Editorial

SENS Survives the Challenge: Now Let’s Get to Work

The old road is rapidly aging.

—Bob Dylan

Most readers will by now have heard that MIT Technology Review’s “SENS Challenge”—an invitation to mainstream gerontologists, with a $20,000 incentive, to compose a denunciation of SENS powerful enough to convince an independent expert panel that discussing SENS in detail (let alone funding it) is unwarranted—has received three submissions that were all rejected by the panel. Given the eminence of the panel in both biology and technology and of the submitters in biogerontology, a popular conclusion (with which I of course concur) is that it was singularly unwise of some of my colleagues in gerontology to be quite so outspoken in their opinions of SENS, given how poorly they had in fact studied it. (The orchestrator of the most strongly worded submission reinforced this view by penning a furious protest at the “non-expert” status of the panel, thereby merely digging himself and his colleagues into an even deeper hole than they already occupied.) Another conclusion has been that, since the panel were certainly not convinced that SENS would succeed, there was merit on both sides. This second conclusion, by contrast, is one with which I sharply disagree. My view is the exact opposite: The detail of SENS is what makes it feasible, and hence a panel who came in with essentially no knowledge of it and studied it only quite briefly would be almost certain to doubt its feasibility, but the fact that they accept its admissibility as a credible topic of discussion despite this is an even stronger refutation of my critics than if they had accepted it as workable and, thus, necessarily worthy of debate.

However, it is not my purpose—here or elsewhere—to be in any way triumphalist. What matters is that there is work to do. An observer from outside mainstream biogerontology might feel that a certain amount of time should now be spent ensuring that my many published detractors (totaling 37 undoubtedly credentialed gerontologists) appreciate the fact that they can evidently only convince each other, and not independent experts, of their position, which means that they should set about urgently considering whether that position results from overencumbrance by conventional wisdom. In fact, and as should be plain to anyone in the field, the depth of my colleagues’ derision at SENS is not accurately reflected by the simple number of its signatories. A concerted effort at attracting such signatures, when conducted by people well known to wield great influence in the decision-making process of mainstream research funding, is hardly likely to be rebuffed by many whose work entirely relies on such funding: Indeed, it is something of a testament to the legitimacy of SENS that several such scientists did indeed refuse to sign the EMBO Reports paper and many others were conspicuously not asked to sign it. Other signatories of that article were long-retired researchers who, I am sure, agreed heartily with the conclusion that SENS is fanciful but without knowing anything whatever about SENS other than its claimed ability to lead to indefinite extension of lifespan. The size of the list of authors is thus in danger of giving the potentially disastrous impression that mainstream biogerontology is not nearly as open-minded as it is in fact.

It is therefore a source of immense pleasure to me that a colleague who has hitherto been prominent among my more intemperate detractors has, in this issue of RR, chosen to aban-
don such language in favor of a thoroughly measured account of his difficulties with SENS. Huber Warner has occupied a particularly pivotal role in biogerontology for many years, heading the NIA’s Biology of Aging program; consequently, his position as corresponding author on the EMBO Reports paper was, on its face, a powerful statement that SENS is not only fanciful, but also so dangerous that the understated language typical of science must be abandoned in the quest to marginalize it. Just 3 weeks after that article appeared, however, Warner took part in a debate on SENS at the annual meeting of the Gerontological Society of America, at the end of which he invited me and the other participants to join him in summarizing our contributions in print. The original intention was to publish these pieces in the journal that Warner edits, Journal of Gerontology: Biological Sciences, but that did not work out, so the collection appears in this issue. Warner’s taking of the initiative in this matter unambiguously lays to rest the idea that there was a consensus among the EMBO Reports article’s authors with regard to its main message; namely, that SENS is as unworthy of real scientific debate as creationism.

Therefore, I feel that no time should be spent flagellating my colleagues with the SENS Challenge’s demonstration that their judgment in signing up to a denunciation of SENS was unduly hasty and short-sighted. Everyone makes mistakes; and the best course, here as always, is to learn from them but not dwell on them. To be sure, there are a rump of genuine SENS opponents (as opposed to skeptics) who have nailed their colors so firmly to that mast that they may feel they have no choice but to bluster on to oblivion; but the field in general is not so narrow minded as to ignore the views of minds so eminent as the SENS Challenge panel. That is one reason why, in this issue of RR, you will find not only my write-up of my contribution to the GSA session—which necessarily consisted of a response to what had been written by others before that session—but also a separate commentary in which I offer a considered and constructive response to Warner’s points. Onward!

REFERENCES


—Aubrey D.N.J. de Grey, Ph.D.
Editor-in-Chief