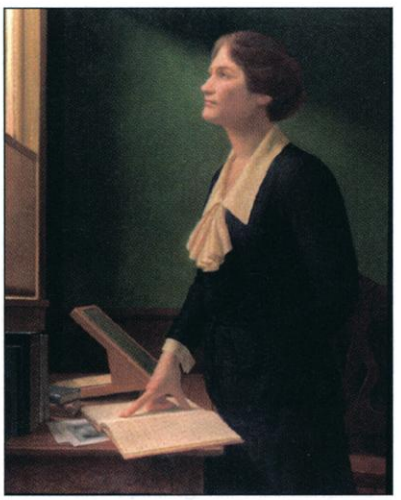
Breaking the Portrait Glass Ceiling

Women are rare on the faculty of Harvard University and rarer still on its walls. But, thanks to chemist and Nobel laureate Dudley Herschbach, astronomer Cecilia Payne-Gaposchkin (1900–1979) now joins the men hanging around the faculty room in University Hall.

Herschbach, who has been struggling for 30 years to get more women into Harvard's portrait collection, and his wife Georgine spent $15,000 of his Nobel Prize money to commission a portrait by Patricia Watwood. The work, shown here, recalls Vermeer's "The Astronomer," as well as a watercolor by William Blake showing God surveying the universe.



Payne-Gaposchkin, who discovered that stars are primarily made of hydrogen and have varying temperatures, had a string of firsts at Harvard: first woman graduate student in astronomy, first person to get an astronomy Ph.D., first woman to chair the arts and sciences faculty, and first to receive tenure.

After winning tenure in 1938, however, she was denied a professorship for 18 years. Since then, says Herschbach, "Harvard has made some progress" in hiring women, but "affirmative action for portraits is a hell of a lot easier."

Lighting's Dark Side

Civilization's growing reliance on artificial lighting may be having a pronounced impact on animals and even plants, scientists say. So, a few dozen researchers plan to gather in Los Angeles, California, this month to explore how the spread of glowing street lamps and flickering signs is affecting everything from insects and birds to salamanders, fish, and mammals.

Satellite images of Earth at night provide especially dramatic evidence of how lights are creeping into many ecosystems, says biogeographer Travis Longcore of the nonprofit Urban Wildlands Group. He is organizing the 22 to 23 February conclave with group director Catherine Rich (see www.Wildlands.org).

Already, the pair notes, scientists have documented some impacts of round-the-clock illumination. Millions of night-flying birds and insects, for instance, are killed annually in collisions with illuminated office and communication towers, which act as powerful lures—perhaps related to the fact that the moon is used for navigation. Seashore lighting has also fatally disoriented newly hatched sea turtles trying to flop their way to the surf. And trees have been known to drop their leaves early due to constant exposure to streetlights.

Researchers are still mostly in the dark, though, when it comes to predicting the ecological effects of lights. "There aren't enough studies to draw really strong conclusions," says wildlife ecologist Melissa Grigione of the University of South Florida in Tampa. She has studied how ocelots, an endangered nocturnal wildcat, react to security lights along the U.S.-Mexican border.

Aliens Eschew Antimatter

Whatever beings are responsible for crop circles, abductions, cow dismemberments, and other strange phenomena, they aren't getting here in antimatter spacecraft.

Antimatter energy is a favorite of science fiction buffs: It's what powers *Star Trek*'s Enterprise through the heavens. But reality hasn't caught up yet, according to NASA astronomer Michael Harris. If antimatter-powered UFOs had been buzzing through our solar system, the craft would emit telltale gamma rays created by proton-antiproton collisions, notes Harris, a researcher at Goddard Space Flight Center in Greenbelt, Maryland. Harris combed through data collected by EGRET, an instrument flown aboard the Compton Gamma Ray Satellite, which crashed back to Earth in June 2000. But he could find no signs of antiproton annihilation, at least within Saturn's orbit, he relates in a paper published last month in the online Los Alamos National Laboratory preprint archive. Extraterrestrials, it seems, rely on more conventional conveyances.

No Enterprises here.

Name That Clone

Researchers have stopped using the term "therapeutic cloning" to avoid being tarred by the widespread criticism of efforts to clone human beings (see Policy Forum, p. 1237). Instead, they call the creation of a cloned embryo solely for research purposes "somatic cell nuclear transfer." But Senator Orrin Hatch (R–UT), who supports the research, thinks he has a better idea. Last week at a Senate hearing, Hatch unveiled a new name: "DNA regenerative therapy."

Will it catch on? Biologist Davor Solter of the Max Planck Institute for Immunobiology in Freiburg, Germany, doesn't think so. "The term," he says, "is beyond comprehension."

Tea That's Out of This World

Japan's contribution to the space station, due for launch in 2004 or 2005, comprises a laboratory for zero-gravity experiments and a smaller cylindrical storage chamber. But there's a 2-meter-by-2-meter unused area in the storage chamber—which Yuichi Yonebayashi, professor at Tokyo National University of Fine Arts and Music, has proposed converting into a traditional tea room. The contemplative "Way of Tea" is particularly appropriate for relieving the stresses of space work, he says: "In the ceremonial tea room, all are equal. Even during Japan's feudal era, everyone, regardless of rank, had to leave their swords outside."

The traditional ceremony requires accoutrements such as fresh flowers and a charcoal-burning brazier to boil water. Yonebayashi concedes that some corners will have to be cut; nonetheless, he believes it's possible "to create a place that captures the atmosphere and the ideology of the ceremonial tea room." A spokesperson for Japan's space agency confirms that it is considering the proposal.