Data Analysis in Imaging (DAIM) Section Annual Report 2020-2021
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The Data Analysis Imaging committee was formed this year as a follow-on from the successful RMS Image Analysis Focused Interest Group (IAFIG), led by Dr Dominic Waithe. The IAFIG was created in response to the NEUBIAS COST action that ran from 2016-2020, with a view to continuing the excellent knowledge-sharing and community building efforts during the action. The IAFIG ran several successful training events, including a python programming course and a "train-the-trainer" course, all of which were very well received.

With lots of support and encouragement from Allison Winton, Amanda Jarman and Maddy Parsons (amongst others), we formed the DAIM committee, largely from the IAFIG membership, chaired by me, with Chas Nelson as deputy-chair, with Dominic Waithe serving as vice-chair to pass on his considerable experience from running the IAFIG. Other committee members are: Dr David Barry, Dr Constantino Carlos Reyes-Aldasoro, Dr Stephen Cross, Dr Siân Culley, Dr Stefania Marcotti (ECR rep), Dr Dale Moulding, Dr Leila Muresan, Dr Laura Murphy, Dr Alice Pyne, Dr Rocco D'Antuono and Dr Eric Prestat. The present committee represents a variety of important sectors of data analysis, including Life Sciences, Medical Imaging, Engineering and Physical Sciences, Research Software Engineering, Machine Learning, Electron Microscopy, Scanning Probe Microscopy, Light Microscopy, Industry, NEUBIAS-Academy, Research PIs, Early Career Researchers and Core Facility staff.

The new committee is in the process of forming links with the other RMS science sections and FIGs, with links already established with Electron Microscopy, Light Microscopy, Early Career Committee and the X-ray FIG. It is hoped that the DAIM committee can become involved in all sections and FIGs in the near future.

In line with NEUBIAS' key objectives, the main goals of the DAIM section include supporting a diverse and open community of researchers and staff who specialise in image data analysis, as well as advocate for their roles in the larger scientific community. One shortcoming identified by NEUBIAS and the IAFIG is the inconsistency of training provision. To combat this, the section will pursue several opportunities for supporting the community in terms of sustainable training and mentoring, including the development and curation of training materials and support in their delivery. In addition, one of the new RMS diploma cohort (Alan Wainman) will be mentored by me for an image analysis based project at Oxford.

Three members of the DAIM committee chaired scientific sessions at mmc2021 (Siân Culley, Chas Nelson and me). Each session was very well attended, and it was noted in the mmc post-event meeting that the virtual format allowed much better accessibility for the international image analysis community.

Looking ahead, now the committee is formed we aim to continue to support and build the community in the UK and internationally, integrating with existing initiatives such as BioImagingUK, EuroBioimaging, GlobalBioimaging, NEUBIAS academy and the very active technical communities present on the integrated imaging forum (forum.image.sc). The covid pandemic has seen an explosion of online content for training and showcasing image analysis tools and techniques, the DAIM section will help to identify and curate lists of high quality existing content and help to develop new content where necessary. Due to the very varied applications of data analysis across the RMS' remit, the committee has proposed to nucleate a series of community-led satellite groups that can act as a link between the larger communities and the DAIM committee. This will ensure that innovations in

techniques, technology, training, and policy can be disseminated across communities much more rapidly than typical "organic" transfer.

The committee is very excited to be at the start of a journey that we hope will be of considerable benefit to anyone working in the field of data analysis in imaging, and we are grateful for the vision and support of the RMS in helping us building solid foundations, with special thanks to Amanda Jarman and Allison Winton for being involved every step of the way with invaluable support and guidance.