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# Editorial for the SEB Brighton Special Issue: Dynamic organization of the nucleus

*David Evans, Iris Meier, Katja Graumann*

Oxford Brookes University

The papers resulting from the first meeting of the Society for Experimental Biology (SEB) Nuclear Dynamics Special Interest Group held in Brighton, UK, presented in this, and the subsequent, issue of *Nucleus*, constitute a valuable insight into current research on the dynamic organization of the nucleus. As editors, we are privileged to have brought together leading researchers in the field, both at the meeting and in this collection of review and original research articles. This would not have been possible without the support of the Society for Experimental Biology and of *Nucleus*; and the willingness of leading researchers to contribute both to the meeting and to these papers.

The papers reflect the remarkable engagement of the participants with the structures and dynamics of the nucleus across kingdoms and their willingness to interact and collaborate to take the field forward. It is our experience that the rapid progress being made results from this collaborative spirit as we explore the similarities and differences between kingdoms and the protein and other interactions within our systems that, *inter alia* perform such vital and exciting tasks as positioning nuclei, maintaining the structure of chromatin and responding to external signals.

For some of us, the world of nuclear dynamics centers on the SUN- perhaps among the most ancient and highly conserved of all the nuclear proteins; for others, KASH is vital, as they explore the way the nucleus interacts physically with the rest of the cell; others focus on chromatin structure and chromosome territories, on the role of the lamina and nucleoskeleton or on nuclear pores- but increasingly it is clear all are connected, resulting in a physical scaffold of structural and anchoring proteins, of membranes and pores, of chromatin and genes that interact to provide the dynamic organization of the nucleus- in unicells, fungi, plants, and animals.

Papers in these special issues include many of these aspects; we are grateful to Stephen Thorpe and Myriam Charpentier, two of the younger members of the Special Interest Group who have provided a detailed meeting report (Thorpe S, Charpentier M. Highlight on the dynamic organization of the nucleus, *Nucleus* 2016. 8(1): 2–10; http://dx.doi.org/10.1080/19491034.2016.1243634) and to all the contributors both to the meeting and to the special issue, whose passion for their work and desire to support others in the field is reflected throughout. We trust that this work will be as useful to the furtherance of the field as we have found organizing the meeting and editing the papers to be inspiring for our own laboratories.