

just governance, virtual learning and training in Cardiology can be effective, inclusive and equitable for the current and future generation of cardiologists through COVID-19 era and beyond.

## Acknowledgements

We thank Anwar Chahal, Francesca Pugliese, Ajay Gupta, and Mark Westwood for editing and assistance.

**Conflict of interest:** J.H.C. has been supported by the Singapore Ministry of Health's National Medical Research Council Research Training Fellowship (FLWSHP19may-0013) and the National Medical Research Council Collaborative Centre Grant Seed Funding (NHCS-CGSF/2019/002). S.E.P. provides consultancy and is shareholder of Circle Cardiovascular Imaging, Inc., Calgary, Alberta, Canada. M.Y.K. and M.W. have no conflicts of interest or financial discourses.

Jun Hua Chong<sup>1</sup>, Fabrizio Ricci<sup>2</sup>, Steffen E. Petersen<sup>3</sup>, and Mohammed Y. Khanji<sup>4\*</sup>

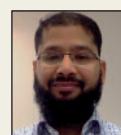
<sup>1</sup>National Heart Centre Singapore & Cardiovascular Sciences Academic Clinical Programme at Duke-National University of Singapore Medical School & Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore; <sup>2</sup>Department of Neuroscience, Imaging and Clinical Sciences, 'G. d'Annunzio' University of Chieti-Pescara, Via dei Vestini, 33 - 66100 Chieti, Italy & Department of Clinical Sciences, Lund University, Jan Waldenströms gata 35, 205 02, Malmö, Sweden; <sup>3</sup>William Harvey Research Institute, NIHR Barts Cardiovascular Research Centre, Queen Mary University of London, Charterhouse Square, London, EC1M 6BQ, UK, Barts Heart Centre, St Bartholomew's Hospital, Barts Health NHS Trust, West Smithfield, London, UK; and <sup>4</sup>Newham University Hospital, Barts Health NHS Trust, Glen Road, London E13 8SL, UK, William Harvey Research Institute, NIHR Barts Cardiovascular Research Centre, Queen Mary University of London, Charterhouse Square,

London, EC1M 6BQ, UK, Barts Heart Centre, St Bartholomew's Hospital, Barts Health NHS Trust, West Smithfield, London, UK

\* Corresponding author. Tel: +44 02073638079, Email: m.khanji@qmul.ac.uk

## References

1. COVID-19: education in the time of coronavirus. <https://cardiovascularnews.com/covid-19-education-in-the-time-of-coronavirus/> ( 27 September 2020).
2. Schecter S, Lin W, Gopal A, Fan R, Rashba E. Haptics and the heart: force and tactile feedback system for cardiovascular interventions. *Cardiovasc Revasc Med* 2018;**19**:36–40.
3. Damp J, Anthony R, Davidson MA, Mendes L. Effects of transesophageal echocardiography simulator training on learning and performance in cardiovascular medicine fellows. *J Am Soc Echocardiogr* 2013;**26**:1450–1456.e2.
4. Bagai A, O'Brien S, Al Lawati H, Goyal P, Ball W, Grantcharov T, Fam N. Mentored simulation training improves procedural skills in cardiac catheterization: a randomized, controlled pilot study. *Circ Cardiovasc Interv* 2012;**5**:672–679.
5. Romito BT, Krasne S, Kellman PJ, Dhillon A. The impact of a perceptual and adaptive learning module on transoesophageal echocardiography interpretation by anaesthesiology residents. *Br J Anaesth* 2016;**117**:477–481.
6. Bonnes SL, Ratelle JT, Halvorsen AJ, Carter KJ, Hafdaht LT, Wang AT, et al. Flipping the quality improvement classroom in residency education. *Acad Med* 2017;**92**:101–107.
7. Yadav A. Cardiology training in times of COVID-19: beyond the present. *Indian Heart J* 2020;**72**:321–324.
8. DeFilippis EM, Stefanescu Schmidt AC, Reza N. Adapting the educational environment for cardiovascular fellows-in-training during the COVID-19 pandemic. *J Am Coll Cardiol* 2020;**75**:2630–2634.
9. Ground Rules for IIBA Online Examinations. <https://www.adaptiveus.com/blog/ground-rules-iiba-online-exam> (14 December 2020).
10. Netiquette: Rules and Guidelines for Online Discussions. <https://www.scps.virginia.edu/uploads/Netiquette.pdf> (14 December 2020).



Dr Mohammed Y Khanji MBBCh & BAO MRCP PhD  
corresponding author  
Newham University Hospital, Barts Health NHS Trust,  
Glen Road, London E13 8SL, UK William Harvey Research  
Institute, NIHR Barts Cardiovascular Research Centre, Queen  
Mary University of London, Charterhouse Square, London,  
EC1M 6BQ, UK Barts Heart Centre, St Bartholomew's Hospital,  
Barts Health NHS Trust, West Smithfield, London, UK  
+44 02073638079  
Email: m.khanji@qmul.ac.uk

doi:10.1093/eurheartj/ehaa1015

## Obituary

# Professor Anthony H. Gershlick

**Interventional cardiology has lost one of its most prominent leaders, trainers, and researchers in Professor Tony Gershlick who died from COVID-19 on 20th November 2020 at the hospital he had worked in for over 30 years**

Anthony (Tony) H. Gershlick was born and brought up in Essex, South-East England, to working-class parents. He struggled at school with dyslexia but, despite this, managed to achieve grades to study medicine at St Mary's in London, graduating in 1976 after also undertaking an intercalated BSc in pharmacological biochemistry. Postgraduate training was also completed in London where amongst others he worked with the neurologist, Sir Roger Bannister, the first man to run a mile in under 4 min. An early mentor was Professor Stewart Cameron, Professor of Nephrology at the Guy's renal unit,

who showed him the potential to influence patient management through well-conducted translational clinical trials.

Thwarted in his initial aim to obtain a training post in renal medicine, Tony extended the last attachment on his medical rotation which was at the National Heart Hospital. He rapidly became hooked on cardiology and renal medicine's loss became cardiology's gain. He completed his clinical training at the London Chest Hospital where he subspecialised in coronary intervention under the tutelage of Martin Rothman, at this time a pioneer in the field, and Raphael Balcon, who Tony cited as



Anthony H. Gershlick at  
Professor McCann's  
inaugural lecture in 2016



Glenfield Hospital, Leicester, UK



British Heart Foundation Clinical Research Centre at Glenfield Hospital

one of his greatest influences. His training was equally influenced by other giants of intervention including Patrick Serruys and Gregg Stone, who he worked with over many years.

Tony moved to Leicester in 1989 to take up a consultant cardiologist and senior lecturer post with Professor David De Bono, BHF Professor of Cardiology at the East Midlands regional cardiac centre initially based at Groby Road Hospital and moving to Glenfield General Hospital in 1993. His research output (>250 articles) and pioneering work in multicentre randomized trials in the UK over the last 30 years have made significant contributions to the Glenfield Hospital being recognized as one of the world-leading cardiorespiratory centres. He was determined to explore ways in which to mitigate the risk of restenosis, which represented the Achilles heel of coronary angioplasty at the time and he was at the forefront of the development of drug-eluting stents.

Tony's reputation as a clinical trialist was cemented through his leadership of the REACT trial which was published in the *NEJM* in 2005. This was the first collaborative multicentre randomized UK trial in acute coronary syndromes (ACS) and showed that rescue angioplasty was superior to repeat lysis or standard care after failed thrombolysis for ST-elevation myocardial infarction (STEMI). Shortly after this, he was appointed as Honorary Professor of Coronary Intervention at the University of Leicester. The impact of REACT was far more extensive than advancing our understanding of the benefits of rescue percutaneous coronary intervention (PCI) over repeated thrombolysis. The trial demonstrated to a generation of academically minded interventional cardiologists that such high-quality original research was indeed possible in the UK setting. This represented the catalyst for a huge expansion in clinical trial activity in interventional cardiology in the UK.



His other major trial that changed STEMI guidelines was CVLPRIT (2015) which, together with other trials, changed the status of revascularisation of non-infarct related vessels in patients undergoing primary PCI for STEMI from a Class III (do not do) to class IIa (should be considered) indication.

Tony served on the ESC STEMI guidelines committee for the 2012 and 2018 recommendations. He was the UK chief investigator on numerous other clinical trials across the full range of coronary intervention including those on drug-eluting stents, left main stem disease, and the

treatment of chronic total occlusions. Right up until his death, Tony was very active as the chief investigator for two further important clinical trials in ACS: The British Heart Foundation Rapid Non-STEMI study assessing very early intervention in high-risk ACS patients and the EU Horizons 2020 funded EUROSCHOCK trial assessing the potential benefit of extracorporeal membrane oxygenation in cardiogenic shock. Tony had an extensive range of other research interests and had developed a network of collaborators all over the world, many of whom became long-term friends. He had become the go-to UK figure for international studies and keynote lectures and was a consistent advocate for interventional cardiology.

Although his passion was coronary intervention, Tony was a supporter of technological innovation across cardiology. He was an early adopter of the use of imaging to guide revascularisation in his patients and supported the local development of stress echocardiography and cardiac magnetic resonance imaging at Glenfield Hospital well before these techniques were established nationally. He chaired the British Cardiovascular Society Working Group reporting in 2007 on the role of non-invasive imaging in coronary artery disease and the increase in capacity that would be required over the following 10 years. Tony was an early advocate of multi-disciplinary meetings, initially introduced at Glenfield for the trials of stenting in left main stem disease vs. surgery. We witnessed many lively discussions at such meetings.

Tony was highly regarded for his commitment to clinical trainees. He served as the East Midlands cardiology training programme director for many years. His dexterity and decision-making in the catheter lab, plus his commitment and flair for teaching, made him a much sought-after clinical teacher and supervisor. He was responsible for passing on the highest standards of care and interventional technique to scores of trainees over his career. He was generous with his time and an energetic supporter of clinical and research trainees alike. Following his death, the tsunami of postings on social media by ex-colleagues attest to his quality as a teacher and mentor. Tony excelled as a communicator. He contributed to hundreds of teaching courses over his career, many of which he set up and ran himself. Particular annual highlights included his long running and highly popular courses in Chronic Total Occlusion and Left Main PCI: he was a genuine pioneer in both of these fields. An example that summed up his reputation as a teacher and generosity of spirit was the invitation from the South African Heart Association in 2015 to visit the country and teach interventional cardiologists there state-of-the-art techniques. Tony

negotiated a sabbatical from his beloved Glenfield Hospital and spent 3 months in South Africa performing procedures with local interventionists in more than 10 hospitals and lecturing extensively, an experience that had a profound effect on him as well as those he trained.



**Professor Gershlick at home in the catheter laboratory**

Tony was the first-ever recipient of the Lifetime Achievement Award from the British Cardiovascular Intervention Society (BCIS); a professional organization that he has served with great commitment over the years as a member of the national council and as Chair of the Research & Development Committee. In addition, Tony was one of the most prolific contributors to the annual BCIS national conference. His talks were always considered a highlight for their clarity, visual impact, and their challenging and thought-provoking content.

Away from cardiology, Tony loved sport, music, and art. In his younger days, he played rugby to a high standard representing Essex and during his student days played with some of the Welsh rugby legends of that era. His move to Leicester allowed him to support passionately the then dominant English rugby team Leicester Tigers. Tony also played squash competitively and was often seen running around the quiet country lanes of Leicestershire and completed the London marathon on more than one occasion. He also managed to squeeze in a motorbike tour of India, surviving a nasty accident with a bus following the sudden appearance of a cow in the middle of a busy road.

Tony loved jazz music and was an accomplished saxophone player and like his approach to cardiology, he always strived to improve taking weekly lessons. He was seen playing publicly on many occasions including at a Washington DC Jazz club during a recent visit. A surprise



**Professor Gershlick, playing his saxophone at a Washington DC Jazz club in 2017.  
photo courtesy Dr Gary Mintz**

to many of us was the fact he also painted, which he revealed in the interview in 2017 featured in the *European Heart Journal* following his lifetime achievement award.

Despite all these activities, Tony was first and foremost a family man at heart. He spent quality time with his two sons David and Ben and was incredibly supportive and proud of their respective achievements as they grew into young men with successful careers. The Gershlicks were renowned for their warmth and hospitality, hosting the most entertaining dinner parties and Christmas get-togethers. Seeing a beaming Tony at such social events is how we will remember him. Engaging, fun, witty, mischievous, and always challenging. Cardiology has lost one of its greatest characters too early.

Tony is survived by his wife Mary, his two sons Ben and David and will be sorely missed by many close friends and colleagues.

**Authors:** Gerry P McCann, Nick P Curzen, Simon G Ray, Nilesh J Samani on behalf of the University of Leicester and University Hospitals of Leicester NHS Trust, The British Cardiovascular Society, The British Cardiovascular Intervention Society and the British Heart Foundation.



Gerry P. McCann,  
NIHR Research Professor,  
Department of Cardiovascular Sciences  
and NIHR Leicester Biomedical  
Research Centre,  
Glenfield Hospital, Leicester UK.



Nick P. Curzen,  
Professor of Interventional Cardiology  
and President British Cardiovascular  
Intervention Society,  
University of Southampton  
and University Hospital Southampton  
NHS Trust, Southampton, UK



Simon G. Ray,  
Professor of Cardiology and President of the  
British Cardiovascular Society,  
Manchester University Hospitals NHS Trust,  
Manchester, UK.



Nilesh J. Samani,  
Professor of cardiology and  
BHF Medical Director, Department of  
Cardiovascular Sciences and NIHR Leicester  
Biomedical Research Centre,  
Glenfield Hospital, Leicester UK