

was asked about his family life, he admitted to abusing a stepdaughter two years previously and to now being afraid of beating up his six-week-old son as well. As he talked about his feelings, his symptoms gradually subsided.

These three cases, Mogielnicki and his colleagues conclude, indicate that child abusers and potential abusers may use physical symptoms, especially weakness

or paralysis, as a signal for help. When no physical cause for such symptoms can be found, they advise doctors and nurses in hospital emergency rooms and in private practices to probe patients' lives to determine whether they are child abusers or potential abusers. Such probing, they declare, "may prevent the tragic outcome to which the syndrome of the battered child often leads." □

## Press named science adviser, busy on job

President Jimmy Carter has officially nominated MIT geophysicist Frank Press to become the next presidential science adviser, but Press has already been hard at work performing many of the duties of the job since his appointment became a subject of speculation more than a month ago (SN: 2/19/77, p. 119). The mandatory Senate confirmation hearing for Press to become the director of the White House Office of Science and Technology Policy (OSTP) has tentatively been scheduled for April 7, and in the meantime he is nominally serving as a consultant to the office.

Despite his unofficial status, Press is beginning to make his mark on OSTP. He is leading the agency to take a new look at energy matters, particularly the conflicting reports on the nation's uranium resources. (The likely availability of uranium is one of the key factors in determining the need for breeder reactors—see SN: 1/24/76, p. 58.) The office is also reportedly heavily involved in helping prepare President Carter's environmental message, expected next month.

Press has also met with the new Assistant Secretary of State for Oceans and International Environmental and Scientific

Affairs, Patsy Mink (SN: 1/8/77, p. 21), to set up a panel to review existing international agreements affecting science. Some 40 bilateral agreements will be examined, although no major shift of policy is expected. Eugene B. Skolnikoff, a science policy expert at MIT, has been asked to be a consultant for OSTP to coordinate work with the new panel.

Meanwhile, Press has been doing the rounds of meeting fellow agency heads and trying to establish rapport with the senior presidential staff members. He has, for example, attended some cabinet meetings and met with Zbigniew Brzezinski, Carter's national security adviser. No details of this meeting are available, and the perpetual question of the science adviser's role in national security affairs is expected to come up at the confirmation hearing.

Press has also met the advisory panel charged with coordinating federal science policy with the needs of state and local governments. Bert Lance, director of the Office of Management and Budget, attended the meeting and reportedly talked about how the panel could be used in setting up budget priorities for various technical programs. □

## Psychologist Atkinson to head NSF

SCIENCE NEWS learned this week that President Carter will soon nominate psychologist Richard C. Atkinson to head the National Science Foundation. Atkinson has been acting director of NSF since August 1976, when H. Guyford Stever left the foundation to become President Ford's science adviser. The President met with Atkinson last week to discuss the appointment.

Before coming to NSF in 1975, Atkinson was a professor and dean at Stanford University and headed the psychology department from 1968 to 1973. His research concerned the psychology of memory and he transformed many of the intuitive ideas about memory into a theory that could be formulated into mathematical terms. This theory serves as the basis for much current experimental research into memory and cognition and has also helped scientists understand the correlation between brain structure and psychological phenomena.

Atkinson also designed computer-aided instruction devices for use in the classroom. His work has helped optimize the learning process, and it is the basis for the design of some commercial teaching units.

He is a member of the National Academy of Sciences and has received the distinguished Research award of the Social Sciences Research Council. Atkinson is generally well respected on Capitol Hill and once his nomination is officially submitted, little problem is expected in securing Senate confirmation. □

## Supernova: Trigger for new stars?



Mosaic of photos from the Palomar Observatory Sky Survey shows an apparent supernova remnant, believed to be about 600,000 years old, in the constellation Canis Major. A group of young stars in the remnant's vicinity are also of about that age, possible observational support for the theory that expanding supernova shells trigger star formation. See p. 222.

## 20-billion-year universe

Cosmological dating can be done by making use of the radioactive decay of certain unstable elements. To date the universe, however, one needs a longer-lived decay process than the 600-year half-life of carbon-14. Some years ago Donald Clayton of Rice University suggested for cosmology the use of rhenium-187, which has a 40-billion-year half-life. To make the method possible, precise calculations of the rate of rhenium production in stars during the evolution of our galaxy were necessary. Such calculations were done at the Lawrence Livermore Laboratory, and at the time some Livermore physicists used them to calculate an age of 20 billion years for the universe (SN: 7/10/76, p. 19). Now the National Science Foundation and the University of Chicago report that two UC scientists, David N. Schramm and Kem L. Hainebach of UC's Enrico Fermi Institute, have used the same figures on rhenium production, and have arrived at a similar age estimate: 20 billion years. □