



# **Contents**

Introduction	4
BHF Chairholders	5
Awards made during the year 1 April 2022 – 31 March 2023	8
Fellowships	8
Big Beat Challenge	15
Strategic Initiatives	15
Infrastructure Grant	16
Special Project Grants	16
Programme Grants	17
Cardiovascular Catalyst Awards	17
New Horizons Grant	18
Clinical Study Grants	18
Translational Award	18
Project Grants	19

# Introduction

In the year April 2022 to March 2023 British Heart Foundation (BHF) awarded grants totalling £115.6 million\* for research into the causes, prevention, diagnosis and treatment of diseases of the heart and circulation.

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. Applicants for Translational Awards, and shortlisted applicants for Personal Chairs, and for Intermediate and Senior Fellowships are interviewed.

In 2022/2023 the Board of Trustees awarded £30 million to the University of Oxford for the Big Beat Challenge, following selection by an International Advisory Panel.

The Chairs and Programme Grants Committee awarded £18.3 million. This included £0.8 million for a new BHF Personal Chair for Professor Matthew Bown at the University of Leicester, £0.6 million to four Cardiovascular Catalyst Awards, and £2.9 million to three Strategic Initiatives in partnership with other UK research funders.

There were 26 awarded Chairs (also referred to as BHF Professors) on 31 March 2023, with 25 of these in post. (Professor Bown had not yet commenced.) Each chairholder receives a site-visit 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 £7 million to four applications.

The Translational Awards Committee awarded £0.059 million\*\* to one application 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 £30.9 million to 82 applications\*\*\*, and the Project Grants Committee awarded £15.3 million to 59 applications.

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

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

#### Notes

- \* This figure includes supplements made to existing grants, as well as £1,102,692.21 towards 47 Open Access Block Grants and £42,100 towards 13 Small Meetings which are not listed in the following pages.
- \*\* This figure includes only the expected payments to the next milestone for grants which are conditional upon the successful achievement of project milestones.
- \*\*\* One award totalling £946,119.21 included in the figures above was declined.

# BHF Chairholders Listed by location

# University of Birmingham

The Chair of Cardiovascular Sciences and Cellular Pharmacology

Held by: Professor S P Watson

**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

to 31 March 2023

**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

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

# University of Bristol

The Chair of Cardiovascular Science and Clinical Epidemiology

Held by: Professor D A Lawlor

**Major interest:** Population health – links between ethnicity, genetics and health during pregnancy on the long-term cardiovascular health of mothers and children.

# University of Cambridge

The Chair of Cardiovascular Sciences

Held by: Professor M R Bennett

**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

**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

**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** to 17 October 2022

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

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

# University of Edinburgh

The BHF Chair of Cardiology

Held by: Professor N L Mills

**Major interest:** Using digital healthcare data to learn about heart disease and its consequences and cardiovascular diagnostics.

# University of Edinburgh

The Duke of Edinburgh Chair of Cardiology

Held by: Professor D E Newby

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

# University of Leeds

The Chair of Cardiovascular and Diabetes Research

Held by: Professor M T Kearney

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

# University of Leeds

The Chair of Cardiovascular Imaging

Held by: Professor S Plein

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

# University of Leicester

The Chair of Vascular Surgery

Held by: Professor M Bown

from 1 April 2023

**Major interest:** Causes of, and screening for, abdominal aortic aneurysms, and treatments for peripheral arterial disease.

# University of Leicester

The Chair of Cardiac Surgery

Held by: Professor G J Murphy

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

# Imperial College London

The Chair of Cardiovascular Science

Held by: Professor C Emanueli

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

# King's College London

The Chair of Molecular Cardiology

Held by: Professor M Gautel

**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

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

# King's College London

The Chair of Cardiology

Held by: Professor A M Shah

**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.

# Queen Mary University of London

The Chair of Cardiovascular Immunology

Held by: Professor F M Marelli-Berg

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

### University of Manchester

The Chair of Cardiology

Held by: Professor B D Keavney

Major interest: Genetics of heart disease.

# University of Oxford

The BHF Chair of Cardiovascular Medicine

Held by: Professor C Antoniades

**Major interest:** How fat in the body and surrounding arteries communicates with the heart and blood vessels, leading to heart attacks and strokes.

# University of Oxford

The Chair of Cardiovascular Medicine

Held by: Professor S Bhattacharya

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

# University of Oxford

The Chair of Cardiovascular Medicine

Held by: Professor B Casadei

**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

**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 R Collins

**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

**Major interest:** 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

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

# Awards made during the year 1 April 2022 – 31 March 2023

# **Fellowships**

Listed alphabetically by institute

#### Non-clinical Fellowships

Senior E	Basic	Science	Research	<b>Fellowships</b>
----------	-------	---------	----------	--------------------

Reference number	Name	Institution	Grant title	Total
FS/SBSRF/22/31031	Prof C Mauro	University of Birmingham	Investigating and exploiting lactate signalling in athero-immunometabolism. 60 months	£828,220.39
FS/SBSRF/22/31036	Dr X Li	University of Cambridge	Investigating the association between inflammation and microtubule-guided cardiac inotropy. 60 months	£1,007,524.00
FS/SBSRF/22/31037	Prof S De Val	University of Oxford	An investigation into the regulatory pathways controlling coronary arterial differentiation. 60 months	£913,199.94
FS/SBSRF/22/31033	Dr S Reilly	University of Oxford	Molecular mechanisms of aberrant calcitonin receptor localisation in human atrial fibroblasts in persistent atrial fibrillation. 60 months	£957,218.80
FS/SBSRF/22/31022	Dr D Sparrow	University of Oxford	Investigation of the mechanisms of environmental causes of congenital heart disease. 60 months	£904,725.99

#### Intermediate Basic Science Research Fellowships

Reference number	Name	Institution	Grant title	Total
FS/IBSRF/22/25121	Dr L Rolas	Queen Mary, University of London	Regulation of the neutrophil oxidative response by the vascular endothelium: functional implications during ageing. 60 months	£699,273.23
FS/IBSRF/22/25144	Dr A Vujic	University of Cambridge	Characterisation of mitochondrial metabolites and redox system as regulators of cellular adaptation during exercise in heart failure with preserved ejection fraction. 60 months	£813,484.00
FS/IBSRF/22/25130	Dr C Duval	University of Leeds	Factor XIII-A V34L variant and inflammation in thromboembolism. 60 months	£787,859.78
FS/IBSRF/22/25110	Dr N Akbar	University of Oxford	Harnessing endothelial cell extracellular vesicles in acute myocardial infarction. 60 months	£749,762.46

### Career Re-entry Research Fellowship

Reference number	Name	Institution	Grant title	Total
FS/CRERF/DJT/23/22502	Dr A Ronksley	University of Nottingham	Joint BHF/Daphne Jackson Fellowship: Application of a bioinformatics pipeline to evaluate the cardiac transcriptomic profile in myotonic dystrophy. 36 months	£149,967.96

# Immediate Postdoctoral Basic Science Research Fellowships

Reference number	Name	Institution	Grant title	Total
FS/IPBSRF/22/27059	Dr K McGurk	Imperial College London	Rare variant and phenotype analyses of adult cardiac trabecular morphology in the UK Biobank. <i>36 months</i>	£224,899.63
FS/IPBSRF/22/27050	Dr I Hall Balcazar	University of Edinburgh	Defining and exploiting the reversibility of EndMT in atherosclerosis. 48 months	£355,690.34
FS/IPBSRF/22/27042	Dr R Hillary	University of Edinburgh	Branching out: investigating the role of protein glycosylation in the biology and prediction of cardiovascular disease. 48 months	£280,724.54
FS/IPBSRF/22/27060	Mr M Nazarzadeh Larzjan	University of Oxford	Temporal trends, risk factors and pharmacological treatments of valvular heart disease: triangulation of evidence. 36 months	£205,755.00

#### 4-year PhD Studentships

Reference number	Name	Institution	Grant title	Total
FS/4yPhD/F/22/34187	Prof J Mitchell	Imperial College London	ICL 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Ms Ana Cammack; Mr Iyobel Kibreab; Ms Sophie Newton; Ms Clara Rodrigo Gonzalez. <i>48 months</i>	£634,168.00
FS/4yPhD/F/22/34176	Prof M Mayr	King's College London	KCL 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Ms Foteini Christou; Ms Omara Mukhtar; Mr Gabriel Watson. <i>48 months</i>	£467,508.00
FS/4yPhD/F/22/34174	Prof A Ahluwalia	Queen Mary, University of London	QMUL 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Mr Weifeng Bu; Mr Jack Keane; Mr Tom Moseley. 48 months	£447,561.00
FS/4yPhD/F/22/34181	Prof V Muthurangu	University College London	UCL 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Ms Shayma Abukar; Ms Adama Saccoh; Mr Mark Wrobel. <i>48 months</i>	£462,708.00
FS/4yPhD/F/22/34173	Prof A Poole	University of Bristol	Bristol 2nd intake – The Shanta Foundation Scholarships, 2022 – 4-year PhD Studentship (5th) Scheme: Ms Kumuthu Amaradasa; Ms Sama Khalid; Mr Samuel Sendac. 48 months	£418,056.00

### 4-year PhD Studentships (continued)

Reference number	Name	Institution	Grant title	Total
FS/4yPhD/F/22/34170	Prof M Bennett	University of Cambridge	Cambridge 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Mr Peter Jones; Mr Jack Palmer; Ms Kate Quigley. <i>48 months</i>	£472,767.00
FS/4yPhD/F/22/34175	Prof N Morton (to 31 January 2023) Prof M Bailey (from 1 February 2023)	University of Edinburgh 3)	Edinburgh 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Ms Maria Paula Huertas; Mr Angus Jacobs; Mr Samuel Sjostr 48 months	£418,467.00
FS/4yPhD/F/22/34180	Prof E Davies	University of Glasgow	Glasgow 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Ms Sasha Forbes; Ms Nicola Gilroy; Ms Maia Lyall. 48 months	£415,803.00
FS/4yPhD/F/22/34182	Prof D Beech	University of Leeds	Leeds 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Ms Grace Adjei-Doku; Ms Emily Rolfe; Ms Hannah Smith 48 months	£418,512.00
FS/4yPhD/F/22/34172	Prof G A Ng	University of Leicester	Leicester 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Mr Rahul Patel; Ms Bethan Roper-Jones; Ms Lauren Walker. 48 months	£418,461.00
FS/4yPhD/F/22/34179	Prof E Cartwright	University of Manchester	Manchester 2nd intake 2022 – 4-year PhD Studentship (5th) Scheme: Ms Harriet Barker; Mr Samuel Ching; Ms Chiara Ramponi. 48 months	£418,461.99
FS/4yPhD/F/22/34177	Prof D Greaves	University of Oxford	Oxford 2nd intake – The McKie McLean Class of 2022, BHF – 4-year PhD Studentship (5th) Scheme: Mr Aaron Johnston; Ms Flair Paradine Cullup; Ms Liliana Som. 48 months	£470,496.00

### 3-year PhD Studentships

Reference number	Name	Institution	Grant title	Total
FS/PhD/22/29317	Ms E Capes	Anglia Ruskin University	Investigation of the mechanisms and significance of degranulation-dependent Zn <sup>2+</sup> release following platelet activation. <i>36 months</i>	£109,809.00
FS/PhD/22/29304	Ms R Edwards	Keele University	Elucidating hypoxia signalling pathways in vascular cognitive impairment pathogenesis.  36 months	£108,726.11
FS/PhD/22/29258	Ms S Mackie	King's College London	Clonal haematopoiesis and myeloid-driven inflammation in cardiovascular disease.  36 months	£122,742.00
FS/PhD/NC3Rs/23/29903	Student to be appointed – (Supervisor: Prof M M	King's College London	Joint NC3Rs/BHF PhD Studentship: development and disease modelling in engineered vascular tissues. <i>36 months</i>	£90,000.00

### 3-year PhD Studentships (continued)

Reference number	Name	Institution	Grant title	Total
FS/PhD/22/29256	Ms E Karim	Manchester Metropolitan University	Investigating Pim kinase as a novel anti-thrombotic endothelium targeting strategy.  36 months	£109,708.00
FS/PhD/NC3Rs/23/29904	Student to be appointed – (Supervisor: Dr L Borthwick)	Newcastle University	Joint NC3Rs/BHF PhD Studentship: Identification of the molecular and cellular mechanisms driving cardiac fibrosis: a novel <i>ex-vivo</i> approach to target identification and validation. <i>36 months</i>	£90,000.00
FS/PhD/22/29316	Mr A Jaitley	Queen Mary, University of London	Application of a new high throughput platform for validation of mechanosensitive miRNA. 36 months	£117,986.40
FS/PhD/22/29329	Student to be appointed – (Supervisor: Dr I Salles-Crawley)	St George's, University of London	Activated allbβ3/SLC44A2 interaction in platelet-dependent NET formation and immunothrombosis.  36 months	£117,450.00
FS/PhD/22/29348	Ms S Lau	St George's, University of London	Role of oestrogenic modulation of Kv7 channels in cerebral artery reactivity. 36 months	£145,404.00
FS/PhD/22/29236	Ms L McEwan	St George's, University of London	Investigating G protein βγ regulation of cardiac Kv7 channels. <i>36 months</i>	£115,337.05
FS/PhD/22/29299	Ms P Chapman	University College London	Control of circulation by intracranial baroreceptors. 36 months	£109,851.00
FS/PhD/22/29309	Ms O Baines	University of Birmingham	Investigating the effects of novel cardiovascular therapeutics on cardiac electrophysiology in health and obesity. 36 months	£131,369.80
FS/PhD/22/29245	Ms N Pavey	University of Birmingham	Characterising the organisation and dynamics of the IMS and cytoskeleton in human iPSC-derived megakaryocytes and platelet production. 36 month	
FS/PhD/22/29353	Mr L Malins	University of East Anglia	Purinergic control of neurogenic venous tone.  36 months	£111,472.91
FS/PhD/22/29342	Student to be appointed – (Supervisor: Dr F Rivero)	University of Hull	Targeting the myosin light chain phosphatase with peptide disruptors: a novel antiplatelet therapeutic approach.  36 months	£118,349.00
FS/PhD/22/29364	Ms A Garcia	University of Hull	Investigating arginine methylation as a novel post-translational modification of the critical platelet integrin allb\(\beta\). 36 months	£109,553.61
FS/PhD/22/29265	Ms S Leonard	University of Hull	Effect of hypoxia on prostacyclin-mediated inhibition of platelet function. 36 months	£110,353.48
FS/PhD/22/29312	Ms C Randall	University of Leeds	Computational analysis of the M2225R gain-of-function mutation in Piezol channel.  36 months	£109,584.00

#### 3-year PhD Studentships (continued)

Reference number	Name	Institution	Grant title	Total
FS/PhD/22/29339	Ms R Morris	University of Liverpool	Regulation of the calcium channel Cav1.2 by calmodulin variants associated with long-QT syndrome. 36 months	£109,025.00
FS/PhD/22/29234	Ms T Afzal	University of Manchester	The BHF Masonic Charitable Foundation PhD Studentship: Investigation of SLIT3 sequence variants as genetic contributors to congenital heart disease. 36 months	£112,769.00
FS/PhD/22/29307	Ms O Fonseka	University of Manchester	Investigate a novel regulation of cardiac lipid homeostasis in metabolic disorder.  36 months	£109,840.00
FS/PhD/22/29321	Mr Z Fan	University of Oxford	Knowledge-aware deep learning for interpretable phenotyping of heart failure.  36 months	£103,201.00
FS/PhD/22/29355	Mr O Heaney	University of Sheffield	Molecular manipulation of intestinal microbiota and effect on experimental atherosclerosis.  36 months	£112,251.00
FS/PhD/22/29326	Mr Q Hurst	University of St Andrews	A new pathway for cancer-drug related cardiac toxicity. <i>36 months</i>	£110,829.00

# **Clinical Fellowships**

### Senior Clinical Research Fellowship

Reference number	Name	Institution	Grant title	Total
FS/SCRF/22/32014	Dr O Rider	University of Oxford	Increasing substrate supply to the heart as a therapeutic strategy in heart failure. 60 months	£1,257,905.30

# Intermediate Clinical Research Fellowships

Reference number	Reference number Name Institution Grant title		Grant title		
FS/ICRF/22/26051 Dr R Al Lamee Im		Imperial College London	Revisiting the contemporary management of angina with percutaneous coronary intervention. 60 months		
FS/ICRF/22/26039	Dr J Howard	Imperial College London	Individualised and efficient cardiac magnetic resonance scanning with artificial intelligence. 60 months	£894,223.59	
FS/ICRF/22/26028	Dr D Lloyd	King's College London Advanced prenatal MRI assessment of place function, foetal heart development and early cardiovascular health. 60 months		£1,307,743.07	
FS/ICRF/22/26046	CRF/22/26046 <b>Dr M Quail</b> University College Why do children develop hypertension afte London coarctation repair? <i>60 months</i>		Why do children develop hypertension after coarctation repair? 60 months	£1,002,623.08	

### Career Development Research Fellowship (for Nurses and Healthcare Professionals)

Reference number	Name	Institution	Grant title	Total
FS/CDRF/22/21048	Dr L Hill	Queen's University Belfast	CHOICE-ICD: To co-develop and pilot trial an e-health intervention that provides information to reduce the concerns of patients living with an implantable cardioverter defibrillator. 36 months	£315,794.50

#### **Consultant Research Awards**

Reference number Name		Institution	Grant title	Total	
FS/CRA/22/23036	Prof J Mayet	Imperial College London	Evolving the NIHR Cardiovascular Health Informatics Collaborative infrastructure to expand the secondary care dataset, to integrate with primary care data and become a data spine for prospective studies. 48 months	£416,302.70	
FS/CRA/22/23032 <b>Dr C Bourantas</b> Queen Mary, University of Lor		Queen Mary, University of London	Efficacy of plaque morphology, physiology and biology in detecting vulnerable plaques: a computational biomechanical analysis study of a prospective multimodality intravascular imaging trial. 60 months	£237,741.63	
FS/CRA/22/23034 <b>Dr P Swoboda</b> University of Leeds		University of Leeds	Myocardial fibrosis in endurance athletes: mechanisms and association with adverse cardiovascular events. 60 months	£439,965.00	

### Clinical Research Training Fellowships

Reference number	Name	Institution	Grant title	Total	
FS/CRTF/22/24356 <b>Dr A Bakr</b> Imperial College Lond		Imperial College London	Impact of infection with SARS-CoV-2 and influenza on vascular function.  36 months	£310,827.12	
FS/CRTF/22/24369	Dr K Cheng	Imperial College London	Reducing microvascular dysfunction in patients with angina, ischaemia and unobstructed coronary arteries – a mechanistic sub study (REMEDY-MECH). 36 months	£294,193.56	
FS/CRTF/22/24409	Dr J Kay	Imperial College London	Understanding the role of right Atrial Ectopy-Triggering ganglionated plexuses in paroxysmal Atrial Fibrillation. <i>36 months</i>	£298,857.33	
FS/CRTF/23/24444	,		Mapping gene expression in chronic ischaemic heart failure (MAP-IHF). <i>36 months</i>	£313,395.95	
FS/CRTF/23/24407	Dr A Ragavan	Imperial College London	London Characterising recovered dilated cardiomyopa – a step towards precision therapy. <i>36 months</i>		
FS/CRTF/22/24328	Dr V Androshchuk	King's College London	Functional outcomes in severe symptomatic aortic stenosis after transcatheter valve implantation.  36 months	£289,638.55	

### Clinical Research Training Fellowships (continued)

Reference number	Name	Institution	Grant title	Total
FS/CRTF/22/24342	Dr M Li Kam Wa	King's College London	Optical coherence tomography with magnetic resonance angiography to assess STEMI non-culprit risk (OCT-RISK). 36 months	£394,999.29
FS/CRTF/22/24368	Dr G Sen	King's College London	Imaging cardiac disease in idiopathic inflammatory myopathies using cardiac MRI and PET/CT. 36 months	£283,914.11
FS/CRTF/22/24362	Dr N Wijesuriya	King's College London	Feasibility and proposed mechanisms for £ effective leadless left ventricular endocardial conduction system pacing. 36 months	
FS/CRTF/22/24386	Dr J Kearney	Queen Mary, University of London	Molecular explanations and solutions for variable outcomes in primary aldosteronism (PA).  36 months	
FS/CRTF/22/24370	Dr K Laycock	Queen Mary, University of London	Uncovering the origins of primary aldosteronism using single cell technology. <i>36 months</i>	
FS/CRTF/22/24353	Dr M Sanghvi	Queen Mary, University of London	Enhancing understanding of obesity genetics £2 through imaging phenotypes and gene-by-lifestyle interaction analyses. <i>36 months</i>	
FS/CRTF/22/24329	Dr B Craven	University College London	The anti-ADAMTS13 immune response in immune-mediated thrombotic thrombocytopenic purpura (iTTP). 24 months	
FS/CRTF/22/24395	Dr B Dowsing	University College London	Safety of withdrawal of pharmacological £33 treatment for recovered HER2-targeted therapy related cardiac dysfunction. <i>36 months</i>	
FS/CRTF/22/24394	Dr K Moschonas	University College London	Ischaemia in apical hypertrophic cardiomyopathy: £310,98 clinical significance and potential therapeutic target. 36 months	
FS/CRTF/22/24361	Dr L Skinner	University of Bristol	Investigating the role of endothelial glycocalyx £301,4 dysfunction in the vascular injury of pre-eclampsia.  36 months	
FS/CRTF/22/24390	Dr J Newman	University of Cambridge	pe Novel decentralised and digital endpoints for £188,7 use in clinical trials in pulmonary hypertension.  24 months	
FS/CRTF/22/24377	Dr K Loganath	University of Edinburgh	Myocardial fibrosis activity and the activated £219,3° fibroblast in heart failure with preserved ejection fraction. 24 months	
FS/CRTF/22/24437	Dr B Bussman	University of Oxford	MR guided precision radiotherapy to modify £34 molecular biomarker targets and treat ventricular arrhythmia: a first in man study. <i>36 months</i>	

#### Research Training Fellowship (for Nurses and Allied Health Professionals)

Reference number	Name	Institution	Grant title	Total
FS/RTF/23/30052	Mr K Riley	Imperial College London	Haemolysis-induced acute kidney injury resulting from cardiac surgery: evaluation of haemoglobin and related product removal therapeutic approaches. 48 months	£208,257.19

#### MBPhD Studentships

Reference number	Name	Institution	Grant title	Total
FS/MBPhD/22/28013	Mr J Berg	University College London	The role of Neuropilin-1/P130Cas signalling in pulmonary arterial hypertension. <i>36 months</i>	£121,216.64
, 3		Vascular involvement in post-COVID-19 syndromes. £109,81 36 months		

# **Big Beat Challenge**

Reference number	Name	Institution	Grant title	Total
BBC/F/21/220106	Prof H Watkins	University of Oxford	Curing genetic heart muscle disease (CureHeart). 60 months	£30,000,000.00

# Strategic Initiatives

#### Listed alphabetically by institute

Reference number	Name	Institution	Grant title	Total
SI/F/22/21170010	Dr S Candy	Academy of Medical Sciences	Academy of Medical Sciences Springboard £684,000 Awards for Biomedical Researchers, years 7-9 (AMS rounds 9-11). 36 months	
SI/F/23/21170011	Dr P Colville-Nash	Medical Research Council	Joint funding towards Health Data Research UK (HDRUK) awards (renewal). 60 months	£2,000,000.00
SI/F/23/21170009	Prof K Channon	University of Oxford	The NIHR-BHF Cardiovascular Partnership. 60 months	£246,909.48

# Infrastructure Grant

Reference number	Name	Institution	Grant title	Total
SIG/F/22/50011	Prof C Loughrey	University of Glasgow	Cross-disciplinary capacity building in ultra-high frequency preclinical cardiovascular ultrasound. <i>12 months</i>	£206,430.00

# **Special Project Grants**

#### Listed alphabetically by institute

Reference number	ce number Name Institution Grant title		Total	
SP/F/22/150042	Prof C Webber	Cardiff University	A cellular atlas of regional neurovascular vulnerability and neurodegeneration. 36 months	£775,794.23
SP/F/23/150045	Dr T Iskratsch	Queen Mary, University of London	Talin dependent mechanical imprinting as driver for cardiac disease progression. 36 months	£718,168.02
SP/F/23/150048	Dr A Butterworth	University of Cambridge	Translational proteomics for cardiovascular diseases: from population prediction to clinical and therapeutic applications (Prot4CVD) (joint funding with DZHK and DHF). 48 months	£490,874.00
SP/F/22/150038	Prof M Clarke	University of Cambridge	How can we target senescent cell-driven vascular inflammation whilst sparing host defence? 60 months	£719,425.00
SP/F/23/150049	Dr J Tarkin	University of Cambridge	Intercellular communication pathways in atherosclerosis and plaque destabilisation (PLAK TALK) (joint funding with DZHK and DHF).  48 months	£499,709.00
SP/F/23/150051	Dr M Brittan	University of Edinburgh	Discovering the microvascular landscape from a platelet perspective – mapping a blood-bone marrow-heart axis to identify therapeutic targets for heart failure (MegaCardiocyte) (joint funding with DZHK and DHF). 48 months	£394,055.62
SP/J/23/285003	Prof M Buch	University of Manchester	The CARDIOvascular-Immune-Mediated Inflammatory Diseases (CARDIO-IMID) UK Network (joint-funding with MRC). 60 months	£400,000.00
SP/F/22/150044	Prof C Denning	University of Nottingham	Do snoRNAs govern genotype-phenotype interactions in hypertrophic cardiomyopathy? 60 months	£969,481.60
SP/F/22/150035	Prof S Myerson	University of Oxford	OxValve population cohort study. 36 months	£524,144.79
SP/F/23/150050 <b>Dr A Swift</b> Unive		University of Sheffield	Pulmonary hypertension induced right heart failure: occurrence of genetic variations and disturbed BMP and TGF-β signalling explaining impaired mechanotransduction and heterogenous adaptation to pressure overload (PROMETHEUS) (joint funding with DZHK and DHF). 48 months	£469,272.00

# **Programme Grants**

1		Inhahetic	II I	: <b>.</b> : <b>.</b>
	ISTEC C	IDDADETIC	ally by	INSTITLITA

Reference number	Name	Institution	Grant title	Total
RG/F/22/110081	Prof J Gorelik	Imperial College London	Function follows form 2.0: from cellular mechanics and nanodomains to mechanisms of cardiomyopathies and therapeutic strategies. 60 months	£1,208,539.76
RG/F/22/110078	Dr F Ng	Imperial College London	Artificial intelligence to guide mechanism- specific electrophenotype-directed treatments for complex arrhythmias. 60 months	£1,197,675.48
RG/F/22/110079	Prof M Gautel	King's College London	A comprehensive approach to the genetic, molecular and functional impact of rare titin missense variants in dilated cardiomyopathy.  48 months	£1,023,597.89
RG/F/22/110093	Prof D Newby	University of Edinburgh	Finding a cure for aortic stenosis. 60 months	£1,943,103.52
RG/F/22/110076	Prof M Kearney	University of Leeds	A novel signalling node pivotal to type 2 diabetes related vascular damage.  48 months	£895,356.62
RG/F/22/110085	Prof K Channon	University of Oxford	New approaches to target tetrahydrobiopterin effects in cardiovascular disease pathogenesis and treatment. 60 months	£1,306,834.67

# Cardiovascular Catalyst Awards

Reference number	Name	Institution	Grant title	Total
CC/22/250022	Prof A Shah	King's College London	The BHF Adrian Beecroft Cardiovascular Catalyst Award: Natural Language Processing based artificial intelligence methods to detect heart failure with preserved ejection fraction. 24 months	£146,933.53
CC/22/250021	Dr S White	Manchester Metropolitan University	The BHF Doug Gurr Cardiovascular Catalyst Award: Using big data to identify novel interrelationships that predict incidence of, and recovery from, acute coronary syndromes. 24 months	£126,014.00
CC/22/250024	Dr T Johnson	University of Bristol	Guiding antithrombotic therapies in patients with high bleeding risk. 24 months	£133,054.00
CC/22/250026	Prof C Gale	University of Leeds	The BHF Bristol Myers Squibb Cardiovascular Catalyst Award: Future innovations in novel detection of atrial fibrillation (FIND-AF) – A proof-of-concept clinical implementation study of an artificial intelligence algorithm to increase detection rates of atrial fibrillation in the general population. 24 months	£199,453.00

# **New Horizons Grant**

Reference number	Name	Institution	Grant title	Total
NH/F/22/70010	Dr J West	University of Southampton	Platelet Kinetics: droplet microfluidics for the identification of hyper-reactive platelets and thrombosis risk prediction. <i>36 months</i>	£220,205.56

# **Clinical Study Grants**

#### Listed alphabetically by institute

Reference number	Name	Institution	Grant title	Total
CS/F/21/190034	Prof P Lambiase	University College London	Randomised control trial: cryoballoon/ radiofrequency ablation of atrial fibrillation versus medical treatment for heart failure: CRAAFT-HF. 72 months	£1,576,568.28
CS/F/22/190051	Prof R Hinchliffe	University of Bristol	Low dose ColchicinE in pAtients with peripheral artery DiseasE to address residual vascular Risk: a randomised trial (LEADER-PAD Trial). <i>57 months</i>	£1,278,758.29
CS/F/22/190053	Prof R Salman	University of Edinburgh	Antiplatelet Secondary Prevention International Randomised trial after INtracerebral haemorrhaGe (ASPIRING): a pragmatic randomised, parallel group, open, superiority, phase 3 GCRFF multinational clinical trial. Application for international coordination and UK national contributions. 72 months	£2,333,936.60
CS/F/21/190049	Dr A Flett	University of Southampton	Using cardiovascular magnetic resonance identified scar as the Benchmark Risk Indication Tool for Implantable cardioverter defibrillators in patients with non-ischaemic cardiomyopathy and Severe systolic Heart failure (BRITISH). 79 months	£1,767,515.70

# **Translational Award**

Reference number	Name	Institution	Grant title	Total
TA/F/22/210039	Prof N Mills	University of Edinburgh	Artificial intelligence to guide the diagnosis of acute heart failure using the CoDE-HF algorithm.  18 months	£265,621.66

# **Project Grants**

### Listed alphabetically by institute

Reference number	Name	Institution	Grant title	Total
PG/22/11143	Dr C Kardeby	Aston University	Investigating a novel mechanism underlying increased risk of vascular events in Parkinson's disease: dissecting pathological synergy between protein aggregates and glycosaminoglycans.  36 months	£312,152.24
PG/22/11062	Dr A Raby	Cardiff University	The interaction between early chronic kidney disease-associated endogenous ligands of TLRs and adaptive immune cells, and its impact on atherosclerosis. 36 months	£239,333.37
PG/22/10928	Dr J Boyle	Imperial College London	Role of cyclic-AMP in macrophage-mediated resolution of vascular inflammation. <i>36 months</i>	£277,448.37
PG/22/11063	Prof C Emanueli	Imperial College London	The microRNA epitranscriptome as novel therapeutic target in diabetes microangiopathy associated with ischaemic heart disease. 30 months	£273,732.32
PG/22/10999	Dr B Halliday	Imperial College London	Maintaining success for patients with dilated cardiomyopathy and heart failure remission (TRED-HF2). 36 months	£254,772.19
PG/22/11083	Dr P Ruiz Lozano	Imperial College London	Targeted glycosylation: cardiac survival and regeneration. 24 months	£254,905.03
PG/22/11178	Prof C Terracciano	Imperial College London	Mechanosensitive regulation of myocardial contractility and electrophysiology by microvascular endothelial cells. 36 months	£298,931.89
PG/22/11159	Dr M Bishop	King's College London	Predicting sudden cardiac death by computational structure-function metrics: reaching tangible clinical translation.  30 months	£169,522.75
PG/22/10932	Dr J Burgoyne	King's College London	Targeting heart failure with preserved ejection fraction by polyphenol-dependent oxidation of PKG1a. <i>36 months</i>	£259,785.62
PG/22/11094	Prof P Chowienczyk	King's College London	Evaluation of first-phase ejection fraction to guide cardiac resynchronisation therapy.  36 months	£240,458.98
PG/23/11267	Prof B Modarai	King's College London	A magnetic resonance imaging strategy for assessment of oxygenation and perfusion after revascularisation of the ischaemic limb.  24 months	£231,787.11

Reference number	Name	Institution	Grant title	Total
PG/22/11055	Dr M Zhang	King's College London	NADPH oxidase-2 activation as a pathogenic mechanism and potential therapeutic target in heart failure with preserved ejection fraction.  36 months	£260,849.60
PG/23/11093	Dr S Tual-Chalot	Newcastle University	Role of amyloid-beta in cardiovascular ageing.  36 months	£299,934.00
PG/22/11033	Dr S Robinson	Quadram Institute Bioscience	How a complex angiogenic network is governed to deliver vascular development and health. <i>36 months</i>	£309,292.00
PG/22/11084	Prof P Eaton	Queen Mary, University of London	Redox control of RSK1 and RSK2: implications for blood pressure regulation and cardiovascular remodelling. <i>36 months</i>	£326,221.02
PG/22/11208	Dr T Nightingale	Queen Mary University of London	Novel regulatory mechanisms for von Willebrand factor secretion: towards therapeutic control.  36 months	£286,031.98
PG/22/11226	Dr M Subramanian	Queen Mary, University of London	Macrophage-secreted DNases in neutrophil extracellular trap clearance and atherosclerosis progression. 36 months	£237,775.58
PG/23/11249	Prof A Tinker	Queen Mary, University of London	The cardiovascular function of the orphan G-protein coupled receptor, GPR20. 36 months	£307,773.42
PG/22/11085	Dr C Watson	Queen's University Belfast	LRG1 in heart failure: investigating its role in hypertension and diabetes induced cardiac remodelling and as a potential diagnostic and prognostic biomarker. 36 months	£315,146.00
PG/23/11166	Dr A Asimaki	St George's, University of London	Protein biomarkers: improving risk stratification in arrhythmogenic cardiomyopathy. 36 months	£269,485.59
PG/23/11301	Prof C Ruhrberg	University College London	Novel endothelial progenitor sources for lymphangiogenesis in the heart. 36 months	£250,964.15
PG/23/11342	Prof C Ruhrberg	University College London	NRP1 regulation of endothelial cell metabolism and nutrient delivery in the heart. 28 months	£221,177.69
PG/22/10989	Dr A Schmidt	University College London	Predicting patient relevant outcomes in people with diabetes through integration of electronic healthcare records, genomics and machine learning. 36 months	£221,981.24
PG/22/11117	Dr K Hijazi	University of Aberdeen	Epigenetic phase variation of periodontal bacteria: a mechanistic contributor to coronary artery disease. 36 months	£230,671.00

Reference number	Name	Institution	Grant title	Total
PG/23/11230	Dr S Montague	University of Birmingham	The molecular basis of variation in response to platelet activation by FcyRIIA: implications for the risk of thrombosis. <i>36 months</i>	£236,336.93
PG/22/11161	Dr R Monteiro	University of Birmingham	The role of epigenetic regulation of haemato-endothelial cell differentiation by class IIa histone deacetylases. <i>36 months</i>	£321,713.06
PG/22/11139	Prof S George	University of Bristol	Combined Wnt and hedgehog pathway inhibition as a new therapy for vein graft failure. 36 months	£306,904.14
PG/22/11121	Dr R Ramnath	University of Bristol	Vascular endothelial glycocalyx dysfunction as a therapeutic target in sepsis-associated acute kidney injury (sAKI). 36 months	£293,770.67
PG/22/10929	Dr S Smith	University of Bristol	Validation of novel LincRNAs with preventative roles in adverse cardiac fibrosis. 30 months	£192,952.39
PG/22/10944	Prof M Bennett	University of Cambridge	Preventing vascular damage after radiotherapy and chemotherapy. 36 months	£245,640.05
PG/22/11220	Prof Z Mallat	University of Cambridge	Transposable elements in the ageing vasculature. 36 months	£329,373.00
PG/22/11183	Prof S Fountain	University of East Anglia	Pre-junctional purinergic receptors of post-ganglionic sympathetic nerves: modulators of vasomotor activity. <i>36 months</i>	£307,947.00
PG/23/11269	Prof A Baker	University of Edinburgh	The role of IncRNA CARMN and its associated miRNAs during scar regression and cardiac repair. 36 months	£300,000.00
PG/22/11133	Dr N Dhaun	University of Edinburgh	Impact of kidney disease on cardiovascular disease: a data linkage study of 500,000 adults and 30 years follow-up. <i>36 months</i>	£185,594.13
PG/22/11041	Prof T Guzik	University of Edinburgh	Defining the role of IL-33/ST2 axis in vascular injury in hypertension. <i>36 months</i>	£275,288.00
PG/22/11004	Dr M Nixon	University of Edinburgh	ABCC1-mediated corticosterone export protects from glucocorticoid-induced cardiometabolic toxicity. 24 months	£199,270.22
PG/23/11290	Prof W Fuller	University of Glasgow	Palmitoylation and regulation of a potassium channel of central importance in cardiac electrophysiology. 26 months	£340,227.23
PG/22/10930	Dr H Gao	University of Glasgow	A modelling study of right ventricular function in repaired tetralogy of Fallot for predicting outcome and impact of pulmonary valve replacement. 36 months	£185,504.78

Reference number	Name	Institution	Grant title	Total
PG/23/11184	Prof R Ariens	University of Leeds	Pinpointing the platelet GPVI binding site on the fibrinogen alpha-chain: implications for platelet and fibrin driven blood clotting. 36 months	£256,932.85
PG/22/11016	Prof H Philippou	University of Leeds	Characterisation of novel interactions and cleavage of fibrinogen by activated Factor XI and Kallikrein that modulate the structure and function of fibrin. 36 months	£263,393.95
PG/23/11233	Prof G McCann	University of Leicester	A Multi-Ethnic, multi-centre raNdomised controlled trial of a low-calorie Diet for improving functional status in heart failure with PRESERVED ejection fraction (AMEND-Preserved). 30 months	£209,330.52
PG/23/11253	Dr M Choy	University of Manchester	How are promoter interactions of cardiac genes differentially rewired in Noonan syndrome with and without a myocardial phenotype? 36 months	£294,566.43
PG/22/10919	Dr A D'Souza	University of Manchester	Pre-clinical development of a microRNA inhibitor for ageing-associated sinus node dysfunction.  36 months	£257,969.29
PG/23/11296	Dr G Galli	University of Manchester	Developmental programming of ventricular arrhythmia by foetal hypoxia. 36 months	£292,495.00
PG/22/11127	Dr K Hentges	University of Manchester	Investigating cardiac development genes identified through machine learning as causes of congenital heart defects. 24 months	£140,951.73
PG/22/11075	Dr W Liu	University of Manchester	An investigation into the molecular basis and impacts of cardiac FGF21 resistance in response to metabolic stress. 24 months	£157,252.34
PG/22/11044	Dr S Saxton	University of Manchester	The BHF Rosetrees Trust Project Grant: investigating the effects of interleukin-33 on obesity-mediated hypertension and type 2 diabetes. 36 months	£296,316.88
PG/22/10957	Prof M Tomaszewski	University of Manchester	Uncovering new genes, cell-types, tissues and therapeutic targets for blood pressure and hypertension through kidney transcriptome-wide association studies (TWAS). 24 months	£144,480.23
PG/22/10937	Prof A Trafford	University of Manchester	Evaluating the efficacy and mechanisms of action of phosphodiesterase 5 inhibitors in preventing triggered activity and delayed afterdepolarisations in catecholaminergic polymorphic ventricular tachycardia.  36 months	£299,794.08

Reference number	Name	Institution	Grant title	Total
PG/22/11217	Prof X Wang	University of Manchester	Understanding ER stress-instigated disturbances in cellular homeostasis in HFpEF: towards a new paradigm for disease management through Pak targeted therapies. 36 month	£334,752.01
PG/23/11189	Dr M Mommersteeg	University of Oxford	Investigating the crosstalk between circadian rhythm and heart regeneration. <i>36 months</i>	£334,016.74
PG/23/11327	Dr O Rider	University of Oxford	Using magnetic resonance imaging and spectroscopy to understand the role of intracellular magnesium in the pathophysiology of HFpEF. <i>36 months</i>	£158,391.90
PG/22/10860	Dr C Taylor	University of Oxford	A risk prediction model for incident heart failure (RiskHF): derivation and validation cohort study. 24 months	£166,686.85
PG/22/10965	Dr K Taylor	University of Reading	Regulation of atherothrombosis and thromboinflammation by pannexin-1 channels. 36 months	£274,189.00
PG/22/11008	Prof S Wharton	University of Sheffield	How does brain microvascular disease (MVD), especially pathological changes to capillaries, contribute to dementia? <i>36 months</i>	£344,000.00
PG/22/11172	Dr P Camelliti	University of Surrey	Impact of human cardiac fibroblast-derived extracellular vesicles on electrical and contractile activity of the heart. 30 months	£218,259.00
PG/22/10899	Dr K Jeevaratnam	University of Surrey	Cardiac electrophysiological mechanisms associated with anti-malarial therapy and its implications for arrhythmogenesis and drug repurposing – COMPARE. 36 months	£252,075.73
PG/22/10931	Prof F Osman	University of Warwick	OSCA (obstructive sleep apnoea and cardiac arrhythmias) trial: a prospective randomised controlled observational study to assess cardiac arrhythmias (using injectable loop recorders) and cardiac autonomic function (using heart rate variability and turbulence) in patients with obstructive sleep apnoea, before and after continuous positive airway pressure treatment. 33 months	£264,276.78
PG/22/11031	Dr T Saunders	University of Warwick	Building the first heart. 36 months	£290,038.37



bhf.org.uk