



**Minutes of the 2020 AGM of the Electron Microscopy Section of the Royal Microscopical Society
which took place on Monday 16 November 2020 during the
Virtual Microscopy: Advances, Innovation, Impact 2020 Meeting**

Members Present: Dr Lucy Collinson FRMS, (EM Chair), Dr Thomas Walther FRMS, (EM Deputy Chair), Professor Grace Burke FRMS (RMS President), Dr Peter O'Toole FRMS (RMS Vice President), Professor Michelle Peckham FRMS (RMS Honorary Secretary), Mr Rod Shipley (RMS Honorary Treasurer), Professor Rik Brydson FRMS (Honorary Secretary for Education (Physical Sciences)), Professor Maddy Parsons FRMS (Honorary Secretary for Education (Life Sciences)), Dr Brad Amos Hon FRMS, Dr Kurt Anderson FRMS, Dr Paul Appleton FRMS, Dr Miryam Arredondo FRMS, Mr Mike Ashton FRMS, Mr Steve Bagley FRMS, Dr Saskia Bakker FRMS, Mr Paul Balas, Dr Alex Ball FRMS, Ms Elana Battistella, Mr Ian Belding, Dr Jacquelyn Bond FRMS, Professor Stanley Botchway, Ms Beatrice Bottura, Dr Nicola Cayzer, Miss Jessica Chandler, Dr David Chatelet, Mr Jay Christopher, Dr Paola Ciselli FRMS, Dr Laura Clark, Dr Charles Clifford FRMS, Dr Joel Cohen, Dr Sean Collins, Ms Maria Conejero, Professor Sonia Contera, Dr Susan Cox FRMS, Mrs Tracey Davey, Mr Derek Davies FRMS, Dr Giovambattista Depietra FRMS, Dr Emmanuel Derivery, Dr Michael Dixon, Dr Peter Djali FRMS, Professor Vinayak Dravid FRMS, Dr Elizabeth Duke, Professor Rafal Dunin-Borkowski FRMS, Dr Chris Dyer, Dr Anna Lena Eberle, Professor Francis Adelaide GO Fakoya, Mrs Kim Findlay FRMS, Professor Roland Fleck FRMS, Dr Leslie Franchi FRMS, Mr Matthew Francis, Mr Adrian Garcia Burgos, Dr Iria Gonzalez-Dopeso Reyes, Dr James Gott, Dr Joelle Goulding, Dr Nicola Green FRMS, Mr Owen Green FRMS, Mr Paul Gunning FRMS, Miss Pamela S Hamer FRMS, Dr Sarah Harper, Dr Daniel Haspel, Professor Pippa Hawes FRMS, Mr Qamar Hayat, Dr Brian Hayes FRMS, Mr Daniel Hewes, Professor Jamie Hobbs, Dr Karen Hogg FRMS, Dr Andrea Holme, Miss Carmel Howe FRMS, Dr Gareth Howell, Dr Ashley Howkins, Dr Chen Huang, Professor Sir Colin Humphreys Hon FRMS, Dr Grenham Ireland FRMS, Mr Gareth Jackson, Dr Izzy Jayasinghe, Dr Mark Jepson FRMS, Mr Peter Johnson, Dr Errin Johnson FRMS, Dr Martin Jones, Dr Lynne Joyce FRMS, Dr Sohini Kar-Narayan, Dr Georgeanna Kawaley, Dr Daniel Kelly FRMS, Dr Demie Kepaptsoglou, Professor Rob Kessler FRMS, Mr Sarfraz Khan, Dr Werner Knebel, Dr Marie Kokolski FRMS, Professor Oleg Kolosov, Professor Roland Kröger FRMS, Dr Alex Laude FRMS, Dr Nicola Lawrence FRMS, Dr Leandro Lemgruber, Dr Imre Lengyel, Professor Stefan Linder, Mr Yunxing Ma, Mr Pedro Machado, Mr Kevin Mackenzie FRMS, Dr Kirsty MacLellan-Gibson FRMS, Dr Alessandro Di Maio FRMS, Mr Ofentse Makgae, Dr John Mansfield, Ms Joanne Marrison FRMS, Mr Patrick McBean, Professor Gail McConnell FRMS, Dr Emma McDermott, Mr Eddie McGuigan, Dr Greg McMahon FRMS, Mr Steve Metcalfe FRMS, Dr Katy Moffat, Mr Barry Moran, Dr Flavia Moreira-Leite, Mr David Morgan, Mr Ricardo Morilla FRMS, Dr Caroline Muellenbroich FRMS, Ms Marlies Muernseer, Dr Duncan Muir, Mr Tiarnan Mullarkey, Professor Sebastian Munck, Dr Mogana Das Murtey, Mrs Niga Nawroly, Dr Chas Nelson, Dr Glyn Nelson FRMS, Dr Ulla Neumann FRMS, Dr Shirley Northover FRMS, Dr Fabio Nudelman, Dr Tom O'Hanlon, Mr Richard Osgood, Dr Dogan Ozkaya FRMS, Dr Graeme Park FRMS, Dr Julia Parker, Dr Christopher Parmenter FRMS, Mr Seymour Perlowitz FRMS, Dr Lucia Pinon-Giraldez, Dr Aleks Ponjavic, Dr Eric Prestat FRMS, Ms Frances Quigley, Professor Klaus Qvortrup FRMS, Dr Stefanie Reichelt, Dr Roland Remenyi FRMS, Ms Lorelei Robertson, Professor Brian Rodriguez, Dr Liam Rooney FRMS, Dr Eduardo Rosa-Molinar, Dr Mara-Camelia Rusu, Dr Rebecca Saleeb, Ms Nicole Salgado Cortes, Dr Hilary Sandig, Dr Andrew J Scott FRMS, Ms Jennifer Simpson FRMS, Mr Kevin Smith FRMS, Mr Alexander J Sossick FRMS, Mrs Harriet Spatharakis, Dr Natasha Stephen FRMS, Dr Jane Stinchcombe, Dr Debbie Stokes FRMS, Dr Kornelis Straatman FRMS, Mr Leslie Stump FRMS, Dr Cassandra Terry, Mr Michel Theron FRMS, Dr Steven Thomas FRMS, Mr Ashutosh Tiwari, Ms Dhani Tracey-White, Miss Beatriz Vale, Professor Ventsislav Valev, Professor Paul Verkade FRMS, Ms Suzy Vitale, Dr Kison Voitchovsky FRMS, Ms Margaret I Walby FRMS, Dr Theresa H Ward FRMS, Dr Ecaterina Ware, Dr Claire Wells FRMS, Miss Lucinda Wight FRMS, Dr Neil Wilson FRMS, Professor Tony Wilson Hon FRMS, Dr Christopher Wood, Mr Heath Young and Ms Xiangli Zhong FRMS.*

1. Preliminary Courtesies and Apologies for Absence

Apologies for absence had been received from Dr Adrian Burden FRMS, Mr Mark Cheetham, Mr Maurice Dunman FRMS, Dr Nadia Halidi, Mrs Gillian Hibbs, Dr John Hutchison Hon FRMS, Professor Beverley Inkson FRMS, Dr Alexander Lichius FRMS, Dr James Perkins, Professor Anthony W Robards OBE FRMS and Professor David B. Williams Hon FRMS.

2. Minutes of the 2019 Annual General Meeting

The Minutes were approved as a true and accurate record of the meeting.

3. Matters Arising

There were no matters arising.

4. Report from Section Chair

Dr Lucy Collinson:

"It is a pleasure to write this report, as outgoing Chair of the RMS Electron Microscopy Section. Despite the great challenges of 2020, the RMS and the EM Section have remained active and have been able to support the microscopy community in various activities and initiatives.

Early in the year, the EM-UK meeting was successfully held in Plymouth before we had even heard of the term 'lockdown'. Soon though, in-person meetings had to be cancelled or postponed and the microscopy world went

virtual. The RMS reacted quickly to support the community in switching to a virtual format, and the 'Virtual Electron Microscopy Facility Meeting' series was extremely popular and provided a forum for facility managers to discuss and design new ways of safe working in the COVID era. The 'Imaging SARS-COV-2 safely' webinar brought together expert pathologists, virologists and electron microscopists to share their experiences of safely handling and imaging containment level three pathogens and educated the community in interpretation of images of SARS-CoV-2 infected cells and tissues.

As well as virtual meetings, the section has made progress in evaluating the current provision of training in the UK, with additional training in single particle cryo EM being offered at Leeds University, and workshops planned for biological and materials sample preparation, which will resume once face-to-face training is viable. The section is also looking at ways to deliver online training in the meantime, in collaboration with the RMS Training FIG. Interdisciplinary discussions were also facilitated by a joint EM and EPS Section Meeting this year, which was particularly productive in identifying cross-disciplinary sessions for mmc2021, and I hope this can be repeated in the future.

It has been a bumper year for FIGs, and I am very excited to see the progress made by the Image Analysis FIG in growing and formalising their community, and in the various training initiatives they have set up and conducted virtually. It will be a great help to the electron microscopy community to have more experts in image analysis in research groups and facilities to help extract the most scientific knowledge out of our big image data. It is also very exciting that X-ray Microscopy experts, found within various sections (EM and EPS especially), are formalising their community and have come together in a new X-ray FIG chaired by Dr Liz Duke from Diamond.

It is my pleasure to confirm two awards coming from the EM Section this year. The 2020 Alan Agar Award was given to Dr Alexandra Pacureanu from ESRF for her work on imaging cells and tissues with synchrotron radiation as part of correlative workflows with electron microscopy, and one of the RMS Mid-Career Awards was given to Dr Yannick Schwab from EMBL Heidelberg for his work on 3D Correlative Light and Electron Microscopy.

Members of the EM Section have been active in various UK imaging initiatives, including BiolmagingUK, the UK volume EM infrastructure proposals, and with EMBL EBI looking at metadata standards for bioimages being deposited into the EMPIAR and BioImage Archive public archives. Outreach and Education in EM has also moved forward, with Dr Alex Ball and Dr James Perkins securing a benchtop SEM from Hitachi, which will be available to schools when COVID allows. We have also continued to forge closer ties with our colleagues in diagnostic electron microscopy, represented on the committee by Dr Anton Page, and moving forward the RMS will be assisting ACEM with administration of the society.

In our last section meeting, we welcomed new member to the EM Section – Dr Jenny Simpson (Pirbright Institute) representing the Early Career Section. We also welcomed Dr Chris Guerin to attend the section, as he will be reviewing the existing EM timeline, filling any gaps and translating it to a more interactive online tool ahead of the one-hundred-year anniversary of the invention of the electron microscope. We continue to have representation on the section from a number of more focused groups on the committee including the SEMT, the Cryo Microscopy Group, EM-UK and local EM networks.

As I step down as chair of the section, I would like to offer my heartfelt thanks to Allison and the RMS team for all their support and advice - they have been a pleasure to work with and have made my job easy! Also, to my co-chair Thomas Walther and to the whole section, who are an extremely dynamic and engaged group - section meetings are never boring! I also have the pleasure of passing over the reins to two distinguished imaging scientists, Professor Asa Barber (London Southbank University) and Dr Becky Thompson (University of Leeds), and so I know that the section is in very safe hands. Wishing you all a happy and safe year and looking forward to more microscopy in less challenging times!"

5. Election of Officers

There being no other nominations, the following Officers were duly elected:

Chair:	Professor Asa Barber, London South Bank University
Vice Chair:	Dr Lucy Collinson, The Francis Crick Institute
Deputy Chair:	Dr Rebecca Thompson, University of Leeds

6. Election of Ordinary Members

There being no other nominations, the following Ordinary Members were duly elected:

Mr Mike Ashton, Intertek Pharmaceuticals, Manchester
Professor Roland Fleck, King's College, London
Mr Gareth Jackson, Leica
Dr Leandro Lemgruber, University of Glasgow
Dr Chris Parmenter, University of Nottingham
Dr Natasha Stephen, University of Plymouth
Dr Lore Troalen, National Museums, Scotland
Professor Paul Verkade, University of Bristol

In addition to the nominated Committee Members, Dr Alex Ball, Dr Anton Page, Dr Jeremy Rees and Dr Thomas Walther have been co-opted onto the Committee. Mrs Jenny Simpson has been co-opted as the Early Career Representative.

Professor Ursel Bangert will be invited to attend to represent the Microscopical Society of Ireland, Dr Martin Jones will be invited to attend to represent IAFIG and Dr Liz Duke will be invited to attend to represent Council.

7. Any Other Business

There was no further business.

***Non-Members Present:** Ms Stella Aslanoglou, Dr Maria Manuela Azevedo, Professor Daniel Bahena Uribe, Mr Ganesh Bangar, Ms Alison Beckett, Mr Paul Bennett-Hughes, Dr Olga Biskou, Dr Matthew Boebinger, Ms Katherine Brown, Dr Matthieu Bugnet, Miss Kate Burgoyne, Mr Benjamin Butler, Dr Anderson Caires, Dr Pasquale Cervero, Ms Raquel Checca, Dr Helena Coker, Dr Marie-Charlotte Domart, Ms Elizabeth Duffy, Mrs Linda Duncan, Mr Mohammed Fadhil, Dr Alessandro Felder, Dr Aruni Fonseka, Professor Jacky Goetz, Miss Abi Graham, Dr Wei Guan, Dr Fredrik Hage, Mr Glenn Harper, Dr Xavier Heiligenstein, Ms Annemarie Held, Ms Elizabeth Hillman, Mr Ian Holton, Dr Tzipi Hyams, Dr Jung Ho Hyun, Miss Lucy Isherwood, Dr Deidre Kavanagh, Mr Christian Koch, Miss Eleni Konstantinopoulou, Dr Vineet Kumar, Dr Penny Lawton, Professor Alice Liang, Miss Shu En Lim, Mr Paco Lopez-Cuevas, Ms Ying Lui, Mr Omar Matar, Dr Maria J Mazon-Moya, Dr Elizabeth McCarthy, Dr Sudhajit Misra, Dr Aleksander Buseth Mosberg, Dr Ali Mostaed, Professor Serge Mostowy, Dr Dorothea Muecke-Herzberg, Dr Hoan Ngo, Dr Giuseppe Nicotra, Mr James Nunn, Miss Adaobi Ojiakor, Dr Anna Oliveras Martinez, Ms Elizaveta Olkhova, Dr Gizem Ozbaykal, Dr Hilda Amalia Pasolli, Mr Vinay Patel, Mr Peter Pilecki, Professor Quentin Ramasse, Mr Cam Robinson, Ms Marta Rudzite, Dr Matthew Russell, Mr Ebrima Saho, Dr Yannick Schwab, Mr Stan Schwartz, Mr Kieron Scully, Dr Violaine See, Mr Ankur Sharma, Mr Benjamin Shaw, Dr Alpesh Shukla, Dr Avinash Singh, Dr Maria Chiara Spadaro, Professor Toma Susi, Dr Raymond Unocic, Dr Chloe van Oostende-Triplett, Mr Daniel Waiger, Dr Shihao Wang, Ms Lauren Wilburn, Ms Steffi Woo, Dr Charles Wood, Dr Mingjian Wu and Mr Mingquan Xu.