\$240,000 award. He may do some traveling and learn some "non-computer-related skills"—like cooking and swimming.

This year's other scientist awardees are John C. Bailar III, professor of epidemiology and biostatistics at McGill University; Stanford biologist Paul Ehrlich; Harvard astronomer Margaret J. Geller; Harvard mathematician David Kazhdan; biologist M. A. R. Koehl of the University of California at Berkeley; Boston University mathematician Nancy Kopell; ethnobotanist Gary Paul Nabhan of the Desert Botanical Garden in Phoenix; University of Michigan anthropologist Sherry P. Ortner; and anthropologist Eric Wolf of the City University of New York.

# Army Decontaminant Gets Washed Up

Since the early '60s the Army has stockpiled a toxic and highly corrosive chemical, DS2, for decontaminating weapons and equipment exposed to chemical weapons—despite the fact that its own tests have shown it doesn't do the job.

So says a recent report by the U.S. General Accounting Office.\* It relates that, for starters, DS2 can cause severe health problems, including chemical burns and damage to the nervous system and internal organs. The Army requires personnel to protect themselves with breathing apparatuses and rubber clothing, but the chemical causes rubber to decompose.

The use of DS2 might still be justified if it did its job well. But according to the report, when the Army tested DS2 on an M1 tank in 1984, it "caused the rubber road wheels and tracks to become soft and decompose." Electronic cables softened, and one began smoking within 30 minutes as the DS2 ate through it. Nonetheless, the Army continues to stockpile the chemical,

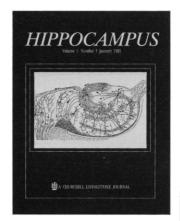
explaining that the obvious alternative—household bleach—is too corrosive.

But other branches of the armed services have managed to find effective substitutes for the expensive (\$14 to \$28 per gallon) DS2. The Navy uses a hypochlorite similar to household bleach. And the advanced technical fix preferred by the Air Force? Hot, soapy water.

#### **New Brain Journal**

The number of research papers published on the hippocampus in recent years has been, well, mind-boggling—more than 1000 papers in research journals last year alone. So, David Amaral at the Salk Institute for Biological Studies decided to face the deluge head on: he has started a new quarterly journal dedicated just to the hippocampus and related structures.

The first issue of *Hippocampus*, published by Churchill Livingstone in New York, is due out in January. It will be the first journal dedicated to just one region of the brain—"very few brain regions can sustain a journal," says Amaral proudly. But more may be on the way: a journal called *Cerebral Cortex* is soon to be introduced by researchers at Yale University. Lest we worry that neuroscience is becoming too specialized and fragmented, Amaral says the hippocampus is a



region of unusually wide interest, attracting everyone from brain mappers concerned with its role in forming long-term memories to clinicians who treat epilepsy.

Amaral and his coeditor, Menno Witter of Vrije University in Amsterdam, joke that the journal still needs a slogan. One that has been suggested: All the News That's Fit to Remember.

## **Updated Gene Tome**

Victor McKusick has revised his bible again. The Johns Hopkins University geneticist this month introduced the ninth edition of his book, *The Mendelian Inheritance of Man*, regarded as the bible of human genetics. When first published in 1966, it included the location of about 1000 traits on the human genome. The new edition includes 4937.

At a recent presentation to neuroscientists at Johns Hopkins, McCusick showed color slides of all nine editions, saying, "I'm the only person people ask not what's your next book going to be, but what color?" This time, it's silver with black leather binding—"Silver because the first issue went to press 25 years ago."

### Stone to Head JPL

Caltech physicist Edward C. Stone, Jr., best known as the chief scientist and spokesman for the Voyager missions to Jupiter, Saturn, Uranus, and Neptune, is the unanimous choice of a Caltech search committee to be the next director of the Jet Propulsion Laboratory. He will replace Lew Allen, who plans to retire in December. (In the meantime, Allen will continue to head the NASA team investigating the optical defect in the Hubble Space Telescope.)

JPL is operated by Caltech under contract to NASA and is the agency's leading center for planetary exploration.

Stone, who has been involved in space research for close to 30 years, became Voyager project scientist in 1972. He is currently chairman of the board for the California Association for Research in Astronomy, which oversees the soon-to-be-completed Keck Telescope in Hawaii.

# **Spidery Trompe l'Oeuil**

Researchers have discovered that spiders that feed on nectarloving insects effice their prey by decorating their webs with patterns resembling flowers. The wily arachnids accomplish this by using a type of silk that strongly reflects ultraviolet light, a key component of insect vision.

Yale University biologist Catherine Craig and vision specialist Gary D. Bernard of the University of Washington claim to be the first to define the role of ultraviolet (UV) light in insect perception of spider webs. They say the patterns the spiders create—zigzags, bars, or crosses--resemble the UV patterns of many flowers, which have contrasting UV-reflective and nonreflective petals and centers. Experiments showed that significantly more insects were attracted to decorated than undecorated webs.



Sitting pretty. UV light reveals zigzag lines decorating spider's web.

The UV-reflecting silks also have a second deceitful function, say the researchers, who reported their findings in the April issue of *Ecology*. Because sun and sky are the only natural sources of UV light, the webs also attract bugs that are trying to head for open space.

27 JULY 1990 BRIEFINGS 359

<sup>\*</sup>DOD Should Eliminate DS2 From Its Inventory of Decontaminants (U.S. General Accounting Office, GAO/ NSIAD-90-10, April 1990).