one specific purpose. Some large corporations, for instance, have more than one internal data communication network, none of which can talk to the other. The ACS network would also provide textediting and address-storage memories, so that even "dumb" terminals could be hooked up to a phone line and function as terminals for limited data processing or electronic mail.

The system looked perfect, until last year, when Bell announced that the big data network was going on hold. Ostensibly, the problem was software for the ambitious system. According to some industry observers, however, AT&T was using the technical delay to sit back and see just how hard the wind of deregulation was going to blow.

The wait was not long. On 7 April the FCC acted to reorganize the burgeoning telecommunications industry, completely deregulating the marketing of all terminal equipment—from simple telephones to the most sophisticated computing devices. At the same time, the FCC Commissioners abolished restrictions that have prevented Ma Bell from entering data processing.

The FCC took pains to protect small

terminal-equipment manufactures and data-processing companies, though many observers say the protections are too weak. By March 1982, both AT&T and General Telephone and Electronics, the nation's second largest phone company, must set up separate, "arm's length" subsidiaries to handle all nonregulated businesses. The idea is to prevent them from subsidizing new competitive, unregulated activities with revenues from basic telephone services, which remain under FCC regulation.

Critics of the decision say these arm'slength safequards are not enough. "I

Biologist Is New Head of Kennedy Institute

Thomas Joseph King, a developmental biologist who for the past 8 years has been an administrator at the National Cancer Institute, has been selected as director of the Kennedy Institute of Ethics at Georgetown University. He succeeds Andre E. Hellegers, who died suddenly in May 1979 at 52. The Dutch-born Hellegers was a man of rare erudition who more than any other individual was responsible for conceiving and establishing the institute.

King, who like his predecessor is a Catholic, has little or no training in philosophy or ethics other than what he got as an underegraduate at Jesuit-run Fordham University. However, he has extensive research and teaching experience and is regarded as a seasoned administrator, having headed the department of embryology at the Institute for Cancer Research in Philadelphia before coming to Washington in 1967, and been director for the past 6 years of the division of cancer research resources and centers at NCI. He has been familiar with the institute since its founding in 1971, when he was professor of biology at Georgetown.

King is a gracious and reserved man who is eager to learn about the new field he is about to plunge into. "I have got to learn to think in different terms," he told *Science*, admitting, "my ethics is thin." King said he accepted the job offer because he is fascinated with the diversity of ethical problems being explored at the institute, and because it offers him an opportunity to become more intimately involved with research.

The Kennedy Institute is a unique setup, divided as it is into three parts: laboratories for reproductive biology, where researchers are exploring such ethics-related matters as diagnosis of genetic disorders in utero: a center for population research, which focuses in particular on population growth in developing countries and the implications of an aging population in developed countries; and a center for bioethics.

The institution most closely comparable with the Kennedy Institute is the Institute for Society, Ethics, and the Life Sciences in Hastings-on-Hudson, New York, headed by philosopher Daniel Callahan. A major difference between the two is that the Kennedy Institute has close ties with Georgetown and is thus in a better position to have a direct impact on budding ethicists in all fields. King adds that whereas the Hastings center has groups working on interdisciplinary projects designed to cast light on specific public policy questions, the Kennedy Institute, where individual projects are allowed, operates more as a forum for identifying problems and promoting public discussion.

So far, one of the institute's major contributions has been compilation of the first comprehensive Encyclopedia



Photo by Constance Holden

of Bioethics, published in 1978. Professionals at the institute have also become an established source of advice to the federal government through its various ethics commissions and advisory boards.

The institute's unusual organization reflects the personal interest of Hellegers, a researcher as well as obstetrician and gynecologist, in reproductive biology, and that of the Kennedy family, which is particularly interested in prevention of mental retardation. King says his immediate concern will be building up the research end, which he says has been on the "back burner."

King's own ethical views are pretty down-home. "I think a lot of people are looking to ethics now to set the tone of human conduct," he says, because old codes of behavior are not covering new circumstances and people are no longer looking to religion to supply their ethical context. "We know something is missing in our interactions with one another, but we're not quite sure what it is.... A lot of people are groping for guidance."

-Constance Holden