Special Issue

Somatic Genetic Variations in Aging

Message from the Guest Editor

More than 60 years after the “somatic mutational” theory of aging was proposed by Leo Szilard, the role of somatic variation in aging continues to be unclear, and we are far from recognizing that somatic mutations contribute to age-related disease. Despite considering somatic variation as a form of genomic instability and a hallmark of aging, a lot more work is needed to fully understand how they contribute to the cellular dysfunction that characterizes aging and how they originate during adulthood. Long believed to accumulate stochastically, we now know that somatic mutations accumulate following age-related patterns and defining mutational signatures. More studies are needed to complete the full picture of the somatic mutations that occur with age. Sequencing technologies for the accurate detection of somatic variation are making it possible to complete this picture. This Special Issue invites studies that contribute to this characterization, allowing us to delve into their molecular consequences at the cellular, regional, and organismal level to confirm or rule out the role of somatic mutagenesis in aging.

Guest Editor

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Deadline for manuscript submissions

closed (20 May 2025)

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an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5
Indexed in PubMed

mdpi.com/si/222954

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