

*Mutations: I was just wondering if you could explain the difference in DNA replication mutations between somatic and germline cells? Are somatic cell mutations not as harmful? Also regarding errors in transcription and translation, I wrote down RNA's are not heritable (they may transcribe the same gene but they are fresh copies). Could you clarify this for me?*

Somatic cell mutations can be potentially lethal to the individual carrying it, but by definition, a somatic cell is NOT a cell passed on to your progeny. So looking long-term for the survivability of the species, a somatic cell mutation is not as relevant as a germ line (sex cell) mutation. Regarding the heritability of RNA part, RNAs have rather short periods of existence. So if you make a mistake in one, it's probably going to be ok, because the next one you make is likely to be fine, and it's not like you're passing that very same RNA molecule from generation to generation anyway. Changing the genome, however, that's another story...

*Unique solution ID: #1253*

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*Last update: 2007-03-19 18:59*