many of the old-time liberals, in the words of one, as "the most hopeful thing to happen in several generations" —an enthusiasm which the students do not uniformly reciprocate. The movement takes the form, first, of a new grouping, a loose federation of campus units known collectively as the Student Health Organizations. These SHO groups have been founded on about 50 medical campuses in the last 2 years in opposition to the Student American Medical Association (SAMA), the junior AMA to which medical students have traditionally belonged. The SHO groups are multiprofessional, including nursing and dental students as well as medical students. They began in protest not so much against SAMA's policies as against its lethargy. One medical student at Albert Einstein, where SHO has been particularly active, told *Science* that SAMA basically didn't do anything: "It had no meetings, no forums, no activities, no anything."

SHO's began as forums for discussions of controversial medical issues not usually aired in the classroom. About 40 people came to its first national meeting in 1966. By 1967, the national meeting attracted about 400 students, and its leaders estimate that about 2000 students have participated in its programs in one way or another on various campuses. Meanwhile the organizations have been shifting their focus from talk to action. Last summer a small action project was initiated in California, and this summer about 250 medical students together with some social science and social work students are at work in rural and urban slum areas in New York, Chicago, and California learning firsthand about community medicine. The programs are funded through various parts of the poverty program and sponsored by Albert Einstein, the University of Chicago, and the University of Southern California.

What the students are doing, in effect, is taking their curriculum into their own hands. Their goals are perhaps best stated by themselves:

> While medicine in this country advances by giant steps in the area of increasing scientific and technical knowledge, it plods along in extending the fruits of these benefits to all Americans. Today, comprehensive community health care is an idealistic pipe dream, compared with the realities of a stopgap system of health care which is scanty, episodic, and fragmented. A major reason for these deficiencies and inadequacies is the lack

NEWS IN BRIEF

● **ANIMAL CARE FACILITIES**: A total outlay of close to $4.5 million may be necessary for almost half the nation's 93 medical schools if they are to meet requirements placed on them by legislation for the humane treatment of laboratory animals, according to a survey conducted by the National Society for Medical Research (NSMR). NSMR led the opposition against the bill when it was before Congress last year. The legislation goes into effect 24 August. During pre-passage debate on the legislation NSMR claimed the measure would be costly to implement. Among other things the law provides standards for the housing of laboratory animals and requires research institutions to register with the Secretary of Agriculture. Whether most will be in compliance with the law when it becomes effective looks questionable in view of the NSMR survey results. Of 86 schools responding, 41 (almost 48 percent) indicated they could meet requirements without spending money. The remainder said expenses for upgrading animal housing would be their biggest problem. Twenty-five indicated they would have to spend from $2,000 to $45,000 to upgrade facilities and 20 anticipated expenditures of $50,000 upward. One school said it would need to spend $1.3 million for renovations to meet the new requirements. None of the schools were named. NSMR believes the law will also lead to higher costs for laboratory animals, expenditures for larger cages, construction of new laboratory animal facilities, increased record keeping and reporting costs, and a slowdown of some research.

● **PHYSICS AND SOCIETY**: The American Institute of Physics (AIP) has established a Committee on Physics and Society to evaluate the contributions of physics to society through a study of its role in education, industry, research, and government. John A. Wheeler, professor of physics, Princeton, will serve as chairman. Among the topics to be considered by the committee, according to the AIP announcement, are funding of physics education and research; relation between physics and technology and industry; and the "self-image and public image of physics."

● **RESEARCH ADMINISTRATORS**: A Society of Research Administrators was formed on 24 June at a meeting at the University of Massachusetts attended by 100 administrators from the United States and Canada. The society was established to promote information exchange, professional standards, and research among personnel engaged in the operation and management of research facilities. One of the organizers of the society, Ken Hartford, business manager, biology department, Yale University, was elected president.

● **RADIO TELESCOPES**: Three university consortia have recently announced plans to build major radio telescopes—in the Northeast, the Midwest, and the western regions of the United States. Two of the groups, Associates for Radio Astronomy (ARA) and the Northeast Radio Observatory Corporation (NEROC), were formed expressly for the purpose of building the telescopes. ARA has submitted a proposal to NSF for the funding of a 328-foot instrument estimated to cost $17.8 million, at Caltech's Owens Valley Observatory (*Science*, 23 June). NEROC is preparing a proposal for submission to NSF for a 440-foot steerable radio telescope, estimated to cost more than $20 million. A specific site for the Northeast observatory has not yet been selected. Jerome Wiesner, M.I.T. provost, was elected chairman of NEROC whose members include: Boston University, Brandeis, Brown, Dartmouth College, Harvard, University of Massachusetts, M.I.T., University of New Hampshire, State University of New York at Buffalo and Stony Brook, Polytechnic Institute of Brooklyn, Smithsonian Institution Astrophysical Observatory, and Yale. The third telescope has been proposed by the Committee on Institutional Cooperation, a 9-year-old consortium of Big Ten universities and the University of Chicago, which has received $101,000 from NSF for preliminary studies on a 328-foot open or 360-foot enclosed steerable radar telescope. The facility will cost an estimated $12 million and be located near the University of Illinois, at Urbana. NSF has also received applications for two arrays of smaller antennae, and one for a resurfacing of an existing antenna.