

09/02/2023

**Professor  
Marc R Dweck**

BSc (Hons) MBChB  
PhD FRCP FACC

**CURRICULUM VITAE**

## Personal Information

### Qualifications

- FRCP, Fellow of the Royal College of Physicians 2019
- FACC, Fellow of the American College of Cardiology 2013
- Member of the Young Academy of Scotland, Royal Society of Edinburgh 2013
- PhD, University of Edinburgh 2012
- MRCP, Royal College of Physicians 2006
- MB ChB, University of Edinburgh 2003
- BSc (First Class Honours), University of Edinburgh 2000

### Awards & Prizes

- 2021 Clarivate Highly Cited Researcher in Clinical Medicine (top 1% of researchers)
- 2021 William W. Parmley Young Author Award, Journal American College of Cardiology (mentor)
- 2019 Scientific Paper of the Year, EuroMinnies. AuntMinnieEurope.com
- 2017 British Medical Journal Imaging Team of the Year
- 2016 Michael Davies Early Career Award, British Cardiovascular Society
- 2016 Elite Reviewer Award for JACC Cardiovascular Imaging
- 2015 Sir Jules Thorn Award for Biomedical Research
- 2015 Queen's Anniversary Prize for Higher and Further Education
- 2015 British Heart Foundation Outstanding Investigator Award
- 2014 Glaxo-Smith Kline Emerging Scientist of the Year, Academy of Pharmaceutical Sciences
- 2014 Prof J Roelandt's Young Investigator Award. Euro Echo Imaging, Vienna
- 2014 BMJ Awards. UK Research Paper of the Year. Runner up (senior author)
- 2013 Patrick Neil Medal. Early Career Award for Life Sciences, Royal Society of Edinburgh
- 2013 Finalist The Lancet Prize, Young Investigator Award, Academy of Medical Sciences
- 2012 William W. Parmley Young Author Award, Journal American College of Cardiology
- 2012 Winner, Young Investigator Award, American College Cardiology Scientific Sessions
- 2012 President's Medal, Royal Society of Medicine, London
- 2012 Cardiosource World News Future Star of Cardiology (April 2012)
- 2011 Young Research Workers Prize, Radiology Society North America, Chicago, USA
- 2010 Gold-medal abstract award EURO-CMR, Florence, 2010.
- 2000 Research Bursary from the Physiological Society for intercalated BSc research
- 2000 University of Edinburgh Blue for Sporting Achievement

## **Awards to PhD Students**

- 2021 Young Investigator Award, European Society of Cardiology (Dr Evangelos Tzolos)
- 2021 Late Breaking Clinical Trial, European Society of Cardiology (Dr Evangelos Tzolos)
- 2021 Best Clinical Case Award, European Society of Cardiology (Dr Marwa Daghem)
- 2021 William W. Parmley Young Author Award, Journal American College of Cardiology (Mentor to Dr Jacek Kwiecinski and Dr Evangelos Tzolos).
- 2018 Young Investigator Award, European Society of Cardiology (Dr Tim Cartlidge)
- 2015 Young Investigator Award, American College Cardiology Scientific Sessions (Dr Calvin Chin)
- 2015 James Thomas Heart Valve Imaging Award, Heart Valve Society (Dr Russell Everett)
- 2014 Hotline Late Breaking Clinical Trial (Basic and Transitional Science), ESC Congress (Dr Nik Joshi)
- 2011 Josephine Lansdell Award for research in heart diseases, British Medical Association (Dr Nik Joshi)

## **Professional Appointments**

- **Vice President Elect European Association of Cardiovascular Imaging (2022-24)**
- **Professor of Clinical Cardiology, University of Edinburgh 2020- present**
- **Director of the Image Analysis Core of the Edinburgh Clinical Research Facility 2020-present**
- **Elected Board Member European Association of Cardiovascular Imaging (EACVI) 2018-20, 2020-22**
- **Executive Committee Member, British Atherosclerosis Society 2022-20225**
- **British Heart Foundation. Project Grants Committee 2018-2021**
- **European Society of Cardiology Congress Program Committee 2019 and 2020.**
- **Education in Heart. Series Editor for Imaging 2019 to present**
- **Reader in Cardiology University of Edinburgh August 2018**
- **Member of the Editorial Board of Circulation. October 2017 to present**
- **Member of the Editorial Board of Heart. January 2018 to present**
- **Associate Editor for Trials. August 2018**
- **Member of European Association Cardiovascular Imaging (EACVI) Education Committee. 2016**
- **Guest Editor Circulation Cardiovascular Imaging. June 2015 to present**
- **Honorary Consultant Cardiologist, Edinburgh Heart Centre, UK June 2016**
- **British Heart Foundation Intermediate Clinical Research Fellow, Dec 2014 University of Edinburgh.**

- **British Heart Foundation Clinical Research Fellow. University of Edinburgh 01/10 – 12/12.**
- **NTN Cardiology & General Internal Medicine South East Scotland 03/07- 2015**  
- Royal Infirmary Edinburgh, Western General & Victoria Hospitals
- **St Thomas' Hospital. ITU SHO (6 months) 08/06 – 02/07**
- **Hammersmith Medical SHO Rotation: 08/05- 07/06**
- **Royal Brompton Hospital. Cardiology SHO. 02/05 – 07/05**
- **Royal Infirmary Edinburgh. Cardiology & General Surgery PRHO. 08/03-08/04**

## National & International Fellowships

- **Fellowship in Molecular Cardiovascular Imaging. June 2015.**  
Translation Molecular Imaging Institute, Mount Sinai Hospital, New York, USA (NIH RO1 grant 5 R01 HL071021-13)  
*Prof Zahi Fayad, Prof Jagat Narula, Prof Valentin Fuster*
- **British Cardiac Society / American College of Cardiology Fellowship in Multi Modality Cardiac imaging 2011**  
Cedars-Sinai Medical Centre, Los Angeles,  
*Prof Daniel Berman, Prof James Min.*
- **British Heart Foundation Clinical PhD Training Fellowship 2010**  
*"The Assessment of Aortic Stenosis Using Modern Non-Invasive Imaging Techniques"*  
BHF Centre for Cardiovascular Science, University of Edinburgh  
*Prof David Newby, Dr Nicholas Boon, Prof James Rudd (Cambridge)*
- **Cardiovascular Magnetic Resonance Fellowship 2009**  
Royal Brompton Hospital.  
*Prof Pennel, Prof Mohiaddin, Dr Prasad, Dr Kilner*

## Research Grants

- **BHF Programme Grant (RG/F/22/110093). £1,943,103.52.** 5 years. Finding a cure for aortic stenosis. Co-applicant.
- **Medical Research Council. (MR/X009955/1) £1,599,877.69.** The CARDIOvascular-Immune-Mediated Inflammatory Diseases (CARDIO-IMID) UK Network. **Co Applicant (PET lead)**
- **BHF CRTF (Dr Kri Loganathan). FS/CRTF/22/24377. £219,314.54.** 2022. 24 months. "Myocardial fibrosis activity and the activated fibroblast in heart failure with preserved ejection fraction" **Primary Applicant.**
- **BHF REA3 Strategic Grant. £100,000. 2022. 18 months.** Dissecting mechanisms of aortic stenosis to develop targeted therapeutics (CureAS). **Primary Applicant.**

- **European Association of Cardiovascular Imaging Research Grant. 30,000 Euros. Jolien Geers. May 2022. 12 months.** Imaging Fibrosis in Aortic Stenosis. **Primary Applicant.**
- **BHF Senior Clinical Research Fellowship FS/SCRF/21/32010. £671,000.89.** December 2021. 36 months (then review). "Myocardial fibrosis activity in cardiovascular disease. **Primary Applicant.**
- **BHF Clinical Research Training Fellowship Application FS/CRTF/20/24087. £146,019.59 2021.** Over 2 years. Altered myocardial calcium-handling in patients with diabetes mellitus or heart failure. Co-applicant Dr Shruti Joshi.
- **BHF Clinical Research Training Fellowship Application FS/CRTF/20/24086. £231,336.69. 2021.** Incidence, consequences and natural history of left ventricular thrombus after acute anterior myocardial infarction. Evangelos Tszolos. **Primary Applicant**
- **Joint funding British Heart Foundation with DZHK and DHF, BHF Special Project SP/20/3/35123. Euro 1,107,255. 4 years.** Quantitative-imaging in cardiac transthyretin amyloidosis (I-CARE). **Primary Applicant**
- **British Heart Foundation Project Grant. 2019. Bioprosthetic Valve Thrombosis. £256,948. 2 years. Co-applicant**
- **BHF REA3 Pump Priming Awards 2019.** Manufacture of 68Ga-FAPI: a novel tracer for fibrosis activity **£41,500. Primary Applicant**
- **British Heart Foundation Extension to Intermediate Clinical Research Fellowship (FS/14/78/31020) Dec 2019 2 years.** 18F-proline MR/PET for the assessment of myocardial fibrosis activity in humans. **£398,919. Primary Applicant**
- **BHF REA3 Pump Priming Awards 2019.** Dissecting activation, heterogeneity and crosstalk of PDGFRa/b+ cells in valvular stenosis and left ventricular remodelling following aortic stenosis. **£46,200. Primary Applicant**
- **British Heart Foundation Clinical Study Grant 2019 CS/18/7/33714. 5 years** The Early surgery in severe ASymptomatic Aortic Stenosis (EASY-AS) trial. Principal Applicant, Professor Gerry McCann. **£2,722,054. Co-applicant.**
- **British Heart Foundation Clinical Study Grant 2019 CS/18/4/34074. 5 years** Computed tomography coronary angiography for the prevention of myocardial infarction: The SCOT-HEART 2 Trial. **£943,260. Co-applicant.**
- **BHF Research Excellence Award to the University of Edinburgh. 2019. PI for Theme 2 of the application "Fibrosis and Calcification in Cardiovascular Disease". £3,000,000. Co-PI.**
- **BHF Infrastructure Grant no. IG/18/1/33458. March 2018 £700,000.** "Funds to upgrade and expand a radiochemistry facility to deliver current and future cardiovascular PET research" Co Applicant
- **BHF Project Grant no. PG/18/26/33589. March 2018. £176,162. 3 years** How does NPP1 ablation drive arterial calcification? Co-applicant

- **BHF Infrastructure Grant no IG/17/3/33201. October 2017. £393,225.** Funds to upgrade a BHF funded 3T magnetic resonance imaging scanner. Co-Applicant
- **BHF Clinical Research Training Fellowship no. FS/17/79/33226. October 2017. £120,628.** Mhairi Doris. Combined positron emission tomography and magnetic resonance imaging of coronary atherothrombosis 1 year. **Primary applicant**
- **National Institute of Health, United States of America. R01HL135557. August 2017. \$2,950,825.** Integrated analysis of coronary anatomy and biology with 18F-fluoride PET and CT angiography. 4 years. Co-Applicant
- **BHF Clinical Research Training Fellowship no FS/17/51/33096 August 2017 £168,504** Jack Andrews. Early clinical development of a thrombus 18F-radiotracer". 2 years. Supervisor.
- **BHF Clinical Research Training Fellowship no FS/17/19/32641. £210,408.** Nicholas Spath. Manganese-enhanced magnetic resonance imaging of the myocardium. Supervisor
- **Sir Jules Thorn Award for Biomedical Research June 2016. 15/JTA. £1,364,215.** Myocardial fibrosis and left ventricular decompensation in patients with aortic stenosis. for 5 years. **Primary applicant**
- **BHF Programme Grant RG/16/10/32375. 2016. £1,796,358.** "Non-invasive Imaging of Human Coronary Atherosclerosis." 5 years. Co-applicant
- **BHF Project Grant no. PG/16/12/32022. 2016 £103,596.** "Novel imaging biomarker for detection of regional cardiovascular inflammation using Positron Emission Tomography (PET)." 1 year. Co-applicant
- **BHF Project Grant no. PG/15/108/31928. 2016 £258,153.** "A study into the inflammatory mechanisms and protracted recovery of tako-tsubo cardiomyopathy" 3 years. Co-applicant
- **BHF Clinical Research Training Fellowship no. FS/16/19/31982 - 2016. £169,016.** Tania Pawade "Role of calcification in the pathogenesis of aortic stenosis" for 2 years. **Primary applicant.**
- **BHF Clinical Research Training Fellowship. 31957 RG81875 Mohammed Choudhury. 2016.** University of Cambridge. The role of inflammation and calcification in peripheral arterial disease and its complications - The CIRLA study. For 3 years. Co-applicant
- **Dr Miriam & Sheldon G. Adelson Medical Research Foundation. \$5,000,000.** Cardiac Imaging Research Initiative. Dec 2015-Dec 2020. 5 years. Co-applicant.
- **Wellcome Trust Institutional Strategic Support Fund. 2015. £50,650.** Can glucocorticoids be used to suppress myocardial glucose uptake to improve non-invasive diagnosis of coronary artery disease in humans using <sup>18</sup>FDG-PET/CT? Co-applicant.
- **Chief Scientist Office Project Grant. 2015 ETM/365 £205,747.** 18F-Sodium Fluoride Imaging of Abdominal Aortic Aneurysms. 3 years. Co-applicant.
- **Wellcome Trust Senior Investigator Award (Prof David Newby). WT103782AIA. £2,247,188** Identification and prediction of coronary artery plaque rupture using 18F-fluoride positron emission

tomography. January 2015 for 5 years. Co-applicant.

- **BHF Intermediate Clinical Research Fellowship Dec 2014. FS/14/78/31020. £976,514.** Modification of calcification activity and 18F-Fluoride positron emission tomography uptake in cardiovascular disease. 5 years. **Primary applicant.**
- **Astrazeneca. ISSBRIL0250. 2014. £413,487.** Dual antiplatelet therapy to Inhibit coronary Atherosclerosis and Myocardial injury in patients with Necrotic high-risk coronary plaque Disease: the DIAMOND study. Co-applicant
- **British Heart Foundation Clinical PhD Training Fellowship (FS/13/77/30488). 2014. Timothy Cartledge £294,956.** 18F-fluoride in the identification of bioprosthetic valve degeneration following surgical and transcatheter implantation. 3 years. **Primary applicant.**
- **British Heart Foundation Project Grant. PG/13/32/30205. 2013. £299,405.** Development of a clinical translational model of arterial injury and repair to assess vascular stem cell therapies. 3 years. Co-applicant.
- **Chest, Heart and Stroke Scotland Project Grant. 2013 £50,722.** Metabolic Imaging in Carotid Atherosclerosis (MICA Study). 2 years. Co-applicant.
- **Chief Scientist Office Project Grant ETM/266. 2012 £211,771.** Identification of cellular inflammation in the myocardium using magnetic resonance imaging. 3 years. Co-applicant.
- **Wellcome Trust Vacation Scholarship. 2012 £1,440.** Mr Gregom Sng. **Primary applicant.**
- **British Heart Foundation Clinical PhD Training Fellowship. FS/12/84/29814 2012. £240,310 William Jenkins.** Identification of *In Vivo* Angiogenesis and Fibrosis in Cardiovascular Disease Using Positron Emission Tomography. 3 years. Co-applicant
- **British Heart Foundation Project Grant PG/12/8/29371. 2012. £251,525.** Role of 18F-Sodium Fluoride imaging as a novel marker of plaque instability. 3 years. Co-applicant.
- **British Heart Foundation Supplement to Clinical PhD Training Fellowship. 2011. FS/10/026 £119,200. Marc Dweck.** The Role of Fibrosis in Aortic Stenosis. 2 years. **Primary applicant**
- **Chief Scientist Office Project Grant ETM/160. 2011. £225,001.** Novel imaging approaches to identify unstable atherosclerotic coronary plaques. 3 years. Co-investigator
- **British Heart Foundation Clinical PhD Training Fellowship FS/10/026. 2010. £280,048. Marc Dweck.** Role of inflammation and calcification in the progression of aortic stenosis: the ring of fire. 3 years. **Primary applicant**

**Total £31,784,361**

### **Trial Steering Committees & Industry Sponsored Studies**

- Trial Steering Committee, Lp(a) FRONTIERS CAVS, Novartis
- UK Principal Investigator. Victorian Plaque Study. Novartis

## Positions of Responsibility

- Vice President Elect European Association of Cardiovascular Imaging (2022-24) (CT/Nuclear)
- Chair EACVI Scientific Initiatives Committee 2020-22 & 2022-24
- Chair BHF/NIHR Partnership Working Group for Heart Valve Disease. 2023-present
- Elected Member of the Board for the European Association Cardiovascular Imaging (EACVI) 2020-2022
- European Society of Cardiology Task Force Gender Medicine 2022- present
- Chair ESC/EACVI Committee for Accreditation in Cardiovascular Computed Tomography 2021- present
- Board Member British Atherosclerosis Society.
- Convenor of the 2023 British Atherosclerosis Society Annual Scientific Meeting
- EACVI 2022 Congress Program Committee
- Selector University of Edinburgh Medical School Admissions 2022, 2023
- European Society of Cardiology EORP (*EURObservational Research Programme*) Committee 2020-22
- Course Director EACVI Course on Cardiac CT, ESC Heart House, Nice 2022 & 2023
- Judge British Cardiac Society Michael Davies Award & Young Investigator Award 2022
- British Heart Foundation Data Science Centre Cardiovascular Imaging Prioritisation Exercise Steering Committee 2022
- Voting Member European Society of Cardiology General Assembly 2020
- EACVI 2020 Congress Program Committee
- European Society of Cardiology Congress Program Committee 2019 and 2020
- European Society of Cardiology Spokesperson, ESC Conference Paris 2019
- British Heart Foundation. Project Grants Committee 2018-2021
- Elected Member of the Board for the European Association Cardiovascular Imaging (EACVI) 2018-2020
- Task force EACVI Committee Level 1 CT Course
- EACVI Co-Chair Scientific Initiatives Committee
- ESC/EACVI Task Force Member on Multi-modality Imaging
- Director of the Wellcome Trust Image Analysis Core, University of Edinburgh.
- EACVI Scientific Documents Committee
- EACVI Education Committee
- EACVI and European Association of Nuclear Medicine 4I's Task Force on Inflammation imaging
- EACVI Lead Question Writer on Multi-Modality Imaging for Accreditation Examinations
- Lead of the Valve Heart Disease Task Force for the British Society of Cardiovascular Magnetic Resonance
- Member of the Nucleus for CT and Nuclear Imaging, European Association Cardiovascular Imaging (EACVI)
- Member of the Nucleus for CMR, European Association Cardiovascular Imaging (EACVI)
- External Advisory Board of the European Union's Horizon 2020 research program INTRICARE. ITN-EJD No 722609.
- Member of the Research Committee of the British Society of Cardiovascular Magnetic Resonance
- Member of the European Society of Cardiology Working Group on Valvular Heart Disease
- Working Group Lead. Young Academy of Scotland, Royal Society of Edinburgh
- Captain Scottish Universities Cricket Team

## Editorial Board Positions



- Member Editorial Board for Circulation
- Member Editorial Board for European Heart Journal Open
- Member Editorial Board for Heart (International Advisory Board Member)
- Education in Heart, Series Editor for Imaging
- Member Editorial Board for the European Heart Journal Cardiovascular Imaging
- Senior Editorial Advisor JACC Case Reports
- Guest Editor Circulation Cardiovascular Imaging.
- Associate Editor (Cardiology) for Trials
- Member Editorial Board Journal of Nuclear Cardiology
- Elected Board Member European Association Cardiovascular Imaging (EACVI)
- Co-chair EACVI Scientific Initiative Committee
- EACVI Certification and Accreditation Committee Member
- EACVI Scientific Documents Committee

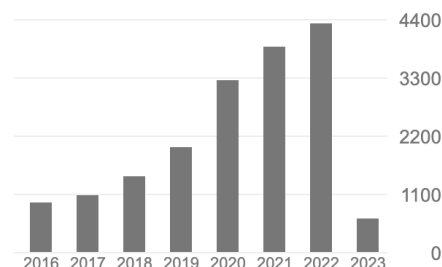
## 5 KEY PUBLICATIONS

- Kaiser Y, Daghm M, Tzolos E, Meah MN, Doris MK, Moss AJ, Kwiecinski J, Kroon J, Nurmohamed NS, van der Harst P, Adamson PD, Williams MC, Dey D, Newby DE, Stroes ESG, Zheng KH, **Dweck MR**. Association of Lipoprotein(a) With Atherosclerotic Plaque Progression. **J Am Coll Cardiol**. 2022 Jan 25;79(3):223-233. doi: 10.1016/j.jacc.2021.10.044. PMID: 35057907; PMCID: PMC8784819.
- Williams MC, Kwiecinski J, Doris M, McElhinney P, D'Souza MS, Cadet S, Adamson PD, Moss AJ, Alam S, Hunter A, Shah ASV, Mills NL, Pawade T, Wang C, Weir McCall J, Bonnici-Mallia M, Murrills C, Roditi G, van Beek EJR, Shaw LJ, Nicol ED, Berman DS, Slomka PJ, Newby DE, Dey D, **Dweck MR**. [Low-Attenuation Noncalcified Plaque on Coronary Computed Tomography Angiography Predicts Myocardial Infarction: Results From the Multicenter SCOT-HEART Trial \(Scottish Computed Tomography of the HEART\)](#). **Circulation**. 2020 Mar 16. doi: 10.1161/CIRCULATIONAHA.119.044720. [Epub ahead of print]
- The Scottish Computed Tomography of the HEART (SCOT-HEART) Trial Investigators. Coronary CT angiography and the future risk of myocardial infarction. **New England Journal of Medicine** 2018 Sep 6;379(10):924-933. doi: 10.1056/NEJMoa1805971
- The Scot Heart Investigators. Computed Tomography Coronary Angiography in Patients with Suspected Angina due to Coronary Heart Disease. *The Scottish COmputed Tomography of the HEART (SCOT-HEART) Trial*. **The Lancet**. 2015. Jun 13;385(9985):2383-91
- Joshi NV, Vesey AT, Williams MC, Shah ASV, Calvert PA, Craighead FHM, Yeo SE, Wallace W, Salter D, Fletcher AM, van Beek EJR, Flapan AD, Uren NG, Behan MWHM Cruden NLM, Mills, NL, Fox KAA, Rudd JHF, **Dweck MR**,\* Newby DE.\* 18F-Fluoride positron emission tomography for identification of ruptured and high-risk coronary atherosclerotic plaques: a prospective clinical trial. **The Lancet**. 2014; 383(9918):705-13. \* joint senior author

## Publication Summary

- 369 manuscripts listed in Pubmed
- H-index 66 (22/02/2023)
- <https://www.ncbi.nlm.nih.gov/pubmed/?term=Dweck+m>

	All	Since 2018
Citations	19072	15679
h-index	66	62
i10-index	226	215



## Original Articles

- Artico J, Shiwani H, Moon JC, Gorecka M, McCann GP, Roditi G, Morrow A, Mangion K, Lukaschuk E, Shanmuganathan M, Miller CA, Chiribiri A, Prasad SK, Adam RD, Singh T, Bucciarelli-Ducci C, Dawson D, Knight D, Fontana M, Manisty C, Treibel TA, Levelt E, Arnold R, Macfarlane PW, Young R, McConnachie A, Neubauer S, Piechnik SK, Davies RH, Ferreira VM, **Dweck MR**, Berry C; OxAMI (Oxford Acute Myocardial Infarction Study) Investigators; COVID-HEART Investigator†; Greenwood JP. Myocardial Involvement After Hospitalization for COVID-19 Complicated by Troponin Elevation: A Prospective, Multicenter, Observational Study. **Circulation**. 2023 Jan 27;147(5):364-374. doi: 10.1161/CIRCULATIONAHA.122.060632. Epub ahead of print. PMID: 36705028; PMCID: PMC9889203.
- Ćorović A, Wall C, Nus M, Gopalan D, Huang Y, Imaz M, Zulcinski M, Peverelli M, Uryga A, Lambert J, Bressan D, Maughan RT, Pericleous C, Dubash S, Jordan N, Jayne DR, Hoole SP, Calvert PA, Dean AF, Rassl D, Barwick T, Iles M, Frontini M, Hannon G, Manavaki R, Fryer TD, Aloj L, Graves MJ, Gilbert FJ, **Dweck MR**, Newby DE, Fayad ZA, Reynolds G, Morgan AW, Aboagye EO, Davenport AP, Jørgensen HF, Mallat Z, Bennett MR, Peters JE, Rudd JHF, Mason JC, Tarkin JM. Somatostatin Receptor PET/MR Imaging of Inflammation in Patients With Large Vessel Vasculitis and Atherosclerosis. **J Am Coll Cardiol**. 2023 Jan 31;81(4):336-354. doi: 10.1016/j.jacc.2022.10.034. PMID: 36697134; PMCID: PMC9883634.
- Botezatu SB, Tzolos E, Kaiser Y, Cartlidge TRG, Kwiecinski J, Barton AK, Yu X, Williams MC, van Beek EJR, White A, Kroon J, Slomka PJ, Popescu BA, Newby DE, Stroes ESG, Zheng KH, **Dweck MR**. Serum lipoprotein(a) and bioprosthetic aortic valve degeneration. **Eur Heart J Cardiovasc Imaging**. 2023 Jan 20;jeac274. doi: 10.1093/ehjci/jeac274. Epub ahead of print. PMID: 36662130.
- Kwiecinski J, Dabrowski M, Nombela-Franco L, Grodecki K, Pieszko K, Chmielak Z, Pylko A, Hennessey B, Kalinczuk L, Tirado-Conte G, Rymuza B, Kochman J, Opolski MP, Huczek Z, **Dweck MR**, Dey D, Jimenez-Quevedo P, Slomka P, Witkowski A. Machine learning for prediction of all-cause mortality after transcatheter aortic valve implantation. **Eur Heart J Qual Care Clin Outcomes**. 2023 Jan 13:qcad002. doi: 10.1093/ehjqcco/qcad002. Epub ahead of print. PMID: 36637410.
- Meah MN, Wereski R, Bularga A, van Beek EJR, **Dweck MR**, Mills NL, Newby DE, Dey D, Williams MC, Lee KK. Coronary low-attenuation plaque and high-sensitivity cardiac troponin. **Heart**. 2023 Jan 11:heartjnl-2022-321867. doi: 10.1136/heartjnl-2022-321867. Epub ahead of print. PMID: 36631142.

- Stankovic I, **Dweck MR**. Global strain in moderate aortic valve stenosis with reduced left ventricular ejection fraction: A piece of the puzzle. **Int J Cardiol**. 2023 Mar 1;374:87-88. doi: 10.1016/j.ijcard.2022.12.049. Epub 2022 Dec 31. PMID: 36596412.
- Tzolos E, Bing R, Andrews J, MacAskill MG, Tavares AAS, Macnaught G, Clark T, Mills NL, Fujisawa T, Nash J, Dey D, Slomka PJ, Koglin N, Stephens AW, Deutsch MA, van Beek EJ, Williams MC, Hermann S, Hugenberg V, **Dweck MR**, Newby DE. Noninvasive In Vivo Coronary Artery Thrombus Imaging. **JACC Cardiovasc Imaging**. 2022 Dec 9:S1936-878X(22)00606-4. doi: 10.1016/j.jcmg.2022.10.002. Epub ahead of print. PMID: 36526577.
- Meah MN, Tzolos E, Wang KL, Bularga A, **Dweck MR**, Curzen N, Kardos A, Keating L, Storey RF, Mills NL, Slomka PJ, Dey D, Newby DE, Gray A, Williams MC, Roobottom C. Plaque Burden and 1-Year Outcomes in Acute Chest Pain: Results From the Multicenter RAPID-CTCA Trial. **JACC Cardiovasc Imaging**. 2022 Nov;15(11):1916-1925. doi: 10.1016/j.jcmg.2022.04.024. Epub 2022 Jun 15. PMID: 36357133.
- Meah MN, Bularga A, Tzolos E, Chapman AR, Daghem M, Hung JD, Chiong J, Taggart C, Wereski R, Gray A, **Dweck MR**, Roobottom C, Curzen N, Kardos A, Felmeden D, Mills NL, Slomka PJ, Newby DE, Dey D, Williams MC. Distinguishing Type 1 from Type 2 Myocardial Infarction by Using CT Coronary Angiography. **Radiol Cardiothorac Imaging**. 2022 Oct 27;4(5):e220081. doi: 10.1148/ryct.220081. PMID: 36339063; PMCID: PMC9627233.
- Singh T, Joshi S, Kershaw LE, Baker AH, McCann GP, Dawson DK, **Dweck MR**, Semple SI, Newby DE. Manganese-Enhanced Magnetic Resonance Imaging in Takotsubo Syndrome. **Circulation**. 2022 Dec 13;146(24):1823-1835. doi: 10.1161/CIRCULATIONAHA.122.060375. Epub 2022 Nov 1. PMID: 36317524; PMCID: PMC7613919.
- Corballis N, Tsampasian V, Merinopoulos I, Gunawardena T, Bhalraam U, Eccleshall S, **Dweck MR**, Vassiliou V. CT angiography compared to invasive angiography for stable coronary disease as predictors of major adverse cardiovascular events- A systematic review and meta-analysis. **Heart Lung**. 2023 Jan-Feb;57:207-213. doi: 10.1016/j.hrtlng.2022.09.018. Epub 2022 Oct 17. PMID: 36257218.
- Thirunavukarasu S, Ansari F, Cubbon R, Forbes K, Bucciarelli-Ducci C, Newby DE, **Dweck MR**, Rider OJ, Valkovič L, Rodgers CT, Tyler DJ, Chowdhary A, Jex N, Kotha S, Morley L, Xue H, Swoboda P, Kellman P, Greenwood JP, Plein S, Everett T, Scott E, Levelt E. Maternal Cardiac Changes in Women With Obesity and Gestational Diabetes Mellitus. **Diabetes Care**. 2022 Dec 1;45(12):3007-3015. doi: 10.2337/dc22-0401. PMID: 36099225; PMCID: PMC9862457.
- Soliman-Aboumarie H, Joshi SS, Cameli M, Michalski B, Manka R, Haugaa K, Demirkiran A, Podlesnikar T, Jurcut R, Muraru D, Badano LP, **Dweck MR**. EACVI survey on the multi-modality imaging assessment of the right heart. **Eur Heart J Cardiovasc Imaging**. 2022 Oct 20;23(11):1417-1422. doi: 10.1093/ehjci/jeac183. PMID: 36093580.
- Syed MJB, Fletcher AJ, Debono S, Forsythe RO, Williams MC, **Dweck MR**, Shah ASV, Macaskill MG, Tavares A, Denvir MA, Lim K, Wallace WA, Kaczynski J, Clark T, Sellers SL, Masson N, Falah O, Chalmers RTA, Tambyraja AL, van Beek EJ, Newby DE. <sup>18</sup>F-Sodium Fluoride Positron Emission Tomography and Computed Tomography in Acute Aortic Syndrome. **JACC Cardiovasc Imaging**. 2022 Jul;15(7):1291-1304. doi: 10.1016/j.jcmg.2022.01.003. Epub 2022 Mar 16. PMID: 35798405.
- Singh A, Kwiecinski J, Cadet S, Killekar A, Tzolos E, Williams MC, **Dweck MR**, Newby DE, Dey D, Slomka PJ. Automated nonlinear registration of coronary PET to CT angiography using pseudo-CT generated from

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- **Dweck MR**, William MC, Krishnan P, Fuster V, Narula J, Fayad ZA. Magnetic Resonance Imaging and Computed Tomography of the Vascular System. Chapter 24. **Hurst’s the Heart.** 14<sup>th</sup> Edition. Editors: Valentin Fuster. McGraw Hill Education
- Vassillou V, Chin C, Malley T, Newby, **Dweck MR\***, Prasad SK\*. Myocardial Fibrosis in Aortic Stenosis. **Surgical Management of Aortic Pathologies.** Springer. Editors: Stranger O, Pepper JR, Svensson LO. \*equal contribution as senior author. In press
- **Dweck MR**, Robson P, Fayad ZA. Atherosclerotic Plaque Imaging: Aorta and Carotid. **Cardiovascular Magnetic Resonance. Chapter 28.** 3<sup>rd</sup> Edition. Editors: Dudley Pennell, Warren Manning. Elsevier.
- Luo E, **Dweck MR.** Valvular Heart Disease. Chapter in **Cardiology in a Heartbeat.** Editors Chim Lang, Vipin Zamvar. Scion Publishing Ltd.
- Vaswani A, Wooton E, **Dweck MR.** Cardiomyopathy. Chapter in **Cardiology in a Heartbeat.** Editors Chim Lang, Vipin Zamvar. Scion Publishing Ltd.
- Joshi NV, Newby DE, **Dweck MR.** Role of Multimodality Imaging in Atherosclerotic Plaque Burden and Metabolism. Chapter in **Molecular and Multimodality Imaging in Cardiovascular Disease.** Editors Thomas H. Schindler Richard T. George and Joao Lima. Springer, New York
- Vassiliou V, Chin CWL, Malley T, Newby DE, **Dweck MR\***, Prasad SK\*. Chapter on Left ventricular hypertrophy, fibrosis and decompensation in patients with aortic stenosis. **Left Ventricular Hypertrophy: Prevalence, risk factors and Treatment.** Nova Publishers \*Joint senior authors.
- **Dweck MR**, Rudd JHF, Newby DE. Positron Emission Tomography in Aortic Stenosis. Chapter in **Multimodality Imaging for Transcatheter Aortic Valve Replacement.** Editors Daniel S Berman, James Min, Jonathon Leipsic. Springer, New York.
- Vesey A, Newby DE, **Dweck MR.** PET/CT imaging in calcific aortic valve disease. Chapter in **Cardiovascular imaging: Insights into mechanisms of vascular and valvular inflammation and calcification.** Editor Elena Aikawa. Springer New York.

## Invited Lectures

- Molecular Imaging in Heart Valve Disease  
**Visiting Professor for Grand Round, Cleveland Clinic, USA 2023**
- Imaging Coronary Plaque

**European Vascular Biology Meeting, Virtual 2023**

- What is new in multimodality imaging.  
**SCCT Winter Meeting Edinburgh 2023**
- Calcium scoring is all you need in the assessment of patients with chest pain. Debate  
**SCCT Winter Meeting Edinburgh 2023**
- Optimising the timing of intervention in aortic stenosis  
**Sir Jules Thorn Charitable Trust, Royal Society of Arts, London 2022**
- The need for Lp(a) lowering trials in aortic valve stenosis  
**19<sup>TH</sup> Global Cardio Vascular Clinical Trialists Forum (CVCT), Washington 2022**
- How to grade mitral annular calcification and degenerative MS by multimodal imaging  
**Korean Society of Echocardiography, Seoul 2022**
- Myocardial Fibrosis in Aortic Stenosis  
**Belgium National Cardiac Imaging Symposium, Brussels 2022**
- Newer TAVR trials to address timing of intervention in aortic stenosis  
**Echo 360 Structural Heart Meeting, Seoul 2022**
- AI and Integrated Models of CAD Risk  
**The 3I's Conference, Pisa Italy 2022**
- Advanced imaging and novel treatment in aortic stenosis  
**Grand Rounds, Houston Methodist Hospital, Houston USA 2022**
- Advanced imaging in aortic stenosis  
**Grand Round University Hospital Zurich, Switzerland 2022**
- PET Imaging in Aortic Stenosis  
**BSCMR Meeting, Liverpool 2022**
- This House believes AVR/TAVI should be offered without waiting for symptoms in severe AS.  
**Eurovalve Meeting, Cambridge Union Society 2022**
- This House believes AS may be treated by preventing aortic valve calcification.  
**Eurovalve Meeting, Cambridge Union Society 2022**
- Current assessments of functional mitral regurgitation are adequate  
**Vancouver Valve Meeting, Vancouver 2022**
- Molecular imaging of coronary thrombus  
**Vulnerable Plaque Meeting, Galway 2022**
- The diagnostic workup of cardiac sarcoidosis: which techniques for whom and when?

**ESC Meeting, Barcelona 2022**

- Unusual causes of coronary artery disease: from diagnosis to treatment – discussion  
**ESC Meeting, Barcelona 2022**
- Subclinical thrombosis 18F-GP1.  
**ESC Meeting, Barcelona 2022**
- Basic interpretation of CT images: case-based sessions - Intro and take-home messages  
**EACVI LEVEL 1 ONLINE COURSE CT**
- Coronary CT angiography in patients with chronic coronary syndrome - Pathophysiology of coronary artery disease and rationale for plaque imaging  
**EACVI LEVEL 1 ONLINE COURSE CT**
- Correlation of cardiac CT findings with other imaging modalities - Multi-modality imaging: the right test for the right patient  
**EACVI LEVEL 1 ONLINE COURSE CT**
- Basic physiological and pathophysiological principles and CMR sequences in valve heart disease  
**EACVI LEVEL 1 ONLINE COURSE CMR**
- Non ischemic myocardial disease and myocarditis - Imaging of cardiac Sarcoidosis  
**EACVI LEVEL 1 ONLINE COURSE NUCLEAR**
- Imaging Plaque  
**British Society for Cardiovascular Imaging Seminar Series 2022 (virtual)**
- Imaging in Chronic Coronary Syndromes  
**Grand Round, University Hospital Pisa, Italy 2022 (virtual)**
- Imaging fibrosis activity and thrombus formation with PET  
**SNMMI Meeting, Vancouver 2022**
- PET/MR for imaging cardiac sarcoidosis  
**SNMMI Winter Meeting, Virtual 2022**
- Assessing Valve Calcification Activity  
**iMAGINE Echo New York 2022**
- Basic of Cardiovascular PET Imaging  
**Scottish National Training Program, Scottish Cardiac Society Virtual Meeting Jan 2022**
- New Non-invasive Imaging in Coronary Disease: PET/CT in Predicting Disease Activity and Outcomes  
**American College of Cardiology New York Cardiovascular Symposium 2021**
- Functional vs plaque imaging to improve ACS outcomes  
**EUROECHO 2021**



- What have the EACVI surveys taught us about COVID-19  
**EACVI Multimodality Imaging in COVID-19 Mini-Symposium**
- How COVID-19 Affects the Heart  
**Contemporary and Futuristic Cardiology Symposium, RCPE 2021**
- 5 Top Tips for Your Logbook  
**EACVI Webinar (virtual) 2021**
- Coronary 18F-NaF imaging- ready for prime time?  
**Vulnerable plaque meeting. London 2021**
- Debate session: Stress echocardiography or CCTA  
**British Society of Echocardiography, London 2021**
- Great Debate Session: coronary plaque Imaging is all you need: pro  
**European Society of Cardiology, London (virtual) 2021**
- CT Imaging in Aortic Stenosis  
**Asian Society of Cardiovascular Imaging, Vietnam (virtual) 2021**
- Imaging Coronary Plaque  
**Asian Society of Cardiovascular Imaging, Vietnam (virtual) 2021**
- COVID-19 and the heart  
**British Heart Foundation Annual General Meeting (virtual) 2021**
- FFR-CT is an adequate functional assessment in coronary artery disease  
**British Cardiac Society, 2021**
- Plaque Composition & Risk of Cardiovascular Events  
**Society of Cardiovascular CT Meeting, 2021**
- Measuring Disease Activity in Aortic Stenosis  
**Portuguese Cardiology Society, 2021**
- Cardiovascular Imaging and COVID-19  
**BHF Fellows Day, Virtual Meeting 2021**
- Cardiovascular Imaging and COVID-19  
**Scottish Cardiac Society, Spring meeting 2021**
- Advanced Imaging in Aortic Stenosis: CT, MRI and PET  
**Brigham & Women's Hospital, Harvard Medical School Grand Rounds 2021**
- How and Why Do I Assess the Left Ventricle in Aortic Stenosis  
**Echo, New York, Virtual Conference 2021**

- Imaging Calcification Activity with 18F-NaF  
**EACVI 2020, Virtual Conference**
- How Does Imaging Guide Management in COVID-19?  
**EACVI 2020, Virtual Conference**
- Echocardiography and Cardiovascular Magnetic Resonance in ATTR-CMR  
**EACVI 2020, Virtual Conference**
- Echocardiography & Cardiovascular Magnetic Resonance  
**A Year in Cardiology, British Cardiac Society 2020**
- 18F-Fluoride PET Imaging  
**American College of Cardiology Extended Learning Live Interview with Anthony De Maria 2020**
- Assessing plaque in the coronary arteries  
**New York University Hospital Virtual Grand Round, New York 2020**
- Multimodality Imaging for Patients with Chest Pain  
**Turkish Society of Cardiology, Virtual Meeting 2020**
- A career in academic hospital medicine  
**Atrium, Edinburgh 2020**
- 18F-fluoride PET: measuring disease activity and improving the prediction of myocardial infarction  
**American College of Cardiology, NYCVS Virtual Symposium, New York 2020**
- Cardiac Effects of COVID-19  
**International Society for Stem Cell Research, COVID-19 Virtual Meeting, USA**
- How Imaging Can Diagnosis Severe Aortic Stenosis  
**American Heart Association, Virtual Conference 2020**
- Measuring Coronary Disease Activity with 18-NaF PET  
**American Society of Nuclear Cardiology, Virtual Conference 2020**
- How COVID-19 Affects the Heart  
**British Heart Foundation Virtual Supporter Event 2020**
- Nuclear PET imaging for Endocarditis- Case Based Talk  
**Webinar Royal Society of Medicine, London 2020**
- Myocardial Fibrosis in Aortic Stenosis  
**European Society of Cardiology, Virtual Conference 2020**
- Assessing calcification activity and vascular injury in the cardiovascular system  
**Einstein Medical Centre, Philadelphia, US 2020**
- How I assess aortic stenosis in 2020

**Scottish Cardiology National Training Programme, Stirling 2020**

- A Career in Cardiology  
**Royal Medical Society, Edinburgh 2020**
- The Future of Imaging in Coronary Artery Disease  
**Swedish Society of Cardiology, Stockholm 2020**
- Inflammation in Aortic Stenosis  
**French Society of Cardiology, Paris 2020**
- Left Ventricular Assessment Requires Multi-Modality Imaging  
**Euroecho Vienna 2019**
- Calcification in Aortic Stenosis  
**Euroecho Vienna 2019**
- Novel Treatment Strategies in Aortic Stenosis  
**250<sup>th</sup> Anniversary Sommelweis University, Budapest**
- Picturing the Heart in 2020  
**Grand Round Lecture. Massachusetts General Hospital, Boston 2019**
- MR/PET Imaging in Coronary Artery Disease  
**Royal College of Radiology Annual Meeting, Liverpool 2019**
- Nuclear imaging in aortic stenosis  
**EchoSeoul and Multimodality Imaging, Seoul 2019**
- Aortic stenosis a disease of the valve and the myocardium  
**EchoSeoul and Multimodality Imaging, Seoul 2019**
- Meet the Experts Session: imaging and patient with a prosthetic heart valve  
**European Society of Cardiology, Paris 2019**
- Measuring disease activity in aortic stenosis: fact or fiction?  
**European Society of Cardiology, Paris 2019**
- Functional assessment of the myocardium using manganese CMR  
**European Society of Cardiology, Paris 2019**
- Multi-modality Imaging in Heart Valve Disease  
**Romanian Society of Cardiology, Sibiu 2019**
- PET Imaging to Detect High Risk Aortic Stenosis Patients  
**ICNC Lisbon 2019**
- Can Imaging Improve Outcome: SCOTHEART & PROMISE  
**ICNC Lisbon 2019**

- Quantification of Myocardial Perfusion is Better than Visual Assessment: Con **EUROCMR. Venice 2019**
- Picturing the Heart in 2020  
**UK-Qatar Health Research Forum organised by the British Embassy, Dohar Qatar 2019**
- Imaging Endocarditis: State of the Art  
**German Society of Cardiology, Manneheim 2019**
- Assessment of Valve Regurgitation using Cardiovascular Magnetic Resonance  
**Egyptian Society of Cardiology, Cairo 2019**
- How to train in multi-modality cardiovascular imaging  
**Egyptian Society of Cardiology, Cairo 2019**
- 18F-Fluoride Imaging: Potential Role in Clinical Practice  
**Advances in Nuclear Cardiology and Cardiac CT, Cedars Sinai Hospital, Los Angeles 2019**
- Imaging Cardiovascular Calcification Activity  
**American Society of Nuclear Cardiology, Palm Springs 2019**
- Evaluation of Cardiac Sarcoid: MR, PET or both?  
**Advances in Nuclear Cardiology and Cardiac CT, Cedars Sinai Hospital, Los Angeles 2019**
- Imaging Coronary Artery Disease in 2020  
**EMERGE MEETING, Edinburgh 2018**
- The SCOT-HEART trial  
**EACVI/ESC Brainstorming Meeting, Valencia 2018**
- Molecular Imaging in Cardiovascular Disease  
**Hungarian Society of Cardiology, Budapest 2018**
- This house believes early surgery is superior to watchful waiting in aortic stenosis  
**British Heart Valve Society, Birmingham 2018**
- Novel therapeutic strategies in aortic stenosis  
**Korean Society of Cardiology, Seoul 2018**
- CT as a complementary tool to assess aortic stenosis severity  
**Korean Society of Cardiology, Seoul 2018**
- Measuring calcification activity with 18F-fluoride PET  
**Korean Society of Cardiology, Seoul 2018**
- Congress Condensed Valvular Heart Disease: Imaging  
Multi-modality assessment for diagnosis and surveillance of valve disease  
**European Society of Cardiology Meeting, Munich 2018**

- Multimodality Imaging in the Context of Valve Intervention  
**European Society of Cardiology Meeting, Munich 2018**
- Imaging and Targetting Calcification in Aortic Stenosis  
**European Society of Cardiology Meeting, Munich 2018**
- Imaging in the Unstable Atherosclerotic Plaque- State of the Art  
**European Society of Cardiology Meeting, Munich 2018**
- Imaging Cardiovascular Calcification Activity  
**Gwanju Interventional Cardiology Meeting, Gwanju Korea**
- PET/CT and PET/MR imaging for the vulnerable patient  
**Vulnerable Plaque Meeting, Stresa Italy 2018**
- Aortic stenosis: biological mechanisms and imaging diagnosis  
**Eurovalve Meeting, Palermo Italy 2018**
- Multimodality Cardiovascular Imaging  
**British Cardiovascular Society & Mayo Clinic Annular Cardiology Review Course, RCP London 2018**
- Pathogenesis of Atherosclerosis  
**SCMR 2018, Barcelona**
- Recent Advances in Cardiovascular PET Imaging  
**SCCT Winter Meeting 2018, London**
- 18F-Fluoride Imaging: Potential Role in Clinical Practice  
**Advances in Nuclear Cardiology and Cardiac CT, Cedars Sinai Hospital, Los Angeles 2018**
- Future Therapeutic Strategies in Aortic Stenosis  
**Valve Summit Korea, Seoul 2018**
- Multimodality imaging in Aortic Stenosis  
**Valve Summit Korea, Seoul 2018**
- MRI assessment LV volumes mass an function  
**EUROECHO IMAGING, Lisbon 2017**
- Multimodality Imaging for TAVR patient selection  
**EUROECHO IMAGING, Lisbon 2017**
- Advances in Atherosclerosis and Heart Valve Imaging  
**University of Nantes, France 2017**
- Multimodality Imaging: Picturing the Heart in 2020  
**Department of Cardiovascular Science, Cambridge University 2017**

- New imaging tools and definition of vulnerable plaque  
**Korean Society of Cardiology, Seoul 2017**
- CT-Based Ischemia Diagnosis: CT perfusion and CT FFR  
**Korean Society of Cardiology, Seoul 2017**
- PET/CT Imaging of Vulnerable Plaque  
**European Society of Cardiology, Barcelona 2017**
- Imaging the Vulnerable Plaque  
**ESC Basic Science Summer School, European Heart House Nice 2017**
- MR and PET imaging in aortic stenosis  
**Paris Echo 2017**
- Cardiovascular MR/PET Imaging  
**EUROCMR, Prague 2017**
- Why do we get aortic stenosis?  
**British Cardiovascular Society, Manchester 2017**
- Top 10 trials of the Year 2017  
**British Cardiovascular Society, Manchester 2017**
- PET Imaging in Atherosclerosis: 18F-fluoride and other non-FDG tracers  
**ICNC, Vienna 2017**
- SCOT-HEART vs. PROMISE  
**ICNC, Vienna 2017**
- PET/MR Imaging of Atherosclerosis  
**European Atherosclerosis Society, Prague 2017**
- PET Imaging of Calcification  
**Grand Rounds. Maastricht University, The Netherlands 2017**
- PET/MR imaging in Cardiac Sarcoidosis  
**Royal College of Physicians London, 2017**
- 18F-Fluoride Imaging: Potential Role in Clinical Practice  
**Advances in Nuclear Cardiology and Cardiac CT, Cedars Sinai Hospital, Los Angeles 2017**
- How will we use molecular imaging in aortic stenosis?  
**EUROECHO, Leipzig 2016**
- Role of CTCA in stable coronary artery disease  
**Royal College of Physicians Edinburgh, Cardiology Symposium 2016**
- Imaging of Coronary Atherosclerosis

**Controversies & Advances in Cardiovascular Disease, Los Angeles 2016**

- Novel Biomarkers in Aortic Stenosis  
**Cardiovascular Forum, Cascais Portugal 2016**
- Watchful Waiting vs. Early Surgery in Aortic Stenosis  
**Heart Valve Society, Bart's Heart Centre, London 2016**
- Multimodality Imaging in Restrictive Cardiomyopathy  
**European Society of Cardiology Meeting, Rome 2016**
- Novel Imaging Approaches in Coronary Artery Disease  
**British Cardiovascular Society, Manchester 2016**
- Picturing the Heart in 2020. The Michael Davies Early Career Award  
**British Cardiovascular Society, Manchester 2016**
- PET Imaging in Coronary Atherosclerosis and Aortic Stenosis  
**Cardiology Grand Rounds, Brigham & Women's Hospital, Boston 2016**
- Early Imaging of Aortic Stenosis and Calcification  
**Symposium on Aortic Stenosis, Brigham & Women's Hospital, Boston 2016**
- New Imaging Modalities in Heart Valve Disease  
**Heart Valve Society, New York 2016**
- Multi-modality Imaging in Aortic Stenosis  
**Grand Rounds. University of Pittsburgh Medical Centre, Pittsburgh 2016**
- Aortic Stenosis 18F-Fluoride PET  
**Journées Europeennes Societe Francaise de Cardiologies, Paris 2016**
- 18F-Fluoride Imaging: Potential Role in Management of Coronary Artery Disease & Beyond  
**Advances in Nuclear Cardiology and Cardiac CT, Cedars Sinai Hospital, Los Angeles 2016**
- Modern Non-Invasive Imaging in Aortic Stenosis  
**Norwegian Cardiology Society, Bergen 2015**
- Aortic Stenosis Imaging: CT, PET, MRI  
**European Society of Cardiology, London 2015**
- Imaging Inflammatory Atherosclerotic Plaque  
**European Society of Cardiology, London 2015**
- Atherosclerotic Plaque Regression and Stabilisation  
**European Society of Cardiology, London 2015**
- Vulnerable Plaques and the Vulnerable Patient  
**European Society of Cardiology, London 2015**

- Myocardial Infarction begets Myocardial Infarction  
**Translational & Molecular Imaging Institute Annual Symposium, New York 2015**
- Positron Emission Tomography Predicts Disease Progression in Aortic Stenosis  
**Japanese Society of Echocardiography, Kitakyushu, Japan 2015**
- High sensitivity troponin in aortic stenosis  
**Heart Valve Society, Monaco 2015**
- 18F-Fluoride Cardiovascular Imaging  
**ICNC12 Nuclear Cardiology and CT, Madrid Spain 2015**
- PET imaging of the coronary arteries. Tracers beyond FDG.  
**European Congress of Radiology, Vienna 2015**
- Coronary 18F-Fluoride PET imaging. How does it work and will it be useful  
**High Country Nuclear Medicine, Vail Colorado US 2015**
- Aortic Valve Disease & TAVI: Role of CMR & Other Imaging Modalities  
**EuroCMR / SCMR Nice 2015**
- Molecular Imaging of the Vulnerable Plaque  
**EuroEcho 2014, Vienna**
- Role of Cardiac CT in Restrictive Cardiomyopathy  
**EuroEcho 2014, Vienna**
- CT is better than MRI for Bicuspid Aortic Valve Decision Making  
**EuroEcho 2014, Vienna**
- 18F-Fluoride PET Predicts Disease Progression in Aortic Stenosis  
**EuroEcho 2014, Vienna**
- Dweck MR. PET/CT imaging in Coronary Artery Disease  
**European Society of Cardiology, Barcelona 2014**
- Dweck MR. Non-invasive Assessment of Plaque Vulnerability  
**European Society of Cardiology, Barcelona 2014**
- Dweck MR. 18F-Fluoride PET: a marker of culprit and vulnerable coronary atherosclerotic plaque  
**European Society of Clinical Investigation, Utrecht 2014**
- Dweck MR. Imaging of Calcification in Aortic Stenosis  
**British Heart Valve Society, London 2014**
- Dweck MR. Assessing Cardiovascular Calcification using PET/CT  
**World Federation of Nuclear Medicine and Biology, Cancun Mexico 2014**



- Dweck MR. Low-flow low-gradient aortic stenosis, what can CT and CMR add?  
**British Society of Echocardiography & British Heart Valve Society, London 2014**
- Dweck MR. Imaging for TAVI  
**British Society of Cardiovascular Imaging, Glasgow 2014**
- Dweck MR. Predicting Heart Attacks  
**Science and the Parliament, The Scottish Parliament 2013**
- Dweck MR. PET/CT imaging in aortic stenosis and atherosclerosis  
**Academy of Medical Sciences, London 2013**
- Dweck MR. The Role of Biomarkers in Aortic Stenosis  
**European Society of Cardiology, Amsterdam 2013**
- Dweck MR. Improving children's health in Scotland  
**Young Academy of Scotland, Stirling 2013**
- Dweck MR. CT imaging prior to TAVI  
**Scottish Society of Cardiology, Dundee 2013**
- Dweck MR. PET Metabolic Imaging in Aortic Stenosis  
**Royal Society of Medicine. Cardiovascular Imaging Day, London 2013**
- Dweck MR. Assessment of Arterial and Coronary Inflammation with NaF PET.  
**American College of Cardiology Congress. Mexico City 2012**
- Dweck MR. Mid-wall fibrosis in aortic stenosis.  
**American College of Cardiology Congress. Mexico City 2012**
- Dweck MR. What can we learn about aortic valve disease from PET/CT.  
**British Heart Valve Disease Annual Meeting. London 2012**
- Dweck MR, Cardiovascular PET/CT: "The Ring of Fire."  
**NHS Research Scotland Conference, Edinburgh 2012**
- Dweck MR. Measuring disease activity in the heart  
**British Heart Foundation. London 2012**
- Dweck MR. How can imaging modalities assess aortic stenosis progression?  
**British Cardiac Society. Manchester 2012**
- Dweck MR, Lloyd G. Calcification in aortic valve disease  
**BMJ Heart Podcasts [www.podcasts.bmj.com/heart](http://www.podcasts.bmj.com/heart). 2012. Podcast of the month**
- Dweck MR. PET/CT imaging in atherosclerosis and aortic stenosis.  
**Scottish Nuclear Medicine Group. Glasgow 2012**

- Dweck MR. The assessment of aortic stenosis and coronary atherosclerosis using PET/CT. **British Heart Foundation Centres of Excellence Synergy Meeting. London 2012**
- Dweck MR. Atherosclerosis imaging with FDG-PET. Getting closer to the vulnerable plaque. **Royal College of Physicians of Edinburgh Cardiology Symposium. 2011**
- Dweck MR, Van Beek E. How to interpret a calcium score. **Royal College of Physicians of Edinburgh Cardiology Symposium. 2011**

## Reviewer Positions

- Outstanding Reviewer Award from Circulation in 2017
- Elite Reviewer Award from JACC: Cardiovascular Imaging 2016
- Top Reviewer for Heart 2017 & 2018

I am a regular reviewer for the following scientific journals: The Lancet, Journal of the American College of Cardiology; Circulation; European Heart Journal; Journal of the American Medical Association; Nature Communications; Nature Reviews Biomedical Engineering; Heart; Circulation: Cardiovascular Imaging; JACC: Cardiovascular imaging; European Heart Journal: Cardiovascular Imaging; Atherosclerosis; PLOS one; Clinical Radiology; Annals of Nuclear Medicine; Journal of Cardiovascular Magnetic Resonance.

I have reviewed grant applications for the following scientific bodies: Medical Research Council; British Heart Foundation; Chief Scientist's Office, Scotland; Heart Research UK

I am an abstract examiner for the following scientific conferences: British Cardiac Society; American College of Cardiology; European Society of Cardiology; Frontiers in Cardiovascular Biology ESC Congress; European Atherosclerosis Society; EUROCMR

## PhD Examiner

- PhD. Alexandros Papachristidis. Ultrasound beam-forming and processing techniques to detect and quantify myocardial fibrosis using two-dimensional and three dimensional echocardiography. **King's College London**, November 2022
- PhD. Russell Franks. Optimising Quantitative Myocardial Perfusion Cardiovascular Magnetic Resonance for the Assessment of Coronary Artery Disease. **King's College, London**. September 2022
- PhD. Lida Kurrami. Presence and significance of aortic valve calcification detected by cardiac CT. **University of Southern Denmark**. 2022.
- PhD. Zahra Raisi Estabragh. Novel determinants of cardiovascular disease: a population approach. **Queen Mary University of London**. July 2021
- PhD. Omar Aldati. Haemodynamic Changes Induced by Transcatheter Aortic Valve Intervention and their Correlation to Clinical Outcomes. **King's College, London**. March 2021

- MD. Anna Choi. Pathophysiology and Therapeutic Modulation of Abnormalities of Ventricular Repolarization and Depolarization. **University of Dundee**. November 2020.
- PhD. James Howard. Deep Learning Using Convolutional Neural Networks in Clinical Cardiology. **Imperial College**, London November 2020
- PhD. Magnus Lund. Myocardial hypertrophy and extracellular volume by cardiovascular magnetic resonance imaging. **Karolinska Institutet**, Sweden May 2020.
- Doctor of Philosophy. DPhil. Mark Peterzan. **University of Oxford**. October 2019
- MD. Dr Peggy Chew. Cardiovascular Magnetic Resonance for the Investigation of Patients with Mitral Regurgitation. **University of Leeds**. August 2019
- Doctor of Philosophy. PhD. Dr Andrew Chapman. Improving the Diagnosis and Classification of Myocardial Infarction. **University of Edinburgh**. October 2018
- Doctor of Philosophy. Dr Mohammad Alkalil. Vascular characterisation using multimodal imaging and relationship to functional lipid indices in blood. **University of Oxford**. March 2018
- Doctor of Philosophy. Mathias Burgmaier. From bench to bedside; Tools to diagnose and treat atherosclerosis and heart failure". **Maastricht University** 2016.
- MD. Dr Joana D'Arcy. Valvular heart disease: Novel epidemiological and imaging studies. **University of Edinburgh** 2015.
- Doctor of Philosophy. PhD. Dr James Bailey. The Role of Perivascular Cells in Cardiac Repair. **University of Edinburgh** 2015

## Cardiology Clinical Skills

I am an honorary consultant cardiologist at the Edinburgh Heart Centre. I am on call for acute cardiology admissions and the coronary care unit on a 1 in 12 rota. I have an outpatient clinic once a week seeing the full spectrum of cardiology conditions and referrals. My specialist interests are outlined below.

### IMAGING

- EACVI Level 3 Accreditation Cardiovascular Computed Tomography
- EACVI Level 3 Accreditation Cardiovascular Magnetic Resonance
- I deliver the advanced clinical imaging service at Edinburgh Heart Centre, incorporating state-of-the-art cardiovascular magnetic resonance (cardiomyopathies, viability, myocardial perfusion etc.), computed tomography coronary angiography, CT imaging prior to TAVI implantation and structural heart intervention, as well as vascular FDG PET imaging for prosthesis infections and cardiac sarcoidosis.
- I am trained in transthoracic echocardiography (British Society of Echocardiography Transthoracic Echocardiography Accreditation 2009), regularly performing and supervising echocardiography lists in my outpatient clinics and on my weeks on call in the CCU
- I have trained numerous fellows and registrars in the acquisition and reporting of these scans.

## DEVICES

I regularly perform and supervise cardiac device implantation lists inserting permanent pacemakers, implantable cardiac defibrillators and cardiac resynchronisation therapy devices. I also perform pacemaker lead extraction and together with Dr Neil Grubb offer the Scottish National service removing devices using the Spectranetics laser system.

## Teaching & Education

### RESEARCH SUPERVISION

I am a supervising or have supervised the following students in their PhD or MD theses and who are funded by the following grants. I have set up an exchange program with Cedars Sinai Medical Center where each year one fellow has the opportunity to work and do research at Cedars, supporting our well-established collaborative links.

#### Research Fellows PhD Awarded

#### **Professor Dweck has supervised the following PhD students**

- 1) **Dr Nikhil Joshi.** Chief Scientist Office Project Grant 2012 (ETM/160). Novel imaging approaches to identify unstable atherosclerotic coronary plaques. Finalist at the ACC Young Investigator Award 2013; Josephine Lansdell Award for research in to heart diseases by the British Medical Association. Multiple high impact publications including in The Lancet and the Journal of the American Heart Association. PhD awarded 2017 (part time). Consultant Cardiologist at Bristol Royal Infirmary & Senior Lecturer.
- 2) **Dr Calvin Chin.** British Heart Foundation Supplement to Clinical PhD Training Fellowship 2012 (FS/10/026). The Role of Fibrosis in Aortic Stenosis. Dr Chin was also funded during his PhD via an academic scholarship from the Singapore government. Multiple high impact publications in Circulation, European Heart Journal, Journal of the American College of Cardiology. Winner of the ACC Young Investigator Award 2015. PhD awarded 2015. Consultant Cardiologist and Associate Professor in Singapore.
- 3) **Dr Alex Vesey.** British Heart Foundation Project Grant 2012 (PG/12/8/29371). Role of 18F- Fluoride imaging as a novel marker of plaque instability. Multiple high impact publications in JACC, Circulation Cardiovascular Imaging, The Lancet, Nature Communications. PhD awarded 2019 (part-time). Consultant Vascular Surgeon at Haymires Hospital.
- 4) **Dr Tania Pawade.** BHF Clinical Research Training Fellowship (FS/16/19/31982) 2016. "Role of calcification in the pathogenesis of aortic stenosis". Multiple high impact publications in leading cardiovascular (Circulation, JACC) and cardiovascular imaging journals. PhD awarded 2018 (part time). Cardiology Specialist Trainee in South East Scotland.
- 5) **Dr William Jenkins.** British Heart Foundation Clinical PhD Training Fellowship 2012 (FS/12/84/29814). Identification of In Vivo Angiogenesis and Fibrosis in Cardiovascular Disease Using Positron Emission Tomography. Winner of top rated UK abstract at the American College of Cardiology Scientific Session, Washington USA. Multiple high impact publications in JACC, Circulation Cardiovascular Imaging and Heart. PhD awarded 2018 (part time). Cardiology Specialist Trainee in South East Scotland.
- 6) **Dr Jacek Kwiecinski.** Dr Kwiecinski conducted his PhD under my supervision between 2015 and 2018 after receiving a prestigious academic scholarship from the Polish Government. Finalist in the Young Investigator Award at the American College of Cardiology Scientific Sessions, Chicago 2020. Manuscript under resubmission with JACC. Numerous manuscripts in cardiovascular imaging journals.

Jacek was awarded his PhD in 2019 (part time) and has returned to Poland to complete his cardiology training. Evangelos and I were jointly awarded the Parmley Prize in 2021 for our manuscript in JACC describing the prognostic power of 18F-Fluoride PET imaging of the coronary arteries. We continue to collaborate scientifically.

7) **Dr Russell Everett.** Dr Everett was funded as part of the Sir Jules Thorn Award for Biomedical Research 2016 (15/JTA). Myocardial fibrosis and left ventricular decompensation in patients with aortic stenosis. Russell investigated myocardial fibrosis in aortic stenosis using CMR. Winner of the Heart Valve Society Young Investigator of the Year 2016. 1st Author publication in JACC with multiple papers in iJACC and Circulation Cardiovascular Imaging. His PhD was awarded in 2019 (part time). Cardiology Specialist Trainee in South East Scotland.

8) **Dr Timothy Cartlidge.** British Heart Foundation Clinical PhD Training Fellowship 2013 (FS/13/77/30488). 18F-fluoride in the identification of bioprosthetic valve degeneration following surgical and transcatheter implantation. Winner ESC Young Investigator of the Year 2018. 1st Author publication in JACC. He has submitted his PhD and awaiting his viva. Cardiology Specialist Trainee in South East Scotland.

9) **Dr Alastair Moss.** Was funded as part of a Wellcome Trust Senior Investigator Award 2015 (Prof David Newby, WT103782AIA). Identification and prediction of coronary artery plaque rupture using 18F-fluoride positron emission tomography. He has published multiple papers in cardiovascular imaging journals. PhD awarded 2019 (part time). Cardiology Specialist Trainee in South of England.

10) **Dr Nicholas Spath.** Dr Nicholas Spath was awarded a BHF Clinical Research Training Fellowship 2017 (FS/17/19/32641) to investigating manganese contrast agents for CMR imaging of patients with heart failure and following myocardial infarction. He has published multiple papers in cardiovascular imaging journals He is writing up his PhD. Cardiology Specialist Trainee in South East Scotland.

11) **Dr Jack Andrews.** Dr Andrews was awarded a BHF Clinical Research Training Fellowship in 2017 (FS/17/51/33096) to investigate the association between 18F-fluoride PET and the presence of intraluminal thrombus and intra-plaque haemorrhage on T1 weighted MR sequence using MR/PET. He has published multiple papers in cardiovascular imaging journals He is writing up his PhD. Cardiology Specialist Trainee in South East Scotland.

12) **Dr Mhairi Doris** was awarded a BHF Clinical Research Training Fellowship FS/17/79/33226 in 2017 to investigate coronary thrombosis using PET/MR imaging and has helped deliver the SALTIRE 2 and FAABULOUS trials. She has published multiple papers in the leading cardiovascular imaging journals and has recently had a manuscript accepted to Circulation as first author for SALTIRE 2. PhD awarded in 2020 (part time). Mhairi has returned to her clinical training as a GP in Glasgow.

13) **Dr Rong Bing.** Dr Bing is an interventional cardiologist from Australia. He was being funded by a British Heart Foundation Project grant investigating thrombus formation on bioprosthetic valves. Started 2019. PhD completed in 2022. Dr Bing has now been appointed as a consultant cardiologist at the Royal Infirmary of Edinburgh.

14) **Dr Alex Fletcher.** Dr Fletcher is a paediatric cardiologist who investigated 18F-fluoride uptake in patients with thoracic aortic aneurysms. He was supported by British Heart Foundation. Clinical Research Training Fellowship and awarded his PhD in 2021

15) **Dr Evangelos Tzolos.** Dr Tzolos was awarded a BHF Clinical Research Training Fellowship in 2020 to investigate myocardial thrombus formation following acute myocardial infarction. Evangelos and I were jointly awarded the Parmley Prize in 2021 for our manuscript in JACC describing the prognostic power of 18F-Fluoride PET imaging of the coronary arteries. He also was awarded a Young Investigator Award from the ESC. He was awarded his PhD in 2022.

16) **Dr Maaz Syed.** Dr Syed is a vascular surgeon investigating 18F-fluoride uptake in patients with aortic dissection. He was awarded a BHF Clinical Research Training Fellowship to investigate 18F-NaF PET activity in patients with acute aortic syndromes. PhD has been awarded.

17) **Dr Clara Vergez.** Dr Vergez is a scientist who investigated OCT imaging with ferraheme to detect atherosclerotic plaque macrophages. She was funded as part of the Optical Medical Imaging with Healthcare Innovation and Entrepreneurship scheme and was awarded her PhD.

18) **Dr Alisia Sim.** Dr Sim is a scientist who developed a novel fluorescent imaging probe to detect developing microcalcification. She was funded as part of the Optical Medical Imaging with Healthcare Innovation and Entrepreneurship scheme, co-supervised with the Chemistry Department and was awarded her PhD.

19) **Dr Nick Spath.** Dr Spath was awarded a BHF Clinical Research Training Fellowship to investigate myocyte calcium handling using manganese enhanced MRI. He was awarded his PhD and has returned to clinical cardiology training.

### **CURRENT PhD FELLOWS**

20) **Dr Marwa Daghem.** Dr Daghem is a cardiology trainee performing a study investigating coronary 18F-fluoride uptake and the relationship with coronary thrombus. She is supported by a British Heart Foundation Clinical Research Training Fellowship.

21) **Dr Trisha Singh.** Dr Singh was awarded an MRC clinical research training grant to investigate myocyte calcium handling in patients with Tako-tsubo cardiomyopathy using manganese enhanced cardiovascular MRI. She is writing up her PhD and has recently returned to clinical training.

22) **Dr Shruti Daga.** Dr Daga was awarded a BHF Clinical Research Training Fellowship in 2020 (FS/CRTF/20/24087) to investigate cardiac manganese uptake using magnetic resonance in patients with diabetes mellitus and heart failure. Her studies are underway.

23) **Dr Anna Barton.** Dr Barton was awarded a BHF Scholarship and then received funding from the BHF Research Excellence Award. Her PhD is focused in the assessment of myocardial fibrosis activity in patients following acute myocardial infarction. She is spending the last year of her PhD in Cedars Sinai, Los Angeles applying state of the art image analysis techniques to her PET/MR datasets.

24) **Dr Kri Loganath.** Dr Loganath was awarded a BHF CRTF to investigate fibrosis activity with 68Ga-FAPI PET/MR in patients with heart failure and preserved ejection fraction.

25) **Dr Sam DeBono.** Dr DeBono is performing a PhD investigation 18F-Fluoride in patients with aortic aneurysms.

26) **Dr Jennifer Nash.** Dr DeBono is performing a PhD investigation 18F-Fluoride in patients with aortic aneurysms.

27) **Dr Kang Ling Wang.** Dr Wang gained a scholarship to perform a PhD with us from the Taiwanese Government. He is investigating advanced methods of coronary atherosclerotic plaque analysis.

### **International Fellows**

1) *Dr Jacek Kwiecinski* (Warsaw, Poland) – 1 year imaging fellowship and subsequent PhD

2) *Dr Kang Zheng* (Amsterdam, Netherlands). 3-month imaging fellowship

3) *Dr Danielle Massera* (New York, USA). 6-month imaging fellowship

4) *Dr Maria Lembo* (Naples, Italy). 6-month imaging fellowship

5) *Dr Simona Botezatu* (Bucharest, Romania). 1 year fellowship funded by Romanian Society of Cardiology

6) *Dr Jolien Geers*- (Brussels, Belgium). 1 year imaging fellowship funded by a European Association of Cardiovascular Imaging Travel Fellowship

7) *Dr Kang Ling Wang* (Taiwan). 3 year fellowship to do a PhD. Scholarship from the Taiwanese Government.

8) Dr Patrycja Molek (Poland). 3 month multimodality clinical imaging fellowship. Scholarship from Poland government.

### Highlights of Trainee Achievement

1) *Joshi, et al. 18F-Fluoride positron emission tomography for identification of ruptured and high-risk coronary atherosclerotic plaques: a prospective clinical trial. The Lancet. 2014; 383(9918):705-13. doi: 10.1016/S0140-6736(13)61754-7 (Dweck senior author)*

The culmination of Dr Joshi's PhD using 18F-fluoride PET to identify culprit and high-risk coronary plaques. This manuscript has been cited more than 500 times and led to funding for the PREFFIR trial which is assessing whether 18F-fluoride can prospectively identify patients at increased risk of future myocardial infarction. Dr Joshi was awarded the Josephine Lansdell Award for research in to heart diseases by the British Medical Association for this work.

2) *Carlidge et al. Detection and prediction of bioprosthetic aortic valve degeneration. Journal of the American College Cardiology. 2019; 73(10):1107-1119. doi: 10.1016/j.jacc.2018.12.056. (Dweck senior author)*

The culmination of Dr Carlidge's PhD using 18F-fluoride PET to identify early bioprosthetic valve degeneration. It has been widely cited AND has led to follow up studies investigating the durability of TAVI valves. Dr Carlidge was awarded the 2018 Young Investigator Award, European Society of Cardiology. doi: 10.1093/eurheartj/ehu189.

3) *Chin et al. High-sensitivity Troponin I concentrations are a marker of an advanced hypertrophic response and adverse outcomes in patients with aortic stenosis. European Heart Journal. 2014. 35(34):2312-21. doi: 10.1093/eurheartj/ehu189. (Dweck senior author)*

The culmination of Dr Chin's PhD, confirming the utility of high sensitivity troponin in aortic stenosis and the prognostic importance of myocardial fibrosis. Led to funding for the EVOLVED randomised controlled trial. Dr Chin was awarded the American College Cardiology Young Investigator Award.

4) *In 2021 I was awarded the Parmley Prize as mentor to Dr Evangelos Tzolos and Dr Jacek Kwiecinski for their manuscript in JACC describing the prognostic power of coronary 18F-fluoride PET imaging.*

### University of Edinburgh Teaching

- A career in academic medicine. Atrium Virtual Meeting, Edinburgh 2020
- How I assess aortic stenosis in 2020. Lecture at the Scottish Cardiology National Training Programme, Stirling 2020
- A Career in Cardiology. Talk to medical students about training in cardiology at the Royal Medical Society, Edinburgh 2020.
- Clinical tutor for 3<sup>rd</sup> year medical students in Cardiology with weekly bedside teaching
- Examiner for year 3 OSCE/OSCA examinations at the University of Edinburgh Medical School
- I supervise Scheduled Patient Learning and Case Based Learning sessions
- Mentor. Medical Visualisation Product Forge. Toshiba. Edinburgh 2017
- Nomination Edinburgh University Student's Association Teaching Award 2013
- Lecture on "Imaging the Heart" to 1<sup>st</sup> year MSc students in Cardiovascular Biology
- Lecture on "Atherosclerosis" to 1<sup>st</sup> year medical students at the University of Edinburgh
- Lecture on "Cardiovascular Imaging" to 3<sup>rd</sup> year medical students at the University of Edinburgh

- Lecturer and tutor for the University of Edinburgh/ Royal College of Physicians, Edinburgh online MSc in Internal Medicine. This involved creating a series of web-based lectures, followed by live on-line tutorials based upon case presentations.
- Clinical Tutor Associate as part of the novel Personal tutor system at the University of Edinburgh
- I spent 2 months teaching English in an orphanage in Karachi, Pakistan in 2004
- Sex education tutor Loretto School and Dalkeith High School 2005-2006

### International Education

- EACVI LEVEL 1 ONLINE COURSE IN CARDIAC CT- Course Director
- Faculty Slovenian Society of Cardiology Course on Cardiac CT and CMR, Bled Slovenia 2022
- Course Director EACVI Course on Cardiac CT, ESC Heart House, Nice 2022
- EACVI Webinar on Imaging in Aortic Stenosis. Chair April 2022
- Clinical Nuclear Cardiology: From the Nuts and Bolts to the Recent Advances. American College of Cardiology. Meeting on Demand Program. 2022
- Member of the Education Committee, European Association Cardiovascular Imaging (EACVI)
- EACVI Webinar on Multimodality Imaging for Constrictive Pericarditis September 2019  
<https://www.escardio.org/Education/E-Learning/Webinars/How-to-use-cardiac-imaging-to-diagnose-constrictive-pericarditis>
- EACVI Webinar on Multimodality Imaging for Coronary Artery Disease November 2018.  
<https://www.escardio.org/Education/E-Learning/Webinars/Cardiovascular-imaging/Multi-modality-imaging-stable-coronary-artery-disease>
- EACVI Webinar on Multimodality Imaging Prior to TAVI October 2018.  
<https://www.youtube.com/watch?v=wRVC5rJhyjE>
- ESC TV You Tube Video on Restrictive Cardiomyopathy Guidelines.  
<https://www.youtube.com/watch?v=MZfzW4JS6eI>
- Question writer EACVI Computed Tomography Accreditation Exam
- Question writer EACVI Nuclear Accreditation Exam
- Question writer EACVI Multi-Modality Imaging Exam
- Contributor EACVI Continuing Education & Training Catalogue 2019
- Member of the European Society of Cardiology (ESC)/EACVI Working Group on Multi-modality Imaging. Our remit is to recommend how to train the imagers of the future in multi-modality imaging and how modern imaging services will be delivered
- Invited Faculty ESC Basic Science Summer School. European Heart House, Nice 2017

### eLearning

- European Society of Cardiology Multimodality Imaging Toolkit on Aortic Stenosis.  
<https://www.escardio.org/Education/Practice-Tools/EACVI-toolboxes/Aortic-Stenosis/home>
- European Society of Cardiology ESC TV. New EACVI recommendation papers - Restrictive cardiomyopathy. Dr Marc Dweck. Prof Gilbert Habib.  
<https://www.youtube.com/watch?v=MZfzW4JS6eI>
- Contribution to the American College of Cardiology Valvular Heart Disease Clinical Topic Collection. Pawade T, Everett R, Carlidge T, Dweck M. Utility of PET and MRI in AS. <http://www.acc.org>. July 26, 2016. <http://www.acc.org/latest-in-cardiology/articles/2016/07/26/08/21/utility-of-pet-and-mri-in-as>
- European Association Cardiovascular Imaging (EACVI) Toolkit on Aortic Stenosis. The Role of PET/CT in Aortic Stenosis. 2016
- Author on UpToDate website. Chapter on Aortic valve sclerosis and pathogenesis of calcific aortic valve disease. <https://www.uptodate.com/contents/topic.do?topicKey=CARD/8123>



- BMJ Podcast. “Advice for trainees considering a career in academic medicine.” June 2016 <https://soundcloud.com/bmjpodcasts/interview-with-marc-dweck>
- Author of the pathophysiology section on an online e-learning program on heart valve disease set up by the British Heart Valve Society and the British Journal of Cardiology. <http://bjcardio.co.uk/category/heart-valve-disease-learning/>
- Author of the key references section for the educational section of the British Heart Valve Society Website. Aortic stenosis pathobiology & The Emerging Role of MRI, CT and PET in heart valve disease.
- ACCEL on line teaching program talking with Dr Anthony De Maria (Editor of JACC) about low-flow, low-gradient severe aortic stenosis. 2015.
- I have contributed expert commentaries on recent cardiovascular studies for the educational website [www.PracticeUpdate.com](http://www.PracticeUpdate.com) edited by Douglas Zipes. Dweck M. Increased Risk of Aortic Valve Stenosis With Psoriasis. <http://www.practiceupdate.com/c/26331/1/2>.

## Public Engagement with Science

I have appeared and given live interviews about my research on the following media outlets: BBC 1 BBC Breakfast: live interview on the “red couch” [I](https://www.youtube.com/watch?v=Rc6ziEUadYc) BBC Horizon “Are Health Tests Really a Good Idea?” <https://www.youtube.com/watch?v=Rc6ziEUadYc>; BBC 1 Six O’Clock News; BBC 1 Ten O’clock News; Radio 4, The Today Program; Radio 5 Live Breakfast; BBC World Service; BBC Radio Scotland; Forth FM

My research has also been featured in the following newspapers and online news forums: BBC News online and the BBC News App Top Stories; The Times; The Metro; The Daily Telegraph; The Scotsman; Daily Express front page; Daily Mail; The Daily Telegraph; The heart.org

In conjunction with the British Heart Foundation I have featured in two YouTube videos describing our research and appeared on national radio as part of British Heart Foundation Bagathon Radio Campaign [http://www.youtube.com/watch?v=Vr\\_94glAJHl](http://www.youtube.com/watch?v=Vr_94glAJHl)  
<http://www.youtube.com/watch?v=mWtm07QhHol>

## European Society of Cardiology Webinars in YouTube

- ESC TV You Tube Video on Restrictive Cardiomyopathy Guidelines. <https://www.youtube.com/watch?v=MZfzW4JS6el>
- ESC TV Webinar and YouTube Video on Multi-modality Imaging Prior to TAVI <https://www.escardio.org/Education/E-Learning/Webinars/Cardiovascular-imaging/How-to-use-multi-modality-imaging-for-transcatheter-interventions-Part-II-Aortic-Valve>
- ESC TV Webinar and YouTube Video on Multi-modality Imaging in Coronary Artery Disease <https://www.escardio.org/Education/E-Learning/Webinars/Cardiovascular-imaging/Multi-modality-imaging-stable-coronary-artery-disease>
- ESC TV Webinar and YouTube Video on Constrictive Pericarditis <https://www.escardio.org/Education/E-Learning/Webinars/How-to-use-cardiac-imaging-to-diagnose-constrictive-pericarditis>

## Public Lectures

- [TCTMD article](#) on the Twitter reaction to the SCOT-HEART trial 2019

- Advances in Heart Valve Disease. Heart Valve Voice Patient Meeting, Birmingham 2019
- Pint of Science. 2018 Lecture in the Old Bell Pub on Modern Imaging of the Heart
- Edinburgh Science Festival 2018. Discussion on how to identify patients at risk of heart disease

### **Impact on international Guidelines**

- Our work on CT calcium scoring in aortic stenosis contributed to its inclusion as alternative assessment of disease severity in the ESC guidelines on heart valve disease
- Our work on CT coronary angiography in SCOTHEART led to it Class 1 recommendation in the 2019 ESC guidelines, and its recommendation as the first line imaging test in patients with chest pain in the most recent NICE guidelines.