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This Week

Research Notes

Articles

Cover: Synthetic red blood cells containing oxygen-rich hemoglobin are swept through a capillary made of yellow epithelial cells. Normal human red blood cells, such as the solid red one shown at top, can barely squeeze through the body's smallest vessels. The artificial "neohemocytes," shown slightly enlarged in three foreground examples, pass easily and are better able to get past partially blocked vessels. The mass production of synthetic red cells is one of several approaches now being pursued by scientists in an effort to develop a bionic blood. (Illustration by Robert Burnett, courtesy C. Anthony Hunt/Univ. of California)

Departments

Letters

Nosy questions

Todd Olson's early hominoid phylogeny ("Hominoid lineages and keystone clues," SN: 8/1/87, p.71) has been nosed out, and he knows it. In the Aug. 8 NATURE Olson argued "that nasal bone outlines . . . are highly consistent within and between . . . taxa." Now, in SCIENCE NEWS he has conceded that "there is certainly variation in hominoid nasal bone anatomy." Previously Olson saw in the keystone-shaped nasal bones of AL333-105 from Hadar "a paranthropic type of pattern," and assigned this single specimen to his *Paranthropus* clade, believing that two hominoid lineages existed 3 to 4 million years ago. Recently, according to Eric Delson, Olson conceded that only a single lineage existed: *Australopithecus afarensis*. We now seem to be in agreement – with the position that I have maintained throughout.

All that remains is for Olson to concede the superiority of a theoretical framework that is now broadly accepted in evolutionary biology, one that accepts variation as a normal attribute of populations rather than as a hindrance to the construction of idealized typologies. The alternative is for him to continue insisting that he is right – the pongid populations were wrong to exhibit nasal bone variation and I was wrong to recognize it.

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Zapping sap

"The electric life of plants gives fungal spores a charge" (SN: 7/25/87, p.53) was very interesting. I would like to point out, though, that research involving electricity and plants is not new. As far back as 1783, Abbé Bertholon described how, by watering them with electrified water, he was able to grow vegetables of great size. In 1845, a paper appeared in the JOURNAL OF THE HORTICULTURAL SOCIETY on "Influence of Electricity on Vegetation." In 1902, Selim Lemström wrote that electrified plants would grow 50 percent larger than normal. Joseph Molitorisz used electricity to stimulate sap flow in trees. Electricity was his explanation for how trees were able to achieve a stature of more than 300 feet. And finally, James Lee Scribner grew a butterbean plant to the incredible height of 22 feet by planting it in a potting mix made of copper and zinc particles between two electrodes that were merely plugged into the wall. This plant produced two bushels of tasty beans.

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