

AASCP Zoom Lecture March 3rd, 7:30pm (EST)

Aubrey de Grey, Ph.D., "Rejuvenation biotechnology: why age may soon cease to mean aging"

Dr. Aubrey de Grey is a biomedical gerontologist based in Cambridge, UK and Mountain View, California, USA, and is the Chief Science Officer of <u>SENS</u> <u>Foundation</u>, a California-based 501(c)(3) charity dedicated to combating the aging process. He is also Editor-in-Chief of <u>Rejuvenation</u> <u>Research</u>, the world's highest-impact peer-reviewed journal focused on intervention in aging.

He received his BA and Ph.D. from the University of Cambridge in 1985 and 2000 respectively.

His original field was computer science, and he did research in the private sector for six years in the area of software verification before switching biogerontology in the mid-1990s. His research interests encompass characterization of all the accumulating and eventually pathogenic molecular and cellular side-effects of metabolism ("damage") that constitute mammalian aging and the design of interventions to repair and/or obviate that damage. He has developed a possibly comprehensive plan for such repair, termed Strategies for Engineered Negligible Senescence (SENS), which breaks aging down into seven major classes of damage and identifies detailed approaches to addressing each one. A key aspect of SENS is that it can potentially extend healthy lifespan without limit, even though these repair processes will probably never be perfect, as the repair only needs to approach perfection rapidly enough to keep the overall level of damage below pathogenic levels. Dr. de Grey has termed this required rate of improvement of repair therapies "longevity escape velocity".

