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91 Excavating Words: A Geological Tool

Cover: This excerpt from the *Book of the Early Han Dynasty* recounts unseasonably cold weather, failed crops, famine and strange astronomical observations during 43 B.C. Researchers now believe that these occurrences are all signs of an eruption the previous year of Mt. Etna on the other side of the globe. Similar passages from the surviving literature of many ancient civilizations are proving valuable tools in dating and describing volcanos that erupted in the past. (Courtesy Kevin D. Pang)



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Letters

Contradiction reconciled

In "Tour through a taste bud" (SN: 12/22 & 29/84, p. 393), J.A. Miller states that taste buds are among the most active replicators in the body, yet Eugenia Wang ("Finding a cellular sign of aging," SN: 12/22 & 29/84, p. 390) found statin in taste buds. The latter article says that "statin turns up in places like taste buds and heart muscle, where cells aren't dividing." It would seem that there is a contradiction here. Please explain which view is correct.

Ernest O'Byrne
Eugene, Ore.

Both views are correct. In the taste bud, according to Wang, the cells of the inner layer do replicate actively to replace cells of the outer layer, which do not replicate and which, when they age, are shed from the tongue surface. Wang says that the protein statin is found only in the taste bud's outer layer.

—J.A. Miller

Alternative view

I enjoyed the article on high-voltage electron microscopy ("HVEM: The Big Picture of Small Structures," SN: 12/22 & 29/84, p. 392). However, I must take issue with the statement that the "microtrabecular matrix is now recognized as the structure within cells." Although it remains possible that microtrabeculae exist *in vivo*, this is not a proven fact and is not generally accepted as such.

The alternative view is that microtrabeculae represent the cytoskeleton (i.e., filaments composed of actin and other proteins) onto which most of the cell's soluble contents have collapsed during specimen preparation. In fact, this latter view is supported by recent studies using both high-voltage and conventional electron microscopes and therefore enjoys widespread acceptance among cell biologists and biological microscopists.

Walter E. Fowler
Duke University Medical Center
Durham, N.C.

Rocks resurface

The "Halos of Stone" (SN: 1/19/85, p. 42) have nothing on my garden. Each spring I pick up what seems like tons of rocks from a quarter-acre plot. My neighbor collects these and lines his drainage ditch with them, claiming that every year they sink into the ground and must be replaced.

Even though his ditch is nearly a half-mile from my garden, after six years of this I could swear I'm picking up the same damn rocks. This year I intend to prove it—I'm going to spray all the rocks in his ditch with red paint.

Emily Johnston
Westminster, Md.

Correction: The report of joggers being attacked by birds (SN: 1/12/85, p. 24) appeared in the Dec. 27, 1984, NEW ENGLAND JOURNAL OF MEDICINE, not the Dec. 15 LANCET.

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