APPOINTMENTS

Eugene B. Skolnikoff, head, political science department, Massachusetts Institute of Technology, appointed director, Center for International Studies at the institute. . . . **David B. Bates**, chairman, physiology department, McGill University, to dean of medicine, University of British Columbia. . . . **Neal L. Gault, Jr.**, chairman, medicine department, University of Hawaii, to dean, Medical School, University of Minnesota. . . . **Francis G. Brennan**, associate professor of English, St. Louis University, to dean, Graduate School at the university. . . . **Albert R. Haskell**, professor of pharmacy, University of Tennessee, to dean, College of Pharmacy, University of Nebraska. . . . **Arthur W. Brown**, president, Marygrove College, to dean, School of Arts and Sciences, Baruch College, City University of New York. . . . **Asa G. Hilliard, Jr.**, chairman of secondary education, San Francisco State College, to dean, School of Education, at the college. . . . **Robert G. Valpey**, dean, School of Engineering, California State College, Fullerton, to dean of engineering and technology, California State Polytechnic College. . . . **Keith Goldhammer**, dean, School of Education, Oregon State University, to dean, College of Education, Michigan State University. . . . **Edward E. Sampson**, visiting professor of psychology, Clark University, to chairman, sociology department at the university. . . . **Barclay Kamb**, professor of geology and geophysics, California Institute of Technology, to head, geological and planetary sciences division at the institute. . . . **James R. Chandler**, acting chairman, otolaryngology department, University of Miami School of Medicine, appointed chairman. . . . **Franklin H. Epstein**, professor of medicine, Yale University, to head, medicine department, Harvard Medical School. . . . **Emile M. Scarpelli**, associate professor of physiology, Albert Einstein College of Medicine, to chairman, physiology department, The University of Texas Medical Branch. . . . **Anne E. Coghlan**, professor of biology, Simmons College, Massachusetts, to chairman, biology department at the college. . . . **John I. Brewer**, professor of obstetrics and gynecology, Northwestern University Medical School, to chairman, ob-gyn department at the school.

RECENT DEATHS

Howard L. Alt, 71; former professor of medicine, Northwestern University; 12 February.

Theda Bennett, 48; professor of biology, State University of New York College, Buffalo; 9 February.

Harvey C. Brill, 90; professor emeritus of chemistry and former head, chemistry department, Miami University; 11 January.

Ira W. Drew, 94; osteopathic physician and board member, Philadelphia College of Osteopathic Medicine; 12 February.

Frank. J. Eichenlaub, 77; professor emeritus of dermatology, Georgetown University; 13 February.

Charles E. Farr, 96; clinical professor emeritus of surgery, Cornell Medical School; 20 February.

Frank P. Graham, 85; former president, University of North Carolina; 16 February.

Grant O. Graves, 67; chairman, anatomy department, Ohio State University; 7 February.

Albert Hartzell, 80; retired entomologist, Boyce Thompson Institute for Plant Research, New York; 7 January.

Stanley Katz, 51; professor of chemical engineering, City College, City University of New York; 19 February.

Frank Kingdon, 77; former president, University of Newark; 24 February.

Colin M. MacLeod, 63; microbiologist, director, Oklahoma Medical Research Foundation and former White House science adviser; 13 February.

Maria G. Mayer, 65; professor of physics, University of California, San Diego; 20 February.

Henry B. McDaniel, 68; professor emeritus of education and psychology, Stanford University; 20 February.

Edwin M. Miller, 83; professor emeritus of surgery, Rush Medical College, Illinois; 4 February.

RESEARCH NEWS

Cancer Virus Theories: Focus of Research Debate

The realm of the molecular genetics of cancer is populated by three elusive characters: the provirus, the oncogene, and the protovirus, each a theoretical precursor of the putative human cancer virus. There is no incontrovertible evidence that any of them exist in human cells, but the search for that evidence constitutes one of the most active areas of fundamental cancer research.

The three hypothetical agents are each meant to account for the way that the genetic information for cancer is formed and expressed in cells, and they are based on the assumption that viruses do, in fact, cause human cancer. This, too, has yet to be definitively proved. Nonetheless, an impressive corps of investigators is tenaciously pursuing these suspected cancer agents in the belief that the ultimate understanding of cancer will be found in the molecular structure of the cancer cell and the current efforts are likely to succeed in elucidating that structure.

The discovery 2 years ago of reverse transcriptase, or RNA-directed DNA polymerase, an enzyme that catalyzes the flow of genetic information from RNA→DNA in a surprising reversal of the usual DNA→RNA direction of genetic expression, brought molecular virology to the forefront of cancer research. The enzyme was discovered by Howard M. Temin and Satoshi Mizutani of the University of Wisconsin and, independently, by David Baltimore of the Massachusetts Institute of Technology (*Science*, 28 May 1971).

Because most viruses known to cause cancer in animals have an RNA core, discovery of this enzyme was of particular significance to cancer virus studies. It explained, for the first time, the mechanism by which genes in the RNA of a virus can be incorporated into the DNA of a cell, where they might func-