Wellcome Sanger Institute Technician Commitment:

Evaluating Impact through Self-Assessment & Future Action Planning

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Please provide a RAG analysis on your institutional 24-month action plan indicating which activities you have undertaken and completed (green), which are in progress (amber) and which are still to be carried out (red). Please provide an explanation for those categorised as red. This may be detailed here or attached to this document as an appendix. 9

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Please provide details of any additional initiatives/programmes/activities aligned to your Technician Commitment that are not covered in your original action plan.

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Please provide a 36-month action plan; detailing plans to ensure your organisation continues to address the themes of the Technician Commitment and details of how impact will be evidenced: (this may be detailed here or attached to this document as an appendix). Please evidence how the 'technician voice' was present in the development and formation of the 36-month action plan. 23

Technician Commitment O wellcome science



WELLCOME GENOME

sanger

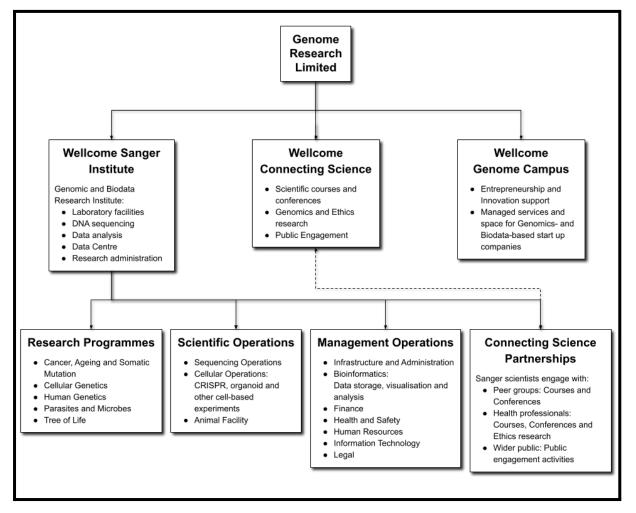
Sanger Technician Commitment: Evaluating Impact through Self-Assessment & Future Action Planning

Please provide an overview of technical staff structures in your organisation

The Wellcome Sanger Institute is a world leader in genome research. Our mission is to use information from genome sequences to advance understanding of biology and improve 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 Wellcome Sanger Institute operates as part of Genome Research Limited, an organisation that oversees and coordinates three interlinked activities:



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 European Union and National Institutes of Health.

The Sanger Institute employs 1,100 staff and also hosts PhD students and visiting workers from dozens of countries. The organisation is broadly structured in 3 main areas:

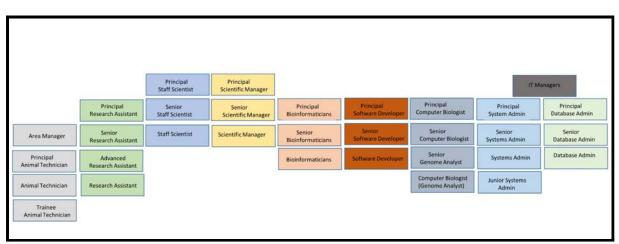
- Faculty/Research Programmes: Our research is organised into five Programmes; Cancer, Ageing and Somatic Mutation, Cellular Genetics, Human Genetics, Parasites and Microbes & Tree of Life.
- Scientific Operations: are responsible for all data production pipelines at the Institute, with three major core facilities Sequencing Operations, the Animal Facility and Cellular Operations.
- **Management Operations:** are a collection of supporting teams that enable delivery of the science, including Health & Safety, Finance, IT and Human Resources.

Connecting Science employs ~50 staff and enables GRL to connect researchers, health professionals and the wider public with the groundbreaking science at the Institute. Connecting Science consists of Advanced Courses and Scientific Conferences, a Conference Centre, Society & Ethic and Public Engagement teams.

At the Wellcome Sanger Institute, we have chosen to adopt an inclusive approach and have described 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 include members of the Animal Technician, Technician, Technical Assistant, Research Assistant, Staff Scientist, Scientific Manager, IT and Informatics job families."

- Wellcome Sanger Institute definition of Technicians



Celebrating diversity of technical expertise: Technicians and Technical experts

While the Technician definition was welcomed by the majority of our wet laboratory staff including Animal Technicians, Research Assistants and Technical Assistants, we found that dry laboratory staff (IT and Informatics) preferred another description 'Technical Experts'. As a demonstration of our inclusivity we currently use Technical staff or Technicians/Technical Experts and call our technical staff

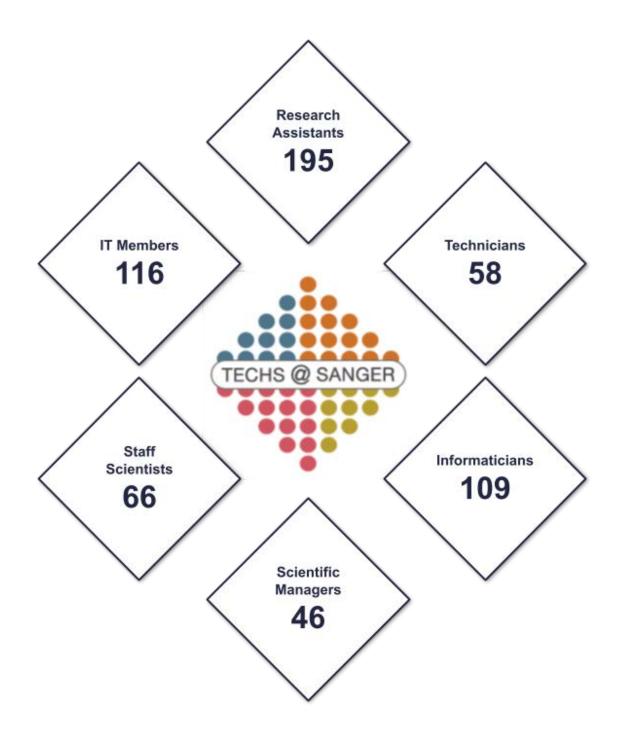






Techs@Sanger. Please see the job families represented under Techs@Sanger community which spans across all main areas of the institute.

The distribution of Technical staff numbers per job family is shown below:



Please tell us about your institution's approach to the Technician Commitment since becoming a signatory. Comments on governance and reporting lines, resources and wider community engagement are welcomed.

The Wellcome Sanger Institute became a signatory in March 2018. A Steering committee and six working groups were formed with representation from technical staff, their managers, Human Resources and Employee Partners across the Institute to achieve wide engagement. Members worked on a two year Action plan and Self-Assessment which was submitted in May 2019.

For technicians, led by technicians

The initial idea for the Institute's involvement in the initiative was discussed at an Employee Partnership meeting (a forum for partnership working between management and elected employee representatives) representing a mix of interest both from management and employees. Our involvement with the commitment was initially facilitated by Human Resources, however the key principle of 'Technician Commitment is for technicians and led by technicians' was put into effect by the creation of a full time Technician Commitment Manager position in November 2019.

Dedicated Technician Commitment Manager

This role amplified the existing dedication and support for the Technician Commitment at the Institute, and the Technician Commitment Manager, who is a technician herself, has led and shaped the Institute's significant progress delivering the Action plan.

Creating this dedicated role generated considerable enthusiasm across the Institute which was exemplified by an increase in engagement with the Technician Commitment programme and an increase in Technician Commitment activities.

Shared endeavour through Working Groups

As a result, the governance structure evolved to include a core Steering Committee which includes the Chairs of the six working groups. All working group Chairs are Sanger Institute technical staff. The current working groups and their main aims are:

- Training: Provide and promote training and development opportunities
- **Communications and Events**: Provide information and activities across issues related to promotion, internal and external communications, and plan, organize and deliver events
- **Policies, Procedures and Processes:** Develop/review policies to further enhance the visibility of technicians/technical experts and further create opportunities
- **Finance:** Manage the Technician Commitment budget, approve applications for technician training grants



Despite Covid restrictions our monthly Steering committee and working group meetings continued virtually.

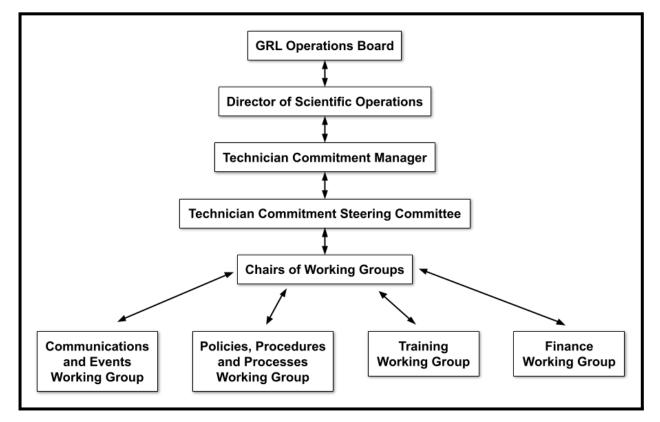
One of our early virtual Steering committee meetings.







The Current Governance structure



Oversight for The Technician Commitment sits with the Genome Research Limited Operations Board with regular updates and an annual report. The Operations Board supports the operational management of activities carried out by Genome Research Limited (Wellcome Sanger Institute, Connecting Science and Wellcome Genome Campus) and receives its authority from the Genome Research Limited Executive Board. Reporting to the GRL Operations Board is the responsibility of the Director of Scientific Operations.

Currently the Sanger Institute Technician Commitment team has 30 Sanger members (including Steering Committee and Working Group members), deliberately the majority of members are Technical staff.

Technicians and Technical Experts constitute almost half of the Institute staff members, currently we have 590 Technical staff at the Institute. Of these, 51% are female and 49% are male.

The main aims of the Sanger Institute Technician Commitment team are:

- to create a community of technical staff internally and externally
- to bring different functional areas of the organisation and people together and therefore provide a communication medium between the technical staff and the rest of the Institute

The Wellcome Sanger Institute has recently introduced a Behavioural Competency Framework which is part of a broader culture programme launched in 2019. It intends to elevate a positive, supportive and inclusive environment, underpinned by high levels of transparency with what's required to succeed at Genome Research Limited. The voice of Technical staff has been represented both in the creation of the Framework and at the Behavioural Competency Framework Steering Committee meetings via the Technician Commitment manager.

The Technician Commitment team has established strong collaborations with two internal groups at the organisation, namely the Equality, Diversity and Inclusion and Public Engagement teams. The Technician Commitment manager sits on the Equality, Diversity and Inclusion Forum and Working

Groups. To further increase connectivity, the Head of Equality, Diversity and Inclusion and the Public Engagement Programme manager are members of the Sanger Technician Commitment team.

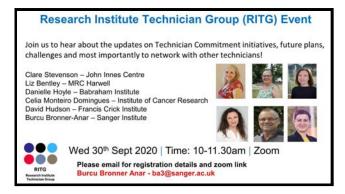
The reach of the Sanger Technician Commitment is not limited to the Sanger Institute. The Institute is situated on the Wellcome Genome Campus where we share grounds, services and facilities, including seminars and the intranet with Connecting Science, the European Molecular Biology Laboratory's European Bioinformatics Institute, and companies within the Biodata Innovation Centre.

The Technician Commitment manager was invited to an official visit of the Secretary of State for Health Matt Hancock MP at the campus during Feb 2019 and had a chance to raise awareness about the Technician Commitment initiative during a Q&A session with the secretary and the rest of the senior leaders of the Campus.

A collaboration with the Entrepreneurship and Innovation team at the Wellcome Genome Campus is another example of connecting beyond the Institute. Sanger Institute Technical staff were invited to contribute to a Survey at the initial steps of the '<u>The Start-Up School for</u> <u>Genomics and Biodata Scientists'</u>, the only entrepreneurship training programme in the UK designed for researchers, scientists and technical experts in the field of genomics of biodata. As a result, three of our Technical staff were accepted to the first-year programme.

Beyond campus, we have developed strong collaborations with fellow signatory Institutes. The Sanger Institute Technician Commitment was a founder member of the Research Institute Technician Group collaboration in 2019. This has now expanded to 9 Institutes (see below) across the UK with a clear structure of monthly meetings, minutes, and regular virtual Research Institute Technician Group events.

- The Babraham Institute
- Francis Crick Institute
- Institute of Cancer Research
- John Innes Centre
- MRC Harwell Institute
- MRC Laboratory of Molecular Biology
- MRC London Institute of Medical Sciences
- Science Technology Facilities Council
- Wellcome Sanger Institute



The Sanger Institute led the quarterly virtual Research Institute Technician Group event in September 2020.

Recently, the Research Institute Technician Group has secured funding from the Technician Commitment Collaboration Fund which will be used to organise the second Research Institute Technician Symposium in November 2021. The first symposium in November 2019 brought

Burcu Bronner-anar @TechComm_Sanger

This evening, during his visit to Wellcome Genome Campus, I had a chance to talk to Matt Hancock and raised awareness about Technician Commitment and the crucial role technical staff play across organisations @sangerinstitute @TechsCommit









Technical staff from the Francis Crick Institute, the Institute of Cancer Research, John Innes Centre, the Babraham Institute and MRC Institutes together. The programme consisted of informative and inspirational talks around technical roles, achievements and a Career Development workshop.

Wider community engagement is achieved via the Sanger Technician Twitter account, it is notable that the Technician Commitment Community uses Twitter widely. The @TechComm_Sanger account was created and has been used extensively. Tweets from our account have reached thousands of people.

Please provide a RAG analysis on your institutional 24-month action plan indicating which activities you have undertaken and completed (green), which are in progress (amber) and which are still to be carried out (red). Please provide an explanation for those categorised as red. This may be detailed here or attached to this document as an appendix.

Please see the RAG analysis document attached.

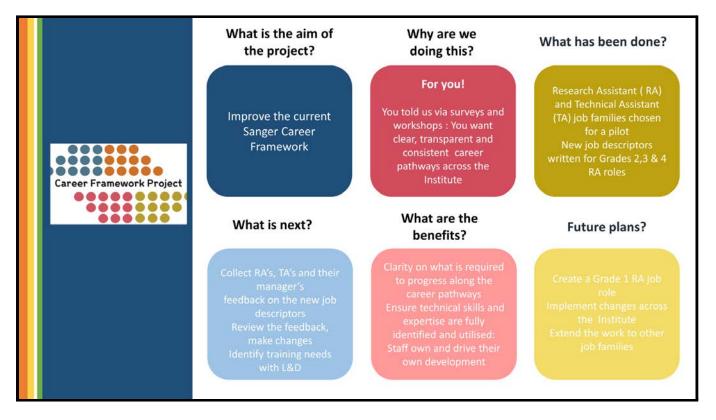
Please tell us how you evidence that your action plan has had/is having an impact?

VISIBILITY			RECOGNITION	
	DE	CAREER DEVELOPMENT		
EVALUATING IMPACT			SUSTA	AINABILITY

Career Development & Sustainability:

• **Career Framework Project:** The Institute's 2-year Action plan had an ambition of 'Creating technical career pathways and job families which are aligned with role profiles'. This was supported by both the Sanger Institute Technician Commitment Survey and the Institute-wide 'Great Place To Work' Survey. Results from these surveys show that Career Development is one priority of the areas where members felt improvement was needed.

The Career Framework Project, managed by the Technician Commitment Programme manager, started in Feb 2020 to address these issues. The project has a defined governance structure with a 'Career Framework Steering group' which monitors the project aims, objectives and approaches as it extends to different areas of the organisation.



The Project has long term value for the whole organisation and will require time to understand the career framework and pathways, develop recommendations and finalise and implement the outcomes. This work will review and enhance the existing career path information and ensure their consistent implementation across the Institute. The Research Assistant job family was chosen as a pilot group as this constitutes ½ of the technical staff at Sanger. The creation of a highly-skilled Research Assistant role and finalising clear job descriptions for the Research Assistant family were the achievements of the project in the last year. We will extend the project to other job families under the Sanger Technician Commitment umbrella.

• **Training:** The Sanger Institute provides diverse training opportunities. Please note that due to Covid-19 restrictions face to face training has been cancelled since March 2020, and a limited number of training courses continued virtually. Due to homeworking, the Institute acquired organisational LinkedIn membership to support employees and has provided staff with an extensive range of online courses and has been used widely.

In addition, in April 2020, the Training working group put together free online resources and training which was shared internally and externally via Twitter and the Technician Commitment pages.







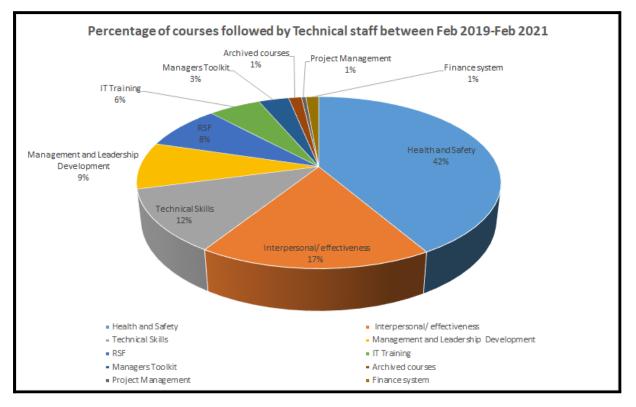


In September 2020, the Institute launched a portfolio of mandatory training to support staff with their personal growth and development plans and reflect the Sanger Institute's global scientific ambitions. Good Research Practice is one of the mandatory training modules, and tailored sessions for Technicians and Technical Experts were created. Technical Staff were involved in the pilot sessions prior to launch and had the opportunity to feedback on the proposed training. 0 (858 AM

Professional Development (Remotely!) – Resources for the Technical Community By Burcu Bronner-Anar, Technician Commitment Manager, Wellcome Sanger Institute

ne Welkome Sanger hostute is one of the premier centres of genomic discovery and interrandroig in the world. We are as broad signatory of the Technican Commitment. We signe the Commitment in March 2018, to play our part in valuing, developing and rewarding our highly illied technical employes, who play a vital tole in our organisation's work. To learn more about ow were developing our Technican Commitment plane visit our decided Technican

Between February 2019 and February 2021, 1530 training places were filled by Sanger Institute technical staff. Health and Safety courses represented 42% of the total courses, followed by Interpersonal/ effectiveness, and Technical skills courses. Mandatory training is excluded from the graph.

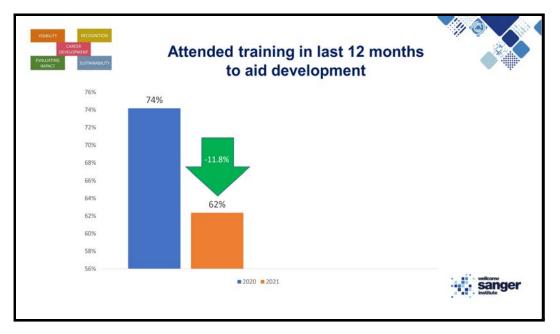


In addition, the Technician Commitment community facilitated a new series of training courses on Cell Culture basics, Organoids, Immunocytometry and Induced pluripotent stem cells (IPSC) which launched at the beginning of 2020.

The most popular courses attended by Technicians/Technical Experts Feb 2019 to February 2021:

Training title	Number of participants
Flow Cytometry Training	109
Chemical Safety	98
Scientific Induction	92
Management in Action	77
Risk Assessment	70
Fire Marshal Training	67
10X Induction	55
Career Planning Workshop	52
Local Co-ordinator Event	44
Schedule 1 Reassessments	42
Essential Communication Skills	39
Farm	39
Laboratory Ergonomics	34
Using SHE Assure for Biological/GM Risk Assessment	34
Talented Womens Impact Programme	27
Managing Upwards	25
Train the Trainer	24
Centrifuge Clinic	23
Local Co-ordinator Induction	23
GRL Requisitioning and Approver Training	21
Spills Training	21
Health & Safety for Managers and Supervisors	19

However, survey results showed 11.8% decrease in training in last 12 months which has been a result of Covid-19 restrictions:



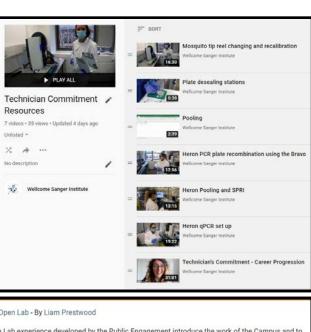






Training and lab tour videos:

The Training working group has been working with Technical staff across the Institute to create a repository of training and lab tour videos to help with the current lack of face to face training opportunities. Videos are being shared on the internal Sanger Technician Commitment Youtube channel as produced and on various external YouTube channels. (Links are communicated to Sanger technical members via our internal Technician Commitment communication pages)



Training ~ Online Training Technician Commitment Grant Training Videos			Wellcome Genome Campus Open Lab - By Liam Prestwood Added 4 months ago This video is part of the Open Lab experience developed by the Public Engagement introduce the work of the Campus and to stimulate discussion around genomics. $talto 0 \oslash 0$			
Training Policies Laboratory Tours			Live from the Lab: the Human Cell Atlas - By Liam Prestwood Added 4 months ago Staff discuss working on the Human Cell Atlas live from the labs $\pounds 0 \oslash 0$			
Career Development >			Life in the Lab: A DNA sequencing pipeline - By Liam Prestwood			
Technicians and Technical Experts	>		Added 6 months ago In this film, from Louise in DNA Pipelines, she outline the processes in sequencing a DNA sample, from receiving a prepared sample to releasing the assembled data to the scientists. She discusses how to working safely and efficiently in the lab as well as how to track samples and carry out quality control checks. The R & D group develop new and improved methods to			
Sanger Survey 2020	>		sequence DNA samples using a range of different technologies at the Wellcome Trust Sanger Institute ± 0 0 \bigcirc 0			
Administration	>		Life in the Lab: Working with malaria parasites - By Liam Prestwood			
# pps		(TEST O LANDA)	Added 6 months ago In this film Alena introduces malaria as a parasitic disease and describes how to work safely in the lab with malaria parasites including culturing them using human blood and preparing them on microscope slides. $\pm 0 \circ 0$			

Apprenticeships: One of the Actions from the 2019 plan was to grow and retain early careers Technicians. This has proven difficult and intake into the scheme was low despite having dedicated resources from Human Resources working on this. In total 12 apprenticeships were supported over the last two years (Table).

Status	Role	Level	Qualification	Number of apprentices
	Laboratory Technician Apprentice			
Complete		3	Laboratory Technician	1
Complete	IT Apprentice	3	IT Infrastructure Technician	1
In progress	IT Apprentice	4	Infastructure technician	1
			BSc (Hons) Bioinformatics - Data	
In progress	Bioinformatics Apprentice	6	Scientist Degree Apprenticeship	5
			BSc (Hons) Digital and Technology	
In progress	Digital Software Apprentice	6	Solutions	1
In progress	High Laboratory Scientist Apprentice	6		1
			BSc (Hons) Digital and Technology	
In progress	Digital Software Apprentice	6	Solutions	1
In progress	Assistant Project Manager	4	Building Services Engineering Tech	1

To increase uptake of apprenticeships, we have established improved communication channels between the Institute's Learning & Development team and the Science Council Apprenticeships Team. This is facilitated via the Training working group which aims to further integrate the Apprentice scheme at the Institute, and also improve knowledge of internal Apprenticeships at the Institute. This is now part of our 3-year Action plan.

Further Education: The Institute is committed to developing all staff in order to help individuals reach their full potential as well as enable the organisation to meet its strategic objectives. We have a policy to ensure that all employees are provided with the opportunity for continual professional development and the essential support and training to enable them to fulfil their roles. Since this was developed a total of 8 Technical staff have pursued further education training.

Course
Bioinformatics MSc
Biosafety Practitioner Level 1
Certificate in Research Management: Foundation
Lean Six Sigma Green Belt
Thinking Stratefically
IT Systems: Planning for Success
Software Engineering
Interaction Design and the user experience & the computing and IT Project
Object-oriented Java Programming
BSc (Honours) in Computing and IT
Algorithms, data structures and computability & Managing IT
Web, mobile and cloud technologies and Software engineering
Data Science School: Machine Learning Applications for Life Sciences

(1) & (2) represent two software developers.

Technician Commitment grant: As part of the 2-year Action plan we created a Sanger Technician Commitment grant which provides a minimum of £250 for Sanger Institute technical staff which can be used to fund external professional development opportunities or to attend conferences/ meetings. This grant has been used for conferences, professional membership costs, and both online or hands-on training programmes.

Recognition:

Policies: The Institute's 2-year Action plan had three objectives relating to organisational policies which have all been actioned and implemented:

- Create a policy outlining the organisation's approach to recognising and acknowledging the work and contribution of technicians/technical experts: The Acknowledgment and Authorship policy is now integrated into Sanger Publication policy.
- Develop a policy which grants Sanger technical staff a minimum of two CPD sessions per annum: Technician Learning & Development policy
- Technician Learning and Development Policy

 Encourage secondments and work-shadowing opportunities amongst the technician community: Secondment and Work shadowing policies.



 Raise awareness of professional bodies and encourage registration: Professional membership policy. The Institute now covers the cost of one Professional membership for each member per year.









Raising awareness of the current policies is part of our 3 year Action plan.

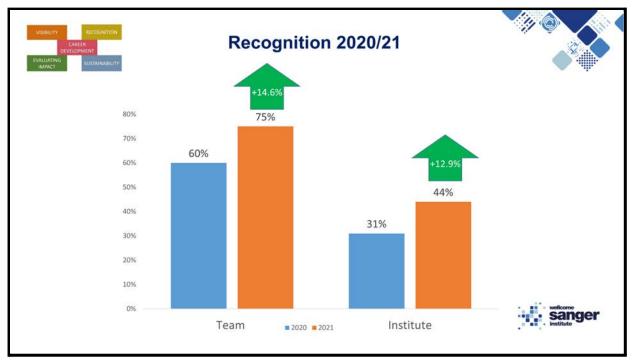
Moreover, the Policies, Procedures and Processes working group has reviewed Sanger Institute policies to determine their impact on Technical staff and aim to effect changes to existing policies, procedures & processes in line with Technician Commitment goals.

Rewards: The Sanger Institute has an extensive Reward Hub which is eligible for all members. In addition to easy access thank you and free drink voucher cards, the Stars for Science awards are announced quarterly to show appreciation and to celebrate success for peers, colleagues and managers. Winners in different categories receive £50 Amazon vouchers for their contribution. Long-Term Service awards were recently introduced to recognise those who have continued to build their careers at the Institute supporting cutting edge science over the years. Employees reaching different milestones receive additional annual leave, which they can choose to use or sell back to the organisation.

Data shown below is for Feb 2020-Feb 2021 period:

	Total number of rewards received by	Total nuber of rewards	Percetage of the rewards received
Type of Reward	technical staff	per category	by Technical staff
Long Servers	17	42	40%
Stars for Science	54	197	27%
Thank you cards	55	171	32%
Drik vouchers	206	829	25%

Due to Covid restrictions, a large proportion of wet lab members needed to work from home, as a result, some projects were either put on hold or run with minimum contribution. The Technician Commitment Steering Committee were concerned this could have an effect on recognition awards, however despite the opposite was true and during this time period around ½ of these awards were received by technical staff. In addition, the Sanger Technician Commitment survey results demonstrated that Recognition had increased internally and externally possibly as a result of the organisational COVID-19 project. Technical staff who contributed to this project received additional recognition via a gift card, prosecco and cake sent to their home.



Public Engagement: GRL has a strong Public Engagement team who are committed to share the world of genomics science with the public and schools. 56 of our Technicians and Technical Experts took part in 88 events which engaged a total of 1659 adults and 4736 children between February 2019 - March 2021. Events included visits to primary and secondary schools, hosting school visits on campus, as well as supporting family events such as festivals and Open Saturdays. Due to the COVID-19 pandemic and campus closures



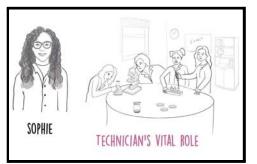
most opportunities for face-to-face engagement were lost but new opportunities arose via virtual talks via Zoom such as The Disease Detectives Zone events where students and scientists had live chats. One of the Sanger Institute Technicians, Laura, was voted the Scientist of the week.

Technical staff award category: In 2020 a 'Technical staff category' was created within the organisational annual Public Engagement awards. Two STEM Ambassador Technicians, Valerie Vancollie and Sophie Pritchard were recognised for their outstanding efforts in engaging public or school audiences about their work.



Valerie Vancollie: https://www.youtube.com /watch?v=NZ6DBpq-okI

> Sophie Pritchard: https://www.youtube.com /watch?v=mbxJt2mH8S0



Visibility:

Visibility can be divided into two areas:

- Visibility of the Technician Commitment internally and externally
- Visibility of Technical staff internally and externally

Visibility of the Technician Commitment: Visibility of the initiative has been one of the main focuses of the Sanger Technician Commitment team. Since appointment the Technician Commitment Manager has presented ~20 talks across the Institute and has also delivered a number of external presentations.

Visibility is impossible without the right resources, therefore an email address to reach all of our technical staff was created early in our Technician Commitment work. As an initial priority of the Communications Working Group, an internal one-stop shop (internal Sanger Technician Commitment pages) was developed where Technicians can easily access materials, resources and find out about relevant events. The site advertises training, promotes events and is supported by regular Sanger









Technician Commitment Newsletters to inform and update the organisation on our progress as a team. The site has been visited around 1900 times in the last 9 months.

Technician Commitment Technician Commitment Home Neuralettere Key Areas Polisies Discussion Forum	*	Sanger Techniclan Commitment The Welcome Tanger Instatute is a proof signatory of the Technical Commentent. We speed so up March 2018, so enhance our efforts to value develop, and reward our highly shall be include and any shall be referencial Commitment will mean for our segmatistical predevelop technical Commitment will mean for our segmatistical predevelop technical Commitment will be and to our segmatistical predevelop technical commitment will be and the segment of the segment o		
News and Events	>	The Technician Commitment is a university and research institution initiative, led by a steering group of sector bodies, with support from the	TECH	IS @ SANGER
Training	5	Science Council and the Batsby Charitable Foundation's Technicians Make It Happen campaign.		
Career Development	>	The Institute submitted Technician Commitment Action Plan and Self- Assessment in May 2019. Please see both at:		
Technicians and Technical Experts	*	https://www.sanger.ac.uk/about/careers/technicians-commitment By signing the Technician Commitment, we have pledged action against the key challenges affecting our technical staff:		•••
Sanger Survey 2020		VISIBILITY	News	
Administration		BECCONITION CAREE RECONTION SUSTAINABILITY EVALUATING IMPACT		Have you seen Colin Barker's blog? Colin is one of our highly skilled Technical staff at the institute. Great blog.
		Events		RITG December
				Newsletter Research Institute Technician
		No content is available for the area specified.	RITO Research Freedom	Research institute recrisician Group Newsletter: December edition Current.

In addition, the Sanger Institute Technician Commitment has now an internal YouTube channel to share recordings from events and Training videos. (please see the training section for details).

In February 2020, Technician Commitment stands were held across the Institute with the aim to raise awareness and also collect ideas from staff. These proved incredibly popular and were visited by many Sanger staff.



Another key action taken in terms of visibility for the initiative was the inclusion of the Technician Commitment logo on Sanger Institute documentation. The Technician Commitment logo now appears on job adverts and is included on organisational presentations. Organisational commitment to Technicians and our Technician Commitment programme was included in our funding application to Wellcome.

Visibility of the Technician Commitment is also crucial for new starters and a bespoke Technician Commitment Starters package was created for all new Technical members.

Communication about the aims and the impact of the Technician Commitment has been an important focus of the team, and as part of this animation profiles for technical job families have been created. Although publication of these has been delayed due to COVID, a



draft for the Research Assistant family can be seen below and these will be expanded and rolled out when staff return to campus.

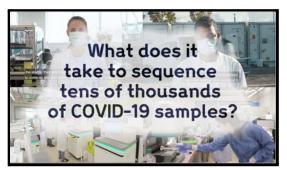
The direct impact of the effort spent on Visibility of Technician Commitment was reflected in the 2021 Survey results. Awareness increased 14% between Technical staff compared to 2020.



External Visibility of Technical staff: Visibility of our Technical staff increased considerably throughout the Institute's COVID-19 work. The Sanger Institute is part of the COVID-19 Genomics UK (COG-UK) Consortium which was created to deliver large scale and rapid whole-genome virus sequencing. Around 184 Technicians/Technical experts have been part of this project (around 30% of our community) out of a team of approximately 300 staff.

A YouTube video and blog was created by the Institute's Communications team to highlight Sanger staff's collaborative work on this project:

What does it take to sequence tens of thousands of COVID-19 samples?



 Network solution
 I = I = I

These communications have been supplemented by many case studies and blogs about the technicians /technical experts who have been involved in this project. From cancer, stem cells and organoids to COVID-19 – Wellcome Sanger Institute Blog



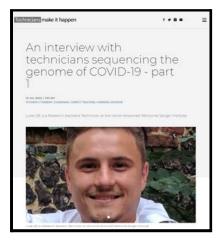
Sequencing COVID-19 at the Sanger Institute – Wellcome Sanger Institute Blog







Additionally, two of the Institute's technicians are showcased in the Technicians Make it Happen webpages for their involvement in UK wide COVID-19 sequencing effort:

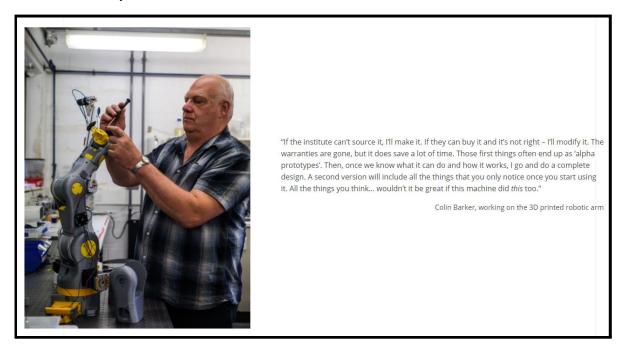


An interview with technicians sequencing the genome of COVID-19 - part 1 | Technicians

An interview with technicians sequencing the genome of COVID-19 - part 2 | Technicians



Sanger Institute Technical staff have been showcased on the Sanger Institute blog on several occasions. One of Institute's most valued and renowned technicians Colin Barker was put under the spotlight recently: Snail hotels, 3D printed robots and custom clips - Wellcome Sanger Institute Blog and this was widely shared on Twitter.



Internal Visibility of Technical staff: In 2020, in collaboration with the Sanger Institute's Communications team, a new series of conversations were introduced to highlight the technical career opportunities available and to inspire others in their career journey(s) at the Institute. These interviews are published quarterly on our Intranet landing pages and aim to spotlight different job families.

Career Journey Spotlight



The Sanger Technician Commitment Virtual Coffee events:

The Events Working group has been active and organised many events to promote the Technician Commitment. The very first of our coffee mornings was held at the Campus, since then a range of events has been held virtually including regular update sessions, drop-ins, specific events with a focus on public engagement, career progression and professional registration.





At the Professional Registration event, we hosted 55 Sanger staff and as a result of the event we have received interest from 9 members who wish to apply for professional registration.

In July 2020, we hosted Kelly Vere at a virtual event and opened it to an external audience: <u>Impact of The</u> <u>Technician Commitment – Wellcome Sanger Institute</u> <u>Blog</u>. 82 people joined the virtual talk and a blog was created and shared on the Sanger Institute external blog-page with the recording.

Visibility of the Technician Commitment has been further increased by the 'Decoding life' podcast focusing on stories of the science at the Wellcome Genome Campus and the people behind it. The



Technician Commitment manager was invited to join at the episode called 'The talent of technicians' where a range of subjects were discussed, from the Technician Commitment to recognition and visibility and Burcu's personal career journey. Burcu joined the launch event as a panelist to raise awareness about technical roles at the Institute to A-level students. This podcast is supported by the Connecting Science Public Engagement Enabling Fund.

EVALUATING IMPACT:



Surveys: We use online surveys to regularly solicit staff views across a wide range of work-related focus areas at the Institute. We have conducted two surveys to assess the impact of the Sanger Technician Commitment activities, the first in February 2020 and another in February 2021. Around 40% of the Technical staff completed the surveys.

These surveys have allowed us to assess areas our technical staff want us to focus for now and for the future. The first survey provided a baseline from which



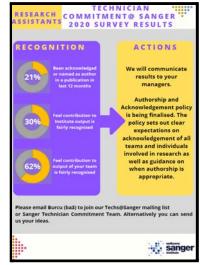




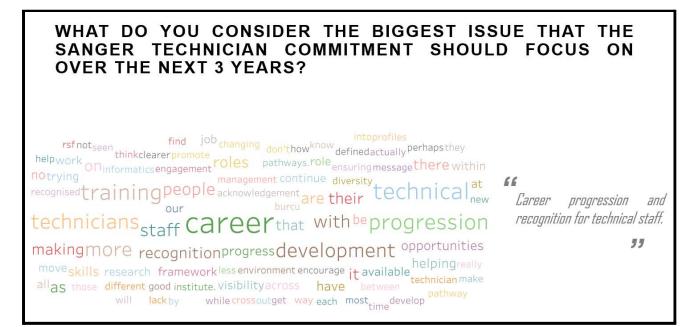


we can measure our progress and the impact of this work. Please see communication pieces from the 2020 Survey results surrounding this text.

Although the majority of survey questions were the same between years to assess change, the 2021 survey included additional detailed demographic questions in order to collect data on Equality, Diversity and Inclusion related areas. The impact of Sanger Technician Commitment via surveys can be followed under different key area sections. The 2021 survey results highlighted the following focus areas for our next 3-year plan: Career Development, Training, Professional registration, Coaching/mentorship.



In addition, inclusion of demography related questions revealed important insights:



- Gender distribution between participants was: 47% female, 52% males, 1% non-binary
- 59% of the participants described their ethnic group as white, 15% as minority ethnic and 26% did not disclose.
- Only 13% of females are registered with a professional body (with 57% interested) whereas the percentage rose to 35% for males (with 44% interested).
- While 30% of white ethnic group members are professionally registered (47% interested), only 9% are registered at minority ethnic groups (70% interested).
- Responders with a disability (~11%) are almost twice as likely as those without to state that there are barriers for them to participate in the development opportunities available.
- Only 4% work part-time.

Highlights from the 2021 Survey:

87% believe they have the opportunity to develop through courses, secondment and work shadowing

65% believe there are no barriers in participating in development opportunities

46% are not aware of the Science and Engineering Council professional registration, but expressed interest

47% had not used the coaching and mentorship scheme, but expressed interest

41% know about 2 year TC Action plan & 19% know about 3 year TC Action plan

Awareness about the next 3-year plan was specifically low due to the timing of the second survey, however, since the survey was finalised an Institute-wide virtual Hackathon event was organised to ensure inclusion of the voice of our technical staff in future plans.

Please see an example below of a virtual board filled during the event. We have shared the virtual boards (focusing on Visibility, Recognition and Career Development & Sustainability) after the event to collect further feedback.











Please provide details of any additional initiatives/programmes/activities aligned to your Technician Commitment that are not covered in your original action plan.

Once the Institute became a signatory, the commitment evolved over time and additional important steps were taken. One such step was the creation of a Sanger Technician Commitment budget which is £8K per year. In addition, a full time Technician Commitment manager role was created which is a unique role in the UK.

While the initiative progressed at the Institute, a need to communicate with our technical staff to include their perspective in plans and to assess the impact of the Technician Commitment became evident. We have now run two Technician Commitment Surveys over the past two years which have provided useful insights about the impact of this work.

Via their involvement in the Training Working group, the Learning & Development team prepared a 'Sanger's Development Opportunities' poster, a single document which highlights all career development opportunities available at the Institute.

As part of the Campus Equality in Science series of talks, we held our first joint Equality, Diversity and Inclusion, and Technician Commitment talk in 2020 to explore intersections and common themes. We were delighted to host Dr. Carole Thomas, Head of JIC Directorate, The John Innes Centre. The talk title was: "Advancing Equal Opportunities: The John Innes Experience": <u>Distinguished Speakers –</u> <u>Wellcome Sanger Institute</u>

A project to review all organisational committees to obtain an Institute-wide picture and determine overall representation by technical staff on these committees was scoped after submission of the Sanger Institute action plan in 2019. However, due to changes in overall governance and the recent appointment of an Institute Governance Manager resulted in this piece of work being deliberately paused. It should now restart and complement a wider programme of work on governance and decision-making at the Institute. It is envisaged that technician representation on these committees will be considered as part of this process, and the Technician Commitment Steering Committee will contribute to this.

Please provide a 36-month action plan; detailing plans to ensure your organisation continues to address the themes of the Technician Commitment and details of how impact will be evidenced: (this may be detailed here or attached to this document as an appendix). Please evidence how the 'technician voice' was present in the development and formation of the 36-month action plan.

Please see the 2021-2024 Action plan attached.

Current Sanger Technician Commitment team members:

Burcu Bronner-Anar, Aaron Dean, Alex Alderton, Alix Schwiening, Charlie Hathaway, David-Parry Smith, Dawn Percival, Francesca Gale, Hazel Rogers, Hayley Clissold, Ian Whithmore, Jenny Mansfield, Julia Wilson, Jon Lowel, Keith James, Laura Durrant, Laura Grout, Liam Prestwood, Marc Folland, Martin Pollard, Mamta Sharma, Minal Patel, Natalie Lazar Adler, Peter Keen, Saher Ahmed, Sally Bygraves, Sameena Iqbal, Sara Gellard, Sophie Pritchard, Stacey Price, Syd Barthorpe, Tristan Self, Yvette Wood.

Please confirm that your Technician Commitment status and 3-year action plan is published on your organisation's website and provide the relevant URL here: https://www.sanger.ac.uk/about/careers/technicians-commitment/

Signed

(Technician Commitment Nominated Institutional Lead)

Date: 26.May.2021

Signed

(Technician Commitment Signatory – Leader of Institution)

Date: 26.May.2021