

Meeting Report on the 1st International Symposium on “Chromosome Orchestration System”

March 1 - March 3, 2016
Awaji Yumebutai

The structure and function of eukaryotic chromosomes, the long strands of DNA which are the blueprint of our life, is an important and timely topic of research. How they are organised within chromosomes, transcribed, replicated, repaired and segregated, both during mitotic cell divisions to promote cell growth and during reproduction to generate our offspring, were the topics that were discussed at the 1st International Symposium on Chromosome Orchestration Systems (‘Chromosome OS’). The core partners of the group and members of their laboratories, as well as several associated scientists, gave oral presentations of their recent research. A striking feature of the Symposium was the very high quality of all the presentations, giving testimony to the truly excellent composition of the Chromosome OS research group.

Progress at the forefront of current research was clearly evident in all the presentations. Highlights included the first analysis of replicative DNA helicase progression through nucleosomal DNA (H. Araki), the reconstitution of chromosome condensation in the absence of histones (T. Hirano), the real-time observation of strand exchange during DNA recombination (H. Iwasaki), the *in vitro* reconstitution of transcriptional regulation by the human cohesin loader (K. Shirahige) and the dissection of parallel kinetochore assembly pathways (T. Fukagawa). We were impressed to see also all the excellent presentations from the PhD students and junior researchers in the Chromosome OS group, all of which were very well prepared and delivered. They gave additional important and interesting insight and they were a great opportunity for the early career scientists to present and discuss their work. It was encouraging to note an improvement in the gender balance among the younger scientist as compared to the group of senior researchers. To further support the development of younger scientist of both genders, the chairing and organisation of future symposiums could, if possible, be handed to the young generation of researchers.

The meeting spanned one full day and two half days, which was just the right amount of time to discuss and appreciate the work of the Chromosome OS group. Besides the oral presentations, the programme gave enough free time during mealtimes and breaks for informal interactions between the group members amongst each other, as well as with the international participants. In particular, the informal evening sessions that were accompanied by drinks were a valuable forum where a engaging discussions and exchange of information took place. The pleasant surroundings of the Awaji Yumebutai hotel and conference centre contributed to the success of the Symposium.

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