

**Research Grant Awards** 

FIGHT FOR EVERY HEARTBEAT bhf.org.uk



# **C**ontents

Introduction	2
BHF chairholders	3
Awards made during the year I April 2015 – 31 March 2016	6
Personal Chairs	6
Fellowships	6
Strategic Initiative Grants	13
Infrastructure Grants	13
Special Project Grants	13
Clinical Study Grants	14
Programme Grants	14
New Horizons Grants	15
Translational Awards	15
Project Grants	16

### Introduction

In the year April 2015 to March 2016 the British Heart Foundation (BHF) awarded grants totalling £113.4 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 2015-2016 the Chairs and Programme Grants Committee awarded £57.3 million to Personal Chairs, Programme Grants and other major projects, including Translational Awards. There were 33 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, future plans and proposed expenditure. The visiting team includes internationally renowned scientists.

The Translational Award scheme, launched in October 2014, supports the development of cardiovascular research through early pre-clinical milestones, with the aim of advancing the research to be attractive for larger follow-on investment.

The Fellowships Committee awarded £28.3 million to 88 applications, and the Project Grants Committee awarded £27.8 million to 125 applications.

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 award offered by BHF and the application process appear on the BHF website **bhf.org.uk/research** 

### **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: Cellular 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 FETCS 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 Cardiovascular Science
Held by: Professor C Emanueli BSc PhD

Major interests: Growth and repair of adult blood vessels: roles of stem cells and angiogenic factors.

#### **University of Bristol**

The Chair of Vascular Cell Biology
Held by: Professor A C Newby MA PhD

*Major interest:* Cellular and molecular biology of atherosclerosis and restenosis.

#### **University of Cambridge**

**The Chair of Cardiovascular Sciences** Held by: **Professor M R Bennett** BSc MBChB PhD MA FRCP FAHA FMedSci

Major interest: 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 FMedSci

*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 W Morrell** MBBS BSc
MA MD 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 interests:* Molecular biology of calcium flux through the ryanodine receptor in cardiac myocytes and its disturbance in arrhythmia.

#### **University of Edinburgh**

**The Chair of Translational Cardiovascular Sciences**Held by: **Professor A H Baker** BSc PhD
FMedSci

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

#### **University of Edinburgh**

The Chair of Cardiology

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

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

#### **University of Glasgow**

**The Chair of Cardiovascular Medicine** Held by: **Professor R M Touyz** BSc MBBCh MSc PhD

*Major interest:* Vascular mechanisms of hypertension, particularly the role of reactive oxygen species.

#### **University of Leeds**

The Chair of Cardiovascular and Diabetes Research Held by: Professor M T Kearney MB ChB FRCP DM

Major interest: Mechanisms by which insulin resistance and diabetes exacerbate atherosclerosis.

#### **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 Sir Nilesh J Samani**DL 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 interests:* 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:* Cellular 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: Cellular and molecular biology of production of reactive oxygen species 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: Cellular and molecular biology of stem cells and their importance in modulating atherosclerosis and restenosis.

#### Queen Mary, University of London

**The Chair of Cardiovascular Immunology** Held by: **Professor F M Marelli-Berg** MD PhD

*Major interests:* Control of T lymphocyte homing to the heart in rejection, autoimmunity and inflammation.

#### **University College London**

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 College London**

**The Chair of Cardiovascular Genetics**Held by: **Professor S E Humphries** BSc
PhD MRCP(Hon) FRCPath FMedSci
Retired September 2015

*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 of Manchester**

**The Chair of Cardiac Physiology** Held by: **Professor D A Eisner** MA DPhil FMedSci

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

#### **University of Manchester**

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 interests:* Developmental biology of the heart; cardiovascular drug target discovery.

#### **University of Oxford**

**The Chair of Cardiovascular Medicine** Held by: **Professor B Casadei** MD DPhil FRCP FESC FMedSci

*Major interest:* Redox signalling in cardiovascular disease, particularly atrial fibrillation.

#### **University of Oxford**

The Field Marshal Earl Alexander
Chair of Cardiovascular Medicine
Awarded but not yet taken up:
Professor K M Channon MD FRCP FMedSci

Major interests: Redox signalling in atherosclerosis; using genetics and genomics to discover novel molecular pathways in atherosclerosis.

#### **University of Oxford**

**The Chair of Medicine and Epidemiology**Held by: **Professor Sir Rory Collins** MSc MBBS
LMSSA FRCP FMedSci FRS

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 FMedSci

*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.

## Awards made during the year 1 April 2015 – 31 March 2016

### **Personal Chairs**

Reference number	Name	Institution	Duration	Grant title	Total
CH/15/2/32064	<b>Prof F Marelli-Berg</b> MD PhD	Queen Mary, University of London	10 years	The BHF Chair of Cardiovascular Immunology	£1,072,526
CH/16/1/32013	<b>Prof K Channon</b> MD FRCP FMedSci	University of Oxford	10 years	The BHF Field Marshal Earl Alexander Chair of Cardiovascular Medicine	£2,309,209

### **Fellowships**

Listed alphabetically by Institute

Senior Basic Scier	nce Research Fellowships				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/30/31494	Dr S Zissimopoulos MSc PhD	Cardiff University	5 years	Drug-induced stabilisation of RyR2 to improve calcium handling and cardiac function in arrhythmogenic cardiac disease	£1,026,035
FS/15/56/31645	Prof L Hodson BSc PhD	University of Oxford	5 years	Heterogeneity in hepatic synthesis pathways may influence the development of non-alcoholic fatty liver disease (NAFLD) and atherogenic dyslipidaemia: studies in humans using <i>in vivo</i> and <i>in vitro</i> approaches	£995,475
Intermediate Bas	ic Science Research Fellowship	S			
Reference number	Name	Institution	Duration	Grant title	Total
FS/16/1/31699	<b>Dr N Kirkby</b> BSc PhD	Imperial College London	4 years	Understanding the unexplored function of COX-1 in vessels: targets for new cardiovascular therapies?	£631,467
FS/15/59/31839	Dr C Rhodes MACantab PhD	Imperial College London	4 years	Molecular phenotyping of pulmonary hypertension	£395,949
FS/16/2/31739	<b>Dr C Warboys</b> BSc PhD	Imperial College London	4 years	Is ß-catenin a master regulator of mechanical signalling in the endothelium?	£426,622
FS/16/3/31887	Dr T Kampourakis PhD	King's College London	4 years	Myosin Binding Protein-C: a key regulator of cardiac output	£493,503
FS/15/33/31608	Dr D Stuckey BSc DPhil	University College London	4 years	Image-guided cardiac regeneration: visible biomaterials functionalised to enhance stem cell-mediated repair and improve cardiac function	£379,561
FS/15/58/31784	<b>Dr A Mazharian</b> PhD	University of Birmingham	4 years	A novel mechanism controlling platelet production involving suppression of ERK1/2 by DUSP1/6	£484,415
FS/15/57/31557	<b>Dr A Sage</b> BSc PhD	University of Cambridge	4 years	Understanding the pathogenic role of B cells in atherosclerosis	£423,428
FS/16/4/31831	<b>Dr M Brittan</b> BSc PhD	University of Edinburgh	4 years	Identification and characterisation of a vessel wall endothelial progenitor cell, and its potential for vascular regeneration	£509,278

	c Science Research Fellowship				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/31/31418	Dr E Cottrell BSc PhD	University of Manchester	4 years	Dietary constituents as pregnancy therapeutics: can dietary nitrate improve vascular function and growth in fetal growth restriction?	£591,890
FS/15/16/31477	Dr W Liu PhD	University of Manchester	4 years	Investigating a novel mechanism of cardiac glucose metabolism regulation in diabetes	£300,300
FS/15/32/31604	Dr S Mistry BSc PhD	University of Nottingham	4 years	A new approach to an old problem: the roles of aldosterone and salt in normal pregnancy and pre-eclampsia	£478,876
FS/15/15/31364	Dr R Carnicer Hijazo BSc PhD	University of Oxford	4 years	An unexpected role of tetrahydrobiopterin (BH4) in diabetic cardiomyopathy	£481,114
FS/16/5/32054	Dr S Reilly MD DPhil	University of Oxford	4 years	MicroRNA-mediated proarrhythmic mechanisms in atrial fibrillation	£552,874
FS/15/34/31656	Dr P Scarborough DPhil	University of Oxford	4 years	Predicting cardiovascular disease rates in England using novel mathematical models	£421,085
Immediate Postdo	octoral Basic Science Research	Fellowships			
Reference number		Institution	Duration	Grant title	Total
FS/16/6/31821	Miss G Bosi MEng	University College London	3 years	Engineering analysis of the left atrial appendage to prevent thromboembolic events	£187,699
FS/15/61/31626	<b>Dr L Rutten Jacobs</b> BSc MSc PhD	University of Cambridge	3 years	Identification of novel pathophysiological mechanisms in cerebral small vessel disease: an epidemiologic and genetic approach	£126,016
FS/15/60/31510	Dr R Menzies PhD MSc MPhys	University of Edinburgh	3 years	Druggable target discovery in hypertensive renal injury: vascular purinergic receptor X7	£229,524
FS/16/7/31843	Miss K Timm Staatsexamen Veterinary Medicine	University of Oxford	3 years	Metabolic derangement in doxorubicin- induced cardiotoxicity assessed using hyperpolarised 13C MRS	£254,587
4-year PhD Stude	ntships				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/65/32036	Prof S Harding BSc PhD	Imperial College London	4 years	Imperial 3rd intake 2015 – 4-Year PhD Studentship (3rd) Scheme: Ms Adela Constantinescu; Mr Jerome Fourre; Ms Alveera Hasan; Ms Viktoria Kalna	£642,196
FS/15/66/32037	Prof M Avkiran BSc PhD DSc	King's College London	4 years	KCL 3rd intake 2015 – 4-Year PhD Studentship (3rd) Scheme: Ms Grace Anderson; Mr Sean Burnap; Ms Ailbhe O'Brien; Ms Meredith Whitehead	£630,136
FS/15/69/32043	Prof T Warner BSc PhD	Queen Mary, University of London	4 years	QMUL 3rd intake 2015 – 4-Year PhD Studentship (3rd) Scheme: Ms Lauren Callender; Ms Alice Hamilton; Ms Eithne Maguire; Mr Michael Preedy	£619,312

4-year PhD Stude	ntships (continued)				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/70/32044	Prof P Scambler BSc MB ChB MD FRCPath	University College London	4 years	UCL 3rd intake 2015 – 4-Year PhD Studentship (3rd) Scheme: Mr Daniel Aggio; Ms Rebecca Bolton; Ms Kirsty Naylor; Ms Kaloyan Takov	£627,244
FS/15/62/32032	<b>Prof M Bennett</b> BSc MBChB PhD MA FRCP FAHA FMedSci	University of Cambridge	4 years	Cambridge 3rd intake 2015 – 4-year PhD Studentship (3rd) Scheme: Ms Sarah Burgess; Ms Sophie McManus; Mr Joshua Hodgson; Ms Annabel Taylor	£627,196
FS/15/63/32033	<b>Dr M Bailey</b> BSc PhD	University of Edinburgh	4 years	Edinburgh 3rd intake 2015 – 4-year PhD Studentship (3rd) Scheme: Ms Sarah Finnie; Ms Natalie Jones; Ms Charlott Repschlager; Ms Kathleen Scullion	£596,156
FS/15/64/32035	<b>Prof R Touyz</b> BSc MBBCh MSc PhD	University of Glasgow	4 years	Glasgow 3rd intake 2015 – 4-year PhD Studentship (3rd) Scheme: Ms Aisling McFall; Ms Sarah McNeilly; Ms Alexandra Riddell; Ms Francesca Vidler	£576,920
FS/15/67/32038	<b>Dr E Cartwright</b> BSc MSc PhD	University of Manchester	4 years	Manchester 3rd intake 2015 – 4-Year PhD Studentship (3rd) Scheme: Ms Lorenz Becker; Ms Elisavet Fotiou; Ms Miriam Lettieri; Ms Damilola Olubando	£578,016
FS/15/68/32042	Prof D Greaves BSc PhD	University of Oxford	4 years	Oxford 3rd intake 2015 – 4-Year PhD Studentship (3rd) Scheme: Ms Kathryn Acheson; Mr Matthew Kerr; Mr Hamish Lemmey; Ms Irina Lupu	£626,180
MBPhD Studentsl	hip				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/35/31529	Mr S Watson BSc	Imperial College London	3 years	Training strategies for the development and maintenance of mature structural and electromechanical properties of cardiac muscle patches <i>in vitro</i>	£119,132
PhD Studentships	5				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/72/31676	Student to be appointed	Aston University	3 years	An investigation of the impact of soluble Flt-1 and soluble endoglin-induced sensitisation of the endothelium to pro-inflammatory cytokines to promote pre-eclampsia	£107,160
FS/15/45/31603	Mr C Brasher BSc	Cardiff University	3 years	Defining the platelet lipidome in cardiovascular disease in humans and mice	£96,812
FS/15/74/31669	Mr M Ehteramyan BSc MSc	King's College London	3 years	The role of the endothelial cell differentiation-related LAF4IR in vascular repair	£116,384
FS/15/47/31646	Ms S Tsakali BSc Mres	King's College London	3 years	A role for mechano-signalling in vascular calcification	£116,228

PhD Studentships					
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/75/31688	Miss S Lau MSci	Lancaster University	3 years	The structure-function relationship of enhanced cardioprotective apolipoprotein A-I mutants in high density lipoprotein nanoparticles	£105,187
FS/15/21/31424	Miss R Naseem BSc Mres MSc	Loughborough University	3 years	Towards controlling the mechanical performance of polymeric bioresorbable vascular scaffold during biodegradation	£104,347
FS/15/77/31823	Miss L Draganova Not yet awarded	Newcastle University	3 years	Lymphocyte activation and transmigration through the CX3CL1/CX3CR1 axis during myocardial ischaemia/reperfusion	£122,928
FS/15/19/31327	Miss S Thompson BSc	Newcastle University	3 years	Post-translation modification of chemokines during heart transplantation: implications for their biological function	£105,343
FS/16/8/31984	Student to be appointed	Newcastle University	3 years	Pax9 and Gbx2 genetically interact in aortic arch artery development	£108,947
FS/15/23/31435	Miss R Caines BSc	Queen's University, Belfast	3 years	Dedifferentiated or re-born again? Elucidating the chromatin remodelling mechanisms during endothelial cell reprogramming for cardiovascular therapy	£107,172
FS/15/44/31570	Miss K Jahan BSc	St George's, University of London	3 years	Role of the PIP2-binding protein MARCKS on voltage-gated Ca <sup>2+</sup> channels and vascular contractility	£114,469
FS/15/39/31526	Miss C Karapouliou BSc MSc	St George's, University of London	3 years	Functional studies on the EphB4 signalling pathway in patients with generalised lymphatic dysplasia	£130,381
FS/15/73/31672	<b>Mr N Blunsom</b> MSci	University College London	3 years	Regulation of the rate-limiting enzyme, CDP-diacylglycerol synthase (CDS), in mitochondrial biogenesis in cardiomyocytes	£123,214
FS/15/22/31356	Ms G Franzetti BSc MSc	University College London	3 years	Investigation of the haemodynamics of dissected aortas: an <i>in vitro</i> , <i>in vivo</i> and <i>in silico</i> study	£96,721
FS/15/71/31677	Mr A Hardy BSc	University of Birmingham	2 years	The regulation and role of Syk phosphorylation by platelet glycoprotein receptors	£73,020
FS/15/18/31317	Miss A MacLachlan BMedSc	University of Birmingham	3 years	Identification and functional investigation of genes in patients with inherited bleeding disorders	£141,561
FS/15/76/31720	<b>Ms G Durham</b> BSc MSc	University of Bradford	3 years	Prostanoid-mediated inhibition of IL-6 transsignalling in pulmonary arterial hypertension: a role for epac1 mediated induction of 'Suppresso of Cytokine Signalling 3' (SOCS3)	£106,986 or
FS/16/9/32012	Mr A Peachey BSc	University of Bristol	1 year, 9 months	Optimising encapsulated, genetically-modified human mesenchymal stem cells (HMSCs) to promote therapeutic angiogenesis	£66,791

PhD Studentships	s (continued)				
Reference number	Name	Institution	Duration	Grant title	Total
FS/16/12/32223	Student to be appointed	University of Bristol	3 years	Joint NC3Rs/BHF PhD Studentship: Development and characterisation of a human <i>ex vivo</i> model of aneurysm	£90,000
FS/15/38/31516	Miss J Harman BSc	University of Cambridge	3 years	Functional analysis of H3K9-methylation on gene regulation and phenotypic switching in vascular smooth muscle cells	£117,436
FS/15/20/31335	Ms E Hunter BSc	University of Cambridge	3 years	The roles of the collagen binding integrins in the regulation of endothelial cell function and behaviour	£117,918
FS/16/11/32224	Student to be appointed	University of Cambridge	3 years	Joint NC3Rs/BHF PhD Studentship: Reducing animal use in thrombosis research with an <i>ex vivo</i> injury model	£90,000
FS/15/41/31564	Mr J Wittig BSc MSc	University of East Anglia	3 years	Investigating a microRNA-Ets1 network during endocardial cushion development	£104,285
FS/15/36/31525	Mr L Atkinson MBiomeSci	University of Hull	3 years	Platelet cAMP signalling controls thrombosis through enhanced embolisation	£106,468
FS/15/46/31606	Mr D Riley BSc MSc	University of Hull	3 years	Coronin is a negative regulator of platelet spreading and thrombus formation	£106,915
FS/15/37/31513	Mr N Asquith BSc	University of Leeds	3 years	Role of extended knob-hole interaction sites in fibrin polymerisation and clot stability	£107,059
FS/15/48/31665	Miss N Blythe BSc	University of Leeds	3 years	Investigating the role of the mechanosensitive cation channel piezo1 in the regulation of cardiac fibroblast function	£107,674
FS/15/40/31536	Miss K Kearney BSc	University of Leeds	3 years	Artificial binding proteins for the targeted modulation of fibrin-related thrombosis risk	£103,889
FS/15/24/31459	Miss L Stewart BSc	University of Leeds	3 years	Characterising the <i>in vitro</i> and <i>in vivo</i> roles of the small GTPase RhoG in regulating angiogenesis	£107,164
FS/15/43/31565	Ms M Grillo BSc MSc	University of Nottingham	3 years	Linking STAT3 redox control to oxidative stress-responsive gene regulation, cell survival and ischaemic preconditioning	£113,079
FS/16/10/32053	Mrs N Conrad MSc	University of Oxford	3 years	Evidence-based management of heart failure through risk prediction and decision support algorithms	£112,210
FS/15/42/31556	Ms A Sobczak MSc	University of St Andrews	3 years	Characterisation of zinc-dependent heparin neutralisation by fibrinogen and histidine-rich glycoprotein	£107,346
FS/16/13/32222	Student to be appointed	University of Sussex	3 years	Joint NC3Rs/BHF PhD Studentship: Developing a drosophila melanogaster model of the cardiac myocyte action potential to investigate function and performance	£90,000

	esearch Fellowship				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/17/31411	Dr M Meloni BSc PhD	St George's, University of London	3 years	Magnetic resonance imaging of atherosclerosis – a novel pretargeted approach	£243,038
Clinical Fellow	ships				
Senior Clinical Re	search Fellowships				
Reference number	Name	Institution	Duration	Grant title	Total
FS/16/14/32023	<b>Prof N Mills</b> BSc MBChB MRCP PhD	University of Edinburgh	5 years	The BHF Butler Senior Clinical Research Fellowship: High-sensitivity cardiac troponin and coronary heart disease	£1,211,383
FS/16/15/32047	Dr C Antoniades MD PhD	University of Oxford	5 years	Exploring new links between adipose tissue and vascular redox state: the role of wnt5a	£1,061,385
Intermediate Clin	ical Research Fellowships				
Reference number	Name	Institution	Duration	Grant title	Total
FS/15/25/31423	<b>Dr N Linton</b> MEng MBBS MRCP PhD	Imperial College London	4 years	Development of patient-specific tools to determine the need for adjunctive ablation following PVI for persistent AF using detailed characterisation of the substrate and the mode of recurrence	£361,712
FS/15/49/31612	Mr N Drury BM PhD MRCS	University of Birmingham	4 years	Remote ischaemic preconditioning for myocardial protection in young children undergoing heart surgery: a double-blind, randomised controlled trial in normoxic and hypoxic patients	£468,325
Clinical Research	Training Fellowships				
Reference number	Name	Institution	Duration	Grant title	Total
FS/16/20/32005	<b>Dr S Obaji</b> MBBCh MRCP MRCPath Part1	Cardiff University	3 years	Characterisation of platelet and microparticle phospholipids in thrombotic and bleeding disorders	£234,333
FS/15/81/31817	<b>Dr C Francis</b> BM BCh MA MRCP	Imperial College London	2 years, 6 months	Genetic determinants of aortic morphology and function	£159,463
FS/15/29/31492	<b>Dr B Halliday</b> BSc MBChB	Imperial College London	3 years	Is it safe to withdraw medical therapy from patients with a previous diagnosis of dilated cardiomyopathy, now in remission?	£186,676
FS/16/17/31663	Dr R Jabbour MBBS BSc	Imperial College London	3 years	Mechanisms of arrhythmia generation from implanted stem cell-derived cardiomyocytes in infarcted hearts	£215,481
FS/15/53/31615	<b>Dr D Keene</b> MBChB MRCP MSc	Imperial College London	3 years	Investigation of the physiological mechanisms through which ventricular tachycardia (VT) impairs cardiac function and exploration of potential clinically applicable therapy to improve cardiac output during VT	£201,066

Clinical Research Training Fellowships (continued)							
Reference number	Name	Institution	Duration	Grant title	Total		
FS/15/79/31736	Miss A Khalil BSc MBBS MRCP	Imperial College London	2 years	Characterisation of chamber-specific fibroblasts from adult human heart and investigation of their potential contribution to the function of engineered heart tissue	£152,776		
FS/16/16/31696	<b>Dr I Mann</b> BMedSci MBBS	Imperial College London	3 years	The distribution pattern of transient planar wavefronts during atrial fibrillation may indicate the underlying mechanisms perpetuating activation	£186,887		
FS/15/52/31587	<b>Dr J Joseph</b> MA MBMBCh MRCP PGDip LATHE	King's College London	3 years	Investigating the haemodynamic and physiological principles underlying exercise-induced angina, and glyceryl trinitrate's antianginal effect, using invasive coronary and ventricular measures of coronary flow and cardiac work	£230,305		
FS/15/55/31649	<b>Dr C Kelly</b> BA MB BChir MRCPCH	King's College London	3 years	The relation of cerebral oxygen delivery to brain dysmaturation and damage in infants with congenital heart disease	£210,218		
FS/15/78/31678	Dr B Modi MA MBBS MRCP	King's College London	3 years	Fractional flow reserve in serial and diffuse coronary artery disease	£211,153		
FS/16/18/31973	<b>Dr E Stephenson</b> BMedSci MBBS	Queen Mary, University of London	3 years	Novel molecular targets for the diagnosis and treatment of myocarditis	£169,243		
FS/15/27/31465	Dr A D'Silva BSc MBBS MRCP	St George's, University of London	3 years	Increased left ventricular trabeculation in athletes – a marker of left ventricular non-compaction or a physiological epiphenomenon of increased cardiac preload?	£163,380		
FS/15/26/31441	<b>Dr C Costopoulos</b> MA MB Chir MPhil MRCP FHEA	University of Cambridge	2 years	Finite element analysis and imaging to predict human atherosclerotic plaque growth and progression to instability	£116,678		
FS/16/19/31982	<b>Dr T Pawade</b> MBChB BMedSc MRCP KBA	University of Edinburgh	2 years, 5 months	Role of calcification in the pathogenesis of aortic stenosis	£169,016		
FS/15/50/31500	Dr C Alexander BSc MBChB	University of Glasgow	3 years	The role of sarcoplasmic reticulum calcium in the generation of early after-depolarisations and ventricular arrhythmias in the long QT syndrome	£181,204		
FS/15/54/31639	Dr K Mangion MRCP	University of Glasgow	2 years	Myocardial strain measurements in survivors of acute ST elevation myocardial infarction: implementation and prognostic significance of novel magnetic resonance imaging methods	£117,075		
FS/15/28/31476	<b>Dr D Hutchings</b> MBChB BMedSc MRCP	University of Manchester	3 years	Understanding the mechanisms by which phosphodiesterase 5 inhibition is protective against arrhythmias in heart failure	£217,179		
FS/15/80/31803	<b>Dr M Peterzan</b> Bsc	University of Oxford	3 years	The role of myocardial ATP delivery rates in myocardial hypertrophy	£271,941		
FS/15/82/31824	Dr W Sumaya MD MRCP	University of Sheffield	3 years	The fibrin network and clinical outcomes in patients with acute coronary syndrome: an additional therapeutic target?	£213,387		

Listed alphabetica	lly by Institute				
Reference number	Name	Institution	Duration	Grant title	Total
SI/16/1/31896	<b>Prof N Morrell</b> MBBS BSc MA MD FRCP FMedSci	University of Cambridge	3 years	Funding towards Cambridge Heart and Lung Research Institute (HLRI)	£10,000,000
SI/15/1/30552	Prof P Riley BSc PhD FMedSci	University of Oxford	3 years	Funding towards a new Oxford Institute of Developmental and Regenerative Medicine (IDRM)	£5,000,000
Infrastruct	ure Grants				
Listed alphabetica	lly by Institute				
Reference number	Name	Institution	Duration	Grant title	Total
IG/15/2/31514	<b>Prof A Trafford</b> BVSc CertVA PhD MRCVS	University of Manchester	1 year	Funding towards a Nikon N-Storm Super-Resolution microscope	£265,000
IG/15/3/31680	<b>Prof S Neubauer</b> MD FRCP FACC FMedSci	University of Oxford	1 year	Funding towards a new 3T MR system and installation costs	£1,000,000
Special Pro	ject Grants				
Listed alphabetica	lly by Institute				
Reference number	Name	Location	Duration	Grant title	Total
SP/16/2/32004	Dr K MacLeod BSc PhD	Imperial College London	3 years	Sex-dependent differences in progression to heart failure	£368,378
SP/15/6/31397	<b>Dr M Hamer</b> BSc MSc PhD	Loughborough University	3 years	Objective assessment of free-living physical and sedentary activity in the 1970 British Cohort Study (BCS70)	£522,485
SP/15/7/31561	Prof R Farndale MA PhD	University of Cambridge	4 years	Integrated collagen patches for cardiac repair: engineering vascularised cardiac tissue from microporous collagen scaffolds, cell attachment peptides and human embryonic stem cells	£798,506
SP/15/5/31548	Dr G Moggridge PhD	University of Cambridge	4 years	A polymeric prosthetic heart valve from anisotropic nanocomposites – device optimisation and <i>in vivo</i> testing	£755,030

3 years

4 years

7 years

Eicosanoids as mediators of nanoparticle-

Coupling gene targeted reporters with fully

automated compound library screening to mature hPSC-cardiomyocytes

UK Biobank Imaging. (Joint funding with

Wellcome Trust and Medical Research Council)

induced cardiovascular disease

£538,064

£1,074,373

£3,000,000

SP/15/8/31575

SP/15/9/31605

SP/16/1/32297

Dr M Miller BSc PhD

**Prof C Denning** BSc PhD

**Prof Sir Rory Collins** MSc

MBBS LMSSA FRCP

FMedSci FRS

University of

University of

Nottingham

University of Oxford

Edinburgh

## Clinical Study Grants Listed alphabetically by Institute

Listed alphabetical	lly by Institute				
Reference number	Name	Location	Duration	Grant title	Total
CS/15/3/31405	<b>Dr Z Whinnett</b> MRCP BM BS BMed Sci PhD	Imperial College London	3 years, 9 months	AV optimisation delivered with direct His bundle pacing, in patients with heart failure, long PR without left bundle branch block: randomised multi-centre clinical outcome study 'The His Optimised Pacing Evaluated for Heart Failure Trial (HOPE-HF)'	£962,958
CS/15/7/31679	<b>Dr V Kunadian</b> MBBS MD FRCP FACC FESC	Newcastle University	5 years	The OLDer Patients Randomised Interventional Trial in Acute Non-ST Elevation Myocardial Infarction: The OLD-RITA Trial	£1,705,737
CS/15/6/31468	Prof A Hughes BSc MBBS PhD	University College London	4 years, 10 months	Study of Emerging Adulthood and Cardiometabolic Health in ALSPAC: the iNfluence of Growth and other Exposures (SEA CHANGE)	£999,049
CS/15/5/31475	Prof J Wardlaw CBE BSc MBChB FRCR FRCP MD FMedSci FESO FRSE	University of Edinburgh	3 years	LACunar Intervention (LACI) Trial: assessment of safety and efficacy of cilostazol and isosorbide mononitrate to prevent recurrent lacunar stroke and progression of cerebral small vessel disease	£847,771
CS/15/8/32065	Prof K Muir MSc MD FRCP	University of Glasgow	5 years	Sixth Joint Stroke Association/ BHF Grant: Alteplase-Tenecteplase Trial Evaluation for Stroke Thrombolysis	£750,000
CS/16/1/31878	<b>Prof S Padmanabhan</b> MBBS MD PhD FRCP FAHA FBHS	University of Glasgow	3 years, 6 months	Clinical Study of UMOD NKCC2 interaction on salt-sensitivity in hypertension	£653,756
CS/15/4/31493	Prof C Fall BSc MBChB DM FRCP FRCPCH	University of Southampton	3 years	Childhood and young adult predictors of myocardial structure and function at age 45 years in the New Delhi and Vellore Birth Cohorts, India	£653,954
Programme	e <b>G</b> rants				
Listed alphabetical	lly by Institute				
Reference number	Name	Institution	Duration	Grant title	Total
RG/15/6/31436	Prof A Williams BA PhD	Cardiff University	5 years	Predicting anti-arrhythmic drug efficacy from the divergent molecular basis of RyR2 dysfunction in genetic arrhythmia syndromes. (Renewal)	£995,228
RG/15/8/31480	<b>Prof M Gautel</b> MD PhD FMedSci	King's College London	5 years	A comprehensive approach to the genetic, molecular and functional impact of rare titin variants in hypertrophic cardiomyopathy	£1,159,309
RG/15/15/31742	<b>Prof A Tinker</b> BA MB BS FRCP PhD FMedSci	Queen Mary, University of London	5 years	The role of the ATP-sensitive potassium channels in cardiovascular physiology and disease. (Renewal)	£1,091,688
RG/15/14/31880	<b>Prof P Scambler</b> BSc MB ChB MD FRCPath	University College London	5 years	Morphogenetic signalling pathways affected in DiGeorge and Charge Syndromes: their role in cardiovascular development. (Renewal)	£1,415,379

Programme Grant	ts (continued)				
Reference number	Name	Institution	Duration	Grant title	Total
RG/15/13/31673	Prof Y Senis PhD	University of Birmingham	5 years	Regulation of platelet homeostasis and thrombosis by the kinase-phosphatase pair Csk-CD148	£966,132
RG/15/16/31758	Prof A Poole MA PhD VetMB FBPhS MRCVS	University of Bristol	5 years	Platelet secretion: control mechanisms and role in thrombosis, cardiac damage and repair. (Renewal)	£1,537,451
RG/15/11/31593	Prof Z Mallat MD PhD	University of Cambridge	5 years	Defining the role(s) of selective subsets of antigen presenting cells in promoting or preventing atherosclerosis. (Renewal)	£1,730,669
RG/15/7/31521	Prof M Kearney MB ChB FRCP DM	University of Leeds	5 years	Manipulating insulin-like growth factor-1 and hybrid receptor expression as a therapeutic strategy to control insulin sensitivity and cardiovascular repair. (Renewal)	£1,376,166
RG/15/12/31616	<b>Prof B Keavney</b> BSc BM BCh MRCP DM FRCP	University of Manchester	5 years	Investigation of genetic mechanisms underlying susceptibility to complex congenital and arrhythmic cardiovascular disease. (Renewal)	£1,129,185
RG/15/10/31485	Prof D Greaves BSc PhD	University of Oxford	5 years	Recruitment, proliferation and differentiation of monocyte/macrophages in cardiovascular inflammation and repair. (Renewal)	£1,173,882
RG/15/9/31534	Prof R Vaughan-Jones BSc PhD	University of Oxford	5 years	H <sup>+</sup> ion control and signalling in cardiac hypertrophy and heart failure. (Renewal)	£1,176,355
RG/15/17/31749	Prof M Hanson MA DPhil FRCOG	University of Southampton	5 years	Epigenetic biomarkers and determinants of cardiovascular risk in children	£1,179,307
New Horizo	ns Grant				
Reference number	Name	Institution	Duration	Grant title	Total
NH/15/1/31543	Prof M Peters MBChB PhD MRCP FRCPCH	University College London	2 years, 6 months	Development of a system to characterise and provide feedback on closed chest compressions for cardiopulmonary resuscitation on paediatric wards	£285,106
<b>T</b> ranslation	al Awards				
Listed alphabetical					
Reference number		Institution	Duration	Grant title	Total
TG/15/1/31518	Prof M Marber FRCP PhD FACC	King's College London	9 months	Comparing the diagnostic and prognostic performance of myosin binding protein C to troponin I and troponin T in patients presenting with chest pain	£204,522
TG/15/2/31691	<b>Dr J Leiper</b> BSc PhD	Medical Research Council	6 months	Translation of a novel compound that improves outcomes in sepsis into humans	£91,768

Translational Awa	rds (continued)				
Reference number	Name	Institution	Duration	Grant title	Total
TG/15/3/31692	Prof A Hobbs BSc PhD	Queen Mary, University of London	2 years	Lead optimisation of novel small molecule natriuretic peptide receptor (NPR)-C agonists for the treatment of myocardial infarction	£396,422
TG/15/4/31891	Dr G Moggridge PhD	University of Cambridge	1 year, 2 months	A novel transcatheter valve for younger patients with aortic stenosis	£248,018
Project <b>G</b> ra	ints				
Listed alphabetica	lly by Institute				
Reference number	Name	Institution	Duration	Grant title	Total
PG/15/75/31748	<b>Dr A Khir</b> BSc MSc PhD	Brunel University London	3 years	The determination of local arterial stiffness and left ventricular load: a new non-invasive technique for calculating PWV and wave intensity	£264,511
PG/15/90/31796	<b>Dr B Latinkic</b> BSc PhD	Cardiff University	3 years	Mechanisms of action of cardiogenic determinants of GATA4	£222,942
PG/16/25/32097	<b>Dr D Ramji</b> BSc PhD	Cardiff University	3 years	Evaluation of the anti-atherogenic therapeutic potential of dihomo-gamma-linolenic acid <i>in vivo</i> and delineation of the underlying molecular mechanisms	£214,170
PG/15/103/31900	Dr J Crawley BSc PhD	Imperial College London	3 years	Pathogenicity of autoantibodies in acquired TTP	£196,924
PG/15/59/31621	Dr E Dupont PhD	Imperial College London	3 years	An <i>in silico</i> model of action potential propagation, biologically validated in the HL1-6 myocyte cell line: a framework for characterising myocardial re-entry and fibrillation in the human heart	£296,235
PG/15/36/31425	Dr P Kanagaratnam PhD FRCP	Imperial College London	2 years, 6 months	Ablation versus anti- arrhythmic therapy for reducing all hospital episodes from recurrent atrial fibrillation	£258,368
PG/15/49/31595	Prof R Krams MD PhD	Imperial College London	3 years	Disturbed shear stress and strain act synergistically to promote the pro-atherogenic endothelial cell phenotype responsible for TCFA	£299,991
PG/15/115/31946	<b>Dr T McKinnon</b> BSc PhD	Imperial College London	3 years	Mapping the interaction of VWF with FXIIa and its potential as a new anti-coagulant target	£198,736
PG/16/17/32069	Prof N Peters MD FRCP	Imperial College London	3 years	Predicting myocardial architecture and electrophysiological function from electrogram morphology	£250,075
PG/15/56/31573	<b>Dr G Quinlan</b> BSc PhD	Imperial College London	3 years	The disrupted hepcidin/ ferroportin axis and proliferative responses in pulmonary arterial hypertension	£294,534
PG/15/102/31890	<b>Prof P Weinberg</b> MA MSc DIC PhD	Imperial College London	3 years	Effect of multidirectional flow on endothelial cell alignment and transport of LDL-sized particles	£228,486

Project Grants (continued)						
Reference number	Name	Institution	Duration	Grant title	Total	
PG/15/69/31719	<b>Dr B Wojciak Stothard</b> MSc PhD	Imperial College London	2 years	Role of endothelial CLIC4 in the regulation of pulmonary vascular remodelling in pulmonary hypertension	£173,452	
PG/16/4/31849	<b>Dr B Wojciak Stothard</b> MSc PhD	Imperial College London	3 years	miR-150 as a regulator of endothelial function in pulmonary arterial hypertension	£214,875	
PG/15/104/31913	<b>Dr J Alastruey-Arimon</b> MEng DIC PhD	King's College London	3 years	How accurate are our clinical measures of aortic stiffness? A combined <i>in vitro</i> , <i>in silico</i> and <i>in vivo</i> study	£200,904	
PG/15/119/31970	Dr A Brewer BSc PhD	King's College London	3 years	Investigation of the redox-dependent regulation of the vascular angiogenic response following ischaemia	£204,346	
PG/15/116/31947	Prof A Ferro MB BS PhD FRCP	King's College London	2 years	The role of nitric oxide/cyclic GMP/β-catenin signalling in endothelial cell survival in the vasculature	£158,341	
PG/16/19/32072	Prof M Irving MA MSc PhD	King's College London	3 years	A novel signalling pathway in the regulation of cardiac contractility: mechano-sensing in the myosin filaments	£230,966	
PG/15/91/31812	Dr S Niederer DPhil	King's College London	3 years	The role of scar morphology and location in arrhythmogenic risk following cardiac resynchronisation therapy in patients with ischaemic heart disease	£174,643	
PG/15/89/31793	<b>Dr A Phinikaridou</b> BSc MA PhD	King's College London	2 years	Multi-sequence MRI characterisation of deep vein thrombosis in man	£126,985	
PG/16/30/32129	<b>Prof A Shah</b> MD FRCP FESC FMedSci	King's College London	3 years	The role of the mitochondrial unfolded protein response in the stressed heart	£220,840	
PG/15/38/31466	Prof C Shanahan BSc PhD	King's College London	3 years	Novel role for poly(ADP) ribose in vascular calcification	£290,798	
PG/15/93/31834	<b>Prof C Shanahan</b> BSc PhD	King's College London	3 years	Prelamin a accumulation causes nuclear lamina disruption and drives cardiomyocyte dysfunction in dilated cardiomyopathy	£200,850	
PG/15/60/31629	Dr R Yan PhD	King's College London	3 years	Development of novel <sup>18</sup> F-PET tracers for direct detection of myocardial oxidative stress in cardiovascular disease	£262,527	
PG/16/13/32024	<b>Dr L Zeng</b> PhD	King's College London	2 years	The role of XBP1-mediated novel type IV collagen isoform in progenitor cell migration	£162,297	
PG/16/18/32070	Prof D Middleton BSc PhD	Lancaster University	2 years	Investigating the role of membrane interactions in the aggregation and toxicity of amyloidogenic proteins affecting the heart and vasculature	£134,661	
PG/15/80/31781	<b>Dr K Bhaskaran</b> BSc MSc PhD	London School of Hygiene and Tropical Medicine	1 year	Impact of the media interest in side effects on the initiation and cessation of statins in the UK	£55,099	

Project Grants (co	· · · · · · · · · · · · · · · · · · ·				
Reference number	Name	Institution	Duration	Grant title	Total
PG/15/57/31580	<b>Prof S Ley</b> BSc PhD	National Institute for Medical Research	3 years	Regulation of atherosclerosis by TPL-2 kinase	£258,466
PG/16/39/32115	<b>Dr S Bamforth</b> BSc PhD	Newcastle University	1 year, 6 months	The pharyngeal endoderm in arch artery morphogenesis	£106,161
PG/15/58/31611	<b>Dr B Chaudhry</b> MBBS MRCP PhD	Newcastle University	3 years	Zebrafish to dissect the role of jnk1 in cardiac development	£252,850
PG/15/46/31589	Prof D Henderson BSc PhD	Newcastle University	3 years	Lineage relationships in aortic valve development	£268,501
PG/15/85/31744	<b>Dr G Richardson</b> BSc PhD	Newcastle University	3 years	The role of cardiomyocyte senescence and cardiac regeneration in ageing	£295,743
PG/16/10/32016	<b>Dr R Hunter</b> BSc MBBS MRCP PhD FESC	Queen Mary, University of London	3 years	Identification, electro-mechanical characterisation and ablation of driver regions in persistent atrial fibrillation	£265,494
PG/15/105/31906	<b>Dr C Mauro</b> BSc MSc PhD	Queen Mary, University of London	2 years	How bioactive lipid mediators control T cell migration: basic mechanisms and therapeutic potential for cardiovascular metabolic disorders	£220,427
PG/15/72/31732	<b>Dr T Nightingale</b> DPhil MBiochem	Queen Mary, University of London	3 years	An investigation into novel regulatory mechanisms for Von Willebrand factor secretion from endothelial cells	£197,752
PG/16/15/32050	<b>Dr B O'Brien</b> MD PhD (Habil) FRCA FFICM MHBA	Queen Mary, University of London	1 year, 3 months	The TIGHT-K STUDY. Arrhythmias on the cardiac intensive care unit – does maintenance of highnormal serum potassium levels matter?	£178,820
PG/16/7/31977	Prof C Shoulders BA PhD	Queen Mary, University of London	3 years	Functional characterisation of missense variants in key genes regulating cholesterol and phytosterol absorption: potential implications for cardiovascular health	£177,679
PG/15/47/31591	Prof T Warner BSc PhD	Queen Mary, University of London	3 years	Platelet response phenotyping to improve anti-thrombotic therapy	£217,121
PG/15/79/31777	Prof T Warner BSc PhD	Queen Mary, University of London	3 years	Control of thrombosis by endogenous pathways of platelet inhibition and relevance to anti-platele therapy	
PG/15/86/31723	<b>Dr Q Xiao</b> BSc MD PhD	Queen Mary, University of London	3 years	A novel role of Cezanne in vascular smooth muscle cell proliferation and neointima hyperplasia	£225,758
PG/16/1/31892	Dr Q Xiao BSc MD PhD	Queen Mary, University of London	2 years	microRNA-214, a novel player in smooth muscle cell differentiation and angioplasty restenosis	£173,985
PG/16/8/31985	<b>Dr A Margariti</b> BSc MSc PhD	Queen's University Belfast	2 years	Investigating the dynamic role of Quaking mRNA splicing in endothelial cell differentiation and its efficacy for vascular regeneration	£189,996
PG/15/78/31771	Prof G Dhoot BSc PhD DSc	Royal Veterinary College, University of London	3 years	Mechanism of Sulf1/Sulf2 function in cardiovascular development and myocardial repair	£213,324 ir

Project Grants (co		1	D 11		T
Reference number	Name	Institution	Duration	Grant title	Total
PG/15/107/31908	Dr E Behr MA MBBS MD FRCP	St George's, University of London	3 years	Novel methods for risk assessment of patients with the Brugada syndrome: the Rare Arrhythmia Syndrome Evaluation (RASE) – Brugada study	£299,026
PG/15/97/31862	Prof I Greenwood BSc PhD	St George's, University of London	3 years	Regulation of cardiovascular Kv7 channels by βγ G protein subunits	£195,661
PG/15/101/31889	<b>Dr A Rudnicka</b> BSc MSc PhD	St George's, University of London	2 years	Automated retinal microvascular quantification as a predictor of cardiovascular disease risk in UK Biobank	£194,978
PG/15/87/31783	Dr R Breckenridge FRCP	University College London	3 years	Coronary microvasculature and hypoxia tolerance	£201,992
PG/15/52/31598	<b>Dr S Davidson</b> BSc PhD	University College London	3 years	Novel means of cardioprotection by exploiting pathways activated by Stromal Derived Factor-1 $\!\alpha$	£282,121
PG/15/108/31928	<b>Dr K Dawson</b> DM FRCP DPhil FESC	University of Aberdeen	3 years	A study into the inflammatory mechanisms and protracted recovery of takotsubo cardiomyopathy	£258,153
PG/15/88/31780	<b>Dr K Dawson</b> DM FRCP DPhil FESC	University of Aberdeen	2 years	Muscle fat compartments and turnover as a determinant of insulin sensitivity	£234,109
PG/15/82/31721	<b>Dr N Mutch</b> BSc PhD	University of Aberdeen	3 years	Platelet plasminogen as a driver of local fibrinolysis	£218,020
PG/16/22/32085	<b>Dr S Bagby</b> BA DPhil	University of Bath	3 years	Substrate capture analysis and activity enhancement by deep mutational scanning of HACE1, a stress response ubiquitin ligase with multiple functions in cardiovascular protection	£203,701
PG/15/40/31522	<b>Dr G Pula</b> BSc PhD	University of Bath	3 years	Characterisation of the role of NADPH oxidase 1 in collagen-dependent activation of platelets: a potential target for the development of novel antithrombotics?	£219,776
PG/15/117/31961	<b>Dr N Edwards</b> BMedSci BM BS MRCP PhD	University of Birmingham	2 years	Onset and functional consequences of left ventricular fibrosis in chronic kidney disease	£199,677
PG/15/45/31579	<b>Dr J Fisher</b> BSc PhD	University of Birmingham	2 years	Cerebral vasomotor regulation in atrial fibrillation	£155,944
PG/15/83/31622	Dr V Heath BA MA DPhil	University of Birmingham	3 years	The molecular regulation of RhoJ and the GIT-PIX complex and their role in angiogenesis	£173,269
PG/15/114/31945	<b>Dr S Thomas</b> BSc PhD	University of Birmingham	3 years	Regulation of platelet actin nodules and their role in thrombus stability	£127,424
PG/15/95/31853	<b>Prof G Angelini</b> MD MCh FRCS FETCS FMedSci	University of Bristol	2 years	Engineered bio-scaffolds for heart valve replacements	£188,980
PG/15/100/31877	Dr M Bond BSc PhD	University of Bristol	3 years	The Hippo pathway: a mechanism underlying the vascular protective effects of cAMP	£192,737
PG/15/81/31740	Dr R Foster BSc PhD	University of Bristol	3 years	A new vascular therapeutic potential for early intervention in diabetic vascular dysfunction	£213,937
PG/15/43/31567	Prof S George BSc PhD	University of Bristol	3 years	Wnt protein activation by periodontal bacteria: implications for atherosclerosis	£174,277

Project Grants (continued)						
Reference number	Name	Institution	Duration	Grant title	Total	
PG/15/106/31915	<b>Prof J Hancox</b> BSc PhD FRSB FBPhS	University of Bristol	3 years	Potassium channel linked short QT syndrome – a mechanical as well as electrical disorder?	£263,540	
PG/16/21/32083	<b>Dr I Hers</b> BSc MSc PhD	University of Bristol	2 years, 6 months	Identification of the molecular targets by which glycogen synthase kinase 3 regulates human platelet function and thrombosis	£180,601	
PG/16/3/31833	<b>Dr I Hers</b> BSc MSc PhD	University of Bristol	3 years	Glycogen-synthase kinase-3 $\alpha$ and glycogen synthase kinase-3 $\beta$ : yin and yang in platelet function and thrombus formation?	£249,580	
PG/15/55/31568	Dr A James BSc DPhil	University of Bristol	3 years	Selective late sodium current blockers as antiarrhythmic drugs in atrial fibrillation	£226,944	
PG/15/68/31717	Dr M Koeners PhD	University of Bristol	3 years	Carotid body-renal interactions in renovascular hypertension	£265,526	
PG/15/54/31559	Prof P Madeddu MD	University of Bristol	3 years	Longevity-associated BPIFB4 gene therapy for treatment of ischaemic disease	£219,503	
PG/16/37/31974	Prof N Marrion BSc PhD	University of Bristol	1 year	Determination of the SK channel composition contributing to atrial action potential duration	£70,133	
PG/15/53/31371	Dr S Oltean MBBS PhD	University of Bristol	3 years	mRNA splicing control in diabetes: a novel therapeutic strategy for treatment of diabetic nephropathy	£268,270	
PG/15/96/31854	Prof A Poole MA PhD VetMB FBPhS MRCVS	University of Bristol	1 year, 6 months	How does Synaptotagmin-like protein 4 (Slp4) control platelet secretion, function and thrombosis?	£99,320	
PG/16/35/32139	Dr C Satchell MRCP BSc PhD	University of Bristol	3 years	Restoring coronary microvascular endothelial glycocalyx as a therapy for diabetic cardiomyopathy	£242,243	
PG/15/66/31710	Prof M Suleiman BSc PhD DSc	University of Bristol	2 years	Role of cyclic AMP/PKA/Epac signalling in cardioprotection	£169,119	
PG/16/11/32021	Prof M Bennett BSc MBChB PhD MA FRCP FAHA FMedSci	University of Cambridge	3 years	Assessment and effects of cell senescence in vascular disease	£224,146	
PG/16/24/32090	Prof M Bennett BSc MBChB PhD MA FRCP FAHA FMedSci	University of Cambridge	3 years	The role and regulation of Sirtuin 6 in vascular smooth muscle cells	£228,489	
PG/15/118/31966	<b>Dr J Gibson</b> PhD MA BA VetMB MRCVS	University of Cambridge	3 years	Phosphatidylserine exposure in red blood cells from patients with sickle cell disease: the interaction between Ca <sup>2+</sup> and oxidation	£219,829	
PG/15/84/31670	<b>Dr T Krieg</b> Dr med habil	University of Cambridge	3 years	Protection against diabetic cardiomyopathy through sequestering of mitochondrial dicarbonyls	£217,361	
PG/15/39/31519	<b>Dr W Li</b> BSc PhD	University of Cambridge	2 years	Development of non-osteogenic variants of bone morphogenetic protein 9 as novel therapies for pulmonary arterial hypertension	£131,534	

Project Grants (continued)						
Reference number	Name	Institution	Duration	Grant title	Total	
PG/15/76/31756	Prof Z Mallat MD PhD	University of Cambridge	2 years	Marginal zone B cells and the regulation of the pro-atherogenic T follicular helper response	£201,386	
PG/15/99/31865	Prof Z Mallat MD PhD	University of Cambridge	2 years	Type-2 innate lymphoid cells in the control of the immune atherogenic response to high fat diet	£194,387	
PG/16/28/32123	Prof C Smith BSc PhD	University of Cambridge	2 years	Master post-transcriptional gene expression regulators in vascular smooth muscle cells	£287,547	
PG/15/44/31574	Prof M Ashford BSc PhD	University of Dundee	3 years	BACE1 and endothelial dysfunction in diabetes	£289,872	
PG/15/42/31563	Dr W Fuller BA MA PhD	University of Dundee	3 years	Cavins: mobile regulators of $\beta$ -adrenoceptor signalling in the cardiac cell	£185,061	
PG/16/33/32134	Dr W Fuller BA MA PhD	University of Dundee	1 year, 6 months	Palmitoylation of the L-type Ca channel pore-forming subunit	£112,660	
PG/15/64/31681	<b>Dr J George</b> MB ChB MRCP MD	University of Dundee	2 years, 9 months	Vascular Effects of Smoking Usual cigarettes Versus electronic cigaretteS (VESUVIUS)	£199,368	
PG/16/32/32132	<b>Prof C Lang</b> BMSc MD FRCP FACC	University of Dundee	2 years	REnal and Cardiovascular Effects of SGLT2 inhibition in combination with loop DiurEtics in diabetic patients with Chronic Heart Failure (RECEDE-CHF)	£192,491	
PG/15/77/31761	Prof A Munsterberg PhD	University of East Anglia	3 years	Signalling cross-talk regulating migration and fate choice in cardiac progenitor cells	£182,012	
PG/15/51/31596	Prof N Mills BSc MBChB MRCP PhD	University of Edinburgh	3 years	HIgh-Sensitivity cardiac Troponin On presentation to Rule out myocardial InfarCtion (HiSTORIC)	£271,484	
PG/16/12/32022	<b>Dr A Tavares</b> BSc PhD	University of Edinburgh	1 year	Novel imaging biomarker for detection of regional cardiovascular inflammation using Positron Emission Tomography (PET)	£103,596	
PG/15/63/31659	Prof M MacLean BSc PhD FBPharmacolS FSB MBE FRSE	University of Glasgow	2 years	Investigating oestrogen metabolism in pulmonary artery smooth muscle cells	£176,845	
PG/15/92/31813	Dr T Van Agtmael PhD	University of Glasgow	3 years	Targeting intracellular pathways to dissect mechanisms of cerebrovascular disease	£275,181	
PG/15/48/31592	Prof C Peers BSc PhD	University of Leeds	3 years	Regulation of Cav3.1 T-type calcium channels by heme oxygenase-1 derived carbon monoxide: a novel target signalling pathway for the treatmen of vascular diseases	£253,169	
PG/16/6/31941	<b>Dr H Philippou</b> BSc PhD	University of Leeds	2 years	Characterisation of novel mechanism(s) linking platelets with anticoagulation	£194,932	
PG/16/31/32130	<b>Dr A Turner</b> BSc PhD	University of Leeds	2 years	Investigating the importance of interleukin-1 $\alpha$ and its receptor on cardiac fibroblasts in post-MI myocardial remodelling	£158,910	
PG/15/62/31653	<b>Dr S Wheatcroft</b> BSc MBChB PhD FRCP	University of Leeds	3 years	Increasing IGFBP1 levels as a strategy to promote therapeutic angiogenesis in diabetes	£222,000	

Project Grants (co	ontinued)				
Reference number	Name	Institution	Duration	Grant title	Total
PG/15/73/31743	<b>Dr S Wheatcroft</b> BSc MBChB PhD FRCP	University of Leeds	3 years	Examining the mechanisms underpinning protection from atherosclerosis in mice with increased endothelial cell insulin-like growth factor-1 receptor expression	£267,233
PG/15/65/31707	Prof N Brindle BSc PhD	University of Leicester	3 years	An angiopoietin-2-specific ligand-trap with potential to treat cardiovascular disease	£196,423
PG/16/14/32039	<b>Dr R Rainbow</b> BSc PhD	University of Leicester	2 years	Understanding mechanisms of cardioprotection: the overlooked role of Kir6.1 in cardiac muscle	£144,989
PG/16/9/31995	Prof S Ye MB MD PhD FRCPath	University of Leicester	3 years	Functional analyses of coronary artery disease- related genetic variant at the FURIN locus	£182,023
PG/16/23/32088	Prof A Canfield BSc PhD	University of Manchester	2 years	Evaluating the potential of targeting PKCα signalling to inhibit vascular calcification	£167,663
PG/15/109/31931	<b>Dr A Greenstein</b> BSc MBChB MRCP PhD	University of Manchester	2 years	Setting the tone: pressure induced oxidative dimerization of PKG enables Ca <sup>2+</sup> spark vasoregulation	£172,209
PG/16/2/31863	<b>Dr S Herbert</b> BSc PhD	University of Manchester	3 years	Spatiotemporal control of endothelial tip/stalk cell identity in angiogenesis	£231,470
PG/15/94/31844	<b>Dr P Kingston</b> BSc MBChB FRCP PhD	University of Manchester	1 year	Assessment of the efficacy of antifibrotic gene transfer as a means of suppressing neointima formation in venous arterial-interposition grafts	£92,521
PG/15/70/31724	Prof A Trafford BVSc CertVA PhD MRCVS	University of Manchester	3 years	Investigating the role of Amphiphysin II (BIN1) in the control of cardiac t-tubule biogenesis and function	£234,436
PG/15/37/31438	Dr K Arkill BSc PGCE PhD	University of Nottingham	1 year, 6 months	Novel nanosensors for real time determination of shear stress experienced by the endothelial surface layer – development, validation, and use in growing vasculature	£113,822
PG/15/67/31715	<b>Prof H Ashrafian</b> BM BCh MA DPhil MRCP	University of Oxford	2 years	Adenosine A2A receptors in myocardial fibrosis	£207,329
PG/15/74/31747	<b>Dr L Biasiolli</b> MSc DPhil	University of Oxford	3 years	Clinical MRI of carotid atherosclerosis using T2 mapping: development and validation of novel methods for plaque lipid quantification	£204,611
PG/15/35/31403	<b>Prof K Channon</b> MD FRCP FMedSci	University of Oxford	3 years	Effects of KIAA1462, a new causal CAD gene, in atherosclerosis	£247,941
PG/15/110/31936	Prof R Choudhury MA DM FRCP	University of Oxford	3 years	Development and validation of fused 3D coronary arteriograms with multimodal MRI	£137,480
PG/16/34/32135	<b>Dr S De Val</b> PhD BSc	University of Oxford	1 year	Delineating the different regulatory pathways involved in coronary vessel formation during development and disease	£72,867
PG/15/34/31300	<b>Dr G Douglas</b> BSc PhD	University of Oxford	1 year	The role of Abcg1 in atherosclerotic plaque regression	£52,856

Project Grants (co		1 22 2	D ::	Control	T
Reference number	Name	Institution	Duration	Grant title	Total
PG/15/113/31944	Dr K Gehmlich PhD	University of Oxford	2 years, 6 months	Dissecting disease pathways in a mouse model of titin-related cardiomyopathy	£239,036
PG/15/50/31594	Dr M Mommersteeg MSc PhD	University of Oxford	3 years	Exploring the role of Slit-Robo signalling in cardiac innervation	£279,569
PG/15/111/31939	Dr M Mommersteeg MSc PhD	University of Oxford	3 years	The blind cavefish: unravelling the mechanisms underlying heart regeneration	£256,134
PG/15/71/31731	<b>Dr S Piechnik</b> MScEE PhD(Cantab) DSc	University of Oxford	3 years	Analysis of diffuse fibrosis with T1 mapping in the CMR in Hypertrophic Cardiomyopathy (HCMR) Study	£287,133
PG/15/112/31940	<b>Dr N Smart</b> BSc PhD	University of Oxford	3 years	SRSF3: a regulator of epicardial gene splicing in development and repair?	£248,743
PG/16/27/32114	<b>Dr N Smart</b> BSc PhD	University of Oxford	3 years	Sulfatases: novel targets for enhancing regeneration by epicardium-derived cells	£233,657
PG/16/29/32128	Dr E Tzima PhD	University of Oxford	3 years	Role of the adaptor protein Shc in flow-mediated vascular remodelling and atherosclerosis	£215,098
PG/16/38/32080	<b>Dr A Webb</b> MA (Cantab) BMBCh MRCP MSc DPhil	University of Oxford	3 years	Markers of persistent vascular risk after optimal treatment of hypertension: 5-year assessments of the OXVASC-Phys TIA/stroke cohort	£75,781
PG/15/41/31560	Prof A Clerk BSc PhD	University of Reading	1 year, 6 months	Regulation of the Germinal Centre Kinase (GCK) MST3 by STRiatin-Interacting Phosphatase And Kinase (STRIPAK) complexes	£145,596
PG/16/20/32074	<b>Prof J Gibbins</b> BSc PhD	University of Reading	3 years	The Virtual Platelet – a computational model for the complex regulation of platelet function	£297,635
PG/16/36/31967	Dr C Jones BSc MSc PhD	University of Reading	3 years	Regulation of thrombus formation by the rate of platelet activation	£176,678
PG/15/98/31864	Dr D Leake BSc PhD	University of Reading	3 years	Inhibition of the lysosomal oxidation of low density lipoprotein and its effect on atherosclerosis	£182,779 s
PG/15/61/31634	Dr M Daly BSc PhD	University of Sheffield	3 years	Identification and characterisation of FLI1 and RUNX1 regulated determinants of platelet granule biogenesis and secretion	£194,647
PG/16/16/32057	Prof S Brophy BSc PhD	University of Swansea	2 years	RCT of ACTIVE – Randomised Control Trial of Active Children Through Individual Vouchers Evaluation	£299,904
PG/16/26/32099	<b>Dr S Hitchcock</b> BSc PhD	University of York	2 years	Understanding the roles of JAK2V617F in aberrant thrombosis and haemostasis	£179,314
PG/16/5/31912	Prof J Potts BSc PhD	University of York	3 years	Investigation of a novel bacterial enzyme involved in cardiovascular device infections	£235,981



Coronary heart disease is the UK's single biggest killer.

For over 50 years we've pioneered research that's transformed the lives of people living with heart and circulatory conditions. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease.

But so many people still need our help.

From babies born with life-threatening heart problems to the many Mums, Dads and Grandparents who survive a heart attack and endure the daily battles of heart failure.

Join our fight for every heartbeat in the UK. Every pound raised, minute of your time and donation to our shops will help make a difference to people's lives. British Heart Foundation Greater London House 180 Hampstead Road London NW1 7AW Phone: 020 7554 0000

Fax: 020 7554 0100 Website: bhf.org.uk



bhf.org.uk