

## 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).

Visit the following website for more detailed grant descriptions in Word format: [www.le.ac.uk/press/augsummaries.doc](http://www.le.ac.uk/press/augsummaries.doc)

#### RESEARCH GRANTS FEBRUARY 2006

##### Biochemistry Farmer P Prof

RM31052  
Supplement - Molecular biomarkers of dose and effect of genotoxins  
*MRC* £151,286

##### Cancer Studies and Molecular Medicine

Ablett S Dr  
RM60025  
Supplement - PLADO 16 An intensified chemotherapy regimen for high risk hepatoblastoma patients. (SIOPEL 4)  
*CRUK* £28,989

Pringle J Dr  
Co-Investigator: Dr G Johnston, UHL-TR NHS  
RM60077

Detection and Confirmation of TCR-V<sub>β</sub> Restriction by Skin Derived T-Cells from Positive Patch Tests in Allergic Dermatitis  
*British Skin Foundation* £10,000

Taylor A Dr  
RM60078  
1st International Summit on Preterm Birth, Sienna, Italy  
*Royal Society* £532

##### Cardiovascular Science

Ng L Prof  
RM61004  
Supplement - Risk stratification of myocardial infarction using cardiac hypertrophic inducing peptides  
*BHF* £6,000

Cell Physiology and Pharmacology  
Hamann M Dr  
RM36096

Long term changes in synaptic activity induced by noise: a model for tinnitus  
*Glaxosmithkline* £60,000

Mulheran M Dr  
RM36048  
Supplement - Characterising the mechanisms of established and potential neuroprotectants and tinnitolytics in the mammalian cochlea: physiology, pharmacology,

pharmacokinetics  
*Action for Tinnitus Research* £46,072

Tobin A Prof  
RM36068  
Supplement - Investigation of the mechanism of the muscarinic receptor anti-apoptotic response in clonal cells & primary neuronal cell cultures  
*Wellcome Trust* £7,803

Chemistry  
Abbott A Prof  
RP10131  
Recycling of electric arc furnace dust using ionic liquids - technology programme  
*DTI via Scionix* £105,756

Davies D Dr  
RP10132  
Acetate Assisted C-H Activation: A computational and experimental study  
*EPSRC* £119,291

Computer Science  
Erlebach T Dr  
RP202018  
iCAMP - Innovative, inclusive, interactive and intercultural learning campus  
*CEC* £114,521

Genetics  
Burton P Prof  
RM33102  
Genetic advisory group for 1958 birth cohort  
*Wellcome Trust* £3,636

Kyriacou C Prof  
RM33101  
Cryptochrome & the circadian clock  
*Royal Society* £18,200

Rosato E Dr  
RM33103  
Identification of circadian genes in northern krill. *Meganyctiphanes norvegica*  
*Royal Society* £1,040

Geology  
Brewer T Dr  
RP14083  
Sustainable scrubbing medium for acid gases, a feasibility study.  
*Department for Trade and Industry* £11,050

Siveter D Prof  
RP14086  
Lower carboniferous ostracods and isotopes of the Midland Valley, Scotland: Testing for the ecological shift into non-marine environments  
*British Geological Foundation* £3,000

Health Sciences  
Dixon-Woods M Dr  
RM62085  
Quality assurance of Research Ethics Committee Process  
East Midlands NHS Innovation Hub  
*Hub* £10,000

Sheehan N Dr  
RM62089  
XX111 International biometric Conference  
*Royal Society* £1,275

Vostanis P Prof  
RM62088  
Development guide lines for Mental Health Training  
*Regional CAMHS* £50,000

Watson P Dr  
RM62086  
An investigation into Black Flags to effective management of back pain in the workplace  
Health Action Zone via Keele University  
*University* £35,223

Infection, Immunity, Inflammation  
Bradding P Dr  
RM63054  
Supplement - Regulation of human mast cell function in asthma by the intermediate conductance calcium-activated K<sup>+</sup> channel iKACA1  
*Wellcome Trust* £10,003

O'Callaghan C Prof  
RM63080  
Ear, Nose and Throat Surgery and Medicine  
*LNR Deanery* £26,900

Law  
Buck T Mr  
RL10047  
Reporting Systems in the tribunal sector  
*Nuffield Foundation* £7,000

McHale J Prof  
Co-Investigator: Dr K Abimbola, Law  
RL10045  
Health Law, Faiths and Beliefs: New Dilemmas: New Perspectives  
*Modern Law Review* £2,500

Szyszcak E Prof  
Co-Investigator: Dr A Cygan, Law  
RL10046  
The Regulation of Sport  
*Modern Law Review* £2,500

Museum Studies  
Parry R Dr  
RA17042  
AHRC Collaborative Doctoral Award  
*MWR Ltd* £2,553

Physics and Astronomy  
Cowley S Prof  
RP16134  
Supplement - Research in the solar system plasmas & atmospheric physics  
*PPARC* £398,056

Fraser G Prof  
Co-Investigator: Dr J Pye, Physics and Astronomy  
RP16176  
Supplement - BepiColombo-MIXS Interim Funding  
*PPARC* £79,638

Lees J Dr  
Co-Investigators: Prof G Fraser, Dr J Pye Physics & Astronomy, and University of Newcastle  
RP16205  
Development of silicon carbide X-ray detectors for remote sensing planetary missions  
*ESA* £12,884

Remedios J Dr  
RP16128  
MIPAS Level 2 Product Validation (Ref SRC-2003-014)  
*ESA* £23,557

Turner M Prof  
RP16125  
Supplement - EPIC instrument maintenance supplement to RP16125  
*ESA* £5,882





**Warwick R, Prof (exWard M Prof)**  
Co-Investigators: Prof M Barstow, Prof G Fraser, Dr G Steward, Prof R Warwick, Dr R Willingale, Dr P O'Brien, Dr M Burleigh, Mr N Bannister, Dr M Watson & Prof A Wells, Physics and Astronomy  
**RP16138**

Supplement - Rolling grant programme in X-ray & observational astronomy & space instrumentation 2004-2008  
*PPARC* £593,693

**Warwick R Prof**  
Co-Investigator: Dr M Watson, Physics and Astronomy  
**RP16078**

Supplement - The Leicester Archive Data System  
*PPARC* £23,975

**Watson M Prof**  
Co-Investigator: Mr T Linde, Physics and Astronomy  
**RP16161**

Supplement - Astrogrid 2 Support and Research Posts  
*PPARC* £371,450

## RESEARCH GRANTS MARCH 2006

**Archaeology and Ancient History**  
**McFadyen L Dr**  
**RA11G0010**  
Re-thinking landscape and re-building architecture: the archaeologies of the Neolithic and Chalcolithic in Britain and Portugal  
*British Council (South Africa)* £1,000

**van der Veen M Prof**  
**RA11G0005**  
Food Consumption in Roman Britain: Diversity and Change  
*AHRC* £24,628

**Biochemistry**  
**Carr M Dr**  
**RM31G0009**  
Celltech Studentship - Ian Wilkinson  
*Celltech Therapeutics Ltd* £18,000

**Eperon I Prof**  
**RM31G0015**  
Supplement - Correcting splicing: development of therapies based on targeted oligonucleotide enhancers of splicing  
*Wellcome Trust* £13,280

**Biology**  
**Harper D Dr**  
**RM48G0022**  
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  
*International Centre for Ecology* £2,000

**Heslop-Harrison J Prof**  
**RM48G0007**  
Supplement - Generation Challenge Programme: Unlocking Genetic Diversity in Crops for the Resource Poor (Validation of COS markers and MUSA rice for comparative genomics)  
*International Network for the Improvement of Banana and Plantain (INIBAP)* £13,770

**Heslop-Harrison J Prof**  
**RM48G0024**  
Generation Challenge Drought Markers  
*Unidad de Biotecnologia* £2,800

**Cancer Studies and Molecular Medicine**  
**Ablett S Dr**  
**RM60G0008**  
Supplement - UKCCSG Group - Data Centre  
*Cancer Research UK* £886,660

**Cardiovascular Science**  
**Leckie B Dr**  
**RM61G0002**  
Identification of a human prorenin receptor involved in diabetic microvascular disease  
*Diabetes UK* £7,582

**Cell Physiology and Pharmacology**  
**Evans R Prof**  
**RM36G0005**  
The contribution of lipid rafts to the regulation of P2Y receptors in the cardiovascular system  
*BHF* £75,922

**Willars G Dr**  
**RM36G0020**  
Molecular Pharmacology and cell signalling of the GLP-1 receptor  
*AstraZeneca Research & Development* £164,405

**Chemistry**  
**Ellis A Dr**  
Co-Investigator: Hillman A Prof,  
**Chemistry**  
**RP10G0020**  
Adventurous Research in Chemistry - Synthesis and Characterisation of Novel Nanomaterials  
*EPSRC* £51,535

**Monks P Dr**  
Co-Investigator: Ellis A Dr, Chemistry  
**RP10G0005**  
Radicals & large molecular weight organics - the missing links in secondary organic aerosol formations?  
*NERC* £42,235

**Computer Science**  
**Ghani N Dr**  
**RP20G0001**  
Theory and applications of containers  
*EPSRC via University of Nottingham* £6,941

**Heckel R Dr**  
**RP20G0017**  
Syntactic and Semantic Integration of Visual Modelling Techniques (SegraVis)  
*CEC* £33,840

**Criminology**  
**Hedderman C Prof**  
**RS301G0001**  
Evaluation of Employment Pathfinders - Phase 2  
*Home Office* £39,966

**Education**  
**Cremin H Dr**  
**RE10G0007**  
Supplement - Essex Teacher/TA partnership project  
*Essex County Council* £2,680

**Stevenson D Dr**  
**RE10G0005**  
Creating a Research Engaged School  
*Beauchamp College* £6,410

**Engineering**  
**Hainsworth S Dr**  
**RP12G0030**  
Investigation of New Materials for Valve Train Applications  
*Jaguar Cars Ltd* £24,000

**Pollock C Prof**  
**RP12G0018**  
Supplement - CASE Studentship with Kohler Mira - Supplement to Cover Student Living Costs while Seconded  
*Kohler Medical Ltd* £3,814

**Genetics**  
**Giorgini F Dr**  
**RM33G0028**  
Characterisation of conserved pathways & candidate therapeutic targets for Huntington disease using a yeast model of huntingtin toxicity  
*Royal Society* £14,954

**Ketley J Prof**  
**RM33G0031**  
Host acute stress responses and the regulation of C.jejuni virulence in the avian gut  
*BBSRC* £134,053

**Rosato E Dr**  
**RM33G0004**  
Supplement - Gene function in Antarctic krill: determining the role of clock genes in synchronised behavioural patterns  
*NERC* £373,350

**Trembath R Prof (run out)**  
**RM33G0023**  
UHL Genetics Programme Research Award  
*UHL Trust* £13,000

**Geography**  
**Tansey K Dr**  
**RP13G0017**  
Inter-comparison of burnt area products derived from SPOT-VGT time series for the year 2000 (Inter-comp Global Burnt Area)  
*CEC* £12,549

**Geology**  
**Brewer T Dr**  
**RP14G0003**  
Provision of logging and scientific petrophysical research services (2004 -

2005) (payment for work previously done out of contract)  
*NERC* £179,500

**Brewer T Dr**  
**RP14G0009**  
Supplement - Provision of logging and scientific petrophysical research services (2005 - 2006)  
*NERC* £941,451

**England R Dr**  
Co-Investigator: Maguire P Prof,  
**Geology**  
**RP14G0014**  
Supplement - NERC Support for the Geophysical Equipment Facility (GEF) - SEIS-UK Leicester Node  
*NERC* £341,665

**Khan M Prof**  
**RP14G0015**  
Supplement - Geophysical Education in the UK  
*Royal Astronomical Society* £2,000

**Health Science**  
**Baker R Prof**  
**RM62G0026**  
Supplement - Supporting research into clinical governance in primary care  
*Leicestershire Primary Care Research Alliance* £3,000

**Burton P Prof**  
**RM62G0055**  
Supplement - Health Care Epidemiology  
*Eastern Leicester Primary Care Trust* £64,636

**Burton P Prof**  
**RM62G0056**  
Diabetic Case Register  
*Eastern Leicester Primary Care Trust* £24,391

**Draper E Dr**  
**RM62G0027**  
Supplement - National paediatric intensive care database (Edinburgh)  
*NHS Lothian* £10,000

**Draper E Dr**  
**RM62G0028**  
Supplement - National paediatric intensive care database (Wales)  
*Health Commission Wales* £18,000

**Draper E Dr**  
**RM62G0029**  
Supplement - National paediatric intensive care database  
*Department of Health via University of Sheffield* £65,202

**Draper E Dr**  
**RM62G0054**  
Supplement - Perinatal Mortality Study  
*Eastern Leicester Primary Care Trust* £57,318

**Jagger C Prof**  
**RM62G0057**  
Supplement - Support to Chair  
*Eastern Leicester Primary Care Trust* £76,831



**Khunti K Dr**  
**RM62G0011**  
Supplement - Clinical Lead for Primary Care Diabetes & Cardiovascular Research  
*Leicestershire Primary Care Research Alliance* £29,050

**Rowbotham D Prof**  
**RM62G0044**  
An Investigation into the temporal relationship between pain and sleep in patients with neuropathic pain  
*Pfizer Inc.* £42,308

**Stone M Dr**  
**RM62G0010**  
DHDS interviews for University of Sheffield  
*Department of Health via University of Sheffield* £4,028

**Vostanis P Prof**  
**RM62G0030**  
Supplement - Evaluation of the CAMHS infant mental health worker pilot with Beaumont Leys Sure Start  
*Leicestershire Partnership NHS Trust* £10,000

**Wailoo M Dr**  
**RM62G0023**  
A molecular study of the ontogeny of circadian rhythmicity in human infants  
*Leicester City West Primary Care Trust* £26,000

**History**  
**Dyer C Prof**  
**RA15G0004**  
Explorations in Local and Regional History  
*Aurelius Charitable Trust* £1,036

**Infection, Immunity, Inflammation**  
**Grigg J Dr**  
**RM63G0009**  
Applicability of electronic nose technology to the diagnosis of *Pseudomonas* airway infection in cystic fibrosis.  
*UHL Trust* £7,380

**Kadioglu A Dr**  
**RM63G0001**  
CD4 T cell interactions with pneumococci and pneumolysin  
*Royal Society* £15,000

**O'Callaghan C Prof**  
**RM63G0027**  
The use of Heliox in Nebulised Drug Delivery  
*BOC Medical* £25,045

**Brightling C Dr**  
**RM63G0028**  
Grant in aid of Research  
*Leicester Air Ltd* £50,000

**Institute of Lifelong Learning**  
**Benyon J Prof**  
**RE03G0002**  
Lifelong Learning, Older People and Society  
*Learning & Skills Council* £2,000

**Law**  
**White R Prof**  
**RL10G0016**  
Supplement - Analysis of Judgements in the European Court of Human Rights  
*AHRC* £10,500

**Management Centre**  
**Williams C Prof**  
**RS101G0003**

Provision of a business transition project specification  
*Wandsworth Borough Council* £2,004

**Physics & Astronomy**  
**Lester M Prof**  
**RP16G0050**  
Supplement - Support for CUTLASS Operations & associated diagnostics (1998-2002)  
*PPARC* £34,921

**Robinson T Prof**  
**RP16G0049**  
Supplement - SPEAR Operations Phase  
*PPARC* £56,900

**Sims M Dr**  
**RP16G0030**  
Biogeochemical sensing of icy ecosystems  
*EPSRC via University of Bristol* £80,340

**Warwick R Prof**  
**RP16G0041**  
Supplement - The Leicester Archive Data System  
*PPARC* £11,880

## RESEARCH GRANT SUMMARIES JUNE / JULY 2006 ANNOUNCED FEBRUARY / MARCH 2006

**RE03009 / RE03G0002**  
**Professor John Benyon**  
**Life Long Learning**  
**Older People, Lifelong Learning and Society (Co-Investigators: Dr David Wilson, Institute of Lifelong Learning)**  
Working with Jim Soulsby at the National Institute of Adult Continuing Education (NIACE), John Benyon and David Wilson from the University of Leicester's Institute of Lifelong learning have been investigating the role that lifelong learning opportunities could and should have in promoting a better life for older people. As part of this work, a seminar series of five presentations was organised in 2005 which involved national speakers on a range of topics, including employment, mental health, education, and better government for older people. The seminars were well supported and attracted participants from as far afield as Manchester, London and Sheffield. In addition to people from universities and colleges, those taking part in the seminars were drawn from various groups and organisations, including Age Concern, the University of the Third Age, and a number of local authorities. As a result of this success, a second series of seminars has been arranged with support from the National Learning and Skills Council. Speakers include Professor Norma Raynes (Salford), Dr Sue Jackson (Birkbeck), Professor Alan Walker (Sheffield), Dr Vanessa Burholt (Bangor) and Dr Paul Cann, Director of Policy at Help the Aged. Further details of the seminars

are available from Isobel Woodliffe on [ijw3@le.ac.uk](mailto:ijw3@le.ac.uk). The research has also been developing a comparative dimension, looking at lifelong learning and older people in a number of different European countries and this has involved study visits to Graz, Vienna and the Azores. In co-operation with other European partners, two applications for EU funding have been submitted. With the grant from the LSC, it is planned to continue the study of the role that lifelong learning can play in responding to the issues raised in ageing societies, exploring different areas of public policy and different forms of delivery, and funding, of lifelong learning.

**RM33G0031**  
**Professor Julian Ketley**  
**Department of Genetics**  
**Host Acute Stress Responses and the Regulation of C. jejuni Virulence in the Avian Gut**  
Food producers strive to minimise the risks of food poisoning for consumers. The most important food-associated bacterium, which infects humans, is *Campylobacter*, which is naturally present in large numbers of raw poultry products. If *Campylobacter* could be eliminated from chickens on the farm it would have a significant impact on human health by preventing many thousands of cases of food poisoning each year. If control is to be achieved it is important that we better understand how *Campylobacter* infects chickens, how the animal host and the pathogen interact, and the impact that modern production methods have on this interaction. Environment and farming practices all influence the microbiology of the farm. Modern chicken

production is highly intensive and even the presence of a visitor can cause stress to the animals. Our hypothesis is that increased levels of stress in chickens may lead to higher levels of *Campylobacter* in the birds and cause the bacterium to behave in a very different way from normal. The reasons for this are not clear, but may involve changes in the populations of protective bacteria in the gut, alterations in immunity, and increased pathogen fitness compromising the animal's ability to resist infection. Animals stressed or in pain release neurotransmitters throughout their body. For example, a stressed chicken being caught and transported to the slaughterhouse will have higher levels of neurotransmitters in its gut. The main neurotransmitter in this respect is noradrenaline and levels of this can increase rapidly during stress. The purpose of this work is to understand the effects of noradrenaline on *Campylobacter*, particularly on how the bacterium acquires iron, interacts with animal tissues, and how this affects the expression of genes important for infection. The work will explore the hypothesis that noradrenaline allows translocation of *Campylobacter* from the gut to other tissue and that it also makes the bacteria better able to survive in the farm environment. A better understanding of the interaction between *Campylobacter* and the stressed host could eventually enhance animal welfare and improve food safety.

**RM36098 / RM36G0005**  
**Professor R Evans**  
**Department of Cell Physiology and Pharmacology**  
**"The contribution of lipid rafts to the**

**regulation of P2Y receptors in the cardiovascular system"**  
P2Y receptors are membrane proteins that mediate the control of blood clotting, contraction of arteries, formation of atherosclerotic plaques in blood vessels and therefore contribute to heart disease and stroke. Our work suggests that P2Y receptors may be regulated by changes in cholesterol levels. We will determine the extent to which different P2Y receptors are controlled by cholesterol, in particular how it affects clotting of blood platelets, contraction, overgrowth and blocking of arteries. This will give an insight into how high cholesterol increases the risk of cardiovascular disease and stroke.

**RM60078**  
**Dr A Taylor**  
**Department of Cancer Studies and Molecular Medicine**  
**The progesterone receptor in human term amniochorion and placenta is isoform C. Endocrinology**  
Before labour and delivery, the womb is kept in a relaxed state throughout pregnancy by the production of the hormone progesterone. Human labour is thought to happen because the cells in the membranes that surround the baby during pregnancy and the muscles of the womb can no longer detect progesterone. As a result the womb, which has become the biggest muscle mass in the body, begins to contract and expel the baby. Progesterone works by binding to receptors found in the cells at the fetal-maternal interface, and it is thought that these cells stop using one progesterone receptor type and are replaced by a new type of non-functional receptor. Research by the Preterm Birth Research Group at the



University of Leicester suggests that this theory may be correct, since they have discovered a novel progesterone receptor (designated type C), which appears just before labour commences. This research, supported by a Royal Society award and presented at the 1st International Summit on Preterm Birth in Siena, Italy was published in the February edition of the prestigious endocrine journal, *Endocrinology*. It is hoped that information about this new progesterone receptor in cells of the membranes that surround the baby will lead to new treatments to prevent preterm birth.

**RM62087**

**Dr M Wailoo**

**Department of Health Sciences  
Developmental physiology research  
with Melatonin**

Infants who are known to have risk factors for cot death have previously been shown to have delayed maturation of adult like overnight temperature patterns. These risk factors include babies of young mothers, males, low socio – economic background and small for dates infants. Melatonin is an important hormone produced by the body, which helps regulate the body's 'bio-rhythms.' Of considerable interest is the coincidental timing of a mature temperature rhythm, the rhythmic secretion melatonin, and the age of peak incidence of cot death. This study will aim to further investigate the relationship.

Healthy term infants will be monitored from 2 – 4 months of age in the comfort of the family home. Data on overnight temperature patterns will be collected along with samples to measure melatonin and other hormones. All methods are safe and non invasive.

The results will be used to help determine whether abnormal development of melatonin rhythmicity may be a contributing factor in the cause of cot death.

**RP13G0017**

**Dr. Kevin Tansey**

**Department of Geography  
Inter-comparison of burnt area  
products derived from SPOT-VGT  
time series for the year 2000 ("Inter-  
comp Global Burnt Area")**

The Global Vegetation Monitoring Unit of the European Commission's Joint Research Centre has produced a database of area burnt globally for the year 2000 using satellite imagery. This global burnt area product, published as the GBA2000 product, is mainly used to:

1. assess the interactions between vegetation fires and land cover changes
2. assess the impact of vegetation fires on natural resources
3. estimate the emission of gases and aerosols from vegetation fires.

For all three applications, the temporal dynamics is a key issue and more

particularly the seasonality of burning and the inter-annual changes in fire activity. This temporal dimension can be assessed, in theory, by the analysis of long time series of satellite observations. The primary objective of this study is to identify among the methods currently available the most accurate and most efficient method for processing satellite imagery to derive burnt area products at the global scale. Three methods will be analysed. To achieve this objective, a comparison will be made between the burnt area maps produced using these methods over three test-sites located in South-America, Africa and Russia.

**RP1602/RP16G0020**

**Dr M Sims**

**Department of Physics and  
Astronomy**

**Biogeochemical Sensing of Icy Eco-  
systems**

The University of Bristol led by Dr. Jemma Wadham aim to look at the detailed biology, chemistry and geology associated with icy environments here on Earth. The project will utilise the Engabreen Glacier in Northern Norway as a test site/model system. The Svartisen Subglacial Laboratory at the glacier provides direct access to the glacier bed via tunnels bored in the underlying bedrock and to subglacial meltwaters, via a series of intake points in tunnel roofs. This allows in-situ examination of the rock/ice interface and access for placement of in-situ sensors. The University of Leicester led by Dr. Mark Sims of the Space Research Centre, Department of Physics and Astronomy, and in conjunction with Dr. David Cullen of Cranfield University, Silsoe are developing instrumentation to detect signs of Life and organic molecules using so-called Life Marker Chip technology for application in searches for Life on Mars and in terrestrial applications. This technology uses molecular receptors (either antibodies or artificial receptors) to detect the molecules. The grant from the University of Bristol will allow construction of an instrument to look for molecules associated with Life in the water associated with the rock/ice interface and run-off and melt-water from the glacier. Very little is known about icy ecosystems and they may play a large role in such issues of climate change, the instrument will allow the biology within those systems to be investigated and will hopefully lead to other and growing collaborations with the University of Bristol.

**RA11G0005**

**Dr M Van Der Veen**

**Department of Archaeology and  
Ancient History**

**Food Consumption in Roman Britain:  
Diversity and Change**

This project aims to analyse the diet of people living in Britain during the

Roman period (c. AD 43 – 410). This period represents a time of major change in Britain: the creation of military settlements, towns, specialised craft production, markets, long-distance trade, and the emergence of new social classes. In terms of food, it brought new consumers (people not involved in agricultural production), and new foods, introduced from the Mediterranean region and beyond. What effect did these new developments have on food consumption? Do the newly imported foods replace the traditional ones, or do the latter become consumed exclusively by certain groups of the population? Did any become commonly available and even locally cultivated? The botanical food remains recovered from Roman period excavations in Britain will be analysed, to assess the cultural and environmental factors influencing the choice of food plants consumed.

**RM33106/RM33G0028**

**Dr. Flaviano Giorgini, Lecturer in**

**Mammalian Genetics**

**Department of Genetics**

**Characterisation of conserved  
pathways & candidate therapeutic  
targets for Huntington's disease,  
using a yeast model of huntingtin  
toxicity**

Huntington's disease is a fatal neurodegenerative disorder caused by a mutation in the huntingtin protein. People suffering from this disease exhibit involuntary movements, rigidity, and dementia. Though a great amount of work has been focused on Huntington's disease in recent years, no effective therapy is yet available. We previously identified 28 gene deletions that suppress toxicity in a yeast model of Huntington's disease with the aim of identifying candidate drug targets and providing insight into the pathogenic pathways of this disorder. In recent pre-clinical trials, we have shown that one of the candidates identified holds great potential as a therapeutic target for Huntington's disease. The work funded by the Royal Society will further characterise the genetic interactions required for mutant huntingtin toxicity in yeast and validate the previously identified candidate therapeutic targets for this disorder.

**RM60073**

**Professor R A Walker**

**Department of Cancer Studies and  
Molecular Medicine**

**Altered Myoepithelial Cell Function in  
Cancer-containing Breasts – a New  
Risk Marker?**

There are over 41,000 new cases of breast cancer per year in the United Kingdom but for only a small percentage are there genetically defined predisposing factors. Our studies have shown that there are differences between normal breast from breasts containing a cancer and

age-matched normal breast from women without breast cancer. These differences could promote the growth of abnormal (pre-cancerous) cells and result in failure to remove them, and so promote the formation of breast cancer. The research will examine in more detail the growth-regulatory alterations we have identified with the aim of identifying new markers of susceptibility and risk.

**RM61062/RM61G0002**

**Dr B Leckie**

**Department Cardiovascular Sciences  
Identification of a human prorenin  
receptor involved in diabetic  
microvascular disease.**

Complications of diabetes include kidney and vascular damage. A protein called prorenin circulates in the blood and may be taken up by the lining of blood vessels and contribute to the damage. We will look for a prorenin receptor on cells derived from the lining of blood vessels and identify which parts of the prorenin molecule it binds, and investigate whether it will be possible to prevent the uptake by designing a specific blocker which might help to reduce the microvascular complications of diabetes.

**RP10G0005**

**Dr P Monks**

**Department of Chemistry  
(Co-Investigator: Dr A Ellis,  
Chemistry)**

Organic compounds are found throughout the atmosphere and contribute to the generation of both fine aerosol and photochemical oxidants such as ozone. Aerosols and ozone have direct effects on human health through respiratory inflammation, on climate change through modification of direct and indirect radiative budgets and on regional ecosystems through oxidation and changes in nutrient balance. This small project will investigate the chemical formation mechanisms of secondary organic aerosol by way of chamber measurements in Switzerland.

**RP10132**

**Dr D Davies**

**Department of Chemistry  
"Acetate-assisted C-H activation: A  
computational and experimental  
study" (Ref RP10130).**

In general, the synthesis of complex organic molecules uses simple starting materials containing a reactive functional group e.g. a C-Cl bond. However, the formation and reactions of these generates environmentally damaging waste. In principle, an ideal starting point would be a C-H bond; molecules containing C-H bonds are abundant and cheap and generate less toxic waste. Unfortunately, C-H bonds are generally extremely unreactive. We have discovered a way to enhance the reactivity of C-H bonds by using certain metal complexes in combination with acetate. A catalytic



process based on this acetate-assisted C-H activation, followed by C-C bond formation would be extremely efficient and environmentally friendly (reduces toxic byproducts). In this project we aim to understand the fundamental chemistry that lies behind acetate-assisted C-H bond activation. We shall use both computational modelling and experimental chemistry to investigate precisely what factors promote this process. Once identified these factors can be included in the design of new catalysts for C-H activation.

**RP202018**  
**Dr T Erlebach**  
**Department of Computer Science**  
**iCamp**

iCamp (innovative, inclusive, interactive and intercultural learning campus) pursues the idea of bringing people together within a common virtual learning environment: an environment that does not consist of a single software system, but is composed of various interoperable tools and platforms; an environment that does not stop at conventional

boundaries, but facilitates multidisciplinary co-operation and networking in an enlarged Europe; an environment that does not only deliver learning experiences, but scaffolds for self-directed learning, catalyses social networking, and fosters cross-cultural collaboration. iCamp is a research project targeting higher education in the enlarged European Union. Its aim is to research, develop and validate a distributed infrastructure for learning solutions – the iCamp space – compliant with a pedagogical model

built upon a social-constructivist approach. iCamp validates its pedagogical model against its interoperable system and tools portfolio – the iCamp building blocks. The efforts result in guidelines on pedagogical and technical issues as well as in an open-source software package of constructivist learning tools.

## Books



# Social Proprieties: Social Relations in Early-Modern England (1500-1680)

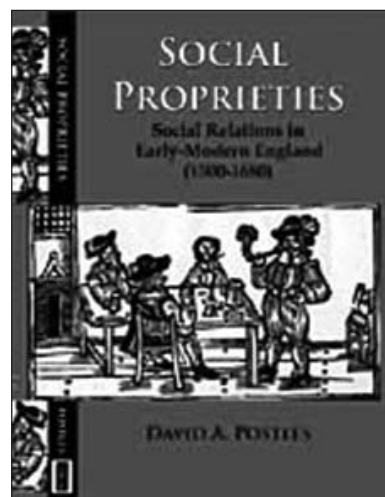
Author: David Postles, Publisher: New Academia, ISBN: 0-9766042-9-3, Price: \$18

▶ David Postles is University Fellow in the Department of English at the University of Leicester. For many years, he was Marc Fitch Research Fellow in the School of Historical Studies in the same university. He was formerly a medievalist with a strong publication list in that area, but recently he has converted to

early-modern English history, publishing in the *Journal of Ecclesiastical History*, in *Social History* and in the *Journal of Historical Sociology*.

This book combines theater and life in an attempt to consider how people interacted in face-to-face situations in early-modern England,

and to examine the wider implications of those relationships for social organization. The research behind the text is interdisciplinary: it draws on mid-Tudor comedies, the City comedies, and early-Stuart plays, illustrating how the dramatic realism of those playwrights interrelates to the real social world.



# 'Explaining the Economic Success of Singapore'

Author: Johnny Sung, Publisher: Edward Elgar Publishing, Price: £55.00, ISBN: 1-84376-329-x

▶ Explaining the Economic Success of Singapore explores the transformation of Singapore in the last three decades, going beyond the conventional explanations often accepted. The book argues that there was more to the transformation than a simple 'right place, right time' scenario as other developing countries benefited from similar multinational corporation investment and political stability but did not achieve the same success. Johnny Sung illustrates what differentiates Singapore from these other similar countries.

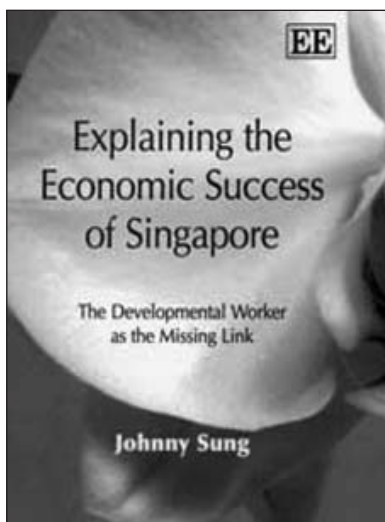
This book argues that both neo-

classical economic theory and early versions of the developmental state theory have contributed little to understanding the nature of worker participation in Singapore's 'miracle growth' period. By developing a complementary concept - the developmental worker - the book examines the socio-political context in which workers became central to the national growth strategy and its skill formation projects. It further argues that one of the most important achievements of the developmental state is its ability to systematically embed the skill formation process through building

innovative worker stake-holding while explicitly recognising the importance of social commitment for economic growth.

Providing important lessons for workforce development policies, this book will appeal to workforce development policy makers, researchers and academics of labour studies, Asian studies and political science as well as consultants advising on workforce matters.

Johnny Sung is a Senior Research Fellow in the Centre for Labour Market Studies at the university of Leicester, UK.





## Teaching Urban History in Europe

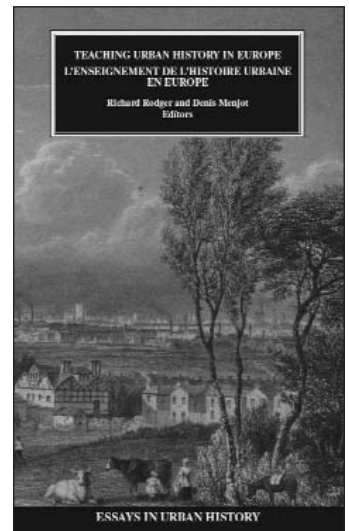
Editors: Richard Rodger and Denis Menjot, Publishers: Centre for Urban History, University of Leicester, ISBN: 1-870664-23-X, Price: £12

► The Bologna Agreement redefined the way European countries will develop their MA programmes. Crucially. The change involves the move to a 2 year Masters degree programme. So 'it seemed opportune to consider good practice' observed Richard Rodger, Professor of Urban History, 'and to convey what worked successfully in the curriculum in countries such in Poland, Italy, Hungary, Spain and Portugal where

the historical study of towns and cities was in its infancy as well as to review developments in the longer established centres in northern Europe.'

This book, sponsored by the European Urban History Association and produced in association with the Centre for Urban History, provides an overview of urban history teaching in 12 European countries. Richard Rodger and his co-editor

from Lyons, Denis Menjot selected both experienced professors and new lecturers in an effort to identify the strengths and weaknesses of the teaching programmes. There are contributions from three past presidents of the European Urban History Association, as well as one from a current Leicester graduate student, and another reviewing the opportunities for e-learning.



## People Extra

### New Professor of Physical Geography

► A new Professor of Physical Geography has been appointed to the University.

Professor Heiko Balzter joins Leicester from the Centre for Ecology and Hydrology (CEH) at Monks Wood, where he was Head of the Section for Earth Observation. He took up his Chair at Leicester in September.

Professor Balzter will focus his research on biosphere / climate interactions and their responses to environmental change. These interactions are strongly influenced by the spatial variability of environmental parameters and human impacts. The response of the biosphere to climate change and how it feeds back on the climate system is a major source of uncertainty in current climate change predictions.

Professor Balzter is Co-Investigator

in the European CarboAfrica proposal, lead scientist for an interdisciplinary international training course in spring 2007 on characterising the land surface, as Co-Investigator in the Marie Curie funded MÉTIER project (METHODs in Interdisciplinary Environmental Research), a member of the EPSRC funded network for Geoforensics and Information Management for Crime Investigation, and serves on the science team of the Northern Eurasian Earth Science Partnership Initiative (NEESPI), the Siberia Earth System Science Cluster (SIBESSC), the International Geosphere/Biosphere Programme (IGBP) UK National Committee and the NERC Peer Review College.

Professor Balzter has worked on satellite-based mapping and

monitoring Siberian forests for the last 8 years. Siberia is a global hotspot in the climate system. Because the Siberian ecosystems are largely temperature controlled the region is strongly affected by global warming. Large amounts of greenhouse gases are currently locked in the permafrost and in organic soils, and if released could accelerate the greenhouse effect. Professor Balzter has investigated the role of forest fires in a full greenhouse gas accounting scheme to monitor the Kyoto Protocol over 3 million km<sup>2</sup> of Central Siberia. He is Co-Investigator in the NERC Climate and Land Surface Systems Interaction Centre (CLASSIC), where he investigates the effects of forest fires on the climate system using satellite data. Professor Balzter was an invited scientist at the European Joint Research Centre in Ispra (Italy) in



**Professor Heiko Balzter.**

2005, where he analysed seasonal vegetation cycles over Siberia. His research interests include monitoring and modelling forest structure and dynamics as well as land cover change. He is Principal and Co-Investigator in a range of national and international Earth Observation programmes.

Before moving to Britain Professor Balzter studied and worked at the Department for Biometry and Population Genetics at the Justus-Liebig-University in Giessen, Germany, where he also obtained his PhD. ☺

### RCGP Chairman appointed Visiting Professor

► Royal College of General Practitioners' (RCGP) Chairman, Dr Mayur Lakhani has been appointed a visiting professor in the Department of Health Sciences at the University of Leicester Medical School.

Dr Lakhani has a long association with the University of Leicester starting as a Lecturer in Clinical Audit in 1993.

Dr Lakhani is a GP in Leicestershire and has a longstanding interest in quality in primary care and health

service policy - areas in which he has published widely. He has co-edited the books Evidence Based Audit in General Practice, Recent Advances in Primary Care and has edited A Celebration of General Practice.

As a GP Principal, he has won awards for quality and was Editor of Quality in Primary Care, the first European journal devoted to the subject. He also sits on the Academy of Medical Royal Colleges and was the

only GP to be a member of the Chief Medical Officer's Review Group on Revalidation and the General Medical Council (GMC) established in 2005.

Dr Lakhani said: "Patients deserve the highest possible standards of general medical care. It is essential that we continue to research, develop and explain methods of improving quality and safety of patient care. I am delighted to be welcomed as a visiting professor at the University of Leicester

Medical School". Dr Lakhani is a Fellow of the Royal College of General Practitioners and the youngest doctor to ever be appointed as Chairman of Council. He is also a Fellow of the Royal College of Physicians of Edinburgh. Dr Lakhani was also Chairman of the Collaborating Centre for Primary Care where he devised a system enabling GPs to shape and influence the development of guidelines for use in the NHS. ☺



## Top Student Rewarded for Excellence

*Engineering student Zemian Hughes received the Masters Prize - awarded to a student whose project is identified as 'most likely to change the future'.*

▶ A Leicester student is among seven engineers from the region to have received a top accolade for innovative projects

The East Midlands' Universities, in partnership with the East Midlands Engineering & Science Professionals (EMESP, formerly the East Midlands PEI) can each award an annual

Masters Prize to the student whose project is identified as 'most likely to change the future.' The Leicester winner was Zemian Hughes of the Department of Engineering.

Zemian Hughes lives in Leicester and is a member of the Institution of Engineering and Technology. Zemian is taking his PhD at the University of

Leicester, and has just received a top accolade for his project developing a new 'embedded processor' for safety-critical computer systems which control aircraft, cars and medical equipment. His project uses built-in hardware rules to replace software which is inherently less reliable and subject to error. Zemian was nominated for the Masters Prize by the University of Leicester, where he previously took his MEng. Zemian says:

"Embedded processors will control more and more of the apparatus of modern life, from refrigerators to aircraft, motor cars to medical equipment. The inherent unreliability of software cannot be economically solved by testing every possible event, and by building the rules into the hardware of the processor we can eliminate these safety concerns." 🗨

## CUBAN MINISTER GIVES ACCOLADE TO LEICESTER

▶ Dr Moraima Orozco, Minister of Education for Cuba, in her closing remarks to the conference: Communication and Opportunity enthused about her visit to Leicester

She said: "In Latin America and Cuba, the University is known for the work achieved by Dr Rosie Sage in the School of Education. As result of her book: The World of Difference, she had been invited to speak at the International Conference on Diversity in Havana in 2004. Her work was impressive so the Cuban government asked her to lead a project on universalisation. Her training of all the Heads of the Pedagogical Institutes has had great impact".

At the conference Lourdes de la Guardia, principal educational psychologist for the international schools in Cuba, presented research that had been carried out under the guidance of Dr Sage in Cuban schools.

Dr Orozco has spent a week in Leicester, visiting schools in the city and county, learning of the work of Leicestershire cares, the National Space Centre and the Science Learning Centre East Midlands, directed by Dr Tina Jarvis. 🗨

## GRADUATE NEWS

- A University of Leicester Economics graduate has been appointed to a three-year term on the Bank of England rate-setting committee from next month. David Blanchflower, who 54, is resident in the US where he is an academic at Dartmouth College in New Hampshire.
- Economics graduate Richard Bowker (40) has been appointed as the new Chief Executive of the National Express Group from September. He has served as head of the Strategic Rail Authority, Chief Executive of Virgin Trains and last August was appointed Chief Executive of the Partnership for Schools, a government body responsible for delivering the 'Building Schools for the Future' investment programme.
- Graduate Andrew Taylor has been appointed as the New Chairman of Leicester City Football Club. The former Politics student is a former Chairman and Chief Executive of McDonald's UK and he has now been appointed as the 23rd Chairman of LCFC from June 1.
- The University of Ghana has announced that a Leicester graduate is to be its next Vice-Chancellor. Professor Clifford Nii Boi Tagoe will take up the post on October 1, 2006, a statement from the University Council announced. Professor Tagoe is an acclaimed medical doctor. He obtained a Bachelor's degree in Medicine and Surgery from the University of Ghana in 1976, and Doctor of Philosophy degree in Anatomy in 1983 from the University of Leicester. 🗨

## LUST wins national award

▶ University of Leicester Students' Union television, LUST has won a national media award.

It bagged the best Light Entertainment award in the 2006 National Association of Student Television Awards, (NASTA) held in Leeds.

Martin Cullen, University of Leicester Students' Union president, said : "A well deserved award, and the direct result of lots of hard work and effort from everyone involved in LUST." 🗨

## Events

### INAUGURAL LECTURE: FETAL ORIGINS OF ADULT DISEASES- 27/06/2006 17:30

▶ Professor Justin Konje's lecture is free and open to the public

On Tuesday 27 June 2006, Professor Justin Konje, Professor of Obstetrics and Gynaecology, will give his lecture entitled 'Fetal Origins of Adult Diseases'. This Inaugural Lecture, which is free and open to the public, will take place at 5.30pm in Lecture Theatre 1 in the Ken Edwards Building.

### LIFE LONG LEARNING, OLDER PEOPLE AND SOCIETY - 14/07/2006 11:00

▶ An Opportunity to explore the benefits of learning activities for older people and wider society in different areas of public policy.

14 July 2006 'Lifelong Learning, Age and Gender', Dr Sue Jackson: Director, Birkbeck Institute for Lifelong Learning. Although there are considerable benefits for individuals and society educational opportunities continue to be withheld from older women. Please note that the number of places at each seminar is limited. To reserve a place please contact Isobel Woodliffe: email - ijw3@le.ac.uk - 0116252 5914.

### GUIDED TOUR OF THE UNIVERSITY OF LEICESTER - 09/08/2006 14:00

The University of Leicester is again opening up the campus to the general public. A guided tour will be conducted by Blue Badge Guide Diana Courtney on Wednesday 9 August at 2pm

**Booking is Essential!**

The Tourist Information office on Every Street will take bookings. There is a maximum number of 25 people on the tour. To book a place on the tour contact 0116 299 4444.



# Eminent Inventor of DNA Fingerprinting Gains New Recognition

► The inventor of DNA Fingerprinting at the University of Leicester, Professor Sir Alec Jeffreys, is to be honoured with a prestigious international accolade later this year, it has been announced.

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 on Thursday 28 September 2006 during a special session of the Royal Netherlands Academy of Arts and Sciences at the Beurs van Berlage Building in Amsterdam.

A statement on the award pays tribute to Sir Alec's invention: "Since his discovery, it has been possible to identify every individual from any cell in his or her body, the only exception being identical twins, who share the same DNA pattern. The consequences of Jeffreys' discovery have been so far-reaching and rapid that it is virtually impossible to imagine the world without it. His technique - DNA fingerprinting - allows us to answer such questions as: Who is the biological father of a child? Whose blood, sweat, hair or

sperm has been left behind at the scene of a crime? Who is this tsunami victim? Are these bones truly the remains of the last Czar of Russia? Jeffreys' technique was even able to tell us whether Dolly was in fact the clone of another sheep.

"The new discipline of forensic molecular biology is therefore a direct outcome of Jeffreys' research, but his discoveries have also opened up other doors, for example the

ability to determine whether someone is a carrier of certain pathogenic genes. Most recently, Jeffreys has concentrated on genetic mutations and environmental factors. He is, for example, studying how irradiation may have caused genetic mutations in families from Chernobyl.

Luton-born Sir Alec has formerly studied in Amsterdam as a postdoctoral fellow in the laboratory

of Piet Borst, a 1994 Heineken prizewinner. Sir Alec said:

"I am honoured indeed to be numbered among the eminent scientists who have been recognised with this prestigious prize. Genetic fingerprinting continues to expand the horizons of knowledge and it is humbling to realise how a chance discovery in my lab in Leicester over 20 years ago has gone on to make a revolutionary impact in the world." ☺

# Leicester Student Wins Gold Medal

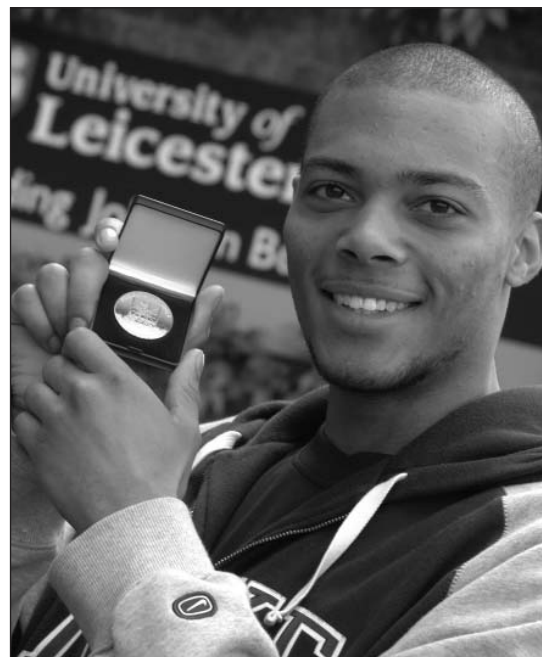
► A Leicester student is celebrating after clinching Gold in a national sports competition.

Third year Economics student William Sharman has become a British Universities Champion after winning at the British Universities Outdoor Athletics Championships. He won the 110 m hurdles and is now all set for the European Championships in August.

William said: "It is a great feeling to be the British Universities champion."

Annie Morgan from the Students' Union sports office said:

"This is a fantastic achievement and we are backing William all the way for the European Championship. William has done the University and Union proud-we are delighted for him." ☺



*Third year Economics student William Sharman won the 110m hurdles at the British Universities Outdoor Athletics Championships.*

# Obituries

## Mrs J S Skinner

► We have learnt, with great regret, of the death in March of Mrs Joan Skinner. Mrs. Skinner joined the University's Department of Biochemistry in April 1968 in a clerical post. She retired in October 1977.

## Emeritus Professor J K Grodecki, OBE, MA

► We have learnt with great regret, of the death of Professor Jan Grodecki on Saturday, 20 May 2006.

Professor Grodecki was appointed in 1965 as the University's first Professor of Law and Head of its

newly-created Department of Law. He served as Pro-Vice-Chancellor and Dean of the Faculty of Law from 1973-1976. In 1983 he was awarded the OBE for services to legal education. He retired in December of that year from his substantive professorial post, but continued in an associate capacity for a further 5 years.

## Death of Honorary Graduate The Dowager Lady Hesketh

► Honorary Graduate of the University The Dowager Lady Hesketh OBE died on April 7, aged 76. Lady Hesketh received an Honorary Doctor of Laws degree from the University in 1982.

She was actively involved in public life in Northamptonshire and had served as deputy lieutenant of the county and High Sheriff.

## Mr. D.A.V. Nicolson, DFM

► We have learnt, with great regret, of the death of Mr. Donal Nicolson. Don joined the University in April 1978 as a Staff Supervisor in the Clinical Sciences Building at the Leicester Royal Infirmary. He retired on 31 July 1989.

## Mrs C Backhouse

► We have learnt, with great regret, of the death of Mrs Caroline Backhouse. Caroline joined the University in September 1986 initially based at Beaumont Hall,

and moved to Gilbert Murray Hall as an Assistant Manager in September 1988. She worked within the Halls of Residence until June 2000.

## Mrs G Farrow

► We have learnt, with great regret, of the death of Mrs Gillian Farrow. Gillian joined the University in June 1987 as a part-time Senior Clerk in the Department of Chemistry. She transferred to the School of Education in November 1989, and retired from the post of Senior Clerk in July 1999. Gillian maintained contact with the University after her retirement through her work as a Committee Member on the Departmental Staff Association. ☺