

UK Bioimaging:

UKRI-BBSRC and UKRI-MRC updates from Rowan McKibbin and Holger Aplitz respectively. Slides available. The BBSRC strategic review of bioimaging was highlighted - <https://bbsrc.ukri.org/about/reviews/scientific-areas/bbsrc-strategic-review-of-bioimaging/>. Question was raised around whether MRC allows facility staff to be a Co-PI in grant applications – this is allowable if University provides a letter stating they are eligible/equivalent to Lecturer/PI status as per BBSRC. Further discussion around whether UKRI might support running facilities to provide affordable access? Something akin to this was being discussed as part of a longer-term goal to develop (with BioImagingUK) a UK Imaging Infrastructure as outlined in the 2020 Community white paper <https://zenodo.org/record/4266470#.YQlvDD-SlnJ>. The goal would be to provide funds centrally to facilitate user access to any UK imaging facility that had designated node status (following future calls). This would also help facilitate UK scientist to access facilities within EuBI.

Georgina Fletcher provided an update on BioImagingUK (slides available) highlighting the activities, including the establishment of working groups who have been focused on software development and archiving, defining job roles and recognition (including the BioUK facility poster, which has been very warmly received and recognised), Kurt Anderson's survey around UK LM facility infrastructure (submitted to Journal of Microscopy), Community Strategy development, including engagement with medical imaging and EuBI nodes, which BioUK developed a call for in collaboration with BBSRC. 8 Business Interaction Vouchers awarded and have generated significant impact. BioUK/RMS have launched Technical Tea Break videos (available through RMS website). Hidden REF and RMS mentoring Scheme were also discussed as in progress items. BioUK members were asked to send feedback and suggestions for future activities they would like to see BioUK engage with to Georgina or Maddy.

Global Partnerships:

Updates were given from EuBI, BINA, CZI, GlobalBI and FocalPlane – most slides are available. Key highlights were from EuBI introducing their services and nodes (www.eurobioimaging.eu), virtual pub networking events (<https://www.eurobioimaging.eu/about-us/virtual-pub>) and future plans to engage with UK nodes. BINA updated on their development of activities (<https://www.bioimagingna.org/>) – lots of online resources and training guides available. Plans to try to mimic the successful French Quality Control 'suitcase' for rollout across North American facilities. Establishment of working groups in communications, D&I, Quality control and training. GlobalBI (<https://globalbioimaging.org/>) also highlighted a large numbers of attendees at their global meetings, development of training materials and opportunities for funding for shadowing and exchange of experience programmes. FocalPlane (<https://focalplane.biologists.com/>) further highlighted their resources available – blogs were highlighted as a key useful feature. All of the presenters highlighted that anyone can join their groups/networks by signing up via their websites.

A question was raised around how these different groupings plan to try and consolidate training and resources across the world for imaging scientist to avoid duplication. Speakers agreed this was important. Jennifer Waters has started such a site (<https://www.microlist.org>) but not clear if everyone has adopted this for resourcing

centrally. Suggested plans for each site to signpost to others until a more comprehensive solution can be reached.

Outlook and Strategy:

Matthew Hartley (EMBL-EBI) updated on his new role at EBI on Metadata standards and the BioImage Archive (<https://www.ebi.ac.uk/bioimage-archive/>). Following a community workshop in 2019, EMBL-EBI assembled a series of suggested minimum metadata sets for upload of datasets for community re-use. Details published in <https://www.nature.com/articles/s41592-021-01166-8>.

Martin Jones provided an overview of the newly established section at RMS (DAIM - Data Analysis in Imaging). Their goal is to support and develop the Image Analysis community in the UK and the application of this science to the field of microscopy in all its forms. Martin encouraged anyone interested in joining the Section in future or contributing to get in touch with him.

Glyn Nelson explained the goals of the QUAREP-LiMi group (<https://quarep.org/>) aimed at improving quality control and reproducibility in light microscopy. Anyone can join via website to receive updates on activities and white papers/publications.

Chris Toseland and Susan Cox gave brief updates on outcomes from their successful use of their BBSRC/RMS/BioUK Business Interaction Vouchers (<https://www.rms.org.uk/network-collaborate/bioimaginguk-network/bioimaginguk-business-interaction-vouchers-scheme.html>) . Lots of community interest in the scheme was noted, including from International partners wanting to adopt this. BBSRC considering supporting the scheme again for BioUk given its broad success and impactful outcomes.

Questions raised around how we can improve education around metadata – suggestions to increase and improve visibility through workshops and potentially a Technical tea Break to be promoted through everyone's internal facility websites etc. Hopes to work with industry to standardise metadata but then education needed on biological annotation. Also need to ensure accurate and sufficient data provided in publications using imaging. Also discussions around importance of ongoing community engagement to update and refine meta-data standards as imaging approaches evolve.