Cellular senescence and reprogramming provide new insights into the process of ageing

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Aging is, by far, the single most important risk factor for the large majority of diseases. Paradoxically, the molecular and cellular basis of ageing have remained poorly studied in comparison to other areas of research related to health and disease. In recent years, the understanding of cellular senescence and cellular reprogramming are providing unprecedented insights into the process of ageing, including emerging pharmacological interventions and objective measures of biological ageing, even at the single cell level. I will present an overview of these areas of research together with some of our recent contributions.