

Editorial

Welcome to Rejuvenation Research

IT IS MY GREAT PLEASURE to introduce myself as the new editor of what has for the past six years been the *Journal of Anti-Aging Medicine*, under its new title of *Rejuvenation Research*. I have been a member of *JAAM's* editorial board since its inception in 1998 and am honored to have this opportunity to build on *JAAM's* pioneering efforts.

There are now a great many academic journals focused on the biology of aging, many of them of high quality. It is not the purpose of *Rejuvenation Research* to provide what those journals are already providing. Rather, *RR* will emphasize research with relevance to modulation of the aging process, especially in mammals. While intervention is the topic of some articles in existing biogerontology journals, it is greatly outweighed by studies aimed at a more detailed understanding of the mechanisms of aging. The opposite emphasis will characterize this journal. Moreover, a particular (though not exclusive) interest of *RR*—reflected unambiguously in its title—will be studies relevant to *late-onset* interventions, designed to extend the remaining healthy lifespan of mammals that have not received any treatment until an age at which the symptoms of senescence are already becoming apparent. This is an area which, in most journals, receives very little attention even as a proportion of the minority of material focusing on interventions; its significance to those of us unfortunate enough to be already alive, by contrast, is surely far greater than that of early-onset or germ-line interventions.

Since so little biogerontology published elsewhere is on the topic in which *RR* will specialize, you may be wondering whether there is enough research to justify so narrow a focus. The answer is that *RR's* focus will be very far

from narrow, because it will not be restricted to research that conventionally comes under the heading of biogerontology. I firmly believe that the major reason why biogerontology remains largely so conservative regarding the prospects for significant progress in combating aging in the foreseeable future is that it has persisted in defining its own limits far too narrowly, neglecting many areas of biology that are of great potential relevance to the development of interventions. As you will see both from the composition of the editorial board and from this first issue's table of contents, *RR's* scope includes gene therapy, tissue engineering, and stem cell therapy—and that is just the start. Future issues will address the repair and removal of all types of degenerative change—damage—that accumulate during mammalian aging, ranging through indigestible aggregates, protein-protein crosslinks, mitochondrial and oncogenic mutations, permanently dysfunctional cells, and more. Put simply, *RR's* ambit is the whole of regeneration biology as it applies to age-related degeneration.

The social, political, and ethical implications of dramatically extended lifespans have been the subject of considerable debate in high-profile quarters recently. Some commentators wonder whether such concern is premature, in view of the very clear non-imminence of such lifespans. I strongly disagree: I share the view of those who have been pursuing this debate that it cannot justifiably be delayed until we have some idea how soon substantial life extension will actually arrive. The most egregious oversight of those who say that such debate is presently superfluous is that many of the most profound changes in society associated with very long lifespans will not await the arrival of

those lifespans: rather, they will occur as soon as extreme life extension becomes widely *anticipated*, an event that may be triggered by results in laboratory mice achievable within only a decade. Accordingly, there will be extensive coverage in *RR* of the social context of rejuvenation research.

The structure of *RR* will evolve over the coming year; readers familiar with *JAAM* will notice only a few changes in this first issue. The main one is the introduction of the Perspectives section. In this section, important studies published recently elsewhere will be evaluated and set in context for readers not necessarily steeped in the relevant background literature.

Aging has been with us for a long time, de-

spite our best efforts. The idea that it will be with us forever has ceased to be tenable, however, and the race is on to expedite its elimination. *RR* will spearhead that effort, from the present situation where relatively few researchers are even knowingly pursuing it, through to the coming years when it becomes globally acknowledged as the foremost project in which mankind is engaged. Rejuvenation research is a field whose time has come. I look forward to bringing you the foremost work in that field as it assumes its rightful place in the pantheon of human endeavor.

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