



SEQUENCER ON BOARD

An \$85,000 on-board sequencer has enabled an international team of scientists to gather detailed genetic and morphological information on an unusually large number of species scooped up on a 20-day cruise of the Sargasso Sea in the Atlantic Ocean.

The scientists, funded by the U.S. National Oceanic and Atmospheric Administration and the Census of Marine Life, a global network of ocean scientists, found greater diversity than they expected from what is considered one of the world's least productive oceanic regions. "Sometimes the most interesting questions come from looking at places where people think it's uninteresting or unimportant," says marine biologist Russell Hopcroft of the University of Alaska, Fairbanks, a member of the expedition. The 28 scientists on board were able to identify some 444 species before their colors faded and to sequence 220 of them before returning to port. For example, *Diacria major*, a sea butterfly (above), had a mitochondrial gene sequenced and compared to that of a similar species for the first time. The goal is to form a database of DNA "barcodes" for the world's marine fish and zooplankton. Data from the cruise will be presented next week at the Barcoding Marine Life Workshop in Amsterdam, the Netherlands.

A LIBRARY'S NEW HOME

A remarkable collection of science texts will move this fall to The Huntington Library, Art Collections, and Botanical Gardens in San Marino, California. The Burndy Library, named for its founder, inventor and author Bern Dibner, has been located at the Massachusetts Institute of Technology (MIT) since 1992. But historians of science and technology expect the new site to be a shot in the arm for their field.

The Huntington already houses a strong history of science collection, with an emphasis on astronomy. And while the Dibner family provided fellowships to attract researchers to MIT, the Huntington already hosts 1700 scholars each year from a range of disciplines. "The library will be one of the richest in the country in terms of [history of science] holdings," says science historian Mordechai Feingold of the California Institute of Technology in Pasadena.

The Burndy contains some 67,000 books—a third of them rare—and various scientific instruments and paintings. Highlights of the collection include a volume belonging to Louis Pasteur, complete with margin notes, and a first edition of 17th century philosopher Robert Boyle's text on electricity (right).

WHAT'S IN YOUR WATER?

The vast majority of Americans who rely on groundwater to drink are swigging more than just H₂O. A new survey of groundwater stores by the U.S. Geological Survey (USGS) found that volatile organic compounds (VOCs) are found in 90% of aquifers, although generally at levels considered safe for human consumption.

VOCs come from commonly used products such as gasoline, cleaning products, plastics, and paint. The 17-year USGS study, released last month, tested water samples from 98 groundwater aquifers and 3500 public and private wells for 55 compounds. Scientists identified 42 such compounds, the most common of which was chloroform. It was found in 7% of aquifers, 5% of domestic wells, and 11% of public wells. But fewer than 2% of the samples had VOC levels above those determined by the Environmental Protection Agency to be harmful to human health.

Senior author John Zogorski says the findings underscore the necessity of "continuing monitoring efforts to go back and understand the sources" of contamination. And Erik Olson, director of the drinking-water program at the Natural Resources Defense Council in Washington, D.C., cautions that many of the chemicals identified could be harbingers of worse contamination. For instance, 3% of aquifer samples contained MTBE—a highly mobile gasoline additive that affects water's taste and odor. Its presence could mean that slower moving and more toxic gasoline compounds may not be far behind.

Old in New

A three-dimensional mural based on early 20th century sketches of mouse neurons by Spanish physiologist Santiago Ramón y Cajal will grace a three-level stairway in the new Washington, D.C., headquarters of the Society for Neuroscience. Cajal shared the 1906 Nobel Prize in physiology or medicine with Camillo Golgi of Italy for work on nervous system structure.

Cajal's grandson and great-granddaughter—both Spanish physicians based in Zaragoza and Barcelona, respectively—were on hand to dedicate the 11-story building last week.

