

British Meiosis Meeting

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For the 9th iteration of their annual meeting, 77 meiosis researchers from the United Kingdom and beyond descended on Dundee in the North-East of Scotland to present and discuss their most recent research. Delegates included British researchers, stakeholders from the crop breeding industry, and participants from France, Germany, and the Republic of Ireland.

The meeting comprised four sessions of talks covering meiotic recombination, chromosome organization, synaptonemal complex formation, chromosome segregation, checkpoint control, and cell division. Following the traditional ethos of the British Meiosis Meeting the talks, apart from the keynote lectures, were given by early career researchers. This year's keynote speakers were Mathilde Grelon from the Institute Jean-Pierre Bourgin in Versailles (France) and Bernard de Massy from the Institute of Human Genetics in Montpellier (France). Mathilde started the whole meeting presenting her recent story on a DNA topoisomerase VI-like complex required to initiate meiotic recombination by inducing double-stranded DNA breaks and the bioinformatics and experimental detective story to identify the non-catalytic subunit of this complex (the catalytic subunit has long been known as Spo11). This was followed by the first session (chaired by Ian Adams, MRC Human Genetics Unit, Edinburgh) on 'Genetic and Environmental Determinants of

Recombination' comprising 4 talks on research projects using both yeasts (*Saccharomyces cerevisiae* & *Schizosaccharomyces pombe*), *Arabidopsis thaliana*, and barley.

The first day concluded with a session of 5 talks on 'Chromosome Segregation and Cell Division' (chaired by Enrique Martinez-Perez, Imperial College, London) presenting research on budding yeast, *Caenorhabditis elegans*, *Drosophila melanogaster*, and human oocytes.

Bernard de Massy started the second day with his keynote discussing determinants of double-stranded DNA break formation in mammals focussing on PRDM9, a histone H3K4 trimethyltransferase with a highly variable zinc-finger domain giving it specificity for particular DNA sequences which in turn become sites of increased DNA breakage (hotspots). This was followed by a session of 3 talks on 'Crossover Control' (chaired by Robbie Waugh, James Hutton Institute, Dundee) showcasing research done in plants (*Arabidopsis*, *Brassica*).

After a coffee break with an additional opportunity to discuss the posters, the final session, with 3 talks on 'Synaptonemal Complex and Checkpoints' (chaired by Mary Herbert, Newcastle University) included research on mouse spermatocytes and biophysical analysis of mammalian synaptonemal complex proteins.

The meeting concluded with awards and prizes for the best talk which went to Kayleigh Wardell (Neale

lab, University of Sussex; prize generously sponsored by Labtech) and the best poster to Rachael Barton (Marston lab, University of Edinburgh).

Thanks to our amazing research community the 9th British Meiosis Meeting was extremely enjoyable, and indeed the Discovery Centre generously provided by the University of Dundee was the perfect venue for these two days of meiotic talks and poster sessions. We are extremely grateful to all the people from the James Hutton Institute, Dundee and the University of Dundee for their support before and during the meeting.

We would also like to thank all the academics who chaired sessions (see above) and served as talk and poster judges (Owen Davies, Newcastle University; Ian Henderson, University of Cambridge; Hiro Ohkura, University of Edinburgh; Luke Ramsay, James Hutton Institute, Dundee). Lastly, we are also very grateful to the Genetics Society for their sponsorship of this meeting, allowing early-career researchers to develop fundamental presentation skills, to build their professional network and to increase their visibility nationally and internationally.

We are all looking forward to next year's gathering in Brighton, the 10th anniversary British Meiosis Meeting which will be organized by Matt Neale (University of Sussex) who originally started this series of conferences in 2009.