

Technician **Commitment**

Technicians: Providing Frontline Support for Student Mental Health

Simon Breeden, Technician Commitment

Virtually Liverpool

12 November 2020

Technician Commitment



PROUD SUPPORTER OF THE
Technician Commitment

#TechsCommit

VISIBILITY

Ensuring technicians are **visible** within and beyond higher education and research institutions



PROUD SUPPORTER OF THE
Technician Commitment

#TechsCommit

RECOGNITION

Supporting technicians to gain **recognition** through registration



PROUD SUPPORTER OF THE
Technician Commitment

#TechsCommit

DEVELOPMENT

Enabling career **progression** for technicians through clear pathways



PROUD SUPPORTER OF THE
Technician Commitment

#TechsCommit

SUSTAINABILITY

Safeguarding technical skills across the organisation by **using** and **developing** expertise

Technician Commitment

Update on Progress

- Expecting Phase 1 & 2 second stage Self-Assessments & Action Plans in December 2020
- Expansion of Peer Reviewers
 - Training held in October 2020 and another session scheduled for November 18th
- Programme Evaluation (Evaluating Impact: the fifth pillar)

Wider dissemination activities:

- THE Awards – Outstanding Technician of the Year 2020
- Royal Institution Christmas Lectures – Technician Placements
- Policy: Government R&D Roadmap Response, Brexit planning
- COVID-19: The Impact on Technicians in Higher Education and Research

Technician **Commitment**

Welcome to Phase Seven – announced 22nd June 2020!



“Our technical professionals are fundamental to University life, they are a highly skilled workforce that offer specialist knowledge and practical experience essential to supporting teaching and cutting edge research. I am delighted to have signed the Technician Commitment for Heriot Watt University and look forward to building on the progress and future of our Technicians community”

Professor Richard A. Williams, Principal and Vice-Chancellor, Heriot Watt University

THE AWARDS
2020

OFFICIAL SPONSOR

Outstanding Technician of the Year

Outstanding Technician of the Year

Sponsored by Technician Commitment

David de la Haye, Newcastle University

Paul Driver, Anglia Ruskin University

Jane Hubble, Cranfield University

Matt Lewis, Staffordshire University

Samantha McCormack, Buckinghamshire New University

Áine McGuckin, Queen's University Belfast

Jan Timms, Sheffield Hallam University

John Waters, University of Liverpool

Christmas Lectures →

CHRISTMAS LECTURES

Started by Michael Faraday in 1825, and now broadcast on national television every year, the CHRISTMAS LECTURES are the UK's flagship science series.



Our 2020 Christmas Lecturers Credit: Paul Wilkinson and John Allen

About the 2020 Lectures

[Find out more](#)



About the CHRISTMAS LECTURES

[Find out more](#)



[< Back to News](#)

MEMBERS OF THE UK'S FIRST POLICY COMMISSION FOCUSED ON VITAL TECHNICAL COMMUNITY NAMED

Leading experts across the higher education and research sector are named as **commissioners** on the country's first policy commission focused on the advancement of the sector's 30,000 strong technical community.

Technicians play an integral role in academic research, including supporting the UK's scientific response to COVID-19, and in the longer term, enabling pioneering research and development to support the recovery of the UK economy and underpinning the country's investment aspirations of reaching 2.4% of GDP in R&D.



<https://www.mitalent.ac.uk/>

TALENT POLICY COMMISSION



Professor Sir John Holman

Chair of the TALENT Policy Commission



Mat Beardsley

Precision Development Facility Manager, RAL Space



Nicola Atkinson

Isotope Support Scientist, British Geological Survey



Nigel Towers

Head of Strategy, Marketing and Sales, Thales Alenia Space UK



Nishan Canagarajah

President & Vice-Chancellor of the University of Leicester



Paul Lewis

Professor of Political Economy, King's College London



Rory Duncan

UKRI Director, Talent and Skills



Steven Hill

Director of Research, Research England



Tim Savage

Head of Academic Development Planning, University for the Creative Arts



Debra Humphris

Vice-Chancellor, University of Brighton and Chair of University Alliance



Helen Atkinson

Pro-Vice-Chancellor - Aerospace, Transport, Manufacturing, Cranfield University



Helen Pain

Acting Chief Executive, Royal Society of Chemistry



James Hetherington

Director of e-Infrastructure, UKRI



Jennifer Allen

Programme Manager, Gatsby Foundation



Jiteen Ahmed

Head of Technical Services, Aston University



Recent News Articles

- ▶ CPD Awards 2020: Winner videos...
- ▶ Clinical Professionals, RIG Healthcare & Cpl Specialist Talent join forces to form to Cpl UK...
- ▶ Professional Registration Workshops Announced for Autumn...



Department for Business, Energy & Industrial Strategy

Policy paper

UK Research and Development Roadmap

Published 1 July 2020

Contents

- Foreword
- Executive Summary
- Being honest about where we need to improve
- Raising our research ambitions
- Inspiring and enabling talented people and teams
- Driving up innovation and productivity
- Levelling up R&D across the UK
- Being at the forefront of global collaboration
- Developing world-leading infrastructure and institutions
- Ensuring a healthy R&D system
- Next steps

Foreword

The UK is internationally recognised for our leadership in research, the excellence of our scientific institutions, and the innovation in our economy. We can proudly claim to be the nation that gave the world the steam engine and the jet engine. We discovered graphene and we decoded the structure of DNA. Today, we are by far the top destination in Europe for venture capital, with inward investors attracted by our talented and diverse workforce as well as our cutting-edge technologies and services.

The COVID-19 pandemic has shown all of us the vital importance of science and innovation. British researchers are at the forefront of global efforts to find a vaccine and are working hard to map out the impact of the pandemic on our lives and livelihoods. Organisations of all shapes and sizes have worked tirelessly to respond to the crisis in innovative new ways.

In March, the Chancellor announced a record increase in public investment in research and development (R&D) – committing to reaching £22 billion per year by 2024 to 2025. Just a few months on, this commitment has added importance. We will need to be even more creative and innovative to adapt to the 'new normal', and to recover swiftly from COVID-19. It is our duty to build a future which is greener, safer and healthier than before.



Technician Commitment



The Impact on Technicians in UK Higher Education & Research



COVID-19

Case Studies

STFC Technicians help deliver thousands of ventilators nationwide

Science and Technology Facilities Council (STFC) technicians helped deliver 13,437 ventilators as part of the Ventilator Challenge UK, more than doubling the stock available to the NHS.

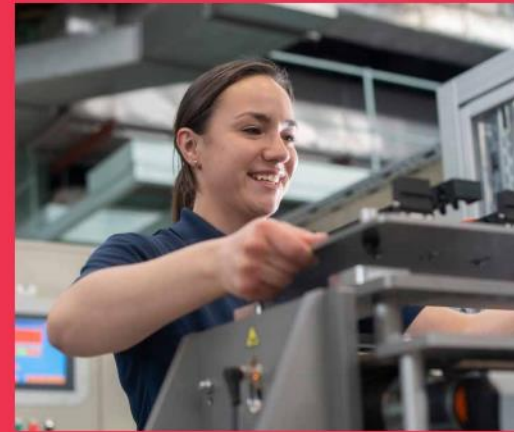
Initially STFC technicians helped to develop a training manual for testing and calibrating Penlon's ventilator to ensure its safe and successful use in hospitals.

The STFC team of "super trainers", based in Harwell, Oxfordshire, led the training of hundreds of others to test the new ventilators produced by Penlon at its nearby facility in Abingdon.

The testing team monitored pressure and air flow through the ventilator while it inflated and deflated a set of steel "lungs".

A larger STFC team of more than 70 people, including technicians, engineers and scientists, continued to test the ventilators throughout production and provided essential logistics services during the project.

The consortium of UK aerospace, motorsport, automotive and medical businesses delivered critical Penlon ESO 2 and Smiths paraPACTM plus ventilators to the NHS from 19 March, with the last shipment of finished ventilators dispatched on Sunday 5 July.



The Impact on Technicians in UK Higher Education & Research



The Midlands Innovation technical community response to COVID-19

Midlands Innovation (MI) is a partnership of eight universities in the Midlands (Aston, Birmingham, Cranfield, Leicester, Loughborough, Keele, Nottingham and Warwick). Technical staff have been at the forefront of supporting Midlands Innovation institutions' efforts against COVID-19, bringing their knowledge, expertise and skills where needed.

Technical colleagues have organised Personal Protective Equipment (PPE) donations from MI universities to NHS and other frontline services, created thousands of gallons of hand sanitiser for hospitals and social care settings, supported MI institutions to quickly transition academic teaching online, and ensured crucial services and ongoing academic research can continue. Technicians have been keeping essential equipment working, refilling cryogenic liquids and gases, sewing medical gowns/face masks, led 3D printing of ventilator parts and visors, collated equipment for UK government testing centres and carrying out compliance checks throughout the lockdown.

Technicians within MI are also part of a national initiative to map how COVID-19 spreads and behaved by using whole-genome sequencing and have been supporting COVID-19 testing at government diagnostic laboratories.

Technician Commitment

Technicians:
Providing frontline and vital support for student mental health and wellbeing

Mental health issues are on the rise across the UK higher education sector and recent reports state that one in four students are affected by a mental health condition.

The majority of technical staff are in student facing roles and, whilst their technical expertise and practical support is an essential part of the teaching and learning experience, the frontline nature of their roles means that they are also providing important but perhaps unrecognised pastoral support for students.

A collaborative team from the Technician Commitment, Science Council, Institute of Physics, Royal Society of Biology, Royal Society of Chemistry, University of Liverpool and University of Nottingham undertook a national survey in order to shed light on the important role technicians play in student mental health and wellbeing. This survey attracted over 700 responses from technicians across a wide range of universities and research institutes.

This report offers an unprecedented insight into the ways in which technical staff in higher education support student mental health and wellbeing. It offers a number of recommendations to the higher education and research sector, individual employers and to technicians themselves in order to ensure that all involved are fully supported and appropriately trained.

Introduction

Student mental health

Mental health issues are on the rise amongst student communities in UK higher education (HE), with recent reports stating that one in four students have been affected by a mental health condition. The number of student suicides is increasing and the number of students dropping out of HE because of a mental health issue has more than tripled in recent years¹. Several surveys also suggest that mental health issues are substantially more prevalent in postgraduate research students (PGRs). Recent research highlights that rates of depression and anxiety are up to six times higher among postgraduate students compared to the general population² and points to both university staff and postgraduate students having a higher risk of having or developing a mental health condition, compared to other working populations³.

UK Higher Education Institutions (HEIs) tend to have counselling services which provide a range of services to staff, students and PGRs. Many are under strain, which may in part be related to waiting times for NHS counselling services, accessed via GPs⁴. Over the past few years, there has been increased recognition of the crucial roles that academic and student services staff can play in supporting students with mental health issues, and signposting students to further support. Universities UK recently advocated a 'whole university approach'⁵ to 'transform cultures and embed mental health initiatives'. Provision is being put in place to ensure that staff are equipped with the appropriate professional training to enable them to support students accordingly. For example, Mental Health First Aid (MHFA) England has produced a whole university framework for mental health⁶. While this is very positive, there has been very little focus on research to date on a community of staff across UK HE who support students on a frontline and regular basis – the technicians.

The technical community

Current data, whilst limited, suggests that there are over 30,000 technicians working across UK HEIs⁷. The technical community has a vast range of job titles – technicians, skills specialists, technologists, experimental officers, laboratory managers to name a few – and is recognised as being critical to the success of the UK's HE sector⁸. A highly skilled workforce with a diverse range of expertise, technicians underpin the primary activities of HEIs, providing the technical excellence essential for research, teaching and knowledge transfer. Alongside this, many technicians are researchers and teachers in their own right. They also play a fundamental role in the development of technical skills that students require to pursue a career in research, academia and/or industry.

Frontline support

The majority of technical staff in HEIs are in student-facing roles and, whilst their technical expertise and practical support is an essential part of the teaching and learning experience, additionally, technicians can often be the first to get to know students more informally in their respective learning and research environments.

This frontline nature of their roles means that they are often the first to notice a student who may be struggling, and they might be the first staff member a student reaches out to. For example, in a research setting, it may be the technician who first becomes aware of a PGR student who hasn't been in the laboratory for a few days; who sees an experiment go wrong again (and again, and again); or who realises that someone is repeatedly working alone over weekends and out of hours. Consequently, they are providing important and often unrecognised pastoral support, contributing to students' personal, social and wellbeing needs. They also act as positive role models, supporting research team resilience and signposting to social and academic support systems. Alongside the role of academic colleagues, this pastoral care is crucial to providing students with routes to access the support they need.

Working together

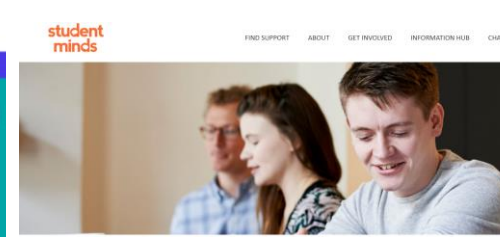
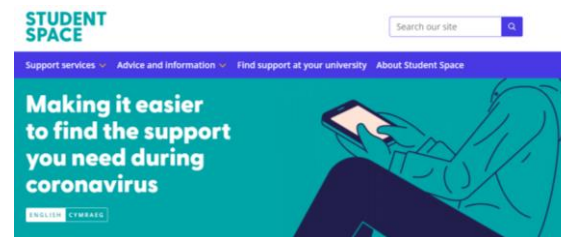
The Technician Commitment⁹ is bringing much needed visibility, recognition, career development and sustainability to the vital roles that technical staff play in enabling research and innovation, and in inspiring and nurturing students. Through the Technician Commitment, the Science Council, Institute of Physics (IOP), the Royal Society of Biology (RSB), the Royal Society of Chemistry (RSC), the University of Nottingham and the University of Liverpool are working together to identify and highlight the roles that technicians play in supporting students' mental health and wellbeing. Together, we aim to shine a light on, and lend help to, the presence and support that technicians bring to their HEIs. In addition to their vital technical skills, they provide support that is critical to the success of HEIs, and to the wellbeing of the communities within them.

For the first time, this report outlines the extent to which technicians are supporting students in this way, and offers a number of recommendations to the higher education and research sector, individual employers and to technicians themselves, in order to ensure that all involved are fully supported. While it is essential that we value and invest in the skills and technical expertise of technicians, we also need to recognise the additional, traditionally unseen, pastoral role they play in actively supporting student wellbeing.

Technician **Commitment**

How might we use TC to support health & wellbeing of technical community?

- Support each other: provide a forum for networking (*we're all in this together*)
 - Signatory Events and other initiatives such as the tech-connect meetings
 - Fantastic feedback from the signatory event (150 attendees): energising, positive, great to chat,
- Policy: engagement with Government; Office for Students; HEI funders, UKRI, research culture
- Senior management awareness that technicians are part of the solution
- Report demonstrates the scale and sector level of the challenge
- Signpost resources to the sector (both to HEIs and technicians)
 - Charlie Waller Memorial Trust (see previously!)
 - Student Minds
 - Student Space
- Share best practice.....



<https://charliewaller.org/>

<https://studentspace.org.uk/>

<https://www.studentminds.org.uk/>

Technician **Commitment**

How might TC signatories use their TC affiliation to promote better wellbeing for their technicians and in turn their students and other staff?

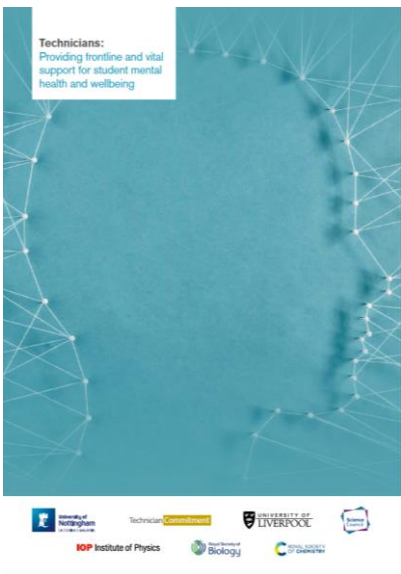
- Raise awareness that technicians are **actually** providing this support across the sector **now**
 - Many (all?) technicians are providing pastoral support but it is rarely recognised (not in JDs)
 - Particularly for student facing roles: technicians in teaching labs
 - Supporting anecdotal evidence is strong: we will all have stories
 - Technicians are the neutral touch point to the institution; more so than academic staff
- Identify solutions in TC action plan to address this (VC sign off is required) including:
 - Provide support for technicians themselves
 - Delivery of in-house mental health training
 - Develop peer support networks for technicians
- Talk about mental health support of, and by, technicians, *it's good to talk*
- Share best practice.....



Technician Commitment

Random thoughts from the day

- Culture change is required
 - Embed support mechanisms
 - UG become PGR, ECR, PI, Prof....
 - Reinforce at PGR specifically (PhD \neq stress)
- Critical to address increase of mental health problems as progress up education levels
- Technicians 'keen to share' (report)
 - Need to give a forum/voice for this
 - 'Meet fellow technicians' in similar situation
 - COVID has enabled digital connectivity: good!
- Why do students report supervisory issues to technicians? (neutral touch point)
 - "Jonny/Jenny on the spot"
- Training, training, training and training
- Build mental health training into induction
- Management awareness of criticality
 - Time to attend; workload management
- Support technicians themselves
 - Train the trainer, support the supporter
- Know your limits (MHFA)
 - Signposting: find out where to point now
- Some training (even light) is better than none
- Technicians are institutional consistency, honesty, approachability, not an authority figure, supportive
- Community.....



Technician **Commitment**

Technicians: Providing Frontline Support for Student Mental Health
www.technicians.org.uk/technician-commitment/resources/technicians-student-well-being

Virtually Liverpool
12 November 2020