

## Elections to EACVI Board 2018-2020

**Application for the position:**

**EACVI Councillor (Nuclear Cardiology &  
Cardiac CT)**



1. Your Identity	
Title	Doctor
Family Name(s)	Dweck
First Name(s)	Marc
Birth Date	28/07/1979
Institute/Organisation	University of Edinburgh
Department	Centre for Cardiovascular Science
City	Edinburgh
Country	United Kingdom



## 2. General Curriculum Vitae (300 words max)

I am a Cardiology Consultant and British Heart Foundation Reader at the University of Edinburgh and Edinburgh Heart Centre. I am a strong proponent of multi-modality imaging and 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 Brompton Hospital London, Cedars Sinai Medical Centre Los Angeles and most recently at 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 to detect vulnerable high-risk atherosclerotic plaques in the coronary arteries; ii) investigated the use of CT in both coronary artery disease (SCOTHEART trial) and aortic stenosis; iii) explored disease progression in aortic stenosis using echocardiography iv) investigated the utility of cardiovascular magnetic resonance to investigate the hypertrophic response and myocardial fibrosis in aortic stenosis. I am the author of over 120 manuscripts (including in the New England Journal Medicine, The Lancet, JAMA, European Heart Journal, Circulation, JACC) and the PI of two ongoing international randomised controlled trials using novel imaging strategies to improve patient care in aortic stenosis (EVOLVED and SALTIRE 2).

I am the recipient of multiple national and international awards including : 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; Young Investigator Award ACC; and The William W Parmley Young Author Award from JACC.





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

- Congress Program Committee, European Society of Cardiology (Meetings in 2019/2020)
- EACVI Education Committee Member
- EACVI Multi-Modality Imaging Task Force Member
- Invited participant on the EACVI CT and Nuclear Nucleus Group
- Invited participant on the EACVI CMR Nucleus Group
- 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 recently contributed to three expert consensus statements for the EACVI. The first was on imaging of prosthetic valves, the second on imaging restrictive cardiomyopathy and the third on Multi-modality cardiovascular imaging (in press). I delivered multiple lectures on multi-modality imaging at the ESC, EuroEcho Imaging, EuroCMR and ICNC meetings over the past 5 years.

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

Yes ☒ No ☐

If Yes, please specify:

Editorial Board Circulation  
Editorial Board Heart  
Editorial Board Circulation cardiovascular imaging  
Editorial Board Journal of Nuclear Cardiology



## 5. 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

Pawade T, Clavel MA, Tribouilloy C, Dreyfus J, Mathieu T, Tastet L, Renard C, Gun M, Jenkins WSA, Macron L, Sechrist JW, Lacomis JM, Nguyen V, Galian Gay L, Cuéllar Calabria H, Ntalas I, Cartlidge TRG, Prendergast B, Rajani R, Evangelista A, Cavalcante JL, Newby DE, Pibarot P, Messika Zeitoun D, **Dweck MR**. Computed Tomography Aortic Valve Calcium Scoring in Patients with Aortic Stenosis. **Circ Cardiovasc Imaging**. 2018 Mar;11(3):e007146. doi: 10.1161/CIRCIMAGING.117.007146.

Forsythe RO, **Dweck MR**, McBride OMB, Vesey AT, Semple SI, Shah ASV, Adamson PD, Wallace WA, Kaczynski J, Ho W, van Beek EJR, Gray CD, Fletcher A, Lucatelli C, Marin A, Burns P, Tambyraja A, Chalmers RTA, Weir G, Mitchard N, Tavares A, Robson JMJ, Newby DE. <sup>18</sup>F-Sodium Fluoride Uptake in Abdominal Aortic Aneurysms: The SoFIA<sub>3</sub> Study. **Journal American College of Cardiology** 2018 Feb 6;71(5):513-523. doi: 10.1016/j.jacc.2017.11.053.

**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 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.\* <sup>18</sup>F-Fluoride positron emission tomography for identification of ruptured and high-risk coronary atherosclerotic plaques: a prospective clinical trial. **Lancet**. 2014; 383(9918):705-13. \* joint senior author

**Dweck MR**, Boon NA, Newby DE. Calcific aortic stenosis: a disease of the valve and myocardium. **Journal American College Cardiology**. 2012;60:1854-63

**Dweck MR**, Khaw HJ, Baird A, Luo ELC, Williams MC, Makiello P, Sng GKZ, Joshi N, Mirsadraee S, Boon NA, Van Beek EJR, Rudd JHF, Newby DE. Aortic stenosis, atherosclerosis and skeletal bone. *Is there a common link with inflammation and calcification?* **European Heart Journal**. 2013 Jun;34(21):1567-74.

**Dweck MR**, Jones C, Joshi N, Fletcher AM, Richardson H, White A, Marsden M, Pessotto R, Clark JC, Wallace WA, Salter DM, McKillop G, van Beek EJR, Boon NA, Rudd JHF, Newby DE. Assessment of valvular calcification and inflammation by positron emission tomography in patients with aortic stenosis. **Circulation**. 2012;125(1):76-86.

**Dweck MR**, Chow MWL, Joshi N, Williams M, Jones C, Fletcher AM, Richardson H, White A, McKillop G, van Beek EJR, Boon NA, Rudd JHF, Newby DE. Coronary arterial <sup>18</sup>F-NaF uptake: a novel marker of plaque biology. **Journal American College Cardiology**. 2012; 59:1539-48.



### 6. Received Hirsch Index (Year / Index)

**H-Index: 27 (over past 5 years since 2013)**

### 7. Received Impact Factor(s) (Year / IF)

Total citations since 2013: 3821

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

I would relish the opportunity to join the EACVI board and would bring both an enthusiasm and energy that I believe would allow me to make a meaningful and dynamic contribution to its working. I 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 am a keen proponent of the value of CT and nuclear imaging to clinical practice, using the strengths of these modalities to improve patient care whilst recognising that in other situations other modalities will be preferred. I would work fervently to promote the EACVI and cardiovascular imaging across Europe and indeed across the globe and would very much welcome the opportunity to contribute my skills and energy to this outstanding and unique imaging association.