

Sutton Trust Inquiry : Widening access to healthcare science careers

'The inquiry will ask representatives from leading professions and those campaigning to widen access to them what is being done to get more less advantaged young people into top jobs. It will also look at what the biggest obstacles to improving access are as well as what measures have been more successful.'

The following response is attributable to IPEM President Professor David Brettle.

Background

The Institute of Physics and Engineering in Medicine (IPEM) is the Learned Society and professional organisation for physicists, clinical and biomedical engineers and technologists working in medicine and biology. We are a charity with around 4,300 members from healthcare, academia and industry and our aim is to advance physics and engineering applied to medicine and biology for the public good.

Our members help to ensure that patients are correctly diagnosed and safely treated for illnesses such as cancer and stroke. They also maintain and manage medical equipment such as MRI and ultrasound scanners, X-ray machines, drug delivery systems and patient monitors. Their research and innovation leads to new technologies and methods that improve on existing medical treatments. They provide new solutions that enable older people and patients with injuries or long-term conditions to complete everyday tasks.

IPEM is committed to proactively promote a culture of equality, diversity and inclusion within our discipline as a professional body and as an employer, and our Equality Action Plan implements this commitment. As a signatory to the Royal Academy of Engineering's Engineering Diversity Concordat and the Science Council's diversity declaration, IPEM has agreed to achieve the following objectives:

- communicate commitment to equality and inclusion principles and practices
- appoint a Trustee level Diversity Lead (currently Member Trustee Kimberley Saint)
- take action to increase diversity amongst those in professional engineering membership and registration
- monitor and measure progress
- facilitate collaboration and share good practice with other professional bodies.

IPEM's position

Our current President is passionate about widening access to healthcare science careers, having come through a non-traditional educational route himself. He has said that, in today's world, he would not be able to get into medical physics. He has made it a cornerstone of his ambitions during his presidency for IPEM to do more on this.

IPEM's contribution in relevant areas

Apprenticeships:

- one of our Fellows Jo Young has done a huge amount to introduce apprenticeship programmes at King's College Hospital, London, and won awards for her work
- other members who work with apprentices from less advantaged backgrounds have identified as key issues the need for flexibility around childcare and breaks in training for family issues; and the need for small grant funding to cover things like bus fares for travel to placements – very different from the 'main' scientific training programme which is a prestigious nationally-run, full time, oversubscribed programme that can afford to ignore individuals' circumstances
- we have offered free membership to apprentices to bring them into IPEM alongside trainee scientists and technologists, and get them started in their career in a professional association. We can also offer them registration with the Science Council
- we have an Apprenticeship Panel which actively responds to consultations and works with Dept of Health and others to help develop standards for training and programmes for apprentices.

Outreach to less privileged schools:

- we have an outreach network of members who go to schools to give talks about careers in medical physics and clinical engineering, and a member who leads on outreach
- we are aware of the problem of the most organised/privileged/best equipped schools and where possible we record the type of schools our members visit (which are often schools they have some personal connection with)
- we are in touch with the Science Learning Centre in York, which provides CPD on science to science teachers, and which successfully reaches over 90 per cent of primary/secondary schools . We have offered to provide them with member contacts and materials on medical physics and clinical engineering careers, as they can ensure that these reach schools across the social spectrum
- our members get involved in promoting these careers by online means such as 'I'm a Scientist, get me out of here' which appeal across the spectrum of schools and young people. In the Medical Physics Zone we sponsor, 100 per cent of the schools are State Schools that have been identified by the Institute of Physics as needing extra support in physics to apply (for example, schools without a physics specialist teacher or low uptake of A-level physics)
- we have careers videos on our website which are accessible to all
- we have recently decided to change our approach to outreach re bioengineering careers – we had supported an excellent short course run by Smallpeice, but it always took place in Southampton during the summer holidays and attracted around 16 students from South

Coast schools, and we want to use the funding to reach a larger and more diverse group of students with information about careers in engineering.

Access to scientists

- we are introducing a brokerage service to link up people looking for a work experience placement with departments or individuals able to offer one - specifically to overcome the issue of this currently only being available to people who 'know someone', which privileges young people with family or contacts in professional roles. This is one of the projects championed by our President.