Albert Raynaud
Laboratoire de Zoologie, Université Paul Sabatier, 31062, Toulouse Cedex, France

References and Notes

1. M. K. Richardson *et al.*, *Anat. Embryol.* **196**, 91 (1997).
2. "Firing Line with William Buckley," Public Broadcasting System (USA) (13 December 1997).
3. W.H. Rusch, *Creat. Res. Soc. Ann.* **6**, 27 (1969).
4. J. M. W. Slack, P. W. H. Holland, C. F. Graham, *Nature* **361**, 490 (1993).
5. R. Raff, *The Shape of Life* (Univ. of Chicago Press, Chicago, IL, 1996).
6. B. Alberts *et al.*, *Molecular Biology of the Cell* (Garland, New York, ed. 3, 1994).
7. M. K. Richardson, *Dev. Biol.* **172**, 412 (1995); and M. Coates, in preparation.
8. F. Verbeek, J. Bluemink, J. Narraway, and other staff of the Netherlands Institute for Developmental Biology provided assistance. Supported by the Wellcome Trust.

■

Demographic Thinking

In his commentary "The future of human longevity (*Science*'s Compass, 17 Apr., p. 395), John R. Wilmoth aptly captures the spirit of demographic thinking as well as the current demographic consensus. For nearly all demographers, a U.S. life expectancy of 85 in the year 2050 is well within the bounds of uncertainty. Life expectancy is heavily influenced by mortality early in life. Furthermore, life expectancy is a synthetic measure of *current* mortality conditions in a particular year: It is calculated by fixing age-specific death rates at prevailing levels. Hence, it is useful to examine other measures of longevity. Half of the babies born in the United States and other developed countries this year may survive to age 91. Half of the white female babies may live to celebrate their 95th or 100th birthday (depending on whether extrapolations are based on data from the past eight or the past three decades) (*1*). Although these are simply alternative ways of expressing the data summarized by Wilmoth, this perspective may be more illuminating. Demographers argue about details, but most agree that improvements in mortality at older ages will probably lead to very rapid growth in the number of octogenarians, nonagenarians, and centenarians, considerably more rapid than the official forecasts of the Social Security Administration (J. W. Vaupel *et al.*, 8 May, p. 855)(*2*).

James W. Vaupel
Max Planck Institute for Demographic Research, D-18057 Rostock, Germany
E-mail: jwv@demogr.mpg.de

References

1. J. W. Vaupel in *Longevity: To the Limits and Beyond*, J.M. Robine *et al.*, Eds. (Springer, Berlin, 1997), pp. 11–28.
2. V. Kannisto, *The Advancing Frontier of Survival* (Odense Univ. Press, Odense, Denmark, 1996); Social Security Administration, *Social Security Area Population Projections: 1997, Actuarial Study 112* (Social Security Administration, Office of the Chief Actuary, Washington, DC, 1997).

■

Bird, Dinosaur Link

Ann Gibbons's Research News article "Missing link ties birds, dinosaurs" about the discovery of the unusual Cretaceous bird *Rahonavis* (née *Rahona)* (20 Mar., p. 1851) includes commentary from two scientists who doubt that the forelimbs and hindlimbs belong to a single animal. One of the authors of the original report (20 Mar., p. 1915), Catherine A. Forster, is quoted in response that a source from two different animals cannot be ruled out, although "she contends that the hind limbs are clearly bird legs."

In fact, the study itself shows a stronger test of this hypothesis (Forster *et al.*'s note 22, p. 1919) that was not reflected in the News article. Phylogenetic analyses were run twice, once including the questioned forelimb ma-