Global mistranslation increases cell survival under stress in *Escherichia coli*

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**Mistranslation puts cells on high alert.**

The easily angered sage Durvasa from Indian mythology is adapted here to represent mistranslating cells (right). Sages on the left depict relatively “calm” wild type cells. Durvasa gets into trouble from indiscriminate cursing; likewise, mistranslating cells incur a cost. However, just as Durvasa has a short fuse, they accumulate more Lon protease (more fireballs in the chest) and are better prepared for danger than wild type cells. On encountering DNA damaging agents (the demon), mistranslating cells quickly activate the SOS response (thunderbolts from Durvasa), ensuring survival; whereas normal cells (calm sages) respond slowly and are more likely to die.

Image credit: Pranjal Gupta.