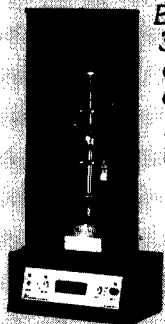


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ter has been found in the shallow sediments off the Atlantic Coast from New Jersey to Cape Cod. The common interpretation (1) suggests that this is the result of lower sea level during periods of Pleistocene glaciation. Even after at least 8000 years, the ground-water system has not equilibrated with the present sea level.

At the Nevada Test Site, the great depth to the water table beneath Yucca Flat (up to 660 meters), and many other valleys of the south-central Great Basin, is controlled by the regional subsurface extent of a highly transmissive carbonate-rock aquifer that also has a topographically low discharge point. That these deep water tables are not a result of the modern, arid to semiarid climate of the region is best seen by comparing Yucca Flat with Emigrant Valley, an intermontane basin bordering Yucca Flat on the northeast. The water table beneath Emigrant Valley is as shallow as 30 meters, yet both valleys have the same climate. The shallow water table beneath Emigrant Valley reflects extremely low transmissivity of the metasedimentary rocks surrounding this valley, not higher precipitation. Details on the hydrogeology (2) of both valleys and estimates of water level rises in the carbonate-rock aquifer in response to future, wetter climates (3) are available. Briefly, future, wetter climates—reflecting some combination of increased precipitation and reduced temperature—are unlikely to raise the water table significantly in Yucca Flat. Of far greater importance to the unsaturated zone notion advanced, a future increase in precipitation is likely to cause more frequent and deeper infiltration of water through the unsaturated zone than occurs at present. Nevertheless, as pointed out explicitly and at some length in Winograd's article, several barriers to radionuclide mobilization and migration remain in the event of a change to a wetter climate; namely, the high sorptive capacity of the valley fill and underlying zeolitized tuffs, the engineered capillary barrier, and a presumed low solubility of the waste form. Any radionuclides somehow reaching the carbonate-rock aquifer despite these barriers would additionally be diluted, as discussed by Winograd.

Alpher's general concern that "an ever-increasing carbon dioxide concentration in the atmosphere . . . must ultimately affect the global distribution and flow of groundwater" is unwarranted when one examines the specific waste disposal strategy of putting wastes in thick unsaturated zones within the arid-

to semiarid southern Great Basin. The deep ground-water system discussed by Bredehoeft and Maini do not respond rapidly to changes in climate; their stability under the right setting can be assured for thousands, if not tens of thousands, of years.

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2. I. J. Winograd and W. Thordarson, *Geol. Soc. Am. Mem.* **110** (1968), pp. 35-48; *U.S. Geol. Surv. Prof. Pap.* 712-C (1975).
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## Myeloma, Not Melanoma

Arnold Demain's article (27 Nov., p. 987) on industrial microbiology is excellent. However, there is one minor mistake in the article. Somehow, in the third column of page 993, myeloma (a tumor of the bone marrow characterized by the excessive production of either the "heavy" or the "light" chain of the antibody molecule) is confused with melanoma (a form of skin cancer). In the technique for the production of monoclonal antibody introduced by Kohler and Milstein (1), a hybrid of myeloma and immunized spleen cell is used.

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### References

1. G. Kohler and C. Milstein, *Nature (London)* **256**, 495 (1975).

*Erratum.* In the letter from Senator Warren B. Rudman (29 Jan., p. 456), a quote from testimony by Ronald Lamont-Havers was incorrectly printed. The correct quote is as follows: "What I would be concerned about, in saying that, would be the fact that funds are then set aside, protected funds, which would prevent one of our own investigators not being supported. That's all I'm concerned about. I'm not really concerned about whether or not there's funding. I'm concerned about protecting my own investigators as far as their funding, and any reduction in funds within that system is going to have a perturbation within our system."

*Erratum.* In figure 1 of the report by D. Regan and K. I. Beverley (8 Jan., p. 194), the photograph on the left should have appeared on the right, and vice versa.