

Correspondence

Presidents of Royal Society live long lives

The records of the UK Royal Society indicate that its presidents are generally long-lived – possibly more so than their high-ranking contemporaries in British society.

We used Royal Society records to compare the lifespans of the society's 59 deceased presidents with those of senior statesmen and Royal Society fellows from 1622 to 2018. Many of the presidents died at a mean age of 77 (s.d. 11), thereby outliving 49 deceased British prime ministers (74 ± 12 years) and 7,665 Royal Society fellows (72 ± 14 years).

Averaged over 50-year periods, Royal Society presidents are living as long now as they did 100–150 years ago: 82 ± 12 years, compared with 83 ± 8 today, in contrast to the general population's linear rise in life expectancy from about 1920 until 2010 (see go.nature.com/31bknh).

The society did not admit its first female fellows until 1945. Since then, 198 women have been elected, of whom 59 have died – at a mean age of 83 ± 12 years. These figures are comparable to those for the society's presidents (all men) over the same period. Given that women tend to live longer than men, the similar average lifespan of these presidents could be noteworthy.

Bearing in mind the small sample sizes, these findings are speculative. The enduring correlation between longevity and socio-economic class might be a contributing factor.

Oscar S. Wilson, Herbert E. Huppert King's College, Cambridge, UK.
heh1@cam.ac.uk

Link knowledge and action networks to tackle disasters

Earth's climate, ecological and human systems could converge into a comprehensive crisis within our children's lifetimes, driven by factors such as inequality, inadequate health infrastructure and food insecurity (see consensus statement, J. Falk *et al. Sustain. Sci.* <https://doi.org/g5bd>; 2021). As the COVID-19 pandemic has revealed, national military and economic security provide inadequate protection against global catastrophes.

Such threats to societies are distributed and interconnected, so local and global responses must be coordinated. As for climate change and biodiversity collapse, a convergence of risks demands cooperation between knowledge providers and networks that can take action. For example, data on local sea level rise and coastline water temperatures from the World Meteorological Organization's Global Earth Observation System of Systems can be used to forecast and control local cholera and malaria outbreaks, mangrove and rainforest losses, and threats to vulnerable populations.

Other international agencies, such as the World Health Organization and the Food and Agriculture Organization of the United Nations, can help to support security and sustainability by integrating their knowledge resources. The UN Technology Facilitation Mechanism could help them to coordinate, with funding from the UN Environment Programme.

Jim Falk* University of Melbourne, Melbourne, Australia.
jimfalk2@gmail.com
 *On behalf of 4 correspondents.
[See go.nature.com/3wessfg](https://go.nature.com/3wessfg)

Funders need to credit open science

Researchers are increasingly expected to pursue open science in the form of open-access publication and data sharing. To help promote this movement, the Dutch Research Council set up an Open Science Fund for research projects that are specifically designed to stimulate open-science practices (go.nature.com/3mtupbd).

The response from the Dutch research community has been overwhelming. We received 167 eligible proposals, of which 26 were funded in the first round. The projects include the development of innovative publication practices and of open-source tools and software that facilitate open science; devising and setting standards for data sharing; and promoting a cultural shift towards open science.

For open science to become the norm (see <https://doi.org/g47b>), we suggest that funders need to recognize and encourage researchers' participation in open science. Earlier this year, the European Commission announced a move in this direction: open science will be assessed as part of the scientific methodology under the excellence criterion of Horizon Europe's research-funding programme (see go.nature.com/3kiolq).

Hans de Jonge, Maria Cruz, Stephanie Holst Dutch Research Council, The Hague, the Netherlands.
h.dejonge@nwo.nl

Reflections on a pioneer in electrical engineering

When Eric Ash (1928–2021) joined University College London's department of electronic engineering in 1963, the institution's annual report noted that he was an “acquisition of very special significance”. And so it proved to be. Some of his most important contributions were made during his 22 years here.

Among his many achievements, Ash's work laid the foundations for scanning near-field optical microscopy. It was widely cited, even in Nobel prize lectures – for instance, by chemistry laureate Robert E. Betzig in 2014. Ash explored the fundamental properties of imaging systems, including the first experimental demonstration of subwavelength-resolution imaging (E. Ash and G. Nicholls *Nature* **237**, 510–512; 1972).

He had an original way of observing and describing even the commonplace. He was generous with his time and wisdom, and the greatest beneficiaries were his students and colleagues, whom he mentored for most of their professional lives. He instilled in them the power of encouragement, loyalty, curiosity and clear communication. Thirty-five years after he left to become rector of Imperial College London and then treasurer of the Royal Society, his legacy of high standards continues to permeate my department and to contribute to its impressive history.

Polina Bayvel University College London, UK.
p.bayvel@ucl.ac.uk