

In the study, experimenters interviewed children and their mothers every 6 months. The researchers found that youngsters living with both parents recovered more often than did those in other household arrangements. Children also showed greater improvement if they maintained warm relations with their mothers.

Although nearly half the kids received lithium or an anticonvulsant drug to quell manic symptoms, their bipolar condition subsided no more often than that of their unmedicated peers. There was no evidence either for efficacy of other psychiatric drugs or individual, group, or family therapy.

The sobering treatment assessment needs to be confirmed in more-diverse groups of children, comments psychiatrist Fred R. Volkmar of Yale University. Still, "the important possibility that children [with bipolar disorder] are less responsive than adults are to mood-stabilizing drugs cannot be ruled out," he says.

Other research, published in the same issue of *American Journal of Psychiatry*, links early-onset bipolar disorder to disturbed electrical activity in the brain. A team led by psychologist Anita Miller of the University of Pittsburgh compared brain waves in 55 young adults who had suffered from severe depression during childhood and 55 others who had not.

Whether or not they were currently depressed, young women who had experi-

enced childhood depression exhibited unusually high right-brain activity. In contrast, excess left-brain activity characterized young men who had had childhood depression. This sex difference was most striking for participants who had also been diagnosed with bipolar disorder since childhood. While intriguing, the scientists say they don't yet know what underlying brain mechanisms might orchestrate this sex difference. —B. BOWER

Rare Find

Odd type of ammonia detected in space

An unusual form of ammonia has turned up in space, upending scientists' long-held belief that this substance is too rare to detect there. The finding could help astronomers better understand the complex chemistry of dark clouds in star-forming regions of space.

A molecule of ammonia consists of one nitrogen atom linked to three hydrogen atoms. Unlike ordinary ammonia used for household cleaning, however, the newly found molecule doesn't contain typical hydrogen. Instead, it has three atoms of deuterium, a heavy isotope of hydrogen. Throughout the galaxy, there's about 1 atom of deuterium for each 100,000 atoms of ordinary hydrogen.

An international team of scientists, including Darek Lis of the California Institute of Technology in Pasadena, identified the unusual ammonia in the Milky Way's Barnard 1 cloud, located about 1,000 light years from Earth. By using the Caltech Submillimeter Observatory on Hawaii's Mauna

Kea, the researchers detected triply deuterated ammonia's characteristic radio emissions.

Once in ammonia, deuterium atoms "prefer" to stay there when temperatures are extremely low, says Lis. Nonetheless, "it's surprising that molecules can get so heavily deuterated," comments Alwyn Wootten of the National Radio Astronomy Observatory in Charlottesville, Va.

The radio signature of ammonia incorporating three deuteriums was first determined more than 3 decades ago in laboratory experiments. It was "known and forgotten," comments Eric Herbst of Ohio State University in Columbus. No one has previously used the signature to look for the molecule in space because astronomers didn't believe a measurable concentration of the heavy ammonia was out there. That bias gave way several years ago, when astrochemists discovered molecules of ammonia and formaldehyde containing two deuterium atoms, adds Lis.

The discovery of heavily deuterated molecules in space could help scientists understand the chemistry of star-forming regions, says Herbst. "Molecules tell us more than anything else about these regions," he notes. Yet before triply deuterated ammonia can provide information on chemistry in space, astronomers must determine how widespread the molecule is, says Wootten.

Lis and his coworkers, who reported their discovery in the May 20 *Astrophysical Journal Letters*, now plan to look for the molecule elsewhere in the universe and also measure less-deuterated versions of ammonia in the Barnard 1 cloud. In another logical step, says Herbst, researchers will probably start searching for molecules, such as methanol, containing four deuterium atoms. —J. GORMAN

Editor's Note

Solar series wins award for *Science News*

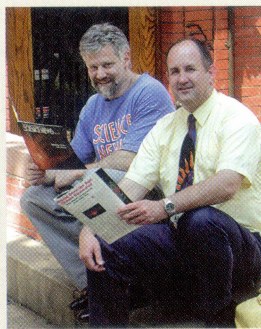
The sun is shining on *Science News* this week. In Albuquerque, the Solar Physics Division of the American Astronomical Society has awarded its 2002 Popular Writing Award for journalists to Ron Cowen and Sid Perkins for a two-part series in *Science News*.

Ron's article "Stormy Weather" (*SN*: 1/13/01, p. 26) focuses on cyclic variations in the sun's activity and describes solar storms, which can disrupt communications and power networks on Earth, threaten high-altitude flight crews, and cause

beautiful aurora. Ron has written about astronomy for *Science News* for more than 11 years.

In "Pinning Down the Sun-Climate Connection" (*SN*: 1/20/01, p. 45), Sid tackles the difficult task of disentangling solar and earthly effects on Earth's climate, addressing phenomena—temperature, rainfall, forest fires, and hurricanes—that seem to follow the sun's 11-year activity cycle. Sid has covered earth sciences for *Science News* for 2 years.

Both articles can be



AWARD WINNERS Ron Cowen (left) and Sid Perkins (right).

viewed at Science News Online (www.science-news.org). —J.A. MILLER

Transplant Triumph

Cloned cow kidneys thrive for months

On the eve of a U.S. Senate vote that could ban similar experiments in people, scientists have successfully transplanted into cows miniature kidneys and other tissues generated through cloning. The experiments offer the most convincing indication yet that the controversial transplant strategy called therapeutic cloning can produce genetically matched cells that a person's immune system won't reject as foreign.

"This shows that [therapeutic cloning] really does work. That could help shape the debate in Congress," says Robert Lanza of Advanced Cell Technology in Worcester, Mass. He and his colleagues describe their