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This Week

Fossils Push Back Origin of Land Animals
Genetic trickery probes tropical parasites
Genetics may underlie some artery ruptures
Radwaste dump gets permit
Biological clues linked to criminal record
Rabbit trail may lead to human gene therapy
Defusing arthritis with oral collagen
Green genes blasted into chloroplasts
Hubble still shaking despite software 'fix'

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Shadows of Thoughts RevealedTrekking in the Molecular Forest

Cover: Chemists can now build huge, precisely shaped polymers with branching structures. This computer image shows one such molecule, which has an oily, water-repelling interior and a periphery studded with water-loving hydroxyl groups that enhance its ability to dissolve in water. (Image: Newkome et al.)



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290 Books 291 Letters

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Letters

Not so fast

In "Lifting a dusty veil to clear IRAS' view" (SN: 9/22/90, p. 182), you say that the "wave-like feature... traces the path of the solar system as it rises above and falls below the Milky Way's plane over nearly a year." In reality, it takes the solar system more than 200 million years to do that. What is shown there is probably an image in galactic coordinates which will show the ecliptic (the plane of Earth's orbit around the sun) as a wave-like feature.

Guenther Eichhorn Senior Staff Scientist, Steward Observatory University of Arizona Tucson, Ariz.

Astronaut-in-a-box

Until NASA or its subcontractors can design a comfortable 14.7-psi space suit to eliminate the need for an oxygen prebreathe (Letters, SN: 9/22/90, p.179), there is a simple stopgap measure. For much of the astronauts' work, the

waist and legs play a minor role. It would be a relatively simple matter, using existing technology, to build a space box that holds an astronaut in ordinary street clothes. The box would resemble the work stations designed for people working with radioactive isotopes. Astronauts could put their arms into arms attached to the box, utilizing existing space-suit arm technology. This could allow access to coffee, snacks and a better space toilet. An astronaut could also share a box with a friend.

One nice advantage the space box would have over space suits is the possibility of modifying its design to permit extravehicular activity in high Earth-orbit. There seems little hope that a space suit will be developed for such an application.

Peter C. Williams East Longmeadow, Mass.

'Radiator' originator

In "The Great Brain Drain" (SN: 10/13/90, p.232), Bruce Bower has done a superb job of

explaining complex information in a limited space. I would only add one point of clarification regarding the "radiator" theory. Pete Wheeler (Liverpool Polytechnic) should be credited for originally suggesting in 1988 that certain blood-cooling mechanisms in savanna-adapted australopithecines released a physiological constraint on brain size, thereby making possible the subsequent increase in *Homo* brain size.

Dean Falk Professor of Anthropology State University of New York Albany, N.Y.

Address communications to: Editor, **Science News** 1719 N St., NW Washington, D.C. 20036 Please limit letters to 250 words. All letters subject to editing.

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