Medical Xpress

The science of aging

December 4 2015, by Bob Yirka

Credit: Peter Griffin/public domain

(Medical Xpress)—As the year comes to a close so too do thoughts of time itself and for some that can lead to musing about our own mortality—for others it might mean worrying about how much time they have left with a loved one or perhaps a much loved cat or dog. In either event, it all comes back to the same thing, none of us are immortal. But it also begs the question of why animals have such different life spans—a topic covered by David Grimm in a recent News post in the journal *Science*.

He notes the history of the search for answers and outlines some possible ideas, such as the notion that some animals face fewer threats than others—mice who have very short life-spans tend to die in the teeth of predators, while elephants and whales live long relatively risk-free lives. But what about anomalies, such as why do cats live longer than dogs?

Science has released a video asking that very question and then discussing it at length. It might be due to the fact that cats do not as a rule live in packs—by keeping to themselves they avoid many of the diseases that plague canines. But then, it could be something completely different.

On the other hand, while philosophical discussions are nice and all, what about cold hard science? Are we getting any closer to understanding how and why we age and better yet, putting a stop to it? Jeffrey Kluger recently offered a rundown in *Time*, describing the current state of age research—what scientists know and do not know, and outlining promising areas of research. He suggests some believe it all comes down to microbes in our gut, stem cells, telomeres or mitochondrial breakdown. Figuring out how these systems work, and then how to change them might just lead to not only extending our lives, but to extending the number of high quality years as well.

In the meantime, as the *Telegraph* recently reported, some researchers are pushing forward with testing different drugs to see if they have an impact on aging, a new study, they note, is about to start trials involving giving a drug called rapamycin to test dogs—there has been some evidence it extends the life of mice by approximately 25 percent.

What scientists cannot tell us of course is what we might all do with those extra years if they are suddenly given to us—fortunately, we have a New Year just around the corner, giving us the opportunity to navel gaze, sip a few beers and make promises about how we will do better this time around, and at some point remind ourselves, that no one really

knows what the future holds, that only time will tell.

More information: www.sciencemag.org/content/350 … 265.toc#SpecialIssue

Citation: The science of aging (2015, December 4) retrieved 4 May 2024 from https://medicalxpress.com/news/2015-12-science-aging.html