible for designing the landscaping around the various buildings which have been erected over the past 30 years.

Barrie and his team have also been instrumental in keeping the grounds in and around the University's Student Accommodation to such a high standard. Barrie's floral displays at De Montfort Hall, for the Degree Congregations have been highly praised over the years by staff, graduands and their guests.

Barrie has been a keen runner all his life and he is keen to continue his running for as long as he can. He is also eager to travel whilst pursuing his other hobby of motorcross.



Barrie Frankland right with his partner Elaine left pictured with Jim Shaw.



Jim Shaw with Richard Green.

### Richard Green

▶ Richard retired from the University on 30 September 2006 after more than 33 years service. Richard joined the university in 1973 as the Building Surveyor. At that time Richard was the only Building Surveyor employed by the University. One of his first jobs was to help deal with the collapse of the Bennett Building, not an auspicious start to his University Career.

During those 33 years of service as the Building Surveyor Richard has witnessed a phenomenal increase in the size of the University Estate. He has served 3 Vice-Chancellors, 5

Registrars and 4 Bursars/Directors of Estates. Richard has very much enjoyed his time at the University and I am sure he will be missed by many colleagues both within the Estates Office and throughout the Campus.

Richard intends to continue with his career as a Building Surveyor on a part-time basis. Although he no longer plays Rugby Football, he remains very active in the sport at County level and will continue that involvement into his "so called" retirement. He will also continue his work with the Scout movement whilst finding the time to travel and see more of his family. ☺



Graham Benskin pictured with Barrie Frankland.

### Graham Benskin

▶ Graham Benskin Retires after 40 Years' Service

On 13th July 2006, friends and colleagues from Horticultural Services and the Biology Department gathered in the Botanic Garden to say goodbye to Mr Graham Benskin and to wish him a happy retirement.

Graham joined the University in October 1965 specifically to develop and maintain plant collections in the then recently constructed new glasshouses in the Botanic Garden. One of his responsibilities was the production of teaching and research plant material for the Botany/Biology Department and over this period of time he grew in excess of 160,000

plants for this purpose. Much of this material was produced out of the normal growing seasons to meet specific class and research requirements and Graham became an expert in all year round production of a wide range of plants.

Barrie Frankland, Superintendent of Gardens and Dr Richard Gornall, Director of the Botanic Garden presented gifts, cards and thanks for the contribution that Graham has made to the Botanic Garden and academic work of the University. Graham was also presented with the Royal Horticultural Societies Long Service Medal to commemorate more than 40 years continuous employment as a gardener with one employer.



## Inaugural Lectures

### 31 October 2006

Professor Bernard Barker, Education: "Schools- Do we ask too much or too little?"

### 07 November 2006

Professor Peter Bradding, Infection, Immunity and Inflammation: "Mast cells in the pathogenesis of asthma: past present and future"

### 05 December 2006

Professor Steve Trevillion, Social Work Education: "Innovation, consultation and participation in the regulation of professional education"

### 12 December 2006

Professor Rosemary Sweet, Urban History: "The English in Italy, 1680-1820"

## Information from the RAC about concerts in October and November:

### October

Sat 28 Voces Intimae String Quartet 7.30pm RAC £10 (£7.50; £5)

Mon 30 Storytelling Soundbites 12.45pm RAC Free

Tue 31 Stephen Foster bass

Jonathan Gregory piano 12.45pm RAC Free

### November

Wed 1 University of Leicester Theatre: 24-Hour Play 7.30pm QHT £6 (£4; £3 LUT)

Thu 2 Jenny Sherrard, Victoria Wray, Kate McKechnie 12.45pm RAC Free

Thu 2 Così fan tutte 7pm RAC £8

Tue 7 Coro Nostro Chamber Choir 7.30pm St J B £8 (£6.50; £1)

Thu 9 Emily Guerry, Bethany Rowell with Moira Finch 12.45pm RAC Free

Sat 11 Leicestershire Sinfonia 7.30pm FNB £6 (£4)

Mon 13 Storytelling Soundbites 12.45pm RAC Free

Tue 14 Jazz Jam in the Piazza 6.30pm CP £2 (£1 NUS)

Wed 15 Rowena Bass harp 1pm RAC £5

Wed 15 Folk & Roots Night 6.30pm CP £5

Wed 15 University of Leicester Theatre: Dr Faustus 7.30pm QHT £6 (£4; £3 LUT)

Wed 22 Leicester Jazz House 8pm RAC £8 (£5 NUS)

Wed 22 University Singers & Proteus Chamber Orchestra 7.30pm FNB £8 (£6.50; £3.50)

Thu 23 Jazz in the Piazza 6.30pm CP £5

Thu 23 Nick Hislam Jazz Quartet 12.45pm RAC Free

Sat 25 Symphonic Concert Band & Big Band 7.30pm FNB £5.50 (£4.50; £3)

Thu 30 Matthew Barley cello with workshop students 12.45pm RAC Free

## Department of Biochemistry Autumn Seminars Programme 2006

### 25 October

Catherine Hall: "Development of new NMR based methods for characterizing the structures of therapeutic antibody-target protein complexes"

Jonathan Howe: "The Role of Tensin in the Assembly of the Fibronectin Extracellular Matrix"

Department of Biochemistry, University of Leicester

### 30 October

The Redfearn Lecture

Dr Jim Sellers, National Institute for Health, Bethesda, USA: "Walking with Myosin V – a nanomachine"

Time and Venue to be confirmed

### 8 November

Dr Michael Dye, Sir William Dunn School of Pathology, University of Oxford: "Insights into the coupling of transcription and pre-mRNA processing"

### 15 November

Dr David Christianson, Roy and Diana Vagelos Laboratories, Department of Chemistry, University of Pennsylvania: "Arginase: Structure, Mechanism and Physiological Role in Male and Female sexual Arousal"

### 29 November

Donna Parkinson: "Regulation of the Centrosomal Nek2 kinase by autophosphorylation"

Ian Wilkinson: "Characterisation of single chain variable fragments (scFvs) as models for therapeutic antibodies"

Department of Biochemistry, University of Leicester

## The Frank May Prize Lecture - November 2006 -

### "Prevention of diabetes and cardiovascular disease: Evidence to waist?"

Dr Kamlesh Khunti, Senior Clinical Lecturer, Division of General Practice & Primary Health Care, Department of Health Sciences

"Prevention of diabetes and cardiovascular disease: Evidence to waist?"

Wednesday 1st November 2006

- At 5.30 pm
  - The Frank and Katherine May Lecture Theatre, The Henry Wellcome Building, University Road, Leicester (Reception in the Foyer after the Lecture)
- Free Admission and open to the Public

## Leicestershire & Rutland Classical Association (jointly with the Society for the Promotion of Hellenic Studies) presents the 6th Dorothy Buchan Memorial Lecture

Professor Helen King (University of Reading)

'From Father of Gynaecology to Father of Midwifery: the paternity of Hippocrates in the eighteenth century'

### Tuesday 7 November 2006

Ratray Lecture Theatre, 5.30 p.m.

University of Leicester

(followed by a reception)

### All Welcome

For details of other events organized by the Association, please consult Professor Graham Shipley (Chair) or Dr Elly Cowan (Secretary)

## SMALL ADS

### HOUSE FOR RENT

Superior 3-bedroom terraced house, 5 minutes walking distance from the university, infirmary, railway station and city centre. The fully furnished, gas centrally heated accommodation comprises: lounge; dining room; kitchen with washing machine; fridge and microwave oven; cellar; private garden with lockable gate access. Car parking through residents permit only.

Available from July. Rent is £750 pcm. Tel: 01162707071

Room in quiet house close to University, price £250 pcm all inc.  
email [jjd7@le.ac.uk](mailto:jjd7@le.ac.uk) 079396 66328