British Heart Foundation

Making every moment count

Research Grant Awards 2019/2020

Contents

Cover image

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"A couple of years ago I found myself forgetting things – doctors' appointments, food in the oven, my keys. I had to go to my GP. After some tests, I went to the memory service and they told me I have dementia. I think you get good days and bad days. You have to look after yourself and find a purpose. Now I run the City Mission Dementia Project, I don't worry about the future. I haven't got the time. I'm thinking about the people I can help."

Dianne Campbell, runs the City Mission Dementia Project

Over 780 hours spent helping others living with dementia.

Introduction

In the year April 2019 to March 2020 the British Heart Foundation (BHF) awarded grants totalling £99.7 million* for research into the causes, prevention, diagnosis and treatment of diseases of the heart and circulation.

The BHF has five research grant committees, each of which meets up to 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. Shortlisted applicants for intermediate and senior Fellowships are interviewed.

In 2019/2020 the Chairs and Programme Grants Committee awarded £42.2 million to Personal Chairs, Programme Grants, Infrastructure Grants and other major projects. This included £10 million towards the establishment of a BHF Data Science Centre, £0.3 million towards six awards jointly funded with The Alan Turing Institute, and £1.1 million towards two awards jointly funded with the German Centre for Cardiovascular Research and the Dutch Heart Foundation. We also awarded £0.2 million seed funding to the four shortlisted applicants for the Big Beat Challenge.

There were 28 chairholders (also referred to as BHF Professors) in post on 31 March 2020. 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 Clinical Studies Committee supports clinical trials of treatments, diagnostics and other interventions and certain observational studies of specific patient groups. The Committee awarded £3.8 million to three applications.

The Translational Awards Committee awarded £1.4 million to two applications for 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 £29.5 million to 85 applications, and the Project Grants Committee awarded £22.6 million to 89 applications.

The pages that follow list BHF chairholders in post during the year and new awards made for Programme Grants, Clinical Studies, Translational Awards, Fellowships, Project Grants and others.

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

Notes

The figures above include supplements made to new and existing grants.

* This figure includes only the expected payments to the next milestone for grants which are conditional upon the successful achievement of project milestones

BHF Chairholders listed by institute

Imperial College London

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.

Imperial College London

The Simon Marks Chair of Regenerative Cardiology until 30 September 2019

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 Cardiovascular Proteomics

Held by: Professor M Mayr MD PhD

Major interest: Novel methods to detect and measure biomarkers of cardiovascular risk.

King's College London

The Chair of Cardiology

Held by: Professor K Otsu MD PhD FAHA FMedSci

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 until 31 December 2019

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

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 Congenital Heart Surgery

Held by: Professor M Caputo MD MCh FRCS

Major interest: Cardiac surgical research, particularly in congenital heart disease.

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 FMedSci

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 ScD FMedSci

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

University of Edinburgh

The Chair of Translational Cardiovascular Sciences

Held by: Professor A H Baker
BSc (Hons) PhD FAHA FESC FMedSci FRSE

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

University of Edinburgh

The Duke of Edinburgh 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 (Hons) MBBCh MSc PhD FMedSci

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 Leeds

The Chair of Cardiovascular Imaging

Held by: Professor S Plein MRCP MD PhD

Major interest: Innovative cardiac magnetic resonance imaging for patient diagnosis and assessment.

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 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 the control of heart rhythm.

University of Manchester

The Chair of Cardiology

Held by: Professor B D Keavney BSc BM BCh MRCP (UK) 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 FESC 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

Held by: 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 Chair of Cardiovascular Medicine

Held by: Professor H C Watkins
MD PhD FRCP FMedSci FRS

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.

University of Swansea

The Sir Thomas Lewis Chair of Cardiovascular Science until 30 September 2019

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.

Awards made during the year 1 April 2019–31 March 2020

Fellowships

Listed alphabetically by institute

Non-clinical fellowships

Senior Basic Science Research Fellowships

Reference number	Name	Institution	Grant title	Total
FS/19/30/34173	**Dr A Brill** MD PhD	University of Birmingham	Mechanisms of mast cell-mediated inflammation exacerbating deep vein thrombosis. *5 years*	£627,801
FS/19/32/34376	**Dr N Smart** BSC PhD	University of Oxford	The BHF Ian Fleming Research Fellowship. Targeting developmental mechanisms to augment neovascularisation of the ischaemic heart (renewal). *5 years*	£828,402

Intermediate Basic Science Research Fellowships

Reference number	Name	Institution	Grant title	Total
FS/19/33/34328	**Dr J Barallobre Barreiro** BSc MSc PhD	King's College London	Extracellular matrix remodelling in heart failure: the contribution of ADAMTS proteases. *5 years*	£717,731
FS/20/25/34983	**Dr J Gregson** BSc MSc MPhil PhD	London School of Hygiene and Tropical Medicine	A programme of research into statistical methods for cardiovascular trials. *5 years*	£387,238
FS/20/23/34784	**Dr M Nus Chimeno** BSc PhD	University of Cambridge	Metabolic pathways to T follicular helper cells development in atherosclerosis. *5 years*	£773,743
FS/19/34/34354	**Dr A Tavares** BSc PhD	University of Edinburgh	Myocardial fibrosis and left ventricular remodelling in cardiovascular disease. *3 years*	£497,370
FS/20/21/34704	**Dr C Scarff** BSc PhD	University of Leeds	Structural basis of hypertrophic cardiomyopathy caused by mutations in cardiac myosin and myosin-binding protein-C. *5 years*	£615,993
FS/19/31/34158	**Dr J Vieira** BSc MSc PhD	University of Oxford	Investigating the functional role of the noncoding genome during epithelial-to-mesenchymal transition to enable cardiovascular regeneration. *5 years*	£817,466

Immediate Postdoctoral Basic Science Research Fellowships

Reference number	Name	Institution	Grant title	Total
FS/20/20/34626	**Dr P Charlton** MEng PhD	University of Cambridge	Using clinical and consumer devices to enhance screening for atrial fibrillation. *5 years*	£251,475

4-year PhD Studentships

Reference number	Name	Institution	Grant title	Total
FS/19/57/34894	**Prof S Harding** BSc PhD	Imperial College London	Imperial 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Ms Natasha de Winter; Ms Laura Nicastro; Ms Amalia Sintou; Ms Eleni Vasilaki. *4 years*	£683,988
FS/19/58/34895	**Prof M Mayr** MD PhD	King's College London	King's College London 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Mr Marco Antonazzi; Ms Isabella Cuthbert; Mr Josef Huntington; Ms Bhawana Singh. *4 years*	£670,196
FS/19/62/34901	**Prof A Ahluwalia** BSc PhD	Queen Mary University of London	Queen Mary 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Ms Laura Deelen; Mr Joshua Dyson; Ms Trupti Kolvekar; Mr Balraj Singh Sandhar. *4 years*	£653,416
FS/19/63/34902	**Prof A Hughes** BSc MBBS PhD	University College London	UCL 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Mr Liam Burke; Ms Alexandra Clare Jamieson; Ms Teodora Popa; Mr Dominic Scaglioni. *4 years*	£669,164
FS/19/53/34887	**Prof A Poole** MA PhD VetMB FBPhS MRCVS	University of Bristol	Bristol 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Mr Stanley Buffouge; Ms Katrine Hegeland; Ms Ffion Jones; Mr Jordan Vautrinot. *4 years*	£612,848
FS/19/54/34889	**Prof M Bennett** BSc MBChB PhD MA FRCP FAHA FMedSci	University of Cambridge	Cambridge 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Mr Benjamin Constant; Ms Alice Knapton; Ms Samantha Mason; Mr James Taylor. *4 years*	£680,368
FS/19/55/34890	**Prof N Morton** BSc PhD	University of Edinburgh	Edinburgh 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Ms Rachel Bell; Ms Lisa Ivatt; Ms Clare Macleod; Ms Sophie Louise Walker. *4 years*	£613,312
FS/19/56/34893	**Prof R Touyz** BSc MBBCh MSc PhD FMedSci	University of Glasgow	Glasgow 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Ms Gabriella Gerganova; Ms Rebecca Gilchrist; Mr Mohsen Shoaran; Ms Cara Trivett. *4 years*	£609,592
FS/19/59/34896	**Prof P Stewart** MD FRCP FMedSci	University of Leeds	Leeds 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Ms Abigail Byford; Mr Jacob Kinsella; Ms Cheuk Yau (Jane) Luk; Mr Samuel Turvey. *4 years*	£616,292
FS/19/60/34899	**Prof E Cartwright** BSc MSc PhD	University of Manchester	Manchester 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Ms Kerri Smith; Mr Connor Stonall; Ms Agnieszka Swiderska; Ms Alice Whitly. *4 years*	£613,308
FS/19/61/34900	**Prof D Greaves** BSc PhD	University of Oxford	Oxford 3rd intake 2019 – 4-year PhD Studentship (4th) Scheme: Ms Katherine Banecki; Ms Kaitlyn Dennis; Mr Conan O'Brien; Mr Yu Yeung Hanson Ng. *4 years*	£670,860

PhD Studentships

Reference number	Name	Institution	Grant title	Total
FS/19/73/34690	Student to be appointed (Supervisor: Prof A Khir)	Brunel University London	The development of a sophisticated cardiac pacing simulator: a training tool to enhance the management of post cardiac surgical patient care. *3 years*	£111,705
FS/19/43/34559	**Miss L Mereweather** BSc MSc	Imperial College London	Venous thrombosis: initiating mechanisms and therapeutic strategies. *3 years*	£120,728
FS/20/9/34989	**Ms G Mobayen** BSc MSc	Imperial College London	How von Willebrand factor responds to shear stress – the role of the C-terminal domains. *3 years*	£120,728
FS/19/71/34688	Student to be appointed (Supervisor: Dr V George)	Keele University	Creating 3D models of ARVC (arrhythmogenic right ventricular cardiomyopathy) disease with light-induced tuneable severity in stem cell-derived cardiomyocytes. *3 years*	£107,036
FS/19/42/34537	**Mr B Barrett** BSc MSc	King's College London	Investigating the vascular response to a cold probe: a study of mechanisms in cardiovascular health and disease. *3 years*	£122,220
FS/19/27/34355	**Ms S de Silva** BSc MSc	King's College London	Investigating a novel role for the LINC complex in cardiomyocyte mechanotransduction. *3 years*	£118,154
FS/20/8/34984	**Ms J Morris** MSc BSc	King's College London	Sulforaphane improves maternal glucose handling in obese insulin-resistant pregnancy; consequences for uterine blood flow, placental function and offspring metabolism. *3 years*	£125,210
FS/19/25/34277	**Mr N Siddall**	King's College London	Neurovascular protection afforded by stabilised sulforaphane in a murine model of ischaemic stroke: a role for Nrf2-regulated redox signalling in the blood-brain barrier endothelium. *3 years*	£123,783
FS/20/10/34993	Student to be appointed (Supervisor: Dr S Jones)	Manchester Metropolitan University	SIRT1: a novel antithrombotic target in cardiovascular disease? *3 years*	£108,152
FS/19/28/34358	**Mr O Cappa** BSc MSc	Queen's University Belfast	Cellular drivers of fibrosis in atrial fibrillation. *3 years*	£107,927
FS/19/24/34262	**Miss S Cooper** BSc	St George's University of London	Raf kinases and cardiac ECs: characterising Raf inhibition in chronic hypertension. *3 years*	£115,400
FS/19/29/34367	**Ms E Ioannou** BSc MSc	University College London	Molecular regulation of great vessel formation and remodelling. *3 years*	£118,830
FS/20/4/34958	**Mr Z Ren** BSc	University College London	Novel targets in the final common pathway of necrosis during ischaemia reperfusion injury: identification of mitochondrial permeability transition pore components by proximity-dependent biotinylation. *3 years*	£102,428

PhD Studentships (continued)

FS/20/2/34799	**Ms J Begum** BSc MSc	University of Birmingham	Developing iPSC based models of foam cell formation to study new pathways of lipid clearance that regulate inflammation. *3 years*	£107,926
FS/19/68/34583	**Mr J Price** BSc	University of Birmingham	Measurement of extracellular vesicles in cardiovascular disease by a novel interferometric imaging method. *3 years*	£107,927
FS/19/76/34927	Student to be appointed (Supervisor: Dr K Gehmlich)	University of Birmingham	Joint NC3Rs/BHF PhD Studentship: Use of induced pluripotent stem cell derived cardiomyocytes to test the consequences of genetic variants in atrial and ventricular arrhythmias. *3 years*	£90,000
FS/20/5/34973	**Mr M Bradshaw** BSc MSc	University of Bristol	High resolution structural studies of cardiac thin filaments; heart disease at the molecular level. *3 years*	£111,301
FS/19/37/34438	**Mr J Hawkins** BSc	University of Bristol	The role of nuclear actin dynamics in the regulation of vascular smooth muscle cell inflammation. *3 years*	£111,962
FS/19/72/34698	**Mr Z Li BSc** MRes	University of Bristol	Regulation of hypertension-induced coronary artery fibrosis by Wnt/b-catenin signalling pathway. *3 years*	£118,313
FS/19/77/34929	Student to be appointed (Supervisor: Dr G Wheeler)	University of East Anglia	Joint NC3Rs/BHF PhD Studentship: Development of non-mammalian, pre-clinical screening tools for the predictive analysis of cardiotoxicity. *3 years*	£90,000
FS/19/74/34725	Student to be appointed (Supervisor: Dr N Halbesma)	University of Edinburgh	Analysing the interplay between patient characteristics, the 'chain of survival' and mortality after out-of-hospital cardiac arrest using a linked national dataset. *3 years*	£80,625
FS/19/40/34477	**Mr A Flynn** BSc MRes	University of Glasgow	Defining the roles of dimethylarginine dimethylaminohydrolases (DDAH) in cerebrovascular regulation. *3 years*	£105,312
FS/19/38/34441	**Mr C Coupland** BSc	University of Hull	Is zinc critical for the control of platelet cyclic nucleotide signalling? *3 years*	£108,240
FS/19/41/34478	**Mr C Trevelyan** BSc	University of Leeds	Regulation of human cardiac fibroblast function by specific microRNAs. *3 years*	£108,668
FS/19/39/34447	**Ms T Azam** BSc MRes	University of Manchester	Investigating cardioprotective system against myocardial infarction: is mitogen activated protein kinase kinase 7 (MKK7) a new player? *3 years*	£106,361
FS/20/6/34990	**Ms B Niort** Bachelors Masters	University of Manchester	Identifying the mechanisms causing the reduced L-type calcium current in the post-infarcted left ventricle. *1 year, 9 months*	£88,278
FS/19/70/34650	**Ms R Raja** BSc MRes	University of Manchester	Investigating the role of ER-dependent protein homeostasis in the diabetic heart. *3 years*	£107,996
FS/19/36/34346	**Mr M Larzjan** BS MSc	University of Oxford	The effect of blood pressure lowering drugs and drug-drug interactions on the risk of type 2 diabetes: integrating epidemiologic and genetic data. *3 years*	£96,387

PhD Studentships (continued)

FS/20/7/34992	**Ms L Moreira** BSc MSc	University of Oxford	Exploring effects of calcitonin and procalcitonin on cardiomyocyte function, calcium handling and arrhythmogeneity. *3 years*	£119,394
FS/19/78/34716	Student to be appointed (Supervisor: Prof P Aveyard)	University of Oxford	Developing the evidence for active intervention to support smoking cessation in cardiovascular disease. *3 years*	£117,347
FS/19/26/34326	**Ms E Armitage** BSc	University of Sheffield	Investigating the role of Dock6 and Eogt in cardiac development and congenital heart disease. *3 years*	£106,033
FS/20/17/34730	Student to be appointed (Supervisor: Prof P Evans)	University of Sheffield	c-REL transcriptional programmes driving atherosclerosis. *3 years*	£107,925
FS/20/3/34956	**Mr S Hierons** BSc MRes	University of St Andrews	Plasma non-esterified fatty acids and fibrin clot formation in obesity – a relationship forged in zinc? *3 years*	£108,535
FS/19/69/34639	**Mr J Marsh** BSc MSc	University of St Andrews	Role of plasma fatty acid and zinc dynamics in platelet functioning: implications for pathological clotting. *3 years*	£108,134

Travel Fellowships

Reference number	Name	Institution	Grant title	Total
FS/19/75/34693	**Dr S Jones** BSc MSc PhD	University College London	Macro- and micro-vascular haemodynamic responses to exercise training and their alignment with molecular transducers in the Molecular Transducers of Physical Activity Consortium (MoTrPAC) study. *4 months*	£9,435

Career Development Research Fellowship for Nurses and Allied Health Professionals

Reference number	Name	Institution	Grant title	Total
FS/19/52/34563	**Dr R Issitt** BSc (Hons) PgDip DClinP FCCP AACP	University College London	Antibody immunoadsorption for transplantation. *3 years*	£366,231
FS/20/24/34944	**Dr B Farquharson** PhD MSc PgCert BSc	University of Stirling	Improving outcomes of out-of-hospital cardiac arrest (OHCA): applying behavioural science to enhance dispatcher assistance and increase rates of cardiopulmonary resuscitation. *3 years*	£289,830

Clinical Fellowships

Intermediate Clinical Research Fellowships

Reference number	Name	Institution	Grant title	Total
FS/20/26/34952	**Dr S Williams** BSc MBChB PgCert PhD MRCP MIET	King's College London	Informing atrial fibrillation rhythm control strategies using electrophysiological testing, cardiac imaging and computational modelling. *5 years*	£994,674
FS/19/35/34374	**Dr T Treibel** MA MBBS MRCP PhD	University College London	Mechanisms of excess risk in Aortic STEnosis after valve Replacement (MASTER). *5 years*	£905,514

Clinical Research Training Fellowships

Reference number	Name	Institution	Grant title	Total
FS/20/14/34917	**Dr C Coyle** BMBCh BA MRCP	Imperial College London	Determining the characteristics of drivers of persistent atrial fibrillation using distribution patterns of uniform wavefronts. *3 years*	£215,121
FS/20/18/34972	**Dr A Kaura** MSc BSc MBChB MRCP	Imperial College London	Using unstructured echocardiography and electrocardiography data from multicentre electronic health record systems for big data analytics. *2 years*	£150,707
FS/20/11/34750	**Dr A Miyazawa** MBChB MRCP	Imperial College London	Improving implantable cardioverter-defibrillator arrhythmia detection: development of a novel arrhythmia detection algorithm. *3 years*	£249,284
FS/19/22/34334	**Dr R Rajakulasingam** BSc MBBS MRCP	Imperial College London	Investigation of post-myocardial infarction left ventricular remodelling by diffusion tensor cardiac magnetic resonance. *3 years*	£246,452
FS/20/27/34981	**Dr S Salim** BSc MBBS	Imperial College London	Epidemiology of Chronic Venous Disease in England. *2 years, 4 months*	£124,464
FS/20/13/34857	**Dr A Hua** MRCP MBBS BSc	King's College London	Multi-parametric tissue characterisation of myocardial inflammation in autoimmune rheumatic diseases using cardiovascular magnetic resonance imaging. *3 years*	£255,962
FS/19/67/34697	**Dr C Peet** MA BMBCh	King's College London	The autoinflammatory basis of idiopathic recurrent pericarditis. *3 years*	£216,454
FS/19/21/34331	Student to be Appointed (Supervisor: Dr F Capon)	King's College London	The autoinflammatory basis of idiopathic recurrent pericardidtis. *3 years*	£194,351
FS/19/50/34566	**Dr G Argentesi** BMedSci BMBS MRCP MSc	Queen Mary University of London	Somatic GNA11 mutations: clues to cause and consequence of primary aldosteronism? *3 years*	£284,193
FS/19/47/34510	**Dr A Christensen** BMBCh MCROG	Queen Mary University of London	Linking the maternal immune system to cardiac function during preeclampsia. *3 years*	£252,000

Clinical Research Training Fellowships (continued)

FS/20/22/34640	**Dr S Naredi** BMedSci MBBS MRCP	Queen Mary University of London	Predicting hypertension mediated subclinical left ventricular hypertrophy using machine learning techniques. *3 years*	£251,134
FS/20/16/34945	**Dr A Salam** BSc MBBS MRCP	Queen Mary University of London	Therapeutic utility of targeting C-type natriuretic peptide to maintain endothelial integrity and offset pulmonary oedema and acute lung injury. *3 years*	£263,904
FS/19/48/34523	**Dr K Patel** MBBS BSc MRCP	University College London	CAAST study: Cardiac Amyloid and Aortic Stenosis in the TAVI era. *2 years*	£161,931
FS/19/44/34424	**Dr O Hanington** MSc MBBS MRCP PgCert	University of Bristol	Characterising and mapping hERG channel interactors: new insights into the molecular mechanisms underlying arrhythmia. *3 years*	£207,612
FS/20/19/34976	**Dr P Carter** BMedSc MBChB	University of Cambridge	Does clonal haematopoiesis drive atherosclerosis via IL-1β, or does atherosclerosis create a permissive environment to drive clonal haematopoiesis? *3 years*	£257,091
FS/19/66/34658	**Dr S Gu** BEng MBChB MRCP PgDip	University of Cambridge	Biomechanical assessment of plaque vulnerability. *3 years*	£218,840
FS/19/46/34445	**Dr M Meah** MBBS MRCP	University of Edinburgh	Effect of computed tomography coronary angiography on lifestyle and risk factor modification. *3 years*	£273,091
FS/20/12/34789	**Dr R Nadarajah** BA MBBChir MA MRCP	University of Leeds	Predicting patient-level new onset atrial fibrillation from population-based nationwide electronic health records: a precision medicine investigation using artificial intelligence. *3 years*	£188,229
FS/19/45/34443	**Dr D Sagar** BMedSci BMBS PgCert	University of Leeds	Diabetes-driven immunometabolic reprogramming of blood platelets. *3 years*	£241,395
FS/19/23/34370	**Dr C Thaitirarot** BSc MBChB MRCP	University of Leicester	Combined targeted and agnostic search for prognostic biomarkers in heart failure with preserved ejection fraction. *3 years*	£225,387
FS/19/65/34692	**Dr M Burrage** BSc MBBS FRACP	University of Oxford	Early detection of cardiotoxicity using cardiovascular magnetic resonance and spectroscopy in patients with breast or other thoracic cancer receiving radiotherapy and chemotherapy. *2 years*	£108,599
FS/20/15/34920	**Dr C Camm** MA BMBCh PGDip MRCP	University of Oxford	Elucidating the causal pathways between adiposity and atrial fibrillation. *2 years*	£144,603
FS/19/64/34673	**Dr A Pinho-Gomes** MD MSc MRCS	University of Oxford	Blood pressure management in atrial fibrillation, heart failure and multimorbidity. *2 years*	£132,592
FS/19/49/34541	**Dr T Nelson** BSc MBChB MRCP	University of Sheffield	Relationships between fibrin clot properties, clinical characteristics, other biomarkers and clinical outcomes in patients with atrial fibrillation. *3 years*	£278,999

Research Training Fellowship For Nurses and Allied Health Professionals

Reference number	Name	Institution	Grant title	Total
FS/19/51/34562	**Mrs H Waterhouse** BSc MSc	University of Leicester	Cardiac rehabilitation programme in patients following hospitalisation for decompensated chronic heart failure: the development of an intervention to improve patient acceptance of referral. *2 years, 6 months*	£172,388
FS/20/1/34946	**Mrs H Eftekhari** BSc MSc MRes	University of Warwick	Self-management support in people with postural orthostatic tachycardia syndrome (POTS): co-producing a supportive self-management intervention and testing for feasibility. *4 years*	£217,854

Infrastructure Grants

Reference number	Name	Institution	Grant title	Total
IG/20/1/34747	**Prof V O'Donnell** BSc PhD	Cardiff University	Funds to purchase a Sciex 6600 Time-of-Flight Mass Spectrometer to be based at the Cardiff Lipidomics Facility at Cardiff University. *1 year*	£285,024
IG/20/2/35021	**Prof P Madeddu** MD CS FAHA	University of Bristol	Funds towards the purchase of a rodent dedicated Vevo 3100 Imaging System. *1 year*	£126,526

Special Project Grants

Listed alphabetically by institute

Reference number	Name	Institution	Grant title	Total
SP/19/5/34806	**Dr F Drenos** BSc PhD	Brunel University London	The BHF-Turing Cardiovascular Data Science Awards (Second call): Integration of time and genetic instrument dependent causal methods for the construction of a metabolomics network for the assessment of drug compounds (joint funding with The Alan Turing Institute). *1 year*	£31,090
SP/20/1/35122	**Prof S Harding** BSc PhD	Imperial College London	BHF Centres for Regenerative Medicine cross-centre activity.	£31,174
SP/19/4/34677	**Prof M Mayr** MD PhD	King's College London	Vascular Ageing, Rejuvenation and Healthspan Extension (joint funding with BIRAX). *3 years*	£179,975
SP/20/4/35124	**Prof E Behr** MA MBBS MD FRCP FESC	St George's University of London	The Genomic basis of Unexplained Cardiac Arrest: the GenUCA Investigators (joint funding with DZHK and DHF). *4 years*	£731,434
SP/20/2/34841	**Dr G Captur** MD MRCP MSc PhD	University College London	MyoFit46: multi-morbidity life-course approach to myocardial health – a cardiac sub-study of the MRC National Survey of Health and Development (NSHD). *5 years*	£550,789

Special Project Grants (continued)

SP/19/7/34810	**Prof U Benedetto** MD PhD	University of Bristol	The BHF-Turing Cardiovascular Data Science Awards (Second call): Machine learning for risk prediction in adult cardiac surgery in the United Kingdom (joint funding with The Alan Turing Institute). *2 years*	£62,473
SP/20/3/35123	**Dr M Dweck** BSc MB ChB MRCP FACC	University of Edinburgh	Quantitative-imaging in cardiac transthyretin amyloidosis (I-CARE) (joint funding with DZHK and DHF). *4 years*	£386,675
SP/19/9/34812	**Prof J Wardlaw** CBE BSc (Hons) MBChB (Hons) FRCR FRCP MD FMedSci FESO FRSE	University of Edinburgh	The BHF-Turing Cardiovascular Data Science Awards (Second call): Uncovering retinal microvascular predictors of compromised brain haemodynamics in small vessel disease (joint funding with The Alan Turing Institute). *2 years*	£66,000
SP/19/6/34809	**Dr J Dennis** BSc MSc PhD	University of Exeter	The BHF-Turing Cardiovascular Data Science Awards (Second call): Precision medicine in type 2 diabetes: developing and testing a decision support tool for primary care to optimise the selection of glucose-lowering therapy (joint funding with The Alan Turing Institute). *1 year, 6 months*	£65,473
SP/19/8/34811	**Dr M Hall** BSc MSc PhD	University of Leeds	The BHF-Turing Cardiovascular Data Science Awards (Second call): Post myocardial infarction disease trajectories: process mining of 145 million hospitalised events (joint funding with The Alan Turing Institute). *1 year, 6 months*	£57,582
SP/19/10/34813	**Prof M Tomaszewski** MD FAHA FRCP	University of Manchester	The BHF-Turing Cardiovascular Data Science Awards (Second call): Molecular causal networks of hypertension – a machine learning approach (joint funding with The Alan Turing Institute). *1 year, 6 months*	£24,434
SP/19/3/34678	Health Data Research UK		BHF Data Science Centre. *5 years*	£10,000,000

Clinical Study Grants

Reference number	Name	Institution	Grant title	Total
CS/20/3/34738	**Mr N Drury** BM (Hons) PhD FRCS (CTh)	University of Birmingham	del Nido versus St Thomas' blood cardioplegia: a multi-centre randomised controlled trial in children undergoing cardiac surgery. *3 years*	£566,211
CS/20/2/34731	**Prof P Mark** MB ChB (Hons) PhD FRCP	University of Glasgow	Aldosterone bloCkade for Health Improvement EValuation in End-stage renal disease. Proposal for a randomised double-blind placebo-controlled trial in the United Kingdom (ACHIEVE-UK). *4 years, 8 months*	£650,557
CS/20/1/34732	**Prof R Kharbanda** BSc MBChB PhD FRCP	University of Oxford	British Heart Foundation Randomised Clinical Trial of Cerebral Embolic Protection in Transcatheter Aortic Valve Implantation (BHF PROTECT-TAVI). *6 years*	£2,251,003

Programme Grants

Listed alphabetically by institute

Reference number	Name	Institution	Grant title	Total
RG/20/9/35101	**Prof C Emanueli** BSc (Hons) PhD	Imperial College London	Exosomes in ischaemic heart disease accompanied with diabetes mellitus: from pathogenic mediators to novel therapeutic agents (renewal). *5 years*	£1,000,000
RG/19/6/34387	**Dr D O'Regan** FRCP FRCR PhD	Imperial College London	Machine learning to model disease mechanisms and predict outcomes in cardiomyopathy. *5 years*	£1,011,285
RG/20/1/34802	**Prof R Botnar** PhD	King's College London	Detection of high-risk plaque with tropoelastin-specific and multicontrast coronary MRI (renewal). *5 years*	£1,258,715
RG/19/11/34633	**Prof M Giacca** MD PhD	King's College London	Functional selection of novel biotherapeutics for myocardial infarction and heart failure using arrayed AAV libraries coding for the secretome. *5 years*	£1,420,289
RG/20/4/34803	**Prof S Niederer** DPhil	King's College London	Selecting rhythm or rate control in patients with both atrial fibrillation and heart failure. *5 years*	£691,686
RG/20/3/34823	**Prof A Shah** MD FRCP FESC FMedSci	King's College London	Redox-regulated adaptive pathways in heart failure (renewal). *5 years*	£1,446,778
RG/20/8/34995	**Prof F Marelli-Berg** MD PhD	Queen Mary University of London	Investigating the topography of adaptive immunity in the cardiovascular system: basic mechanisms and therapeutic potential (renewal). *5 years*	£1,332,534
RG/19/7/34577	**Prof K Suzuki** MD PhD	Queen Mary University of London	Advancing mesenchymal stromal cell-dressing therapy for myocardial repair: application expansion, technical innovation and mechanistic investigations (renewal). *5 years*	£1,263,590
RG/19/8/34500	**Prof T Warner** BSc PhD	Queen Mary University of London	The association between platelet age and platelet function: relevance to thrombotic risk. *5 years*	£845,282
RG/19/5/34463	**Prof A Gourine** PhD	University College London	Cardiac vagus and exercise in health and disease (renewal). *5 years*	£1,022,603
RG/19/4/34452	**Prof S Wannamethee** PhD FFPH	University College London	The British Regional Heart Study: a resource for studying the causes, pathways and prevention of cardiovascular disease and disability among older British men. *5 years*	£893,651
RG/20/2/34763	**Prof M Bennett** BSc MBChB PhD MA FRCP FAHA FMedSci	University of Cambridge	Causes, consequences and therapeutic potential of cell senescence in atherosclerosis (renewal). *5 years*	£1,397,236
RG/20/5/34796	**Prof A Baker** BSc (Hons) PhD FAHA FESC FMedSci FRSE	University of Edinburgh	Exploitation of the response to injury in saphenous vein bypass grafts (renewal). *5 years*	£849,570

Programme Grants (continued)				
RG/20/10/34966	**Prof N Mills** MBChB BSc PhD FESC FRCP	University of Edinburgh	High-sensitivity cardiac troponin beyond the acute coronary syndrome. *5 years*	£1,270,434
RG/20/6/35095	**Prof C Loughrey** BVMS PhD FHEA MRCVS	University of Glasgow	Targeting RUNX to attenuate adverse cardiac remodelling and progression to heart failure. *5 years*	£1,206,845
RG/19/9/34655	**Prof S Ye** MD PhD FRCPath	University of Leicester	A comprehensive study to uncover and understand genetic influences on vascular smooth muscle cell behaviour in relation to cardiovascular diseases (renewal). *3 years*	£574,204
RG/20/7/34866	**Prof J Gibbins** BSc PhD	University of Reading	Understanding differences in platelet function and regulation in health and cardiometabolic disease: towards personalised and more effective anti-platelet treatment (renewal). *5 years*	£1,399,398
RG/19/10/34506	**Prof P Evans** BSc MSc PhD	University of Sheffield	Role of the transcription factor twist1 in endothelial pathophysiology and atherosclerosis progression (renewal). *5 years*	£799,778

New Horizons Grants

Reference number	Name	Institution	Grant title	Total
NH/20/1/34705	**Prof V Diaz** MEng PhD	University College London	VIRTUOSO: a virtual platform to enable precision vascular surgery – application on chronic type-b aortic dissection. *3 years*	£299,122
NH/19/1/34595	**Prof D Dawson** DM FRCP DPhil FESC	University of Aberdeen	The next leap in cardiac magnetic resonance imaging: cycling the field. *3 years*	£277,722

Translational Awards

Reference number	Name	Institution	Grant title	Total
TG/19/2/34831	**Prof C Antoniades** MD PhD	University of Oxford	Using radiomics and artificial intelligence to predict cardio-embolic stroke. *2 years*	£583,145
TG/19/1/34451	**Prof J Gunn MA** MB BChir MD MRCP	University of Sheffield	How will virtual (computed) fractional flow reserve (vFFR) impact the management of coronary artery disease? (VIRTU-4). *2 years*	£295,258

Project Grants

Listed alphabetically by institute

Reference number	Name	Institution	Grant title	Total
PG/19/22/34203	**Dr G McGregor** BA (Hons) MPhil PhD	Coventry University	Supervised exercise training for people with postural tachycardia syndrome: a feasibility RCT. *3 years*	£190,405
PG/20/4/34680	**Dr J Hanley** PhD MPhil BSc	Edinburgh Napier University	Who benefits from cardiovascular risk reduction programmes? Building a Scottish observatory to measure the impact of blood pressure telemonitoring and future cardiovascular risk reduction interventions. *3 years*	£192,845
PG/20/13/34994	**Dr J Ahnstrom** BSc MSc PhD	Imperial College London	FV-short as a major regulator of TFPI during the initiation of coagulation. *3 years*	£232,650
PG/20/16/35047	**Dr G Birdsey** BSc PhD	Imperial College London	The transcription factor ERG controls lymphangiogenesis and lymphatic endothelial cell gene expression. *3 years*	£276,858
PG/19/78/34733	**Prof D Francis** MA MB BChir MD FRCP	Imperial College London	Tensor-mapping to resolve the Achilles heel of echocardiographic strain imaging. *3 years*	£241,367
PG/19/75/34686	**Dr K Paschalaki** MD PhD	Imperial College London	Understanding the molecular mechanisms of endothelial senescence in COPD and association with clinical readouts of vascular ageing. *3 years*	£297,760
PG/20/8/34856	**Prof C Terracciano** MD PhD	Imperial College London	Myocardial slices for the study of mechanosensitive molecular mechanisms of myocardial fibrosis in cardiac fibroblasts. *1 year, 6 months*	£119,113
PG/19/46/34307	**Prof K Jordan PhD** MSc BComm (Acc)	Keele University	Cardiovascular prognosis in patients with undiagnosed chest pain: an electronic health record cohort study. *2 years*	£201,686
PG/19/72/34642	**Dr K Authi** BSc MSc PhD	King's College London	Characterisation of RASA3 interaction with integrin and cytoskeletal proteins in platelets. *3 years*	£235,981
PG/19/65/34574	**Dr J Burgoyne** PhD	King's College London	Studying transforming growth factor-beta-activated kinase (TAK1) thiol-dependent activation and its role in heart failure. *3 years*	£291,948
PG/19/23/34259	**Prof P Chowienczyk** BSc MBBS FRCP	King's College London	First-phase ejection fraction to guide elective aortic valve replacement in asymptomatic aortic stenosis. *3 years*	£225,515
PG/19/42/34429	**Dr A Ivetic** BSc (Hons) ARCS PhD	King's College London	Assessing the impact of blocking ectodomain shedding of L-selectin in myocardial infarction. *3 years*	£246,578
PG/19/52/34497	**Dr T Kampourakis** PhD Diploma in Biochemistry and Molecular Biology (equivalent to MSC)	King's College London	Targeting the myofilaments to correct heart muscle dysfunction. *3 years*	£212,446

Project Grants (continued)

PG/19/34/34388	**Prof C Shanahan** BSc PhD	King's College London	Investigating the role of bromodomain protein BRD9 in vascular calcification. *3 years*	£292,415
PG/19/44/34368	**Dr S Williams** BSc MBChB PgCert PhD MRCP (UK) MIET	King's College London	Atrial cardiac magnetic resonance imaging in patients with embolic stroke of unknown source without documented atrial fibrillation. *2 years*	£182,072
PG/19/56/34550	**Dr A Zampetaki** PhD	King's College London	The role of LOC105 in endothelial cell dysfunction in diabetes mellitus. *3 years*	£248,338
PG/19/71/34632	**Dr E Herrett** BSc MSc PhD	London School of Hygiene and Tropical Medicine	Inequalities and missed opportunities in prevention of cardiovascular disease. *2 years*	£148,283
PG/20/15/35041	**Dr S Bamforth** BSc PhD	Newcastle University	Pharyngeal arch cell signalling in arch artery morphogenesis. *3 years*	£276,628
PG/19/33/34385	**Prof P Eaton** BSc PhD	Queen Mary University of London	p38-MAPK mediates cardiac fibrosis via DNA hypomethylation. *3 years*	£296,996
PG/20/6/34835	**Dr T Iskratsch** PhD Dipl Ing	Queen Mary University of London	The regulation of mechanosensing in healthy and atherosclerotic vascular smooth muscle cells. *3 years*	£238,020
PG/20/2/34618	**Dr F Lewis-McDougall** BSc PhD	Queen Mary University of London	Therapeutic potential of human induced pluripotent stem cell-derived cardiac progenitor cells: direct comparison with endogenous cardiac progenitor cells from the same patients. *3 years*	£260,799
PG/19/60/34585	**Dr T Nightingale** DPhil MBiochem	Queen Mary University of London	Controlling the haemostatic response: novel regulatory mechanisms for von Willebrand factor secretion from endothelial cells. *3 years*	£229,656
PG/20/18/35058	**Prof A Tinker** BA MB BS FRCP PhD FMedSci FHEA	Queen Mary University of London	Resistance to inhibitors of cholinesterase 8B and regulation of cardiovascular function. *2 years*	£159,710
PG/19/73/34663	**Dr M Voisin** PhD	Queen Mary University of London	Impact of a neutrophil subpopulation infiltrating the lymph nodes on T-cell effector functions during ischaemia-reperfusion injury: a new cellular target for immunotherapy? *3 years*	£255,831
PG/19/61/34586	**Prof D Grieve** BSc PhD	Queen's University Belfast	Defining key mechanisms underlying NOX4 signalling in endothelial colony-forming cells towards improved vasoreparative capacity in ischaemic disease. *3 years*	£282,730
PG/19/50/34436	**Prof A Stitt** BSc PhD	Queen's University Belfast	Modulating glycolysis in vascular progenitors to improve tissue regeneration in ischaemic disease. *3 years*	£265,727
PG/19/86/34788	**Dr Q Su** PhD	Queen's University Belfast	Defining microRNA-378A and ERRγ as key determinants underlying adverse cardiomyocyte and endothelial cell remodelling in insulin resistance. *3 years*	£276,430

Project Grants (continued)

PG/19/58/34581	**Prof E Behr** MA MBBS MD FRCP FESC	St George's University of London	A genotype-phenotype association study of ajmaline provocation and its role in the diagnosis of Brugada syndrome. *2 years*	£294,754
PG/19/31/34343	**Prof J Deanfield** BA BChir MB FRCP FESC FACC	University College London	Progression of cardio-renal phenotypes in young people with type 1 diabetes: the AdDIT cohort. *3 years*	£292,323
PG/19/37/34399	**Prof C Ruhrberg** PhD	University College London	NRP1-mediated cell adhesion for tissue vascularisation. *3 years*	£235,416
PG/20/20/35060	**Prof P Turowski** PhD	University College London	Paracellular and transcellular leakage at the blood-brain barrier. *1 year, 6 months*	£108,549
PG/19/51/34493	**Prof D Yellon** PhD DSc	University College London	Gasdermin D: a novel target for dual protection against acute and chronic effects of cardiac ischaemia and reperfusion injury? *3 years*	£295,858
PG/20/17/35050	**Dr N Mutch** BSc (Hons) PhD	University of Aberdeen	Characterisation and function of novel profibrinolytic receptors on the platelet membrane. *3 years*	£299,938
PG/19/30/34327	**Dr D Thompson** BSc PhD	University of Aberdeen	The FPR2 ligand W-peptide: a new therapeutic approach to treat atherosclerosis. *3 years*	£252,229
PG/19/43/34432	**Dr J Gonzalez** Bsc (Hons) MRes PhD	University of Bath	Revealing the mechanisms by which milk sugars exaggerate postprandial lipaemia: implications for cardiovascular disease risk. *2 years, 6 months*	£167,770
PG/19/85/34776	**Dr N Kalia** BSc PhD	University of Birmingham	Do dual anti-platelet treatments (DAPTs) protect the coronary microcirculation of the injured and diabetic heart? *3 years*	£238,226
PG/20/22/35093	**Prof P Kirchhof** MD FESC FRCP (Edin)	University of Birmingham	Defining clusters of patients with atrial fibrillation at risk of heart failure and death. *1 year*	£73,801
PG/19/87/34792	**Dr M Madhani** BSc PhD	University of Birmingham	Nitrite-induced redox regulation of vascular function in hypertension. *3 years*	£254,917
PG/19/39/34415	**Dr M Bond** BSc PhD	University of Bristol	Breaking the cycle of cardiac fibrosis: harnessing the anti-fibrotic effects of cAMP. *3 years*	£233,547
PG/19/21/34190	**Dr A Fraser** BA MA MPH PhD	University of Bristol	Cardiometabolic health of women with and without adverse pregnancy outcomes: an electronic health records study. *3 years*	£249,879
PG/19/26/34302	**Prof J Hancox** BSc PhD DSc FRSB FBPhS	University of Bristol	Elucidating the effects of a short QT syndrome 'hotspot' mutation and hERG channel gating pathway modifier. *3 years*	£195,405
PG/19/77/34723	**Dr S Harmer** BSc PhD	University of Bristol	Rescuing defective trafficking of mutant channel complexes in the long QT syndrome. *3 years*	£202,013
PG/20/5/34801	**DR H Kong** BSc (Hons) PhD	University of Bristol	Interactions between microscopic Ca2+ signalling and electrical stability in the heart. *3 years*	£265,156

Project Grants (continued)

PG/19/49/34440	**Prof P Madeddu** MD CS FAHA	University of Bristol	A novel pericyte mechanism involving the transcriptional activator Nrf2 and the transcriptional repressor Bach1 modulates antioxidant defence response and angiopoietin-dependent vascular stabilisation during reparative angiogenesis. *3 years*	£212,341
PG/19/29/34319	**Prof H Mellor** BSc PhD	University of Bristol	Mechanisms of neovascularisation: the role of DAAM2 in blood vessel outgrowth. *3 years*	£201,066
PG/20/1/34617	**Prof S Mundell** BSc (Hons) PhD	University of Bristol	Regulation of TP thromboxane receptor expression and activity by selective P2Y12 receptor antagonists in human platelets: consequences for dual antiplatelet therapy? *3 years*	£226,673
PG/20/7/34849	**Prof S Satchell** BSc MBBS MRCP PhD	University of Bristol	Heparan sulphate: a key component of the coronary microvascular endothelial glycocalyx and a potential therapeutic target? *3 years*	£297,493
PG/20/12/34982	**Dr M Harper** MA PhD	University of Cambridge	Investigating the roles of neutrophil extracellular traps in arterial thrombosis. *3 years*	£202,947
PG/19/59/34582	**Dr A Jackson** MA PhD	University of Cambridge	A structural and/or signalling role for ventricular NaV1.5 in a murine model for Brugada syndrome. *3 years*	£299,463
PG/19/74/34670	**Prof H Markus** BM BCh BA FRCP DM	University of Cambridge	What causes lacunar stroke? A 7T magnetic resonance imaging study. *3 years*	£293,089
PG/20/11/34957	**Prof S Ozanne** BSc Hons PhD	University of Cambridge	Does metformin in obese pregnancy programme long-term cardiac and metabolic dysfunction in adult offspring? *3 years*	£289,403
PG/20/3/34651	**Prof I Wilkinson** MA DM FRCP FAHA	University of Cambridge	Investigating the relevance of skin sodium and salt sensitivity of blood pressure in determining the response to anti-hypertensive treatment. *2 years*	£167,235
PG/19/79/34742	**Prof C Sutherland** BSc PhD	University of Dundee	RABEP2 is a novel GSK3 substrate that represents a single therapeutic target to reduce both hyperglycaemia and microvascular disease in diabetes. *3 years*	£294,505
PG/19/35/34389	**Dr S Fountain** BSc PhD	University of East Anglia	Role of purinergic signalling in human adipocyte function. *3 years*	£260,109
PG/19/76/34696	**Dr G Mok** BSc MSc PhD	University of East Anglia	Characterising the embryonic origin of haemangioblasts, their trajectories and lineage decisions at single cell resolution. *3 years*	£239,073
PG/19/40/34422	**Prof D Newby** BA BSc PhD BM DM DSc FRSE FESC FACC FMedSci	University of Edinburgh	Bioprosthetic valve thrombosis. *2 years*	£256,948
PG/19/28/34310	**Prof C Berry** BSc MBChB PhD FRCP Gla FRCP Edin FACC FESC	University of Glasgow	The clinical utility of cardiac magnetic resonance imaging in patients with angina but no obstructive coronary disease (CorCMR): a diagnostic study and nested randomised trial. *3 years*	£296,404

Project Grants (continued)

PG/19/64/34434	**Dr N Lang** BSc (Hons) MB ChB PhD FRCP	University of Glasgow	Markers and mediators of angiogenesis inhibitor-induced vascular and myocardial toxicity: a prospective study in patients with cancer. *2 years, 6 months*	£256,744
PG/19/84/34771	**Dr P Maffia** BSc (Hons) MPhil PhD FHEA FRSB FBPhS FESC	University of Glasgow	Defining the individual and integrated roles of inflammatory chemokine receptors (iCCRs) in atherosclerosis. *3 years*	£298,529
PG/20/19/35061	**Dr A Miller** BSc (Hons) PhD	University of Glasgow	Determining the role of the ADMA-DDAH1 pathway in ischaemic stroke. *3 years*	£245,780
PG/19/55/34545	**Prof G Smith** BSc PhD	University of Glasgow	Adrenergic modulation of ventricular transmural conduction velocity is a novel factor governing electrical excitability in health and disease. *3 years*	£262,957
PG/19/54/34511	**Prof C Gale** BSc MBBS PhD MEd FESC MSc FRCP	University of Leeds	Health-related quality of life and clinical outcomes following acute myocardial infarction: national longitudinal cohort study. *3 years*	£234,361
PG/19/80/34753	**Dr S Ponnambalam** BSc PhD	University of Leeds	The CXCL2 chemokine promotes VEGF-A-regulated angiogenesis. *3 years*	£253,313
PG/19/68/34614	**Prof D Steele** BSc PhD	University of Leeds	Mechanisms of cardiomyocyte dysfunction induced by extracellular histones. *3 years*	£245,105
PG/19/81/34758	**Dr N Turner** BSc PhD	University of Leeds	Investigating the role and regulation of the Piezo1 mechanosensitive cation channel in cardiac fibroblasts. *3 years*	£271,148
PG/19/47/34335	**Prof E White** BSc PhD	University of Leeds	The role of Purkinje fibres in mechanically-induced arrhythmias. *3 years*	£255,054
PG/19/27/34305	**Prof N Brindle** BSc PhD	University of Leicester	Regulation of the switch to pathogenic angiopoietin signalling and its involvement in cardiovascular diseases. *2 years*	£147,301
PG/20/10/34886	**Prof G Murphy** BSc MBChB MD FRCS	University of Leicester	Preoperative weight management to improve outcomes of cardiac surgery in adults with obesity (SLIMCARD): a multicentre feasibility RCT. *2 years*	£262,723
PG/19/83/34765	**Dr J Bowes** BSc PhD	University of Manchester	Cardiovascular health in patients with inflammatory joint diseases: a genetic approach to understanding excess mortality. *2 years*	£184,701
PG/19/25/34301	**Dr P Brownbill** BSc (Hons) MPhil PhD	University of Manchester	Evaluation of the safety of maternal anti-hypertensive medicines on placental vascular function. *3 years*	£203,365
PG/19/63/34601	**Dr K Dibb** BSc PhD	University of Manchester	The role of alternans in generating atrial fibrillation in heart failure: a mechanistic study to understand the importance of remodelled Ca handling. *3 years*	£233,243
PG/20/14/35030	**Dr K Hentges** BA PhD	University of Manchester	Identification of genes associated with cardiac development using 'machine learning'. *3 years*	£246,410

Project Grants (continued)

PG/19/66/34600	**Dr W Liu** PhD MB	University of Manchester	Investigating p21 protein activated kinase-3 (Pak3) regulation of cardiac autophagy: a target for slowing down heart failure progression? *2 years*	£177,580
PG/19/82/34760	**Dr L Venetucci** MB ChB MRCP (UK) PhD	University of Manchester	Modulation of cardiac systolic and diastolic properties by oxidation dependent activation of protein kinase G: is phospholamban the only regulator? *3 years*	£287,668
PG/19/53/34499	**Dr X Wang** MB ChB PhD	University of Manchester	A new mechanism underlying hypertrophic progression to heart failure: the role of Ras-association domain family protein isoform 7 (RASSF7). *3 years*	£223,762
PG/19/69/34636	**Prof P Bath** BSc MB BS MD FRCPath FRCP FESO FAHA FBHS FBPhS FWSO DSc FMedSci	University of Nottingham	Assessment of modern machine learning methods and conventional statistical regression techniques in diagnosis and prediction of outcome after acute stroke using big data. *2 years, 6 months*	£145,079
PG/19/48/34433	**Prof K Channon** MD FRCP FMedSci	University of Oxford	Regulation of uteroplacental vascular remodelling by maternal endothelial cell tetrahydrobiopterin: role in pre-eclampsia and programmed cardiovascular risk in mothers and offspring. *3 years*	£289,945
PG/20/21/35082	**Prof R Choudhury** MA DM FRCP	University of Oxford	Development of a system for real time integration and display of quantitative multimodality data during cardiac catheterisation. *3 years*	£183,050
PG/19/36/34396	**Prof K Dora** BSc PhD MA	University of Oxford	TRPV4 channels in the feedback control of coronary artery myogenic tone. *3 years*	£180,455
PG/19/45/34419	**Dr K Gehmlich** PhD	University of Oxford	The role of ALPK3 in autosomal dominant hypertrophic cardiomyopathy. *2 years, 6 months*	£248,907
PG/19/41/34426	**Prof C Monaco** MD PhD	University of Oxford	The immune checkpoint CD200-CD200R as a therapeutic pathway in cardiovascular disease. *2 years, 6 months*	£267,509
PG/19/67/34607	**Dr C Sigalas** PhD BSc	University of Oxford	Catecholaminergic polymorphic ventricular tachycardia: investigating the relationships between RyR2 dysfunction in the brain and sudden cardiac death. *3 years*	£264,096
PG/19/38/34403	**Prof R Sitsapesan** BSc MSc PhD	University of Oxford	Statin-induced dysfunction of ryanodine receptor channels. *3 years*	£221,917
PG/19/70/34630	**Dr E Tzima** PhD	University of Oxford	Molecular determinants in endothelial Shc required for flow-mediated physiological and pathological responses. *3 years*	£263,388
PG/19/24/34266	**Prof A Clerk** BSc PhD	University of Reading	The role of p90 ribosomal S6 kinase 1 (RSK1) in heart failure. *1 year*	£98,052
PG/19/32/34383	**Prof A Clerk** BSc PhD	University of Reading	Effects of dabrafenib on cardiac hypertrophy and heart failure. *1 year, 6 months*	£121,400

Project Grants (continued)

PG/19/57/34568	**Dr A McNeish** BSc PhD	University of Reading	Characterisation of the mechanisms of omega-3 polyunsaturated fatty acids (n-3 PUFA) and novel structural analogues on the activation of KATP channels and subsequent regulation of blood pressure. *3 years*	£225,912
PG/19/62/34593	**Dr S Vaiyapuri** MSc PhD	University of Reading	Impact of pro-resolution mediators in the control of thromboinflammatory responses. *3 years*	£204,099
PG/20/9/34859	**Prof J McCarron** BSc PhD	University of Strathclyde	Mitochondrial amplification of local calcium entry and vascular contraction in hypertension. *3 years*	£263,268

Big Beat Challenge Seed Funding

Reference number	Name	Institution	Grant title	Total
BBC/19/1/35107	**Prof Dr J Kluin**	Amsterdam UMC	Hybrid Heart. *6 months*	£50,000
BBC/19/4/35108	**Prof F Rademakers** MD PhD	Catholic University of Leuven	Enhancing Cardiac care tHrOugh Extensive Sensing (ECHOES). *6 months*	£50,000
BBC/19/2/35105	**Prof Z Mallat** PhD MD	University of Cambridge	The immunobiology of human atherosclerosis: from single cell mapping to transformative immunotherapy. *6 months*	£50,000
BBC/19/3/35106	**Prof H Watkins** MD PhD FRCP FMedSci FRS	University of Oxford	Curing Genetic Heart Muscle Disease (CureHeart). *6 months*	£50,000

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