



Technician **Commitment**

Technician Commitment Action Statement from the Royal Microscopical Society (RMS) and BioluminescenceUK

How the RMS and BioluminescenceUK advance the key pillars of the Technician Commitment

**Items in black are underway and in bold italic are future actions*

Pillar 1 - Visibility

- In 2018 BioluminescenceUK ran a project called the Imaging Scientist (www.imagingscientist.com) in which we explored who 'Imaging Scientists' are, their contribution to science and the opportunities and the challenges they face day-to-day in using imaging to answer scientific questions. This included conducting 25 interviews with representatives from all career levels and across disciplines at 12 institutions. Career paths, recognition, team science, technology, funding and people were probed, and conclusions and future directions were outlined. Some of these we have already acted on and are described below. We continue to use and promote the hashtag #ImagingScientist on social media.
- RMS travel bursaries and RMS technical training subsidies already exist to empower members of the technical community to attend and present at any conference relating to microscopy and take part in RMS training events. ***We commit to continue to provide and further improve take up of these grants and reduced rates for training courses by increasing signposting in our newsletters and social media posts. Furthermore, we will start to collect and publish the metrics concerning the technical community for each RMS event, for example by adding a question such as "which best describes your role – student, post-doc, PI, technician, etc" to every event booking form. Using this data, we will start to see areas and particular meetings where technician take up or attendance could be improved.***
- ***The RMS commits to having at least one technician on every one of its 11 Section Committees and 5 Focused Interest Groups. Most groups will likely already have at least one representative from the technical community as a permanent member but formalising and pledging this will further help to provide visibility and amplify the technical voice. When committees lose and gain members this will now be a formal consideration rather than a chance occurrence. We commit to having our support for the Technician Commitment written into every Section's handbook.***

Pillar 2 - Recognition

As noted by our surveys and interviews in 2018 and highlighted on the Imaging Scientist website:

- *Peer-reviewed publication is the metric that most institutions use to evaluate scientific output.*
 - *Contributions of Imaging Scientists to user training, technology development and equipment maintenance are rarely captured through publication authorship.*
 - *Publication output can be used to evaluate the performance of Imaging Scientists if an institution has policies and processes that ensure Imaging Scientists are included as authors on papers where they make a contribution.*
- Recognition of the contribution that technicians in core facilities make to research is vital to the continuation of those facilities and the career progression of individuals. Technicians are highly skilled individuals who contribute technically and intellectually to research projects. It is therefore important to acknowledge them properly in publications and presentations. To try to address this, the RMS has drawn up a generic Core Facilities Publication Policy which can be freely downloaded from its website and can be adapted for use in any facility.
www.rms.org.uk/library/core-facilities-publication-policy
 - BioImagingUK designed a poster to be displayed in core facilities that helps decide when to acknowledge or give authorship to technicians: “Imaging Facility Publication Guidelines Poster”. This was our most viewed tweet with >30,000 views and >1500 engagements.
www.rms.org.uk/community/networks-affiliates/bioimaginguk-network/imaging-facility-publication-guidelines
 - In the quest to be inclusive and recognise all levels of impact and contribution, 16 RMS awards and both RMS competitions are open to technicians. In particular, the Vice-President's Award recognises the 'unsung heroes' of microscopy - the engineers, technicians or laboratory research support scientists. Past winners have included members of the technical community such as Kurt Anderson, Karen Hogg and Kim Findlay. ***We commit to further increasing the visibility of this and all our awards on our social media posts, website and newsletters, 2mphasizing that members of the technical community can apply.***

Pillar 3 – Career Development

As noted by our surveys and interviews in 2018 and highlighted on the Imaging Scientist website:

- *Career structures and paths for Imaging Scientists are often seen as undefined and difficult to navigate.*
 - *Universities have the power to appoint Imaging Scientists to positions with long-term career trajectories.*
 - *Long-term funding of Imaging Scientists in core facilities helps ensure knowledge transfer and sustain scientific excellence.*
 - *Imaging Scientists are often placed on technology career tracks, but some may deserve appointment to academic tracks.*
- In 2020, BioImagingUK conducted a survey of UK Light Microscopy facilities looking at the careers, operations and funding of 113 Imaging Scientists. This was published in the Journal of Microscopy in 2021. <https://onlinelibrary.wiley.com/doi/10.1111/jmi.13076>
Issues such as gender, pay and contract type were investigated and discussed. We noted that

from a funding point of view it's important to acknowledge the equipment that enabled the published research and so on multiple levels it's critical to give recognition to the core facility and its staff.

- The RMS Diploma is open to all RMS members including technicians and is a way to develop and get recognition for microscopy skills through project work, training and mentorship.
- RMS standard travel and virtual meeting bursaries are open to all technical staff who are RMS members.
- RMS Technical Training Subsidies are available for members to attend RMS/BioImagingUK annual conferences and other training courses/conferences.
- Imaging ONEWORLD is a free, weekly online seminar series supported by the RMS that is aimed at those carrying imaging experiments including technicians. Every week the talk is followed by a quiz where attendees can test their knowledge. Questions and discussion around the practicalities of running an imaging experiment are actively encouraged.
- The RMS Core Facility Manager Training Course is run by technicians for technical staff who want to manage facilities.
- The RMS and BioImagingUK launched and continues to support a monthly virtual coffee club for the BioimagingUK and the Flow Cytometry communities. These open forums provide a safe environment to discuss general community topics and specific topics such as career development.
- The RMS and BioImagingUK organise three annual two-day meetings for people working in light microscopy, electron microscopy and flow cytometry facilities where highlighting the Technician Commitment is a regular element of these conferences.
- ***Together, the RMS and BioImagingUK will launch a new Coaching and Mentoring Scheme this summer aimed (not exclusively) at supporting the careers of technicians.***
- ***In recognition of development of Imaging Scientists including technicians, the possibility of becoming an RMS Registered/Chartered Microscopist is currently under investigation.***

Pillar 4 - Sustainability

- Every year the RMS sends out hundreds of Microscope Activity Kits to primary schools around the country. As well as educating children about the science, this highlights the role and career path of technicians in microscopy.
- ***Microscope activities for secondary schools are currently being developed, and when launched we will ensure that the technical career pathway is highlighted. A table-top Scanning Electron Microscope project organised by the RMS is about to be launched in***

schools around the UK.

- *The RMS and BioImagingUK will launch a new Coaching and Mentoring Scheme this summer aimed at supporting the careers of technicians.*
- *Following the 2019 community survey of Imaging Scientists where more than 50% of questions concerned careers and training, BioImagingUK will carry out a follow up survey in 2024 and our findings and outcomes will be reported.*