

Association Award

Dr Tom Pierce



It gives me great pleasure to write this citation for Tom Pierce.

Tom's concerns with waste began early at Watford Boys' Grammar. For A level physics, he investigated how many times a new expensive Ni Cad rechargeable AA battery had to be recharged before working out cheaper than the old alkaline ones. (The answer was 156).

Tom went to medical school in Southampton and graduated in 1981. Dr David Saunders, the then senior lecturer in anaesthesia, made an impression when lecturing on fluid and electrolyte balance. During his medical SHO rotation, Tom found that David's advice worked in the clinical arena and a career in anaesthesia and intensive care was born.

Tom started anaesthetic training in Derby but moved to Southampton for his registrar rotation. During this time, Tom's father attended a Royal Institution talk on CFCs and the ozone layer. He contacted Tom to ask if the halogenated volatile agents affected ozone. Tom got in touch with the speaker, Professor Brown, who invited him for breakfast. Six months later there was a paper in Nature establishing that they did not.

Tom next moved to the Netherlands for a Fellowship in cardiac anaesthesia from 1989-1990. He was struck by how easy and safe it was to get about by bicycle. Nearly all the hospital staff cycled to work. When he returned to Southampton, the family moved close enough to work for him to cycle and he has done so ever since.

Environmental issues took a back seat whilst Tom got established as a consultant and began teaching regularly. He ran the Wessex Final FRCA course for 4 years between 2002 and 2006. The next step was to become an FRCA examiner in 2006.

In 2008, Tom attended a seminar at Portland Place on The Anaesthetist and the Environment. He met David Pencheon, a key player in the fledgling Sustainable Development Unit, and Frances Mortimer, now at the Centre for Sustainable Healthcare. In 2008, the UK Climate Change Act was passed. There was increasing evidence and concern that human activity was having a major impact on climate and that this had serious implications for health globally.

Work in the USA and UK has shown that 5% of the carbon footprint equivalent of the hospital sector of the NHS was attributable to anaesthetic gases. Tom was able to calculate the figure for Southampton from consumption data and found this to be a very good estimate.

With increasing use of circle systems and low flow anaesthesia, there was potential to make big reductions in the carbon footprint of anaesthesia. Tom developed an app with a software engineer that enables easy calculation of the carbon footprint of an anaesthetic. The app is free to download and is a valuable teaching aid.

In 2013, JP van Besouw, President of RCoA, asked Tom to be Environmental Advisor to the College. This is how Tom came to be involved in the Association's Environmental Task Group and other health bodies concerned with sustainable healthcare.

Back in Southampton, with a medical student, Tom worked on how much energy was used by operating theatres. He discovered that the single biggest energy draw was for the scavenging system and that huge savings could be made by turning it off at the end of every day.

The family took environmental concerns seriously, with Tom's late wife, Carole, using an electric bike for her work as a GP. Modelling this for the NHS would require 60% of NHS staff to cycle to save a million tonnes of carbon dioxide per year. More recent work has considered the impact of efficient care pathways that minimise the to and fro of so many patient encounter with hospitals. With the College looking more at peri-operative medicine, sustainability is an aspect of quality that should be considered in developing new pathways and processes.

More recently, Tom was co-organiser of a very successful environment seminar at Portland Place. It attracted delegates from Europe and beyond and was heavily over-subscribed. There is increasing interest in how we can be responsible in our use of resources within healthcare whilst continuing to improve quality of care. The actions of individuals have consequences and Tom is keen to equip anaesthetists with the knowledge to make good choices as well as to exert influence at a wider level.

Tom's contribution to this area is unique in UK anaesthesia and he deserves recognition with this award.

Dr Lucy Williams
Consultant Anaesthetist