

LEICESTER RESEARCH GRANTS AND BOOKS

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).

ANAESTHESIA

Dr D G Lambert

Studies on the Desensitisation of the Recombinant VRI Receptor – PhD Studentship

£37,305 *British Journal of Anaesthesia*

BIOCHEMISTRY

Dr C Bagshaw

Dynamics of Actomyosin Motors
Myosin and actin have long been known to be the key proteins involved in the contraction of muscle using adenosine triphosphate (ATP) as fuel. Recently, myosin has been shown to exist in many variants and is present in all plant and animal cells. Here it is involved with fundamental processes of motility, cell division and transport of material. Myosins are one of several types of proteins called molecular motors that use the chemical energy of ATP or related substances, to drive movement. It is speculated that changes in shape of the molecules are amplified to give the macroscopic motions. We will use fluorescence methods in conjunction with rapid mixing methods to test these ideas, by following events in real time (i.e. with a resolution of less than 1/1000 second). These studies are important in understanding how proteins function as nano-motors and may indicate why they fail in certain diseased states.

£160,839 *Wellcome Trust*

Dr D M Heery

Structure/Function Analysis of the Leukemogenic Fusion Protein MOZ-TIF2 and the Wild Type MOZ Protein (Year 1)
Acute Myeloid Leukemia (type M4/M5) is characterised by chromosomal translocations which result in fusion of the protein MOZ (monocytic leukemia zinc finger protein) to the transcriptional coactivators CBP, p300 or TIF2. MOZ has histone acetyltransferase activity, although little else is known of its function in vivo. CBP and p300 are also his-

tone acetyltransferases, recruited to many promoters, whereas TIF2 is a hormone receptor-specific coactivator, and binds CBP/p300. The molecular mechanisms by which the translocations contribute to leukemogenesis remain unknown.

We have established that MOZ-TIF2 downregulates transcriptional responses by hormone receptors in mammalian cell lines. We have also shown that MOZ-TIF2 appears to disrupt the normal subcellular distribution of CBP and p300. The aim of this project is to investigate the functions of MOZ *in vivo*, and to establish how MOZ-TIF2 causes aberrant gene regulation. This will be achieved through yeast two hybrid screens, cell transformation assays, transcription assays and FRET based interaction studies. In addition, the ability of retrovirally transduced MOZ-TIF2 derivatives to induce myeloproliferative syndromes in mice, will be assessed in a collaboration with the Howard Hughes Medical Centre, Harvard. This research will shed light on the role of fusion proteins in AML and potentially provide model systems to facilitate the development of small molecule therapies.

£52,626 *Cancer Research Campaign*

Dr A Munro, Rachel Lawson (student) Case Studentship - Characterisation of a Novel Pathway for Vitamin Biosynthesis

The vitamin biotin (vitamin H) is essential for mammalian reactions involving carboxylation and decarboxylation, and has vital roles in fatty acid and carbohydrate metabolism. Human deficiencies in biotin result in neurodegenerative disorders and reproductive abnormalities. There is a world shortage of biotin, resulting in intense industrial interest in developing methods for its overproduction. Total chemical synthesis of biotin is unfeasibly complicated, but use of the natural bacterial enzymes for its manufacture is a viable proposition. This

requires a fundamental understanding of the biochemical reactions involved. This award will enable the detailed analysis of the catalytic pathway for biotin synthesis in the model bacterium *Bacillus subtilis*. The study will focus around one particular poorly understood step in catalysis – which involves a heme-containing enzyme (cytochrome P450 BioI) that catalyses reaction(s) that result in long chain fatty acid molecules being converted to short chain derivatives that feed in to the final steps in the biotin synthesis pathway. The long term project aim is the optimisation of enzyme-mediated synthesis of biotin.

£13,200 *Roche*

Prof G C K Roberts, Dr M Carr, Dr M Pfuhl

JIF Award: Protein Structure Dynamics and Interactions: 800 MHz NMR Spectroscopy

This award of £1.68m from the Joint Infrastructure Fund (operated jointly by the Wellcome Trust and HEFCE) will provide the Biological NMR Centre with a new 'state-of-the-art' nuclear magnetic resonance spectrometer. This instrument will be used in a range of research programmes in the Department focussed particularly on determining the 3-dimensional structure of protein molecules and the way in which they interact both with small molecules and with other proteins or DNA. These research programmes provide fundamental information on the mechanisms of biological processes but many of them are also specifically directed at proteins which are involved in drug action and the information obtained will be used in collaboration with industry in the design of new and more effective drugs. The addition of this new instrument means that the facilities of the Biological NMR Centre are now on a par with those of any other laboratory in Europe.

£1,682,654 *Wellcome Trust/HEFCE*

Dr A E Willis

Investigation and Characterisation of MRNAs that are Translated by Cap-Independent Mechanisms by CDNA Microarray

£168,876 *BBSRC*

BIOCHEMISTRY WITH UNIVERSITY OF KENT AT CANTERBURY

Dr M Carr

NMR-Based Structural Studies of the *M. Bovis* Protein mpb70
£5,678 *Veterinary Laboratories Agency*

BIOLOGY

Prof R H Smith

Routes of Exposure of Vertebrate Predators to Pesticides

Pesticides are used because they have beneficial effects, but health and environmental risks need to be set against the benefits. Rodenticides may harm animals other than rodent pests, though a potential risk only becomes a hazard if there is sufficient exposure of organisms at risk.

This project will focus on the Red Kite, a bird that was eliminated from England and Scotland by persecution in the last century but has been successfully reintroduced to the English Midlands. Red Kite obtain most of their food by scavenging carcasses, and are consequently at risk of consuming harmful levels of rodenticide if they eat rats that have been killed by pest control on farms. The majority of the diet of Red Kite is rabbits, though rats also feature (rats make up roughly one quarter of the diet of Red Kite). This field-based project is jointly supported by English Nature and the Natural Environment Research Council and will quantify risk by measuring exposure and how it is affected by (a) the levels and toxicities of rodenticides in Common Rats, (b) how rodenticides alter the behaviour of intoxicated rats, (c) the feeding preferences of Red Kite, and (d) the responses of Red Kites to intoxicated rats. The practical outcome





will be to modify control of rodent pests in order to minimise the harm that may be done accidentally to predators and scavengers of rats.

£6,000 *English Nature*

CELL PHYSIOLOGY & PHARMACOLOGY

Dr R Challiss, Prof S Nahorski

Studentship - Regulation of Group I Metabotropic Glutamate Receptor Signalling in Neurones and Glial Cells

Metabotropic glutamate receptors are widely expressed in the human central nervous system and are currently being actively investigated as potential drug targets in a diverse array of neurological and psychiatric diseases. In this project, signalling differences between the splice variant forms of group I metabotropic glutamate (mGlu1 and mGlu5) receptors will be explored in neurones, glial cells and recombinant cell-lines. Using membrane preparations, the populations of G proteins activated by mGlu1/5 receptor splice variants will be assessed. To explore receptor-G protein coupling specificity in intact cells, mini-gene constructs encoding unique Ga C-terminal peptides, which block receptor coupling to specific cellular G protein sub-populations, will be utilized. This method should allow the 'knock-out' of G protein coupling partners for mGlu receptors and provide a powerful 'in vivo' approach to interrogate directly the importance of specific G proteins for linkage to the array of intracellular signalling pathways that are activated or inhibited following receptor activation.

£20,550 *Glaxosmithkline*

Dr G B Willars

Specificity of RGS Protein Recruitment by Activated G-Protein-Coupled Receptors

Cell function is controlled by a diverse range of chemical messengers, many of which act through specific proteins on the surface of cells. The largest family of receptor molecules are G-protein-coupled receptors. The ability of these receptors to influence cell function is continually tuned, providing a basis for the adaptation that occurs in health and disease. Recently a family of proteins known as regulators of G-protein signalling (RGS proteins) have been identified that are key in the tuning of signalling by G-protein-coupled receptors but our understanding of these proteins is in its infancy. This project aims to add to our knowledge of how these RGS proteins work.

£169,740 *BBSRC*

Case Studentship - Activation and Regulation of Intracellular Signalling by the Neuromedin U Receptors NmU-R1 and NmU-R2

In many instances, molecules that regulate cell function act through interac-

tions with cell-surface proteins. Such proteins act as receptors, transducing the signal to the cell interior. The largest family of cell-surface receptors are known as G-protein-coupled receptors (GPCRs), which, once activated, regulate signalling cascades within the cell that ultimately produce the physiological response. Recently, two distinct GPCRs were identified which are activated by the signalling molecule neuromedin U (NmU) and work is already underway to exploit their therapeutic potential. This project will concentrate on characterising the intracellular signalling pathways and their regulation, and determine any differences between the two Nm U receptors.

£20,550 *Smithkline Beecham*

CHEMISTRY

Dr A P Abbott

Chromium Electroplating using Ionic Liquids

£121,168 *EPSRC*

Dr P W Dyer

Novel Polymeric Supports for High Performance Immobilised Catalysts and Reagents - Student - Toby B Reeve

£13,200 *Avecia plc*

Dr R J Green

Peptide Interactions with Model Lipid Membranes

Antimicrobial peptides act as offensive or defensive agents by rupturing the membranes of target cells and are studied due to their potential as a family of antibiotics. However, their specificity towards bacterial cells varies and is not clearly understood. This project aims to investigate the chemical and physical parameters that control antimicrobial peptide selectivity using complementary surface analytical techniques. Model membrane surfaces will be created in the form of lipid monolayers spread at the air/water interface. The dynamics of peptide adsorption and the structural changes of the peptide and lipid layer will then be investigated through the combined use of three techniques: surface tensiometry, infrared spectroscopy and neutron reflectivity.

£60,244 *EPSRC*

Prof A R Hillman

Travel to Conference Grant

£1,026 *The Royal Society*

Dr E Raven

Supplement - Redox Regulation, Catalytic Mechanism and Active Site Structure in Human Indoleamine 2,3-Dioxygenase

£13,110(supp) *Wellcome Trust*

Dr G Solan

Studentship - Agreement No:

AG2001M033 "Blending Polyolefins

with Late Transition Metal Double-Site Catalysts"

£77,695 *Exxon Mobil*

Dr J R Woodward

The Study of Magnetic Field Effects on Radical Reactions in Solution Using Nanosecond Time Resolved Infrared Spectroscopy

Magnetic fields are capable of influencing the rate and yield of chemical reactions that proceed via free radical intermediates. This has significant implications to the question of whether human exposure to weak electromagnetic fields, experienced close to electrical equipment or living under overhead power cables, is potentially harmful. This project will involve the design, construction and operation of a novel time resolved infrared magnetic field effect spectrometer, to give highly detailed information on the effect of magnetic fields on very simple radical reactions. The purpose of this is to develop a complete understanding of the factors that make free radical reactions field sensitive, thus indicating those biological systems that are the most likely to be influenced.

£60,311 *EPSRC*

ECONOMICS

Prof W Charemsza

Phare ACE Scholarship 1998 -

D Hristova

£13,284 *CEC via GOPA-Cartermill*

EDUCATION

Dr R Watling

Education for Citizenship:

External Evaluation

£8,000 *St Columb's Park House*

Dr R Watling, Mr C Comber

Citizenship and ITT on the Internet (CITTI)

The Centre for Citizenship Studies in Education at the University of Leicester has been commissioned to conduct an applied research project on behalf of the Department for Education and Skills and the Teacher Training Agency.

The project will design, pilot, maintain and evaluate an Internet-based support system for the first wave of 19 Teacher Training Institutions (TTIs) who will be providing Initial Teacher Training (ITT) in Citizenship from September 2001 to August 2003.

The main aims of the project are to:

- Design a website which can support collaboration and exchange of information between the 19 TTIs offering ITT in Citizenship from September 2001.
- Build and pilot this website on the University of Leicester server (www.le.ac.uk) by October 2001 in consultation with the DfES and the TTIs.

- Launch and maintain this website with suitable levels of functionality and security from November 2001 until August 2003 in the first instance.
- Monitor the use of this website and evaluate its relevance to the teaching of Citizenship ITT in the 19 TTIs.
- Report on the values and limitations of the service, and make recommendations for future action and support.

£10,000 *Department for Education and Skills*

Dr R Watling, Prof A Osler

Global Citizenship Resource Project

The Centre for Citizenship Studies in Education (CCSE) at the University of Leicester is being funded by the Department for International Development (DfID) to establish a *Global Citizenship Resource Project*. The project will assist teachers, schools and other education providers in the East Midlands region and beyond in developing global citizenship and development education across the curriculum. Our goal is to increase public awareness of international development and the impact of globalisation, by targeting teachers locally, regionally and nationally. We plan, through this strategic initiative, to raise teachers' own awareness and understanding of the effects of globalisation and increased global interdependence. By building upon this increased personal awareness and encouraging teachers to develop a global dimension to their work and by introducing and improving teachers' access to appropriate teaching materials we will make a key contribution to DFID's central aim of improving public awareness of international development. The project has four key aims:

- To augment and support DfID's Global Dimension database (www.globaldimension.org.uk which is already managed by CCSE)
- To provide a physical resource base of development education materials which will be situated in a special collection in the University of Leicester library
- To provide training for teachers and others engaged in formal education in the use of development education resources.
- To increase the capacity of the voluntary sector and LEA advisory teachers in working effectively with schools using development education resources.

Further details can be obtained from The Centre for Citizenship Studies in Education, School of Education, University of Leicester, Leicester, LE1 7RF. 0116 252 3681. ccse@le.ac.uk

£71,151 *Department for International Development*



ENGINEERING

Prof L A Dissado

Investigation of Dielectric Materials
£2,000 *Dr Ali Haidar*

EPIDEMIOLOGY & PUBLIC HEALTH

Dr S Ablett

Supplement - Unreported Costs Since 1998 - Computer Officer
£342,378(supp) *UKCCSG*

Prof K Abrams

HSR Fellowship:- Mr Richard Riley - Evaluation of the Use of Tumour Markers in Cancer Services
£80,030 *NHS Trent*

Mrs E Draper, Mr B Manktelow

Neonatal Intensive Care Review for the Trent Region
£17,500 *NHS Trent*

Prof C Jagger

Setting Up a Coherent Set of Health Expectancies in the EU

This grant is the second part of a two stage project developing instruments to monitor the health of the European population and to use in the European Health Information System. In total, a set of eleven indicators will be developed in four health domains: perceived health, disability, chronic morbidity and mental health. This grant is to develop the measurement tools for one specific area of disability, that of Instrumental Activities of Daily Living. This type of activity, assessing the ability to live independently and maintain a household as well as a role in society, is important in monitoring disability and care needs in older people. The Leicester team has been chosen to undertake the work in this domain because of previous work reviewing these measures as well as its research on the epidemiology of ageing and disability in later life, through the longitudinal studies of ageing in Melton Mowbray.

£13,394 *CEC via INSERM*

Forecasting the Prevalence of Alzheimer's Disease in the UK (Phase 1) The continued increase in life expectancy over the last century has particular importance for age-related diseases such as dementia. This project will use nationally representative data on the incidence of dementia and more specifically Alzheimer's disease from the MRC Cognitive Function and Ageing Study (MRC-CFAS), together with estimated trends in mortality rates and population projections to forecast the numbers of older people with dementia, and with Alzheimer's disease up to the year 2041. Since the longer an individual has dementia, the greater their need for care, we will also calculate the number of individuals living with dementia for different lengths of time to better indi-

cate potential healthcare costs. Having developed the projections, we will explore the effect on prevalence figures of potential interventions to delay the onset of dementia. This project forms part of the MRC Co-operative Group Grant held in Cambridge and based on the MRC-CFAS study.

£11,250 *Alzheimer's Foundation*

Dr J Kurinczuk

National Public Health Career Scientist Award - Towards the Prevention of Fetal, Infant and Childhood Disease
£479,520 *Department of Health/NHS R & D*

EPIDEMIOLOGY & PUBLIC HEALTH, ONCOLOGY/DIVISION OF MEDICAL EDUCATION

Dr M Dixon-Woods, Dr B Young, Dr D Heney

Information Needs of Children with Cancer and their Parents: A Study in Partnership

It is now accepted that satisfying patients' information needs is a key element of high quality cancer care. The information needs of children with cancer have received far less attention than their adult counterparts, however, and little is understood about how much information children want to have, which methods they prefer for receiving information, and how their needs and preferences vary by age and other variables. We will use qualitative methods to explore the views of children with cancer and their families. Up to fifteen families will be recruited from Leicester Royal Infirmary's Children's Oncology Unit. They will be asked to participate in semi-structured interviews with a non-clinical interviewer. The interview tapes will be transcribed and analysed using the constant comparative method. The outcomes of this research will be used to inform good practice in communicating with children with cancer, including the development of suitable information materials.

£3,250 *University Hospitals of Leicester*

GENERAL PRACTICE

Dr R K McKinley

Spirometry in Primary Care

Chronic Obstructive Pulmonary Disease (COPD) is a common chronic progressive lung condition in people in their middle years and older. It is a common cause of disability and death in older people. Nevertheless, if it is recognised and treated appropriately disability can be reduced and life extended. The student will examine the extent to which practices in Leicestershire are able to diagnose and to organise care for people with COPD.

£500 *General Practitioners in Asthma Group*

GENETICS

Dr R H Borts

Supplement - Molecular and Genetic Analysis of the Functions of MutL Homologues in Yeast - Prize Studentship
Ms E R Hoffman
£7,285 *Wellcome Trust*

Prof R C Trembath

The Molecular Basis of Familial Partial Lipodystrophy

Partial lipodystrophy (PLD) is an inherited disorder involving wasting of subcutaneous fat and resulting in hyperlipidaemia, insulin resistance and diabetes. PLD is caused by mutations in the gene encoding lamins A and C, components of the nuclear lamina, however, the mechanism by which mutated lamins result in fat loss is unknown. We have identified the adipocyte differentiation factor SREBP1 as a novel lamin A interactor and propose that PLD results from alteration of this interaction. We will test this hypothesis by investigating the effects of PLD mutations on adipocyte differentiation in cultured cells and examining their effects on SREBP1 maturation, localisation and function. To examine the effects of lamin A/C mutations in a whole system, we will generate a "knock-in" transgenic model of PLD carrying the common R482W mutation. This model will also enable investigation of the process of fat loss and identification and testing of targets for therapy.

£204,867 *British Heart Foundation*

GEOLOGY

Dr M A Lovell

Geophysical Methodologies for the Characterisation of Gas Hydrate Core
£85,192 *NERC*

HISTORY OF ART

Dr G Quilley

The Illuminated Calvino

This project consists of the development of original new art work by established and respected artists, much of it building on recent research into the use of digital technology in printmaking, to produce works based upon the writings of the Italian novelist and essayist, Italo Calvino.

Calvino's texts are perfectly suited to such a creative purpose. The title, *The Illuminated Calvino*, itself seeks to embrace the extraordinary diversity of his interests, from mediaeval romances and folk-tales to science fiction and computer technology. 'Illuminated' refers not just to a specific type of image-making associated with mediaeval and Renaissance manuscripts, itself appropriate to Calvino's expert knowledge of such culture, but also to this concept of "lightness" by which, in *Six Memos for the Next Millennium*, he addresses the challenges posed for the creative arts by the proliferation of digital technologies.

While one of the concerns of this project will be to take up Calvino's challenge and confront the complex issues surrounding the impact of digital culture upon creative art, it will also, therefore, address another of Calvino's primary interests: how visual imagery responds and relates to the written word.

The artists involved will be:

Raz Barfield, digital printmaker (London)

Colin Cina, painter and printmaker, Head of Chelsea College of Art (London)

Eileen Hogan, painter and printmaker, Professor of the London Institute (London)

Simon Marsh, printmaker (London)

Tiffany McNab, painter and printmaker (Victoria, Australia)

Megan McPherson, digital printmaker (Victoria, Australia)

Geoff Quilley, artist and art historian (Leicester)

Richard Slee, ceramicist (London)

Rupert Wheeler, architect (London)

Karyn White, painter and printmaker (London)

Sarah Winfrey, multimedia artist (Victoria, Australia)

David Wood, illustrator (London)

The originating force behind *The Illuminated Calvino* was the internationally respected artist Tristan Humphries.

Many of the artists listed above were associated with either or both of the projects by which he pioneered the use of digital technologies in art: *The Integration of Computers, Print Technology and Printmaking* (London Institute) and *Digital Imaging and the Fine Art Object* (Royal Melbourne Institute of Technology).

However, following his tragic and untimely death last summer, the project will now be carried forward by the artists themselves, with myself, who had originally intended only to write the catalogue, as its co-ordinator. Naturally and properly, the project will also be in honour of the memory of Tristan.

£5,000 *Arts & Humanities Research Board*

£5,000 *Arts & Humanities Research Board*

£5,000 *Arts & Humanities Research Board*

£5,000 *Arts & Humanities Research Board*

£5,000 *Arts & Humanities Research Board*

£5,000 *Arts & Humanities Research Board*

£5,000 *Arts & Humanities Research Board*

£500 *Italian Cultural Institute*

£500 *Italian Cultural Institute*

£20,705 *Chartered Institute of Personnel and Development*

£20,705 *Chartered Institute of Personnel and Development*

£20,705 *Chartered Institute of Personnel and Development*

£600 *London Mathematical Society*

£600 *London Mathematical Society*

£600 *London Mathematical Society*

£600 *London Mathematical Society*

£600 *London Mathematical Society*

£600 *London Mathematical Society*



leading researchers and highlight the expertise in spectral theory at Leicester and Loughborough. Spectral problems arise in numerous important applications including, for example, hydrodynamics and magnetohydrodynamics, scattering in optical and acoustic waveguides and quantum mechanics. The solution of 'inverse' spectral problems is another area of growing interest with important applications to imaging problems (e.g. location of underground bodies such as ore deposits, landmines, etc).

The meeting is open to all who wish to attend. Further details are available at www.mcs.le.ac.uk/seminars/applicable/SpectralDay.html or by contacting M.Marletta@mcs.le.ac.uk

£694 *London Mathematical Society*

Dr N Snashall, Prof S Koenig, Dr J Hunton

Algebra and Topology Workshop
Major advances in mathematics in recent years have resulted from new ideas providing unified approaches to many central problems. A workshop to highlight and develop new links between Algebra and Topology will be held in Leicester during the week September 17 to September 21.

The meeting has attracted many of the leading mathematicians in the focus areas from Europe, the former Soviet Union and North America. It builds on a similar successful workshop held here last year.

Value Reported in October Bulletin Supplement

MEDICINE & THERAPEUTICS

Dr L L Ng

Mechanisms of Activation of Leucocyte NADPH Oxidase in Pre-Eclampsia

£66,677 *British Heart Foundation*

MEDICINE & THERAPEUTICS WITH GUY'S HOSPITAL, LONDON

Prof A J Wardlaw

Mechanisms of T Lymphocyte Recruitment to the Lung in Asthma

£132,664 *National Asthma Campaign*

MICROBIOLOGY & IMMUNOLOGY

Prof M Barer

Expression and Release of Toxin and Converting Phages in Shiga-Toxin-Producing Escherichia Coli (STEC)

£116,413 *BBSRC*

Prof W D Grant, Dr S Heaphy
Supplement - Environmental Gene Screening

£70,000 *Genecor*

Prof K Nicholson

Evaluate Study of FLUAD Influenza Vaccine or AGGRIPAL S1 Influenza Vaccine

£18,000 *Chiron S.p.A.*

OBSTETRICS & GYNAECOLOGY

Mr F Al-Azzawi

Fixed-Term Lectureship in Molecular Endocrinology

£100,000 *Institute of Women's Health*

PATHOLOGY, ACCIDENT & EMERGENCY MEDICINE, LRI

Prof J Pasi, Mr Adrian Evans

Pre-Clinical Assessment of the Potential for rVIIa as a Universal Haemostatic Agent in a Model of Haemodilution and Trauma

Failure of blood coagulation, secondary to large volume fluid replacement in trauma, is a major component to the mortality and morbidity associated with blunt trauma. Progressive bleeding compromises multiply injured patients directly and indirectly. Shock requires rapid restoration of the circulating volume by rapid infusion of fluid to restore and sustain adequate tissue perfusion. However, colloid gelatin fluids interfere with primary blood coagulation aggravating bleeding. Recombinant factor VIIa (rVIIa) is seen as a possible universal haemostatic agent. Reports have shown that rVIIa is effective at arresting severe haemorrhage in the context of major trauma, unremitting haemorrhage and post surgical bleeding. Recombinant VIIa conceivably may overcome some of the defects that occur because of large volume fluid replacement and have a role in treating the multifactorial haemostatic failure. This study will investigate the feasibility of use of rVIIa as a universal agent to improve blood coagulation in the setting of major trauma.

Value Reported in October Bulletin Supplement

PHYSICS & ASTRONOMY

Dr C Binns

AMMARE - New Nanoscale Materials for Advance Magnetic Storage Devices (EC FP5)

This project funded by the EC under the fifth framework programme supports research, to be carried out by nine academic and industrial centres in 4 European countries, on advanced performance magnetic materials assembled from nanoclusters. These are particles consisting of just a few hundred atoms that are of the order of 2 nanometres (about 10,000 times smaller than the width of a human hair). They mark the boundary between the atomic and bulk states and have properties distinct from both. Recently, at research laboratories, including the condensed matter group in

the Physics and Astronomy department at Leicester, the technology has been developed to assemble the clusters to make materials with novel properties. The aim of this project is to push the technology from the research laboratory towards advanced materials and devices for the next generation of magnetic recording technology.

£161,670 *CEC via FORTH, Greece*

Dr A N Brunton, Prof G Fraser
Development of Large Area Silicon Nitride Detector Windows

Lobster-ISS is a wide-angle X-ray telescope designed and under development at Leicester, which we hope the European Space Agency will place on the International Space Station. From there it will view the whole sky once per 90 minute orbit, both monitoring the temporal variation in brightness of known X-ray emitting objects and looking for new ones which flare up.

Its gas-filled X-ray detectors, being developed at NASA Goddard Space Flight Center, have a heritage dating back to the work of Geiger.

To maximise their sensitivity a large area but very thin window is needed, through which the X-rays can enter unimpeded. This grant is to fund development of silicon nitride windows as thin as 0.1 microns for Lobster-ISS and other applications.

£77,900 *PPARC*

Dr A Holland
Radiation Hardening of MAT CCDs for Space Use

£171,656 *PPARC*

Prof C Norriss
Supplement - Diamond Synchrotron Project - Interim Scientific Directorship

£16,000(supp) *Department of Trade & Industry/Office of Science & Technology*

POLITICS

Dr I C Harris

Grant on Edmund Burke

This is a grant for work in connexion with Writings & Speeches of Edmund Burke, vol.4 (Clarendon Press) centring on the collections of the Hartley Library, Southampton.

£1,000 *University of Southampton*

PSYCHIATRY

Dr J Milton

Supplement - Rampton Referrals Cohort Follow-Up Project

£16,713 *Central Nottinghamshire (supp) Healthcare*

PSYCHIATRY - GREENWOOD INSTITUTE

Prof P Vostanis

Assessment of Need for Transitional Services: Professionals Perspectives

This component reflects the support costs towards a project by the Leicestershire and Rutland NHS Trust to establish gaps in transitional mental health services, i.e. between adolescence and young adult life (Researcher Maxine Richards). The continuities of childhood disorders into adolescence and adulthood are well established. Yet few statutory mental health services work specifically with older adolescents/young adults, with numerous deficiencies identified in the range, quality and distribution of services and the lack of any consistent, inclusive service model. Many service issues relate to agencies within the education, voluntary and social services sectors. This research focuses upon the perspectives of 40 mental health clinicians and managers from statutory and non-statutory services working with the 16-20 year-old group, who will be interviewed, in order to: ascertain existing mental health provision; identify service gaps; explore the need for transitional planning of transfer of young people between the two services; identify alternative service models; make recommendations to all partner agencies.

£2,000 *Leicestershire & Rutland NHS Trust*

PSYCHIATRY WITH UNIVERSITY OF OXFORD

Dr R Palmer

Eating Disorders: Cognitive Processes and Treatments

The present state of the treatment of the eating disorders, anorexia nervosa and bulimia nervosa, is far from satisfactory. New therapies are needed. A grant from the Wellcome Trust to Dr Bob Palmer in the Department of Psychiatry will fund a major randomised controlled trial of new psychotherapeutic treatments. The work is a collaboration with the research team led by Prof. Christopher Fairburn of the Oxford University. Oxford is the other centre for the trial. The study will continue for five years. It will compare two kinds of outpatient psychological treatment and test out a theory of the mechanisms that sustain eating disorders.

Value Reported in October Bulletin Supplement

RESPIRATORY MEDICINE, EPIDEMIOLOGY & PUBLIC HEALTH, SHEFFIELD/MANCHESTER/OXFORD/KEELE/NOTTINGHAM UNIVERSITIES

Prof A Wardlaw, Prof P Burton
The Genetic Epidemiology of Chronic Obstructive Pulmonary Disease

This grant has been awarded to a



multi centre consortium of seven centres to collect blood from patients with COPD and their relatives with the aim of trying to find genes involved in lung diseases caused by smoking. It is anticipated over the next two years that we will recruit 1,000 patients and a 1,000 siblings and that this will form a platform for a long term programme of studies into the genetic basis of COPD. As well as Leicester the other centres in the COPD genetics network are Oxford, Nottingham, Sheffield, Keele and Manchester. Within Leicester the study represents a collaboration between members of the Division of Respiratory Medicine, the Division of Medicine for the Elderly and the Department of Epidemiology under the auspices of the Institute for Lung Health.

£65,417 *PPP Healthcare Medical Trust*
Leicester component
(total grant value
£274,662)

RESPIRATORY MEDICINE, UHL TRUST

Dr I Pavord, Dr S Birring

The Immunopathology of Idiopathic Chronic Cough

The purpose of the current study is to determine whether an autoimmune type of inflammation occurs in the airways of patients with unexplained persistent cough.

We will measure airway inflammation in 15 subjects with cough and 15 healthy controls by taking a small sample of the airway wall and the fluid bathing the airway wall during a bronchoscopy and analysing them using standard pathological techniques. Bronchoscopy is a relatively simple, painless and safe day case procedure done under local anaesthesia and light sedation.

Chronic persistent cough is a common clinical problem and is responsible for 8% of specialist referrals. The cause can be determined and successfully treated in most cases but there remains a small minority, variously estimated at between 5 and 20%, where the cause is obscure. In an earlier study we noticed a high incidence of other diseases such as an underactive thyroid and diabetes. These conditions are often called autoimmune diseases as they are caused by an abnormal immune response to cells in the thyroid or pancreas. They commonly coexist with other autoimmune conditions so we have begun to wonder whether the cough is related to an abnormal autoimmune response to cells in the airway.

Chronic cough is a common and dis-

treasing condition. The causes are poorly understood and treatment is often unsatisfactory.

We may uncover a previously unrecognised condition responsible for a significant number of cases of chronic cough. Closer understanding of the nature of this condition might lead to more effective treatments.

For further information contact: Mr Vaughan Marsden, Public Relations Manager, Glenfield Hospital, Groby Road, Leicester. Tel: 0116 256 3479
£25,400 *British Lung Foundation*

SCARMAN CENTRE

Dr C Fuller

An Injury Audit Amongst English Premier League Rugby Clubs

£61,570 *English Rugby Football Union*

Mr J Garland, Mr N Chakraborti

Rural Racism in Suffolk

This project investigates how mainstream and voluntary services respond to incidents of rural racism within Suffolk. The minority ethnic community in Suffolk is very small and therefore individuals experiencing racism may feel socially isolated. This research seeks to uncover how effective these services are in challenging racism and supporting victims of racial harassment.

The project will employ a variety of methodologies, including a questionnaire survey of minority ethnic communities living in rural parts of Suffolk and the conducting of interviews with victims of racial harassment, representatives from mainstream and voluntary services as well as a cross-section of the rural white communities.

£14,137 *Suffolk County Council*

Prof M Gill

A Study to Determine the Impact of CCTV in Monitored and Unmonitored Stores

This research project will determine the value of monitoring in-store CCTV, via a comparison of stores where CCTV is monitored and stores where it is not. This evaluation will consider what CCTV Operators do and why. Data will be collected and analysed from monitored and non-monitored stores to enable comparisons to be made with a view to offering guidance on improving the impact of CCTV systems. Employee perspectives relating to the effectiveness of utilising CCTV Operators will also be explored, as will the possibility of employing those less-able bodied to fill this role. The research project is led by Professor Martin Gill and assisted by Karryn Loveday (Research Assistant – 252 5773, kl33@le.ac.uk).

£26,815 *ASDA Stores Ltd*

Professor M Gill, Mr N Chakraborti Offender Perspective Project

The Scarman Centre was commissioned by the Dixons Stores Group (DSG) to conduct a preliminary investigation of shop and staff offender perspectives. By gaining a greater understanding of the offender's decision-making process, it was envisaged that DSG would learn more about the perceived effectiveness of security measures, the way in which criminal opportunities are utilised and how best to develop and improve preventive strategies.

The primary aim of this study was to provide video evidence of theft from Dixons stores which could be used for staff training purposes. Experienced shop thieves were therefore identified and taken on video tours of stores, where their interaction and observations were recorded to show how they would exploit existing vulnerabilities. In addition, interviews were conducted with former employees of DSG who had been dismissed for dishonesty as a means of eliciting first-hand accounts of staff theft.

The research findings were inevitably restricted in terms of their validity, reliability and scope on account of the small-scale nature of the present study. However, a number of important issues were raised relating to the decision-making process of both shop and staff offenders, which can be confirmed and built upon through the development of a further study.

£6,609 *Dixons Stores Group*

SURGERY

Prof M Galinanes

Equipment Grant

£5,000 *Link-Up*

Prof M Galinanes, A Sosnowski

Regression of Myocardial Hypertrophy

£95,000 *Sorin*

Mr M J McCarthy, Mr M Thompson, Dr J Thompson

A prospective, double-blind, randomised trial to assess the efficacy of continuous sciatic/posterior tibial nerve blockade via a neural sheath catheter in lower limb amputees

Patients undergoing major lower limb amputation have a longer hospital stay and require long-term institutional support. One of the major factors that contribute to a protracted hospital stay is poor mobility, which partly reflects intractable stump pain. Major lower limb amputees can experience two types of pain in the immediate post-operative period. Firstly, from the surgical incision site and divided nerves and secondly, phantom limb pain. Despite the aggressive approach adopted to

lower limb salvage very little work has been undertaken on improving post-operative outcome measures for amputees, shortening their hospital stay and ultimately improving their quality of life.

It has been previously reported that infusion of local anaesthetic via a neural catheter placed into the severed nerve following lower limb amputation can improve post-operative analgesia and enhance early mobilisation and reduce phantom limb pain 1,2. However, both these studies were of poor design and therefore the true efficacy of this technique will only be known by implementing a prospective, blind, randomised clinical trial.

The aim of this study is to investigate these observations by performing a randomised double-blinded study. If there a statistically proven benefit to this technique then it should be implemented on a routine basis for all patients undergoing major lower limb amputations as this will ultimately reduce post-operative pain and hence improve patient well-being and early rehabilitation.

Value Reported in October Bulletin Supplement

Mr T J Spyt, Prof N Samani, Dr P Stafford, Dr D Chin, Mr G Doukas Use of Pulmonary Vein Isolation by Radiofrequency Ablation to Reduce Atrial Fibrillation after Mitral Valve Surgery – A Randomised Prospective Assessment

Atrial fibrillation (AF) is the most common type of arrhythmia in the general population. It is associated with many heart conditions one of which is mitral valve disease. Unfortunately this arrhythmia persists even after successful valve surgery and predisposes to serious complications such as heart failure and stroke, which greatly impair quality of life and impose a huge burden in NHS economics. In fact, AF is associated with a 1.5- to 1.9-fold mortality risk after adjustment for the preexisting cardiovascular conditions with which AF was related. This project, funded by the British Heart Foundation intends to test the effectiveness of a procedure carried out at the time of mitral valve surgery to reduce the incidence of post-operative AF. This procedure involves the use of radiofrequency energy to ablate the areas where the abnormal electric currents are generated. We anticipate that this properly randomized prospective evaluation will allow us to identify patients who will benefit from this additional procedure and establish its' appropriate future use.

£115,476 *British Heart Foundation*

**GENERAL PRACTICE**

Prof R Baker, M Hare
The General Practice Assessment
Survey for Hinckley & Bosworth
Primary Care Group

Under new arrangements, general practices are grouped together for management purposes in 'primary care groups'. The managers of these groups are encouraged to investigate the views of users of services, the objective being to promote the development of services designed to meet the preferences of users. The general practice assessment survey is a standard instrument for assessing users' views of general practice, and in this project, samples of patients will be asked to complete it.

£1,766 *Hinckley & Bosworth*
Primary Care Group

Dr A Wilson

Supplement - How Important is
Private Health Activity to the NHS

£500(supp) *NHS Trent via*
University of Nottingham

GENETICS**Dr R Borts**

Genetic and Molecular Analysis of
Crossover Control in Yeast and Man

£367,098 *Wellcome Trust*

Dr M Jobling

Supplement - Surnames and Genetic
Structure: A Molecular Analysis
Using Y-Chromosomal DNA

Polymorphisms - Prize Studentship
Ms T King

£1,211.50(supp) *Wellcome*
Trust

Prof R C Trembath

Candidate Locus and Gene Based
Analysis in Congenital Microph-
thalmia - Vacation Scholarship - Paul
Dudley

With local Ethical Committee approval and family member consent, we have recently revisited a previously reported kindred with congenital microphthalmia(1). Congenital microphthalmia is an important and relatively common developmental ocular disorder characterised by a small eye. However, the severity of the disease often ranges from mild to extreme microphthalmia (anophthalmia) within a single family. Whilst chromosomal abnormalities of virtually all chromosomes may result in syndromic microphthalmia, few single genes have as yet been identified as causative of this developmental anomaly. Human eye development begins as early as the fourth week of gestation and proceeds throughout embryonic and foetal life. Isolated microphthalmia appears both clinically and genetically heterogeneous and in this family appears to be

inherited as an autosomal dominant trait. The identification of genes involved in normal eye development represents an important example of the need to translate recent progress in human genome sequencing. As a preliminary to undertaking a genome wide scan, to identify putative candidate loci for congenital microphthalmus, we seek to undertake specific candidate gene analysis together with specific marker based linkage testing. The specific candidate gene to be examined CHX10 homeobox gene will be assessed by direct sequencing of genomic DNA. Two additional loci (chromosomes 14q32 and 11p) will be assessed using standard fluorescent microsatellite based polymorphic marker analysis.

All the necessary equipment and techniques to undertake this study, including basic linkage analysis, are frequently used within the laboratory and the student will gain exposure to relevant contemporary gene identification methods. DNA is available from sufficient family members to allow exclusion and/or confirmation of linkage to a putative candidate region.

Refs:

1. Russell-Eggitt I, Fielder AR, Levene MI, et al. Microphthalmos in a family. *Ophthalmic Paed and Genet.* Vol 6, No. 1/2, pp. 121-128 (1985)
 2. Percin EF, Ploder LA, Yu JJ, et al. Human microphthalmia associated with mutations in the retinal homeobox gene CHX10. *Nat Genet* 25: pp. 397-401 (2000)
- £1,160 *Wellcome Trust*

Genomic Approaches to the
Molecular Pathology of AHO
Syndromes - Advanced Training

Fellowship: Dr M A Aldred

Albright hereditary osteodystrophy (AHO) is an uncommon condition, typically associated with short stature, brachydactyly, mental retardation and, in some cases, biochemical abnormalities. The advanced training fellow and the supervisor both have extensive experience of genetic analysis in this condition and have access to significant patient resources. We propose to utilise novel technologies to address two aspects of AHO that remain unanswered. Firstly, although the major genetic locus is known to be GNAS1 on chromosome 20, an AHO-like phenotype can result from a sub-telomeric 2q deletion. Such deletions remain poorly characterised due to the paucity of polymorphic markers in this region. We propose to separate the deleted and non-deleted homologues in cells from known deletion patients using diploid-to-haploid conversion and to hybridise the resultant DNA

samples to a 2q-specific microarray of expressed and non-expressed sequences. This approach will provide a rapid and powerful means of characterising the minimal deleted region and identifying candidate genes for further study. Furthermore, since sub-telomeric chromosomal rearrangements are a significant cause of mental retardation, it will have wider applicability in addressing this common clinical problem. Secondly, we aim to develop allele-specific in situ PCR methodology to investigate the tissue-specific imprinting of GNAS1 that is assumed to underlie the parent-of-origin effect observed to determine biochemical status. The wider biological importance of alternative splicing and epigenetic modulation is increasingly apparent in both normal and disease states and the ability to study the expression of individual alleles or splice variants in situ will have wide-ranging applications.

£199,829 *Wellcome Trust*

PhD Studentship - BMP2 Promoter
Cloning and Molecular Functional
Characterisation in Primary
Pulmonary Hypertension - Student -
Dr R E Harrison

Primary pulmonary hypertension is a devastating disorder of the lung blood supply, not least when it occurs in childhood. Treatment has been limited to heart lung transplantation, with limited life expectancy. Much optimism is now heralded by both the recent availability of effective medical treatment, and also the identification of key genetic events critical in disease causation.

We seek to develop much improved techniques to identify gene alterations and better understand how such changes predispose to the development of PPH with particular emphasis on childhood onset disease. Identifying 'at risk' individuals has become a major goal in fighting this important disorder.

£137,959 *British Heart*
Foundation

GEOGRAPHY

Prof A J Parsons

Bursary - Travel Distance of Particles
in Shallow Flow - Student - Rebecca
Miles

£1,240 *Nuffield Foundation*

GEOLOGY

Dr G R T Jenkin

Mineralising Fluids from Basins?

£8,948 *Royal Society*

Dr M A Purnell

Supplement - NERC Advanced
Fellowship

£90,678(supp) *NERC*

Dr R V White

Supplement - Expenses on - Were
the Permo-Triassic Mass Extinctions
Triggered by Massive Silicic Siberian
Volcanism? Dorothy Hodgkin
Fellowship

£9,000 *Royal Society*
(supp)

Dr R V White, Prof A Saunders
NERC/Ocean Drilling Program Rapid
Response Award: Leg 192, Ontong
Java Plateau

Mantle plumes are significant transporters of heat and matter from the Earth's interior to its surface. The generation of Large Igneous Provinces (LIPs) above mantle plumes may have profound effects on the hydrosphere and atmosphere, and the eruption of some LIPs has been linked with environmental catastrophe and mass extinctions (e.g., the Siberian Traps and the Permo-Triassic extinction).

In Autumn 2000, the Ocean Drilling Program drillship spent two months drilling the largest of all LIPs - the Alaska-sized Ontong Java Plateau in the Pacific Ocean. Rosalind White represented the University of Leicester and the UK geological community as a member of the shipboard scientific party. This rapid response award is for shore-based studies that aim to characterise the composition and abundance of volatile species in the Ontong Java Plateau lavas. These data will allow estimates of volatile fluxes during LIP volcanism, and will provide constraints on the composition of the mantle source region.

£2,000 *NERC - British*
Geological Society

HISTORY

Prof R Bonney

Centre for the History of Religious
and Political Pluralism

£105,000 *University Grants Com*
mission Pakistan

Prof N Housley

Research Leave Scheme: Religious
Warfare in Europe, 1400-1536

Europe has witnessed two great series of religious wars, conflicts in which the will of God was seen by combatants and contemporaries as central to the whole enterprise. These were the Crusades and the European Wars of Religion. This study, which the generosity of the AHRB's Research Leave Scheme will enable me to bring to a speedier conclusion, is rooted in major revisions which have recently been made in the study of both of these series of wars. In the case of the Crusades, we are increasingly conscious of how long they lasted: at least into the fifteenth century, with important echoes still in the sixteenth. And in the case of the



Religious Wars, we are now much more attuned to the ways in which religious values permeated the waging of the conflicts. My monograph can be viewed as an attempt to build a bridge which will establish as fully as possible the relationship between these two phenomena. I shall be emphasising continuities and changes, but I shall also attempt to define the intellectual tools and associative vehicles which European communities used when they engaged in conflict which they saw as willed by God.

£18,085 AHRB

LAW

Dr R Cholewinski Supplement - Year 2 Funding - Polish Joint Research Collaboration Programme

This is a British Council funded project supporting research collaboration between the Law Faculties of the University of Leicester and the University of Silesia in Katowice, Poland. The research project addresses selected aspects of European and International law concerning the protection of the environment, economic and social cohesion, police and judicial co-operation in criminal matters, and asylum and immigration. These issues have a special significance for Poland in the light of that country's intended future membership of the European Union. In addition to addressing these substantive legal issues, the project also considers the challenges posed for legal education in Britain and Poland in the light of the impending enlargement of the European Union. It is intended that this research collaboration will crystallise into an edited publication analysing the research areas identified from both British and Polish perspectives.

£1,845 The British Council
(supp)

MATHEMATICS & COMPUTER SCIENCE

Dr N Snashall, Prof S Koenig, Dr J Hunton

Algebra and Topology Workshop

£5,000 London Mathematical
Society

MATHEMATICS & COMPUTER SCIENCE WITH KING'S COLLEGE, LONDON

Prof R Raman

New Paradigms in Data Structure Design: Word-Level Parallelism and Self Adjustment

£58,514 EPSRC

MATHEMATICS & COMPUTER SCIENCE WITH UNIVERSITY OF WUPPERTAL, GERMANY

Dr J R Hunton, Dr B Schuster Varieties and Chromatic Subrings of Ordinary Cohomology

This grant provides a visiting Fellowship for Dr Schuster to visit Leicester during September 2001 to develop an existing collaboration with Dr Hunton. In earlier work they have established a new link between several diverse areas of pure mathematics – algebraic geometry, topology and group theory. In particular, they showed new and unexpected structure within Quillen's varieties of group cohomology rings. They now seek to exploit this structure further.

£500 London Mathematical
Society

MEDICINE & THERAPEUTICS (CARDIOLOGY), EPIDEMIOLOGY & PUBLIC HEALTH, WITH ST BARTHOLOMEW'S AND THE ROYAL LONDON SCHOOL OF MEDICINE & DENTISTRY

Prof N J Samani, Prof P Burton

Genetic Regulation of Arterial Pressure of Humans in the Community: The GRAPHIC Study

£594,442 British Heart
Foundation

MEDICINE & THERAPEUTICS (CARDIOLOGY), EPIDEMIOLOGY & PUBLIC HEALTH WITH UNIVERSITY OF LEEDS

Prof N J Samani, Prof P Burton

The Acute Coronary Event DNA Library (ADLIB) Project: A National Collection of DNA from 2000 Families Affected by Premature Coronary Artery Disease

£343,835 MRC via University of
Leeds

MICROBIOLOGY & IMMUNOLOGY

Prof M Barer, Prof P Andrew Rapid Genomic and Biological Characterization of the Crown Hills Tuberculosis Outbreak Strain

£24,833 Medisearch

Prof P H Williams

Supplement - Commercial Development of Bacterial Autoinducers

Advances in medicine during the 20th Century led to dramatic increases in life expectancy world wide. The 21st Century began with the announcement that the human genome has been sequenced - the popular press predicts cures for all mankind's ills within the year! At the same time, the World Health Organisation warns that "an infectious disease crisis of global proportions is today threatening hard-won

gains in health and life expectancy".

Infections account for 13 million deaths a year world wide, one in two deaths in developing countries. In the time it takes you to read this, 50 people will have died from an infection, 30 of them children under 5 years old. Knowing the human genome would not have helped them; understanding how infectious bacteria do their worst might have! We have discovered that bacteria hijack hormones that are essential to our bodily health to stimulate their own growth. This has important clinical implications. Trauma patients, for example, show increased susceptibility to opportunistic infection by gut bacteria that use stress hormones to 'kick start' growth. Patients in intensive care suffer sepsis because hormones used as drugs to regulate heart function induce growth of skin bacteria contaminating catheters. This project aims to understand the complexities of these processes with a view to identifying targets for a new generation of antibiotics.

£19,900 Bionatrix, LLC

Prof L H Ziegler-Heitbrock Monocyte Populations and Tuberculosis

£100,000 Medisearch

MUSEUM STUDIES RESEARCH CENTRE FOR MUSEUM AND GALLERY EDUCATION

Prof E Hooper-Greenhill, J Dodd

Museum and Gallery Education Programme Evaluation

The Research Centre for Museums and Galleries has been awarded £95,000 to evaluate the DfEE Museum and Gallery Education Programme. The MGEP is the largest government-funded museum education initiative to date. It was established in April 1999 with the objective of stimulating and encouraging museums and galleries to develop their educational role, to strengthen their links with schools and to improve the quality and spread of provision. Additionally it aimed to improve pupils' use of the opportunities presented by museums and galleries, to enrich their education, in particular by experiencing real objects relevant to their studies. Over 60 diverse individual projects have operated throughout England. The evaluation will focus on identifying good practice, common challenges, the effectiveness of partnerships and issues of sustainability. It will identify the coverage of themes including links to the National Curriculum 2000, ICT, parents supporting their children's learning, and professional development.

The evaluation will be used to present

case studies of good practice, but also to shape the use of future DfES-funded projects.

Value Reported in August/September
Bulletin

OBSTETRICS & GYNAECOLOGY

Dr M Habiba

Evaluating the Effectiveness of a Patient-Focussed, Joined-Up Model of Care Across Primary and Secondary Care Sectors - Test Case: Menstrual Disorders

An ambitious scheme which brings together clinical scientists and clinicians at The University, the University Hospitals of Leicester and local general practitioners has won a substantial boost through a grant from Trent R&D. The scheme establishes new health care pathways and aims to overcome the traditional barriers between the primary and secondary health care sectors. The project addresses the difficulties patients experience between referral from their GP to hospital-based specialists, and supports the delivery of evidence based best practice. The research team will assess the health impact of this scheme and its applicability to other health priority areas. This project, which has the endorsement of Leicestershire Health, will be piloted between the innovative One-stop Menstrual Clinic at the Leicester Royal Infirmary and the Lutterworth-Blaby Primary Care Group, and will establish important collaborative links with de Montfort University and the University of Warwick.

£103,670 NHS Trent

Dr M Habiba, Prof D Taylor CEC - EUROBS - Development of Perinatal Technology and Ethical Decision-Making During Pregnancy and Birth: The Obstetricians Perspective

Advances in prenatal diagnosis, obstetric management and in neonatal intensive care have dramatically improved survival of babies with problems such as prematurity, growth restriction and congenital abnormalities. However, it is not always possible to predict which babies will benefit from medical interventions, and some of the saved babies will continue to have major health problems. The decisions that parents and doctors need to make in this context are becoming increasingly difficult and complex, and there is a clear need – as reflected in the medical school curriculum - for doctors to develop a deeper appreciation of the social, cultural, and ethical influences on these decisions. The department of Obstetrics and Gynaecology at Leicester University is the co-ordinating centre for England and



Wales of an EU Concerted Action which aims to ascertain which factors influence doctors' attitudes and choices at the interface between acute clinical medicine and ethics.

£3,624 CEC via Istituto per l'In fanzia, Italy

OPHTHALMOLOGY, GENETICS

Prof I Gottlob, Prof R Trembath
Genetic Assessment of Congenital Idiopathic Nystagmus

£37,394 Medisearch

ORTHOPAEDIC SURGERY

Prof W Harper
Supplement - Randomised Placebo-Controlled Trial of Daily Oral Vitamin D and Calcium for the Secondary Prevention of Osteoporosis Related Fractures in the Elderly (RECORD)

£1,946 MRC via University of (supp) Aberdeen

PATHOLOGY

Dr J L Jones, Dr J A Shaw, Dr J H

Pringle, Prof R A Walker

Functional and Clinical Significance of Altered Tenascin Isoform Expression in the Breast

The ECM glycoprotein Tenascin (TN) is highly expressed in many solid tumours including breast cancer. However, TN exists as multiple isoforms generated through alternative splicing of mRNA that have different effects on cell adhesion, migration and proliferation. Work in our laboratory has identified a specific change in TN isoform profile in malignant versus normal/benign breast, with two additional isoforms being specifically detected in invasive carcinomas. In ductal carcinoma in-situ, only a proportion of cases exhibits these additional isoforms.

The purpose of this study is to express these TN isoforms in fibroblasts and tumour cells and use in vitro model sys-

tems to analyse in detail the effect on invasion, matrix remodelling and tumour growth. Elucidating the function of these TN isoforms may provide novel stromal targets for therapeutic attack.

£75,596 Breast Cancer Campaign

Dr H Pringle

Supplement - Investigating the Vitamin D Receptor and Certain Candidate Response Genes

£4,200 Leicestershire (supp) Dermatological RSFD

PATHOLOGY (CHEMICAL)

Dr A Goodall

PhD Stipend for Davinder Kaur

£7,035 Glenfield Hospital (Breast Cancer Research Fund)

PATHOLOGY (CHEMICAL), WITH MRC TOXICOLOGY UNIT AND ASTON UNIVERSITY

Prof J Lunec

Supplement - Investigation of a Potential DNA Repair Role for the Plant Antioxidant Vitamin C

£5,000 Scottish Office (supp)

PATHOLOGY, ACCIDENT & EMERGENCY MEDICINE, LRI

Prof J Pasi, Mr Adrian Evans
Pre-Clinical Assessment of the Potential for rVIIa as a Universal Haemostatic Agent in a Model of Haemodilution and Trauma

£65,000 Novo Nordisk

FIRST PAST THE POST - RESEARCH APPLICATIONS GO INTERACTIVE

► The world is increasingly becoming digitally interactive, and, if you apply for research grants, it will affect you soon - if it hasn't already. Electronic application is online now and will be the method for all future research applications.

What is electronic application?

A method of submitting an application from your computer (at work or at home) to the funding body.

Why do I have to apply for a research grant in this way?

However a funding body may demonstrate how useful to you their electronic system is, the driving force behind the initiative is how useful it is to them. Making applications electronic will save funding bodies huge amounts of money after the initial outlay. This is the reason why it will become obligatory, as it already is with some funding bodies, and why all those funding bodies not using it at present will soon be considering it.

Who is using this method?

The Research Councils are leading the way so far. The ESRC, MRC, EPSRC and BBSRC have systems up and running. All the Research Councils have formed a joint initiative known as JeS, which aims to unify all the systems. JeS is currently running a consultation forum, which is open to all at <http://www.research-councils.ac.uk/je-s/>. The CEC has a system in place and The Wellcome Trust is set to be the first charity to adopt the system.

How does it work?

Each system works differently at the moment. There are currently two main types:

- The ESRC use a system which involves the applicant downloading software to create their application. This is available on our network, the route being START-PROGRAMMES-INSTALLABLE SOFTWARE-CENTRAL SOFTWARE-GENERAL UTILITIES-INSTALL ESRC FORMS. Once the application has been completed it is emailed to the University's administration based in the Research and Business Development Office. The administrative authority within that section has a 'despatcher' programme, which gives University approval to the application and sends it to the ESRC.
- The MRC use an Internet system. The applicant enters the MRC site <http://www.eaa.mrc.ac.uk/EAA/> and registers. An interactive form can then be completed online. Once submitted the MRC emails the administrative authority who enters a 'private' web page to approve the grant. The Wellcome Trust seems to be developing a third system that is

email based. They already have a 'Preliminary Expression of Interest' on their website where details of a project idea can be entered online and they will respond if it's worth making an application.

Is there anyone who can help me?

The Director of the Research and Business Development Office, Dr David Ward, embraces the new technology. The Office will do its utmost to keep up to speed and keep people informed of new developments as they occur. Systems are in place for ESRC and MRC submissions, and progress on EPSRC and BBSRC's system - which is in its infancy and may be altered pending the outcome of the JeS initiative - is being reviewed. The CEC system involves editing PDF files, currently not possible on the CFS network.

Jan Davies is the main administrative authority within Research and Business Development for electronic application. Queries on electronic application should be directed to David Downton, who has a liaison role with the funding bodies using electronic application. He is also responsible for providing up-to-date technical advice. There is a page on the Research and Business Development site dedicated to this topic:

http://www.le.ac.uk/ua/kamg1/Internal/ResearchGuidelines/PreAward/electronic_application.html



The 'E' team: (Left) Dr David Ward, Director of the Research and Business Development Office, with Jan Davies and David Downton.



THE CREATION OF POLITICAL NEWS

The Influence of Television on Party Political Conferences
James Stanyer

Sussex Academic Press, September 2001, £15.95 (paperback), £45 (hardback)
ISBN 1902210778 (paperback), 190221076X (hardback)

Available from the Bookshop or from Sussex Academic Press (telephone 01273 699533, fax 01273 621262)

► **Television news remains one of the most important sources of political information for the British electorate. Political parties use the TV media to get their messages across. The annual conferences of the main political parties are now a well-established publicity opportunity designed with a national television audience of millions in mind.**

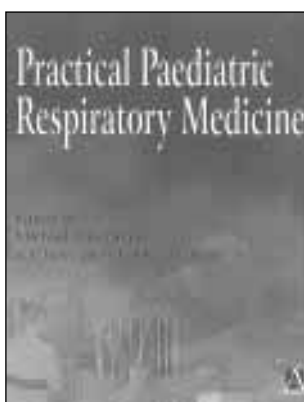
This book examines the way in which publicity conscious elites systematically manage conference proceedings and the broadcasters to

ensure that their party and policies are portrayed in the best possible light.

The book provides an important analysis of the attitudes of news media professionals towards such a stage-managed event in an increasingly competitive news environment. It gives a unique insight into what effectively is a publicity game in which each party and the broadcasters seek to pursue differing but overlapping goals. While both want coverage to attract audiences, there is a

growing distrust of each other's motives, so that they feel they increasingly have to direct coverage in order to get their message across. Broadcasters - with the viewers in mind - increasingly want to break out of such a management 'straitjacket' and open their audiences' eyes to what they see as the 'true' conference story.

• **Dr James Stanyer is a Lecturer in the Centre for Mass Communication Research.** ☺



PRACTICAL PAEDIATRIC RESPIRATORY MEDICINE

Edited by Michael Silverman and Christopher L O'Callaghan

Arnold, August 2001, £39.50 (paperback)

ISBN 0340741260

Available from the Bookshop

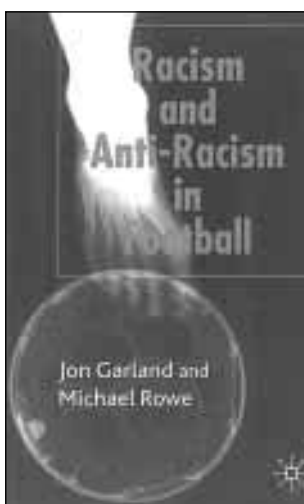
► **Knowledge of the practical procedures that are commonly used in diagnosis, evaluation and management is vital to the health professional. Despite this the time allocated to gaining and practising important clinical skills during training is shrinking. This book aims to complement, and supplement, the traditional apprenticeship system. It will provide trainee paediatricians and respiratory physicians, and children's nurses in training, with invaluable advice and support when tackling the clinical problems that they are presented with in everyday practice.**

The book includes:

- **Important guidance on history taking, investigative techniques and emergency procedures,**
- **A support to trainee paediatricians and paediatric pulmonologists and to children's nurses as they acquire the skills associated with clinical practice,**
- **Compensations for ever-shortening training periods and opportunities to develop these skills in the clinical environment**
- **Clinical vignettes illustrating how skills acquired should be applied to solve commonly encountered clinical problems**

With a highly structured approach, numerous illustrative diagrams and clinical photographs, case studies and information boxes, the book will be referred to frequently as a practical tool in the clinical setting and will provide useful guidance and pointers during exam revision.

• **Michael Silverman is Professor of Child Health and Head of Department of Child Health at the University of Leicester. Christopher O'Callaghan is Professor of Paediatrics in the Department of Child Health.** ☺



RACISM AND ANTI-RACISM IN FOOTBALL

John Garland and Michael Rowe

Palgrave (formerly Macmillan Press), August 2001, £14.99 (paperback)

ISBN 0333964225

Available from the Bookshop

► **Racism and Anti-Racism in Football explores the key issues of nationalism, identity and racism in British football. It relates the history and impact that black players have had in the game from the late nineteenth century to the present day.**

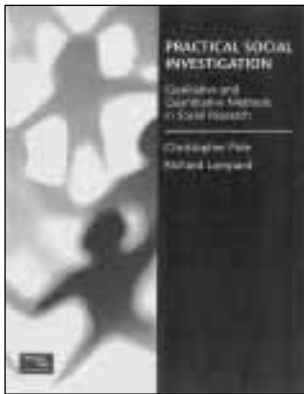
The book analyses the types of racism that these players have experienced, and includes an examination of the influence of far-right extremist groups among fans. It seeks to analyse the nature of this racism, as well as evaluating many

of the anti-racist campaigns and initiatives that have challenged it. The methods used to police racism at football matches are also assessed.

The xenophobia evident in much of the media's reporting of recent major tournaments is debated and placed in the context of the way that English, Scottish and Welsh identities are constructed within British football. It is argued that these identities are often outdated and are exclusive of Britain's minority ethnic communities.

• **Jon Garland is a Research Fellow at the University's Scarman Centre. He has published on issues of racism, ethnicity and identity, racism and anti-racism in British football, policing, and football-related disorder.**

• **Michael Rowe lectures in policing at the Scarman Centre. His teaching and research interests include the politics of racism and urban unrest in British society, the policing of football, and policing and race relations.** ☺



PRACTICAL SOCIAL INVESTIGATION: Qualitative and Quantitative Methods in Social Research

Christopher Pole and Richard Lampard
Prentice Hall, September 2001, £18.99 (paperback)
ISBN 0136168485
Available from the Bookshop

► **Practical Social Investigation provides, within a single text, an introduction to a wide range of both long-standing and newer social research methods. Its balanced and integrated coverage of qualitative and quantitative approaches demonstrates that they can be complementary. While research practice is emphasised, readers are encouraged to reflect on methodological issues as well as being provided with tools for their own research.**

The first three chapters consider the nature of research, research design and sampling, identifying both the shared characteristics of qualitative and quan-

titative research and also their distinctive features.

The next four chapters focus on data collection, including the practicalities of observation, surveys and interviews, and the pros and cons of using existing data.

Two chapters are devoted to qualitative and quantitative data analysis, including detailed coverage of statistical techniques, while a chapter on writing encourages the effective dissemination of research findings.

The final chapter, which aims to facilitate readers' own projects or dissertations, draws together earlier mate-

rial by using two examples of student projects to highlight key issues and common problems within the research process.

This coherent, accessibly written book draws upon the authors' extensive experience. Numerous examples, based on real research studies, illustrate key issues. Useful supplementary material includes a glossary and example survey data.

• **Christopher Pole is a Senior Lecturer in Sociology at the University of Leicester and Richard Lampard is a Lecturer in Sociology at the University of Warwick.** ☺



HIDDEN HANDS: International Perspectives on Children's Work and Labour

Edited by Christopher Pole, Phillip Mizen, and Angela Bolton
Routledge Falmer, July 2001, £15.99 (paperback), £60.00 (hardback)
ISBN 0415242444 (paperback), ISBN 0415242436 (hardback)
Available from the Bookshop

► **Drawing on original research conducted in the industrialized societies of North America, Western Europe and Russia, this book constitutes a distinctive and original contribution to debates in this important area of childhood.**

While providing the first cross-cultural examination of children's vari-

ous productive roles and their relationship to children's broader social lives, the book also considers the implications for their education, welfare and well-being.

This valuable new book will be of interest to students studying in these areas, as well as practitioners in the social, child and youth services and

non-governmental organisations who focus on children.

• **Dr Christopher Pole is a Senior Lecturer in the Department of Sociology. Phillip Mizen is a Lecturer in the Department of Sociology, University of Warwick. Angela Bolton is a Principal Research Officer with Barnado's.** ☺



POSITIVE ALTERNATIVES TO EXCLUSION

Paul Cooper, Mary Jane Drummond, Susan Hart, Jane Lovey, Colleen McLaughlin
Routledge Falmer, August 2000, £16.99 (paperback)
ISBN 0 415 19758 9
Available from the Bookshop

► **The problem of school exclusion is one of the major educational issues of our time, responsible for the loss of hundreds and thousands school days every year, with the number of children and young people barred from participation in our schools increasingly annually.**

This book looks at what schools can do to build more harmonious communities and engage students-particularly those at risk of exclusion-more productively in all areas of school life. It describes the Positive Alternatives to School Exclusion Project, based at the School of Educa-

tion, University of Cambridge. This was a multi-phase (primary, secondary, FE) empirical study of the thinking underlying what schools and colleges were currently doing to foster inclusion and to reduce and prevent exclusion. The research approach was based around an equal partnership between staff in mainstream schools/ colleges and university staff.

The book provides detailed case studies of the approaches and strategies being adopted in a variety of different frameworks, drawn from the case studies, which can be used by practitioners working in other settings

to support their own reflection and development work. Particular importance is placed, throughout the book, on valuing the domain of personal experience in the life of school community. This theme is explored in detail, drawing the case study material, suggesting ways in which it might become a priority focus of further development work in schools.

• **Paul Cooper is Professor of Education at the University of Leicester. Mary Jane Drummond, Susan Hart, Jane Lovey and Colleen McLaughlin are all staff at the School of Education, University of Cambridge.** ☺



NEWCASTLE UPON TYNE A Modern History

Edited by Robert Colls and Bill Lancaster
Phillimore & Co Ltd, October 2001, £19.99 (hardback)
ISBN 186077167X
Available from the Bookshop

► Newcastle upon Tyne has not had a major new history published for fifty years, until now. In that time much has changed, not only in the city but also in the way history is written. Newcastle does not look the same and the people don't think as they did. History writing, meanwhile, has opened out to embrace a wider past; it is no longer just the history of the few.

Fifty years ago, Newcastle was at its industrial and commercial peak, but coal, shipbuilding and heavy engineering continued to dominate the economy and the landscape. Now that so much of that economy has gone and the city seeks a new identity, it seems a proper time to

review the history – especially the history of the last three centuries – of this great and, in some ways, first modern city. Seventeen historians have contributed original scholarship to a lavishly illustrated, clearly written narrative, conceived with the non-specialist reader in mind.

The authors are drawn from the universities of Northumbria, Newcastle, Durham, Nottingham and Leicester and, between them, they cover every aspect of the city's phenomenal modern flowering, its business, its technology, its people – their lives, their deaths, their memories and their pleasures – its architecture, art, literature and street life, the changing townscape, especially town

planning since 1945 and, finally, the development of its distinctive dialect.

• *Dr Robert Colls currently teaches in the Department of Economic and Social History at the University of Leicester. An Honorary Fellow of the Centre for Northern Studies at the University of Northumbria, he has written extensively on the history and culture of the north east of England. Dr Bill Lancaster is currently Director of the Centre for Northern Studies and Reader in History at the University of Northumbria. The two editors, who are also contributors, are already well known from their previous collaboration in the immensely successful *Geordies: Roots of Regionalism* (1992).* ☪

SMALL ADVERTISEMENTS



LEICESTERSHIRE INTERVARSITY CLUB

Leicestershire IVC is an informal club whose members organise a wide range of activities including speakers, meals, walks, badminton, cinema, and theatre trips. For more information contact Sheila on 0116 223 4730, or Alan on 0116 246 0951 (email ab74@le.ac.uk).

HOLIDAY APARTMENT IN SPAIN

New apartment at Torrevieja, south-east Spain, 40 minutes from Alicante airport. Beautiful beaches, nature reserves, golf and club close by. Ideal summer and winter (20°). Fans and heating in apartment. Swimming pool. Sleeps up to 6. Contact email jpr7@le.ac.uk.

JOIN A READING GROUP

A reading circle, organised by the Charles Wilson Bookshop, which meets once a month has space for new members. There are two groups, one meeting at lunchtime and one after work. If you would like to join, give your name and a contact number/address to a member of the Bookshop staff.

BED AND BREAKFAST IN LONDON

The Penn Club, 21 Bedford Place, London WC1B 5JJ (near British Museum, British Library and London University, ten minutes' walk from Euston, 55 minutes by tube from Heathrow) offers bed and breakfast with Quaker ambience. For further details telephone 02076364718, or email office@pennclub.co.uk, or visit www.pennclub.co.uk.

HOST FAMILIES WANTED

Host families residing near the University are required for officers of the Royal Jordanian Air Force in mid-January and in mid-February. These officers are sponsored by the Ministry of Defence and RAF Cranwell, and will be taking short courses in English Language at the University of Leicester. Excellent rates to caring, friendly families who can provide bed, breakfast and evening meal, and opportunities to practise English and experience our way of life. For more information contact Jenny Evans on 0116 241 5570.

ACCOMMODATION REQUIRED FROM FEBRUARY 2002

Serious third-year medical student, female, non-smoker, non-drinker, seeks quiet room to rent in leafy part of Leicester – Stoneygate/Knighton area preferred. Telephone 020 8874 9931.

GOVERNMENT-FUNDED NURSERY PLACES AVAILABLE

The Leicester Montessori Nursery School, 27 St John's Road, Stoneygate, Leicester, offers genuine Montessori pre-school education for ages 2-5 years. Introductory offer: free for first half-term, then half the usual price. Qualified and experienced staff, small group sizes, morning and afternoon sessions. For a prospectus/appointment, telephone 0116 270 2758.



Thinking of starting up a business in Leicester?

Up to £10,000 interest-free loans available!

You must be 18-35 and resident in Leicester to qualify. You must also have a well thought out Business Plan and be able to supply

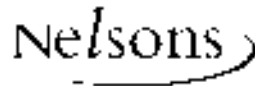
4 sureties. To find out more, contact Wendy Faulkner at Norwich House, 26 Horsefair Street, Leicester LE1 5BD.

Tel: (0116) 204 6620.

Email: wf@stwcharity.co.uk

THE SIR THOMAS WHITE LOAN CHARITY

(Charity No 218061)



Legal Advice Bureau

Visit our legal advice bureau on campus every Tuesday from 12 noon - 2pm for free initial advice on:

- Claims for accident compensation
- Making a Will
- Road traffic matters or trouble with the police
- Buying or selling a house
- Family legal problems
- Housing disputes

To book an appointment call 0116 252 3334

In emergencies call Nelsons 24 Hour Police Station Advice Line 0116 253 5500

Provincial House, 37 New Walk, Leicester LE1 6TU;
2a New Walk, Leicester LE1 6TF

Nelsons is the merged firm of Nelsons, Forde, Jolliffe and Greene Heyson

Conference Services

Thinking about organising an event?

Then give us a call

We can cater for:

- | | |
|-------------------------|-----------------------|
| Residential Conferences | : Away Days |
| Day Conferences | : Group Accommodation |
| Summer Schools | : Social Events |
| Team Building | and so much more |

All in fabulous surroundings with first class hospitality

Contact us now for further information on 0116 271 9933 or email: conferences@le.ac.uk



University of Leicester

RESIDENTIAL & CATERING SERVICES



KPMG TAX AND PERSONAL FINANCIAL ADVISORY SESSIONS

FREE INITIAL ADVICE is available on personal tax, investment planning and any area of personal finance.

For an appointment at KPMG telephone Sarah Ward on 0116 256 6000

KPMG - Accounts and Business Advisers
Peat Marwick, 1 Waterloo Way, Leicester LE1 6LP

