

Journal of the Nuffield Department of Surgical Sciences

Foreword

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In this NDS Research issue of JNDS we are delighted to offer a further showcase for participants in the NDS Virtual Research Away Day sessions that have been held monthly since the beginning of the year.

Those sessions represent another example of the department's efforts to mitigate against the effects of COVID-19. Of course, these sessions have been only a partial substitute for the much more organic, random and joyful in-person interactions that take place in and around the usual NDS Away Day in February. Whilst we know that many of you have appreciated the excellent time-keeping achieved by using pre-recorded talks (barring the odd technical glitch!), the trade-off has perhaps been a less interactive Q&A session.

Trade-offs, compromises and sacrifices have of course always been a feature of the real world but during the COVID pandemic they have become the front and centre of many of our lives. That was the motivation for introducing a new category of departmental award this year, the COVID Heroes.

More than ever the aim of the Away Day events was to appreciate individuals, teams and the diversity of activity within the department. The Away Day Organising Committee spent hours pondering how best to do this, how best to blend themes and topics and offer a sufficient breadth in each individual session without overloading your calendars. The end-product has been a number of engaging reflective talks by eminent invited speakers. Professor Neil Mortensen reflected on the challenges of surgical practice during COVID-19 and the role of the Royal College of Surgeons of England in rising to those challenges. Sir Michael Dixon provided some fascinating insights into the work of the Natural History Museum, and its contribution to research and our understanding of evolution and bio-diversity prior to becoming the Principal of Green Templeton College. Having both taken on complex leadership roles during the pandemic they were able to reflect on the challenges that posed, and of course remote meetings had become a hallmark of their lives.

The Away Day sessions also offered an opportunity for new recruits to the department to present their research. Dr. Dan Woodcock gave a talk on the use of machine learning to interpret the genomic evolution of prostate cancers. Professor

Simon Buczacki presented his research to decipher the lineage of colorectal cancer, charting the changes in differentiation state aligned to genomic alterations. The course of disease, and life, is by definition dynamic. Historically those dynamics are inferred from data that we collect at particular timepoints, samples taken from particular anatomical sites and correlates with particular symptoms or phenotypes.

As a department our mission is to understand these dynamics and then alter their course to improve outcomes for patients. We do so across cancer types, we do so in seeking to increase the success of organ transplants, we do so in monitoring and treating patients with cardiovascular disease, we do so in working with developing countries to enhance the quality of surgical care. To do so comprehensively our studies embrace laboratory science, clinical trials and everything in-between. The department is present and active in 13 locations within the Medical Sciences Division reaching into Oncology, the Target Discovery Institute, the Big Data Institute and the West Wing of the John Radcliffe Hospital amongst others.

Arguably we can't rely entirely on in-person interactions even in non-COVID times to give everyone a full picture of who we are and what we do! The presentations during the Away Day sessions, and now showcased here, are themselves only snapshots of this important work. Our aim was to capture this breadth as well as possible and the advantage of virtual sessions is that we've had several opportunities to do that this year and used that to provide a forum for our DPhil students and postdocs, to showcase the work of the Surgical Intervention Trials Unit (SITU) and recent clinical trials, and colorectal cancer research amongst others.

We hope that you've enjoyed the sessions and that you'll enjoy reading this issue, either as a recap for those that attended or as another chance to see some of this work for those that weren't able to join us. My sincere thanks to the Away Day Organising Committee (David Cranston, Odette Dawkins, Nicky Iyer, Jo Snoeck, Lucy Paterson, Louise King) and all of the participants for making this possible.

With a fair wind behind us we look forward to ending this series with a Garden Party in June in the Oxford Botanic Garden. See you all then!