



## Role of DNA Damage and Repair in Aging

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Deadline for manuscript submissions:

**closed (30 November 2021)**

### **Message from the Guest Editors**

In the tissues of aging animals and humans, the frequency of DNA damage and somatic mutations increases and so-called genome instability arises, which is expressed in a set of point mutations, breaks, and cross-links of DNA strands, transpositions and translocations, and aneuploidies. Moreover, different somatic cells accumulate mutations at different rates. As a result, clones of cells with a slightly different genotype are formed in an aging organism, inducing somatic mosaicism. Signs of accelerated aging in people with congenital mutations in DNA repair genes remained the main argument for many years. Apparently, reliable methods of DNA protection are one of the reasons for the "immortality" of germline cells.

In the Special Issue, "Role of DNA Damage and Repair in Aging", we expect papers on the aging-related dynamics of DNA damages, aneuploidy and somatic mutations in somatic and germinative tissues, the role of DNA repair in aging and longevity in human (including centenarians) and different species, and epigenetic stability with age.





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