



Elections to EACVI Board 2020-2022

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)	Petersen
First Name(s)	Steffen E
Birth Date	24/08/1970
Type of address	Business <input checked="" type="checkbox"/> Home <input type="checkbox"/>
Institute/Organisation	William Harvey Research Institute/Queen Mary University of London
Department	Centre for Advanced Cardiovascular Imaging
Address	Charterhouse Square
Post Code/Zip	EC1M 6BQ
City	London
Country	United Kingdom



2. General Curriculum Vitae (300 words max)

Steffen Petersen is Professor of Cardiovascular Medicine at the William Harvey Research Institute, Queen Mary University of London and Consultant Cardiologist and Clinical Co-Director for Research at Barts Heart Centre, Barts Health NHS Trust. He has strategic oversight over cardiovascular research as the Cardiovascular Programme Director of UCLPartners Academic Medical Centre. He is currently **Vice President of the EACVI**.

Education:

- MBChB and MDRES equivalent (Dr med.) from Johannes Gutenberg University Mainz, Germany
- DPHIL (OXON) from the Department of Cardiovascular Medicine, University of Oxford
- MPH from Harvard School of Public Health
- Executive MSc in Health Economics from the London School of Economics.
- Medical School, internal medicine, cardiology and cardiovascular imaging training: Mainz/Germany, Fribourg/Switzerland, Milwaukee/US, Liverpool, Oxford and London/UK

International multi-disciplinary recognition as Fellow:

- European Society of Cardiology (FESC)
- European Association of Cardiovascular Imaging (FEACVI)
- American College of Cardiology (FACC)
- Society for Cardiovascular Magnetic Resonance (FSCMR)
- The Alan Turing Institute
- Senior Fellow of the Higher Education Academy (SFHEA)

His **research interests** include clinical trials using cardiac imaging, cost-effectiveness analysis related to cardiac imaging and primary prevention, large scale population-based studies using cardiac imaging including AI approaches (UK Biobank cardiac imaging lead) and electronic health record research that incorporates cardiac imaging data. He has successfully supervised 14 PhD students and currently supervises six.



In addition to his ESC and EACVI activities listed in the next section 3 he contributes to the cardiac imaging community through:

- Cardiovascular Imaging Specialty Chief Editor for Frontiers in Cardiovascular Medicine and in this role contributed to the new and first impact factor of 3.9 in 2020
- Editorial boards to Heart, JACC Imaging, Journal for Cardiovascular Magnetic Resonance
- Frequent reviewer of national and international grants

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

Senior leadership

- Since 2019: Member of the ESC Atlas Quality Assurance and Publication Committee
- Since 2019: Member of the ESC Regulatory Affairs/EACVI Joint Task Force on Regulatory Governance of Diagnostic Imaging Devices
- Since 2018 Member of the ESC Clinical Practice Guideline Committee
- Since 2018: Member of the ESC Congress Programme Committee
- Since 2018: Chair, Cardiovascular MRI (Dec 2018-Dec 2020), Vice President EACVI
- Since 2018: Member of the EACVI International Communities and Membership Committee
- Since 2018: Member of the EACVI Industry Round Table Committee
- Since 2018: EORP European REgistry on Cardiovascular Imaging EURECA (Executive Committee Member)
- 2017: EACVI constitution task force member which led to current version of constitution
- 2014-2016: Member of the EACVI Industry Round Table Committee
- 2014-2016 Member of the EACVI Research and Innovation Committee
- 2010-2014: Chair of the European CMR Exam Board



Education:

- EuroCMR 2019: Under my leadership this 3-day conference has become the largest clinical CMR conference in Europe (30% increase in delegates)
- Frequent teaching at EACVI Section CMR courses
- I am an editor of the EACVI CMR Textbook
- I led on the CMR certification process in Europe with a particular focus on establishing a high quality European CMR exam, in particular during the transition from paper-based examinations to entirely electronic delivery of examinations
- Co-Programme Chair SCMR-EuroCMR 2015 Joint Scientific Sessions
- I am course co-director of EACVI CMR exam preparation course
- I am course director of the EACVI CMR e-learning course
- Participated as speaker and moderator at various EACVI webinars
- Regular invited speaker at ESC and ESC associated conferences
- Editorial Board of the European Heart Journal Cardiovascular Imaging
- Contribution to many EACVI consensus manuscripts over the last few years published in the European Heart Journal Cardiovascular Imaging

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

Yes No

If Yes, please specify:

I have been a Board member of the Society for Cardiovascular Magnetic Resonance (SCMR) in the past, but since my involvement in the EACVI at Board level not anymore. There should be no conflict of interest.

5. Publications (please list max 10 of your most important publications)



Cosyns B, Lochy S, Luchian ML, Gimelli A, Pontone G, Allard SD, de Mey J, Rosseel P, Dweck M, **Petersen SE**, Edvardsen T. The role of cardiovascular imaging for myocardial injury in hospitalized COVID-19 patients. *Eur Heart J Cardiovasc Imaging*. 2020 Jul 1;21(7):709-714. doi: 10.1093/ehjci/jeaa136. PMID: 32391912; PMCID: PMC7239207

Aung N, Doimo S, Ricci F, Sanghvi MM, Pedrosa C, Woodbridge SP, Al-Balah A, Zemrak F, Khanji MY, Munroe PB, Naci H, **Petersen SE**. Prognostic Significance of Left Ventricular Noncompaction: Systematic Review and Meta-Analysis of Observational Studies. *Circ Cardiovasc Imaging*. 2020 Jan;13(1):e009712. doi: 10.1161/CIRCIMAGING.119.009712. Epub 2020 Jan 21. PMID: 31959004; PMCID: PMC7012350.

Timmis A, Townsend N, Gale CP, Torbica A, Lettino M, **Petersen SE**, Mossialos EA, Maggioni AP, Kazakiewicz D, May HT, De Smedt D, Flather M, Zuhlke L, Beltrame JF, Huculeci R, Tavazzi L, Hindricks G, Bax J, Casadei B, Achenbach S, Wright L, Vardas P; European Society of Cardiology. European Society of Cardiology: Cardiovascular Disease Statistics 2019. *Eur Heart J*. 2020 Jan 1;41(1):12-85. doi: 10.1093/eurheartj/ehz859. PMID: 31820000.

Khanji MY, Jensen MT, Kenawy AA, Raisi-Estabragh Z, Paiva JM, Aung N, Fung K, Lukaschuk E, Zemrak F, Lee AM, Barutcu A, Maclean E, Cooper J, Piechnik SK, Neubauer S, **Petersen SE**. Association Between Recreational Cannabis Use and Cardiac Structure and Function. *JACC Cardiovasc Imaging*. 2020 Mar;13(3):886-888. doi: 10.1016/j.jcmg.2019.10.012. Epub 2019 Dec 18. PMID: 31864983.

Petersen SE, Khanji MY, Plein S, Lancellotti P, Bucciarelli-Ducci C. European Association of Cardiovascular Imaging expert consensus paper: a comprehensive review of cardiovascular magnetic resonance normal values of cardiac chamber size and aortic root in adults and recommendations for grading severity. *Eur Heart J Cardiovasc Imaging*. 2019 Dec 1;20(12):1321-1331. doi: 10.1093/ehjci/jez232. Erratum in: *Eur Heart J Cardiovasc Imaging*. 2019 Dec 1;20(12):1331. PMID: 31544926.

Ricci F, Aung N, Thomson R, Boubertakh R, Camaioni C, Doimo S, Sanghvi MM, Fung K, Khanji MY, Lee A, Malcolmson J, Mantini C, Paiva J, Gallina S, Fedorowski A, Mohiddin SA, Aquaro GD, **Petersen SE**. Pulmonary blood volume index as a quantitative biomarker of haemodynamic congestion in hypertrophic cardiomyopathy. *Eur Heart J Cardiovasc Imaging*. 2019 Dec 1;20(12):1368-1376. doi: 10.1093/ehjci/jez213. PMID: 31504370; PMCID: PMC6868494.

Aung N, Vargas JD, Yang C, Cabrera CP, Warren HR, Fung K, Tzanis E, Barnes MR, Rotter JI, Taylor KD, Manichaikul AW, Lima JAC, Bluemke DA, Piechnik SK, Neubauer S, Munroe PB, **Petersen SE**. Genome-Wide Analysis of Left Ventricular Image-Derived Phenotypes Identifies Fourteen Loci Associated With Cardiac





Morphogenesis and Heart Failure Development. *Circulation*. 2019 Oct 15;140(16):1318-1330. doi: 10.1161/CIRCULATIONAHA.119.041161. Epub 2019 Sep 25. PMID: 31554410; PMCID: PMC6791514.

Petersen SE, Abdulkareem M, Leiner T. Artificial Intelligence Will Transform Cardiac Imaging-Opportunities and Challenges. *Front Cardiovasc Med*. 2019 Sep 10;6:133. doi: 10.3389/fcvm.2019.00133. PMID: 31552275; PMCID: PMC6746883.

Aung N, Sanghvi MM, Zemrak F, Lee AM, Cooper JA, Paiva JM, Thomson RJ, Fung K, Khanji MY, Lukaschuk E, Carapella V, Kim YJ, Munroe PB, Piechnik SK, Neubauer S, **Petersen SE**. Association Between Ambient Air Pollution and Cardiac Morpho-Functional Phenotypes: Insights From the UK Biobank Population Imaging Study. *Circulation*. 2018 Nov 13;138(20):2175-2186. doi: 10.1161/CIRCULATIONAHA.118.034856. Epub 2018 Aug 2. PMID: 30524134; PMCID: PMC6250297.

Petersen SE, Selvanayagam JB, Wiesmann F, Robson MD, Francis JM, Anderson RH, Watkins H, Neubauer S. Left ventricular non-compaction: insights from cardiovascular magnetic resonance imaging. *J Am Coll Cardiol*. 2005 Jul 5;46(1):101-5. doi: 10.1016/j.jacc.2005.03.045. PMID: 15992642.

6. Hirsch Index to date, by Web of Science

44 (on 6/7/2020)





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

Visionary founding fathers created our EACVI bringing together four modalities for one mission: to promote excellence in clinical diagnosis, research, technical development, and education in cardiovascular imaging. Encouraging progress has been made since. Our Heart Imagers of Tomorrow (HIT) – the powerhouse of the EACVI membership – are already multimodality imagers.

I look forward to being considered to lead and represent the entire cardiovascular imaging membership and with strategy further break down perceived and real barriers between modalities. I am committed and ready to serve the EACVI and I trust I am a respected, strategic, positive, pro-active and balanced candidate for the President-Elect position.

With your support we can have a big impact on patients' health due to the multimodality nature of our association and the mission that puts patients at the heart of what we do in **education, research and advocacy**. I bring years of experience within the EACVI and the ESC and so am well positioned to be an effective and strategic leader in challenging times.

The COVID-19 pandemic has affected us all, has changed us all and our environments. Thus, we need to reflect and be ready to change: firstly, how we practice cardiac imaging to best serve our patients; secondly, how we support and deliver highest quality research that will impact patients positively; thirdly, how we have the broadest reach through innovative high-quality education; and last but not least how we better engage with our patients.

I look forward to finding solutions with the EACVI's talented and dedicated membership through its committees to provide value-based healthcare that has the patient and cardiac imaging at its core when healthcare resources are limited. Ambitious plans can only be achieved together and the EACVI is in a very good position to lead and work collaboratively with you all.