

REJUVENATION

It is difficult to understand the causes of aging. Accumulation of mutations appears to be the most valid explanation. An indirect proof is provided by the observation that the difference in lifespan between different species is correlated to the difference in their mutation rate (see post of July 13, 2022, Mutation Rate and Lifespan).

It is known that the Cnidarian *Turritopsis dohrnii* maintains its high rejuvenation potential (up to 100%) in the post-reproductive stages, i.e. it is immortal. Its congener *Turritopsis rubra* is not immortal.

[Pascual-Torner et al.](#)¹ (PNAS) compared the genomes of these two species in search of an explanation for the difference. They have not come up with a definitive answer, but they have identified a number of genes and a number of differences in their expression that will help solve the problem.

In this context, see also the post of November 16, 2022, Aging and Age reversal.

1-https://www.pnas.org/doi/abs/10.1073/pnas.2118763119?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed