Elections to the Board 2014-2016

Application for the position:

Councillor

1. Your Identity

Title: Doctor

Family Name(s): Dweck

First Name(s): Marc

Birth Date: 28/07/1979

Type of address: Business

Institute/Organisation: University of Edinburgh

Department: Centre for Cardiovacular Science,

Address: Chancellor's Building
Little France Crescent
Little France
Edinburgh

Post Code/Zip: EH16 4SB

City: Edinburgh

State / Province: Scotland

Country: UK

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2. General Curriculum Vitae (300 words max)

I am a Cardiology Specialist Registrar and British Heart Foundation Clinical Lecturer at the University of Edinburgh and The Edinburgh Heart Centre. I beleive stongly in multi-modality imaging and being trained in an array of different techniques so that the optimal test can be sleected to address a patient's specific need. As such I am trained in echocardiography (transthoracic and transoesophageal), cardiovascular magnetic resonance computed tomography and nuclear cardiology and have conducted international imaging fellowships at the Royal Bromtpon Hospital, London and Cedars Sinai Medical Centre, Los Angeles. My main research interest is in the clinical application of modern non-invasive imaging techniques to the study of cardiovascular diseasens. In particular I have pioneered the use of 18F-NaF PET/CT to measure disease activity in aortic stenosis and to detect vulnerable high-risk atherosclerotic plaques; and the application of cardiovascular magnetic resonance to investigate the hypertrophic response in aortic stenosis.

On the basis of this work I have published in many of world's leading general medical and cardiovascular journals and I am the recipient of numerous national and international awards including: Glaxo-Smith Kline Emerging Scientist of the Year, Academy of Pharmaceutical Sciences (2014) ; Finalist BMJ UK research paper of the year (2014); Winner of the Patrick Neil Medal, The Royal Society, Edinburgh (2013); The Young Investigator Award from the American College of Cardiology (2012); The Young Research Worker's Prize from the Radiology Society of North America (2011); and The William W Parmley Young Author Award from the Journal of the American College of Cardiology (2012).

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

- Member of the European Society of Cardiology Working Group on Valvular Heart Disease
- Member of the British Cardiac Society Collaborative Research Programme for Valvular Heart Disease
- Member of the Valve Heart Disease Task Force for the British Society of Cardiovascular Magnetic Resonance
- Working Group Lead. Young Academy of Scotland, Royal Society of Edinburgh

4. Publications (please list 10 max)

1) 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. **Lancet.** 2014; 383(9918):705-13. * joint senior author

2) Chin CWL, Shah ASV, McAllister DA, Cowell SJ, Alam S, Langrish JP, Strachan F, Hunter A, Choy AM, Lang CC, Walker S, Boon NA, Newby DE, Mills NL, Dweck MR. 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 May 14. pii: ehu189. [Epub ahead of print]

3) **Dweck MR**, Jenkins WS, Vesey AT, Pringle MA, Chin CW, Malley TS, Cowie WJ, Tsampasian V, Richardson H, Fletcher A, Wallace WA, Pessotto R, Van Beek EJ, Boon NA, Rudd JH, Newby DE. 18F-NaF Uptake Is a Marker of Active Calcification and Disease Progression in Patients with Aortic Stenosis. **Circulation Cardiovascular Imaging.** 2014;7(2):371-8

4) Gulati A, Jabbour A, Ismail T, Guha K, Khawaja J, Raza S, Brown T, **Dweck MR**, O'Hanlon R, Sheppard MN, Alpendurada F, Cook S, Cowie MR, Assomull RG, Pennell DJ, Prasad SK. Cardiovascular magnetic resonance of myocardial fibrosis predicts mortality in non-ischemic dilated cardiomyopathy. **Journal of the American Medical Association.** 2013; 309(9):896-908

5. Publications (please list 10 max)

5) **Dweck MR**, Khaw HJ, Baird A, Luo ELC, Williams MC, Makielo 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.

6) **Dweck MR,** Calvin CJ, Newby DE. Small Valve Area with Low Gradient Aortic Stenosis: Beware the Hard Hearted. **Journal American College Cardiology**. 2013 62(24):2339-40

7) Chin CWL, Semple S, Malley T, White A, Mirsadraee, Weale PJ, Prasad SK, Newby DE, **Dweck MR**. Optimization and comparison of myocardial T1 techniques at 3T in patients with aortic stenosis. **European Heart Journal Cardiovascular Imaging.** 2014;15(5):556-65

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

9) **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. (With Editorial)

10) **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 18F-NaF uptake: a novel marker of plaque biology. **Journal American College Cardiology**. 2012; 59:1539-48. (With Editorial)

5. Received Impact Factor(s) : Year / IF

Total citations since 2012: 401

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6. Received Hirsch Index : Year / Index

H-Imdex: 9

7. Why are you interested in joining the EACVI Board (150 words max)?

I would relish the opportunity to join the EACVI board. I would bring an enthusiasm and vitality to the board that I beleive would make me a valued member and allow me to make a meaningful and dynamic contribution to its working. Whilst relatively early in my career I have established a strong body of on going research activity using a wide range of imaging technqiues. I strongly beleive that a multimodlaity approach is the future of cardiovascular imaging and that this aproach is somewhat limited in current practice, I am particularly attracted to the EACVI for this exact reason and I will work fervently to help strengthen this paradigm within the EACVI and to help broaden the uptake of this principle across Europe. I would very much welcome the opportunity to contribute my skills and energy to this excellent imaging association.