



# Emerging Leaders Programme 2019

British Cardiovascular Society

# Foreword

It gives me great pleasure to introduce the British Cardiovascular Society Emerging Leaders Programme (ELP) yearbook for our 2019-20 cohort.

This programme was established in 2019 with the vision to enable delegates to lead significant service change and importantly to provide professional leadership more widely within cardiology and the NHS. We are immensely proud of our Emerging Leaders and the impact they are making in their own trusts and more widely.

Each year, senior cardiology trainees and recently appointed consultants are invited to join the cohort of the ELP at the **BCS Leadership Academy** held at the BCS Annual Conference. We greatly value the support and partnership of the **American College of Cardiology** both with the development and delivery of the Programme.

The programme is led by **Dr Sarah Clarke**, Past President of the BCS with fellow Course Directors **Dr Clive Lewis** and **Chris Wilkinson**, supported by myself and the team at Fitzroy Square. The faculty includes a mixture of international, national and regional leaders all recognised as experts in leadership, health care delivery and cardiology.

The first and final day of the program is usually held at the BCS Annual Conference. We recognise that the last 12 months has been a challenge due to the COVID-19 pandemic. We have had to rapidly adapt to new ways of working, meeting and communicating. This has also been evident in the ELP with the loss of face to face networking of the cohort at Fitzroy Square.

However, we successfully continued the programme virtually although recognise the difficulties that some of the cohort faced with service development projects being delayed or shelved. We know that our Emerging Leaders have used their new and enhanced skills in leadership to help trusts and Systems to adapt and change during the pandemic.

As you will see from this yearbook, our Emerging Leaders are outstanding and enthusiastic about leading and delivering change. We provide details of the inaugural Programme, our delegates and the service improvement projects. They have had a huge impact with a variety of improvement initiatives which have improved patient care and outcomes. The feedback has been overwhelmingly positive and we have included some comments about the programme and what our Emerging Leaders felt they gained from being involved. The yearbook will also be useful for those considering applying for future programmes and will also provide insights for the sponsors who we thank for their financial support for this inaugural 2019 programme.

We wish our Emerging Leaders every success to drive forward change and lead cardiology services to further enhance patient care over their careers.

Our particular thanks are extended to AstraZeneca, Bayer, Daiichi-Sankyo and Novo-Nordisk for their sponsorship of the Programme. It is noted that they have had no input to the development or delivery of the programme.



Professor Simon Ray  
President of the British Cardiovascular Society



# Dr Helena Bolam



## Networking details:

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Cardiology training undertaken in the Wessex Deanery, with subspeciality training and fellowships in Heart Failure and Devices at Southampton General Hospital and Queen Alexandra Hospital, Portsmouth. Special interest in the prevention of cardiovascular disease with a Masters with Distinction from Imperial College, London in Preventive Cardiology.

# Project abstract

## Referral Management for Patients with Suspected Heart Failure during the COVID-19 Pandemic

**Objectives:** To set up, run and audit a referrals management system for new referrals with suspected heart failure

**Background & Methods:** A well-established pathway exists at the Queen Alexandra Hospital, Portsmouth for new suspected heart failure patients to be referred from primary to secondary care. This includes a triage system whereby the timing of the initial outpatient appointment is determined by the NT-proBNP blood test level. However, due to the COVID-19 pandemic, there was a requirement to reduce the number of patients seen face to face in the hospital setting, thus prompting the need for a change to this referral management system.

Each referral was thoroughly screened and a clinical decision was made as to which of three possible outcomes would be most appropriate. These were: a face-to-face clinic appointment within 2 weeks, one within 6 weeks, or an alternative which did not require a hospital visit. The alternatives included any one or more of: an echocardiogram in the community, advice and guidance to the general practitioner, a telephone consultation with the patient, a referral to the community heart failure nurse specialists.

**Results:** Referrals made from primary to secondary care, of new patients with suspected heart failure, between 5<sup>th</sup> May and 30<sup>th</sup> July 2020 were evaluated. In total, 200 patients were referred during this time. All patients were triaged using the new referral management system. 135 patients (68%) required face to face appointments in the hospital setting. However, 65 patients (32%) were managed in one or more alternative ways. For the majority of these (43 patients), advice and guidance regarding further management was given to the referring general practitioner.

**Conclusions:** The results show that a sizeable group of those referred were able to be managed away from the hospital environment. Moving forwards, this patient group is being followed up, in order to assess the safety of this system, and determine the optimal future model for referral management for new patients with suspected heart failure.

# Dr Laura Dobson



## Networking details:

**Dr Laura Dobson**

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Dr Laura Dobson is a Consultant Cardiologist with a specialist interest in Echocardiography and Valvular Heart Disease at Wythenshawe Hospital in Manchester. She was appointed as a Consultant in 2017 and leads a busy heart valve service, overseeing a nurse led valve surveillance clinic of around 1500 patients and well as recently developing a multidisciplinary complex valve clinic.

Prior to this she completed her Cardiology training in the West Yorkshire Deanery, an Advanced Imaging Fellowship in non-invasive imaging at Monash Heart in Melbourne, Australia and a MD at University of Leeds investigating the use of CMR to assess patients with aortic stenosis. She has been a member of the British Heart Valve Society Council since 2016, firstly as Communications Secretary and more recently as Programme Chair. She is also part of the British Cardiac Society Program Committee, being responsible for organisation of the Imaging Village at the BCS annual conference and was a Fellow of the Inaugural BCS Emerging Leaders Programme.

She has a keen research interest, having over 50 peer reviewed publications and is local PI for the Easy-AS study. Laura is heavily involved in education, running courses for sonographers and doctors locally at Wythenshawe Hospital. Outside of work she enjoys CrossFit, running around after her energetic toddler, travelling and skiing.

# Project abstract

**Project title: Development of a novel Complex Valve Assessment Clinic**

## **Background**

With an ageing population, the incidence of heart valve disease is increasing and cases increasingly challenging due to complex co-morbidities and a rapidly changing landscape of valvular interventions available. Once symptoms are heralded timely valve intervention is essential with ESC guidelines suggesting 2 months between diagnosis and treatment.

## **Methods**

Our project involved the creation of a rapid access joint physiologist/cardiologist Complex Valve Assessment Clinic (CVAC) to assess those with complex/symptomatic valve disease with the aim of reducing time to valve intervention using a 'one stop clinic' model. Patients received a tele-consult within 2 weeks of referral and were invited to a 'one stop' clinic the following week for a diagnostic workup including bloods / BNP, ECG, advanced echo, exercise/dobutamine stress echocardiography, treadmill testing and 6 minute walk test depending on the underlying valve condition. We audited the time taken from referral to valve intervention prior to the clinic starting and following 12 months of the new CVAC clinic.

## **Results**

Prior to CVAC, the median wait from referral to cardiologist review was 70 days (range 28-112 days). One year audit data of 47 patients referred to CVAC demonstrated a reduction in median time to first clinic appointment of 13 days. Time from referral to valvular intervention was 101 days via the CVAC and 193 days via the traditional pathway.

## **Conclusion**

The creation of a novel rapid-access Complex Valve Assessment Clinic led to an average reduction in time from referral to valvular intervention of 92 days. Although this intervention led to a shorter pathway for patients with high risk valvular lesions at risk of decompensation, further work still needs to be completed to shorten the patient journey to achieve intervention within 60 days as per the ESC guidelines.

**Acknowledgements:** I would like to thank Mr Keith Pearce for his help in setting up this new service and Dr David Lai who helped collate the audit data presented.



# Dr Rebecca Dobson



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Dr Dobson's sub-specialty interests are echocardiography and cardio-oncology. She is particularly interested in the field of cardiac toxicity and is leading the development of a new regional cardio-oncology service. She is also passionate about equality for all within cardiology and runs several local initiatives to champion/support women within the specialty.



# Project abstract

## **Equality in Cardiology; Encouraging and Supporting The Female Cardiologists of Today & Tomorrow**

Despite making up over half of medical students and CMTs in the UK, recent data show that women are grossly under-represented in cardiology, accounting for 28% of cardiology trainees and only 13% of cardiology consultants. There are many potential reasons for this gender imbalance and the Equality in Cardiology project seeks to address several of these.

Lack of female role models is an important factor with many young women feeling that they cannot succeed in cardiology as they don't have positive role models to learn from. This was addressed on a local level through several Women in Cardiology meetings whereby successful women from every cardiology sub-specialty 'showcased' their careers to medical students and junior doctors.

Concerns about radiation in pregnancy, working less than full time and work-life balance are often cited as reasons women do not enter cardiology. Lack of knowledge of these issues is a greater barrier than the reality of them and therefore presentations with adequate time for questions were given to explore and address these concerns.

Support and encouragement for female medical students and junior doctors has been facilitated through a local mentorship scheme whereby individuals considering a career in cardiology are paired with a consultant cardiologist. These partnerships take on varying forms, including career advice, assistance with CV building and work experience placements.

There is no 'quick fix' for the lack of women within cardiology and there is much more work, on a larger scale, required. This grassroots project is still in its infancy with many more initiatives planned. The success of the project will be measured in years to come.

# Dr Arjun Ghosh



## Networking details:

### Dr Arjun K Ghosh

Consultant Cardiologist, Clinical Lead for Cardio-Oncology at University College London Hospital, Foundation Programme TPD, St Bartholomew's Hospital.

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Arjun was the first consultant cardiologist in the UK to be appointed specifically in cardio-oncology having helped establish those services at BHC and UCLH as a senior trainee. He leads the UCLH Cardio-Oncology service and is part of the Barts Heart Centre Cardio-Oncology and CMR services. He is actively involved in Cardio-Oncology research and was joint first author of the 2021 British Society of Echocardiography/British Cardio-Oncology Society guidelines.

He has a number of leadership roles at the American College of Cardiology, International Cardio-Oncology Society, British Cardio-Oncology Society and British Cardiovascular Society. He is also significantly involved in delivering education and training as Foundation Programme TPD, joint-lead for imaging and specialised cardiology training at BHC and via the Royal Society of Medicine.

Arjun's latest role is a foray into the world of podcasts as the co-host of the ICOS podcast on Spotify.

# Project abstract

## Developing a complete CAR T cell cardio-oncology programme – how the BCS ELP showed the way

Authors: Arjun K Ghosh, Daniel H Chen, Alison Macklin, Maeve A O'Reilly, Claire Roddie, J Malcolm Walker

### Introduction/Objectives

Chimeric antigen receptor T cell therapy (CARTC) is a revolutionary therapy for haematological cancers. Associated cardiotoxicities are ill-defined [1]. Building on ELP-delivered concepts of individual and systems-based changes to optimise patient safety [2], we aimed to establish clinical and research CARTC cardio-oncology programmes.

### Materials and methods

- The “heart + head = hands” model [3] was used to determine the most appropriate overarching strategic approach. A teams-based leadership style [4] was utilized with individuals assigned tasks appropriate to skill-set.
- A Johari window [5] was constructed (Figure 1) to determine relationships between relevant parties and a policy development plot [6] was designed (Figure 2).
- ELP concepts of “exerting power and influence” [7], [8] and “having difficult conversations” [9] were utilized in subsequent meetings with relevant stakeholders.

### Results

Despite COVID-19 related challenges both goals were met. A new clinic and consult service was established with constructive discussions on job-planning and funding. A research programme was initiated after successfully obtaining funding and ethical/regulatory approvals.

### Conclusions

Utilising a number of leadership and managerial concepts explored on the ELP (compassionate leadership, teams-based approach, critical problem appraisal, difficult conversations, NHS funding sources), we successfully established clinical and research CARTC programmes.

# Dr Paul Haydock



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Paul is a Consultant Cardiologist at University Hospital Southampton. He read Medical Sciences at Emmanuel College, Cambridge, with a Part II in Pathology, before transferring to Guy's, King's and St Thomas' Hospitals' School of Medicine for clinical training. He spent his early career in London, Kent and Melbourne, Australia, prior to taking his MD from Imperial College.

He completed his speciality training in the Wessex Deanery and was appointed to his current post in February 2017. His research interests include heart failure epidemiology and the impact of inequalities on cardiovascular disease – particularly focussed on the equitable provision of heart failure therapies within the population. He is currently working with the British Heart Foundation to develop a digital tool for the use of heart failure services and their patients to deliver enhanced integrated care.

Paul is experienced in all areas of general cardiology and his sub-speciality interests are in advanced heart failure, heritable cardiomyopathies, cardio-oncology, and device therapy. He implants pacemakers, including cardiac resynchronization therapy, as well as defibrillators, and is EHRA certified in Cardiac Implantable Electronic Devices.

Paul is the lead for Foundation and IMT Doctors in Cardiology at University Hospital Southampton and is also the sub-speciality lead for the clinical aspects of the Year 1 & 2 BM5 Medical Student programme at the University of Southampton.

He is passionate about supporting patients to make wise choices about their care and is the Lead for the NHS England Vanguard Shared Decision Making Programme in Cardiovascular & Thoracics, Orthopaedics, and Neurosciences at the Trust.

## Project abstract

### **Developing an Integrated, Multidisciplinary Clinic for Duchenne Muscular Dystrophy Patients and their Carers from across the Wessex Region.**

Duchenne Muscular Dystrophy (DMD) is an X-linked, recessive, inherited, progressive neuromuscular condition characterized by profound skeletal muscle weakness and loss of functional capacity. Diagnosis is made early in childhood and affected boys are generally seen by specialist paediatric clinics in tertiary centres. It is a complex, multisystem problem and patients typically develop cardiorespiratory compromise within the second decade of life due to a combination of respiratory muscle weakness and cardiomyopathy.

We recognised that DMD patients transitioning to Adult Services generally had a poor experience, with disjointed care and a lack of specific specialist input. They typically attended multiple appointments, often in several different centres, in stark contrast to their experience during childhood. Cardiology review has variably been in general cardiology or specialist heart failure clinics in DGH settings, or by the Adult Congenital Heart Disease (ACHD) team at University Hospital Southampton (UHS) as a default upon transition from paediatric cardiology.

In an effort to improve the care of these patients we have set-up a quarterly, multidisciplinary specialist clinic at the regional Young Adults Hospice 'JacksPlace'. Patients are seen by a Neurologist specialising in Neuromuscular Disease, a Cardiologist with a special interest in

heritable cardiomyopathies, a specialist Palliative Care Consultant, a specialist physiotherapist and the DMD care co-ordinator. Echocardiography and ECG are also delivered on-site in a bespoke environment.

We have developed an integrated, electronic clinic pro-forma and complete this as part of the medical record following an MDT de-brief at the end of the day. Due to restrictions related to the Covid-19 pandemic in this highly clinically vulnerable group, we have only managed to run the clinic on 3 occasions so far and therefore have limited feedback. The experiences of the staff, the patients, and their carers have, however, been overwhelmingly positive so far.

# Dr Shazia Hussain



## Networking details:

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Shazia was appointed as a Consultant Interventional Cardiologist at Glenfield Hospital, Leicester after receiving her Cardiology training at Papworth Hospital in Cambridgeshire. She completed her interventional training with a BCIS awarded interventional fellowship at Toronto General Hospital, Canada.

In addition, Shazia has undertaken a dedicated period of research resulting in a PhD awarded from Kings College, London. Her research involved leading on the MR-INFORM study, a randomised controlled trial of FFR vs CMR to guide revascularisation, resulting in a main publication in the NEJM.

## Project abstract

**The evaluation of departmental adherence to the European Society of Cardiology guidelines in the assessment of ventricular function after Myocardial Infarction.**



## **Aim**

To evaluate the adherence of the cardiology department at Glenfield Hospital to international guidelines in identification and follow up of patients with significant left ventricular systolic dysfunction (LVSD), following ST Elevation Myocardial infarction (STEMI).

## **Method**

We performed a review of patients who underwent primary percutaneous coronary intervention (PPCI) for STEMI in the 3 months period between the 1<sup>st</sup> of February and the 30<sup>th</sup> of April 2019. Electronic records were used for data collection.

Significant LVSD was defined as an LV ejection fraction (EF) < 35%, severe LVSD, moderate to severe LVSD, significant LVSD.

In patients with significant LVSD prior to discharge, we evaluated if a second assessment of LVSF was carried out, the findings and time interval between assessments.

## **Results**

81 patients were included in the analysis and 80% of patients (n=65) had pre-discharge assessment of LV function. 14 of the 16 patients who did not have pre-discharge assessment had an assessment post discharge.

A quarter of patients (n=16) who had LV function assessment pre-discharge had severe LVSD. 87.5 % of patients with severe LVSD had PPCI involving the left main artery (LMS) or the Left Anterior Descending artery (LAD).

Of patients with severe LVSD and repeat assessment of LV function (n=12), improvement of LV function was seen in 58% (n=7). Of these only 3 (30%) had repeat scans within 12 weeks.

## **Conclusion**

The majority of patients (80%) who undergo PPCI for STEMI have an assessment of LV function prior to discharge. However, one fifth do not have documented evidence of LV function prior to discharge, a significant deviation from recommended practice.

A quarter of patients with significant LVSD prior to discharge do not have repeat assessment of LV systolic function to guide further management. Repeat scanning was done within the 12week recommended timeline in only 30% of patients.

# Dr Joanna Lim



## Networking details:

**Joanna Lim**

Consultant Cardiologist (Adult Congenital Heart Disease)  
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Jo graduated from Oxford University in 2006. She completed junior doctor training in London and Bristol before returning to the Oxford Deanery to train in General Cardiology. Jo undertook higher specialist training on the Pan-London Adult Congenital Heart Disease Rotation from 2014-2019, completing fellowships at the Royal Brompton Hospital, St Thomas' Hospital, St Bartholomew's Hospital and Great Ormond Street Hospital for Children, where she was nominated for Trainee of the Year in 2014.

Jo was appointed as a Consultant in Oxford in 2019. She is interested in all aspects of congenital heart disease and has a particular interest in congenital transthoracic echocardiography.

Jo has extensive experience in undergraduate, postgraduate and multi-disciplinary teaching. She completed her Postgraduate Certificate in Medical Education in 2010. In July 2020 she established the on-line Oxford ACHD Echo Teaching Programme, which is now attended by Physiologists and Cardiologists from over 10 Trusts across the country. She also leads the Oxford Heart Centre Staff Well-being Team which she established at the outset of the COVID pandemic in March 2020.

# Project abstract

## Improving Adult Congenital Heart Disease Echocardiography Services across the Thames Valley Region

### Background

Congenital heart disease affects approximately 1% of live births worldwide. Due to major medical and surgical advances, the vast majority of these children now survive into adulthood and the adult congenital heart disease (ACHD) population is therefore expanding. However, many of these individuals remain at risk of long-term cardiac complications and consequently require lifelong specialist care from dedicated ACHD Services.

The Oxford University Hospitals (OUH) ACHD Service cares for a large and growing population of ACHD patients across the Thames Valley region, including 3 clinics a week in Oxford and monthly clinics in Milton Keynes, Swindon, Reading, Northampton and Jersey. Echocardiography is a fundamental tool in the diagnosis and lifelong surveillance of these patients. In the Thames Valley region, ACHD echocardiograms are performed by skilled Physiologists who are highly experienced in 'standard' adult echocardiography, but few of whom have undergone formal training or accreditation in ACHD echocardiography. ACHD echocardiography requires a different approach to 'standard' adult echocardiography and can be understandably daunting without formal training. Moreover, if the Physiologist is unfamiliar with ACHD, they may fail to obtain all the necessary data in their study.

### Aim

The aim of this project is to improve the quality of ACHD echocardiography across the Thames Valley region, specifically:

- a. to ensure that all ACHD echocardiograms performed in our region meet agreed standards.
- b. to ensure that all Physiologists are offered training in ACHD echocardiography.
- c. to support interested Physiologists in achieving ACHD echo accreditation and in leading further quality improvement in this area.

## **Methods**

1. Standardised protocols from the International Society for ACHD (ISACHD) for data acquisition and reporting were implemented at OUH. An audit was commenced assessing compliance of echo reporting with these standards.
2. A regional on-line teaching programme was launched in July 2020, designed to equip Physiologists with the knowledge and skills to approach these patients with confidence and to support them in pursuing accreditation.
3. A weekly Consultant ACHD echo list was established at OUH, providing an additional training opportunity. Physiologists from other hospitals in the region are encouraged to attend to gain hands-on experience.
4. Departmental support was obtained for Physiologists at OUH to apply and study for ACHD echo accreditation.

## **Results to date**

1. Initial audit of compliance with ISACHD standards for echo reporting was 54% for January 2020 (prior to implementation of the standards and teaching programme). Re-audit will occur in January 2021.
2. To date there have been four hour-long on-line teaching sessions (one per month). Each of the four sessions has been rated as 'excellent' by over 90% of delegates, and as 'extremely useful' or 'very useful' by 100% of delegates, along with reports that the teaching has led to change in practice. The audience is expanding with regular attendance from Physiologists, Cardiologists and Intensivists from over 10 Trusts across the country so far.
3. In response to demand for increased access to the teaching materials, a website is being developed that will facilitate ongoing study and wider dissemination of resources.
4. Long term success will be indicated by improvement in compliance with ISACHD standards for echo reports and by increasing numbers of participants obtaining ACHD echo accreditation.

# Dr Aneil Malhotra



## Networking details:

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Aneil is a senior lecturer and consultant cardiologist in inherited cardiac conditions and sports cardiology. He is based at Wythenshawe and Manchester Royal Infirmary Hospitals and the University of Manchester.

He graduated from the University of Cambridge (Emmanuel College) in 2006, moved to Oxford for specialist training and undertook a Masters in Medical Leadership achieving a distinction, at the Royal College of Physicians. He completed his PhD (2017) in inherited heart diseases and sports cardiology at St. George's University of London where he was subsequently appointed NIHR Clinical Lecturer to complete his training.

Now based in the north-west, Aneil is setting up an inherited cardiac conditions and sports cardiology service across the Manchester University NHS Foundation Trust. His research focuses on the predictors of cardiomyopathy, particularly among black athletes who appear to be at a higher risk of sudden cardiac death. He has over 100 peer-reviewed publications and has co-authored and contributed to numerous books in cardiology and medicine. He is regularly involved in the cardiac care of athletes for Team GB, English Institute of Sport and numerous professional football, cricket and rugby clubs. Aneil aims to establish a clinical and research network for the athlete's heart in the north-west and beyond.

# Project abstract

## Initiating and leading a Prevention, Rehabilitation & Sports Cardiology Service in the North of England

Over the course of the Emerging Leaders Programme, my aim was to set up and establish a Preventive, Sports and Rehabilitation Cardiology Service, unique to the north of England where there is a 20% greater disparity of mortality compared to the south. Although this rate is multifactorial and encompasses several socioeconomic factors, tackling health inequalities and the provision of specialist services to northern conurbations in order to readdress this balance, should be a government priority.

Regular physical activity is an important component of therapy for most cardiovascular diseases and is associated with reduced cardiovascular and all-cause mortality. In an era where there is an increasing trend towards a sedentary lifestyle and a rising prevalence of obesity and associated diseases, the promotion of exercise is more crucial than ever and at the forefront of priorities not only for all scientific cardiovascular societies but also for national governments.

Despite the substantial health benefits provided by physical activity, exercise may paradoxically act as a trigger for sudden cardiac death in the presence of underlying disease, which is a leading cause of sports and exercise-related mortality. In an era of personalized medicine, exercise regimes must be tailored to the patient, the target population and the specific disorders with highest risk. For example, sudden cardiac death in young athletes is caused by a variety of structural and electrical disorders of the heart, including cardiomyopathies, ion channel disorders and coronary anomalies. In adult and senior athletes, atherosclerotic coronary artery disease is the primary condition leading to major adverse cardiovascular events.

I wished to launch a unique clinical service in Manchester while also establishing research independence in a large conurbation outside London. Not only is cardiovascular disease higher in the north, but there is a high proportion of athletic people, ranging from adolescents to veterans, who are motivated to exercise.

There are several stakeholders interested in this initiative and I have begun to integrate their services. For example, the Manchester Institute of Health and Performance (purpose-built with world-class facilities and the only one of its type in the country) and Manchester University

NHS Foundation Trust (largest trust in the UK). In addition, there are several academic bodies (BRC), charities (CRY) and sporting teams (Manchester City FC, Team GB, British Cycling) who support and raise the profile of this initiative.

Through the ELP I have gained invaluable insight into the infrastructure of the NHS, its values, culture and behaviours. I feel better equipped to design and lead this ambitious service and my efforts have been reflected by being appointed working group lead for inherited cardiac conditions and sports cardiology within the NHS Trust. Moreover, I am now taking regional and national referrals for further management of patients with cardiovascular disorders that wish to continue participating in sport, at both recreational and professional levels. I have learnt key skills such as self-awareness, enhancing my impact as a leader and familiarising myself with business plan writing- as I put together a case for a dedicated inherited cardiac conditions nurse and family co-ordinator, to help further develop this service.



# Dr William Moody



## Networking details:

### Dr William Moody

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Will Moody is a Consultant Cardiologist at the Queen Elizabeth Hospital Birmingham, with a specialist interest in cardiomyopathy and cardiac imaging. He is accredited in echocardiography, CMR and nuclear cardiac imaging having trained under the supervision of Dr Rick Steeds (Queen Elizabeth Hospital, Birmingham), Dr Parthiban Arumugam (Manchester Royal Infirmary) and Prof Sanjay Prasad (Royal Brompton Hospital, London).

After being awarded a Bachelor of Medical Science with First Class Honours, he qualified with Honours in Medicine at the University of Birmingham in 2005. Following general medical training in the West Midlands he was awarded a BHF Clinical Research Fellowship and completed his PhD in CMR in Birmingham on “The Effects of a Reduction in Renal function on Cardiovascular Structure and Function”. His research won the Top Original Clinical Science Paper published in Hypertension and he was shortlisted as a Young Investigator Award Finalist at the American College of Cardiology Scientific Sessions in 2015. Research into myocardial perfusion imaging in patients with end-stage renal disease led to a British Nuclear Cardiology Society Young Investigator Award and he undertook training at Cedars-Sinai in Los Angeles after being awarded a Joint BCS /ACC Multi-modality Imaging Preceptorship.

He has published over 80 research articles and book chapters, which can be accessed at [researchgate.net/profile/William\\_Moody](https://researchgate.net/profile/William_Moody). Current research interests include investigating the role of non-invasive imaging in amyloidosis, liver transplant candidates.

He is presently enrolled on the inaugural BCS Emerging Leaders Program 2019-2020 and has used this opportunity to help establish a national amyloidosis network, with the aim of achieving earlier diagnosis and improved outcomes for these patients. Previously, he was elected onto the Specialist Advisory Committee as the British Junior Cardiologists' Association Trainee Representative in 2016 and as the West Midlands Deanery Cardiology Trainee Representative in 2015. He also enjoys teaching school students interested in Medicine on the Nuffield Science Program and regularly examines Final Year Medical students at the University of Birmingham

## Project abstract

### Extending the Reach of Expert Amyloidosis Care: Development of a Hub-and-Spoke Model

#### Background

There has been an exponential rise in the number of patients diagnosed with cardiac amyloidosis over the last decade, owing to an increased awareness of this disease, improved diagnostic imaging and the availability of new treatments.

#### Objective

The Midlands Amyloidosis Service was launched at University Hospitals Birmingham (UHB) in August 2019 with the aim of providing local patients with: 1) an early diagnosis; 2) virtual, multidisciplinary expertise from the National Amyloidosis Centre (NAC); and 3) access to novel treatments and/or entry into phase III clinical trials.

#### Methods and Results

A total of 125 patients (age  $75 \pm 13$  yr; male 71%) were referred for assessment between 1<sup>st</sup> August 2019 and 1<sup>st</sup> January 2021. The median time from referral to diagnosis was 28 days; median time from referral to first clinic assessment was 34 days. Of the 125 patients referred

for assessment 79 (63%) were diagnosed with cardiac amyloidosis: 70 (89%) subjects with transthyretin amyloid cardiomyopathy (ATTR-CM), 7 (9%) with light chain amyloid cardiomyopathy (AL-CM), 1 (1%) ApoA1 and 1 (1%) AA sub-type. Sanger TTR gene sequencing revealed 12 out of 70 (17%) had hereditary ATTR-CM: V122I (n=7), T60A (n=3) V30M (n=2). To date, 50 patients (40%) have been discussed in a video MDT with the NAC, including 14 over the age of 80 years (16%) who had declined to travel to London. By removing the need for patients to travel to London, a total of 23,207 patient miles were saved ( $186 \pm 28$  miles per patient). Of the 58 wild-type ATTR-CM patients, 15 received tafamidis under the Early Access to Medicines Scheme, and 8 have thus far been enrolled locally into phase III trials of RNA silencing therapy.

### **Conclusion**

A hub-and-spoke service model ensures continued ease and equity of access to specialized amyloidosis healthcare for the increasing numbers of elderly patients diagnosed with ATTR-CM.

# Dr Sukhjinder Nijjer



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Dr Sukhjinder Nijjer, MBChB MRCP PhD, is a Consultant Cardiologist specialising in Coronary Intervention. He is an Honorary Senior Clinical Lecturer at Imperial College London and works at the Hammersmith Hospital. He is the Lead for Clinical Governance for Cardiovascular Directorate. He is the President of Cardiology at the Royal Society of Medicine and is the Communications Lead for the British Cardiovascular Intervention Society.

He has expertise in coronary physiology and has published widely in the field in highly ranked peer-reviewed journals including New England Journal of Medicine, the Lancet and Journal of American College of Cardiology. He was part of the team that developed iFR and iFR-pullback and has been part of seminal trials including DEFINE-FLAIR, ORBITA and SYNTAX-II.

# Project abstract

## Cardiac Risk Optimisation Clinic

Cardiac care in London is fragmented. There are multiple cardiac services at primary, secondary and tertiary levels, all caring for the same patients without knowledge of care being provided at other sites. Pressure on secondary care services mean patients are often discharged following coronary intervention or bypass surgery such that longer term therapies, shown to improve outcomes are not initiated.

We propose a solution utilising a universal medical record available across North West London (SystemOne). Patients with known coronary artery disease and prior revascularisation in enrolled CCGs will automatically be reviewed in a virtual clinic by a Consultant Cardiologist. The Cardiologist will have direct access to all prior records sent to primary care, including investigations and tests performed in other Hospitals. They will then make recommendations to the general practitioner to optimise therapy, including the duration of dual antiplatelet therapy, identifying those suitable for prolonged antiplatelet therapy or dual pathway therapies.

Hyperlipidaemia and hyperglycaemia will be identified and treated. The clinic will serve as an extension of cardiac rehabilitation services and will have a wider reach, as uptake of rehabilitation services remains poor in those at the highest risk.

Those patients identified as needing further routine investigations will be offered these to minimise demand on general Cardiology and sub-speciality clinics.

Metrics of success will include the number of patients on guideline-directed therapy and satisfaction scores from GPs enrolled in the programme.

# Dr Daniel O'Hare



## Networking details:

**Dr. Daniel O'Hare**

Electrophysiology Fellow  
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I studied in the new medical school in the University of Limerick, Ireland and graduated from the inaugural class winning the Gold Medal in Medicine in 2011. I completed my medical membership exams with the Royal College of Physicians and was awarded a place on the Cardiology Specialist Registrar training scheme in 2014. I then trained in multiple centres in Ireland, including St. James' Hospital, University Hospital Galway, University Hospital Limerick and St. Vincent's University Hospital, Dublin.

In 2018 I was awarded a Cardiology Fellowship Bursary and travelled to London to sub-specialise in Electrophysiology. I am currently working as an Electrophysiology Fellow in St Thomas' Hospital, Westminster and completing an MD with King's College London, investigating the role of atrial conduction velocity in the pathophysiology of Atrial Fibrillation.

I live in London with my wife and three children. I enjoy running, and in 2020 achieved the qualifying time for the Boston Marathon.

# Project abstract

## **Development of a Non-Sustained Ventricular Tachycardia treatment pathway.**

Non-sustained Ventricular Tachycardia (NSVT) is defined as an ectopic ventricular rhythm faster than 100bpm lasting for at least 3 beats and self-resolving within 30 seconds<sup>1</sup>. In many conditions, NSVT is associated with an increased risk for further sustained arrhythmias and sudden cardiac death<sup>2</sup>. The increasing number of cardiac implantable electronic devices (CIEDs) worldwide is leading to increased detection of NSVT.

Detection of NSVT may require admission to hospital, insertion of an implantable cardiac defibrillator, up-titration of medication, cardiac imaging, or may be considered benign depending on the individual presentation. A structured step-wise approach is recommended<sup>3</sup>, however this approach requires significant time and often senior expertise to complete correctly.

The aims of this project were to create a guideline document and treatment pro forma for detected NSVT within the cardiac device clinic of a tertiary referral London Hospital. Following the identification of a clinical need for a systematic evidence-based treatment approach, a working group was created consisting of senior and junior cardiology medical staff and a highly specialised cardiac Physiologist. We performed an audit looking at the presentation and treatment of NSVT within a historical one-week window in the Cardiac device clinic. NSVT was discovered in 18 patients with differing CIEDs (9 PPMs, 4 ICD, 4 CRT-D, 1 CRT-P). All NSVT was detected during routine device interrogation by the cardiac physiology staff. Treatment of these patients varied between urgent admission, immediate registrar review, e-mail to consultant, and routine follow-up. Records of treatment plans were not being consistently recorded.

A simple two-page pro forma has been created that enables rapid assessment and data acquisition of relevant information. It is filled by both the cardiac physiologist interrogating the device and a physician in the cardiology service. Treatment plans are clearly documented, and instructions inform the member of staff of when and how to escalate to a senior member of the electrophysiology service. Once completed, the pro forma can be electronically scanned and attached to the electronic medical notes for future reference.



# Dr Alex Rothman



## Networking details:

**Alex Rothman**

Wellcome Trust Clinical Research Career Development Fellow and Honorary Consultant Cardiologist.

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Alex is a Wellcome Trust Clinical Research Career Development Fellow and Honorary Consultant Cardiologist at The University of Sheffield and Sheffield Teaching Hospital NHS Foundation Trust. Alex's clinical work is in the National Pulmonary Hypertension Centre and cardiac intervention and his research interests is in the development of new treatment strategies in heart failure, pulmonary hypertension, coronary artery disease and hypertension.

# Project abstract

## **Establishing a remote monitoring service for patients with pulmonary hypertension.**

Pulmonary hypertension is a rare disease that leads to right heart failure. Patients experience significant morbidity and mortality at 5-years is less than 50%. Approved therapies reduce vasoconstriction through modulation of three distinct biological pathways at a cost of £30-150k/patient/year. Due the range of investigations required and the high cost of therapies diagnosis, treatment and annual review for the 6,244 patients in the UK are commissioned through seven National Centres. To increase patient contact between annual visits, identify disease worsening early and optimise therapy we established the world's first remote monitoring service for patients with pulmonary hypertension at the National Centre in Sheffield.

This service now delivers remote care for 60 patients with implanted pulmonary artery pressure monitors, insertable cardiac monitors and a range of devices that collect basic clinical observations. A remote monitoring multi-professional team made up of a cardiologist, respiratory physician, nurse consultant and pharmacist review this data to facilitate remote care for patients. In contrast to current approaches to clinical care the focus is on a personalised approach to optimising therapy based on remote monitoring of data and early patient engagement, facilitating a proactive rather than reactive approach to patient management.

Preliminary data supports a reduction in health care resource utilisation in high-risk patients during the COVID-19 pandemic. In a recent analysis of a cohort of patients at highest risk within our clinical service, in the 12-months preceding device implantation there were 21 disease related hospitalisation events compared with 4 events in the post-implantation period. Additionally, WHO functional class and quality of life were improved. During this period the number of therapeutic changes in the 12-months preceding device implantation was 10 compared with 68 changes in the same period following implantation, suggesting that more intensive remote monitoring has facilitated early intervention and intensification of treatment and thus prevented hospitalisation. This has protected extremely vulnerable individuals from exposure to COVID-19 in the hospital environment and during transportation to hospital and facilitated remote optimisation of patients prior to and during high-risk surgery.

# Dr Rajiv Sankaranarayanan



## Networking details:

### Dr Rajiv Sankaranarayanan

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Dr Sankaranarayanan is a Consultant Cardiologist who completed his cardiology specialist training in North West England hospitals (Wythenshawe Hospital, Manchester Royal Infirmary and Blackpool Victoria Hospital) and obtained his PhD from the University of Manchester through a fellowship grant awarded by the British Heart Foundation. He is the Clinical Lead for Heart Failure at Liverpool University Hospital (Aintree site & Community Heart Failure Services-Liverpool & South Sefton) as well as the lead for the Aintree Ambulatory Heart Failure Unit since 2016.

He received the National Roy Award in 2018 by the HF patient Charity, Pumping Marvellous, in recognition of his services towards heart failure patients including; developing the HF Mobile App - Aintree Heart Failure Passport and other innovations such as; use of an elastomeric pump for ambulatory diuretic infusion and point of care testing. Rajiv also leads the novel virtual Heart Failure Multispeciality MDT which incorporates input from several specialists for the holistic care of HF patients. He has an active research role, having been appointed as NIHR Research Scholar and Honorary Clinical Lecturer at Liverpool Centre for Cardiovascular Science at the University of Liverpool, numerous peer-reviewed publications and has presented his research at national and international conferences. He is the Principal Investigator for several multi-centre national and international clinical trials in heart failure such as (TRANSITION, IRONMAN, PERSPECTIVE) and is also part of the heart failure guidelines development team for Cheshire and Merseyside.

# Project abstract

## Community IV Diuretics for acute decompensated heart failure using a portable elastomeric pump and point of care blood tests

### Objective

Acute decompensation of heart failure (HF) contributes to 5% of emergency admissions with consequent prolonged hospitalisation for intravenous diuretics. Our HF specialist nurse-delivered, consultant-led multi-disciplinary ambulatory (outpatient) HF Unit has treated over 1000 HF patients safely and efficaciously with intravenous (IV) diuretics on an outpatient basis. However, this strategy can be cumbersome for housebound patients or those with mobility problems. The objective of my BCS ELP project was to develop a business case for community IV diuretics.

### Methods

We piloted the use of point of care (POC) blood tests (renal function, electrolytes) and the use of an elastomeric portable infusion pump (Vygon) in our ambulatory HF unit for bolus furosemide infusion (4 mg/mt). Funding (£15000) was obtained by winning competitive bids from the hospital Dragon's Den. A business case was presented to the hospital and CCG.

### Results

Use of the elastomeric pump (100 patients-500 administrations) demonstrated safety, efficacy and positive feedback from patients as well as staff. 96 patients preferred the new pump which also reduced the need for assistance to walk to the toilet amongst 81% of patients. POC blood testing reduced the median time for availability of results from 62 minutes (range 36-250) to 10 minutes ( $p < 0.001$ ). The portable pump and POC testing will be used to deliver community IV diuretic services which will be supervised by a heart failure consultant and delivered by nurses. The model for community IV includes a Community Hub for ambulant patients (staffed by band 7 HF specialist nurse, one Band 5, one HCA) and a home IV diuretic service (delivered by the community IV team). The business case has been approved by the CCG and hospital

### Conclusions

Community IV diuretic services using an elastomeric pump and POC tests can ensure delivery of life-saving treatment close to or within HF patients' homes.

# Dr Anvesha Singh



## Networking details:

**Dr Anvesha Singh**

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I am an Honorary Consultant/Associate Professor in Cardiology at the University of Leicester, UK. I specialise in cardiac imaging, including echocardiography and magnetic resonance imaging (MRI) and have BSE accreditation in trans-thoracic and trans-oesophageal echocardiography, EACVI level-3 accreditation in cardiac MRI and SCCT level-2 accreditation in cardiac CT. My research interests include using imaging and blood biomarkers to improve risk stratification in asymptomatic aortic stenosis.

I qualified in Medicine from Cardiff University in 2005, and moved to Leicester to continue my medical training in 2007. I took 3 years out of training to complete a PhD (attained in 2016) at the University of Leicester on the 'use of MRI-measured myocardial perfusion reserve in aortic stenosis' as part of the PRIMID-AS study, which was published in the European Heart Journal, and for which I won two young investigator awards (BHVS 2015 and SCMR 2016). I was an NIHR Academic Clinical Lecturer between 2017-2019, before successfully applying for my current post. I was a member of the British Society of Cardiac MRI (BSCMR) trainee committee until 2019, and am now the regional BSCMR training lead for East Midlands and a member of the BSCMR valve working group. I am also part of the College of Life Sciences' Athena Swan self-assessment team at my university, and we have recently achieved a Silver award. I am passionate about promoting gender equality at the workplace, and encouraging female students and trainees to go into STEM subjects and Cardiology.

# Project abstract

## Local utilisation of cardiac imaging in ischaemic heart disease: producing a combined cardiac imaging request form to streamline the referral pathway

### Background:

NICE guidelines recommend the use of various cardiac imaging tests in assessing patients with known or suspected ischaemic heart disease, depending on local expertise and patient risk profile. These include CT calcium score+/-coronary angiography (CTCA), nuclear myocardial perfusion scan (MPS), cardiac stress magnetic resonance imaging (MRI) and dobutamine stress echocardiography (DSE). Locally, there is variation in the referral pathway and booking process for each test, with no request form available for DSE.

### Objectives:

1. To assess the local utilisation of the various imaging tests via a snapshot audit of waiting times for each test.
2. To produce a combined cardiac imaging referral form, to streamline the referral process, allow easier auditing in the future and allow re-direction to an alternative test (if appropriate) by the Vetting Clinician.

### Method and Results:

An **audit** on 28/01/2018 revealed a marked discrepancy between 'supply' and 'demand' for the various tests, with the longest waiting time for DSE (11 weeks), compared to 6 weeks for MRI, 4 weeks for CTCA and 0.2 weeks for MPS. Using a new proposed referral pathway to guide clinicians, we identified suitable alternative tests for 75% of the 86 DSE requests on the waiting list, which would have reduced the waiting time to ~4 weeks for DSE, with slight increases in the other modalities.

**QIP:** In conjunction with Radiologists and Imaging Cardiologists, I have designed a new combined imaging request form, which is to go live on the electronic system, and will be available as paper and electronic forms. This will allow the Vetting Clinician to re-direct to an alternative test if appropriate, using the proposed pathway that has resulted from this work. This will also introduce a new referral/booking pathway for DSE, which was previously managed manually by three separate secretaries, using individual folders.

**Conclusion:** This is an example of a clinical audit that has directly led to a quality improvement project, that is of benefit to the patients, and results in more collaborative working between the different departments.

# Dr Ibrahim Yearoo



## Networking details:

### Ibrahim Yearoo

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I completed most of my post graduate training in General and Interventional Cardiology, rotating through various cities across the Republic of Ireland and working mainly in tertiary centres. I finished my training with post CCT fellowship in Complex Coronary Interventions and Structural Cardiology at the Bristol Heart Institute.

I work as a Consultant Cardiologist at Beaumont Hospital, Dublin and my interests are in complex coronary procedures including CTO, adjunct technology like Shockwave Lithotripsy, Rotational Atherectomy and Intravascular Imaging to optimise patient outcomes post stenting. I recently became a father to a little girl who brings immense joy to our family. In normal times, I still enjoy a good night out with friends and work colleagues at the end of each month to keep us all bonded and happy.



# Project abstract

## Improving Efficacy and Sustainability of Virtual Cardiology Clinics.

### Objective

The COVID-19 outbreak has placed Health Services under significant strain. Strategies to keep clinics going had to be developed while ensuring safety of patients and hospital staff and ensuring that quality of care is maintained

**Materials and Methods:** We started the clinic transition to virtual visits in March 2020 and reflect on 100 consecutive patients' experience in virtual visits. Clinic metrics were tracked. Electronic survey responses were collected from patients, physicians and OPD staff attending virtual visits.

**Results:** Following the target of 75% virtual consultations being set, 81% of consultations were delivered virtually during the period of July to December 2021. Average time spent for a virtual consultation was 19 minutes. We managed to increase patient volume (5 additional new patients per week per clinic) and reducing the waiting time for routine OPD from 44 weeks to 40 weeks. Discharge from clinic at the third visit was encouraged and prompted if clinically indicated. Overall patients and physicians satisfaction scores (82.5 out of 100) following a sudden, unanticipated transition to virtual visits were very encouraging.

**Recommendations:** Virtual clinics should be sustained and improved in the post COVID era. New Model combining Virtual and Physical Visits to improve efficacy and flow post Covid-19 pandemic should be implemented. Providers and consumers of digital medicine should be regularly surveyed, educated and trained locally and nationwide to bring improvements to the service.

### Conclusion

Virtual Clinics could become the new normal and that routes to high-quality help, advice, and care, at lower cost and greater speed, are potentially many. Taking advantage of digital medicine can be a real driver in meeting the demands of the population in order to ease the pressure on the health service. Virtual care at scale would release face-to-face time in clinical practice to be used for the patients who truly benefit from it.

# Comments about the Emerging Leaders Programme

'The ELP is more than simply a leadership course. It offers invaluable, ongoing support and networking opportunities with colleagues, in a safe and non-judgemental environment. It has given us an opportunity to celebrate our successes, as well as to learn and grow from each other's experiences when things haven't always gone to plan. We now also have an individualised leadership framework for our future endeavours. For me personally, the ELP and associated support network were crucial during my transition from specialist registrar to cardiology consultant'.

**Helena Bolam**



'Being part of the inaugural BCS ELP has been a fantastic experience for me as a new Consultant. Not only have I learnt about management from a theoretical perspective (from International and National leaders in Healthcare to esteemed academics in the leadership field), but I have had the opportunity to learn in a safe and non-judgmental environment with a group of like-minded peers with whom I will remain in touch with throughout my career. The experience has allowed time for introspection and self-evaluation often not afforded in the busy NHS and as a result I feel that I have grown and developed my leadership style and become a more effective, thoughtful and inclusive leader, not to mention having fun and a bit of a giggle along the way! Chris and Sarah have been great throughout the course, providing endless support and advice to us in their roles as informal mentors'.

**Laura Dobson**

'A truly excellent course that has already proven incredibly useful in terms of the skills I have developed and people I have met. The opportunity to learn with and from colleagues around the country is invaluable'.

**Rebecca Dobson**



'I am profoundly grateful to the BCS for the opportunity that the ELP has provided. Networking with colleagues from across the country at a similar stage in their careers has been in equal parts an enlightening, humbling and educational experience. Above all it has been enjoyable!

The programme itself has covered many important aspects of early Consultant life and it has been great to be able to explore these, sometimes challenging, aspects of the real-world of clinical leadership with others in the same boat. The exchange of ideas amongst colleagues with different personality types has been enlightening and has certainly helped me to better understand the dynamics within my own department.

I would recommend the ELP to all aspiring clinical leaders in UK Cardiology – the faculty have been very supportive and the exposure to senior leaders on the national and international stage is not something I think I would have experienced in any other setting. Most importantly, I now know that I can phone a friend at pretty much any UK cardiology centre..!'

**Paul Haydock**

'Why I applied – as a new consultant, I wanted some formal leadership training. The BCS-ACC tie up interested me as a Fellow of the ACC. The fact that the programme was being delivered by the BCS and we were to be the first cohort made it a prestigious opportunity if selected.

What I particularly enjoyed – the coaching sessions. As a healthy-sceptic at the beginning of the process I was surprised as to how useful I found it in the end and ended up having a number of sessions with my coach Jim McKenna.

Regularly meeting my peers and developing friendships with other members of the group was another highlight. Our WhatsApp chat group was a source of fun and support especially during the COVID-19 pandemic. We also bounced different leadership and managerial ideas off each other in the group which was helpful to all. It was disappointing when the course became virtual due to COVID as it meant we couldn't have our traditional post-course get-togethers! The variety of topics covered and teaching delivered was also a highlight of the programme.

Key learning points - I found the talks on compassionate leadership, teams-based approach, critical problem appraisal, difficult conversations and NHS funding sources to be very valuable especially for my leadership project'.

## **Arjun Ghosh**



'On securing my Consultant post, I was aware that during training not enough emphasis had been placed on learning the necessary leadership skills that are essential in navigating the responsibilities of a Consultant position. I researched various leadership courses and was delighted to discover that BCS had created a programme specific to the needs of our specialty. I therefore applied for the BCS Emerging Leaders Programme and was fortunate enough to be selected onto the inaugural cohort.

This programme equips you with the necessary interpersonal skills to resolve difficult conflicts and lead within teams. It allows you to understand your own strengths and weaknesses and how to use these to achieve results.

In addition, there are talks from key leaders within the NHS and healthcare leadership giving a unique and detailed insight into the structure of the NHS and the challenges that need to be addressed.

One of the highlights has been establishing an informal support group with the other participants, allowing a safe space to discuss issues and seek support and advice. It also provides a real insight into how things are done in different institutions and regions, allowing exchange of ideas and initiatives.

I would highly recommend this programme as the skills learnt are essential both in your Consultant position and also in shaping and defining your career progression. I have no doubt that equipped with these skills, a new generation of Cardiologists will be able to lead more effectively on both a local and national level resulting in better care for our patients’.

**Shazia Hussain**



‘The Emerging Leadership Programme has exceeded all my expectations and I am incredibly grateful to the faculty, who have worked so hard to bring us such an invigorating and enjoyable programme. Particular highlights for me have been the lively and inspiring introductory session with the American delegation; the enlightening session with Professor Stefan Scholtes on how to lead successful quality improvement projects; and the highly thought-provoking talks from Professor Chris Ham and Professor Michael West.

I also benefited greatly from the work I did with James McKenna, which has helped me advocate for myself and set boundaries more effectively, and helped me recognise what strengths I can bring to a team. This work inspired me to find a coach with whom I could form a longer-term working relationship and this has been a genuinely transformative process.

Participating in the ELP programme has given me the confidence to take on two new leadership roles, the first of which is leading the ACHD Echocardiography quality improvement project, and the second of which was establishing and leading the Oxford Heart Centre Staff Well-being Team during the Covid pandemic. The latter has been well-received and was cited in the British Cardiovascular Society report on the Future of Cardiology as an example of an innovation arising from the pandemic which could be adopted for the longer term, and this is the new focus of our work.

Some of the most valuable assets that I will take from this programme are the relationships I have forged with my fellow ELP participants. It has been an absolute joy meeting a group of such motivated and inspiring individuals, all of whom share a real appetite for learning and a genuine commitment to improving patient services. I have received invaluable support from them in many ways over the past year and I feel hopeful and confident that these relationships will endure’.

**Joanna Lim**



‘This course gives an invaluable insight into the NHS infrastructure and the tools for implementing a new service. The ELP differs from previous programmes I have been on with its unique focus on cardiology, given the background of delegates.

I enjoyed the friendly and approachable environment in which we were encouraged to share our personal and professional ideologies. The course tutors (Chris Wilkinson in particular) was always accommodating and appreciative of our tight schedules with work, family and more recently COVID-19 commitments.

Another appealing aspect of this ELP was the networking opportunities available with colleagues at a similar career stage. Sharing experiences was particularly helpful as embarking on a service delivery project at a relatively early stage of one’s career can appear initially daunting. The blend of advice from contemporaries and senior faculty helped overcome such challenges’.

**Aneil Malhotra**

'Enrolling in the inaugural ELP has more than lived up to expectation. All of the invited speakers have been excellent. There are too many highlights to mention but one day that stood out for me in particular was "Managing Difficult Conversations and Developing Resilience" – I have recycled many of the techniques introduced during the role-play session and put them to good use in real-life scenarios already this year.

For me though, the most valuable aspect of ELP has been the chance to develop a number of friendships with like-minded peers who are at similar stages in their careers. Having forged such strong collaborative links across the UK and by working as a group rather than as individuals, we are now in a far stronger position for shaping the future of cardiology practice within the NHS'.

**Dr William Moody**



'I have found the BCS Emerging Leaders Programme to be a compelling and comprehensive programme to review the many different facets of leadership in healthcare and the NHS. I have loved meeting many different colleagues from around the country. It has been a joy to learning from their perspectives and experiences of the health services and different leadership styles. There are so many ways to approach a problem and learning how others have resolved many service-related issues was particularly useful.

There is a full spectrum of personality types in the group, and working together in group activities and projects certainly widened my view of leadership. The speakers have been engaging and the programme is well organised with good use of supplementary material. I would strongly recommend the BCS ELP for Consultants in their early years'.

**Sukhjinder Nijjer**

'I applied to the programme as I thought it would be a great opportunity to obtain skills necessary to navigate the transition into my first role as a consultant cardiologist. Whilst the course did indeed deliver on this, the unexpected camaraderie within the group was much more beneficial. Immediately we had a group where we could share experiences, ask for help and offer advice during this challenging transition. This was invaluable during 2020 as we all struggled to cope with the challenges that COVID-19 brought to all of us. As part of the course, we were very lucky to engage with Richard Kovacs and Mike Valentine, both past presidents of the American College of Cardiology, who offered great advice into the challenges of leading a department, and also hurdles that we may face along the way. Both Richard and Mike, and multiple other speakers throughout the year offered to stay in touch and be personally contacted with any questions we may have in the future'.

**Daniel O'Hare**



'Excellent program. Will be further enhanced with iteration and many of the issues related to the projects can be addressed with the experience gained from running previously'.

**Alex Rothman**



"I am privileged and honoured that I was chosen to participate in the inaugural Emerging Leadership Program conducted in 2019-2020 by the British Cardiovascular Society in collaboration with the American College of Cardiology. Starting from the very 1<sup>st</sup> session which contained an entertaining, enlightening skit by Dr Mike Valentine and Dr Dick Kovacs from the ACC regarding the DISC leadership profile,



to the final sessions which were virtual, the sessions were all extremely engaging as well as informative. I also hugely benefited from the 1:1 session with renowned leadership coach Mr James Mckenna whose candor and insightful coaching have also helped in a huge way in moulding my leadership profile.

Thanks also to the ELP for bringing together our group which has been a great source of friendship, support and solace. I have made some great friends through this program and we have remained in touch regularly outside the program especially during the stressful times due to COVID-19.

I am grateful to all the eminent speakers who taught in the program and the BCS, in particular to Prof Simon Ray, Dr Sarah Clarke for their support and advice but also to Ms. Chris Wilkinson for her organisation skills.

In summary, the BCS ELP program has been invaluable in developing and honing my leadership skills and this comprehensive leadership training especially stood me in good stead during the COVID-19 pandemic which required effective and decisive leadership skills at all levels. I would highly recommend that senior cardiology trainees as well as early career cardiology consultants strongly consider applying for this amazing program.”

**Rajiv Sankaranarayanan**



‘I feel privileged to be part of the inaugural cohort of the BCS Emerging Leaders Programme, and want to thank the organisers and sponsors for this unique opportunity. This is a great initiative to equip senior Cardiology trainees/new Consultants with important skills to deal with challenges within the NHS, as we progress to more senior roles.

Through this programme, we got the opportunity to meet, learn from and network with colleagues across the UK, who are at a similar stage of their career. This network has been an important source of advice and support, especially during the Coronavirus pandemic. I

also found the experience of one-to-one coaching by James Makena extremely useful. This, along with the DISC personality tests that we undertook, really helped my understanding of both my own and others' leadership styles, and introduced new ways to interact with different personality types. I would highly recommend this programme to anyone considering applying, and have already been promoting it to my colleagues locally'.

**Anvesha Singh**



'I was seeking a learning experience that would give me new perspectives into the array of factors and new entrants, that are shaping evolving Healthcare models right now. It was also a tremendous networking opportunity - one that has enabled me to join a diverse community of care. Through the program, I have identified a framework to reimagine a digital driven person-centred care model through strategic partnerships with providers'.

**Ibrahim Yearoo**

# Project Abstract References

## Dr Arjun K Ghosh

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## Dr William Moody

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