

at the end of June, at which it is hoped that detailed proposals will be worked out for submission to Unesco's General Conference in October. Unesco itself clearly is hoping that a close association with the topical field of human genome research will raise its profile as an international scientific organization; and that this in turn will help persuade both the United States, which left the organization at the beginning of 1985, and Britain, which followed a year later, to rejoin.

Meanwhile, the European Commission in Brussels is revising its plans for a 3-year, \$18-million research program aimed at

boosting European research into the human genome in light of a number of amendments proposed by the European Parliament. The Parliament wants the Commission to increase its support for studies of the social and ethical aspects of the research, and for public information campaigns on both its benefits and potential dangers. Despite objections from the new commissioner for research, Fillipo Pandolfi, the Parliament overwhelmingly approved virtually all of the amendments, which had earlier been passed by its energy and research committee (*Science*, 3 February, p. 599).

It is now up to the Council of Ministers,

representing the governments of the 12 member states, to decide how many of these amendments should be included in the Commission's revised program. One amendment the Commission has already said it will adopt is to change the program's name from "predictive medicine" to the apparently less-threatening title of "human genome analysis."

One specific proposal made by the European Parliament is that at least 10% of the training contracts funded under the new program should be earmarked for research workers from developing countries.

■ DAVID DICKSON

NAE Elects New Members

The National Academy of Engineering has elected 90 new members and 7 foreign associates. This brings the U.S. total membership to 1484 and the foreign associates total to 122. The new members are:

Charles A. Amann, General Motors Research Laboratories, Warren, MI; **Stig A. Annestrand**, Battelle Pacific Northwest Laboratories, Portland, OR; **Frank F. Aplan**, Pennsylvania State University, University Park; **David H. Archer**, Westinghouse Electric Corp., Pittsburgh, PA; **Ali S. Argon**, Massachusetts Institute of Technology; **David H. Auston**, Columbia University; **Robert G. Bea**, PMB Systems Engineering Inc., San Francisco; **George A. Bekey**, University of Southern California; **John A. Betti**, Ford Motor Co., Dearborn, MI; **John R. Beyster**, Science Applications International Corp., San Diego; **Joel S. Birnbaum**, Hewlett-Packard Laboratories, Palo Alto; **Geoffrey Boothroyd**, University of Rhode Island, Kingston; **James J. Carberry**, University of Notre Dame; **Robert P. Caren**, Lockheed Corp., Calabasas, CA; **John R. Casani**, Jet Propulsion Laboratory, Pasadena; **Rodney J. Clifton**, Brown University; **Lynn A. Conway**, University of Michigan, Ann Arbor; **Richard W. Damon**, consultant, Concord, MA; **Stephen W. Director**, Carnegie Mellon University; **Frederick J. Doyle**, U.S. Geological Survey, Reston, VA; **Edsel D. Dunford**, TRW Space and Defense, Redondo Beach, CA; **Russell D. Dupuis**, AT&T Bell Laboratories, Murray Hill, NJ.

Robert J. Eaton, General Motors Corp.; **Charles Elachi**, Jet Propulsion Laboratory; **Thomas V. Falkie**, Berwind Natural Resource Co., Philadelphia; **Frank F. Fang**, IBM Thomas J. Watson Research Center, Yorktown Heights, NY; **Robert E. Fischell**, The Johns Hopkins University; **Robert C. Forney**, E. I. du Pont de Nemours & Co., Wilmington, DE; **Harold K. Forsen**, Bechtel National Inc., San Francisco; **Elsa Garmire**, University of Southern California; **David B. Geselowitz**, Pennsylvania State University; **Jerome B. Gilbert**, East Bay Municipal Utility District, Oakland, CA; **Alan J. Goldman**, The Johns Hopkins University; **Werner Goldsmith**, University of California, Berkeley; **H. J. Gruy**, Gruy Engineering Corp., Houston, TX; **Keith E. Gubbins**, Cornell University; **Carl W. Hall**, National Science Foundation; **Juris Hartmanis**, Cornell University; **Michael Hatzakis**, IBM Thomas J. Watson Research Center; **Donald P. Hearsh**, University of Colorado, Boulder; **L. Louis Hegedus**, W. R. Grace & Co., Columbia, MD; **Robert J. Hermann**, United Technologies Corp., Hartford, CT; **George R. Hill**, University of Utah, Salt Lake City; **Lester A. Hoel**, University of Virginia, Charlottesville; **John E. Hopcroft**, Cornell University.

I. M. Idriss, Woodward Clyde Consultants, Oakland, CA; **Gunter F. Joklik**, BP Minerals America, Salt Lake City; **Willem J. Kolff**, University of Utah; **Edward J. Kramer**, Cornell University; **John D. C. Little**, Massachusetts Institute of Technology; **Daniel P. Loucks**, Cornell University; **Robert F. Mast**, ABAM Engineers Inc., Federal Way, WA; **Shiro Matsuoka**, AT&T Bell Labora-

tories; **Frank W. McBee, Jr.**, Tracor, Inc., Austin, TX; **John C. McDonald**, Contel Corp., New York City; **Marvin L. Minsky**, Massachusetts Institute of Technology; **James W. Mitchell**, AT&T Bell Laboratories; **Richard K. Moore**, University of Kansas Center for Research, Inc., Lawrence; **Arun N. Netravali**, AT&T Bell Laboratories; **John N. Newman**, Massachusetts Institute of Technology; **Robert E. Newnham**, Pennsylvania State University; **Ronald P. Nordgren**, Shell Development Co., Houston, TX; **Charles R. O'Melia**, The Johns Hopkins University; **Clarkson H. Oglesby**, Stanford University; **Robert H. Rediker**, Massachusetts Institute of Technology; **Ronald A. Rohrer**, Carnegie Mellon University; **Elbert L. Rutan**, Scaled Composites Inc., Mojave, CA.

Harold N. Scherer, Jr., American Electric Power Service Corp., Columbus, OH; **Alan Schriesheim**, Argonne National Laboratory; **Frank J. Schuh**, Drilling Technology, Inc., Plano, TX; **Laurence C. Seifert**, AT&T, Berkeley Heights, NJ; **Michael L. Shuler**, Cornell University; **A. M. O. Smith**, consultant, San Marino, CA; **Henry I. Smith**, Massachusetts Institute of Technology; **James J. Solberg**, Purdue University; **Richard G. Strauch**, Wave Propagation Laboratory, Boulder, CO; **Al F. Tasch, Jr.**, University of Texas, Austin; **Larry F. Thompson**, AT&T Bell Laboratories; **Philip A. Thompson**, Rensselaer Polytechnic Institute; **Charles E. Till**, Argonne National Laboratory; **Jeffrey D. Ullman**, Stanford University; **Jan van Schilfgaarde**, U.S. Department of Agriculture, Fort Collins, CO; **Kuo-king Wang**, Cornell University; **William J. Ward, III**, GE Corporate Research and Development Center, Schenectady; **James E. White**, Colorado School of Mines, Golden; **Robert M. White**, Control Data Corp., Minneapolis; **Paul A. Witherspoon, Jr.**, University of California, Berkeley; **Jerry M. Woodall**, IBM Thomas J. Watson Research Center; **Israel J. Wygnanski**, University of Arizona, Tucson; **Tobey A. Yu**, Orba Corp., Mountain Lakes, NJ.

The new foreign associates are:

Henrik Ager-Hanssen, Den Norske Stats Oljeselskap AS (STA-OIL), Stavanger, Norway; **Umberto Colombo**, Italian National Commission for Nuclear and Alternative Sources, Rome; **Konstantin Vasilevich Frolov**, Mechanical Engineering Research Institute, Moscow, U.S.S.R.; **Hans List**, AVL Gesellschaft für Verbrennungskraftmaschinen und Mess Technik MbH., Graz, Austria; **Roddam Narasimha**, National Aeronautical Laboratory of India, Bangalore; **Fernando Vasco Costa**, Harbour Works, Lisbon, Portugal; **Moshe Zakai**, faculty of electrical engineering, Haifa, Israel.