



Cell Lineage Choice during Haematopoiesis 2.0

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Message from the Guest Editor

This Special Issue is the second volume of our previous Special Issue “Cell Lineage Choice during Hematopoiesis: A Commemorative Issue in Honor of Professor Antonius Rolink”.

For more than 30 years, we seemed to have a very clear picture of how the hematopoietic stem cell (HSC) gives rise to the many different types of blood and immune cells. In the classic lineage tree model, HSC follows a prescribed route to each of the end cell types and gradually restricts their alternative choices via a series of intermediate oligo-potent progenitor cells. Recent findings have challenged these principles, leading to a very different viewpoint whereby a continuum of each fate option is open to HSCs. Thus, HSCs have lineage biases/affiliations and progenitor cells in bone marrow are either pluripotent or unipotent. Thus, HSCs can make an immediate choice without traversing a series of intermediate progenitors to progressively close down developmental options. Developing cells can move sideways to adopt an alternative fate. This Special Issue will examine the shift toward a new architecture for the blood cell system and how the development of such cells is controlled.





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Message from the Editor-in-Chief

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