

► **The Fight Over the Future: A Collection of SAGE Crossroads Debates That Examine the Implications of Aging-Related Research, Volume I**

SAGE CROSSROADS

iUniverse, New York, 2003  
191 pp, \$17.95 softcover  
ISBN 0-59531631-X

Gerontology, the study of aging, has recently undergone a dramatic transformation and has become a topic of discussion for scientists, ethicists, journalists, and politicians. Advances in science, including the completion of the Human Genome Project, genetic engineering, and stem cell research, have brought to light many new possibilities for aging-related research.

In *The Fight Over the Future*, SAGE Crossroads—an online forum for emerging issues of human aging—highlights debates among some of the nation's leading scientists, ethicists, and journalists on the topic of aging and aging-related research. The experts featured in the debates fervently contemplate the public policy consequences of breakthroughs that may further extend human lives. In the book, one will find word-for-word transcripts of live debates and interviews originally webcast from [www.SAGECrossroads.net](http://www.SAGECrossroads.net).

The book chronicles six debates and two interviews, each of which addresses an imminent issue in aging-related research. Each debate or discussion represents a single question or subject relevant to the topic. The first two debates, one between *Reason* magazine science correspondent Ron Bailey and political theorist Francis Fukuyama from Johns Hopkins University, and the second between University of California, Los Angeles, Program on Medicine, Technology, and Society director Gregory Stock and environmental writer Bill McKibben, provide a foundation for the ethical divide over life extension. The four present their views

of human life extension and provide a preview of the political brawl that will unfold in the coming decades. Bailey and Stock argue that we should welcome the extension of human life, while Fukuyama and McKibben fear the transformations that might result should human age reversal be achieved.

In the third debate, Charles Krauthammer, a conservative syndicated columnist, and Michael West, CEO of Advanced Cell Technology, who claims to have cloned an embryo, argue about human cloning technologies and whether they are a curse or a blessing. In the fourth discussion, Richard Miller, a University of Michigan gerontologist,

lays out the basic tenets of scientists' current ability to extend life in a range of organisms and provides the scientific background for these advances. He reviews the fact that scientists have found two ways to lengthen life in rats, through caloric restriction and through gene mutation.

The fifth discussion is with Stephen Hall, author of *Merchants of Immortality: Chasing the Dream of Human Life Extension*, who discusses the politics, science, personalities, and corporate wars involved in aging research. Even Hall concludes by saying that the number one barrier to immortality is a natural one. He goes on to say, "I don't think we are designed to live forever." In another debate, S. Jay Olshansky, who is a professor in the School of Public Health at the University of Illinois at Chicago and a research associate at the Center on Aging at the University of Chicago, and Robert Binstock, who is a professor of aging, health, and society at Case Western Reserve University, discuss the war over antiaging medicine. Olshansky defends the position that the war has been successful, while Binstock warns that gerontologists and the geriatric public need to be more wary of dietary supplements that claim to inhibit or delay aging.

Another debate is between Harvard

Medical School pathologist Roderick Bronson and Jackson Laboratory senior staff scientist David Harrison, who discuss the biomarkers of aging and whether they truly exist. These biomarkers are physiological traits that would reflect the biological rate of aging in a living organism. Harrison believes that biomarkers do exist, while Bronson considers the quest to discover them foolish. The final documented debate is between Richard Sprott, executive director of the Ellison Medical Foundation, and Aubrey de Grey, a gerontologist at the University of Cambridge. De Grey predicts dramatic age reversal in mice within the span of 10 years, followed by rapid advances in humans. Sprott, however, protests that "the human organism is enormously complex, and we don't know enough to override our genetic heritage."

Despite all the differences everyone exhibits, it is evident that human life extension is on the horizon. *The Fight Over the Future* does a great job of documenting some critical, initial discussions of aging-related research, a subject that is sure to attract lots of attention in the 21st century. The book provides valid scientific background on the topic and gives the reader a good general background on the subject. The documented interviews and debates will likely serve as a reference for subsequent debates and discussions.

—REVIEWED BY IVAN SULEIMAN ■



► **moregoodreading**

**Aging, Death, and the Quest for Immortality (Horizons in Bioethics Series)**

By C. Ben Mitchell, Robert D. Orr, and Susan A. Salladay  
Wm. B. Eerdmans Publishing, 2004

**Focus on Aging in Context: Socio-Physical Environments (Annual Review of Gerontology and Geriatrics, 23)**

By Hans-Werner Wahl, Rick J. Scheidt, and Paul G. Windley  
Springer, 2003