

Special Issue on Cancer Cell Plasticity

CALL FOR PAPERS

Human cells are very plastic. This is made evident during embryogenesis and after injury, when this inherent plasticity allows cells to generate novel tissues or to regenerate, but it is also present in mature cells that can be reprogrammed into other cell types. The mechanisms underlying this transformation are finely regulated and coordinated in a spatiotemporal-specific manner by a large variety of stimuli. Under pathological conditions including tumor formation and progression, these layers of regulation are lost generating multiple cell populations and conferring tumor cells with novel functional properties. For example, a growing number of studies have demonstrated that the activation of the epithelial to mesenchymal transition (EMT) process can generate cells with enhanced motility, increased invasive potential, and stemness properties. The molecular determinants at the basis of this plasticity, the functional relationships between these different populations, and the potential clinical implications remain to be fully explored. Overall, this represents a challenge to the accurate diagnosis and treatment of tumors.

This special issue aims to highlight the plasticity of cells at different stages of tumor progression and the major contributing factors at the basis of this heterogeneity including the role of the surrounding microenvironment. Central to this special issue will be also the role of EMT and its reversal process, mesenchymal to epithelial transition (MET), in conferring cell plasticity and the molecular basis underlying these processes at the physiological or pathological level. Moreover, considering the dynamic and complex nature of this biological field, important insights gained through the application and the integration of omics and novel experimental methods and analytical approaches in vitro and in vivo will be also considered.

We invite the authors to contribute original research articles as well as review articles that will address recent development in the above areas.

Potential topics include but are not limited to the following:

- ▶ Cellular networks regulating cancer cell plasticity
- ▶ Cell plasticity and epithelial to mesenchymal transition
- ▶ Plasticity and cancer stem cells
- ▶ Genomics and proteomics for analysis of plasticity in tumors
- ▶ Biological and clinical implications of cell plasticity
- ▶ Novel technological and experimental approaches for investigating cancer cell plasticity

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=953247>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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