



Angiogenesis: a year in review

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Since the start of 2021, Dr. Joyce Bischoff has stepped down as Co-Editor in Chief of *Angiogenesis* [1]. Our new Co-Editor in Chief is Dr. Andrew C. Dudley from the University of Virginia, USA. Dr. Dudley served on the editorial board at *Angiogenesis* for 10 years prior to his new role. He runs a research lab that is focused on topics of endothelial cell plasticity/heterogeneity and vascular/immune cell interactions in the tumor microenvironment.

We as the editors of *Angiogenesis* are determined to improve the quality of the journal, thereby serving our scientific community. Our charge is to maintain the rigorous, fair and fast peer-review process of submitted manuscripts, to continue to organize special issues and invited reviews on trending topics in the fields of angiogenesis and vascular biology, and to ensure that high-quality original research articles continue to be published in *Angiogenesis*.

Special issues are focused on trending and important topics and in 2020, a successful special issue was guest-edited by Dr. Dudley dedicated to the subject of vessel co-option in cancer which is a mechanism of vascularization that does not require sprouting angiogenesis [2–9]. In addition, an exceptional new special issue on endothelial cell plasticity is now available, guest-edited by Dr. Coert Margadant [10].

Last year was challenging, with the COVID-19 pandemic damaging almost every segment of society. Angiogenesis researchers discovered that SARS-CoV2 is a vascular disease and that vascular dysfunction is related to the resulting pneumonia [11, 12]. In addition, angiopoietin-2 is a marker of endothelial cell activation in SARS-CoV2 and appears to be a reliable prognostic factor for admission to an intensive

care unit [13]. A review on all aspects of vascular involvement including the essential contribution of endothelial cells in the clinical sequelae of severe SARS-CoV2 is in preparation and will be published in the next issue of *Angiogenesis*.

We would like to mention a few seminal papers recently published in *Angiogenesis*. It is clear that methods papers can enjoy a large interest from readers based on the number of overall citations and downloads from the journal website. Van Duinen et al. described a microfluidics platform that enables the culture of perfused micro-vessels in a three-dimensional collagen-based matrix. This technology is uniquely suited for the study of angiogenesis mechanisms [14].

A paper by Zarfati et al. demonstrated a new mechanism of angiogenesis inhibition, based on proteasome inhibition through release of tumor derived extracellular vesicles [15]. A very interesting study reported the disruption of pericyte recruitment by exposure to excess VEGF [16].

Three excellent reviews were also published. A review by Li et al. highlights the clinical implications of angiogenesis in pancreatic cancer [17]. Man et al. reviewed the therapeutic potential of targeting endothelial-to-mesenchymal transition [18]. And a review by Wang et al. highlighted the role of mitochondria in microvascular ischemia/reperfusion injury [19].

We highly encourage researchers to submit their exciting research to *Angiogenesis* and communicate new ideas for invited reviews and special issues to further improve the journal.

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