

**☑** CONTACT@SAMERALABED.COM

#### **SUMMARY**

I actively drive the advancement of machine learning applications in cardiac imaging, focusing on automating diagnosis, prognosis, anatomical segmentation, and report generation. My work has been published in prestigious journals, has influenced European guidelines and earned awards from the UK Parliament, Radiological Society of North America and Royal College of Radiologist.

Leveraging my expertise in big data management and analysis, computer coding, and evidence-based medicine, and through collaborating with international centers, I was instrumental in the development of a cardiac MR segmentation tool. This tool is integral to clinical practice at Sheffield Teaching Hospitals and underscores my commitment to bridging the gap between research and clinical application.

In tandem with my research, my clinical interest centres on cardiac imaging, particularly the assessment of ischaemic heart disease with stress perfusion cardiac MR and coronary CT. I completed an advanced cardiac imaging fellowship at the Royal Papworth Hospital and attained high-level cardiac MR and CT accreditation.

Teaching is fundamental in my career, demonstrated through my involvement in organising national conferences and courses and teaching at various levels including international courses, supervising PhD students, mentoring junior radiology trainees, and contributing to the departmental radiology teaching programme. I am honoured to have received an Educational Award from Health Education England and hold a Postgraduate-Certificate in Medical Education along with a Fellowship of the Higher Education Academy.

Leadership is central to my professional identity. I have served as the co-chair of the BSCI trainee committee, previously co-chairing the BSCMR trainee committee, actively contributing to the academic committee of the RCR and have represented doctors and postgraduate students in various committees. I have successfully coordinated the on-call registrars' rota at the Sheffield Radiology Training Scheme since 2018. Despite the challenges of transitioning to the new junior doctors' contract and staff shortages during the COVID-19 pandemic, I consistently ensured smooth operations.

PROFESSIONAL MEMBERSHIPS		
GMC	General Medical Council	
RCR	Royal College of Radiologists	
ESR	European Society of Radiology	
ESC	European Society of Cardiology	
ERS	European Respiratory Society	
BSCMR	British Society of Cardiovascular Magnetic Resonance	
BSCI	British Society of Cardiovascular Imaging	
RSNA	Radiological Society of North America	
SCMR	Society for Cardiovascular Magnetic Resonance	
ESCR	European Society of Cardiovascular Radiology	
EACVI	European Association of Cardiovascular Imaging	

QUALIFI	CATIONS	
2023	PhD - Al in cardiac MRI	University of Sheffield
	Thesis: Al in cardiac MRI to predict prognosis and treatment	response
	Supervisors: Professor Andy Swift and Professor Haiping Lu	
2021	FHEA - Fellow of the Higher Education Academy	Higher Education Academy
2020	PgCert - Medical Education	University of Dundee
2019	MSc - Clinical Research Methods (Distinction)	University of Sheffield
2018	FRCR - Fellow of the Royal College of Radiologists	Royal College of Radiologists
2013	MSc - Evidence Based Health-Care	University of Oxford
2011	MD - Medical Degree	Damascus University

RESEARCH EXPERIENCE		
2022-	NIHR Clinical Lecturer in Radiology	University of Sheffield
	> Vital role in research collaborations with Ohio, Leiden and Singapore	
2019-22	Wellcome Trust Research Fellow in Cardiac MRI	University of Sheffield
	Data scientist of the ASPIRE cardiac MRI and CT database	
	▶ Helped train, validate and audit deep learning cardiac MRI segmentation	
	▶ Applied machine learning in cardiac MRI to predict diagnosis and prognosis	
2014-19	NIHR Academic Clinical Fellow in Radiology	University of Sheffield
	Performing and evaluating diagnostic accuracy studies in radiology	
2010-	Cochrane Systematic Reviewer	Cochrane Heart

CLINICAL	EXPERIENCE	
2023-24	Advanced Cardiothoracic Imaging Fellowship	Royal Papworth Hospital
	Clinical Supervisor: Dr Bobby Agrawal	
	Research Mentor: Dr Jonathan Weir-Mccall	
2022-23	Cardiothoracic Radiology Training	Sheffield Teaching Hospitals
	➤ Cardiac MRI level 3 accreditation - SCMR	
	Cardiac CT level 2 accreditation - BSCI	
	3 months Cardiac CT experience - Leeds University Hospitals	
2019-22	Out-of-Programme for Research (OOPR)	Sheffield Teaching Hospitals
	Acute and trauma CT and diagnostic and interventional ultrasou	und
2014-19	Core Radiology Training	Sheffield Teaching Hospitals
	> ST4 Acute and general CT, Oncology imaging, US intervention	
	▶ ST3 Chest, Uro & Gynae, Paediatric and Vascular radiology	
	ST2 Neuroradiology, GI, MSK, Breast and Nuclear imaging	
	▶ ST1 Plain radiography, US, CT, Fluoroscopy	
2013-14	Clinical Foundation Training	Buckinghamshire Healthcare Trust
	➤ Cardiology including coronary care unit, heart failure and valve	clinics

# **GRANTS & AWARDS**

Research	funding
----------	---------

£15,000	Primary-Investigator: 2024	NHS England
	Topol Digital Fellowship: Al-enhanced medical imaging reporting	g
£469,272	Co-Investigator: 2023 - 2024	British Heart Foundation
	▶ PROMETHEUS: Pulmonary hypertension induced Right heart fai	lure
£49,998	Co-Investigator: 2023	NIHR i4i
	AI-Assisted Diagnosis of Pulmonary Hypertension using CT and	MRI Scans
£199,946	Co-Investigator: 2021 - 2023	Janssen Pharmaceuticals
	Building a database of imaging in suspected pulmonary hyperte	ension
£114,354	Co-Investigator: 2021 - 2022	Janssen Pharmaceuticals
	Automatic Echo assessment to improve pulmonary hypertensio	n diagnosis
£10,000	Co-Investigator: 2021	NIHR Cochrane Incentive Award
	NOAC for myocardial infarction - a network meta-analysis	
£7,500	Co-Investigator: 2019	NIHR Cochrane Incentive Award
	NOAC for atrial fibrillation - a network meta-analysis	
£3,000	Principal Investigator	Health Education England
	Education, Research and Innovation Grant - 2018	
£3,000	Principal Investigator	RCR
	Constance Thornton Grant for Radiology Research - 2017	
£23,500	Scholarship: 2011	The Saïd Foundation
	MSc at the University of Oxford	
Awards		
~£1500	AI-NET Fellowship - Excellence in AI Research - 2023	DAAD
Winner	NHS Parliamentary Awards - National Awards - 2023	NHS England
Winner	The Future of NHS Award - North East & Yorkshire - 2023	NHS England
Finalist	Digital Innovator of the Year - 2023	HSJ Awards
Distinction	Radiology Editor's Recognition Award - 2023	Radiology: RCTI
£5000	NHS Innovation Award - 2022	Medipex
1st prize	Oral Abstract Winner at RCR Global - 2022	RCR
£500	British Thoracic Society Conference Award - 2022	BTS
£250	European Congress of Radiology Travel Award - 2022	RCR
1st prize	School of Radiology - Yorkshire & Humber - 2022	Health Education England
\$1000	RSNA Trainee Research Prize - 2021	RSNA
£500	The Sir Ernest Finch Travelling Fellowship - 2021	Sheffield Teaching Hospitals
1st prize	Professor Ronald Grainger Prize - 2021, 2020 & 2018	Sheffield Teaching Hospitals
1st prize	George and Vera Ansell Radiology Prize - 2018	RCR
3rd prize	Radiology Trainee Oral Presentation Award - 2015	Society of Radiologists in Training

# **IMPACT AND RECOGNITION**

# Citations in Guidelines

2022	Diagnosis and treatment of pulmonary hypertension	ESC & ERS
2019	Management of patients with supraventricular tachycardia	ESC
2015	Diagnosis and management of pericardial diseases	ESC

# **Media Coverage**

The Sta	MP visits finalists for transformative AI heart disease technology.	July 2023
The Sta	Sheffield Hospitals heart diagnosis AI technology announced as regional winner of Future NHS Award.	June 2023
The Daily Ma	NHS doctors want ChatGPT AI to write patient heart reports so they can see more people.	May 2023
The Mirro	Artificial intelligence can save NHS time and money with heart scans.	March 2023
The Sta	NHS heart patients to receive quicker diagnosis due to Sheffield University and Teaching Hospitals innovation.	Dec 2022
The Daily Ma	Al spots damage on heart scans in seconds.	Dec 2022
AuntMinni	AI-based measurements increase utility of cardiac MRI.	Dec 2021

# SERVICE TO RESEARCH COMMUNITY

# **Journal Editor Roles**

Deputy	Radiology: Cardiothoracic Imaging
Contact	Cochrane Heart

# **Peer Review**

9 reviews	Radiology: Cardiothoracic Imaging
7 reviews	Clinical Radiology
6 reviews	European Heart Journal - Cardiovascular Imaging
2 reviews	JACC: Cardiovascular Imaging
2 reviews	Insights Into Imaging
1 review	Magnetic Resonance Imaging
1 review	Clinical Pediatrics
3 reviews	RCR Seed Grant
2 reviews	RCR Kodak Fellowship
1 review	RCR Roentgen Professorship

# **Invited Panel Chair**

2023	BSCMR Annual Conference
2023	BSCI Annual Conference

# **LEADERSHIP AND MANAGEMENT**

#### **National Leadership Role**

- ➤ Co-Chair Trainee Committee British Society of Cardiovascular Imaging
- ▶ Co-Chair Trainee Committee British Society of Cardiac Magnetic Resonance
- ▶ AI working group RCR Clinical Academic Committee
- Expert Panel for Radiology Research RCR RADIANT

#### **Local Committee Membership**

- > Research Excellence Framework (REF) 2024 Committee for Clinical Medicine
- Co-Lead Imaging and omics Al interest group University of Sheffield
- ▶ Radiology Training committee Sheffield Teaching Hospitals

# **Rota Management**

- ▶ Radiology on-call coordinator working closely with HR since 2018
- Developed code to calculate fair on-call shifts for the radiology department
- ▶ Performed a cost-effectiveness analysis for multiple on-call rota scenarios
- ▶ Improved on-call cover by introducing Twilight shifts for junior trainees
- Responded to Covid-19 pressure with a double cover system described as a "stroke of genius" by the Clinical Director

#### **Student and Trainee Representation**

- ▶ Representative of less than full-time radiology trainees
- > Student councillor University of Sheffield (2014/15)
- ▶ Student representative University of Oxford (2012/13)

#### **Management Courses**

- ▶ Intensive Course on Leadership University of Sheffield
- Decision Making University of Oxford
- Making Decisions Based on Data Udacity University
- Economic Evaluation & Healthcare Financing University of Sheffield

# **TEACHING**

# **National Teaching Organisation**

- > Programme Chair of the BSCI/BSCCT 2024 annual conference at Sheffield
- Organiser of the BSCMR 2023 Webinar series
- Organiser of the BSCI/BSCCT Cardiac CT workshop at BCS 2022

## **Post-Graduate Teaching Experience**

- > PhD co-supervisor at University of Sheffield: Turki Nasser and Khalid Ghamdi
- ▶ Lecturer MRes Cardiovascular Medicine "How to write Systematic Reviews"
- Mentor to junior radiology registrars and research trainees
- Tutor International Critical Appraisal Skills Programme, University of Oxford
- Regular one-to-one and small group departmental radiology teaching
- ▶ Educational Advisor RadiGo radiology teaching website

# **Undergraduate Teaching Experience**

- Anatomy Demonstrator, Medical School, University of Sheffield
- Co-Supervisor Medical School Student Selected components
- Supervisor Summer Programme for International Research Internship
- ▶ Lecturer SAMS virtual EBM courses with > 20,000 views on YouTube

#### **Teaching Courses**

- > FHEA Fellow of the Higher Education Academy
- ▶ PGCert in Medical Education for Radiology University of Dundee
- Gateway Course in Medical Education University of Sheffield
- > Teaching and Learning skills University of Oxford
- Training the Trainer course University of Oxford

#### **Highlighted Publications**

- [1] Al Said S, Kaier K, Sumaya W, Alsaid D, Duerschmied D, Storey R, Gibson C, Westermann D, and **Alabed** S. *Non-vitamin-K-antagonist oral anticoagulants (NOACs) after acute myocardial infarction: a network meta-analysis*. Cochrane Database of Systematic Reviews, 2024.
- [2] **Alabed** S, Garg P, Alandejani F, Dwivedi K, Maiter A, Karunasaagarar K, Rajaram S, Hill C, Thomas S, Gossling R, Sharkey M, Salehi M, Wild JM, Watson L, et al. *Establishing minimally important differences for cardiac MRI endpoints in pulmonary arterial hypertension*. European Respiratory Journal, 2023.
- [3] Zhong L, **Alabed** S, Leng S, Chai P, Teo L, Ruan W, Low TT, Wild JM, Allen JC, Lim ST, Tan JL, Yip JWL, Swift AJ, Kiely DG, and Tan RS. *Pulmonary Artery Strain Predicts Prognosis in Pulmonary Arterial Hypertension*. JACC: Cardiovascular Imaging, 2023.
- [4] **Alabed** S, Alandejani F, Dwivedi K, Karunasaagarar K, Sharkey M, Garg P, Koning PJH de, Tóth A, Shahin Y, Johns C, Mamalakis M, Stott S, Capener D, Wood S, et al. *Validation of Artificial Intelligence Cardiac MRI Measurements: Relationship to Heart Catheterization and Mortality Prediction.* Radiology, 2022.
- [5] **Alabed** S, Uthoff J, Zhou S, Garg P, Dwivedi K, Alandejani F, Gosling R, Schobs L, Brook M, Capener D, Johns C, Wild JM, Rothman AM, Geest RJ van der, et al. *Machine Learning cardiac-MRI features predict mortality in newly diagnosed pulmonary arterial hypertension*. European Heart Journal Digital Health, 2022.
- [6] **Alabed** S, Maiter A, Salehi M, Wild J, Lu H, O'regan D, Van Der Geest R, Garg P, and Swift A. *Quality of reporting in Al cardiac MRI segmentation studies a systematic review and recommendations for future studies.* Vol. 9. Frontiers in Cardiovascular Medicine, 2022.
- [7] Alandejani F, **Alabed** S, Garg P, Goh ZM, Karunasaagarar K, Sharkey M, Salehi M, Aldabbagh Z, Dwivedi K, Mamalakis M, Metherall P, Uthoff J, Johns C, Rothman A, et al. *Training and clinical testing of artificial intelligence derived right atrial cardiovascular magnetic resonance measurements*. Vol. 24. Journal of Cardiovascular Magnetic Resonance, 2022, p. 25.
- [8] Garg P, Gosling R, Swoboda P, Jones R, Rothman A, Wild JM, Kiely DG, Condliffe R, **Alabed** S, and Swift AJ. *Cardiac magnetic resonance identifies raised left ventricular filling pressure: prognostic implications*. European Heart Journal, May 2022.
- [9] Goh ZM, Balasubramanian N, **Alabed** S, Dwivedi K, Shahin Y, Rothman AMK, Garg P, Lawrie A, Capener D, Thompson AAR, Alandejani F, Wild JM, Johns CS, Lewis RA, et al. *Right ventricular remodelling in pulmonary arterial hypertension predicts treatment response*. Heart, 2022.
- [10] Shahin Y, **Alabed** S, Lewis RA, Johns C, Garg P, Wild JM, Condliffe R, Swift AJ, Kiely DG, and al. et. *CMR Measures of Left Atrial Volume Index and Right Ventricular Function Have Prognostic Value in Chronic Throm-boembolic Pulmonary Hypertension*. Vol. 9. Frontiers in Medicine, 2022.
- [11] **Alabed** S, Shahin Y, Alandejani F, Johns C, Lewis R, Condliffe R, Wild J, Kiely D, and Swift A. *Cardiac-MRI Predicts Clinical Worsening and Mortality in Pulmonary Arterial Hypertension: A Systematic Review and Meta-Analysis*. JACC Cardiovascular Imaging, 2021.
- [12] **Alabed** S, Saunders L, Garg P, Shahin Y, Rolf A, Puntmann V, Nagel E, Wild J, Kiely D, and Swift A. *Myocardial T1-mapping and extracellular volume in pulmonary arterial hypertension: A systematic review and meta-analysis*. Vol. 79. Magnetic Resonance Imaging, 2021, pp. 66–75.
- [13] **Alabed** S, Garg P, Johns CS, Alandejani F, Shahin Y, Dwivedi K, Wild J, Kiely D, and Swift A. *Cardiac Magnetic Resonance in Pulmonary Hypertension-an Update*. Vol. 13. Current Cardiovascular Imaging Reports, 2020.
- [14] Goh Z, **Alabed** S, Rothman A, Garg P, Lawrie A, Thompson R, Condliffe R, Wild J, Kiely D, Swift A, and al. et. *Right Ventricular Adaptation Assessed Using Cardiac Magnetic Resonance Predicts Survival in Pulmonary Arterial Hypertension*. JACC: Cardiovascular Imaging, 2020.
- [15] Al Said S, **Alabed** S, Kaier K, Tan A, Bode C, Meerpohl J, and Duerschmied D. *Non-vitamin K antagonist oral anticoagulants post-percutaneous coronary intervention: a network meta-analysis.* Vol. 12. Cochrane, 2019.
- [16] **Alabed** S, Providência R, and Chico TJA. *Cochrane corner: adenosine versus intravenous calcium channel antagonists for supraventricular tachycardia*. Vol. 104. Heart, 2018, pp. 1993–1994.

#### **Peer Reviewed Publications**

- [17] Durrington C, Hurdman JA, Elliot CA, Maclean R, Veen JV, Sacccullo G, De-Foneska D, Swift AJ, Rajaram S, Hill C, Thomas S, Dwivedi K, **Alabed** S, Wild JM, et al. "Systematic pulmonary embolism follow-up increases diagnostic rates of chronic thromboembolic pulmonary hypertension and identifies less severe disease: results from the ASPIRE Registry". In: *European Respiratory Journal* (2024).
- [18] Alnasser TN, Abdulaal L, Maiter A, Sharkey M, Dwivedi K, Salehi M, Garg P, Swift AJ, and **Alabed** S. "Advancements in Cardiac Structures Segmentation: A Comprehensive Systematic Review of Deep Learning in CT Imaging". In: *Frontiers in Cardiovascular Medicine* 11 (2024).
- [19] Salehi M, Maiter A, Strickland S, Karunasaagarar K, Dwivedi K, Sharkey M, Metherall P, Geest R van der, **Alabed** S, and Swift AJ. "Clinical assessment of an AI tool for measuring biventricular parameters on cardiac MR". In: *Frontiers in Cardiovascular Medicine* 11 (2024).
- [20] Wang X, Gondal M, **Alabed** S, Hill C, and Barmby D. "Left Main Stem Compression by Intrapericardial Paraganglioma Associated With Succinate Dehydrogenase Mutation". In: *JACC: Case Reports* 29 (2024).
- [21] Weir-McCall J and **Alabed** S. "Myocardial Tissue Characterization With CT-Derived Extracellular Volume". In: *JACC: Cardiovascular Imaging* (2023).
- [22] Dwivedi K, Sharkey M, **Alabed** S, Langlotz CP, Swift AJ, and Bluethgen C. "External validation, radiological evaluation, and development of deep learning automatic lung segmentation in contrast-enhanced chest CT". In: *European Radiology* (2023).
- [23] Mastrodicasa D, Gunasekaran S, **Alabed** S, Gulsin GS, and Hanneman K. "Top 2023 Images in Cardiothoracic Imaging". In: *Radiology: Cardiothoracic Imaging* 5 (2023).
- [24] Maiter A, Hocking K, Matthews S, Taylor J, Sharkey M, Metherall P, **Alabed** S, Dwivedi K, Shahin Y, Anderson E, Holt S, Rowbotham C, Kamil MA, Hoggard N, et al. "Evaluating the performance of artificial intelligence software for lung nodule detection on chest radiographs in a retrospective real-world UK population". In: *BMJ Open* 13 (2023).
- [25] Assadi H, Matthews G, Zhao X, Li R, **Alabed** S, Grafton-Clarke C, Mehmood Z, Kasmai B, Limbachia V, Gosling R, Yashoda GK, Halliday I, Swoboda P, Ripley DP, et al. "Cardiac MR modelling of systolic and diastolic blood pressure". In: *Open Heart* 10 (2023).
- [26] Khassafi F, Chelladurai P, Valasarajan C, Nayakanti SR, Martineau S, Kiely DG, Swift AJ, **Alabed** S, Omura J, Breuils-Bonnet S, Kuenne C, Potus F, Günther S, Savai R, et al. "Transcriptional profiling unveils molecular subgroups of adaptive and maladaptive right ventricular remodeling in pulmonary hypertension". In: *Nature Cardiovascular Research* 2 (2023).
- [27] Grafton-Clarke C, Matthews G, Gosling R, Swoboda P, Rothman A, Wild JM, Kiely DG, Condliffe R, **Alabed** S, Swift AJ, and Garg P. "The Left Atrial Area Derived Cardiovascular Magnetic Resonance Left Ventricular Filling Pressure Equation Shows Superiority over Integrated Echocardiography". In: *Medicina* 59 (2023).
- [28] Grafton-Clarke C, Garg P, Swift AJ, **Alabed** S, Thomson R, Aung N, Chambers B, Klassen J, Levelt E, Farley J, Greenwood JP, Plein S, and Swoboda PP. "Cardiac magnetic resonance left ventricular filling pressure is linked to symptoms, signs and prognosis in heart failure". In: *ESC Heart Failure* 10 (2023), pp. 3067–3076.
- [29] **Alabed** S. "Artificial Intelligence in Cardiac Magnetic Resonance Imaging to Predict Prognosis and Treatment Response". In: *White-Rose E-Thesis* (2023).
- [30] Maiter A, Salehi M, Swift A, and **Alabed** S. "How should studies using AI be reported? Lessons from a systematic review in cardiac MRI". In: *Frontiers in Radiology* 3 (2023).
- [31] Alkhanfar D, Dwivedi K, Alandejani F, Shahin Y, **Alabed** S, Johns C, Garg P, Thompson AAR, Rothman AMK, Hameed A, Charalampopoulos A, Wild JM, Condliffe R, Kiely DG, and Swift AJ. "Non-invasive detection of severe PH in lung disease using magnetic resonance imaging". In: *Frontiers in Cardiovascular Medicine* 10 (2023).
- [32] Garg P, Javed W, Assadi H, **Alabed** S, Grafton-Clarke C, Swift AJ, Williams G, Al-Mohammad A, Sawh C, Vassiliou VS, Khanji MY, Ricci F, Greenwood JP, Plein S, and Swoboda P. "An acute increase in Left Atrial volume and left ventricular filling pressure during Adenosine administered myocardial hyperaemia: CMR First-Pass Perfusion Study". In: *BMC Cardiovascular Disorders* 23 (2023), p. 246.
- [33] Macdonald A, Salehi M, **Alabed** S, Maiter A, Goh ZM, Dwivedi K, Johns C, Cogliano M, Alandejani F, Condliffe R, Wild JM, Kiely DG, Garg P, and Swift AJ. "Semi-automatic thresholding of RV trabeculation improves repeatability and diagnostic value in suspected pulmonary hypertension". In: *Frontiers in Cardiovascular Medicine* 9 (2023).

- [34] Hameed A, Condliffe R, Swift AJ, **Alabed** S, Kiely DG, and Charalampopoulos A. "Assessment of Right Ventricular Function—a State of the Art". In: *Current Heart Failure Reports* 20 (2023), pp. 194–207.
- [35] Grafton-Clarke C, Garg P, Swift AJ, **Alabed** S, Thomson R, Aung N, Chambers B, Klassen J, Levelt E, Farley J, Greenwood JP, Plein S, and Swoboda PP. "Cardiac magnetic resonance left ventricular filling pressure is linked to symptoms, signs and prognosis in heart failure". In: *ESC Heart Failure* ().
- [36] Gosling RC, Williams G, Al Baraikan A, **Alabed** S, Levelt E, Chowdhary A, Swoboda PP, Halliday I, Hose DR, Gunn JP, Greenwood JP, Plein S, Swift AJ, Wild JM, et al. "Quantifying Myocardial Blood Flow and Resistance Using 4D-Flow Cardiac Magnetic Resonance Imaging". In: *Cardiology research and practice* (2023).
- [37] Doolub G, Mamalakis M, **Alabed** S, Van der Geest RJ, Swift AJ, Rodrigues JCL, Garg P, Joshi NV, and Dastidar A. "Artificial Intelligence as a Diagnostic Tool in Non-Invasive Imaging in the Assessment of Coronary Artery Disease". In: *Medical Sciences* 11 (2023).
- [38] Assadi H, Li R, Grafton-Clarke C, Uthayachandran B, **Alabed** S, Maiter A, Archer G, Swoboda PP, Sawh C, Ryding A, Nelthorpe F, Kasmai B, Ricci F, Geest RJ van der, et al. "Automated 4D flow cardiac MRI pipeline to derive peak mitral inflow diastolic velocities using short-axis cine stack: two centre validation study against echocardiographic pulse-wave doppler". In: *BMC Cardiovascular Disorders* 23 (2023), p. 24.
- [39] Li R, Assadi H, Matthews G, Vassiliou VS, Nelthorpe F, Ashman D, Curtin J, Van der Geest RJ, **Alabed** S, Swift AJ, Hughes M, and Garg P. "The Importance of Mitral Valve Prolapse Doming Volume in the Assessment of Left Ventricular Stroke Volume with Cardiac MRI". In: *Medical Sciences* 11 (2023), p. 13.
- [40] Mamalakis M, Dwivedi K, Sharkey M, **Alabed** S, Kiely D, and Swift AJ. "A transparent artificial intelligence framework to assess lung disease in pulmonary hypertension". In: *Scientific Reports* 13 (2023), p. 3812.
- [41] Sharkey MJ, Taylor JC, **Alabed** S, Dwivedi K, Karunasaagarar K, Johns CS, Rajaram S, Garg P, Alkhanfar D, Metherall P, O'Regan DP, Geest RJ van der, Condliffe R, Kiely DG, et al. "Fully automatic cardiac four chamber and great vessel segmentation on CT pulmonary angiography using deep learning". In: *Frontiers in Cardiovascular Medicine* 9 (2022).
- [42] Alandejani F, Hameed A, Tubman E, **Alabed** S, Shahin Y, Lewis RA, Dwivedi K, Mahmood A, Middleton J, Watson L, Alkhanfar D, Johns CS, Rajaram S, Garg P, et al. "Imaging and Risk Stratification in Pulmonary Arterial Hypertension: Time to Include Right Ventricular Assessment". In: *Frontiers in Cardiovascular Medicine* 9 (2022).
- [43] Shahin Y, **Alabed** S, Alkhanfar D, Tschirren J, Rothman AMK, Condliffe R, Wild JM, Kiely DG, and Swift AJ. "Quantitative CT Evaluation of Small Pulmonary Vessels Has Functional and Prognostic Value in Pulmonary Hypertension". In: *Radiology* (2022).
- [44] Assadi H, **Alabed** S, Maiter A, Salehi M, Li R, Ripley DP, Van der Geest RJ, Zhong Y, Zhong L, Swift AJ, and Garg P. "The Role of Artificial Intelligence in Predicting Outcomes by Cardiovascular Magnetic Resonance: A Comprehensive Systematic Review". In: *Medicina* 58 (2022).
- [45] Alkhanfar D, Shahin Y, Alandejani F, Dwivedi K, **Alabed** S, Johns C, Lawrie A, Thompson AR, Rothman AM, Tschirren J, Uthoff JM, Hoffman E, Condliffe R, Wild JM, et al. "Severe pulmonary hypertension associated with lung disease is characterised by a loss of small pulmonary vessels on quantitative computed tomography". In: *European Respiratory Journal Open Research* 8 (2022).
- [46] Njoku P, Grafton-Clarke C, Assadi H, Gosling R, Archer G, Swift AJ, Morris P, **Alabed** S, Flather M, Cameron D, Cabrero JB, Val JRD, Nair S, Ryding A, et al. "Validation of time-resolved, automated peak trans-mitral velocity tracking: Two center four-dimensional flow cardiovascular magnetic resonance study". In: *International Journal of Cardiology* (2022).
- [47] Dwivedi K, Condliffe R, Sharkey M, Lewis R, **Alabed** S, Rajaram S, Hill C, Saunders L, Metherall P, Lu H, Wild J, Kiely D, and Swift A. "Computed tomography lung parenchymal descriptions in routine radiological reporting have diagnostic and prognostic utility in patients with idiopathic pulmonary arterial hypertension and pulmonary hypertension associated with lung disease". In: *European Respiratory Journal Open Research* (2022).
- [48] Al Said S, Garg P, Jenkins S, Ahmad M, Qintar M, Kyriacou A, Verma N, Providencia R, Camm J, and **Alabed** S. "Catheter ablation for atrial fibrillation (Protocol)". In: *Cochrane Database of Systematic Reviews* 1 (2022).
- [49] Lanham S, Maiter A, Swift AJ, Dwivedi K, **Alabed** S, Evans O, Sharkey MJ, Matthews S, and Johns CS. "The reproducibility of manual RV/LV ratio measurement on CT pulmonary angiography". In: *British Journal of Radiology Open* eprint (2022).

- [50] Saunders L, Hughes P, **Alabed** S, Capener D, Marshall H, Vogel-Claussen J, Beek ER van, Kiely D, Swift A, and Wild J. "Integrated Cardiopulmonary MRI Assessment of Pulmonary Hypertension". In: *Journal of Magnetic Resonance Imaging* (2021).
- [51] Jenkins S, **Alabed** S, Swift A, Marques G, Ryding A, Sawh C, Wardley J, Shah B, Swoboda P, Senior R, Nijveldt R, Vassiliou V, and Garg P. "Diagnostic accuracy of handheld cardiac ultrasound device for assessment of left ventricular structure and function: systematic review and meta-analysis". In: *Heart* (2021).
- [52] Swift A, Wilson F, Cogliano M, Kendall L, **Alabed** S, Rothman A, Garg P, Wild J, Kiely D, and al. et. "Repeatability and sensitivity to change of non-invasive end points in PAH: the RESPIRE study". In: *BMJ Thorax* (2021).
- [53] Swift A, Lu H, Garg P, Taylor J, Metherall P, Johns CS, **Alabed** S, Wild J, Kiely D, and al. et. "A machine learning cardiac magnetic resonance approach to extract disease features and automate pulmonary arterial hypertension diagnosis". In: *European Heart Journal Cardiovascular Imaging* 22 (2021), pp. 236–245.
- Dwivedi K, Sharkey M, Condliffe R, Uthoff J, **Alabed** S, Metherall P, Lu H, Wild J, Hoffman E, Swift A, and Kiely D. "Pulmonary Hypertension in Association with Lung Disease: Quantitative CT and Artificial Intelligence to the Rescue? State-of-the-Art Review". In: *Diagnostics* 11 (2021).
- [55] Hocking K, Alhun U, Balian V, Kabuli M, Tse G, Chopra A, Kotnis N, Connelly D, and **Alabed** S. "Acute haemorrhage rate in 28,000 Out-of-Hours CT heads". In: *The British Journal of Radiology* 95 (2021).
- [56] Al Said S, Katus HA, and **Alabed** S. "Cochrane corner: NOACs in atrial fibrillation patients post-percutaneous coronary intervention". In: *Heart* 106 (2020), pp. 1293–1295.
- [57] Kaur H, Assadi H, **Alabed** S, Vassiliou VS, Westenberg JJM, Geest R van der, Swift AJ, and Garg P. "Left Ventricular Blood Flow Kinetic Energy Assessment by 4D Flow Cardiovascular Magnetic Resonance: A Systematic Review". In: *Journal of Cardiovascular Development and Disease* 7 (2020).
- [58] Jones R, Varian F, **Alabed** S, Morris P, Rothman A, Swift A, Wild J, and Garg P. "Meta-analysis of echocardio-graphic quantification of left ventricular filling pressure". In: *ESC Heart Failure* 8 (2020), pp. 566–76.
- [59] **Alabed** S, Sabouni A, Providencia R, Atallah E, Qintar M, and Chico T. "Adenosine versus intravenous calcium channel antagonists for supraventricular tachycardia". In: *Emergencias* 32 (2020), pp. 57–58.
- [60] Davis H, **Alabed** S, and Chico T. "Effect of sports massage on performance and recovery: a systematic review and meta-analysis". In: *BMJ Open Sport Exercise Medicine* 6 (2020).
- [61] **Alabed** S, Latifeh Y, Mohammad HA, and Bergman H. "Gamma-aminobutyric acid agonists for antipsychotic-induced tardive dyskinesia". In: *Cochrane Database of Systematic Reviews* 4 (2018).
- [62] **Alabed** S, Sabouni A, Providencia R, Atallah E, Qintar M, and Chico T. "Adenosine versus intravenous calcium channel antagonists for supraventricular tachycardia". In: *Cochrane* 10 (2017).
- [63] Alahdab F, **Alabed** S, Al-Moujahed A, Al Sallakh MA, Alyousef T, Alsharif U, Fares M, and Murad M. "Evidence-based medicine: a persisting desire under fire". In: *BMJ Evidence Based Medicine* 22 (2017), pp. 9–11.
- [64] Alsharif U, Al-Moraissi E, and **Alabed** S. "Systemic antibiotic prophylaxis for preventing infectious complications in maxillofacial trauma surgery". In: *Cochrane Database of Systematic Reviews* 3 (2017).
- [65] Hart A, Sharma R, Atherton M, **Alabed** S, Simpson S, Barfield S, Cohen J, McGlashan N, Ravi A, Parker M, and Connolly D. "Aetiological investigations in early developmental impairment: are they worth it?" In: *Archives of Disease in Childhood* 102.11 (2017), pp. 1004–1013.
- [66] "Global, regional, and national burden of neurological disorders during 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015". In: *Lancet Neurolology* 16.11 (2017), pp. 877–897.
- [67] "Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016". In: *Lancet* 390.10100 (2017), pp. 1084–1150.
- [68] "Global, Regional, and National Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life-years for 32 Cancer Groups, 1990 to 2015". In: *JAMA Oncology* 3.4 (2017).
- [69] "Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980-2015". In: *Lancet* 388.10053 (2016), pp. 1459–1544.
- [70] **Alabed** S, Heredia L de, Naidoo A, Belci M, Hughes R, and Meagher T. "Incidence of pulmonary embolism after the first 3 months of spinal cord injury". In: *Spinal Cord* 53 (2016), pp. 835–7.
- [71] **Alabed** S, Belci M, Van Middendorp JJ, Al Halabi A, and Meagher TM. "Thromboembolism in the Sub-Acute Phase of Spinal Cord Injury: A Systematic Review". In: *Asian Spine Journal* 10.5 (2016), pp. 972–981.
- [72] **Alabed** S. "Reply to Silver and Masri". In: *Spinal Cord* 54.10 (2016), p. 909.

- [73] **Alabed** S, Pérez-Gaxiola G, and Burls A. "Colchicine for children with pericarditis: systematic review of clinical studies". In: *Archives of Disease in Childhood* 101 (2016), pp. 953–6.
- [74] **Alabed** S, Sabouni A, Al Dakhoul S, Bdaiwi Y, and Frobel-Mercier A. "Beta-blockers for congestive heart failure in children". In: *Cochrane* 1 (2016).
- [75] Alabed S, Cabello J, and Burls A. "Cochrane corner: colchicine for pericarditis". In: Heart 101.18 (2015).
- [76] Alabed S, Cabello JB, Irving GJ, Qintar M, and Burls A. "Colchicine for pericarditis". In: Cochrane 8 (2014).
- [77] **Alabed** S, Guul A, Crighton C, Alahdab F, Fares M, Morad M, Sonbol MB, Madmani ME, and Unwin N. "Assessment of diabetes care in Palestinian refugee camps in Syria". In: *Avicenna Journal of Medicine* (2014).
- [78] Essali A, **Alabed** S, Guul A, and Essali N. "Preventive interventions for postnatal psychosis". In: *Cochrane Database of Systematic Reviews* 6 (2013).
- [79] Essali A, **Alabed** S, Guul A, and Essali N. "Preventive interventions for postnatal psychosis". In: *Schizophrenia Bulletin* 39 (2013), pp. 748–50.
- [80] **Alabed** S, Latifeh Y, Mohammad HA, and Rifai A. "Gamma-aminobutyric acid agonists for neuroleptic-induced tardive dyskinesia". In: *Cochrane Database of Systematic Reviews* 4 (2011).

#### **Conference Publications**

- [81] **Alabed** S, Garg P, Alandejani F, Dwivedi K, Maiter A, Gossling R, Sharkey M, Salehi M, Geest RJ van der, Swift AJ, and Kiely DG. "Defining cardiac MRI change thresholds based on how a patient feels, functions, and survives post pulmonary arterial hypertension treatment". In: *Heart*. Vol. 109. Suppl 4. 2023.
- [82] **Alabed** S, Garg P, Alandejani F, Dwivedi K, Maiter A, Rajaram S, Hill C, Thomas S, Gossling R, Sharkey M, Karunasaagarar K, Wild JM, Watsong L, Hameed A, et al. "Cardiac MRI thresholds for improvement in pulmonary arterial hypertension". In: *Heart*. Vol. 109. 2023.
- [83] Al Said S, Kaier K, Sumaya W, Alsaid D, Duerschmied D, Storey RF, Gibson CM, Westermann D, and **Alabed** S. "Non-vitamin-K-antagonist oral anticoagulants (NOACs) after acute myocardial infarction: a network meta-analysis". In: *European Heart Journal*. Vol. 44. 2023.
- [84] Delaney L, **Alabed** S, Salehi M, Goodlad M, Checkley E, Shah H, Swift A, and Dwivedi K. "Interobserver variability of the ATS/ERS/JRS/ALAT diagnostic CT criteria for idiopathic pulmonary fibrosis: a systematic review and meta-analysis". In: *European Respiratory Journal*. Vol. 62. suppl 67. 2023.
- [85] Dwivedi K, Sharkey M, Delany L, **Alabed** S, Rajaram S, Hill C, Johns C, Rothman A, Thompson R, Wild J, Condliffe R, Kiely D, and Swift A. "Artificial Intelligence and Computed Tomography to improve quantification and prognostication of lung disease in precapillary pulmonary hypertension". In: *European Respiratory Journal*. Vol. 62. suppl 67. 2023.
- [86] Dwivedi K, Sharkey M, Delany L, **Alabed** S, Rajaram S, Hill C, Johns C, Rothman A, Thompson R, Condliffe R, Kiely D, Swift A, and Wild J. "Improved quantification and prognostication of lung disease on CT in pulmonary hypertension by combining the strengths of deep learning and radiologists: a retrospective multicentre study with external validation". In: *The Royal College of Radiologists Open.* 2023.
- [87] Dwivedi K, Sharkey M, **Alabed** S, Condliffe R, Swift A, and Kiely D. "Quantitative Computed Tomography Lung Parenchymal Features Can Aid in Phenotyping of Group 1 and Group 3 Pulmonary Hypertension". In: *American Journal of Respiratory and Critical Care Medicine*. 2023.
- [88] Tripathi PC, Suvon MNI, Schobs L, Zhou S, **Alabed** S, Swift AJ, and Lu H. "Tensor-Based Multimodal Learning for Prediction of Pulmonary Arterial Wedge Pressure from Cardiac MRI". In: *MICCAI 2023*. 2023, pp. 206–215.
- [89] Matthews G, Grafton-Clarke C, Swift AJ, Ryding A, Assadi H, Garg P, and **Alabed** S. "Non-invasive assessment of stroke work using cardiac magnetic resonance imaging". In: *Heart*. Vol. 109. 2023.
- [90] Correa-Jaque P, Lin Y, Lin S, Liu Y, Fauvel C, Vanderpool R, Kanwar M, **Alabed** S, Swift A, Kiely DG, and Benza RL. "Improvement of Pulmonary Arterial Hypertension (PAH) Risk Assessment Model Using Cardiac Magnetic Resonance Imaging Variables". In: *Circulation*. Vol. 148. 2023.
- [91] **Alabed** S, Garg P, Dwivedi K, Maiter A, Karunasaagarar K, Rajaram S, Hill C, Thomas S, Wild J, Swift A, and Kiely D. "Establishing minimally important differences for cardiac MRI endpoints in pulmonary arterial hypertension". In: *Thorax*. Vol. 77. 2022.
- [92] **Alabed** S, Garg P, Dwivedi K, Maiter A, Karunasaagarar K, Rajaram S, Hill C, Thomas S, Wild J, Swift A, and Kiely D. "Prediction of outcome with cardiac MRI measurements in patients with pulmonary arterial hypertension". In: *The International Journal of Cardiovascular Imaging*. Vol. A-264. 2022.

- [93] **Alabed** S, Maiter A, Mahmood A, Daniel S, Salehi M, Jenkins S, Sharkey M, Dwivedi K, Mamalakis M, Assadi H, Garg P, and Swift A. "Quality of reporting of artificial intelligence studies: Lessons learnt from a systematic review of the literature". In: *Clinical Radiology*. Vol. 77. 2022.
- [94] **Alabed** S, Maiter A, Mahmood A, Daniel S, Salehi M, Jenkins S, Sharkey M, Rakocevic V, Dwivedi K, Asaadi H, Mamalakis M, O'regan DP, Garg P, Van Der Geest R, and Swift AJ. "The quality of reporting in cardiac MRI artificial intelligence segmentation studies a systematic review". In: *European Heart Journal Cardiovascular Imaging*. Vol. 23. 2022.
- [95] **Alabed** S, Dwivedi K, Durrington C, Alandajani F, Condliffe R, Elliot C, Charalampopoulos A, Hameed A, Thompson R, Rothman A, Armstrong I, Swift A, and Kiely D. "Correlation of emPHasis-10 with clinical tests: insights from the ASPIRE registry". In: *Thorax*. Vol. 77. 2022.
- [96] **Alabed** S, Salehi M, Mohammad D, Ochieng L, Maiter A, Dwivedi K, Johns C, Hill C, Rajaram S, Tuner D, Thomas S, Swift AJ, and Karunasaagarar K. "Cardiac findings on body CT: a review of 275,000 CT reports over the past 14 years". In: *Heart*. Vol. 108. 2022.
- [97] **Alabed** S, Salehi M, Dwivedi K, Swift A, and Karunasaagarar K. "Now you see: Cardiac findings on general CT". In: *Clinical Radiology*. Vol. 77. 2022.
- [98] Alandajani F, **Alabed** S, Garg P, Goh Z, Karunasaagarar K, Sharkey M, Salehi M, Aldabbagh Z, Dwivedi K, Metherall P, Uthoff J, Johns C, Rothman A, Condliffe R, et al. "Training and Clinical Validation of Artificial Intelligence Derived Right Atrial Cardiovascular Magnetic Resonance Measurements". In: *American Journal of Respiratory and Critical Care Medicine*. 2022.
- [99] Gosling R, **Alabed** S, Swoboda P, Nagueh SF, Rothman A, Wild JM, Kiely DG, Condliffe R, Swift AJ, and Garg P. "Cardiac magnetic resonance to identify raised left ventricular filling pressure". In: *Heart*. Vol. 107. 2021.
- [100] **Alabed** S, Karunasaagarar K, Garg P, Lu H, Wild J, Kiely D, Van Der Geest R, and Swift A. "A fully automated cardiac magnetic resonance (CMR) assessment improves the evaluation of patients with pulmonary arterial hypertension (PAH)". In: *European Respiratory Journal*. Vol. 58. 2021.
- [101] **Alabed** S, Karunasaagarar K, Garg P, Uthoff J, Metherall P, Sharkey M, Lu H, Wild J, Kiely D, Van Der Geest R, and Swift A. "Fully automated CMR derived stroke volume correlates with right heart catheter measurements in patients with suspected pulmonary hypertension". In: *European Heart Journal Cardiovascular Imaging*. Vol. 22, 2021.
- [102] **Alabed** S, Karunasaagarar K, Garg P, Uthoff J, Metherall P, Sharkey M, Lu H, Wild J, Kiely D, Van Der Geest R, and Swift A. "High interstudy repeatability of automatic deep learnt biventricular CMR measurements". In: *European Heart Journal Cardiovascular Imaging*. 2021.
- [103] **Alabed** S, Metherall P, Sharkey M, and Swift A. "Deep Learning derived T1-mapping values compared to manual assessment". In: *European Congress of Radiology*. 2021.
- [104] **Alabed** S, Wild J, Kiely D, and Swift A. "Cardiac MRI for Prognosis in Pulmonary Arterial Hypertension: A Systematic Review and Meta-Analysis". In: *European Respiratory Journal*. Vol. 56. 2020.
- [105] Goh Z, Balasubramanian N, **Alabed** S, Dwivedi K, Shahin Y, Rothman A, Garg P, Lawrie A, Wild J, Johns C, Kiely D, and Swift A. "Right ventricular remodelling assessed using cardiac magnetic resonance predicts survival and treatment response in pulmonary arterial hypertension". In: *Thorax*. Vol. 77. 2022.
- [106] **Alabed** S, Hocking K, Alhun U, Wright C, Hughes F, Balian V, Kabuli M, Kotnis N, and Connolly D. "Natural language processing to audit CT Head reports". In: *European Congress of Radiology*. 2021.
- [107] Abdulaal L, Dwivedi K, Sharkey M, **Alabed** S, Mamalakis M, Alkhanfar D, Condliffe R, Kiely D, and Swift A. "CT lung parenchymal appearances in chronic thromboembolic pulmonary hypertension (CTEPH)". In: *Thorax*. Vol. 77, 2022.
- [108] Dwivedi K, Lewis R, Condliffe R, Sharkey M, Mamalakis M, **Alabed** S, Wild J, Swift A, and Kiely D. "Computed Tomography (CT) Features Are of Diagnostic Utility in Pre Diagnosis Idiopathic Pulmonary Arterial Hypertension: A Case Controlled Study". In: *American Journal of Respiratory and Critical Care Medicine*. 2021.
- [109] Mamalakis M, Dwivedi K, Sharkey M, **Alabed** S, Metherall P, Kiely D, and Swift A. "Deep Learning Approaches to Classify Lung Parenchymal Disease on CT Images". In: *American Journal of Respiratory and Critical Care Medicine*. 2021.
- [110] Sharkey M, Karunasaagarar K, Johns C, Rajaram S, Alkhanfar D, Dwivedi K, **Alabed** S, Metherall P, Geest RVD, Mamalakis M, Kiely D, and Swift A. "Fully Automatic Cardiac and Great Vessel Segmentation on CT Pulmonary Angiography (CTPA) Using Deep Learning". In: *American Journal of Respiratory and Critical Care Medicine*. 2021.

- [111] Uthoff J, **Alabed** S, Lawrie A, Kiely D, Lu H, and Swift A. "Sex bias exists in diagnosing pulmonary arterial hypertension via machine learning". In: *European Respiratory Journal*. Vol. 56. 2020.
- [112] Uthoff J, **Alabed** S, Swift A, and Lu H. "Geodesically Smoothed Tensor Features for Pulmonary Hypertension Prognosis using the Heart and Surrounding Tissues". In: *Medical Image Computing and Computer Assisted Intervention–MICCAI 2020*. 2020.
- [113] Alkhanfar D, Shahin Y, Alandejani F, **Alabed** S, Johns C, Rothman A, Garg P, Condliffe R, Quadery R, Kiely D, Wild J, and Swift A. "Serial cardiac MRI for assessment of cardiac morphology and function in CTEPH patients after PEA or vasodilator therapy". In: *European Respiratory Journal*. Vol. 56. 2020.
- [114] Alandejani F, Tubman E, Shahin Y, Lewis R, Dwivedi K, Alkhanfar D, **Alabed** S, Johns C, Garg P, Condliffe R, Lawrie A, Kiely D, Wild J, and Swift A. "Cardiac MRI right atrial area measurement thresholds for risk stratification in patients with PAH". In: *European Respiratory Journal*. Vol. 56. 2020.
- [115] **Alabed** S, Hart A, and DJ. C. "Cost per diagnosis in early developmental impairment (EDI) is magnetic resonance imaging (MRI) worth it?" In: *Clinical Radiology*. 2018.
- [116] **Alabed** S, Al Dakhoul S, Sabouni A, Bdaiwi Y, and Frobel-Mercier A. "Are beta-blockers effective in children with congestive heart failure?-A Cochrane review". In: *European Journal of Heart Failure*. Vol. 19. 2017.
- [117] **Alabed** S, Guul A, and Crichton C. "Diabetes among Palestinians in Syrian refugee camps: what is the reality of care?" In: *Cambridge Journal of Medicine*. 2013, Suppl 1.

ORAL PF	RESENTATIONS	
2024	Post-Treatment MRI Changes in Pulmonary Hypertension	London
	➤ CMR 2024 - International Cardiac Magnetic Resonance Conference	
2023	Large Language Model Mortality Prediction in CT Reports	Berlin
	European Society of Cardiac Radiology	
2023	From automated cardiac measurements to auto reporting	London
	Dragon's Den - Royal College of Radiologists	
2022	Quality of Reporting of Artificial Intelligence studies	Dubai, UAE
	Royal College of Radiologists Global Conference	
2022	Cardiac Findings on General CT	Dubai, UAE
	Royal College of Radiologists Global Conference	
2021	Al Cardiac MRI Measurements Clinical Benchmarking	Chicago, USA
	Radiological Society of North America	
2021	Using AI to improve pulmonary hypertension assessment	London
	National Pulmonary Hypertension Research Forum	
2021	The future of cardiac imaging	Sheffield
	Yorkshire & Humber Chest and Cardiac Regional Study Day	
2021	Clinical Validation of Cardiac MRI AI Segmentation	Sheffield
	School of Radiology - Yorkshire & Humber annual meeting	
	Professor Ronald Grainger Memorial Meeting	
	Clinical Imaging Clinical Research (CICR) meeting	
	Department Research in Progress Meeting (DRIP)	
	▶ Sheffield Medical School Research Conference	
2021	Natural Language Processing in Radiology Audit	Leeds
	➤ Yorkshire School of Radiology Annual Conference	
2017	Cost per MRI diagnosis in developmental impairment	Liverpool
	▶ Royal College of Radiologists Annual Conference	
2015	CTPA detection rates in spinal cord injury	Bangor
	Society of Radiologists in Training Annual Conference	
2012	The need for Evidence-Based Medicine in Syria	London
	▶ Saïd Foundation Annual Dinner	
	Attended by UK Ministers, MPs, Lords and Ambassadors at The V&A Museum	

INTERNATIONAL POSTER PRESENTATIONS		
ESCR 23	Radiology reports of cardiac MRI scans predict prognosis	Berlin
ESCR 22	Outcome prediction with CMR in pulmonary hypertension	Rome
ERS 22	Correlation of emPHasis-10 with clinical tests	Barcelona
EACVI 22	Quality of reporting in AI cardiac MRI segmentation studies	London
ECR 22	Reporting cardiac findings on body CT over the last decade	Vienna
SCMR 22	Time-resolved cardiac MRI prgonostic feature extraction	Virtual
ERS 21	Automated CMR assessment in pulmonary hypertension	Virtual
EuroCMR21	High repeatability of deep learnt CMR measurements	Virtual
EuroCMR21	Automated CMR correlates with right heart catheter	Virtual
ECR 21	Deep Learning derived T1-mapping values	Virtual
ECR 21	Natural language processing to audit CT Head reports	Virtual
SCMR 21	Machine Learning in Cardiac MRI Predicts Mortality	Virtual
RSNA 20	Meta-analysis of T <sub>1</sub> -mapping in pulmonary hypertension	Virtual
ERS 20	Cardiac MRI predicts prognosis in pulmonary hypertension	Virtual
ESC 17	Beta-blockers in children with congestive heart failure	Paris

# **STATISTICAL & CODING SKILLS**

#### Software skills

- **> Python** fluent command of data management, analysis and visualisation
- **▶ R Language** used extensively for most common statistical tests
- **> SPSS** used extensively for most common statistical tests
- > STATA used extensively for diagnostic accuracy meta-analyses
- ▶ LaTeX used the LaTeX typesetting system to write my PhD thesis

# **Statistics Courses**

- > Statistics for Health Care Research University of Oxford
- Advanced Statistics for Health Researchers University of Sheffield
- Descriptive and exploratory data analysis University of Hagen
- Diagnostic accuracy meta-analysis University of Birmingham
- > Python Data Analysis course University of Sheffield
- Data Analysis Skills for Researchers University of Sheffield

# Fluent English Fluent German Fluent Arabic