

Current & Recent Research Grant Awards

(as at October 2011)

Dr **Leanne McKay** (Institute of Neuroscience & Psychology, Glasgow University), for a three-year study aiming to improve understanding of the development and maturation of the neural control of breathing.

Dr **Barry J.A. Laird** & Professor Marie Fallon (Palliative Medicine, Edinburgh Cancer Centre, Edinburgh University), Professor Donald Macmillan (Surgery, Glasgow University) & Professor Kenneth Fearon (Surgery, Edinburgh University), for a three-year investigation of inflammatory biomarkers in prognosis in advanced cancer (IPAC Study).

Dr **Louise S. Bicknell** (Institute of Genetics & Molecular Medicine, Edinburgh University) for a three-year project which seeks to uncover the genetic causes of primordial dwarfism: harnessing gene discovery to gain insights into how humans grow.

Dr **Paul Hoskisson** (Institute of Pharmacy & Biomedical Sciences, Strathclyde University) for a two-year study of non-toxicogenic *Corynebacterium diphtheriae*; a pathogen of emerging importance in Scotland.

Dr **Vicky MacRae** (Roslin Institute and Royal (Dick) Veterinary School, Edinburgh University) for a two-year investigation of the regulation of insulin signalling in bone by PC-1.

Dr **Richard Mort** (MRC Human Genetics Unit, Edinburgh) for a three-year project taking an integrated, multidisciplinary approach to modelling normal neural crest cell development and the abnormalities that contribute to human birth defects.

Dr **Huirong Jiang** (Institute of Pharmacy & Biomedical Sciences, Strathclyde University) for an investigation over 30 months of IL-33 activity in the development of neurological autoimmune diseases.

Dr **Sarah J. Coulthurst** (Division of Molecular Biology, Dundee University) for a two-year investigation into the role of a new protein secretion system in the virulence of the opportunistic pathogen, *Serratia marcescens*.

Dr **Dana Faratian** (Division of Pathology & Breakthrough Research Unit, Edinburgh University) & Dr Gillian Smith (Biomedical Research Institute, Dundee University), for a three-year study involving the grouping of colorectal cancers by phosphoprotein profiling, to refine prediction of responses to new and existing therapies.

Dr **Bing Lang** & Professor Colin D. McCaig (Institute of Medical Sciences, Aberdeen University) and Dr Colin Smith (Pathology, Western General Hospital, Edinburgh), for a three-year project aiming to uncover novel biomarkers for schizophrenia.

Dr **Annette Sorensen**, Dr Marie Boyd & Dr Anthony McClusky (Strathclyde Institute of Pharmacy & Biomedical Sciences, Strathclyde University) for an 18-month investigation of novel combination therapies for the treatment of medulloblastoma and other somatostatin receptor expressing tumours.

Dr **V. Anne Smith**, School of Biology, St Andrews University and Drs Simon Langdon & Dr Dana Faratian (Institute of Molecular Medicine & Genetics, Edinburgh University), for a three-year project involving taking a systems biology approach to the development of predictive patient selection for ovarian cancer therapy.

Dr **Andrew J. Childs**, MRC Human Reproductive Sciences Unit and colleagues, Professors R.A. Anderson (Reproductive & Developmental Sciences) and P.S. Tansey (MRC Reproductive Sciences Unit, Edinburgh University), for two-year investigation of the regulation of germ cell development in the human fetal ovary in an effort to establish reproductive potential.

Dr **Carl S. Goodyear** (Clinical Neurosciences, Glasgow University), Professor Margaret Harnett (Immunology, Infection & Inflammation, Glasgow University) & Dr Richard Soutar (Haematology, Gartnavel General Hospital, Glasgow), for a three-year study of the inhibition of osteoclastogenesis by immunomodulatory complexes. [The Vipiana Award]

Dr **Colin Berry** Scottish Senior Clinical Research Fellow (BHF Glasgow Cardiovascular Research Centre, Glasgow University), for his work on combining computer modelling and MRI to improve heart attack treatment. [2009-2011 Scottish Senior Clinical Research Fellowship Support Grant]

Dr **Christine M. Dufes**, Strathclyde Institute of Pharmacy & Biomedical Sciences and Professor Kevin Ryan (Beatson Institute for Cancer Research, Glasgow), for a two-year project on the evaluation of systemic p73 gene therapy of cancer, using a novel transferring-targeted dendrimer.

Dr **Nancy Sabatier** (Centre for Integrative Physiology, University of Edinburgh) for a two-year study investigating hypothalamic mechanisms in obesity.

Dr **John A. Marwick**, MRC Centre for Inflammation Research, University of Edinburgh and Professor Adriano G. Rossi, for a two-year study of the impact of oxidative stress and glucocorticoids on neutrophil function and macrophage clearance.

Mr **Stephen J. McNally**, Professor Stephen J. Wigmore & Dr Luke Devey, Centre for Inflammation Research, University of Edinburgh, for a two-year investigation of the effect of heme-oxygenase-1 on the role of monocyte in hepatic ischaemia-reperfusion injury and transplantation.

Dr **Nial J. Wheate**, Dr Oliver Sutcliffe & Professor David Flint, Strathclyde Institute of Pharmacy & Biomedical Sciences, Strathclyde University, for a three-year investigation of the mechanisms of folic acid-directed delivery of platinum(II)-based anticancer drugs using PAMAM dendrimers.

Dr **Daniel Walker**, Division of Infection & Immunity, Glasgow University, for a two-year study of the antimicrobial activity of novel protein antibiotics against *Pseudomonas aeruginosa* in the biofilm state.

Dr **Pasquale Maffia** & Dr James Brewer, Strathclyde Institute of Pharmacy & Biomedical Sciences, Strathclyde University, for a two-year project on the visualisation of antigen presentation in models of atherosclerosis.

Dr **Andrew J. Roe**, Infection & Immunity & Dr Richard Burchmore (Functional Genomics Facility), University of Glasgow, for an 19-month project aiming to find new ways of blocking the infectivity of *Escherichia coli* 0157.

Dr **David A. Ferenbach** and Drs Jeremy Hughes & David Kluth, Centre for Inflammation Research, University of Edinburgh, for a 12-month study of the role of selected cells in protecting against acute kidney failure following acute injury.

Dr **Joanna L. Parish**, Bute Medical School, University of St Andrews, for a three-year X-ray crystallographic study of an enzyme required for normal cell division and also in persistent papillomavirus infection.

Dr **Hironori Ishizaki** & Dr Elizabeth Patton (Edinburgh Cancer Centre, University of Edinburgh) for a three-year project aimed at improving understanding of the development of malignant melanoma
Dr **Gareth B. Miles** (School of Biology, University of St Andrews) for a three-year project to test the 'synaptic stripping' hypothesis for amyotrophic lateral sclerosis (ALS), by an investigation of cholinergic synapses on motoneurons in ALS.

Dr **Ada Delaney**, Centre for Neuroscience Research, Royal [Dick] School of Veterinary Studies and colleagues, Professor Susan M. Fleetwood-Walker (Centre for Neuroscience Research, Royal [Dick] School of Veterinary Studies), Dr Rory Mitchell (Centre for Integrative Physiology) Dr Lesley Colvin (Department of Anaesthesia, Critical Care & Pain Medicine, Western General Hospital) and Professor Marie Fallon (CRUK Edinburgh Cancer Research Centre, Western General Hospital), all of the University of Edinburgh, for a two-year investigation aimed at gaining new insights into evidence-based pain management for cancer-induced bone pain.

Dr **Andrew C. Stanfield** and colleagues Professors Eve Johnstone & Stephen M. Lawrie (all of the Department of Psychiatry, University of Edinburgh) and Professor Peter M. McKenna (Department of Psychological Medicine, University of Glasgow), over 30 months for a clinical, neuropsychological and MRI study comparing autism spectrum disorders and schizophrenia spectrum disorders.

Dr **James W. Dear**, Clinical Pharmacology Unit, University of Edinburgh and colleagues Professor David Webb (Centre for Cardiovascular Science), Professor D. Nicholas Bateman (Scottish Poisons Information Bureau, Edinburgh Royal Infirmary), Dr Ian Marshall (Medical Physics Department, University of Edinburgh) & Dr Kenneth J. Simpson (Centre for Inflammation Research, University of Edinburgh) for an 18-month project for the characterisation of paracetamol-induced acute renal failure, using dendrimer-contrast magnetic resonance imaging.

Drs **Mary Donaldson** & Iain Morgan, Department of Pathological Sciences, University of Glasgow Veterinary School, over three years to investigate the potential of TopBP1 to be a therapeutic target for human papillomavirus infection.

Dr **Shauna E. Culshaw**, Centre for Biophotonics, University of Strathclyde and colleagues Professor Paul Garside, Dr John Girkin, Professor Gail McConnell & Dr James Brewer (all of the Centre for Biophotonics, University of Strathclyde), for a two-year project aimed at improving understanding of the basic mechanisms of the adaptive immune response to cariogenic bacteria in the oral cavity.

Dr **Omar Albagha**, Bone Research Group & Professor Stuart Ralston, Rheumatic Disease Unit, Molecular Medicine Centre, University of Edinburgh, for a two-year project on the identification of susceptibility gene(s) for osteoporosis in men on chromosome 10q21.

Dr **Sharon Mitchell** & Professor John Speakman, Department of Integrative Physiology, School of Biological Sciences, University of Aberdeen, for an 18-month project to investigate early onset of leptin insensitivity in response to high-fat diet.