





DOCTOR OF CIVIL LAW HONORIS CAUSA

JAMES VAUPEL

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Mr Chancellor,

Professor James Vaupel, whom we are honouring today, is one of the world's leading demographers, and has made outstanding contributions to the study of population aging. The Director of the Max Planck Institute for Demographic Research in Rostock, Germany, which he established as Founding Director in 1996, his research is dedicated to three main interests: the causes and consequences of the continuing rise in human life expectancy; the biodemography of mortality and fertility across the tree of life; and mathematical demography. A recipient of the Sheps Award for Mathematical Demography, and Seneca Medal for research on longevity, his many accolades also include former membership of the National Advisory Committee on Aging in the US, a Fellowship of the American Academy of Arts and Sciences, and Membership of the German Academy of Sciences. We are also proud of his ongoing research partnership with Professor Tom Kirkwood and Newcastle University's Institute for Aging and Health.

James Vaupel's unique contribution to understanding the demographics of aging has been to revolutionise a research field that is traditionally bound by an emphasis upon statistics by taking

a multidisciplinary approach, one that incorporates both human and non-human biology, mathematics, genetics, and public policy. His numerous publications in *Science* magazine, as well as in leading journals such as *Nature Genetics* and *The Lancet*, have changed perceptions about the demography of aging, and have informed a range of government policy initiatives both in Europe and the United States. In this country, his research has also been of interest to such bodies as the UK Treasury and the Institute of Actuaries, and has attracted broader attention via the media regarding such highly contemporary issues as future retirement ages, pension funding, taxation rates and health and social service provisioning.

Born in New York, James Vaupel's early training was as a student of mathematical statistics and business at Harvard, where he stayed on to study for a PhD in public policy. He has subsequently cultivated much broader expertise beyond his specialist research areas to encompass health sciences, epidemiology and economics. His aim as a demographer, a science which he envisions as sitting half way between the social and biological sciences, is to make demographic knowledge widely available to students, the general public, and to policy makers. In the mid-1970s, the untimely death of three of his close relatives at relatively young ages within the

'Why do men die earlier than women, even though they are healthier, or at last think they are?'

Such questions have historical dimensions which James Vaupel has fruitfully explored in collaboration with, among others, the Cambridge Group for the History of Population and Social Structure, or CamPop as it is known. Pioneering historical demographers such as the late Peter Laslett showed the potential of historic data sets - family reconstitutions based upon data from parish registers, which enabled the life-course of poorer individuals to be compared with aristocratic elites whose life courses can be reconstructed from genealogies. Professor Vaupel's collaborative research with CamPop colleagues showed that life expectancy for both elite and non-elite sections of English society has been rising uninterruptedly for women since about 1700. Life expectancy for elite and non elite males also began to rise and improved at a synchronised rate until the second quarter of the nineteenth century, and then began to rise again after 1850. Further research found similar improvements among population groups in Scotland, North America, France, Denmark and Sweden. From this data, we now know that life expectancy in those countries possessing the highest annual life expectancy internationally have improved in a linear fashion from the early nineteenth century at a rate of about

3 months per year, with a slightly faster rate of improvement for women than men.

From today's perspective, there is no indication that this rate of improvement is slowing down. It might therefore be predicted that, other factors remaining equal, many western societies will exhibit life expectancies at birth of 100 by 2050. Results of this sort have seriously challenged the prevalent evolutionary biological concept of a maximal life expectancy. For example, Professor Vaupel and his colleagues have calculated a predicted life expectancy that is almost 13 years higher than that currently scheduled by the US Social Security Administration for 2075.

Does this make him a pessimist? Far from it. James Vaupel believes that the common assumption that nothing can be done about the effects of ageing is 'just completely, totally wrong'. As he told *The Lancet* in 2009, 'I see the postponement of debility as one of the crowning achievements of civilization'.

Mr. Chancellor, for his world-leading contribution to understanding the demography of aging, I present as a candidate for the degree of Doctor of Civil Law, *honoris causa* Professor James Vaupel.

Citation by Dr Helen Berry