





Application for the position: (Select one position)

- □ EACVI President-Elect
- □ EACVI Treasurer
- □ EACVI Secretary
- □ EACVI Councillor (Echocardiography)
- □ EACVI Councillor (Cardiovascular Magnetic Resonance)
- □ EACVI Councillor (Nuclear Cardiology & Cardiac CT)
- □ EACVI Vice-President-Elect (Echocardiography)
- □ EACVI Vice-President-Elect (Cardiovascular Magnetic Resonance)
- ⊠ EACVI Vice-President-Elect (Nuclear Cardiology & Cardiac CT)

1. Your Identity	
Title	Professor
Family Name(s)	Dweck
First Name(s)	Marc
City	EDINBURGH
Country	UK





2. General Curriculum Vitae (300 words max)

I am a Professor of Clinical Cardiology at the University of Edinburgh and Consultant Cardiologist at the Edinburgh Heart Centre. I am a strong proponent of both nuclear and CT imaging but also have wider clinical and research experience with other multi-modality imaging approaches and believe in the principle that the optimum imaging test be selected to answer the specific clinical or research question at hand. As such I am trained in computed tomography, nuclear cardiology, cardiovascular magnetic resonance and echocardiography having conducted international imaging fellowships at the Royal Bromtpon Hospital London, Cedars Sinai Medical Centre Los Angeles and Mount Sinai Hospital New York.

Aside from my busy clinical and teaching commitments in multi-modality imaging I run a large research program, focusing on the clinical application of novel non-invasive techniques to the study of cardiovascular disease. In particular I have i) pioneered the use of PET to measure disease activity in aortic stenosis, myocardial disease and coronary atherosclerosis; ii) invesitgated the use of CT in both coronary artery disease (SCOTHEART trial) and aortic stenosis ; iii) used echocardiography to explore disease the cardiac complications of COVID-19; and iv) applied cardiovascular magnetic resonance to investigate myocardial fibrosis in aortic stenosis. I am the author of over 340 manuscripts and the PI of multiple international randomised controlled trials using novel imaging strategies to improve patient care in aortic stenosis (e.g. EVOLVED and SALTIRE 2).

I am the recipient of multiple national and international awards including : Clarivate Highly Cited Researcher in Clinical Medicine (top 1% of researchers); Prof J Roelandt's Young Investigator Award EACVI; Michael Davies Early Career Award British Cardiac Society ; British Heart Foundation Outstanding Investigator Award; Glaxo-Smith Kline Emerging Scientist of the Year; and The William W Parmley Young Author Award from JACC (twice as a mentor and as a young author). I believe passionately in the work of the EACVI and am keen to further my service to this organisation as Vice-President Elect for nuclear/CT





3. Previous experience(s) in the EACVI or ESC or your National Bodies?

- Member of the EACVI board 2018-20 and 2020-22 (councilor nuclear/CT)
- EACVI 2020 Congress Program Committee
- Congress Program Committee, European Society of Cardiology (Meetings in 2019/2020)
- Chair EACVI Scientific Initiatives Committee 2020-22
- Chair ESC/EACVI Committee for Accreditation in Cardiovascular Computed Tomography 2021- present
- European Society of Cardiology Task Force Gender Medicine 2022- preesent
- European Society of Cardiology EORP (*EURObservational Research Programme*) Committee 2020-22
- Course Director EACVI Course on Cardiac CT, ESC Heart House, Nice 2022
- EACVI Education Committee Member 2016-2018
- ESC/EACVI Task Force Member on Multi-modality Imaging 2020-present
- EACVI Lead Question Writer on Multi-Modality Imaging for Accreditation Examinations
- EACVI question writer for CT and nuclear accreditation examinations
- Member of the European Society of Cardiology Working Group on Valvular Heart Disease
- Lead of the Valve Heart Disease Task Force for the British Society of Cardiovascular Magnetic Resonance
- British Heart Foundation. Project Grants Committee 2018-2021

I have contributed to numerous expert consensus statements for the EACVI, including the imaging of prosthetic valves, restrictive cardiomyopathy, echocardiography during the COVID-19 pandemic and multi-modality cardiovascular imaging. I have delivered over 200 lectures on multi-modality imaging at conferences and meetings around the world including the ESC, EuroEcho Imaging, EuroCMR and ICNC meetings.

4. Are you a Board or Nucleus Member of another scientific organisation?





	Editorial Board European Heart Journal Cardiovascular
Yes 🛛 No 🗆	Imaging
	Editorial Board Circulation
If Yes, please specify:	Editorial Board Heart
	Editorial Board Circulation cardiovascular imaging
	Editorial Board Journal of Nuclear Cardiology

5. Selected publications (please list 10 max)	
 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 	
 Kaiser Y, Daghem 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. 	
 Pawade TA, Doris MK,Bing R, White AC, Forsyth L, Evans E, Graham C, Williams MC, van Been EJR, Fletcher A, Adamson PD, Andrews J, Cartlidge TR, Jenkins WSA, Syed M, Fijusawa T, Lucatelli C, Fraser W, Ralston SH, Boon NM, Prendergast B, Newby DE, Dweck MR. Effect of denosumab or alendronic acid on the progression of aortic stenosis. A double-blind randomized controlled trial. Circulation 2021. 2021 Apr 29. doi: 10.1161/CIRCULATIONAHA.121.053708. Online ahead of print. 	
4. 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]	



- Dweck MR, Williams MC, Moss AC, Newby DE, Fayad ZA. CT and MR in Ischemic Heart Disease. Journal of the American College of Cardiology. 2016. 2016 Nov 15;68(20):2201-16
- The Scot Heart Investigators. Computed Tomography Coronary Angiography in Patients wih 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
- 7. 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
- Everett RJ, Treibel TA, Fukui M, Lee H, Rigolli M, Singh A, Bijsterveld P, Tastet L, Al Musa T, Dobson L, Chin C, Captur G, Wiesemann S, Ferreira VM, Piechnik SK, Schulz-Menger J, Schelbert EB, Clavel MA, Newby DE, Myerson SG, Pibarot P, Lee S, Cavalcante JL, Lee SP, McCann GP, Greenwood JP, Moon JC, Dweck MR. Extracellular Myocardial Volume in Patients With Aortic Stenosis. Journal American College of Cardiology. 2020. 75: 3 0 4 – 1 6. <u>https://doi.org/10.1016/j.jacc.2019.11.032</u>
- Kwiecinski J, Tzolos E, Cartlidge TRG, Fletcher A, Doris MK, Bing R, Tarkin JM, Seidman MA, Gulsin GS, Cruden NL, Barton AK, Uren NG, Williams MC, van Beek EJR, Leipsic J, Dey D, Makkar RR, Slomka PJ, Rudd JHF, Newby DE, Sellers SL, Berman DS, **Dweck MR**. Native Aortic Valve Disease Progression and Bioprosthetic Valve Degeneration in Patients With Transcatheter Aortic Valve Implantation. **Circulation**. 2021 Oct 26;144(17):1396-1408. doi: 10.1161/CIRCULATIONAHA.121.056891. Epub 2021 Aug 29. PMID: 34455857; PMCID: PMC8542078.
- 10. Zheng KH, Tsimikas S, Pawade TA, Kroon J, Jenkins WSA, Doris MK, White AC, Timmers NKLM, Hjortnaes J, Rogers MA, Aikawa E, Arsenault BJ, Witztum JL, Newby DE, Koschinsky ML, Fayad ZA, Stroes ESG, Boekholdt SM, Dweck MR. Lipoprotein(a) and oxidized phospholipids drive disease progression by aggravating calcification in aortic valve stenosis patients. Journal of the American College Cardiology. 2019;73(17):2150-2162. doi: 10.1016/j.jacc.2019.01.070.

6. Publication metrics

ORCID ID: orcid.org/0000-0001-9847-5917

Google scholar profile link:

https://scholar.google.co.uk/citations?user=2eQHZaIAAAAJ&hl=en



Google scholar h-index: 62 (10/08/2022)

7. Total number of peer reviewed publications / textbooks and chapters

341 (Pubmed 10/08/22)

8. Why are you interested in joining the EACVI Board (300 words max)?

I would relish the opportunity to continue my participation on the EACVI board and would bring the same enthusiasm and energy that I have demonstrated over the past four years. Having served as a councillor for Nuclear/CT I believe I am now ready to serve as Vice-President Elect for this key and growing section of EACVI. I would advocate strongly for these modalities and have a clear vision of how they can contribute to the further success of EACVI and to improving cardiology practice across Europe. I am a keen proponent of the value that nuclear and CT imaging bring to clinical care, using the stregnths of these modalities to improve patient diagnosis and outcomes. I am also passionate about expanding their clinical role via state of the art research. However I also have both clinical and research experience in imaging across multiple modalities and share the EACVI's vision that this is the future of cardiovascular imaging. I would work fervently to promote the EACVI and imaging across Europe and beyond and would welcome the opportunity to contribute my skills and energy to this outstanding and unique imaging association.

