

I attended the Microscience Microscopy Congress (mmc2015) for the first time as an Exhibition visitor for one day on Wednesday 1<sup>st</sup> July – a day also famed for a peak summer temperature at Heathrow of 36.7°C. Luckily it was pleasantly cool inside the Exhibition area at Manchester Central.

I started at the RMS Learning Zone where I installed myself in the lecture room and listened to five talks, all very different and all very informative. Gareth Hughes gave a broad overview about 'Getting the most from your SEM samples' and a breakdown of the considerations and compromises involved. Peter Evennett gave an entertaining talk about 'Seeing the invisible' and different contrast techniques for transparent objects. It was a useful revision of how these techniques work – with a great reminder of what 'digital' originally meant and the application of said digit for creating cheap oblique illumination onto your sample. Jeremy Sanderson gave a wonderfully concise and clear Introduction to Confocal Microscopy. Matt Preston gave a thorough exposition on 'Cameras for Imaging' which contained a lot of interesting information about how digital cameras actually capture light and convert it to a digital signal. Finally we had a useful live demonstration of Image J software by Pedro Almada.

The talks continued further into the afternoon and I had the difficult decision of whether to stay and talk to experts in the RMS Learning Zone, where it would have been easy to spend all day, or check out some of the Trade Stands. I opted to get some exercise and roamed around the wide variety of stands which could supply your every microscopic need whether equipment or advice. I particularly enjoyed the Zeiss stand where they were demonstrating their LSM 880 confocal microscope with AiryScan which gives the user the ability to enhance the image by the choice of increasing signal-to-noise ratio or resolution or speed depending on your specific requirements. A couple of conference delegates were testing it with a real live plant tissue sample so I watched to see how it compared to the Zeiss 780 LSM I normally use. It was impressive to see the how the image really improved using the AiryScan technology. I also saw the fascinating Delphi Microscope (from DELMIC and PhenomWorld), the world's first fully integrated microscope for collecting and precisely overlaying both SEM and fluorescence images from the same sample. Not only that, from loading the sample to correlative imaging takes a few minutes only and all in a table-top unit!

I also managed to squeeze in a look at the Wednesday posters. It was interesting to read how the Natural History Museum is digitising the world's largest collection of microscope slides as part of their drive to digitise 80 million specimens and create a data portal for use by the global scientific community.

Before heading off for the train, I rounded off my day with a look at the varied and interesting entries for the scientific imaging competition. For me the most interesting was of two DNA plasmids linked by an integrating protein by Patrick Gunning. Having constructed (and been frustrated by) many plasmids during my scientific life, it was good to see them pinned down! I also enjoyed seeing the close up image of a Dental Diamond Drill (I am not a fan of visits to the dentist) by Karl Dechart. I am most grateful to the RMS for the Travel Bursary Award which made it possible for me to visit and learn a great deal. I really enjoyed the sense of being among enthusiasts and also the great feeling of being connected to both the past history and the 'Star Trekkian' cutting edge of microscopy. Next time I hope to attend the whole conference!