



Education and Outreach Report for AGM 2021

Period of Report November 2020 – October 2021

I would like to begin by thanking Dr Alex Ball for acting as interim chair whilst I was on leave this year. On returning, I was thoroughly briefed on the committee's activities and the developments that had been made in my absence. This report which will encompass this period and that since my return.

Thankfully the world is slowly emerging from the global pandemic of the last 18 months. This has allowed the committee to slowly and safely start to resume its outreach events and activities. We have continued to host our meetings virtually and this has allowed us to continue to develop, plan and collaborate appropriately. I will now briefly report on our three constitutive pillars of the Outreach and Education committee -

School Outreach including the MAK's, the RMS Diploma or CPD, and the Public Engagement.

I. Schools Outreach

September 2021 saw the successful resumption of the MAK scheme with kits being reissued to schools. We are thrilled that primary educators and their classes are once again able to avail of our flagship scheme. Prior to the restart, the committee devised some Safe Working Guidelines which are now issued on the school consenting to participate. Our primary aim was to ensure the safety of the children and their teachers, whilst allowing the participants to get as much out of their time with the kit as possible. As always, we continue to work very closely with our partners in Oxfordshire Employment/County Print Finishers whose help and assistance this year has gone beyond the normally extremely high standards they always offer. I would like to take this opportunity to publicly thank them for their dedication and hard work. Without Andrew and his staff we could not guarantee the high quality assurance checks that are carried out on the kits prior to their resending to schools, a process which has become all the more challenging since the emergence of Covid-19. Our partner academic societies (the Primary Science Teaching Trust, The Microscopy Society of Ireland, and the Scottish Microscopy Society) continue to avail of and participate in the scheme. All partners continue to provide invaluable feedback and help immensely with the provision of education in the field of microscopy to junior scientists. We have also continued to work to support members of other professional or academic societies to develop their own microscopy related outreach and education packages and welcome future interactions and collaboration.

The new second level programme using portable scanning electron microscopes (SEMs), led by Dr Alex Ball and Dr James Perkins in collaboration with Hitachi, has continued to go from strength to strength. A second microscope was donated in December last and Oxford Instruments have kindly provided two integrated Energy Dispersive X-Ray (EDX) systems to further enhance the capabilities of the microscopes and broaden the analysis and projects that can be carried out. In the first over 80 people (including teachers, science technicians and museum staff) were trained to use the SEMs. Together this group and microscopes provided access to over 2300 school students and almost 500 children and families (the latter in Museum activities in Leeds and Stoke-on-Trent throughout the summer). Over 25 schools were involved in the first year of the programme, 9 as hosts to the SEMs and the rest through remote access to the microscopes. Feedback from participants has been

excellent, including suggestions that many students want to find opportunities to continue to work with microscopy. 33 host schools have applied for the next phase of the programme (Autumn 2021 to Spring 2022), whereby it is managed through the Institute for Research in Schools (IRIS) who coordinate the schools' application and project proposals. This initial success has ensured the continuation and support of the programme until at least August 2022.

2. RMS Diploma and CPD

The RMS Diploma has continued to accrue applications and we now have 9 candidates participating. Professor Susan Brooks, Chair of the RMS Qualifications Committee, Kate and I met with the candidates over the past number of weeks where they gladly and enthusiastically shared their progress updates with us. We were all extremely impressed with the standard of work of the candidates, and the level of support which is being provided by their mentors and supervisors. We hope to develop further resources to support our diploma candidates and the Qualifications Committee (was called the Education subgroup) is working hard to put this proposed Induction Pack together. I look forward to seeing all the projects develop further.

I'm delighted to say that eight summer studentships were awarded to high calibre and very varied projects this year. Two projects each were funded under the Biological, Physical and Multidisciplinary fields. All projects thankfully took place back in research environments this year whereby students were safely allowed into labs. We hope to see some of the project reports published in InFocus over the next few months. Well done to all the participants and their supervisors.

The Professional Development Focussed Interest Group has had discussions on the development of an RMS mentoring scheme. Along with the Executive committee, they have continued to engage with the Science Council about professional accreditation. This year some of the RMS training events took place online. The updated format has allowed a diverse participation in and interaction with our global colleagues. In person training events are starting to resume and please continue to look at the RMS website for updates on future events and activities.

3. Public Engagement

The committee participates yearly in many public engagement events and science festivals. This reporting period has clearly seen the number of these events diminished. Once again we hope to be able to continue our safe participation on emerging from the pandemic. Despite this a number of smaller in person events have managed to go ahead and these include science festivals in Nottingham and Earth Bound at the Natural History Museum. As part of MMC this summer, Prof Rob Kessler delivered a spectacular and riveting talk that was really well attended. It was a wonderful opportunity to showcase to the greater virtual audience the fascinating Art-Science Interface and how we can mutually learn from each other in our respective fields. Again, a huge thank you to everyone who was giving of their time and enthusiasm to events over this period.

I would like to again thank all the members who continue to contribute to this vibrant committee and all the RMS staff, who continue to be such wonderful support and tremendous to work with.

Finally, I would like to present an RMS Diploma to one of our recent graduates Jennifer Simpson, for her work on Marek's Disease Virus In Feather Follicle Epithelium. Congratulations Jenny.

Kerry Thompson