Scientists look for 'gerontogens' substances that work with our genes to induce aging

Why do our bodies age at different rates? Why can some people run marathons at the age of 70 while others are forced to use a walker?

Genes are only part of the answer.

A trio of scientists from the University of North Carolina argue in a new paper that more work needs to be done on "gerontogens" — factors, including substances in the environment, that can accelerate the aging process.

Possible gerontogens include arsenic in groundwater, benzene in industrial emissions, ultraviolet radiation in sunlight, and the cocktail of 4,000 toxic chemicals in tobacco smoke. Activities may also be included, like ingesting excessive calories, or suffering psychological stress.

Writing in Trends in Molecular Medicine, Jessica Sorrentino, Hanna Sanoff, and Norman Sharpless argue that focusing on such factors would complement more popular approaches like studying molecular changes in old bodies and searching for genes that are linked to long life.

"People have focused on slowing aging, which always struck me as premature," says Sharpless. Even if scientists announced tomorrow that they'd discovered an antiaging pill, he says, people would have to take it for decades.

Read the full, original story: Scientists urge study of environmental factors that may speed aging