# NEWS IN BRIEF

• **HANDLER SOLE NOMINEE**: The election of Philip Handler of Duke University to the presidency of the National Academy of Sciences (NAS), seems certain although it will not be announced officially until 15 January. Handler's name was the only one that appeared on the Academy's ballot, which was mailed to its 800 members last week. Handler was nominated in mid-October, but 2 months followed during which any 50 Academy members could have nominated other candidates.

• **DARTMOUTH MED SCHOOL**: Dartmouth College, which in May announced a decision to offer a full 6-year medical program, starting in the junior year and leading to a doctor of medicine degree, has been awarded a $750,000 grant from the Commonwealth Fund for this purpose. The new medical school, which will have 53 students in its first-year class in 1969, expects to have a total enrollment of about 160 by 1973. (Dartmouth now has 96 students in its 2-year basic medical education program.) The new medical school will be operated on an 11-month basis and will offer a curriculum stressing early clinical training. Dartmouth officials told *Science* that the new medical school will require about $28 million in additional funding; $8 million will be for new facilities and about $20 million in endowments will provide the necessary additional operating expenses. For the past 54 years, Dartmouth offered only the 2-year medical program; its graduates completed their degrees elsewhere.

• **YALE AFRO-AMERICAN MAJOR**: Yale will be the first major American university to offer an Afro-American major, which would include such subjects as Negro history and literature and the political effects of violence. Yale's decision to initiate the new program followed a request last winter by many of Yale's 110 Negro undergraduates to develop an Afro-American curriculum. A student-faculty committee approved the plan after a 9-month study. Sidney Mintz, chairman of the faculty committee, told *Science* the program will be in effect next fall and that the majors will be linked to a strong disciplinary base, such as political science or history.

• **R&D SPENDING**: The nation is expected to spend about $26 billion for research and development in the United States in 1969, which represents a 3.6 percent increase over last year. A Battelle Memorial Institute report from Columbus Laboratories shows, however, that this 3.6 percent increase represents "a distinctly slower" rate of growth than in recent years. Battelle estimates that the funding by industry will be up by $725 million, or about 8.7 percent, while federal expenditures are expected to remain at the current level of about $15.6 billion. Funding by colleges, universities, and nonprofit institutions is also expected to rise by about $98 million, or 11.7 percent for universities, and $25 million, or 9.3 percent, for nonprofit institutions. Of the total expenditure, Battelle estimates that the government will spend about $15.6 billion, or about 60 percent of all R&D funds; industry about $9 billion, or about 35 percent; colleges and universities about $938 million, or about 3.6 percent; and nonprofit institutions, about $295 million, or about 1.1 percent.

• **FORDHAM NAMES NEW PRESIDENT**: Fordham University, an 11,000 student Jesuit institution in New York, has named a new president, the Rev. Michael P. Walsh, and enlarged its board of trustees to include, for the first time, laymen and non-Catholics. It is said that the composition of the university's ruling body has been changed so that the church-related university might qualify for direct financial aid from New York State and the federal government. The new enlarged board of trustees consists of 15 laymen (some five of whom are non-Catholic) and 11 Jesuits. Previously Fordham's board of trustees consisted of nine Jesuit priests.

• **NEW PUBLICATIONS**: A report of the National Institutes of Health shows that the federal government provided two-thirds, or $1.5 billion, of the $2.3-billion total funds spent for biomedical research in 1967; *Resources for Medical Research Report No. 12,* "Dollars for Medical Research, 1965–67," may be obtained for $1.25 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

after the test, maintains that the rodent population remained essentially unchanged.

Why were sheep the only animals affected? The answer seems to lie partly in the fact that sheep are more susceptible to the agent than many animals, partly in the fact that sheep had greater access to contaminated food than most animals.

Dugway scientists stated at the time of the incident that not much was known about the effects of the nerve agent on sheep. But during the course of the investigation, according to Surgeon General Steward, it was learned that sheep are "peculiarly responsive" to the nerve agent and succumb to "much lower doses" than would harm a human being, even a child. Moreover, sheep, it seems, die easily once they become sick. Robert H. Huffaker, a Public Health Service veterinarian who participated in the investigation, believes the first sheep that died may have been killed by the nerve agent, but those that died later succumbed to such secondary causes as starvation. "Sick sheep like to die," he says. "You won't find them crawling a mile to a waterhole on a broken leg."

The Army has stated that the sheep were apparently affected by eating contaminated vegetation, and feeding experiments conducted by the Agriculture Department's Poisonous Plant Research Laboratory in Logan, Utah, lend substance to this theory. When Logan scientists fed forage from the affected areas of Skull Valley to healthy sheep, the sheep showed a marked depression of cholinesterase activity (a sign of possible nerve agent exposure) and some of them developed symptoms identical to those observed in the sick Skull Valley sheep. In contrast, sheep placed in the affected areas but muzzled and fed only hay and water brought in from outside showed no signs of toxicity, though some investigators doubt it.

There was speculation early in the investigation that the sheep may have been sickened by licking contaminated snow, and since at least one laboratory has identified traces of the nerve agent in snow water, this may remain a possible source of the poison.

The toxic substance seems to have persisted in the area for at least 3 weeks after the incident, possibly longer. Logan scientists placed three different groups of normal sheep in the affected area on 19 March, 1 April