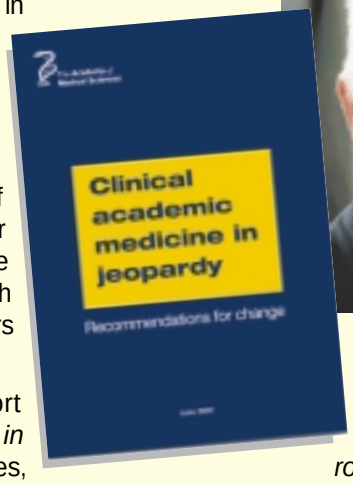
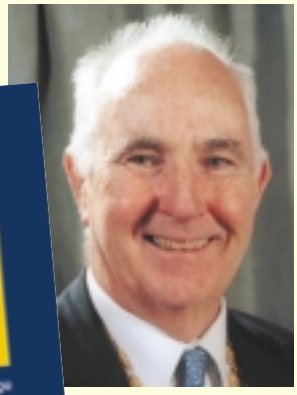
The Academy of Medical Sciences

Fellowship Newsletter 8

Clinical Academic Medicine in Jeopardy

Recruitment is in crisis and those already following a clinical academic career are under pressure as never before. The attraction of a career in clinical academic medicine is fading and while the public have strong expectations for high medical standards and rapid developments in health-care more than 10% of professorial and senior lecturer posts remain unfilled and the shortage of clinical research workers and clinical teachers raises serious worries.





The Academy's latest report *Clinical academic medicine in jeopardy,* confronts these issues, demands urgent action to improve recruitment and retention and spells out the consequences of inaction. It makes practical suggestions for how this can be achieved by addressing contractual and remuneration issues, and appraisal and revalidation practices, and improving career progress. It stresses the importance of securing more time for teaching and protecting time for research, and proposes solutions for the particular difficulties experienced in craft specialties such as surgery, anaesthetics, obstetrics and gynaecology, radiology, and cardiology.

Professor Sir Peter Morris FRS, PRCS, FMedSci, chairman of the Academy working group that produced the report said at its launch *'The situation for academic medicine is becoming desperate especially for craft specialties such as surgery. Concerted action by all the stakeholders - the Academy, government, the universities, the medical royal colleges and others - is needed now, not only to produce the next generation of doctors but also to maintain the translation of basic biological research into clinical practice in the UK'.*

The report may be downloaded from the Academy's web site or paper copies obtained free from Tony Leaney at the Academy.

Founder President Honoured

We are delighted that **Professor Peter Lachmann's** immense contributions to medical science, education and research have been recognized by the award of a knighthood in the Queen's Birthday Honours list.

The Fellowship will also wish to offer congratulations to a further five Fellows who receive honours. Knighthoods are also awarded to Professor Peter Bell for services to surgery and Dr Tom McKillop for services to the pharmaceutical industry. Professor Ann-Louise Kinmonth receives a CBE for services to primary care research and development, as does Professor Robert Shaw for services to medicine. Professor Janet Husband is awarded an OBE for services to cancer imaging.

One of the objectives of the Newsletter is to communicate the work of the Fellows in promoting the mission of the Academy to translate new scientific knowledge rapidly into benefits for patients. This issue reviews some particularly notable examples of this work; the Academy's support for academic careers, presented in Michael Orme's article, the unique Academy mentoring scheme, described by Jolyon Oxley, and in Ray Tallis's report of the recent scientific meeting on neurorehabilitation: the ways in which the Academy can foster productive interaction between fundamental research and progressive practice. The impressive roll of honours to Fellows in the Queen's Birthday Honours List is not only a testimony to their own achievements but must surely help in the words of one congratulatory message to the President 'to put the Academy on the map'.

Sir Alexander Macara *FMedSci, Editor*

Academic Careers

Professor Michael Orme *FMedSci*

The recent report from the Clinical Academic Training Committee *Implementing the Clinician Scientist Scheme* contains a wealth of information about the way in which the scheme can be implemented in a variety of clinical specialties, and complements the Academy's earlier report *The tenure-track clinician scientist: a new career pathway to promote recruitment into clinical academic medicine,* published in 2000. There has been considerable progress with the development of the clinician scientist scheme since 2000 as evidenced by the growing number of appointments nation-wide. The Academy's mentoring programme is now up and running and will assist clinician scientists with their personal and professional development.

The publication of this report concludes the work of the current Clinical Academic Training Committee, under the chairmanship of Professor Roland Levinsky.

Professor Michael Orme, Roland Levinsky's successor, is now turning his attention to new challenges and concerns. The Academy's committee will have a new name, 'The Academic Career Committee' to reflect the value to the Academy of both clinical and non-clinical scientists within the Fellowship. It is likely that the new committee will be smaller in size than its predecessor and it will have a non-clinical vice-chairman. While some of the issues around the clinician scientist career pathway will remain important, a wider remit is needed particularly in relation to the future needs of the NHS. Some of the issues facing non-clinical scientists are as problematical as those of the clinical trainees and the committee will need to convince the Department of Health (DoH), amongst others, of the importance of academic careers for the future of the health service.

The clinician scientist scheme is now moving ahead and the DoH has recognised a number of grant giving bodies as funders of the scheme. The new NTN(A) system will give all clinical academics in training the opportunity to combine their clinical work with their academic development and the Academy has an interest in making sure that this new system is successful. The Academic Careers Committee will therefore liaise closely with other organisations involved in this system, the Royal Colleges, the postgraduate deans, particularly the lead Postgraduate dean Dr Michael Tunbridge, the medical school deans and the Department of Health.

At a time when the Department of Health is mainly concentrating on short term measures to meet its 2004 objectives it is important for the Academy to stress that the NHS needs vision and action to assure its future in the long term. It will be important to ensure that the role of education in its widest sense takes its rightful role alongside the short-term issue of training staff to deliver health care.

Professor Michael Orme *FMedSci*

Guiding Voices - the Academy Mentoring Scheme

One of the most important recommendations of the Savill Report[1] was that a mentoring scheme should be set up for the 50 clinician scientists appointed each year under the national standard. In providing mentors, the Academy is demonstrating its commitment to providing support for the brightest of young clinical research scientists and helping to ensure the future of clinical research in the UK.

The concept of mentoring means many different things to different people, but the Academy's scheme follows closely the scheme for the Royal Society's Dorothy Hodgkin research fellows. Clinician scientists will be invited on appointment to nominate mentors from the Academy's Fellowship and the Academy believes that most of its Fellows will want to take this on. Richard Moxon, FMedSci, who has already accepted nomination, told Newsletter *'My hopes are to be able to renew and maintain contact with a wonderfully talented clinician scientist as she pursues her stellar career. To have a more formal arrangement will enhance the pleasure of our interactions. I hope for her that it will bring support, encouragement and a chance for her to seek guidance when she wants to.'*

The duties of mentors will vary according to the needs of the individual clinician scientist but it is expected that they will meet at least twice in the first year and annually thereafter; and keep in contact as needed in between. Clinician scientist, Sarah Tabrizi, told Newsletter *'My hopes and expectations of mentoring are to have a guiding and*

[1] *The tenure-track clinician scientist: a new career pathway to promote recruitment into clinical academic medicine*

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Neurological rehabilitation:
Can we bring clinical practice closer to basic science?

The rehabilitation of patients with neurological impairments, especially those with stroke, has improved over recent decades. The gains, however, have been due mainly to helping patients to adapt to neurological impairment rather than reversing impairments. Many patients remain severely disabled and new strategies, focusing on reversing impairments, are urgently needed.

These are now starting to be a realistic possibility. A revolution in our understanding of the relationship between structure and function in the nervous system suggests that it is 'soft-wired' and capable even in adults of major reorganisation following injury, permitting recovery that is not constrained by the limitations of regrowth. Moreover, favourable reorganisation may be driven by factors such as afferent information associated with activity. This capacity for activity-driven reorganisation, and the emergence of parallel technologies - such as stem-cell implants and drugs to promote growth and connectivity and electrotherapies - suggest new approaches to reversing impairments.

Unfortunately, few 'hands on' neurological rehabilitation strategies are rooted in the insights coming from basic neuroscience and clinical practitioners and neuroscientists have little knowledge of each other's activities.

The Academy's recent meeting Neurological rehabilitation: Can we bring clinical practice closer to basic science? had two aims: to determine whether there were, indeed, well-founded reasons for believing that new strategies for reversing impairments would shortly be available; and to see whether a more continuous dialogue between clinicians and basic scientists could be fostered and neurological rehabilitation could be more genuinely neuroscience-based. There were contributions from leading neuroscientists and neuro-rehabilitationists from both the UK and from abroad.

In the morning speakers discussed better prospects for spontaneous recovery and its promotion. Dr Geoffrey Raisman and Dr Evan Snyder and Professor Stephen Dunnett described encouraging results of research on neurological transplantation. Dr Raisman discussed the repair of spinal cord injury by transplantation of olfactory ensheathing cells and Dr Evan Snyder gave an overview of the potential clinical application of neural stem cells - young, uncommitted cells that possess the ability to differentiate into the mature cells of the human nervous system. Professor Dunnett emphasised that functional neural transplantation would be effective only in the context of relevant activity: animal models have shown very clearly that functional benefits from transplants would accrue only if the recipients are able to engage in normal behaviour.

Our understanding of the reorganisation necessary to translate, for example, stem-cell regeneration into functional benefits, has been greatly enhanced by functional imaging of living brain. Professor Frackowiak described the extraordinary power of MRI to reveal functional-anatomical correlations with objectivity and sensitivity and to investigate the brain's capacity to reorganise after injury and in association with practice and learning.

The afternoon session examined some non-drug therapies in clinical neurological rehabilitation. Professor Pomeroy gave a critical overview of physiotherapy to restore movement to mobility after stroke. While there was some evidence that certain techniques did improve impairments as assessed both clinically and physiologically, the effects were often only minor and transient. Clues from both clinical experience and basic neuroscience should be exploited to identify new therapies worthy of more intensive investigation. Professor Hariz described the modern use of electrotherapy particularly with reference to deep brain stimulation in Parkinson's disease where encouraging results had been seen. A particular challenge in evaluating novel therapies will be developing appropriate outcome measures: these were discussed by Professor Wade.

The meeting ended with a tour de force from Professor Merzenich who reviewed the emerging prospects for neuroscience-guided rehabilitation, based upon an increasingly clear understanding of how brain plasticity processes contribute, through experience and learning, to the progressive refinement of brain representations of complex inputs and actions. He described how the key strategy of intensive training-driven re-normalisation of the nervous system has been explored in a wide range of studies of the aetiology and treatment of neurobehavioural deficits.

There was unanimity regarding the possibility of novel therapies shaped by insights from basic sciences. This requires closer interaction between scientists and clinicians in neurological rehabilitation which the Academy could play a key role in promoting.


Professor Ray Tallis *FMedSci*

We continue our occasional series of profiles of the Academy's Officers with a wonderful insight into the life of the Registrar written by Julia Walport.

Rheumatology and collecting - about the Registrar

The Registrar carring out culinary research in Nice.

A lifelong West Londoner Mark Walport progressed from St Paul's school to Clare College, Cambridge and then to the Middlesex Hospital, qualifying in 1977. His academic intent was inspired by Stephen Hurry, a biology master at St Paul's, who taught Mendelian genetics and elementary statistics by experimentation with mutant Drosophila. After a house job with John Nabarro, Mark was advised to seek a house job at the Hammersmith and somewhat to his surprise was offered a post in Clinical Pharmacology with Colin Dollery. SHOs at Hammersmith either loved or hated the place and Mark fell unambiguously into the former category, presenting three cases at the Staff Round in six months.

We met as junior doctors at the Brompton, which my sister described as a "romantic place". In 1979 it was: the junior staff ate together most evenings in the mess, led by the RMO; such practices are long gone, abolished by working time directives, partial shifts and suchlike. Mark progressed to Cambridge where Peter Lachmann supervised his PhD, and returned to Hammersmith as a Senior Lecturer in 1985. Ironically, in his role as Registrar to the Academy, his seniors are Peter Lachmann and Colin Dollery - plus ça change.

During his two decades at Hammersmith Mark has worked as SHO, Registrar, Senior Lecturer, Reader and Professor. He has had the good fortune to change his job radically every few years, whilst not actually moving. When the Royal Postgraduate Medical School merged with Imperial College in 1998 Mark was appointed head of the newly formed Division of Medicine; he has recently added to this post responsibilities as the Deputy Principal of the Faculty of Medicine. He became a Governor of the Wellcome Trust, following time as the Chairman of its Molecular and Cell Biology Panel.

He is a pathological collector, which started with bugs, beetles and stamps at Prep School. He emerged triumphantly from a sale of Natural History at Bonham's with a collection of 12 hunting trophies - these adorn our bathroom, bedroom and attic (with my preference for the last location). Collecting in the Walport family is inherited on the Y chromosome, like lupus in the BXSB mouse. His father's treasures included cigar boxes full of West African scorpions and millepedes, a rare collection of gallstones with a spiky bladder stone for good luck (should these have been declared post Alder Hey?) and two ampoules of prontosil rubrum. His grandfather bequeathed boxes of thumbnail specimens of Russian minerals, glass eyes and a frame of decoratively arrayed insects that several of the children covet.

Mark's research life is the complement system and how this contributes to genetic susceptibility to systemic lupus erythematosus. He has a wonderful team in his laboratory, Marina Botto, Kevin Davies, Bernie Morley, Peter Norsworthy and Tim Vyse, who, whilst happy to discuss science with him, wisely keep him as far away from the actual bench as is possible. He sublimates experimental urges by devastating our domestic kitchen; my role is as sous-chef. His culinary energies are boundless and governed by the calendar. Important times of year include the asparagus season and the appearance in spring of a large number of morels near my sister's house (at a secret location near Canterbury).

I should mention our children, Louise 14, Robert 12 and Emily and Fiona 8. Mark is not strong on obstetric diagnostic skills and refused to accept the possibility of my twin pregnancy until this was confirmed at 14 weeks by ultrasound. Mark was a birdwatcher in his youth, but I would judge, not a very good one. His postnatal inability to discriminate accurately between Emily and Fiona presumably matched his incapacity to distinguish a chiffchaff and a willow warbler. They have finally decided to put Mark, their friends and their teachers out of their dysnomia by cutting their hair to different lengths - Fiona short and Emily long.

Mark has observed much of our family life through a lens and this is the cause of occasional strife: obtaining the dreaded Christmas photo has become a cause of anaphylaxis for the children. A splendid day on Carlton House Terrace on June 4th, watching gilded carriages trundling past and culminating in Concorde flanked precariously by Red Arrows presents the Walports with a dilemma. Will the children or Concorde adorn our Christmas card for 2002.

Julia Walport.

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advising voice, that is separate from my own department, for all the questions that can come up as I tread the path between trying to be both a good clinician and at the same time a credible scientist.' Neil Hanley added *'I want someone to bounce ideas and thoughts off, free from some of the politics that might pervade some local relationships; a little extra support from outwith one's training region. Clinician scientists have different needs from their NHS counterparts and NHS consultants who run regional training shouldn't necessarily be expected to be able to address all of them.'*

More details of the scheme are available on the Academy's web site or from the scheme's manager, Dr Jolyon Oxley on jolyon.oxley@acmedsci.ac.uk

Academy Summer Events

Recently Knighted Fellows: Sir Peter Lachmann, and Sir Tom McKillop, with Lady McKillop at the Admission ceremony reception.

President-elect Sir Keith Peters talking with new Fellow Professor Humphrey Hodgson on Admission Day.

Professor Andrew Wilkie FMedSci presenting 'Apert Syndrome: a tale of two nucleotides' on Admission Day.

Sir George Poste FRS FMedSci delivered the 2002 Jean Shanks lecture and gave a powerful and disturbing presentation on 'Bioterrorism, biotechnology and biosecurity'.

Professor Janette Atkinson discusses her poster display with Professor Paul Burgoyne - both newly elected Fellows, on Admission Day.

New Fellows 2002

Professor	**John**	**Aggleton**	Professor of Cognitive Neurosciences	University of Wales, Cardiff
Professor	Chris	Ashley	Professor of Physiology and Director of Medical Studies	University of Oxford
Professor	Alan	Ashworth	Director of the Breakthrough Breast Cancer Research Centre	Institute of Cancer Research, London
Professor	Janette	Atkinson	MRC Senior Scientist	University College London
Professor	Jeanne	Bell	Professor of Neuropathology	University of Edinburgh
Professor	Allan	Bradley	Director of the Sanger Centre	Hinxton, Cambridge
Professor	Hugh	Brady	Professor of Medicine and Therapeutics	University College Dublin
Dr	Paul	Burgoyne	MRC Non-Clinical Research Scientist and Team Leader	Division of Genetics, NIMR, London
Professor	Robert	Burgoyne	Professor of Physiology	University of Liverpool
Professor	Avshalom	Caspi	Professor of Personality Development	Institute of Psychiatry, King's College London
Professor	Vincenzo	Cerundolo	Professor of Immunology	Nuffield Department of Clinical Medicine, University of Oxford
Professor	Tim	Chambers	Professor and Head of Cellular Pathology	St.George's Hospital Medical School, London
Professor	Michael	Clarke	Professor of Epidemiology	University of Leicester
Professor	Stuart	Cobbe	Walton Professor of Medical Cardiology	University of Glasgow
Professor	Peter	Collins	Professor of Histopathology and Morbid Anatomy	University of Cambridge
Professor	Tony	David	Professor of Cognitive Neuropsychiatry	Institute of Psychiatry, Guy's King's and St Thomas' School of Medicine
Professor	Sally	Davies	Director of Research and Development for London	Department of Health
Professor	Guy	Dodson	Head of Division, NIMR and Professor of Chemistry	University of York
Professor	Gordon	Dougan	Director and Rank Professor of Physiological Biochemistry	Centre for Molecular Microbiology and Infection, Imperial College
Professor	Robin	Eady	Professor of Experimental Dermatopathology	St John's Institute of Dermatology, King's College London
Dr	Douglas	Easton	Director of Cancer Research UK Genetic Epidemiology Research	University of Cambridge
Professor	Martin	Eccles	William Leech Professor of Primary Care Research	University of Newcastle upon Tyne
Professor	David	Edwards	Chairman of Paediatrics, Obstetrics and Gynaecology	Imperial College School of Medicine
Professor	Peter	Ell	Director of the Institute of Nuclear Medicine	University College London
Dr	Barry	Furr	Chief Scientist and Head of the Project Evaluation Group	AstraZeneca plc, Macclesfield
Professor	Charles	Galasko	Professor of Orthopaedic Surgery	University of Manchester
Professor	John	Gallagher	Professor of Oncology	CRC Department of Medical Oncology, University of Manchester
Professor	Jean	Golding	Professor of Paediatric and Perinatal Epidemiology	Institute of Child Health, University of Bristol
Professor	Terry	Hamblin	Professor of Immunohaematology	Southampton University
Professor	Grahame	Hardie	Professor of Cellular Signalling	Division of Molecular Physiology, University of Dundee
Professor	Richard	Hobbs	Head of Primary Care and General Practice	University of Birmingham
Professor	John	Hodges	MRC Professor of Behavioural Neurology	MRC Cognition and Brain Sciences Unit, Cambridge
Professor	Humphrey	Hodgson	Sheila Sherlock Professor of Medicine	Royal Free and University College Medical School, London
Professor	Nancy	Hogg	Principal Scientist	Cancer Research UK London Research Institute
Professor	David	Holden	Professor of Molecular Microbiology	Department of Infectious Diseases, Imperial College, London
Professor	James	Ironside	Professor of Clinical Neuropathology	University of Edinburgh
Professor	Kristjan	Jessen	Professor of Developmental Neurobiology	Department of Anatomy and Developmental Biology, University College London
Professor	Peng Tee	Khaw	Professor of Glaucoma and Wound Healing	Institute of Ophthalmology and Moorfields Eye Hospital, London
Dr	Dimitris	Kioussis	Head of Division of Molecular Immunology	MRC National Institute for Medical Research, London
Professor	Jonathan	Lamb	Professor of Respiratory Science	Immunobiology Group, University of Edinburgh
Professor	Martin	Leach	Professor of Physics as applied to Medicine	Institute of Cancer Research and Royal Marsden NHS Trust, Sutton
Professor	Roger	Lemon	Head of Sobell Department of Motor Neuroscience and Movement Disorders	Institute of Neurology, London
Professor	Andrew	Lister	Director of Cancer Services and Professor of Medical Oncology	St. Bartholomew's Hospital, London
Professor	David	Mabey	Professor of Communicable Diseases	London School of Hygiene and Tropical Medicine
Professor	Tom	MacDonald	Professor of Immunology	University of Southampton
Dr	Philippa	Marrack	Investigator, Howard Hughes Medical Institute	Immunology, National Jewish Medical and Research Center, Denver, USA
Professor	Mervyn	Maze	Head of Anaesthetics and Intensive Care	Imperial College, London
Sir	Tom	McKillop	Chief Executive	AstraZeneca plc, London
Professor	Robert	Michell	Royal Society Research Professor	School of Biosciences, University of Birmingham
Professor	Tony	Minson	Professor of Virology	Department of Pathology, University of Cambridge
Professor	David	Nutt	Dean of Clinical Medicine and Dentistry	Psychopharmacology Unit, University of Bristol
Professor	Steve	Oliver	Professor of Genomics	University of Manchester
Baroness	Onora	O'Neill	Principal of Newnham College	University of Cambridge
Professor	Terry	Partridge	Professor of Experimental Pathology	MRC Clinical Sciences Centre, Imperial College, London
Professor	Michael	Peters	Professor of Nuclear Medicine	University of Cambridge
Professor	Raymond	Playford	Professor of Gastroenterology	Imperial College, London
Professor	Robert	Plomin	MRC Research Professor	Institute of Psychiatry, King's College London
Professor	Charles	Pusey	Professor of Renal Medicine	Imperial College, London
Professor	Peter	Ratcliffe	Professor of Renal Medicine	Nuffield Department of Medicine, University of Oxford
Dr	Jonathan	Reeve	MRC External Scientific Staff and Team Leader	University of Cambridge
Professor	Jim	Ritter	Professor and Head of Clinical Pharmacology	GKT School of Biomedical Sciences, King's College London
Professor	Martin	Rossor	Professor of Clinical Neurology	Institute of Neurology, University College London
Professor	Christopher	Rudd	Professor of Haematology and Research Director	Division of Investigative Sciences, Imperial College, London
Professor	Steven	Sacks	Head of Nephrology and Transplantation	Guy's, King's and St Thomas' School of Medicine

Professor	Nilesh Jayantilal	Samani	Professor of Cardiology	University of Leicester
Professor	Jonathan	Shepherd	Professor of Oral and Maxillofacial surgery	University of Wales College of Medicine
Professor	Tom	Strachan	Scientific Director	Institute of Human Genetics, University of Newcastle upon Tyne
Professor	Allan	Templeton	Regius Professor of Obstetrics and Gynaecology	University of Aberdeen
Professor	Jean	Thomas	Professor of Macromolecular Biochemistry	University of Cambridge
Professor	Andrew	Tomkins	Professor of International Child Health	Institute of Child Health, University College London
Professor	Richard	Trembath	Professor and Head of Medical Genetics	University of Leicester
Professor	Angela	Vincent	Professor of Neuroimmunology	Weatherall Institute of Molecular Medicine, Oxford
Mr	John	Wallwork	Consultant Cardiothoracic Surgeon	Papworth Hospital NHS Trust
Dr	Steve	Watson	British Heart Foundation Senior Research Fellow	Department of Pharmacology, University of Oxford
Professor	Andrew	Wilkie	WellcomeTrust Senior Research Fellow in Clinical Science	Weatherall Institute of Molecular Medicine, Oxford
Professor	Geraint	Williams	Professor of Pathology	University of Wales College of Medicine
Professor	Robert	Williamson	Director of Murdoch Children's Research Institute	Royal Children's Hospital, Melbourne, Australia
Dr	Stephen	Wilson	Wellcome Trust Senior Research Fellow	Department of Anatomy and Developmental Biology, UCL
Professor	Kathryn	Wood	Professor of Immunology	Nuffield Department of Surgery, University of Oxford
Professor	Paul	Workman	Harrap Professor of Pharmacology and Therapeutics	Institute of Cancer Research
Professor	Susan	Wray	Professor of Physiology	University of Liverpool
Dr	Tadataka	Yamada	Chairman, Research and Development	GlaxoSmithKline
Professor	Steve	Yeaman	Professor of Molecular Enzymology	University of Newcastle upon Tyne

Admission Day

The Academy's Admission Day for Fellows elected in 2002 took place on 8 July at the Institute of Child Health in London (see pictures on page 5). Forty five of the 83 new Fellows, accompanied by their invited guests were able to be present to hear their citations read by the Registrar, receive their certificates from the President and sign the Fellows' book. They were also treated to thought provoking and entertaining presentations. Prior to the Admission Ceremony Lord Hunt of Kings Heath gave an emphatic presentation on *Why properly regulated research using animals is essential for medical progress.* The ceremony was followed by excellent presentations from four new Fellows. Professor Roger Lemon described the *Cortical control of the hand* and Professor Martin Rossor spoke on *Shrinking brains* in relation to Alzheimer's disease. *Apert syndrome: a tale of two nucleotides* was addressed by Professor Andrew Wilkie and Baroness O'Neill provoked an interesting discussion with her presentation *The emperor's new clothes: autonomy in medical ethics.* The formal proceedings concluded with a characteristically challenging speech from Lord May of Oxford on *The role of academies in a changing world,* after which Fellows, old and new, and guests had the opportunity to interact socially at an informal reception.

Meetings programme

The programme below has been developed in response to Fellows' suggestions. If you would like to propose a meeting topic please get in touch. Fellows and interested colleagues are warmly invited to attend the following scientific meetings. The Fellowship will be mailed programmes prior to each event. Please see the Academy website (www.acmedsci.ac.uk) for up to date details and registration information; additional meetings will be added to the calendar. Alternatively, contact Susan Wicks *on* ***susan.wicks@acmedsci.ac.uk***

REGIONAL MEETING 4 October 2002, Leicester

This meeting is organised by Professor Ian Lauder FMedSci and will be chaired by Professor Steve Nahorski FMedSci. Professor Richard Trembath FMedSci, Professor Sir Alec Jeffreys FMedSci and Professor Gordon Roberts FMedSci will give presentations, and Professor William Doe FMedSci and Professor Tony Weetman FMedSci will debate whether *The future of clinical academic medicine is safe in our hands.* Programme and registration form enclosed.

ACADEMY DINNER 21 November 2002, London

The dinner will take place in the splendid Great Hall at Barts following the Annual General Meeting. Fellows and their guests are warmly invited to this special event that will mark the valediction of the Academy's Founding President and the welcoming of Peter Lachmann's successor. Registration information enclosed.

EVOLUTION AND DISEASE 6 December 2002, London

The central idea of evolutionary or Darwinian medicine is that there are mismatches between our dietary and behavourial or lifestyle habits and our genetics, the latter having undergone prior selection for adaptability under very different environmental/social circumstances. This meeting, co-organised by Professor Mel Greaves FMedSci and Dr Randolph Nesse, will focus on how the evolutionary view might provide a framework within which to understand how gene/environment interactions bring about disease. Participants will include evolutionary biologists, geneticists, anthropologists and pathologists. More details to follow.

ENVIRONMENTAL OESTROGENS AND ANTI-ANDROGENS
Date to be confirmed: January 2003 at venue to be confirmed

There is evidence for increases in certain disorders in the male reproductive tract, and apparent decreases in sperm counts, which may be related to increased exposure to environmental oestrogens. This meeting, organised by Professor Ieuan Hughes FMedSci, will encourage discussion of the scientific issues from a multidisciplinary perspective, covering epidemiology, toxicology and cellular mechanisms as well as clinical effects. More details to follow.

REGIONAL MEETING 25 April 2003, London

More information on this event, organised by Professor Robin Weiss, to follow.

Challenge Studies of Human Volunteers

Twenty invited experts and some 50 registrants gathered at Green College, Oxford in May for a day of spirited and constructive lectures and debate. The meeting (hosted by Richard Moxon) provided a forum for critical discussion of the risks and benefits of microbial challenge studies in human volunteers with emphasis on their role in facilitating research and development of vaccines.

Following the President's introduction, David Tyrrell provided an historical perspective of research done in the MRC Common Cold Unit, highlighting the unique contribution of volunteer studies in growing and detecting common cold viruses. He emphasised the unique information that can be obtained on innate and acquired immune responses. Tim Peto (University of Oxford), Karl Nicholson (University of Leicester), Adrian Hill (University of Oxford), Jeff Weiser (University of Pennsylvania) and Mike Levine (University of Maryland) covered different aspects of the contemporary scientific case for challenge studies. During the past decade, a wide range of pathogens have been used in challenge studies on humans, including several viruses, pathogenic bacteria, and the human malaria parasite, Plasmodium f alciparum providing information that could only realistically have been obtained in this way. Thus, with careful assessment of risks and meticulous supervision, challenge studies offer enormous benefits to our knowledge and have underpinned major and essential breakthroughs in the control of a variety of globally important infections.

Phil Minor (National Institute for Biological Safety and Control, London) reviewed the existing mechanisms for obtaining approval for conducting challenge studies and the small body of regulatory data relevant to quality control of materials used in these studies. David Mant (University of Oxford) appraised concerns that he anticipated would be voiced in the primary care setting. Evan Harris (MP and spokesman on Health for the Liberal Democrats) presented insights into political process, recommending a pro-active approach to 'building bridges', especially through intelligent investment in and involvement of the media.

Michel Cadoz (Aventis-Pasteur, Lyons, France) and Michael Darsley (Acambis, Cambridge), described how humans represent the only definitive source of data on vaccines and without challenge studies how some vaccine programmes would not be commercially viable. Over lunch Tony Hope (University of Oxford) and Rannaan Gillon (Imperial College, London) gave their perspectives on the ethical issues.

The key issues and problems were aired in a rigorous open discussion chaired by Leszek Borysiewicz. The clear consensus of the meeting participants was that challenge studies have a crucial role to play in facilitating the effective control of microbial diseases and that a recommendation should be made to the Academy Council to set up a working party to examine in depth the balance of risks and benefits.

Professor Richard Moxon *FMedSci*

New President Elected

The Council of the Academy is delighted to announce that the next President of the Academy will be Sir Keith Peters. Sir Keith is Regius Professor of Physic in the School of Clinical Medicine, University of Cambridge. He was a founder Fellow of the Academy and currently serves on Council. He will succeed Sir Peter Lachmann, becoming the second President of the Academy, and take office on 21 November 2002.

Sir Keith Peters FRS FMedSci

The Academy of Medical Sciences was established in1998 to act as an authoritative body to promote medical science across traditional boundaries. The Academy campaigns for better structures in support of the medical sciences, promotes excellence in research, provides scientific advice, encourages better communication of medical science and provides quality services to its Fellowship. The Academy draws its authority from its elected Fellowship of 700 leading medical scientists in the UK who may use the suffix FMedSci. The Academy Officers are Sir Peter Lachmann FRS (President), Lord Turnberg (Vice-President), Sir Collin Dollery (Treasurer) and Professor Mark Walport (Registrar).

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