

Challenging Conventional Thinking
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Aging is “an area of ignorance as vast as the undiscovered continents 600 years ago,” Dr. Caleb E. Finch, a gerontologist at the University of Southern California, believes. With an inventor’s instinct and an explorer’s passion, he is challenging many long-held beliefs about aging. His penetrating insights have made him a pioneer in what may become one of the most significant issues of the 21st century: the aging of America.

The U. S. Census Bureau projects that by 2025 there will be 62 million people age 65 and older, nearly one in five Americans. By 2045, there will be 77 million, more than the entire U.S. population in 1900.

As an undergraduate at Yale in the 1960s, Dr. Finch discovered that biologists considered aging a “bunch of diseases.” He felt this was untrue and in essence humanized the field by looking for factors that can “preserve the health and vitality of the aging brain.” He combines evolutionary biology with natural philosophy and recently held the first workshop ever on slowing aging.

As a scientist open to new ideas, Dr. Finch demonstrated that Alzheimer’s disease might be an inflammatory disorder similar to rheumatoid arthritis. Understanding Alzheimer’s, which strikes nearly half of all who live past 85, and results in memory loss and the rupture of self-identity, would mean millions of people living out their lives creatively and actively. This would have far-reaching implications, because the 85 and older group are increasing at a faster rate than the total 65 and over population.

“We are undergoing a major revolution in our thinking,” says Dr. Finch. His ultimate goal is “to understand an aspect of human existence that is essentially remarkable — why aging occurs. And to study environmental factors and how to manipulate them to enhance health.”

Dr. Finch is skeptical that we age and die within a biologically predetermined period of time. He cites a wide variety of plants and animals that live 50 to 100 years and show little or no signs of aging.

“If you look at the biological world, there are many organisms or species that live a short time and a long time, which tells me life span is completely arbitrary,” says Dr. Finch. “Any life span is possible because cells are essentially the same building blocks of any kind of organism that exists in nature. A worker bee that lives only months has the identical set of genes as a queen bee that lives several years.”

A prolific writer, he has published more than 350 articles on gerontology, and his work has earned him numerous awards and honors. His most recent book is *Longevity, Senescence and the Genome*.

As for his own mortality, Dr. Finch says: “I exercise, watch my diet, try to feel good and don’t expose myself to health hazards. But I don’t think there’s a magic bullet for living longer.”

When asked what he might tell baby boomers turning 50, he replies, “Look forward to a huge, unexpected gift of time.”

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