

Stem cells and aging - methods and protocols
Kursad Turksen (ed), 2013
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Thirteen chapters dealing with one of the most neglected aspect of stem cell biology: their senescence. Rightly pointed out by prof. Kursad Turksen (Ottawa Hospital Research Institute, Sprott center for stem cells research, Ottawa, Canada) we are facing an aging population worldwide, the demographic structure of western populations are dramatically changed in the last two-three decades with the majority

of people being over fifty (and a significant proportion being over sixtyfive, i.e., being old !). Thus it is a compelling need to study the biology of stem cells aging, which are the age-related changes that occur in a stem cell and which are the microenvironmental changes occurring in the supporting cells (*i.e.* the changes occurring in their niches) so that one can trace a metabolomic view to account for their functionality time-related.

Particular attention is given to the hematopoietic stem cells and to muscle derived stem cells (including cardiac stem cell senescence) so that the curious hematologists, the trained specialists in aging and the stem cell scholars can all get satisfaction from this excellent update on stem cells biology.

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