# British Heart Foundation Research Grant Awards 2011/2012



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# Introduction

In the year April 2011 to March 2012 the British Heart Foundation (BHF) awarded grants totalling £88.4 million\* for research into the causes, prevention, diagnosis and treatment of diseases of the heart and circulation.

The BHF has three research grant committees which meet four times a year. The members of each committee are experts in various aspects of basic and clinical cardiovascular research. Applications are sent to independent reviewers before being assessed by the committee. Judgements are made on factors such as scientific merit, relevance to cardiovascular disease, timeliness, relationship to other work in the field, and value for money. Approximately one-third of applications are successful.

In 2011-2012 the Chairs and Programme Grants Committee agreed £28.4 million for Programme Grants and other major projects such as Special Projects, New Horizons Grants and an Infrastructure Grant. There were 31 chairholders (also referred to as BHF Professors) in post during the year. Each chairholder is site-visited every five years to assess past research performance and future plans. The visiting team includes internationally renowned scientists. The annual cost of maintaining BHF chairholders'

core funding amounted to £5.6 million, and four new Personal Chairs were awarded totalling £4.1 million. The recipients were: Professor A H Baker, University of Glasgow; Professor J N Danesh, University of Cambridge; Professor G J Murphy, University of Leicester; and Professor K Otsu, King's College London. The Fellowships Committee awarded 93 applications for personal awards costing £23.4 million. The Project Grants Committee awarded 130 applications to the value of £22.8 million.

The pages that follow list BHF chairholders in post during the year and new awards made for Fellowships, Programme Grants, Project Grants and other awards.

Full details of all types of awards offered by the BHF, and the application process, appear on the BHF website **bhf.org.uk/research** 

<sup>\*</sup>This represents the figure recorded in the audited accounts, having made adjustments for departmental costs and closed grants.

# BHF chairholders

# Listed by town

# University of Birmingham

# **The Chair of Cardiovascular Sciences** and Cellular Pharmacology

Held by: Professor S P Watson BSc PhD **FMedSci** 

Major interest: The cell and molecular biology of blood platelets in haemostasis and thrombosis.

# University of Bristol

#### The Chair of Cardiac Surgery

Held by: Professor G D Angelini MD MCh FRCS FMedSci

Major interests: Coronary artery bypass surgery, including off-pump techniques and methods to reduce restenosis; improving surgery for heart defects in infants.

# **University of Bristol**

# The Chair of Vascular Cell Biology

Held by: Professor A C Newby MA PhD

*Major interest:* The cell and molecular biology of atherosclerosis and restenosis.

## University of Cambridge

# The Chair of Cardiovascular Sciences

Held by: Professor M R Bennett BSc MA MBChB PhD FRCP FAHA FMedSci

*Major interest:* The molecular mechanisms controlling smooth muscle cell proliferation, ageing and death in atherosclerosis.

#### University of Cambridge

# The Chair of Epidemiology and Medicine

Held by: Professor J N Danesh MBChB MSc DPhil

Major interests: Cardiovascular epidemiology; large-scale studies of genetic and biochemical factors.

# University of Cambridge

# The Chair of Cardiovascular Medicine

Held by: Professor Z Mallat MD PhD

Major interest: Cellular and molecular control of immune processes in atherosclerosis and vascular inflammation.

# University of Cambridge

#### The Chair of Cardiopulmonary Medicine

Held by: Professor N Morrell MD MRCP FRCP FMedSci

*Major interest:* Molecular and genetic mechanisms of pulmonary arterial hypertension.

# **Cardiff University**

# The Sir Thomas Lewis Chair of Cardiovascular Science

Held by: Professor A J Williams BA PhD

Major interest: Molecular biology of calcium flux through the ryanodine receptor in cardiac myocytes and its disturbance in arrhythmia.

# University of Edinburgh

# The Duke of Edinburgh Chair of Cardiology

Held by: **Professor K A A Fox** BSc MBChB FRCP FESC FMedSci

Major interests: Clinical trials to determine best treatments for patients with acute coronary syndrome; novel non-invasive imaging techniques to detect coronary vascular disease.

## University of Edinburgh

#### The Chair of Cardiology

Held by: **Professor D E Newby** BSc PhD BM DM DSc FRSE FMedSci FESC FACC

*Major interest:* Experimental cardiovascular medicine, including studies of air pollution as a risk factor for cardiovascular disease.

# University of Glasgow

# The Chair of Translational Cardiovascular Sciences

Held by: Professor A H Baker BSc PhD

*Major interest:* Gene- and cell-based therapies to combat vascular disease.

# University of Leeds

### The Chair of Cardiology

Held by: **Professor S G Ball** MA MB BChir PhD FRCP – Retired February 2012

*Major interests:* Genetics of coronary heart disease; cardiac MRI.

#### University of Leicester

# **The Chair of Cardiac Surgery**

Held by: **Professor G J Murphy** BSc MBChB MD FRCS

*Major interest:* Strategies to reduce distal organ injury occurring during cardiac surgery.

# University of Leicester

# The Chair of Cardiology

Held by: **Professor N J Samani** MD FRCP FACC FMedSci

Major interests: Genetics of hypertension and coronary heart disease; cell ageing mechanisms and premature cardiovascular disease.

### Imperial College London

# The Sir John McMichael Chair of Cardiovascular Medicine

Held by: **Professor D O Haskard** DM FRCP FMedSci

*Major interest:* Cellular and molecular control of inflammatory and immune processes in atherosclerosis.

## Imperial College London

# The Simon Marks Chair of Regenerative Cardiology

Held by: Professor M D Schneider MD FMedSci

Major interests: Molecular control of cardiac myocyte growth and death; strategies for regenerative cardiac medicine.

# King's College London

# The Chair of Molecular Cardiology

Held by: Professor M Gautel MD PhD FMedSci

Major interest: Cell and molecular biology of the contractile proteins in heart muscle.

# King's College London

## The Chair of Cardiology

Held by: Professor K Otsu MD PhD FAHA

*Major interest:* Inflammatory mechanisms in heart failure.

# King's College London

#### The Chair of Cardiology

Held by: Professor A M Shah MD FRCP FESC FMedSci

*Major interest:* The cell and molecular biology of production of reactive oxygen species (by NADPH oxidase) in the cardiovascular system and their roles in atherosclerosis, cardiac hypertrophy and heart failure.

# King's College London

# The John Parker Chair of **Cardiovascular Sciences**

Held by: Professor Q Xu MBBS MD PhD

Major interest: The cell and molecular biology of stem cells and their importance in modulating atherosclerosis and restenosis.

#### St George's, University of London

# The Prudential Chair of Clinical Cardiology

Held by: Professor A J Camm BSc QHP MD FRCP FESC FACC FAHA FCGC FMedSci C.St.J -Retired March 2012

Major interest: Mechanisms and treatment of atrial fibrillation.

#### **University College London**

#### **The Chair of Cardiovascular Genetics**

Held by: Professor S E Humphries BSc PhD MRCP(Hon) FRCPath FMedSci

Major interests: Genetics of hyperlipidaemias; interactions between genes and environmental factors in the development of cardiovascular disease.

### **University College London**

#### The Chair of Psychology

Held by: Professor A P A Steptoe MA DPhil DSc FBPsS AcSS FMedSci

Major interest: Psychological stress and cardiovascular disease.

# **University College London** (Institute of Child Health)

# The Vandervell Chair of **Congenital Heart Disease**

Held by: Professor J E Deanfield BA BChir MB FRCP FMedSci

Major interest: Evaluating the risk factors for atherosclerosis and quantifying the progression of vascular disease in children and young adults.

# University of Manchester

# The Chair of Cardiac Physiology

Held by: Professor D A Eisner MA DPhil **FMedSci** 

Major interest: Cell and molecular physiology of the role of calcium in control of heart rhythm.

#### University of Newcastle

### The Chair of Cardiology

Held by: **Professor B D Keavney** BSc BM **BCh MRCP DM FRCP** 

Major interest: Genetics of heart disease.

# University of Oxford

## The Chair of Cardiovascular Medicine

Held by: Professor S Bhattacharya MBBS MD MRCP MSc FMedSci

Major interest: Developmental biology of the heart.

## University of Oxford

# The Chair of Medicine and Epidemiology

Held by: **Professor Sir Rory Collins** MSc MBBS LMSSA FMedSci FRCP

Major interests: Meta-analysis and large-scale trials in cardiovascular disease; large-scale epidemiological studies of risk factors and biomarkers.

#### University of Oxford

# The Chair of Regenerative Medicine

Held by: Professor P R Riley BSc PhD

Major interests: Developmental biology of the heart and its applications to cardiac regenerative medicine.

# University of Oxford

# The Field Marshal Earl Alexander **Chair of Cardiovascular Medicine**

Held by: Professor H C Watkins MD PhD FRCP FMedSci

Major interests: Genetics and underlying molecular mechanisms in hypertrophic cardiomyopathy; genetics of coronary artery disease.

## **University of Southampton**

# The Chair of Cardiovascular Science

Held by: Professor M A Hanson MA DPhil CertEd FRCOG

*Major interest:* Molecular mechanisms for developmental and neonatal origins of adult cardiovascular disease.

# Awards made during the year 1 April 2011 – 31 March 2012

# **Fellowships**

Non-clinical Fellowships

# Senior Basic Science Research Fellowships

FS/11/49/ 28751	<b>Dr S J Mundell</b> BSc PhD	University of Bristol	Role of G protein-coupled receptor sorting in platelet function. <i>5 years</i>	£502,755
FS/11/50/ 29038	Dr J E S Schneider PhD	University of Oxford	New horizons in preclinical cardiovascular magnetic resonance. <i>5 years</i>	£909,071
Intermedia	te Basic Science Research F	Fellowships		
FS/11/51/ 28920	<b>Dr B M Luken</b> MSc PhD	Imperial College London	The critical role of the von Willebrand factor A2 domain as a shear force sensor. 4 years	£497,301
FS/11/53/ 29020	<b>Dr D Warren</b> PhD	King's College London	A pivotal role for the LINC complex and nesprins in vascular smooth muscle cell mechanical coupling and phenotypic modulation. <i>4 years</i>	£560,932
FS/11/19/ 28761	<b>Dr A Woodfin</b> PhD	Queen Mary, University of London	The profile and mechanisms of inflammatory responses in angiogenic microvessels. <i>4 years</i>	£554,125
FS/12/1/ 29080	Dr N Marina-Gonzalez PhD	University College London	Peripheral and central adipokine sensors and their role in the development of obesity-related hypertension. <i>1 year</i>	£69,735
FS/11/52/ 29018	<b>Dr A Caporali</b> BSc	University of Bristol	Inter-cellular trafficking and regulation of microRNA-503 expression in diabetes-induced microvascular complications. <i>4 years</i>	£439,533
FS/12/2/ 29300	<b>Dr K Brack</b> BSc PhD	University of Leicester	Significance of intrinsic cardiac ganglia in the control of cardiac performance in health and disease. <i>4 years</i>	£418,005
FS/11/20/ 28857	<b>Dr H M Phillips</b> BSc MSc PhD	University of Newcastle	Role of Rho kinase in ventricular development and adult heart disease. <i>4 years</i>	£508,189
FS/11/18/ 28633	Dr L Hodson BSc PhD	University of Oxford	An investigation of intra-hepatic fatty acid partitioning and its regulation in man: relevance to the production of atherogenic lipoproteins. 4 years	£480,651

# 4-year PhD Studentships

FS/11/80/ 29330	Prof M Avkiran BSc PhD DSc	King's College London	3rd intake 2011/12 4-Year PhD Studentship Scheme: Ms Joanna Furmston; Mr Rajesh Mistry; Ms Hannah Tomlins; Ms Vesna Zuzel. <i>4 years</i>	£567,916
FS/11/83/ 29333	<b>Prof P J Scambler</b> BSc MB ChB MD FRCPath	University College London	3rd intake 2011/12 4-Year PhD Studentship Scheme: Mr Daniel Dilg; Ms Bridget-Ann Kenny; Ms Hannah Nicholas; Dr Denes Stefler. <i>4 years</i>	£571,196
FS/11/77/ 29327	Prof M R Bennett BSc MA MBChB PhD FRCP FAHA FMedSci	University of Cambridge	3rd intake 2011/12 4-Year PhD Studentship Scheme: Mr William Bernard; Mr Alessandro Bertero; Ms Laura Burzynski; Ms Victoria Pell. <i>4 years</i>	£567,044
FS/11/78/ 29328	<b>Dr M Bailey</b> BSc PhD	University of Edinburgh	3rd intake 2011/12 4-Year PhD Studentship Scheme: Ms Susan Gallogly; Ms Jessica Ivy; Ms Sana Maqsood; Ms Rebecca Moorhouse. <i>4 years</i>	£523,840
FS/11/79/ 29329	Prof A F Dominiczak OBE MD FRCP FAHA FRSE FMedSci	University of Glasgow	3rd intake 2011 /12 4-Year PhD Studentship Scheme: Mr Christopher Lavery; Ms Kirsten Munro; Ms Katrin Nather; Mr Martin Wilson. <i>4 years</i>	£526,656
FS/11/81/ 29331	Dr C E Austin BSc PhD	University of Manchester	3rd intake 2011/12 4-Year PhD Studentship Scheme: Ms Samantha Borland; Ms Charlotte Bussey; Ms Thomas Morris; Ms Maria Pieri. <i>4 years</i>	£528,144
FS/11/82/ 29332	Prof D R Greaves BSc PhD	University of Oxford	3rd intake 2011/12 4-Year PhD Studentship Scheme: Mr Arne Bruyneel; Mr Harrison Davis; Mr Drew Duglan; Mr Daniel Regan-Komito. <i>4 years</i>	£572,116
Career Re-	entry Research Fellowship			
FS/11/21/ 28691	<b>Dr D Proudfoot</b> BSc PhD	Babraham Institute, Cambridge	Uncovering the mechanisms by which nanoparticulate calcium phosphate crystals induce vascular smooth muscle cell death. <i>3 years</i>	£303,016
Advanced <sup>-</sup>	Training Award			
FS/11/22/ 28745	<b>Dr C Cantwell</b> MMath MSc PhD	Imperial College London	Measurement site selection for the optimal reduction of uncertainty in computer models of cardiac conduction. <i>3 years</i>	£125,064

# 3-year PhD Studentships

FS/11/27/ 28756	Mr J Firth BSc	Cardiff University	Structural mechanisms of gating at the selectivity filter of the cardiac ryanodine receptor channel (RyR2) and a potential gate-coupling element. 3 years	£86,166
FS/11/26/ 28750	Miss N Price BSc	Cardiff University	Mechanisms of vascular dysfunction in rheumatoid arthritis. 3 years	£113,355
FS/11/25/ 28740	Ms Z Hira MSc	Imperial College London	Integrated network analysis of the regulation of left ventricular hypertrophy and microvascular remodelling. 3 years	£92,050
FS/11/55/ 28911	Mr L lannone BSc MSc	Imperial College London	ADMA metabolism and chronic hypoxia- induced pulmonary hypertension. 3 years	£105,791
FS/11/60/ 28940	Ms N Reglinska BSc	Imperial College London	Inhibitory role of TFPI/protein S complex in the initiation phase of coagulation.  3 years	£113,644
FS/11/29/ 28759	Ms G Barnett BSc	King's College London	Embryonic stem cell differentiation to the vascular lineage: a proteomics approach. 3 years	£106,678
FS/11/24/ 28735	Ms N Pace BSc	King's College London	Structure of thin filament complexes: new insights by solid state NMR spectroscopy. <i>3 years</i>	£106,678
FS/11/64/ 28945	Mr K Cheung BSc	Queen Mary, University of London	Molecular mechanisms of endothelial cytoprotection by CD31-mediated signals. 3 years	£105,951
FS/11/30/ 28789	Miss E Kay MSc	Queen Mary, University of London	Regulation and function of Toll-like receptors in leukocyte recruitment <i>in vivo. 3 years</i>	£113,304
FS/11/28/ 28758	Mr A Moore BSc	Queen Mary, University of London	Regulation of matrix metalloproteinase-14 expression by hypoxia-inducible transcription factor – implications in neovessel formation in atherosclerotic plaques. <i>3 years</i>	£106,312
FS/11/36/ 28872	Mr MTate BSc	Queen's University, Belfast	Does glucagon-like peptide-1 modulate progression of cardiac remodelling in diabetes via specific actions on inflammation and the extracellular matrix? 3 years	£100,195
FS/11/88/ 29205	Miss R Coker BSc	University College London	Cardiac amyloid: investigation of the role of serum amyloid P component in fibrillogenesis. <i>3 years</i>	£109,471
FS/11/23/ 28730	Miss J McKean BSc MSc	University of Aberdeen	Uncovering new therapeutic targets for inhibiting VSM cell migration: role of Rap1. <i>3 years</i>	£100,266
FS/11/87/ 29199	Ms EThompson BMed Sc	University of Birmingham	Mechanisms underlying the detrimental effects of ageing on cerebrovascular responses to rises in blood pressure. 3 years	£111,933

FS/12/3/ 29232	<b>Mr T Blair</b> BSc	University of Bristol	The role and regulation of the mammalian target of rapamycin complex (mTORC)1 and mTORC2 in platelet function and arterial thrombosis. 3 years	£103,402
FS/11/57/ 28936	Mr B Littlejohns BSc	University of Bristol	Role of mitochondria in increased vulnerability to insults of hearts and cardiomyocytes isolated from mice fed a 'Western-style' high-fat diet.  1 year, 9 months	£60,790
FS/11/59/ 28938	Mr D Melgari BSc MSc	University of Bristol	Flecainide inhibition of the hERG potassium channel: binding site and role of drug ionisation. <i>3 years</i>	£97,295
FS/11/31/ 28790	Ms F O'Brien BSc	University of Bristol	Novel phosphorylation control mechanisms in cardiac sarcoplasmic reticulum. <i>3 years</i>	£99,464
FS/11/84/ 29121	Mr M D Richards BSc	University of Bristol	Mechanisms of neovascularisation: the role of the novel cytoskeletal regulator DAAM2 in angiogenesis. <i>3 years</i>	£99,620
FS/11/32/ 28814	Mr A P Richardson BSc	University of Bristol	The molecular mechanism of the mitochondrial permeability transition pore. 3 years	£99,851
FS/11/62/ 28934	Miss M van den Bosch BSc	University of Bristol	Role of the motor protein myosin Va in regulating platelet secretion and function. <i>3 years</i>	£115,439
FS/11/34/ 28860	Mr X Ye BSc	University of Bristol	To investigate the role of VEGF splicing and alternative therapeutic options in capillary haemangiomas. <i>3 years</i>	£110,205
FS/11/85/ 29129	Mr A Buckroyd BSc MRes	University of Cambridge	Regulation of vascular smooth muscle alternative splicing by core splicing factors. 3 years	£102,025
FS/12/4/ 29254	<b>Dr L Gaynor</b> BSc MBBS	University of Cambridge	Immunogenetics of uterine natural killer cell and trophoblast interactions in trophoblast invasion and uteroplacental arterial remodelling. 3 years	£117,608
FS/11/35/ 28871	Miss H Lalarukh BSc	University of Cambridge	Does the orphan G-protein coupled receptor, GPR61, play a role in the secretion of aldosterone from normal or adenomatous human adrenal? 3 years	£119,599
FS/11/33/ 28831	Mr N K Moss BSc	University of Leeds	TRPC channel surface stability and cholesterol-dependent retraction. 3 years	£107,600
FS/11/63/ 28944	Mr M Miossec BSc MSc	University of Newcastle	Whole-exome capture and next- generation sequencing to discover rare variants predisposing to congenital heart disease. <i>3 years</i>	£116,209
FS/12/7/ 29359	Ms Z Abbas BSc	University of Nottingham	Identification and characterisation of the novel P2Y14 purine receptor in the coronary vasculature. 3 years	£103,024

FS/11/61/ 28941	<b>Ms R Manna</b> BSc	University of Nottingham	Investigation of the coagulation Factor XII protease domain structure and inhibition. <i>3 years</i>	£89,882
FS/11/58/ 28937	Miss C Palmer BSc	University of Nottingham	Redox role of STAT3 in the survival of cardiomyocytes during hypoxia/oxidative stress. 3 years	£98,202
FS/11/86/ 29137	Mrs P Sasikumar BSc MSc	University of Reading	The regulation of platelet function and cell signalling by a newly identified platelet collagen receptor, the chaperone protein HSP47. 3 years	£100,497
FS/11/54/ 28910	Ms K Radford BSc	University of Sheffield	Structure/function relationships of the Tie2 receptor tyrosine kinase in endocytosis and signalling. 3 years	£100,073
FS/11/56/ 28912	Mr T Carson BSc	University of Strathclyde	Vein graft success depends on tissue hypoxia modulating TLR and PLC gamma. <i>3 years</i>	£100,263
FS/12/6/ 29358	Student to be appointed	University of Birmingham	Does impaired microvascular unit perfusion lead to cardiac dysfunction in diabetic cardiomyopathy? <i>3 years</i>	£105,281
FS/12/5/ 29339	Student to be appointed	University of Bristol	Gene expression changes in the hypothalamus implicated in hypertension. <i>3 years</i>	£102,112
Travel Fello	wships			
FS/11/69/ 29017	<b>Dr F S Ng</b> MRCP	Imperial College London	Infarct border zone as a determinant of post-infarction ventricular arrhythmias in human myocardium. <i>1 year</i>	£50,688
FS/11/39/ 28754	<b>Dr T P E Lockie</b> BSc MBChB	King's College London	Dual-sensor pressure and flow measurements in the assessment of impaired coronary microvascular and endothelial function. 1 year	£62,554
FS/11/68/ 28821	<b>Dr A S Greenstein</b> BSc MB ChB MRCP PhD	University of Manchester	Mechanisms of adipose vascular coupling. 1 year	£106,592

# Clinical Fellowships

# Senior Clinical Research Fellowships

FS/12/8/ 29377	<b>Dr I B Wilkinson</b> MA DM MRCP	University of Cambridge	Aortic stiffness: mechanisms and clinical importance. <i>5 years</i>	£983,605
FS/11/65/ 28865	Dr P Leeson PhD MRCP	University of Oxford	Endothelial dysfunction and predisposition to hypertension: cardiovascular studies in offspring of hypertensive pregnancies. <i>5 years</i>	£1,085,963
Intermedia	te Clinical Research Fellow	yships		
FS/11/38/ 28864	<b>Dr S Babu-Narayan</b> MRCP	Imperial College London	Predicting cardiac events in congenital heart disease: the role of focal and interstitial fibrosis. 4 years	£636,507
FS/11/67/ 28954	Dr A R Lyon MA BM BCH	Imperial College London	Spatiotemporal patterns of cardiometabolic vulnerability in the intact failing heart. <i>4 years</i>	£816,090
FS/11/37/ 28819	<b>Dr B Modarai</b> BSc MBBS MRCS PhD FRCS	King's College London	Developing a novel cell candidate and perfusion imaging strategy for the treatment of critical leg ischaemia. 4 years	£730,778
FS/11/66/ 28855	Dr C Antoniades MD PhD	University of Oxford	The role of adiponectin in the regulation of vascular and myocardial superoxide generation in human coronary artery disease. <i>4 years</i>	£657,372
Clinical Res	earch Leave Fellowship			
FS/11/89/ 29162	<b>Dr G A MacGowan</b> MD FACC FRCPI	University of Newcastle	Cardiac energetics and function in normal human ageing. <i>3 years</i>	£287,177
Clinical Res	earch Training Fellowship	s		
FS/11/42/ 28753	Dr C L Percy MBBS BSc	Cardiff University	Predicting excess bleeding due to haemostatic failure following cardiopulmonary bypass surgery. 3 years	£185,878
FS/12/12/ 29294	<b>Dr G Cole</b> MA MB BChir MRCP	Imperial College London	Accurate, reproducible and meaningful quantification of cardiac performance and volume status by non-specialists. <i>3 years</i>	£192,124
FS/11/75/ 29030	<b>Dr A Finnemore</b> MBBCh	Imperial College London	Quantitative assessment and functional correlates of cardiac mechanics and energetics in newborn infants. 2 years	£113,403
FS/11/48/ 28869	<b>Dr B Iqbal</b> BSc MBBS MRCP	Imperial College London	The role of tristetraprolin (TTP) and Poly(ADP-Ribose)-Polymerase-14 (PARP-14) in the post-transcriptional regulation of monocyte-macrophage tissue factor expression. <i>1 year, 6 months</i>	£102,092

FS/11/46/ 28861	<b>Dr R Petraco Da Cunha</b> MBBS MRCP	Imperial College London	Ischaemia-induced electromechanical delay for the diagnosis of coronary artery disease. 2 years	£159,004
FS/11/92/ 29122	Dr S M A Sohaib MBBS BSc	Imperial College London	Cardiac resynchronisation therapy: does the haemodynamic improvement of biventricular pacing truly arise from cardiac resynchronisation? 3 years	£190,442
FS/11/43/ 28760	<b>Dr K Asrress</b> MA BM BCh MRCP	King's College London	Unravelling the mechanisms of exercise- induced angina and the actions of GTN by magnetic resonance imaging and invasive assessment of coronary haemodynamics. 3 years	£225,033
FS/11/93/ 29163	Dr Z Chen BSc MBBS FRCP	King's College London	Assessment of left ventricular grey zone using MRI to predict ventricular arrhythmias in patients with implantable defibrillators. 2 years	£144,318
FS/12/16/ 29384	Dr S Kalra BA MA MBBS MRCP	King's College London	Using smooth muscle derived microvesicles as vascular risk biomarkers in humans. <i>2 years</i>	£136,809
FS/11/45/ 28859	Dr K Khavandi MBChB MRes	King's College London	Novel approaches to understanding oxidant sensing and signalling in the cardiovascular system. <i>3 years</i>	£192,142
FS/12/15/ 29380	Dr M Z O Khawaja MBBS	King's College London	Describing the haemodynamic modification of coronary and aortic disease in severe aortic stenosis. <i>3 years</i>	£251,240
FS/11/70/ 28917	<b>Dr A Myat</b> BSc MBBS MRCP	King's College London	Liraglutide-stimulated cardioprotection: is it novel and can it be an anti-anginal agent? 3 years	£230,767
FS/12/9/ 29233	Dr S Omar MBBS MRCP	King's College London	Inorganic nitrite and large artery function. 2 years	£142,352
FS/11/90/ 29087	Dr RPC Williams MBBS BSc	King's College London	The assessment of coronary blood flow and myocardial work in patients with warm-up angina: increased flow or reduced need? 3 years	£209,898
FS/11/41/ 28749	Dr S Velmurugan BSc MBBS	Queen Mary, University of London	Investigation of the effect of dietary nitrate on platelet reactivity and vascular function using advanced magnetic resonance imaging in patients with hypercholesterolaemia. 2 years, 6 months	£244,954
FS/12/11/ 29289	<b>Dr J Lane</b> BSc MBChB MRCP	Queen Mary, University of London	Are changes in the expression of inhibitory heterotrimeric G-proteins protective or maladaptive in heart failure? 3 years	£229,624
FS/11/40/ 28739	Dr K Gordon MBBS MRCP	St George's, University of London	Progressing classification and understanding of primary lymphoedema by genetic analysis of patient cohorts.  2 years	£127,381

FS/11/71/ 28918	<b>Dr H Raju</b> MBChB MRCP	St George's, University of London	Next generation sequencing of inherited cardiac conditions: future diagnostic role and novel genetic <i>loci</i> in sudden arrhythmic death syndrome. 2 years	£154,451
FS/11/72/ 28955	Dr D Knight BSc MBBS	University College London	Towards a more comprehensive assessment of the right ventricle by echocardiography: novel techniques applied to carcinoid heart disease and pulmonary hypertension. 2 years	£116,618
FS/11/76/ 29037	Dr M Quail BSc MBChB	University College London	Patient-specific modelling of complex cardiovascular mechanics in congenital heart disease. <i>3 years</i>	£178,341
FS/11/44/ 28820	Dr A Aziz MBChB MRCP	University of Leeds	Enhancing vascular endothelial repair in the setting of insulin resistance: the role of insulin-like growth factor binding protein-1. 3 years	£191,241
FS/11/91/ 29090	Miss K Griffin MA MB BChir	University of Leeds	The role of transglutaminases in the development of aortic abdominal aneurysms. <i>3 years</i>	£172,160
FS/11/73/ 29014	<b>Dr B Mercer</b> MBChB MRCP	University of Leeds	Manipulating the phenotype of endothelial progenitor cells from insulin-resistant South Asian men: towards cell-based therapies. <i>3 years</i>	£162,740
FS/11/94/ 29180	<b>Dr A Sengupta</b> MBChB MRCP	University of Leeds	Can restoration of vascular endothelial insulin signalling rescue impaired endogenous vascular repair in systemic insulin resistance? <i>3 years</i>	£178,773
FS/12/10/ 29265	Dr M Choudhury BSc MBChB	University of Manchester	Biopacemakers: new concepts and new targets. 3 years	£168,335
FS/12/13/ 29307	Dr H Schneider MRCP	University of Manchester	Is cardiac ion channel remodelling the cause of arrhythmia in patients with previous surgical correction of tetralogy of Fallot? <i>2 years</i>	£128,690
FS/11/47/ 28867	<b>Dr DT Raine</b> BMedSci MBBS	University of Newcastle	Surface ECG waveform analysis in determining the extent of atrial remodelling and predicting ablation outcomes in patients with atrial fibrillation. 2 years	£103,787
FS/12/14/ 29354	<b>Dr V Stoll</b> MA (Cantab) BMBCh MRCP	University of Oxford	Characterisation of 3D time-resolved intra-cardiac blood flow in the failing heart using advanced cardiovascular magnetic resonance techniques. 3 years	£284,852
FS/11/74/ 29015	DrT Ellam BA BM BCh MRCP	University of Sheffield	The effects of modulating dietary phosphate exposure on endothelial function. <i>3 years</i>	£184,666

# **Personal Chairs**

CH/11/2/ 28733	Prof A H Baker BSc PhD	University of Glasgow	The BHF Chair of Translational Cardiovascular Sciences. <i>10 years</i>	£1,134,216
CH/12/2/ 29428	<b>Prof J N Danesh</b> MBChB MSc DPhil	University of Cambridge	The BHF Chair of Epidemiology and Medicine. <i>10 years</i>	£499,348
CH/12/1/ 29419	Prof G J Murphy BSc MBChB MD FRCS	University of Leicester	The BHF Chair of Cardiac Surgery. 10 years	£1,282,707
CH/11/3/ 29051	Prof K Otsu MD PhD FAHA	King's College London	The BHF Chair of Cardiology. 10 years	£1,175,453

# Infrastructure Grant

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# **New Horizons Grants**

NH/12/2/ 29427	<b>Dr F F Fraternali</b> PhD	King's College London	Biophysical investigation of nesprin spectrin repeats: implications for cardiovascular cell function. <i>3 years</i>	£263,187
NH/11/5/ 29058	Prof N P Smith PhD	King's College London	Integrated mathematical modelling and comprehensive MR imaging for DCM assessment. 3 years	£207,473
NH/11/3/ 29033	<b>Dr A Stephanou</b> MSc PhD	University College London	Bio-electrospraying cardiac cells: a novel direct tissue engineering and regenerative medicinal approach for bio-repairing the heart. 3 years	£265,101
NH/11/6/ 29061	Prof S P Watson BSc PhD FMedSci	University of Birmingham	Development and application of dynamic imaging of adhesion, spreading and migration in megakaryocytes/platelets and neutrophils. 3 years	£299,932
NH/11/1/ 28922	Prof R W Farndale MA PhD	University of Cambridge	Development of matrix scaffolds that support cardiovascular repair and regeneration. 2 years, 10 months	£298,018
NH/11/4/ 29059	Dr G D Moggridge MA PhD	University of Cambridge	Engineering anisotropic polymer nano-composites for improved prosthetic heart valve leaflets. <i>3 years</i>	£261,241

NH/12/1/ 29382	<b>Dr S Plein</b> MRCP MD PhD	University of Leeds	Gadolinium labelled aptamers as targeted contrast agents for use in cardiac MRI – targeting Tenascin-C at sites of cardiac injury and remodelling. 2 years, 6 months	£299,972
NH/11/2/ 28923	<b>Dr C Dart</b> BSc PhD	University of Liverpool	Bioinformatics-driven exploration of the caveolin interactome: towards the development of specific modulators of pathogenic protein-protein interactions. 2 years	£97,253
NH/11/8/ 29253	Prof R E Morris MA DPhil	University of St Andrews	Porous material delivery methods for 'toxic' gases in cardiovascular science. 3 years	£288,748
NH/11/7/ 29032	<b>Dr G Cavalli-Petraglia</b> BSc MPhil PhD	University of Surrey	Targeted supramolecular nanotherapeutic agents to reduce excess cholesterol. <i>3 years</i>	£298,929

# **Programme Grants**

RG/11/19/ 29264	Prof S E Harding BSc PhD	Imperial College London	Human cardiomyocytes from pluripotent stem cells to study beta-adrenoceptor signalling. 2 years	£472,425
RG/11/13/ 29055	Prof R Krams MD PhD	Imperial College London	Blood flow affects the spatial organisation of (vulnerable) plaques: new ways to modify TCFA formation. <i>5 years</i>	£742,908
RG/11/21/ 29335	Dr P K Luther BSc PhD	Imperial College London	Unravelling the fine structure of the myocardium by modern electron microscopy: structural basis of regulation and disease. <i>5 years</i>	£750,062
RG/11/20/ 29266	<b>Prof S B Marston</b> MA DPhil DSc	Imperial College London	RENEWAL: Molecular mechanisms by which mutations in myofibrillar proteins cause primary cardiomyopathies. <i>5 years</i>	£1,281,568
RG/11/17/ 29256	Dr A M Randi MD PhD	Imperial College London	Validation of the transcription factor erg as a target for the prevention and treatment of cardiovascular diseases. 5 years	£1,203,516
RG/12/1/ 29262	Prof R M B Botnar PhD	King's College London	Molecular imaging of dysfunctional matrix remodelling in arterial disease. 5 years	£1,094,302
RG/11/12/ 29052	Prof K Otsu MD PhD FAHA	King's College London	Non-apoptotic cell death in heart failure. 5 years	£1,755,590
RG/11/14/ 29056	Prof C M Shanahan BSc PhD	King's College London	RENEWAL: Mechanisms of vascular smooth muscle cell calcification and ageing. 5 years	£1,481,252
RG/12/4/ 29426	Prof M J Shattock BSc PhD FRCP (Ed)	King's College London	RENEWAL: Regulation of the cardiac Na/K ATPase in health and disease. 5 years	£1,565,543

RG/11/11/ 29050	Prof I C Zachary BSc PhD	University College London	RENEWAL: Mechanisms and biological roles of the VEGF receptor/neuropilin signalling axis in cardiovascular health and disease. 5 years	£1,204,472
RG/11/16/ 29260	Prof A Giussani MA PhD	University of Cambridge	RENEWAL: Programming of cardovascular dysfunction by prenatal hypoxia, glucocorticoids and oxidative stress. <i>5 years</i>	£1,165,872
RG/11/8/ 29214	Prof J W Mant MA MBBS MSc MD	University of Cambridge	Third Joint Stroke Association/British Heart Foundation Programme Grant: does a 'polypill' have a role in secondary prevention of stroke in older people in the developed world? 5 years	£749,864
RG/11/7/ 28916	Prof M R MacLean BSc PhD	University of Glasgow	Gender and the development of pulmonary arterial hypertension. 5 years	£541,634
RG/11/10/ 28924	Prof D S Steele BSc PhD	University of Leeds	The role of abnormal local Ca <sup>2+</sup> signalling in myocardial dysfunction induced by sustained β1- adrenoceptor activation or phosphodiesterase inhibition. <i>5 years</i>	£558,628
RG/11/18/ 29257	Prof M R Boyett BSc PhD	University of Manchester	RENEWAL: Mapping cardiac conduction system in disease. 5 years	£1,481,308
RG/12/2/ 29416	Dr H M Arthur BSc PhD	University of Newcastle	Vascular regeneration and heart repair – exploiting the pro-angiogenic properties of endoglin. <i>5 years</i>	£1,016,891
RG/11/15/ 29375	Prof B Casadei MD DPhil FRCP FESC	University of Oxford	RENEWAL: Atrial nitrosoredox imbalance and inflammation in atrial fibrillation: mechanistic and therapeutic implications. <i>5 years</i>	£1,074,312
RG/11/9/ 28921	Dr D J Tyler PhD	University of Oxford	Establishing human cardiac hyperpolarised magnetic resonance: initial development and application. <i>2 years</i>	£1,430,667
RG/12/3/ 29423	Prof M Zaccolo MD	University of Oxford	Phosphodiesterase-2 and spatial control of cAMP signals in the heart. 5 years	£1,006,670

# **Special Project Grants**

SP/12/2/ 29422	<b>Dr R Al-Shahi Salman</b> MA MB BChir MRCP PhD FRCP	University of Edinburgh	REstart or STop Antiplatelets Randomised Trial (RESTART). <i>5 years</i>	£1,342,826
SP/11/3/ 29215	Prof A H Baker BSc PhD	University of Glasgow	Joint funding with MRC: Gene therapy for vein graft failure. 5 years	£784,591
SP/12/1/ 29062	Dr J P Greenwood MB ChB	University of Leeds	Clinical Evaluation of 3T MAgnetic Resonance imaging for the management of patients with Coronary heart disease: the CE-MARC 2 study. 5 years	£1,177,145
SP/11/2/ 29063	Medical Research Council	Medical Research Council	Joint funding with MRC: MRC e-health centres' call for health informatics research in the UK. 5 years	£1,000,000
SP/11/4/ 29251	Prof P M Fischer BSc PhD	University of Nottingham	Discovery of selective coagulation factor XIIa inhibitors. <i>3 years</i>	£411,460

# **Project Grants**

Listed alphabetically by Institute

PG/11/69/ 29076	<b>Dr P E James</b> BSc PhD	Cardiff University	Cardiac microvascular function: assessment and protection during coronary intervention. 2 years	£83,232
PG/11/73/ 29095	<b>Dr B Latinkic</b> BSc PhD	Cardiff University	Mechanisms of action of cardiogenic transcription factor GATA4. 3 years	£192,412
PG/11/115/ 29287	<b>Dr B Latinkic</b> BSc PhD	Cardiff University	Identification and analysis of a genomic programme for cardiac specification. <i>3 years</i>	£201,697
PG/11/87/ 29158	Prof A J Williams BA PhD	Cardiff University	Uncovering the mechanisms involved in the block of Ca <sup>2+</sup> release from the cardiac sarcoplasmic reticulum by flecainide. <i>2 years</i>	£274,862
PG/12/30/ 29498	<b>Dr J B Crawley</b> BSc PhD	Imperial College London	ADAMTS18, its substrates and vascular role. 3 years	£195,865
PG/11/53/ 28991	Dr J E Davies MRCP MBBS BSc	Imperial College London	Assessment of the acute and long-term benefits of percutaneous aortic valve replacement on coronary haemodynamics. 2 years	£127,953
PG/12/29/ 29497	Prof A D Hughes BSc MBBS PhD	Imperial College London	Role of microcirculation in cardiovascular, metabolic and cognitive function in three ethnic groups. A Southall and Brent REvisited (SABRE) sub study. <i>1 year</i>	£95,824
PG/11/34/ 28793	Prof R H Knoll MD	Imperial College London	Analysis of Miz1 – a novel MLP interacting protein. 3 years	£205,856

PG/11/50/ 28984	Prof M A Laffan MRCPath	Imperial College London	The role of the von Willebrand Factor A1 domain in determining vessel wall adhesion. <i>3 years</i>	£178,464
PG/11/104/ 29226	Prof M A Laffan MRCPath	Imperial College London	Structural basis of TFPIα and TFPIβ cell surface activities. 3 years	£118,498
PG/12/27/ 29489	<b>Dr D O'Regan</b> MRCP FRCR PhD	Imperial College London	Effect of rare variants in endonuclease G and phospholamban on left ventricular function assessed with 3D cardiac MRI. 2 years	£180,711
PG/11/36/ 28883	<b>Dr R Wensel</b> MD PhD	Imperial College London	Improving the ability of the cardiopulmonary exercise test to distinguish between cardiovascular and respiratory components of functional limitation. 2 years	£178,348
PG/11/81/ 29130	<b>Dr L Ying</b> PhD	Imperial College London	A new therapeutic approach based on small molecule ligands targeting DNA quadruplexes in the genes related to heart failure. 3 years	£181,653
PG/12/34/ 29557	Prof S D Brain BSc PhD	King's College London	Does CGRP play a pivotal protective role in vascular inflammation and is it a potential therapeutic target? 3 years	£210,973
PG/11/124/ 29318	<b>Dr A C Brewer</b> BSc PhD	King's College London	The role of Nox4 in the regulation of maternal biomarkers of congenital heart defects. 3 years	£215,008
PG/11/123/ 29317	<b>Dr E Ehler</b> PhD	King's College London	The formin FHOD3 – a safeguard of myofibrils in the heart. <i>3 years</i>	£180,270
PG/12/16/ 29443	Prof A Ferro MB BS PhD FRCP	King's College London	β-Catenin as a novel mediator of nitric oxide-regulated gene transcription in vascular endothelium. <i>3 years</i>	£189,986
PG/11/127/ 29322	Prof M S Gautel MD PhD	King's College London	MURF2: an overlooked nuclear player in cardiac development and remodelling? <i>3 years</i>	£225,302
PG/12/5/ 29350	Dr G F Greil MD	King's College London	Detection and grading of coronary allograft vasculopathy in children using magnetic resonance imaging. 2 years	£133,858
PG/11/100/ 29211	Prof J C Kentish MA PhD	King's College London	Phosphorylation of cardiac myofilaments by protein kinase D: a novel role in regulating myocardial performance in heart failure? 3 years	£204,195
PG/11/111/ 29270	Dr G E D Mullen BSc PhD	King's College London	Non-invasive imaging of activated complement after acute myocardial infarction: a potential biomarker for ischaemia reperfusion injury. 2 years	£157,229
PG/11/101/ 29212	Dr S A Niederer DPhil	King's College London	Optimising cardiac resynchronisation therapy lead placement for long-term outcomes. 2 years	£102,811

PG/11/90/ 28994	<b>Dr M D Sinha</b> MBBS MRCP PG DIP	King's College London	The Hypertension Optimal Treatment in children with chronic Kldney Disease study: The HOT-KID study – a randomised trial to compare effects of aggressive versus standard targets in blood pressure on target organ damage in children with CKD. 3 years	£247,487
PG/12/11/ 29408	<b>Dr L Zeng</b> PhD	King's College London	The role of XBP1 splicing in smooth muscle proliferation and atherosclerosis. <i>3 years</i>	£244,739
PG/12/26/ 29477	Dr M Zhang MD PhD	King's College London	The roles of NOX4 and its crosstalk with C/EBPβ signalling in exercise-induced cardiac hypertrophy. 3 years	£218,508
PG/11/58/ 29004	Dr Q Zhang BSc PhD	King's College London	The role of nesprins in cardiac cell function. 3 years	£52,072
PG/12/15/ 29442	Prof M Richards BA PhD	Medical Research Council	Lifetime affective problems and risk of cardiovascular disease in early old age: a longitudinal birth cohort study. <i>2 years</i>	£106,310
PG/11/109/ 29247	<b>Dr R L Williams</b> PhD	Medical Research Council	Understanding the mechanism of regulation of class I P13K by G proteins and PKA in cardiac dysfunction. <i>3 years</i>	£158,838
PG/12/28/ 29494	Prof A Ahluwalia BSc PhD	Queen Mary, University of London	Investigation of the role of the kinin B1 receptor in atherosclerosis. <i>1 year</i>	£78,986
PG/11/39/ 28890	Dr D Bishop-Bailey BSc PhD	Queen Mary, University of London	The role of endogenous epoxygenases in the regulation of LyC6-hi monocytes: a novel pathway in vascular inflammation. <i>3 years</i>	£206,450
PG/11/48/ 28981	Prof M Perretti MSc PhD	Queen Mary, University of London	Potential for an ischaemia-specific protective pathway centred on melanocortin receptor 3. 3 years	£223,456
PG/12/10/ 29389	Prof K Suzuki MD PhD	Queen Mary, University of London	'Cell-sheet' therapy using allogeneic mesenchymal stem cells for ischaemic cardiomyopathy. 2 years	£140,486
PG/11/75/ 29105	Prof T D Warner BSc PhD	Queen Mary, University of London	Exploiting synergies between therapeutic drugs and endogenous mediators to improve anti-thrombotic therapy in patients with peripheral arterial disease. 2 years	£113,157
PG/11/40/ 28891	Dr Q Xiao BSc MD PhD	Queen Mary, University of London	Crucial role of microRNA-34a in smooth muscle cell differentiation and neointima formation. <i>3 years</i>	£187,052
PG/11/102/ 29213	<b>Dr K Yashiro</b> MD PhD	Queen Mary, University of London	The role of <i>Sox17</i> on endocardium fate determination in cardiac progenitors. <i>3 years</i>	£244,471
PG/11/99/ 29207	Dr T M Curtis BSc PhD	Queen's University, Belfast	CAMKII: a novel therapeutic target for pathological ocular angiogenesis? 3 years	£161,630

PG/11/94/ 29169	Prof J G McGeown MBBCh PhD	Queen's University, Belfast	Testing for an excitatory role of Ca <sup>2+</sup> sparks in arteriolar myogenic tone and pressure autoregulation of blood flow. <i>3 years</i>	£182,289
PG/11/122/ 29310	Prof S Sharma BSc MBBS MD FRCP FESC	St George's, University of London	Repolarisation abnormalities in black athletes – markers for pathology or innocent bystanders? 2 years	£124,061
PG/11/42/ 28895	Prof P H Whincup MB MSc PhD	St George's, University of London	Improving the accuracy of body fat estimation with bioelectrical impedance in UK South Asian, black Afro-Caribbean and white European children. <i>1 year</i>	£75,794
PG/11/63/ 29011	<b>Dr E J Brunner</b> BSc MSc PhD FFPH	University College London	Longitudinal assessment of aortic stiffness in the Whitehall II study. <i>1 year, 4 months</i>	£126,397
PG/12/20/ 29469	<b>Dr B Khoo</b> MA MB BChir PhD MRCP	University College London	Effective treatment of familial hypercholesterolaemia by SMaRT (spliceosome-mediated RNA transsplicing) correction of defective LDL receptors. 1 year, 6 months	£108,768
PG/11/88/ 28992	Prof R J MacAllister MA MD FRCP	University College London	Clinical evaluation of a novel combination therapy for pulmonary hypertension. <i>2 years</i>	£66,712
PG/11/32/ 28728	Prof W J McKenna MD DSC FRCP	University College London	Identification and familial evaluation of novel genetic determinants in arrhythmogenic right ventricular cardiomyopathy (ARVC) by next generation sequencing. 1 year	£200,116
PG/11/98/ 29201	<b>Dr V Muthurangu</b> BSc MB ChB MRCPCH MD	University College London	Towards better assessment of myocardial ischaemia in children using magnetic resonance imaging. <i>1 year</i>	£58,215
PG/11/92/ 29126	Dr M Ponticos PhD	University College London	Role of connective tissue growth factor in atherosclerosis. 2 years, 6 months	£195,954
PG/11/61/ 29008	Dr C Ruhrberg PhD	University College London	NRP1 signalling in vascular permeability. 2 years	£96,484
PG/11/62/ 29010	<b>Dr P Turowski</b> PhD	University College London	Distinct luminal and abluminal VEGF signalling regulates endothelial function. <i>2 years</i>	£120,339
PG/11/52/ 28989	Prof G D Holman BSc PhD	University of Bath	Role of TBC1D1 in heart cell insulin resistance. 2 years	£122,451
PG/12/17/ 29448	<b>Dr M Sahinkaya</b> BSc MSc PhD	University of Bath	Design and preclinical feasibility assessment of an active Fontan assist device. 2 years	£121,879
PG/11/41/ 28893	<b>Dr J P Fisher</b> BSc PhD	University of Birmingham	Is altered respiratory-sympathetic coupling a pathogenic feature of human hypertension? 2 years	£164,486
PG/11/114/ 29282	<b>Dr N Kalia</b> BSc PhD	University of Birmingham	Enhancing the recruitment of haematopoietic and mesenchymal stem cells to different vascular sites – therapeutic implications. 3 years	£206,974

PG/12/22/ 29485	<b>Dr M Madhani</b> BSc PhD	University of Birmingham	Investigation of the physiological role of natriuretic peptides on platelet function.  1 year, 5 months	£81,878
PG/12/7/ 29365	Prof E R Maher MD FRCP	University of Birmingham	Identification of novel inherited phaeochromocytoma genes. 2 years	£147,671
PG/11/49/ 28983	<b>Prof G E Rainger</b> BSc PhD	University of Birmingham	The role of Src-family kinases in regulating transforming growth factor-β1 driven platelet and monocyte recruitment to endothelial cells. 3 years	£216,385
PG/11/108/ 29237	Dr Y A Senis PhD	University of Birmingham	Regulation of Src-family kinases in platelets by the kinase-phosphatase pair Csk-CD148. 3 <i>years</i>	£231,404
PG/11/119/ 29299	<b>Prof S P Watson</b> BSc PhD FMedSci	University of Birmingham	The regulation of lymphatic development by CLEC-2 in platelets. <i>3 years</i>	£195,786
PG/11/67/ 29067	Prof D O Bates BSc PhD	University of Bristol	Molecular control of arteriolargenesis in peripheral ischaemia. 3 years	£193,178
PG/11/78/ 29113	Dr M Bond BSc PhD	University of Bristol	Novel cAMP-dependent Epac-signalling pathways controlling VSMC proliferation. <i>3 years</i>	£209,807
PG/11/83/ 29145	Prof C Emanueli PhD	University of Bristol	Role of interleukin-33 (IL-33) and its ST2 receptor in post-ischaemic vascular repair. 2 years	£226,641
PG/11/33/ 28794	Dr A Fraser BA MA MPH PhD	University of Bristol	Modifiable early-life determinants of adolescent NADFLD and its association with metabolic and vascular traits. 2 years	£130,493
PG/11/77/ 29110	Prof S J George BSc PhD	University of Bristol	Involvement of Wnt-induced secreted protein-1 (WISP-1/CCN4) in atherosclerosis. <i>3 years</i>	£151,146
PG/11/97/ 29193	Prof J C Hancox BSc PhD FSB	University of Bristol	Mouse atrioventricular node single cell electrophysiology: a pilot and development project. <i>2 years</i>	£128,256
PG/11/51/ 28986	<b>Dr R P Jago</b> BSc PhD	University of Bristol	PROACTIV: PaRental influences On physical ACTIVity and screen-viewing in young children. 2 years, 8 months	£237,731
PG/12/13/ 29434	Prof P Martin BSc PhD	University of Bristol	To investigate inflammation in heart repair using zebrafish as the model. 2 years	£170,884
PG/11/68/ 29074	Prof H Mellor BSc PhD	University of Bristol	The role of VEGF receptor dimerisation in angiogenic signalling. 1 year, 6 months	£105,136
PG/11/95/ 29173	Mr G J Murphy BSc MBChB MD FRCS	University of Bristol	Towards improved blood safety in cardiac surgery: experimental strategies to attenuate red cell transfusion mediated inflammation and organ injury. 2 years	£297,306
PG/12/23/ 29475	Dr A O'Carroll BA PhD	University of Bristol	The role of the central apelin receptor in the regulation of cardiovascular function. 3 years	£278,501

PG/11/47/ 28980	Prof J F R Paton BSc PhD	University of Bristol	Mechanistic insight into chronic arterial pressure set-point regulation through activation of the ventrolateral periaqueductal grey (vIPAG). 3 years	£185,504
PG/12/25/ 29488	Prof A W Poole MA PhD VetMB	University of Bristol	Role of the two-pore channel TPCN1 in regulating platelet calcium signalling, function and thrombosis. <i>2 years</i>	£153,189
PG/11/79/ 29125	Prof M S Suleiman PhD DSc	University of Bristol	The cardioprotective efficacy of consecutive PKA and PKC activation in the diseased heart. <i>3 years</i>	£236,038
PG/11/44/ 28972	Dr S J White BSc DPhil	University of Bristol	Mechanisms and consequences of shear regulation of MMP-10 and MMP-14 in endothelial cells. <i>3 years</i>	£197,505
PG/11/57/ 29003	Prof M R Bennett BSc MA MBChB PhD FRCP FAHA FMedSci	University of Cambridge	DNA damage in unstable atherosclerosis. 3 years	£159,160
PG/11/112/ 29272	Prof M R Bennett BSc MA MBChB PhD FRCP FAHA FMedSci	University of Cambridge	Survival signalling through Akt and FoxO in vascular disease. <i>3 years</i>	£249,100
PG/11/74/ 29100	Prof J H Gillard MBBS MD FFRRCSI FRCR	University of Cambridge	Towards a biomechanics-based vulnerability assessment tool for carotid atherosclerotic plaque: mechanical property testing and MRI-based computational modelling. 3 years	£193,818
PG/11/91/ 29117	<b>Dr J A Huntington</b> BSc PhD	University of Cambridge	NMR and crystallographic studies on the formation and function of the intrinsic tenase complex. 3 years	£164,000
PG/11/107/ 29236	Prof Z Mallat MD PhD	University of Cambridge	Roles of B2 and B10 cells in atherosclerosis. <i>3 years</i>	£287,878
PG/11/35/ 28879	Dr C M McEniery BHMS PhD	University of Cambridge	The influence of ambulatory central pressure in determining cardiovascular risk. 3 years	£171,224
PG/12/6/ 29366	Dr W Fuller BA MA PhD	University of Dundee	Regulation of the cardiac sodium pump by palmitoylation. <i>1 year</i>	£81,726
PG/11/106/ 29235	Prof A J Jovanovic MD PhD	University of Dundee	Regulation of subsarcolemmal ATP by sarcolemmal $K_{\text{ATP}}$ channels: is it important for cardioprotection? 3 years	£159,680
PG/12/3/ 29344	<b>Dr C Sutherland</b> BSc PhD	University of Dundee	Identification and validation of the GSK3 targets in the heart. 3 years	£211,449
PG/11/118/ 29292	Dr A E Munsterberg PhD	University of East Anglia	Investigating signals and mechanisms that govern cardiac progenitor cell migration. 3 years	£189,497
PG/12/8/ 29371	Prof D E Newby BSc PhD BM DM DSc FRSE FMedSci FESC FACC	University of Edinburgh	Role of 18 <sub>F</sub> -fluoride imaging as a novel marker of plaque instability. <i>2 years</i>	£251,525

PG/11/72/ 29334	Dr L B Smith BSc PhD	University of Edinburgh	Cell-specific action of androgen receptor in cardiovascular function, response and repair. <i>3 years</i>	£298,051
PG/12/19/ 29455	Prof A H Baker BSc PhD	University of Glasgow	Adenovirus serotype 49: a novel vector for vascular gene therapy. <i>3 years</i>	£177,387
PG/11/55/ 28999	Prof C Berry MB ChB MRCP PhD	University of Glasgow	Fractional flow reserve versus angiographically guided management to optimise outcomes in unstable coronary syndromes: a developmental clinical study. 2 years, 6 months	£223,194
PG/11/82/ 29136	<b>Dr D Graham</b> BSc PhD	University of Glasgow	The mitochondria-targeted antioxidant MITOQ10: a novel therapeutic agent for cardiovascular disease. <i>1 year</i>	£59,721
PG/11/43/ 28901	<b>Dr S A Nicklin</b> BSc PhD PGCert	University of Glasgow	Angiotensin 1-9 and angiotensin 1-7: assessment of their mechanisms of action as counter-regulatory renin angiotensin system peptides in cardiovascular disease. 3 years	£209,038
PG/12/1/ 29276	Dr T M Palmer BSc PhD	University of Glasgow	Inhibition of vascular STAT signalling by AMP-activated protein kinase (AMPK). 3 years	£206,689
PG/11/113/ 29280	Prof A J Peacock MPhil MD FRCP	University of Glasgow	Acute pulmonary haemodynamic effects of apelin in pulmonary hypertension. 2 years	£201,508
PG/11/37/ 28884	Prof K Naseem BSc PhD	University of Hull	The role of CD36 in regulating platelet sensitivity to the cAMP signalling cascade. <i>3 years</i>	£185,901
PG/11/71/ 29091	Prof G E Morris BA DPhil	University of Keele	Nesprin isoforms and variants: their functions and roles in the pathogenesis of inherited cardiomyopathy. <i>3 years</i>	£193,450
PG/11/96/ 29174	Prof P J Grant MD FRCP	University of Leeds	The role of FXIII/Fibrinogen αC interactions in clot stabilisation and fibrinolysis. 3 years	£167,642
PG/11/126/ 29321	Dr J P Greenwood MB ChB	University of Leeds	Cardiovascular MR evaluation of the safety and efficacy of transcatheter aortic valve implantation (TAVI) compared to surgical aortic valve replacement (AVR). 2 years	£233,754
PG/11/89/ 29085	Prof M T Kearney MB ChB MRCP DM	University of Leeds	The insulin-like growth factor-1 receptor: a novel therapeutic target to reverse insulin resistance related endothelial cell dysfunction. 3 years	£231,110
PG/11/84/ 29146	Prof C S Peers BSc PhD	University of Leeds	Modulation of T-type Ca <sup>2+</sup> channels by hydrogen sulphide: a novel pathway for regulation of vascular smooth muscle proliferation. <i>3 years</i>	£197,609
PG/11/80/ 29135	<b>Dr N A Turner</b> BSc PhD	University of Leeds	Modulation of myocardial remodelling by fibroblast-selective inhibition of Interleukin-1 signalling. 3 years	£241,642

PG/11/110/ 29248	<b>Dr N A Turner</b> BSc PhD	University of Leeds	Modulation of myocardial remodelling by fibroblast-selective inhibition of p38-alpha signalling. <i>3 years</i>	£218,278
PG/12/4/ 29345	Mr E Choke MBBS MRCS PhD	University of Leicester	The <i>in vivo</i> effects of antiangiogenic treatment on abdominal aortic aneurysms. <i>2 years</i>	£131,854
PG/11/64/ 28772	Prof R J Evans BSc DPhil	University of Leicester	Investigation of ligand-sensitive conformational changes in cardiovascular P2X receptors with voltage-clamp fluorometry. <i>3 years</i>	£175,476
PG/11/56/ 29001	Prof M P Mahaut-Smith BSc PhD MA	University of Leicester	The role of K <sup>+</sup> channels in platelet activation. <i>3 years</i>	£191,872
PG/11/38/ 28886	Dr J S Mitcheson PhD	University of Leicester	Conformational changes to the drug binding site hERG potassium channels: the role of inactivation gating. <i>3 years</i>	£179,022
PG/12/9/ 29376	<b>Dr M Tomaszewski</b> MD FAHA	University of Leicester	Genetic mechanisms of coronary artery disease in men – next generation sequencing of the male-specific region of the Y chromosome. 3 years	£240,405
PG/11/60/ 29007	<b>Dr J Willets</b> PhD BSc	University of Leicester	Investigating the causes and consequences of G-protein-coupled receptor kinase (GRK) and arrestin up-regulation in vascular smooth muscle in hypertension. 3 years	£223,707
PG/12/14/ 29438	<b>Prof D A Middleton</b> DPhil BSc	University of Liverpool	Modulating the SERCA-phospholamban interaction as a potential therapy for heart failure. <i>1 year</i>	£80,500
PG/11/105/ 29229	Prof S C Wray BSc PhD	University of Liverpool	An integrated study of the changes in calcium and function in the aorta during the progression of atherosclerotic disease. <i>3 years</i>	£188,104
PG/11/59/ 29006	<b>Dr M Lei</b> MBChB MM DPhil MD	University of Manchester	Regulation of cardiac automaticity and conduction in murine hearts with a cardiac-specific deletion of P21 activated kinase-1. 3 years	£206,150
PG/12/21/ 29473	<b>Dr M Lei</b> MBChB MM DPhil MD	University of Manchester	Age-related atrial remodelling and arrhythmogenesis in mice with atrial myocyte specific genetic deficiency of MKK4. 2 years	£187,730
PG/12/31/ 29527	Dr T Wang MB PhD	University of Manchester	Using patient-specific induced pluripotent stem cells to investigate the molecular mechanism of CADASIL. <i>3 years</i>	£189,216
PG/11/76/ 29108	<b>Prof D J Henderson</b> BSc PhD	University of Newcastle	Vangl2 as a regulator of second heart field movements into the heart. 3 years	£264,796
PG/11/117/ 29290	Prof I Spyridopoulos MD	University of Newcastle	Role of CCR7 and its chemokine ligands during myocardial ischaemia/reperfusion injury in patients following primary coronary angioplasty. 2 years	£105,520

PG/11/45/ 28975	<b>Dr V Ralevic</b> BSc PhD	University of Nottingham	A novel mechanism of coronary hypoxic vasodilatation involving hydrogen sulphide. <i>3 years</i>	£150,718
PG/12/32/ 29544	Dr R J Clarke MD MRCP	University of Oxford	Does vitamin D supplementation improve markers of inflammation, innate immunity and arterial stiffness? 2 years	£112,140
PG/11/120/ 29302	Prof P Jezzard PhD	University of Oxford	Development of improved vessel wall and vessel lumen characterisation using magnetic resonance imaging. 2 years	£134,638
PG/11/46/ 28979	Dr C Monaco MD PhD	University of Oxford	Investigating B regulatory cells in atherosclerosis. 3 years	£192,686
PG/11/121/ 29308	Dr C J Pears BA PhD	University of Oxford	Protein ubiquitination in human platelet responses. <i>1 year</i>	£48,468
PG/12/33/ 29546	Prof C Schofield BSc DPhil	University of Oxford	HIF hydroxylase inhibitors for the treatment of cardiovascular disease. <i>2 years</i>	£224,514
PG/12/2/ 29324	Dr P Swietach BA DPhil	University of Oxford	Effects of nitric oxide signalling on proton dynamics in the healthy and diseased heart. 3 years	£188,409
PG/11/65/ 28969	Dr S R Clarke BSc DPhil	University of Reading	Inhibition of platelet activation by Staphylococcus aureus lipoteichoic acid. 3 years	£195,787
PG/11/125/ 29320	Prof J M Gibbins BSc PhD	University of Reading	Study of the role of gap junctions and connexin hemichannels in the control of platelet function, haemostasis and thrombosis. <i>3 years</i>	£204,735
PG/11/93/ 29143	Dr A J McNeish BSc PhD	University of Reading	Role of thromboxane receptors and Rho-mediated signalling in regulation of endothelial cell calcium activated potassium channels and endothelium-dependent hyperpolarisation. 3 years	£179,376
PG/12/12/ 29433	<b>DrTJ A Chico</b> MBCHB MD MRCP(UK)	University of Sheffield	The role of parathyroid hormone signalling in aortic formation. <i>3 years</i>	£249,695
PG/11/116/ 29288	<b>Dr A Lawrie</b> BSc PhD	University of Sheffield	Investigation into OPG and related biomarkers in incident cases of pulmonary hypertension. <i>3 years</i>	£278,564
PG/11/103/ 29219	Prof E E Qwarnstrom DDS PhD	University of Sheffield	Establishing the role of the IL-1RI co-receptor TILRR in development of atherosclerosis, using a knockout model. <i>2 years</i>	£157,746
PG/11/85/ 29147	Dr H L Wilson BSc DPhil	University of Sheffield	Control of inflammation by Epithelial Membrane Protein-2: a potential vascular disease regulator. <i>2 years</i>	£104,939
PG/12/18/ 29453	Prof G Clough BSc PhD FSB	University of Southampton	Maternal over-nutrition and offspring microvascular function. 2 years	£103,621

PG/11/70/ 29086	Prof J G McCarron BSc PhD	University of Strathclyde	Imaging changes in mitochondrial architecture and mobility in vascular disease. <i>3 years</i>	£245,528
PG/11/86/ 29154	Prof R J Plevin BSc PhD	University of Strathclyde	Using a novel MAP kinase phosphatase-2 mutant to differentially regulate vascular smooth muscle cell proliferation and endothelial cell apoptosis. 2 years	£112,862
PG/12/24/ 29476	Prof N J Pyne BSc PhD	University of Strathclyde	Sphingosine kinase 1 and pulmonary arterial hypertension. <i>3 years</i>	£180,012
PG/11/54/ 28996	Prof T Quinn MPhil RN FESC FRCN FAHA	University of Surrey	Use and impact of the pre-hospital electrocardiogram in acute coronary syndrome patients – insights from MINAP. 6 months	£13,469
PG/11/66/ 28982	Prof D Zehnder MD PhD	University of Warwick	Improvement in left ventricular geometry and cardiovascular functional capacity after restitution of the failing kidney through transplantation: a prospective non-randomised concurrent control study. 3 years	£217,703

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