

Technician Commitment

Evaluating Impact through Self- Assessment & Future Action Planning

Organisation: Wellcome Sanger Institute

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To provide some context, please provide a brief profile of your organisation (up to 250 words)

The Wellcome Sanger Institute is a world leader in genome research. Our mission is to use genome sequences to increase understanding of human and pathogen biology in order to improve human health.

Our scientific niche is in large-scale, high-throughput biology, often incorporating systematic genome-wide screens. These are enabled by major data generation platforms in DNA sequencing, cellular genetics and mouse genetics with an accompanying large IT platform supporting computational data analysis.

The Sanger Institute is supported by a core grant from the Wellcome Trust as well as external grants from large and small funders including UK Research Councils, Charities, the EU and NIH.

Sanger employs 1,100 staff and also hosts PhD students and visiting workers from dozens of countries. The organisation is broadly structured in 4 main areas:

- Faculty/Research Programmes - Our research is organised into 5 Programmes; Cancer, Ageing and Somatic Mutation, Cellular Genetics, Human Genetics, Parasites and Microbes & Tree of Life.
- Scientific Operations - responsible for all data production pipelines at the Institute, with four major core facilities - DNA Pipelines, Animal Facility, Cellular Operations and Information Technology
- Management Operations – supporting teams that enable delivery of the science, including Health & Safety, Finance, IT and HR.
- Connecting Science - connects researchers, health professionals and the wider public. This consists of Advanced Courses and Scientific Conferences, a Conference Centre, Society & Ethic and Public Engagement teams.



Please tell us how your organisation defines its technicians:

We broadly define a Technician as "A person who is trained and/or skilled in the techniques, tools and technology of their subject, who provides the practical application of knowledge, including hands-on support, directly contributing to teaching and learning, research and enterprise activities. Within the context of the Sanger Institute that would, amongst others, include members of the Animal Technician, Technical Assistant, Research Assistant, Scientific Manager, Computational and Bioinformatics job families".

Our technical workforce are critical to the achievement of the institute's ambitions and success.

How many technicians are there in your organisation? Please provide some information on where they are based and/or how they are structured (in terms of subject/discipline/department):

We currently have 494 employees based in roles that we identify as Technicians which span all pay ranges and they can be broadly categorised into the following job families:

- Informatics: Computer Biologists, Software Developers, Bioinformaticians

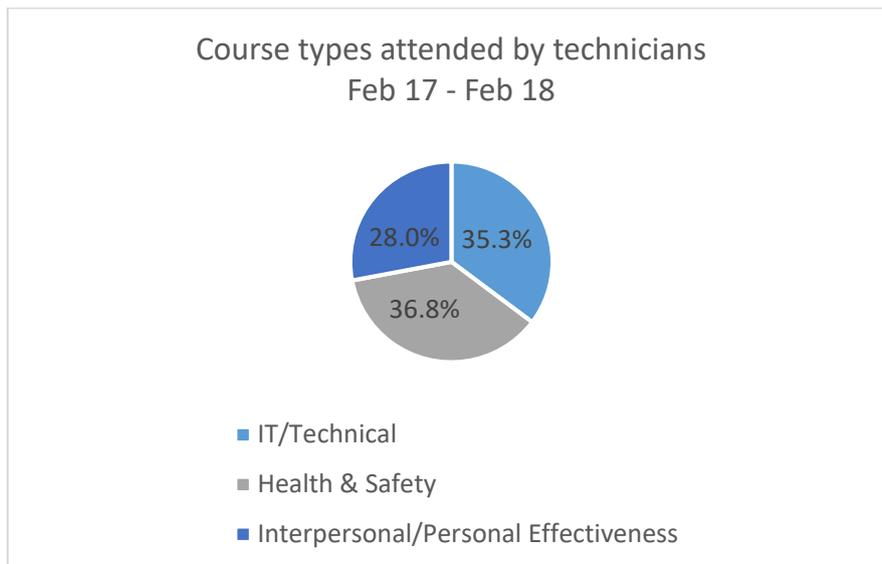
- Scientific: Animal Technician, Laboratory Manager, Research Assistant, Technical Assistant, Staff Scientists, Scientific Management
- IT: Systems Administration, Database Analyst, Web Development, IT Managers

Of these, 255 are male and 239 are female. There are twice as many women to men in the Research Assistant job family.

Please provide details of initiatives/programmes/activities that were already in place for the technical community within your organisation prior to becoming a signatory of the Technician Commitment

Prior to signing up to the Technician Commitment, our technicians were able to access a number of learning and development opportunities. In the year before the organisation became a signatory of the Technician Commitment, development opportunities were accessed by many technicians. Between February 2017 and February 2018, 275 technicians attended training, filling 735 training places (an average of between 2 and 3 courses each over the year).

Health and Safety courses represent the most popular courses for our technicians, closely followed by IT/Technical courses (Excel training) and Interpersonal/Personal Effectiveness courses (e.g. Confidence).



Below is a list of the courses most popular with technicians. All courses that were attended by at least 10 technicians February 17 – February 18 are listed:

Course name	No. of technicians who attended Feb 17 – Feb 18
In house purchasing/finance system	82
Local Co-ordinator Event	61
Scientific Induction	39
Pay Briefing (for managers)	32
Unconscious Bias and Recruitment	31
Python Programming	30
Laboratory Ergonomics	24
Animal Facility Ergonomic Course	24
Management in Action	23
Health & Safety Risk Assessment	19
IT Farm	14
Conducting Effective Appraisals	13
Essential Communication Skills	12
Creating Confidence	11
Ergonomic Champions Course	10
In house purchasing/finance system -Train the Trainer	10

The organisation has always encouraged employees to apply for sponsorship in order to undertake external training to aid professional development. Between February 2017 and February 2018 the Learning & Development team supported 3 applications from Technicians (making up 18% of all applications). Between March 2018 and March 2019 the Learning & Development team supported a further 3 applications (making up 16% of all applications). This funding has allowed technicians to participate in courses such as BSc (Hons) in Computing & IT and MSc in Bioinformatics.



The organisation has a well-established Public Engagement team who recruit, support and train teams of staff to become STEM ambassadors and engage a range of different audiences with the Institute's science and research. The ambassador role is varied and includes things such as talks to school children, tours of the campus, participation in science exhibitions and festivals. A number of our technicians are ambassadors and this provides them with the opportunity to showcase their technical work to members of the public. Of the institute's 95 STEM Ambassadors, 44 are Technicians. In addition, there are a number of other technicians who participate in engagement activities but are not officially registered as STEM ambassadors. For example, colleagues from our animal facility recently ran an event to raise awareness of work they do as animal technicians, gave talks and shared information. Here are some examples of activities our technician STEM ambassadors have been involved in [WGC Engagement on Twitter](#), [Twitter](#), [STEM video](#), [Academy Science Week](#)

The Technician Commitment aims to ensure visibility, recognition, career development and sustainability for technical staff across higher education and research. Please tell us of any initiatives your organisation has put in place to address these themes since becoming a signatory of the Technician Commitment:

The organisation became a signatory of the Technician Commitment in March 2018. Since this time the organisation has actioned a number of new initiatives.



Since signing the Technician Commitment a Steering Group has been formed and meets on a monthly basis. The Steering Group consists of technicians, managers of technicians, human resources and employee partners (representatives). In addition, the following 6 Working Groups have been created in order to help shape and initiate some of the actions on our Action Plan:

- Marketing & Communications – market, promote and communicate the purpose of the Technician Commitment and communicate events and other activities.
- Technician Portal – create a ‘one stop shop’, where technicians can access information, resources, materials and news.
- Internal policies and procedures – develop internal policies and procedures with the aim of improving the visibility, recognition, career development and sustainability of our technicians.
- Membership and Finance – manage a budget to support technician activities and development. To raise the awareness of professional registration and understand the benefits associated with professional body membership.
- Events – organise one-off events, such as conferences and launch events.
- Training & Seminars – develop a varied portfolio of training and development opportunities relevant and meaningful to technicians.

Visibility

In January 2019 we ran a Technician Commitment ‘soft launch’. Over a period of five days, members of the Technician Commitment Steering Group hosted stands around different areas of the campus and encouraged technicians to ‘drop by’. This was a great opportunity not only to raise awareness of the Commitment but also meant we were able to hear first-hand from our technicians what they would like to see incorporated in our Action Plan. We operated an anonymous ‘suggestions box’ so that technicians could submit their ideas confidentially.

Two of our technicians (Claire Cormie and Peter Keen) successfully applied to be case studies for the [Make it Happen Campaign](#). This has been a wonderful way of raising their profiles and, in turn, is helping to improve awareness amongst young people of the very many different technician roles and career pathways.

Read [Peter’s story](#)

Read [Claire’s story](#)



In February 2019 we commissioned two videos highlighting the Technician Commitment at the institute'. The primary aim of this is to raise awareness amongst our workforce of the vital work our technicians do. In the video Sir Mike Stratton Director Wellcome Sanger Institute, features along with other senior leaders across the institute. The videos also feature a number of technicians themselves who talk about their career journey and involvement with the Technician Commitment.



Although not a new initiative, the organisation has an 'Employee Partnership' which is a recognised forum for all Genome Research Limited (GRL) staff and students. A number of members of the Technician Commitment Steering Group are also Employee Partners and this has been utilised in order to ensure the voices of technicians are heard.

Career Development

In March 2019 the organisation became members of [HEaTED](#) in order that our technicians can benefit from their range of courses, events and networking opportunities. This is a fantastic way of building networks with other technicians in the region and supporting the skills and learning of technical staff.

The Training & Seminars Working Group is building a portfolio of technical workshops and training to complement the already established learning and development provision. It is hoped these development opportunities will help our technicians to gain skills and knowledge to develop their career opportunities.

A campus careers day is held annually and is accessible for all staff. At the time of writing, our 2019 campus Careers Day is being organised and will take place on 13 June 2019. This will be the first year that the Careers Day will include a guest speaker who is a technician. One of our own technician's, Paul Ellis - Principle Scientific Manager, will be presenting and will share his career journey. In addition, a stand will be staffed by technicians will be included in the programme in order to raise the profile of the Technician Commitment and the initiatives being started as a result of signing up.

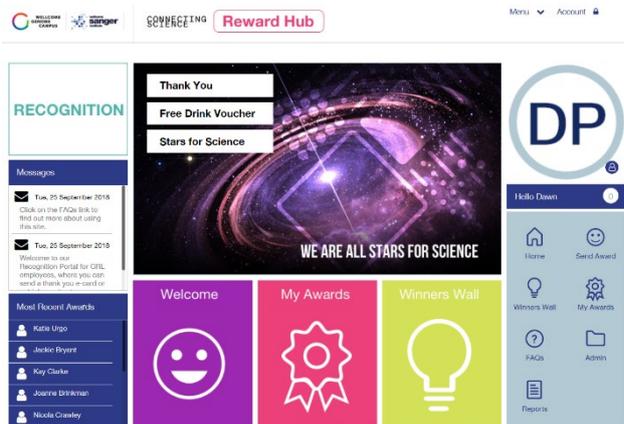
In September 2018 the Scientific Operations team also ran a 'Research Assistant Careers Day'. This day was aimed specifically at technicians, with a number of technicians presenting at this event. 1-1 careers advice was also embedded in the programme.



At the time of writing, the organisation is pending the approval of a new Continuing Professional Development (CPD) Policy for Technicians. This policy, crafted in March 2019, was written by technicians for technicians and has received unilateral support from our Employee Partnership. The policy demonstrates a commitment to wide scale organisational support for technicians undertaking training and development opportunities to enhance their careers. The policy stipulates that technicians should be permitted to undertake a minimum of 2 CPD per year; in the form of training, conferences, workshops etc.. This is an important milestone for the organisation in order to address the management inconsistency in approving development requests from technical employees.

Recognition

Employee recognition is a priority focus for the organisation over the past year. In autumn 2017, the organisation undertook a 'Great Place to Work' survey which is an external tool designed to ascertain how staff feel about working at the Sanger Institute. 239 technicians completed the survey. The results revealed that most notably, the area where the organisation needs to improve most is within 'Recognition'. 55% of technicians believe they are receiving appropriate recognition. Since then the HR team have been working hard to develop new initiatives and mechanisms to create a culture where recognition is firmly embedded and valued.



One of the initiatives that has been introduced is a new Recognition Portal which hosts a Reward Hub. This is a system which provides employees with the opportunity to thank colleagues for their contributions and discretionary effort. It is promising to see so many of our technical colleagues being regularly recognised and thanked, particularly as the managers of recipients are made aware of these messages. Since the Reward Hub first launch in July 2018, Technicians have been thanked using the Hub on 438 occasions; this amounts to 52% of all 'thank

you's' logged! This could be a message of thanks or a thank you voucher that can be redeemed against a free hot drink at our onsite café. These simple gestures go a long way to recognising all our staff but is especially important for our technicians.

Since signing the Commitment we have been collaborating with other institutes to provide mutual support and share best practice around the aims of the Technician Commitment. This collaboration has included the Wellcome Sanger Institute, MRC (LMB & UKRI), John Innes Centre, Crick Institute, Institute of Cancer Research and Babraham Institute. One of the deliverables from this collaboration has been the creation of a cross institute Technician Conference (called 'RITS' – Research Institute Technicians Symposium). At the time of writing, this conference is being planned for 18 November 2019 and the intention to provide technicians from our respective organisations with ample opportunity to contribute and accept speaking slots. In addition, it is planned that prizes will be awarded to the best technical speakers.

To date, technicians have been slow to engage with professional registration. This may in part be due to the fact that the concept is new to the technician community and we need to build greater awareness. There remains a need for us to promote the benefits of membership and registration and, in light of this, professional bodies have been invited to our formal Launch Event.

Sustainability

It is well accepted that the technicians are an aging group and that over the next decade, a large proportion of this community will be entering retirement. In order to address this and to plan for this likely turnover, the organisation has committed to two initiatives to attract young talent and grow our own. In spring 2019 the organisation partnered with the [Nuffield Foundation](#) with the intention of hosting four STEM work experience placements for young people from disadvantaged socio-economic backgrounds. The Nuffield scheme is able to offer technical placements and it is hoped these placements will create a future talent pipeline for future technicians joining our organisation. This presents a good development opportunity for existing technicians to further develop skills in supervision and training.

The organisation pays into the apprenticeship levy and this has provided an opportunity to reinvigorate our apprenticeships. We currently have two technical apprentices; one is a Laboratory Technician and the other is an IT Infrastructure Technician. Apprenticeships provide a valuable source of future talent who can develop their skills and experience whilst conducting technical roles. We have begun outreach with local schools to raise awareness of technical roles and apprenticeships.

There are some areas of the institute where we experience significant technical skills shortages. In particular, there is an acute shortage of skilled bioinformatics scientists. In order to address this, our organisation became the lead partner working with Anglia Ruskin University (ARU) to develop a new [Bioinformatics Degree apprenticeship](#).

This Level 6 Bioinformatics degree apprenticeship, which will commence in September 2019, will help us to address recruitment issues and identifiable skills shortages. It presents an attractive solution to develop a sustainable talent infrastructure in this sector. We need to 'grow our own' in order to create our own talent pool. At the time of writing the organisation is planning the recruitment of 7 bioinformatics apprentices.

Please evidence how the 'technician voice' was present in the development and formation of the institutional action plan:

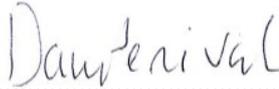
Various iterations of the Action Plan have been shared amongst all members of the Technician Commitment Steering Group. Feedback from technicians has been vital in crafting an Action Plan which is relevant and credible in our institute.

A special thank you goes to those who have helped bring the Technician Commitment to life:

Alex Alderton; Alex Gedney; Alix Schwiening; Anne White; Austra Jenner-Parson; Burcu Bronner Anar; Carole Frost; Claire Cormie; Cordelia Langford; David Parry-Smith; Dominique Von Schiller; Edward Cannon; Eve Coomber; Francesca Gale; Francesca Paoni Saccone; Gavin Wright; Jonathan Lovell; Laura O'Neill; Liam Prestwood; Mike Stratton; Nadia Cross; Nicole Muller-Sienerth; Peter Keen; Rosalind Lacey; Sam Bowker; Sam Thompson; Stacey Price; Stephen Gamble; Vladimir Kiselev.

The organisation's Technician Commitment status and action plan is published on our website:

<https://www.sanger.ac.uk/about/careers/technicians-commitment>

Signed..........(Technician Commitment Nominated Institutional Lead)

Date: 1 May 2019

Signed..........(Technician Commitment Signatory – Leader of Institution)

Date: 01/05/2019