

## Career Highlights

2012 Appointed to the Board of Directors, American Federation of Aging Research; Keynote speaker (Rethink! Lecture), World Demographic and Aging Forum, St. Gallen, Switzerland; *Keynote* speaker, Life & Annuities Executive Services CEO Roundtable; video on major medical breakthroughs in the modern era -- sponsored by Allianz.

2011 *Keynote* speaker at the Global Financial Services CEO Roundtable in Florence, Italy and the American Academy of Insurance Medicine in Chicago. Spoke at the Gerontological Society of America corporate advisory panel. Began a new effort to help secure the Longevity Dividend. Introduced with colleagues the 3rd dimension of mortality forecasts. GDAnalytics was formed in late 2010 -- a group of scientists with expertise in aging, biodemography, geriatrics, biology and statistics who advise investors involved in Insurance Linked Securities -- contracts were signed and work began this year.

2010 Presented at the first Techonomy conference. The presentation was on the logic behind the Longevity Dividend. The conference was one of the most interesting I've ever attended.

2010 Michelle Obama began a campaign to combat childhood obesity. The language used by the White House to support why this is so important came directly out of our paper published in the New England Journal of Medicine in 2005. For more on this go to <http://letsmove.gov/>

2009/2010 Co-chair of the Council on an Ageing Society of the World Economic Forum.

2009 I am featured in a new permanent exhibit at the Museum of Science and Industry (MSI) in Chicago entitled "You: The Experience". This is particularly gratifying since it was my visit to the MSI at the age of 10 that transformed me into a scientist in the first place. Ironically,

the exhibit that entranced me at age 10 -- the fetuses at weekly stages of development throughout gestation -- is now contained within this new permanent exhibit.

2007 Keynote speaker at the Global Financial Services CEO Roundtable in Ravello, Italy.

2007 Published an article on Re-engineering Humans in The Scientist that represented a follow-up to an article published in Scientific American in 2004 entitled If Humans Were Built to Last.

2006 Introduced the concept of the Longevity Dividend in an article in The Scientist. The Longevity Dividend is a set of health, economic, and social benefits to individuals and societies that would accrue from successful efforts to achieve a modest deceleration in the rate of aging in humans.

2005 Predicted in an article in the NEJM that the modern rise of childhood obesity could lead today's younger generation to be the first in the modern era to live a shorter and less healthy life than their parent's generation. National and international legislation and public action ensued.

2005 Demonstrated with colleagues in an article published in JAMA that the distribution of growth hormone as an anti-aging intervention is illegal in the United States.

2005 Invited speaker, UNESCO meeting on Health and Wealth. Paris, France.

2005 Plenary speaker, Oxford Institute of Aging and British Actuaries, Oxford, England.

2005 Invited speaker, Royal Society of Medicine. London, England.

2004 Guest editor (with colleagues) of two special issues of the Journal of Gerontology: Biological Sciences on the topic: “Anti-aging Medicine: The Hype and Reality I and II”

2004 Invited speaker, Brainstorm Meeting by Fortune Magazine. Vail, Colorado.

2004 Invited speaker, Institute of Medicine. Washington, D.C.

2004 Invited speaker, Nobel Conference XL. Gustavus Adolphus College. Saint Peter, Minnesota.

2004 Keynote speaker, 7th International Federation on Aging Global Conference, Singapore.

2003 Keynote speaker, Bernard Isaacs Memorial Lecture, Jerusalem, Israel.

2002 Gathered together top scientists across the globe to declare as a public health message that anti-aging interventions do not currently exist. Two articles were originally published on the topic – both in Scientific American. The Journal of Gerontology: Biological Sciences subsequently reprinted the article.

2002 Invited speaker, President’s Council on Bioethics, Washington, D.C. 2002 Invited speaker, U.S. Social Security Administration, Washington, D.C.

2002 Keynote speaker, First International Chinese Conference on the Promotion of Healthy Aging, Hainan, China.

2002 Keynote speaker, World Assembly on Ageing, Valencia, Spain.

2001 10-year follow up to article in Science demonstrating that human life expectancy is unlikely to rise above 85 for men and women combined. Results corroborate conclusions drawn a decade earlier.

2001 Published a popular book on aging for the general public entitled "The Quest for Immortality: Science at the Frontiers of Aging" (Norton). Co-author: Dr. Bruce Carnes.

2001 Lead author of one of the most popular articles ever published by Scientific American entitled "If Humans Were Built to Last" – a description of how the human body might have been designed differently if a healthy old age was the goal. Republished in a special issue of SCIAM on Human Evolution in 2003.

2001 Keynote speaker, P.K. Whelpton Memorial Lecture. Gerontology Center, Miami University of Ohio.

2001 Keynote speaker at the annual meeting of the Swiss Society of Internal Medicine. Lausanne, Switzerland.

1997 Alerted population scientists and public health experts to the global rise and re-emergence of infectious diseases and its implications for population-related issues through a publication in the Population Bulletin.

1997 Invited testimony before the Trustees of the Social Security Administration of the United States, Canada, and Mexico on the topic of Mortality Forecasting Assumptions, Washington, D.C.

1996 Published the history behind the development of the biodemography of aging and a series of testable research hypotheses that follow.

1994 Set forth the linkages between biology and demography in an article published in PDR.

1994 Keynote speaker at the annual meeting of the American Society of Radiation and Oncology, San Francisco.

1994 Guest of honor and invited speaker on aging at Foundation IPSEN, Paris.

1993 Brought population aging to the public eye in an article published in Scientific American entitled "The Aging of the Human Species."

1992 Developed a new scientific discipline known as the Biodemography of Aging with funding from the U.S. Social Security Administration. Co-equal credit goes to Dr. Bruce Carnes.

1991 Delineated the Expansion of Morbidity Hypothesis. The public policy recommendation was to focus more attention on the non-fatal diseases associated with aging.

1990 Estimated the limits to human life expectancy in a lead article in Science entitled "In Search of Methuselah: Estimating the Upper Limits to Human Longevity." The accompanying editorial stated that Gerontology has come of age.

1990 Published an expose in the Bulletin of Atomic Scientists on my contribution to the Department of Energy's effort to make available to the world of science, original data files on the health effects of above ground testing of atomic weapons.

1988 Outlined the history of mortality forecasting conducted by the Social Security Administration.

1986 Delineated the Fourth Stage of the Epidemiologic Transition – an extension of the three-stage model originally created by Abdel Omran. The fourth stage argument is now part of standard nomenclature in the field.

1985 Demonstrated that delaying death from fatal diseases yields greater increases in longevity than eliminating a single fatal disease.

1982 Demonstrated that smoker/nonsmoker segregation is not effective in reducing passive inhalation of tobacco smoke among nonsmokers. Article published in the American Journal of Public Health. Smoking subsequently banned on airplanes and in public places.