

**Scottish Radiological Society Paul Allan Travel Bursary  
European Congress of Radiology, 2018  
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I would like to thank the Scottish Radiological Society for awarding me the Paul Allen Travel Bursary in support of my attendance and presentation at the European Congress of Radiology (ECR) from 28th February to 4th March 2018.

This year's theme, *Diverse and United*, reflects the great variety and opportunity afforded by our specialty, whilst emphasising the importance of remaining united as knowledge, technology and practices evolve for the benefit of both our patients and our specialty. This is also reflected in the vast array of educational, scientific, practical and key note sessions on offer at the conference.

This was my first attendance at the ECR, and indeed at a conference of such magnitude. Now welcoming over 28,000 attendees, the sheer scale of the conference has necessitated expansion from the Austria Vienna Centre. The "ECR City" now incorporates a number of surrounding venues including the neighbouring United Nations Building, the "Cube" space dedicated to interventional radiology as well as the Sky High Stage within the Saturn Tower, offering spectacular views of the city. Despite its impressive scale, the conference maintains an accessible and relaxed feel, in part due to the newly-introduced and highly enjoyable "coffee and talk" sessions, offering an opportunity to participate in more informal discussions on a range of topical subjects such as value-based radiology and imaging biobanks, as well as audience participation encouraged via the ECR app in a number of interactive sessions.

As well as attending a wide range of general radiology scientific sessions and educational lectures, I was particularly interested in those sessions discussing the development and future of Artificial Intelligence (AI) in radiology and medicine more generally. Currently the subject of great interest and attracting significant resources, opinion remains divided as to the future scope and utility of AI in radiology. However, it seems certain that AI will play an ever increasing role in our routine clinical practice in the coming years, offering exciting opportunities to improve safety and efficiency in our specialty. For example, AI has the potential to stratify reporting work lists based on the presence or absence of significant pathology, to make quantitative measurements such as bone mineral density on computed tomography as well as applying "deep learning" techniques to kernel conversion enabling reduction of scan time and dose without compromise to image quality.

I also have an interest in post mortem and forensic imaging so particularly enjoyed sessions relating to this rapidly developing and fascinating branch of radiology. Particular highlights included the role of imaging in mass fatality incidents, the utility and practicalities of performing contrast enhanced post-mortem CT and the considerations in developing a post-mortem imaging service. These sessions provided an informative overview and were particularly useful for me in my preparation for a forthcoming visit to the Institute of Forensic Imaging in Zurich to complete the basic certificate in Forensic Imaging studies.

I was excited to present my research project on the first day of the conference in the "Challenges in Breast Imaging" scientific session. A sub study of the SCOT-HEART trial, we examined the mammograms of female participants with suspected angina who underwent coronary artery CT (CCTA) and aimed to assess the prevalence of breast arterial calcification and association with cardiovascular risk factors, coronary artery disease on CCTA and subsequent outcomes. Our results showed higher rates of breast arterial calcification in patients with suspected coronary artery disease than published figures for breast screening cohorts, but whilst breast arterial calcification was associated with increased coronary artery calcification and coronary artery disease, this was a non-independent variable with poor diagnostic accuracy. The implications of these results suggest pathophysiological differences in the development of breast arterial calcification and cardiovascular disease.

Days at the conference left little time to enjoy the city, but there is no doubt Vienna is a beautiful city, perfectly sized to explore on foot with a wealth of cultural attractions and traditional Viennese cafes in which to enjoy local specialties such as the infamous Sachertorte.

The European Congress of Radiology is an inspiring conference that I would thoroughly recommend my registrar colleagues attend during their training, with excellent learning opportunities available for all stages in training and subspecialty interests. I am thankful to the SRS for their generosity in supporting my attendance.

