Exe-Tech Strategy 2030

A year in review: 2024-2025

INNOVATE

SUSTAIN

NURTURE

UNIVERSITY OF EXETER · LUCEM SEQUIMUR

Contents

Introduction from Mike Shore-Nye
Senior Vice-President and Registrar & Secretary

As Registrar, I am very proud to present this second review of our technical strategy—a key enabler of our ambition to use the power of our education and research to create a sustainable, healthy and socially just future.

In a challenging external environment, technical expertise has not just been a strong foundation for our activities, it has been a catalyst for innovation and impact. 2025 has marked a significant step forward in our sector leading provision. We have expanded the division, bringing in new expertise in research software and secure data environments, strengthening our ability to support complex projects and data-driven discovery. We have reimagined how we use space and resources, centralising shared infrastructure and optimising specialist environments to unlock efficiency and growth. These changes position us to respond with agility to the operating environment we work in.

Financial resilience underpins this progress. By creating new income streams, implementing cost recovery measures, and securing external funding, we are building a sustainable model that ensures continued investment in facilities, equipment, and skills. At the same time, we are sharing expertise and best practice nationally and internationally, reinforcing Exeter's reputation as a leader in technical excellence.

Thank you to each and every member of Technical Strategy & Operations for their incredible commitment to Exeter and flexibility in facing new challenges. So much has been achieved and I look forward to seeing the impact of year 3 of the strategy with a clear re-focus to reflect the ever changing landscape. As Registrar, I am very proud to present this second review of our technical strategy—a key enabler of our ambition to use the power of our education and research to create a sustainable, healthy and socially just future.

Annual review 2025: Year two

The University of Exeter inaugural technical strategy is now well established and has just completed its second year: Exe-Tech Strategy 2030: Innovate Sustain and Nurture. The strategy is clearly succeeding with what we set out to do: building on our foundations across the University to lead as experts on equipment, facilities and spaces, as well as own contributions to research and education by securing and delivering sustainable and adaptable technical capability and capacity.

Our Purpose
To provide expertise, equipment, facilities, and spaces that optimise the power of our education and research, through adaptable and sustainable technical capability and capacity.

Our Vision
To achieve this, we are building on our foundations of technical expertise and capacity across the University and within faculties to deliver as the service group, 'Technical Strategy & Operations', in partnership with academics and relevant professional services teams.

We will deliver this vision to support education and research by working in partnership with academics, professional services, external, and commercial, partners, guided by the University values (Community, Inclusion, Discovery, Excellence & Respect). Cross-cutting across the delivery of our vision we commit to working collaboratively, sustainably and digitally.

Discovery

Respect

Excellence

Inclusion

Community
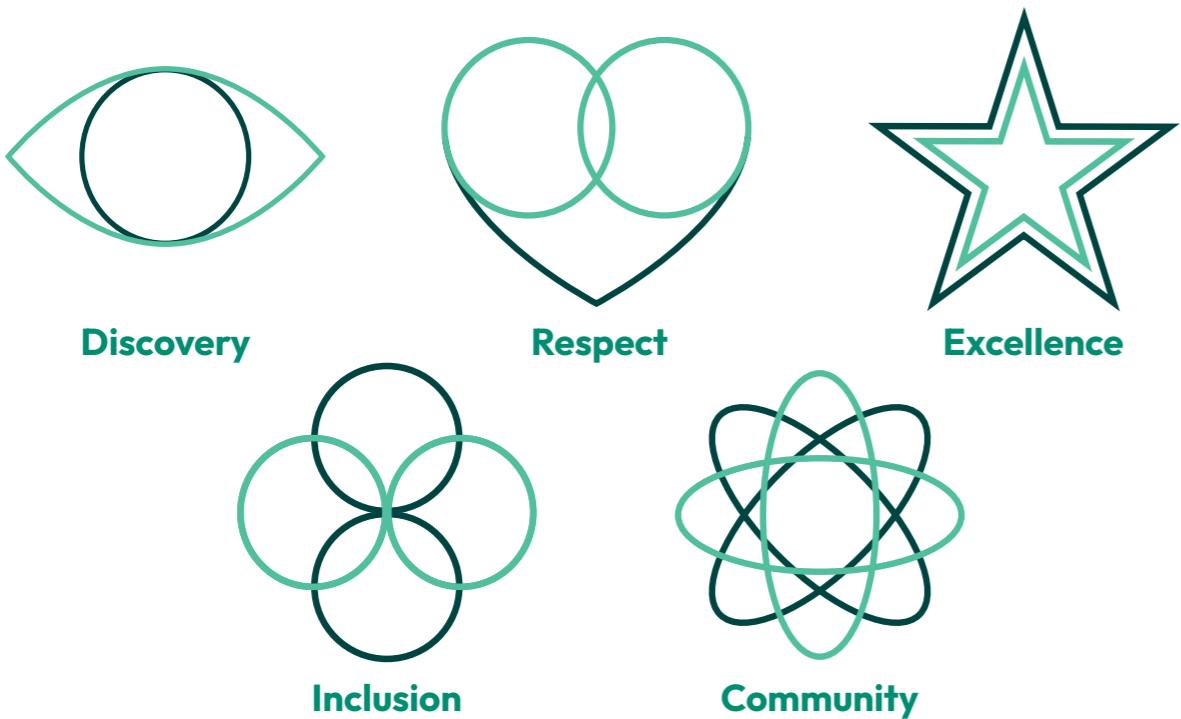
Expanding the team

This year the Technical Strategy & Operations team has expanded to include a wider team of Research Software and Analytics (RSA) experts and colleagues from the Southwest Secure Data Research Environment. This is a really exciting opportunity for the strategy to evolve to incorporate their work, grow collaborations, and support teams through the three themes (Innovate, Sustain, and Nurture).

The RSA Group is an evolving centralised team of Research Software Engineers, Research Data Scientists and Research Data Stewards, who together enable our research community to deliver on complex, bespoke research software needs and meet the ever-increasing demand for specialist skills to enable data-driven research.

The South West Secure Data Environment (SDE) team is being delivered in collaboration with NHS colleagues in the region. It will provide an innovative and efficient approach to conducting research with millions of people's health and care records, while maximising privacy and security. We are really excited to be supporting them following its launch in 2025.

Review Process

Progress against the strategy is reviewed by the senior management team every 6 months through a structured process that reviews each objective critically, looking at achievements, successes and gaps in delivery against the implementation plan. This allows us to celebrate what progress has been made as well as consider what areas need further refocus and adaptation. This report provides a summary of this review providing colleagues with an update on progress for year 2 (following 4 reviews).

As the team has expanded, we will be rewriting the strategy to ensure that it incorporates the needs of the broader community. We aim to publish the revised draft later in 2026 once we have consulted and involved the fantastic teams who support the delivery of the strategy. For this annual review, however, the vision and purpose remain the same and the strategy is still current and relevant to everyone. We have also taken a refreshed approach to the three pillars to reflect the context of the changing environment that we are now working in.

Exe-Tech 2030

Innovate
Lead on managing and developing **innovative technical environments** adaptive to digital and technical growth

Nurture
Nurture communities of experts to thrive through teaching and skills development

Sustain
Future proofed solutions for growth and maintenance of **sustainable facilities and equipment** that delivers for teaching and research
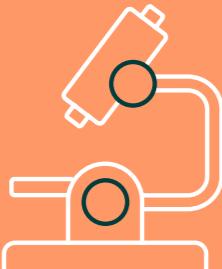
INNOVATE

It is critical we adapt our spaces and technical environments to deliver innovative education that contributes both to student experience, and to growing our research power. Technical Strategy & Operations will **lead on the effective & efficient management and development of innovative technical spaces (including virtual ones),** by acting as the expert interface between research and education needs, as well as infrastructure requirements (such as estates, regulators, health & safety, digital and IT), thus supporting faculty and partner stakeholder decision making in this regard.

How will this be achieved?

Faculty and institutional strategic plans: Lead on the development of strategic planning for all our technical spaces (physical and virtual) in collaboration with faculties, estates and IT to prioritise activities

Facility and Innovation Spaces: Support the development of strategies to evolve facilities and commercial spaces so those technical environments can be planned

Effective Space Utilisation for Education: Develop concept and business plans appropriate to deliver our developing curriculum for change and re-planning our estate

Inform Research & Education Design: Lead on innovative, activity based, adaptable, specialist spaces and projects designed for education and research (including digital solutions) in collaboration with regional and commercial partners

External Funding: Lead on winning external funding for research

Skills Development: Provide and deliver a portfolio of skills programmes and opportunities to support staff development across the breadth of TS&O, including working with the digital strategy to support developing digital skills for teaching and research development

SUSTAIN

To provide leading research and education, we must deliver future proofed solutions for growth and maintenance of sustainable facilities and equipment. Technical Strategy & Operations will **lead a coordinated strategic approach to sustaining our equipment and facilities** in collaboration with faculties, partners and other divisions. This is vital to sustain, enable and grow our teaching and research ecosystem as they underpin our research outputs and impact on our student experience. We will also **lead on reproducibility and data quality for our research facilities** providing sector leading approaches.

How will this be achieved?

Facility strategy: Implementation of the facility strategy, an essential component to developing policies and practices, that will sustain equipment, facilities and laboratories as required for business need

Review Institutional priorities: Equipment and facilities will be reviewed and supported at an institutional level with a prioritised approach to purchasing and managing assets

Coordination of all institutional capital equipment funding: Pursue an approach that ensures strategic management of funds so as to maximise usage and align to our institutional priorities

Planned horizon scanning: Work with departments and facilities to ensure horizon scanning for new equipment is informed

Regional engagement: Employ a regional approach to equipment and facilities aligned with the needs of the UK, driving efficient and effective use of equipment nationally

Data Integrity, compliance and ISO: Drive up the quality and reproducibility of data from our facilities when engaging with stakeholders, and appropriately ISO audit where necessary

NURTURE

Our expertise is at the core of everything do. We will **nurture our communities of technical experts to ensure capacity across the University,** so that their invaluable and exceptional level of achievement can be rewarded and delivered. We will do so in collaboration with academics and other professional services. Through these experts, we will lead on effectively managing and running specialist spaces, winning and delivering research, as well as education through laboratory and field classes. Technicians will be trained and empowered to focus on appropriate level work so they can play a vital role in the delivery of education and research projects and activities. The recognition of the expertise of the community and our ability to nurture that community in the ecosystem will be critical to the success of the Exe-Tech Strategy 2030

How will this be achieved?

Technician Commitment Programme: Delivery of programmes of support for technicians providing better career pathways and greater levels of recognition, visibility and support for the community

Culture Plans: Work with faculties to ensure that the technical community is visible and represented in culture reviews and wider community activities

Promotion of EDI: Develop internal initiatives that promote EDI, as well as working with external bodies to support EDI activities at a national level

Wellbeing Support: Prioritise the inclusive, diverse and rich programmes of support for wellbeing for the service and in partnership with wider University Initiatives

Sector wide initiatives and policies: Work with external bodies and funders to influence and adopt changes in policy and practice to support and nurture our experts

Resource allocation and funding: Review and revise funding models and resource allocation for technical provision to reduce precarity, whilst seeking mechanisms to provide more stable and sustainable funding models

Technical Strategy & Operations

Objective One:

Strategic efficient technical roadmaps and action plans (for education and research) which are adaptable and aligned to need.

Progress & Success

Rethinking the use of **c. 75 wet lab specialist space,** to support improved utilisation, to enable growth in education delivery. This includes support to resequencing activity, improve efficiency of delivery, assess capacity and activity to ensure better fit/match for need.

Institutional mapping of major technologies and facilities such as Aquatic Resource Centre, humanities research and infrastructure to support defence and security with further plans underway

Leadership in planning specialist spaces with **TS&O involvement in c.10-15 major infrastructure projects** at institutional level

Successful **centralisation of shared faculty infrastructure budget** ensuring full oversight of shared costs

Expanded the capacity and capability of the Research Software and Analytics Group by **welcoming 2 Research Data Stewards.**

Leadership in planning specialist spaces with **TSO involvement in c.15-20 major infrastructure projects at institutional level**

Offset capital funding with external funding of £5.4M from Research (Research Capital Investment Fund (RCIF) and external funds across refurbishment, capital and IT projects.

Capital Equipment Fund (CEF) **deployed all its fund (£2.6M) strategically and aligned to our institutional pipeline** as a result of road mapping. It funded 9 projects across all 3 faculties in research and education either directly because there was a strategic need or providing matched funding.

Embedding collaborative processes for equipment replacement planning aligned with department priorities

Expert support for >430 dedicated technical spaces including laboratories, workshops and studios

Leveraged £3.8M directly from UKRI for equipment (BBSRC ALERT and EPSRC Core equipment)

RSA team actively collaborating on c. 60 research projects, including consultancy, providing software engineering, data science, and data stewardship support

Where is the (re)focus for next year?

- Planning **true priorities for delivery for effective and efficient implementation** aligned to faculty needs and resource planning
- **Continued evolution of pipeline for equipment and capital** for strategic and prioritised use (at local, department, faculty and institutional level) in the context of more challenging financial landscape that can effectively cost recover and become sustainable
- Continued **evolution and mapping of lab and specialist spaces business plans** in line with forecasting of research and education plans
- **Reporting of cost recovery** for technicians at department level to inform policy and practice (noting this was not achieved last year as planned)
- **Strategic reviews on technical areas and facilities** in line with evolving government priorities
- Development of **regional shared resourcing models** in line with the UK infrastructure trajectory
- Movement of laboratories to more **agile activity-based work** to ensure more effective resourcing and delivery
- Work with **Digital Research Infrastructure (DRI)** to overcome wider data and associated infrastructure growth

Case Studies

Communications, Drama, and Film technicians integral to delivery of new strategic infrastructure

To support our growing student body in Communications, Drama, and Film, the TS&O teams have been working closely alongside academic and Estates colleagues and contractors to deliver an upgraded suite of facilities at Thornlea. This includes a new Digital Experience Lab equipped with Macs for audio and video editing, creative lighting design, virtual production design, AI investigations, and Playstation 5 consoles for gaming analysis and exploration.

There is also a new Content Creation suite for video podcast production, and upgraded and refurbished learning spaces. The technical team have been integral to enabling the work by a herculean effort of reconfiguring storage and reorganising, and had to adopt a 'just-in-time' approach in the weeks leading up to the start of term 1.

They have ensured a flexible approach to equipment and infrastructure design so room functions can be flipped as teaching needs evolve, which puts the institution on the front foot for preparing to deliver a changing curriculum.

Technical Strategy & Operations
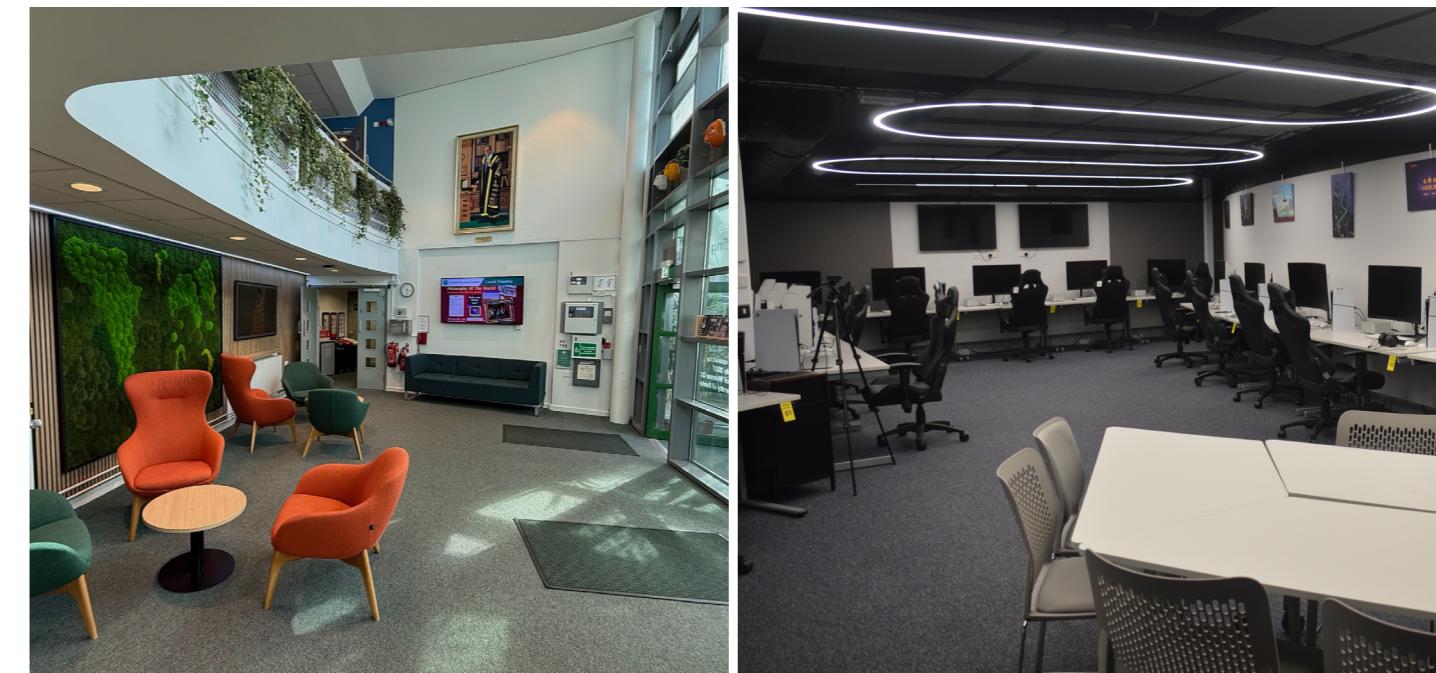
Engineering technicians lead successful bids for state-of-the-art equipment to support education and research

Following a successful Capital Equipment Fund bid, two Hurco VM One three-axis milling machines were purchased and installed in order to improve the precision and timeliness of project delivery in our mechanical workshops. As part of the purchase, the old milling machines were transferred to Penryn to improve the teaching offering on campus.

These new instruments are significantly more advanced than our previous milling machines, offering finer and more precise control over cutting and reliable CNC operation. This allows the mechanical workshop team to output more parts, at a better quality, and in a shorter space of time.

The mechanical workshops continue to be at the forefront of our research projects, delivering – at a fraction of the cost – new technology and equipment to answer unique research questions across all our Faculties.
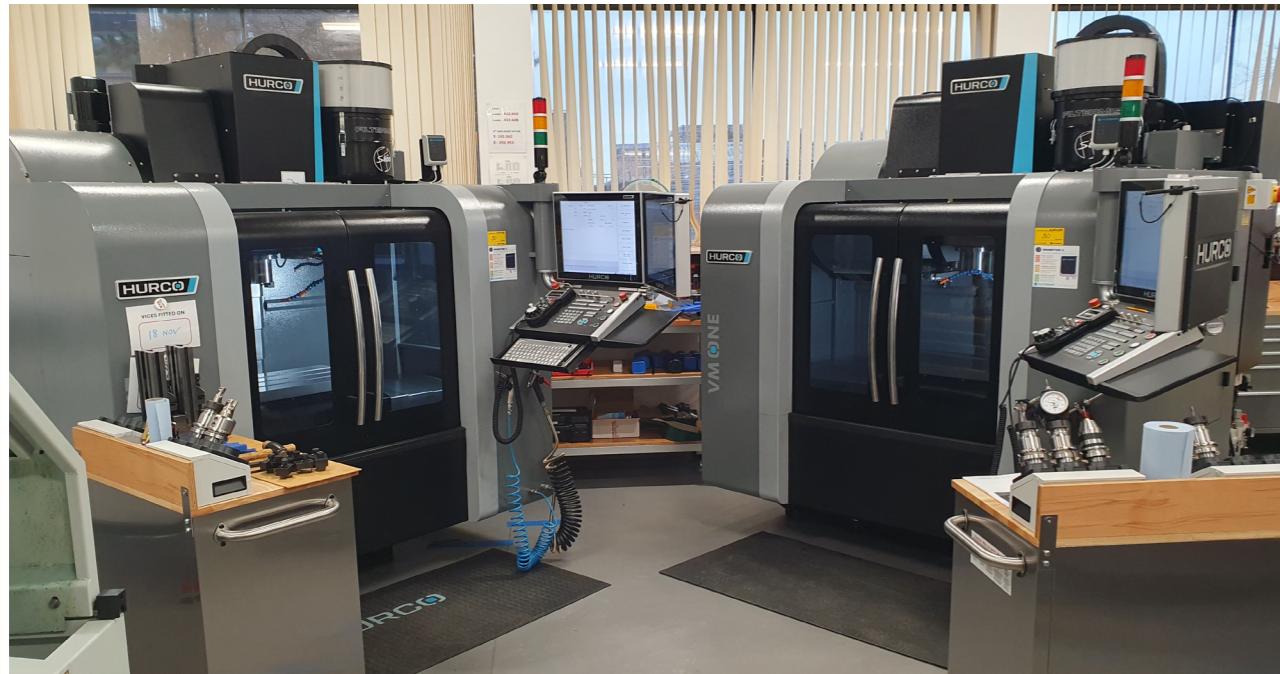
Leading on Infrastructure Upgrades for UKRI Award

In 2025, significant infrastructure enhancements were completed to support two major equipment acquisitions under the UKRI EPSRC Core Equipment 2024 award for Physics Cleanrooms. This bid was led by the Physics Cleanrooms Experimental Officer, Mark Heath. The first installation was a HHV TF500 Reactive Ion Sputtering system, which required a new three-phase power supply, distribution board, and sockets, alongside fire-stopping measures. Additionally, ultra-pure process gases—including CDA, N_2, O_2, and Ar—were extended to the system site with pressure regulation and isolation valves. Both tasks were successfully completed in July 2025.

The second installation involved the Microlight 3D Two-Photon Polymerisation System, necessitating UV protection measures. Six yellow-tinted screens were fitted to cleanroom windows to prevent polymer degradation, with work finalized in May 2025.

To accommodate these systems, other equipment was relocated to the first-floor cleanroom, requiring improved compressed air and nitrogen supply. A Maxiflow nitrogen generator, additional compressors, and a buffer vessel were installed on the mezzanine floor, with termination points, isolation valves, and pressure regulation integrated. This work concluded in October 2025.

These upgrades collectively enhance cleanroom capability, supporting advanced materials research and ensuring compliance with operational and safety standards.

Objective Two:

Readiness to adopt, develop and share expertise on new technologies and digital laboratory and workshop spaces.

Progress & Success

Continued delivery of **9 Technical Lunch Seminars for over 135 attendees,** with guest speakers from across the service, key suppliers, academic groups, people development, research development and more.

Brought the **third year of Coding for Reproducible Research (CfRR)** to a close, **reaching c. 2,400 registrations** from staff and students for its training courses to date.

Continued to **grow the Research Coding Community (RCC), bringing c. 240 like-minded individuals together** across the institution through an online community.

Launched a Digital Community of Practice enabling GW4 RTPs to connect and draw on unique training opportunities.

Significant improvement in training completion across the service, with **6 mandatory courses 100% compliant and a 60% increase in compliance with CoSHH**

Supported and delivered over 22 teaching modules across our Institutional Research Facilities.

Continued **support and development of Digital Management and Monitoring systems** e.g. LabCup, CheckIt, and bespoke app development, including delivery of PowerApps/Automate training

Where is the (re)focus for next year?

- Focus on our expert capabilities and capacity to become **experts in reproducible data**
- Continuing to **enhance the team's digital skills** through the wider University Digital Skills Library
- **Work across GW4 and the region** to ensure we can leverage further training, best practice and staff development
- Continue to **prioritise training opportunities so training budget can be effectively leveraged** to fully upskill TS&O despite challenging financial position
- **Focus on collaboration across TS&O to leverage the capabilities from a broader team** in TS&O to provide greater opportunities
- Effective and efficient delivery of **Health & Safety and Regulatory skills** and training and embed responsibilities across the institution appropriately for different aspects
- Work with the institutional **Digital Research Infrastructure (DRI) initiative** to support wider capabilities

Case Studies
Shaping the Future of Cytometry Education and Innovation

The Exeter Centre for Cytomics is a flagship hub for next generation high dimensional cytometry, uniting cutting edge instrumentation with deep analytical and training expertise. Through GW4 data analysis workshops, our MSc Immunology cytomics track and global courses such as FAILSAFE Cytometry, we are building the skills pipeline and end to end workflows that academic and industrial partners need to turn complex single cell data into clear, reproducible insight.

EXCC designed and hosted the inaugural GW4 Cytometry Computing Workshop, a new two-day, hands-on course on high-dimensional cytometry data analysis in R held on 28–29 July 2025 at the University of Exeter. Supported by the GW4 Cytometry Network, the course brought together researchers from across the Southwest and beyond to build practical skills in data preprocessing, quality control, dimensionality reduction and machine learning for complex flow and spectral datasets. Led by Dr Sebastiano Montante and the EXCC expert team, the workshop showcased Exeter as a regional reference point for data-driven cytomics and AI-enabled single-cell analysis.

In addition, this year saw the launch of the new MSc Immunology programme, a joint initiative between the MRC Centre for Medical Mycology (MRC CMM) and EXCC. Cytomics is embedded as a cornerstone technology throughout the curriculum, from foundational flow cytometry and experimental design to advanced high-parameter panel building and data science. The programme is coordinated by Prof William Horsnell, Prof Adilia Warris and Dr Raif Yuecel, with Dr George Vere serving as the EXCC cytomics point of contact, coordinating talks, practical sessions and data-analysis activities delivered by the EXCC team. Early feedback from students has been excellent and confirms Exeter as a destination of choice for training in cutting-edge immunology and single-cell cytometry.

Technical Strategy & Operations

Bioimaging and Advanced Biological Technologies skills for post graduates

As part of the Bioimaging Centre's commitment to delivering high-level technical training, the team leads two MSc modules that embed cutting-edge imaging and analytical methods into postgraduate education. BIOM555 Bioimaging provides an intensive, facility-embedded learning experience, with students trained directly on the full suite of Bioimaging microscopy platforms and exposed to both electron and light microscopy techniques. Structured analytical workshops and researcher-led topics reinforce core concepts, and the module maintains consistently strong engagement, with feedback emphasising the value of access to advanced instrumentation and expert supervision.

In parallel, BIOM549 Advanced Biological Technologies delivers a broader, cross-platform introduction to the core research technologies housed across the Centre for Life Sciences Technologies (CLST). This module integrates light microscopy, sequencing, mass spectrometry, flow cytometry, and specialist input from the Aquatic Research Centre, enabling students to understand how complementary systems operate within modern bioscience workflows. Delivery is coordinated with the wider teaching laboratories to ensure coherent practical progression across modalities. Together, these modules strengthen the educational portfolio of Bioimaging and other research facilities, and enhance the Centre's commercial readiness by developing a pipeline of graduates trained across the full CLST technology landscape.

Their delivery demonstrates the Centre's capability to utilise its facilities for high-quality, professionally aligned teaching and supports the strategic objectives of the Extech 2030 vision, aligning directly with BBSRC priorities to upskill the future UK research and technical workforce.

Experts leading on open, ethical and supportive research culture

Coding for Reproducible Research (CfRR) actively supports the delivery of the university's Strategy 2030 commitment to research excellence through an open, ethical and supportive research culture, ensuring its community is well-equipped to capitalise on the opportunities presented by technology, big data and artificial intelligence. It offers an annual series of workshops for all staff and students, underpinned by the RSA Group and supplemented by freely available self-study materials, supporting colleagues in developing their digital skills and enabling them to confidently progress technical aspects of their work in an efficient and reproducible manner.

Over the course of 2025, the third year of CfRR came to a close, reaching c. 2,400 registrations from staff and students for its training courses to date. We also embarked on the fourth, promoting a focus on Python, R and data science to ensure we are catering to the community's needs. With the view to keeping the community at the forefront, we established a cross-institution advisory group; and continued to grow the complementary Research Coding Community, bringing c. 240 like-minded individuals across the institution together online. As we transition into 2026, we will continue the vital work on our Executive Education offerings, looking to ensure the sustainability of the internal programme.

Objective Three:

Improvements in cost recovery, commercialisation of facilities and financial sustainability of equipment

Progress & Success

A Multi-Technology Centre ISO Accreditation - **2nd in UK and 1st in England,** unique in England as Multi-Technology Centre	Roll out of the **cost allocation policy** for transparent financial transactions
Roll out of the **Contract Research Organisation (CRO)** model	**Unified branding** for 8 facilities

In-depth **review of 2 major research facilities** with focused action plans to develop	Successful annual monitoring of **ISO accreditation** for 4 facilities with poitive response from industry quality standardisation	**Successful implementation of governance** to support research facilities through the Research Facilities Advisory Committee (RF-AC) and the Management Committee (RF-MC)
Centralisation of research facilities within TS&O underway bringing a refresh to the management	**Beginning to grow external engagement and income** for research facilities through appointment and implementation of commercial manager	Adaptation to new TRAC rules / guidance and 11 **business cases reviewed** and rates approved aligned with faculties
Annual monitoring of facilities led to **£400k for savings in year**		

Where is the (re)focus for next year?

- **Realising the financial benefit** of launching the CRO
- **Driving up income and usage for research facilities** balanced against reduced costs to become more efficient
- **Implementation of the centralising of facilities** and to increase monitoring and mitigation plans
- **Improvements in cost recovery of 5%** across the research facilities
- **Implementation of the facility management system** to ensure we have tools to drive up cost recovery
- **Specialist facility reviews** to identify future needs and prioritisation for the institution

Case Studies

Launching facility contract research offering to business

The Centre for Life Science Technologies has been actively launching its contract research offer to the external market, exhibiting at three major industry conferences focused on agri-tech, biomarkers and precision medicine, and drug discovery. Across these meetings the team held more than 120 targeted discussions with companies and is now scoping several large multi-facility programmes. This was supported by a successful completion of its second BSI audit for ISO 9001:2015, confirming that its research quality management system continues to meet international standards. This gives industrial and clinical partners confidence that projects are delivered with rigorous governance, traceable methods and reproducible multi omics data.

CLST showcased at World Agri-Tech Innovation Summit on how integrated cytomics, bioimaging, sequencing and mass spectrometry can accelerate trait discovery, microbiome profiling and mode-of-action studies for agri-tech and environmental applications. The summit attracted strong interest from crop, animal health and ag-biotech companies seeking high-quality multi omics support.

At Biomarkers and Precision Medicine, CLST presented its capability for complex immune profiling, translational biomarker discovery and data-rich clinical sample analysis. Discussions with pharma and diagnostics partners focused on how CLST can bridge exploratory biology with robust assay development for clinical decision making.

At ELRIG Drug Discovery, CLST promoted its full multi omics contract research portfolio, from bespoke assay development through to mechanism-of-action studies that combine cytometry, imaging and mass spectrometry. The meeting underlined CLST's position as a flexible, science-led partner for drug discovery and preclinical innovation.

At the Mycology Partnerships Summit, Raif Yücel presented "From Idea to Impact – The CLST Project Lifecycle," highlighting how CLST and the MRC Centre for Medical Mycology deliver end-to-end programmes for antifungal research and development. The meeting positioned CLST as a strategic partner for companies developing diagnostics, drugs and vaccines for fungal diseases.

Technical Strategy & Operations

Sport Science expert Technicians lead on equipment replacement schedules improving cost recovery and the ability to commercialise their facilities.

To assist with the financial sustainability of equipment for Public Health and Sports Science (PHSS), Sam Bailey, Technical Operations Manager, created a mechanism to track equipment coming to its end of life, year on year. This helped to financially plan ahead with a rolling equipment replacement plan based on a ten-year lifecycle. The team could determine whether the equipment was still being supported by suppliers, if so, it would not require replacement so long as it was in working order and parts were available.

The team have consequently highlighted equipment which was no longer supported and where parts could no longer be sourced as being critical (i.e. where failure would impact research activities). This would then be raised at our Laboratory Operations Group for discussion on whether it requires replacement or not. Discussions would then take place to determine funding routes and where possible we would ask for new equipment to be costed into grants so that we try not to incur costs through capital funding where it is research related. A business case may be required to seek capital funding for equipment which is deemed core to the facility, and Sam assists the Director of Research and Department Manager with writing this. This work helped with upgrading the PHSS teaching facilities in Biomechanics and Physiology and we were able to create state of the art facilities and were praised for creating one of the best business cases senior management had seen!

Building good rapport with suppliers has also helped with negotiating discounts on replacement products. Where multiple pieces of kit are required, bulk orders try to be placed to secure even greater discounts and cost savings.

Most recently in PHSS, there has been an increase in commercialising physiological testing for athletes. Runners and cyclists in particular can pay to have an array of tests carried out on them from body composition to VO_2 max plus additional expertise from our senior physiologists and nutritionists to maximise performance and dietary requirements.
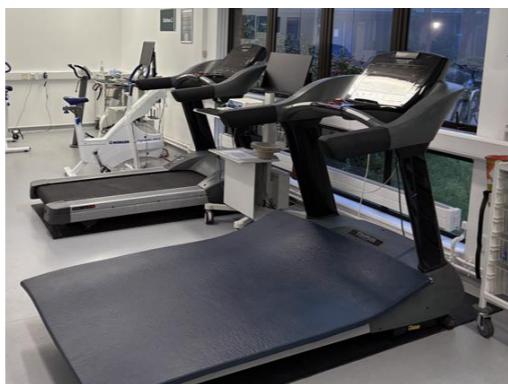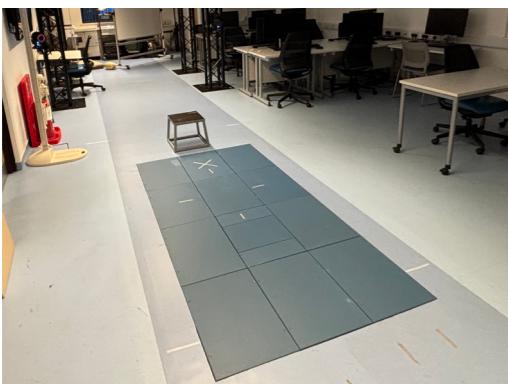
Development of a business case for a new facility management system to drive improved cost recovery, and ensure Research Facilities are competitive options for external clients.

In late 2024, initial work was conducted by the TS&O Projects Team to explore the processes underpinning the management of institutional Research Facilities (RFs). Starting with extensive scoping, a huge array of digital (or sometimes handwritten!) systems were identified. These fulfilled a huge range of functions: from booking, to project management, to usage tracking. Though it was clear that the teams who implemented these systems did a fantastic job in meeting the needs of their Facilities, it was noted that this non-standardized approach to systems across the institution had room for improvement. Namely, external users of the Facilities would get a very different experience from one RF to the other, and the inconsistent methods for collecting usage data sometimes impaired oversight.

As such, this scoping work led to the development of a case for change: the implementation of a consistent digital system to assist with the management of Research Facilities. Through early market engagement, it was clear that many institutions within the sector already make excellent use of such systems to streamline operations, as well as valuable oversight of facility usage. By allowing for a much more accurate and granular record of Facility usage, cost recovery can be improved significantly. Such software not only assists internal staff with the management of their facilities; they also offer excellent end user experience for booking, planning, and reviewing projects for external clients. A new management system is therefore predicted to substantially improve the financial sustainability of RFs by facilitating additional cost recovery and making the University of Exeter a more attractive option for commercial clients.

Extensive work has been done over the last year to develop business cases and get this project to implementation, taking into account feedback and input from RF staff. Funding from the Capital Equipment Fund was secured and tender for a new system began in late 2025, and rollout of the system is expected to begin in Q1 2026. This provides a great opportunity for the RFs, which will improve the financial sustainability of the entire service.

Objective Four:

Contributing to University NetZero targets and sector leading in lab sustainability

Progress & Success

Strengthened compliance with **evolving national and global sustainability standards,** including the Laboratory Efficiency Assessment Framework (LEAF) and the Environmental Sustainability Concordat

Piloting new accreditation frameworks for **dry labs and digital spaces**

Participation in My Green Lab's global Freezer Challenge delivered substantial energy savings with **RILD Labs achieved daily savings of 622 kWh—equivalent to turning off 415 household fridges**—earning the University of Exeter 11th place on the global leaderboard!

Launched the **Sustainable Labs Induction** as mandatory training for all staff and postgraduate students working in technical spaces. **35% of TSO staff have completed the training so far.**

100% of applicable technical spaces are LEAF accredited, with **53% now at gold** level

Donated 101 items for resale or recycling to the UniGreenScheme, **saving over 15,000 kg of CO²e**, and positioning the University of Exeter as the **4th most active Russell Group university**

A full freezer audit at Penryn reduced ULT units by 30%

First round of the **Advancing Sustainability Initiatives Fund invested over £20,000 into sustainability projects** across technical spaces

385 kg of gloves and 965 kg of lab plastics have been recycled in 2025, preventing approximately 3,000 kg of CO²e emissions!

Where is the (re)focus for next year?

- The **Sustainable Labs action plan and stakeholder engagement plan review** to highlight emerging initiatives and to inform future plans that accelerate sustainable research and deliver on continuous improvement across all technical spaces.
- The **Sustainable Labs reporting dashboard** will provide consistent, transparent reporting on key metrics—such as LEAF accreditation status and savings from waste management—giving stakeholders a clear view of sustainability efforts across all technical spaces.
- **Penryn 2.0 lab refurbishments** will embed sustainability into upgrades, focusing on reducing waste, improving storage efficiency, and cutting energy use in collaboration with staff and academic teams to align practices with the University's Net Zero goals.
- **Sustainability frameworks for all technical spaces** following pilot studies with Green DiSC for digital environments. We continue to collaborate with LEAF developers to pilot a tailored framework for physics and engineering spaces—an area where the University of Exeter has been a strong initiator and leader.
- Introduce a **peer review system for green accreditations** to create opportunities for professional development, support Technician Commitment values, enhance resilience, and align with future cross-institutional collaboration.

Case Studies

The Sustainable Labs Action Plan

The Sustainable Labs team, established in early 2025, was created to deliver on institutional and national sustainability goals for technical spaces. The above initiatives are direct outcomes of this mini action plan, which focuses on embedding sustainable practices, improving compliance, and driving measurable impact across research environments.

This year, the team underwent a rebrand to strengthen its identity, along with redeveloping its branding and SharePoint site to improve resources, enhance signposting, and create more opportunities for engagement with laboratory sustainability. These changes, supported by a stakeholder engagement plan, have laid the foundation for cross-departmental collaboration and ensure Sustainable Labs remains a key contributor to institutional and national sustainability networks.

The objectives of the Sustainable Labs Action Plan are mapped to the University's Climate Strategy, faculty sustainability committees, and the Circular Economy Strategy, while supporting compliance with the Environmental Sustainability Concordat and contributing to the United Nations Sustainable Development Goals (SDGs). This ensures our work not only meets local priorities but also drives progress toward global sustainability commitments.

Looking ahead, we are evaluating the current action plan and identifying emerging initiatives to inform a sustainable labs plan until 2030 that accelerates sustainable research and delivers continuous improvement across all technical spaces.

Advancing Sustainability Initiatives (ASI) Fund – Wave 1

Building on the success of the Sustainable Research Models scheme, we have secured ongoing sustainability funding through profits generated by donating via the UniGreenScheme. These funds are open to applications to kickstart sustainability initiatives across all technical spaces to ensure a parity of experience across our campuses for support with sustainability. The first wave invested £20,000 into small to medium sized projects that deliver measurable impact across technical spaces. Key initiatives included replacing old cold storage units, launching lab plastic recycling, piloting new saving equipment to reduce energy use by 30–50%, enabling in-house production to lower procurement emissions, improving fume hood efficiency, and installing a water-saving dishwasher using 63% less water than standard models. We look forward to sharing the outcomes of these projects after 12 months of implementation.

In addition, we have enhanced signposting for internal and external funding opportunities to support sustainability initiatives through our university webpage and resource hub. Recent successes include £11,000 awarded to the LSI Sustainability Group, to replace single-use plastic pipettes with glass alternatives, and £15,000 awarded to Penryn glasshouses to upgrade to LED grow lights—both projects awarded through the University's Sustainability Projects Fund. Moving forward we continue to identify these funding opportunities, along with opportunities from the sector such as the ITSS equipment sharing fund.

Technical Strategy & Operations

Penryn Campus refurbishments developed with sustainability at the heart

The Penryn campus is undergoing a series of refurbishments, including teaching and research labs, through the Penryn2.0 project. To coincide with this, the technical team have focused on improving sustainability across the labs, with a series of initiatives aimed at more efficiently using space, reducing waste, and improving energy conservation. Working collaboratively with the academic community, the team have made significant progress over the last 12 months to improve lab practice and increase awareness of the Universities Net Zero aims.

These efforts have been broad and wide reaching. For example, the team have collaborated with the academic community to audit ULTs, allowing for improved freezer efficiency and the creation of communal shared freezer spaces. Scientific stores have been better integrated across the campus in order to reduce duplicated purchase, and to supporting areas previously not covered by such stores such as medical research.

Auditing and stock reviews has allowed for a significant reduction of redundant stored stock; 4 tons of unwanted equipment, equating to 14 tons of saved CO2, was recycled through the UniGreenScheme, and stockpiled consumables have been redistributed to reduce wastage. Additionally, the implementation of the new freezer management policy has seen a 25% reduction in -80.C ULT freezers, significantly reducing energy consumption.

Working closely with FXPlus and Suez, a new scheme has allowed for the recycling of decontaminated lab plastics, gloves, and packaging. With help from the Sustainability Projects fund, £15k of investment has allowed for the wide roll out of energy saving bulbs in greenhouses. The campus has seen a positive trend in LEAF awards, too, with mineral processing, chemical imaging and geochemistry labs achieving LEAF silver.

These efforts demonstrate the effectiveness of the refurbishment efforts across the campus, and the technical team's commitment to meeting the sustainability goals within this objective. These initiatives will extend further as we move through the planning and implementation stages of Penyn2.0, further embedding sustainability best practice across the campus.

Tracking Research Activities Carbon Emissions (TRACE) Project

The University of Exeter are developing a carbon costing tool, named Tracking Research Activities Carbon Emissions (TRACE), to better help researchers 'cost' the carbon impact of research projects. The tool is planned to be rolled out across multiple higher education institutions. The Research Software and Analytics (RSA) Group have been responsible for designing and developing the public-facing Django application and PostgreSQL backend database, and managing the deployment via Docker and AWS.

To encourage institutional adoption and integration with existing research and sustainability workflows, the design of the tool has been led by user involvement and feedback. From the initial series of stakeholder design workshops, the RSA Group have been heavily involved in working with users and the management team to design the tool. This has ranged from high-level architectural design (e.g. using docker and AWS to enable easy deployment for other institutions) to detailed interface improvements (e.g. adding user guidance 'tooltips' for specific elements based on user feedback). The team are working with an external science-focused design agency to design the interface branding, as well as with accessibility experts to ensure the tool is usable by all.

The project is currently in a pilot release phase with multiple external institutions, enabling the team to rapidly collect user feedback and deploy improvements and fixes, iteratively improving the user-centric interface. Recent improvements include the addition of multiple user guides focused on different user types, and the development of tailored sustainability advice based on users' data.

TRACE — Tracking Research Activity Carbon Emission
Inform, raise awareness, encourage behaviour change

Sustainable Labs were highly commended at the Exeter Sustainability Awards for our comprehensive action plan.

Objective Five:

Increase Regional, National and International reputation for technicians

Progress & Success

Supported technician attendance at **48 external conference and networking events across the breadth of TS&O expertise**

Providing **Strategic Technical Leadership network leadership** recognising our strategic leadership nationally

Three Exeter-led GW4 **technical conferences**

Leading on **regionally mapping our expertise** in Cytomics, Imaging, Home office facilities and whole Body Imaging

First **Research Professional article around recognition of technical experts** in the REF

Successfully **received £20k funding from UKITSS** for a Technical Apprentice in Physics

*ResearchProfessional News

| UK | Europe | USA | Australia & NZ | Africa | World | Opinion | Funding Insight | Highlighted Funding Opportunities |

< Go back   RESEARCH FORTNIGHT   30 APR 2025

Widening the REF is easier said than done

By Kate Dixon, Charlotte Murphy   Share 🟦 𝕏 🦋 in ✉

Where is the (re)focus for next year?

- Extend **mapping of technologies across GW4** in sequencing/omics, maker-spaces, physical imaging, and mass spec capabilities
- Maintain presence at the **Strategic Technical Leadership Network** nationally
- Engagement with the next phase of the **Technician Commitment and the UK Insitute for Technical Skills and Strategy (UKITSS)**
- Systematic tracking and attendance of appropriate **national and international specialist networks**
- More systematic approach to **public engagement and outreach** regionally
- Wider leverage of **Apprenticeships and T-Levels schemes** across TS&O

Case Studies

Engineering successfully received funding for a Physics Technical Apprentice from the ITSS

TS&O successfully applied to the UK Institute for Technical Skills and Strategy Physics Technical Apprentice fund. Exeter was one of only three institutions to receive funding. The investment enables high quality, world leading research in our Physics department as our technical staff continue to support ongoing research projects. The role will also enable an apprentice technician to learn from the deep experience of our existing research technicians in this area.

The Physics workshop provides high precision mechanical engineering to the Physics Department (and others) in designing and producing experimental equipment and support for research in areas as diverse as biophysics to astronomy.

The role will also provide support to the Low Temperature Services in the Physics Department, providing cryogens for low temperature experiments. We are really excited to be able to support the continuous development of technical careers with this apprenticeship.

UK INSTITUTE FOR TECHNICAL SKILLS & STRATEGY

Launch of Commercial-Facing Practical Workshop in Bioimaging

As part of a new initiative to strengthen commercial engagement and knowledge exchange, the Bioimaging Centre delivered its first practical workshop on electron microscopy in July 2025. This four-day event combined hands-on training with a series of theoretical seminars, offering a comprehensive learning experience for both internal and external participants.

The workshop was organised in close collaboration with the teaching laboratory, leveraging state-of-the-art facilities adjacent to the research centre. Attendance was strong, and participant feedback was highly positive, confirming the value of this approach for skills development and technology adoption.

By introducing a commercial dimension, the workshop supports cost recovery for the facility while promoting a professional training environment that attracts motivated learners and industry partners. Building on this success, the Centre is planning to expand the range of workshops offered and explore formal accreditation options for future courses.

This initiative demonstrates readiness to adopt and share expertise on advanced technologies, while utilising modern laboratory and teaching spaces to deliver high-quality, commercially viable training programmes.

Objective Six:

Improvements in staff well-being, culture, retention of skills and expertise, EDI, recognition and reputation for high quality output

Progress & Success

84 specialist research technicians supporting the live research portfolio (Growth from 70)	**10 Silver and 40 Bronze Above & Beyond nominations** totalling £20,000	Embedded **institutional visibility** of TS&O
	Opportunities for **degree apprenticeships**	
Delivery of the university's **first Technical Showcase event**	**85% of staff on permanent contracts** and work continuing to ensure Fair Employment for All	
Development of guidance for **PhD opportunities for technicians**	Expansion of **standardised job descriptions** to include senior management and Facility roles	

Where is the (re)focus for next year?

- **Celebrating success** despite financial pressures
- Ring fencing **time for wellbeing** activities
- **Reviewing and redefining staffing structures** and management where needed to support teams in relation to our new size and shape
- Development of a **service-wide Nurture plan** to include work by Wellbeing Working Group, on communications, and rolling out further Director training.

Case Studies
Career growth and development opportunities within TSO

One of our talented technicians in Engineering, Jordanna, has recently completed her Degree Apprenticeship in Engineering, with UWE. She started in TS&O in 2015 as an apprentice completing her HND level apprenticeship in 2018. She then progressed to a full-time, open-ended role. In 2022 she applied for and was successful in achieving a higher grade position. In 2023 she started her degree, alongside her main role and a 0.5FTE research technician role, providing mechanical engineering support to a civil engineering research project. She completed her Degree Apprenticeship in 2025.

Jordanna exemplifies career development and has made the most of her position in Engineering teaching. She turns her hand to any task asked of her and has developed skills across the Engineering teaching team. She has worked at the University of Exeter for ten years and completed two apprenticeships during that time, as well as successfully securing a higher grade role.

Jordanna's success in both these courses has paved the way for more apprentices in Engineering. We currently have two in the mechanical engineering team and one in the teaching team. These roles suit Engineering well, as the tasks are very practical and varied, often using similar skills and techniques to solve vastly different problems.

Successful inaugural Technical Showcase Event

The University community were invited to experience the inaugural Technical Showcase on the 30th April in The Forum Street. Attendees were treated to displays, exhibitions and demonstrations at 25 stands representing the breadth and depth of the University's technical community. This included hands-on displays which showcased digital apps and physical equipment technicians have developed and use to support and deliver teaching and research across the institution.

The event was well attended by senior leadership, but also by hundreds of staff and students who visited the Forum throughout the day.

Management introductions to our technical services outlining scope of work, current highlights and future plans were made by Charlotte Murphy, Technical Strategy and Operations, Steve Chapman, IT Services/Research IT, Helen Cocks, Digital, Katie Finch, Research Software and Analytics and Gary Stringer, Library & Special Collections.

Alicia O'Grady Executive Director External Engagement and Global commented "It has been great to spotlight and celebrate the incredible work of technicians across our university community. Technical experts are essential to the success of research, education and innovation and their 'behind-the-scenes' work powers the front-line breakthroughs and supports our students every single day."

Technical Strategy & Operations

A word from the Director of Technical Strategy & Operations, Dr Charlotte Murphy

This annual report really reflects a strong record of success, demonstrating the significant progress achieved over the past two years. One of the key aims of the strategy was to ensure that the outstanding expertise, leadership and responsibilities of TS&O are clear and these are now far more embedded, helping to accelerate delivery of the University's Strategy 2030. These aspects are increasingly becoming 'business as usual' for teams, as evidenced through listening to and visiting staff in their labs, workshops and studios, where they now speak with genuine pride, confidence and leadership.

The review concluded that the objectives set two years ago remain relevant and appropriate, and the report's renewed focus reflects the exciting next phase of delivery against those original aims. We know that we need to ensure it represents the wider community which will happen over the next year.

The financial landscape for universities is becoming ever more challenging, meaning that our future vision will be best delivered by prioritising activities that add the greatest value. This refocused approach, working closely with other divisions, aims to support the Exe-Tech strategy in continuing to thrive despite external challenges, and to provide something to which the service can be justifiably proud to contribute to.

Technical Conference 2025, Streatham Campus

Scan the QR code below to view the original Strategy document

bitly

Follow us on social media to stay up to date:

@exetertechs.bsky.social

@exetertechs

linkedin.com/showcase/exetertechs

@exetertechs

University of Exeter

UNIVERSITY OF EXETER · LUCEM SEQUIMUR ·

University of Exeter

INNOVATE

SUSTAIN

NURTURE

Jan 2026