

sidering publishing videos, and *Cell Motility and the Cytoskeleton* intends to begin publishing its annual video supplements next month.

Founded in 1980 by Robert Allen, *Cell Motility* had video publishing as a goal right from the beginning. But its first effort, in 1983, failed. There was almost no demand for the videos, partly because the journal chose video discs as a format, and at the time few researchers had access to video-disc players.

Now under the editorship of Bill Brinkley of the University of Alabama, Birmingham, the journal is trying again—this time with videotapes. They have high expectations that the more accessible format and the greater number of researchers who are now using video will make the venture a success. The first videotape supplement, a kind of “Greatest Hits of Cell-Biology Research Videos,” will be out in December, and Brian Crawford, executive editor at Wiley-Liss, the journal’s publisher, says he has been deluged with calls from subscribers eager to get the tape. Subsequent supplements will contain video data submitted and peer reviewed as part of papers published that year in the journal.

But some researchers question whether mailing out videotapes or discs is really the best way to publish video data. Their proposed solution: fully electronic journals, through which one could receive, at a computer work station, both the printed text and figures from a paper, and an accompanying video. Video information can be transmitted over current research networks, says Daniel Masys, of the National Library of Medicine, although the recipient must have the software to convert the digital information back into video. But within a year or so, Masys says, networks such as Internet will be able to transmit a processed video image to anyone with a monitor able to display it. Intriguing as this idea sounds, publishers aren’t rushing to start electronic video journals, says Patricia Morgan, director of publications at the American Association for the Advancement of Science. The demand, she says, is not high enough to make such a venture worthwhile.

Once journals like *Cell Motility* break the ice, however, that demand may grow, as an ever increasing contingent of video researchers becomes less willing to settle for publishing static images. And, in the end, video may not only change the way research is done in many areas of biology, but also how results are disseminated. “Our first tape is a way of showing what the medium has to offer,” says Crawford, of Wiley-Liss. After that, there may be no turning back.

■ MARCIA BARINAGA

New Maps of a Very Strange Place

Almost everywhere the Magellan spacecraft looks on the hot, cloud-wrapped surface of Venus, it is finding symptoms of rampant volcanic activity. Take the two images shown below—among its latest radar snapshots of Earth’s sister planet.

Looking like the mold on some long-forgotten leftovers, seven domed hills (bottom image) march across the eastern flank of a highland known as Alpha Regio, in the southern hemisphere of Venus. The domes are volcanic features averaging 25 kilometers in diameter and 750 meters in height, say Magellan scientists. One theory is that they were produced by thick, viscous lava that oozed up through vents in the ground and then flowed out radially across the surrounding plains like so many giant mudpies. Alternatively, they may be bulges where the surface rocks have been pushed upward by magma welling underneath.

In the side image, a high-resolution mosaic of several Magellan radar scans shows a 341-kilometer-wide panorama of Lakshmi Planum, a high plateau that stretches across roughly the same northern latitudes that Alaska occupies on Earth. Rising some 3.5 kilometers from the surrounding plains, Lakshmi is thought to be a tectonic uplift similar to the Himalayas and the Tibetan plateau, which were produced by the collision of India with Asia. Lakshmi is about the size of Africa and tends to have very steep sides. Shown here is a close-up of the southern edge, where the dark, smooth, lava-covered surface of the plateau suddenly falls off to the rough, broken terrain that rings its base. (Both images are shown here with south at the top; otherwise, the way Magellan’s radar illuminates the Venusian surface would make hills look like depressions and vice versa.)

The 64-kilometer-wide pit in the center of the image is a feature known as Siddons. It appears to be a volcanic caldera—a region where a subterranean bubble of magma first bulged upward and then drained away, leaving the fractured vault of rock above it to cave in. This interpretation is supported by the fact that Siddons is surrounded by collapsed lava tubes—the ruined pipeline system where natural tubes of barely solidified lava once conducted the magma outward.

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