

In a wager featured in the January 16 edition of *The New York Times* and in interviews and articles appearing in the local and international media, Dr. S. Jay Olshansky is predicting that by 2150 someone will have lived to reach 130. A colleague has countered with a bet on a life span of 150. Each has put \$150 into a trust fund which, with additional gifts, could grow to \$500 million by the deadline year. The money will go to universities and research institutions on aging.

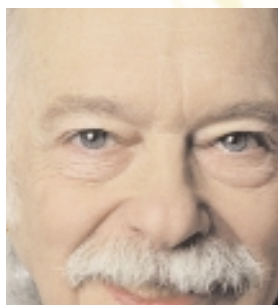


Dr. S. Jay Olshansky

Olshansky is a professor in the Epidemiology and Biostatistics Division at UIC School of Public Health and a senior research associate at the Center on Aging, University of Chicago. He is the president of the Society for the Study of Social Biology and an associate editor of the *Journal of Gerontology: Biological Sciences and Biogerontology*. A member of the American Association for the Advancement of Science and the New York Academy of Sciences, and co-author of the forthcoming book, *The Quest for Immortality: Science at the Frontiers of Aging*, Olshansky is also a sought-after speaker and interview subject, offering a counterpoint to those “prolongevists” who will be disappointed if they don’t make it to 150 years of age.

Don’t misunderstand. Olshansky does believe that the science of aging is on the verge of a promising and exciting future, and he expects average life expectancy to rise from the current seventy-six years to about eighty-five years during the next century. However, he warns against using a strictly demographic model to predict the gains in longevity. Instead, he advocates a biodemographic model to dampen the unrealistic predictions. This model adds biological factors into the strictly mathematical model that extrapolates data from historical death rate and life expectancy trends. In this new paradigm, the underlying biology of the organism that leads to characteristic age-patterns of death in populations is considered.

HOW LONG CAN HUMANS LIVE?



In an upcoming article in *Scientific American*, Olshansky and his co-authors use biodemographics to explain why the human body is not biologically engineered to last into a second century of service. In the process, they present a tongue-in-cheek look at how the human body might look if it were designed to last that long. Complete with re-wired eyes, large ears, curved neck, forward-tilting spine, and backward-pointing knees, the theoretical model resulting from this excursion into "body building" points out some of the physical limitations facing scientists and others seeking to extend human life indefinitely.

If the realistic prediction of life expectancy seems more philosophical than practical, consider that when Social Security was first instituted in 1935, average life expectancy was predicted to be sixty-one years and there were forty-two workers supporting each beneficiary. Today, life expectancy is predicted to be about seventy-six years, and the ratio is closer to three workers per beneficiary. Future predictions of average life expectancy will have a significant impact on entitlement programs. Add to this the possibility that the prolongation of life by eliminating deadly diseases such as cancer, heart disease, and diabetes without conquering other debilitating non-fatal conditions, such as arthritis, Alzheimer's, and vision and hearing loss, may lead to a larger, less healthy, and more dependent older population, and it becomes clear that forecasting how long people will live has enormous public policy and public health implications.

The Quest for Immortality: Science at the Frontiers of Aging is an entertaining and thoughtful book that outlines the exciting advances in the science of aging while dispelling the myths and hype that have abounded in this field for centuries. While the authors point out that there is no "fountain of youth," there are exciting scientific advances that will have a profound effect on humanity, now and in the future.

In the words of the authors, S. Jay Olshansky and Bruce A. Carnes, "Scientists are on the threshold of discoveries about aging that are likely to have consequences for personal health and longevity that we could only have dreamed of just a few decades ago."

Olshansky's work has been funded by a Special Emphasis Research Career Award (SERCA) and an Independent Scientist Award (ISA) from the National Institute on Aging. These awards have enabled him to undertake additional training in evolutionary biology, molecular biology, epidemiology, population biology, anthropology, and statistics. Combining information from these disciplines may help Olshansky and his colleagues answer the question: "How long can humans live?"

Sandy Ketcham

THE HUMAN BODY IS NOT
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In his review, Andrew Weil, MD, author of *Eating Well for Optimum Health*, compliments the co-authors: "This is by far the best book I've read on the science of aging. Drs. Olshansky and Carnes do a terrific job of exploring the questions of why we age, how we age, and what, realistically, we can do to protect ourselves from those consequences of aging that we can influence. *The Quest for Immortality* is both highly readable and highly informative."

Dr. Olshansky will be signing copies of his book on March 1 at Anderson's Bookshop, 123 West Jefferson Avenue, Naperville, Illinois, at 7:00PM.