

## OSKM mediated delay in ageing clock: CRISPR C as 9 approach

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Ageing is a consequence of several changes in the epigenome that ultimately results in decreased functionality in tissues as well as organs. Hence, it is crucial to re-build the functioning pattern of the aged cells by acquiring pluripotency. OSKM (OCT 4, SOX 2, KLF 4, MYC) pathway is known to re- create pluripotency in aged cells by various mechanisms. This group of transcription factors can be targeted for specific inhibitory pathways like oxidative stress and inflammation promoting molecular aging. This study aims to probe the molecular crosstalk among the four transcription factors with the CRISPR Cas 9 approach that will prevent the transfer of aged genome to the offspring. The activators associated with CRISPR Cas were exposed to four transcription factors. Yamanka factors were introduced in mouse model in vivo along with CRISPR genes showed the possibility of editing the inhibitory genes.

### Biography

Akanksha Singh is affiliated to RTMNU, India. She is a recipient of many awards and grants for her valuable contributions and discoveries in major area of Cell/Molecular Biotechnology research. Her international experience includes various programs, contributions and participation in different countries for diverse fields of study. Her research interests reflect in her wide range of publications in various national and international journals.