Special Issue

Cellular Quiescence and Dormancy

Message from the Guest Editor

Most cells, including those in our bodies, spend most of their time in non-dividing, quiescent states, yet these quiescent cells are much less studied than proliferating cells. Quiescence is characterized by a reversible arrest of cell proliferation, reprogrammed gene expression and metabolism, and increased stress resilience and longevity. Remarkably, some specialized dormant cells, like microbial spores or plant seeds, can survive harsh conditions for centuries. Human cells alternating between cellular quiescence and proliferation are critical for ageing- and disease-associated processes, including stem-cell function, tissue homeostasis and renewal, immune responses, and drug resistance of tumours. This Special Issue aims to highlight the understudied genetic, regulatory and molecular adaptations that characterize cellular quiescence and dormancy across diverse organisms. Research areas will cover various cellular and molecular processes featured in non-dividing, quiescent cells of microbes, fungi, plants, and animals as fundamental strategies for their normal development, function, and maintenance or for their long-term survival in the face of adverse conditions.

Guest Editor

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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