operating within the PHS and transform them into a single unit devoted to the study of such growing environmental problems as air and water pollution, the protection of the food and milk supply, and occupational and radiological hazards to health. As originally pictured, the center would have cost around $60 million and would have employed between 4000 and 5000 people.

Since the center was first proposed, however, Congress has been hostile to the PHS's contention that it had to be located in the Washington area. The PHS position was based chiefly on the argument that the new unit would have to work closely with other government agencies involved in environmental studies—the Food and Drug Administration, the Atomic Energy Commission, and several others. The PHS, supported by the conclusions of two separate advisory panels, argued that the necessary administrative liaison would be possible only if the center were in Washington, and it also alleged that Washington's cultural and scientific superiority would help attract top-flight personnel to the new installation.

Congressional Hostility

Congress reacted to these arguments by belittling them, but mixed in with genuine disagreement that the Capitol is a scientific mecca were a host of political factors. Many representatives wanted the environmental health center for their own districts. But even those who had scant hope for themselves were sympathetic to the grumblings of their colleagues that "the East" was getting a disproportionate share of the government's research funds and that the center should be placed outside the Boston-Washington corridor.

The PHS fought its opponents doggedly for 3 years. As time passed, however, and the agency still failed to come up with a specific proposal for a Washington site, another charge—bureaucratic muddleheadedness—was also brought against it. Within the executive branch formerly submerged doubts began to surface, and Kennedy, who had specifically asked congressional approval of a Washington site in his 1963 health message, let it be known that he was casting a more favorable eye on the energetic representations of his friend Governor Terry Sanford of North Carolina.

It was Congress, finally, that put an end to the struggle last fall by authorizing construction of the health center but stipulating that it be located more than 50 miles from Washington, D.C. The unusual proviso grew out of a difference between the House Appropriations Committee, which had disallowed the request altogether, and the Senate Committee, which had finally approved the PHS-favored site in Beltsville, Maryland.

The prohibition of a Washington site had two consequences: it reopened the entire site question and reactivated the occasionally flagging lobbyists from several states; and it forced the PHS to redefine and modify its conception of the center. The PHS established a site selection group that studied 41 potential locations, weighing them against several criteria. The most important, according to a PHS spokesman, were proximity to academic resources, the availability of at least 400 contiguous acres, existence of a community that would be attractive to the type of scientific and technical personnel the center would need to attract, and sufficient proximity to Washington for round-trip visits to be made easily in a single day.

Using these criteria, the PHS selection committee arrived at a decision happily compatible with the political omens—North Carolina. The major portion of the new facility—and the one that bears the closest likeness to original proposals for the center—will be located on land donated by the state in its Research Triangle, an industrial complex bounded by the University of North Carolina, North Carolina State College, and Duke University.

The new facility will be known as the National Center for Environmental Sciences and will conduct basic research on a variety of environmental health problems. Partly because of its distance from Washington, however, and partly because of the general attrition that accompanied 4 years of disagreement, the center will be on not nearly so grand a scale as was originally planned. Instead of the 5000 people proposed in 1961 or the 1600 proposed as recently as 5 months ago, the new center will house about 1000 people, chiefly in research. Administrative and supporting work will continue to be done in Washington. Costs have been similarly scaled down, with the present estimate at about $25 million.

About the remaining components of last week's compromise so little is known—even within the Public Health Service—that the suspicion is great that they were last-minute brainstorms, with more than a little political overtone. The simplest is the plan for Ohio, which consists solely of proposed construction of a new building to house the functions of the Taft Sanitary Engineering Center, some of which are now scattered about the city of Cincinnati. The Public Health Service will try to encourage the distinction between applied research, which will continue to be done in Ohio, and basic research, which will be the function of the new unit in North Carolina.

The most unexpected feature of the PHS's plans is its intention to build a small, highly specialized research facility in West Virginia. West Virginia is part of the area known as Appalachia, which has been the object of great government solicitousness in recent years, and PHS officials say their plans are part of a general government campaign to "do all we can" for the troubled region. (They neglected to say that it is also the home of Democratic Senator Robert Byrd, a key member of the Senate Appropriations Committee, who was long one of the most determined opponents of the agency's plans to locate the health center in Washington.) The West Virginia center will consist of "upwards of 200 persons" who will devote themselves to environmental health problems that stem from the particular industrial character and economic and social condition of the area." These problems, Secretary of Health, Education, and Welfare Anthony Celebrezze said last week, "include acid mine drainage, resulting in water pollution, and the burning of waste piles, resulting in air pollution, and occupational diseases associated with the mining industry." As of now, the specific site has not been chosen, and it is not yet known when funds for either the Ohio or the Appalachian facility will be requested.—ELINOR LANGER

Announcements

The National Science Foundation has announced opportunities for U.S. scientists to participate in the Antarctic expeditions of foreign countries as exchange scientists from the **U.S. Antarctic Research Program**. Nations with Antarctic programs are Argentina, Australia, Chile, France, New Zealand, the Republic of South Africa, the United Kingdom, and the U.S.S.R. Fields of research include atmospheric physics,

biology, geology, glaciology, meteorology, and the marine sciences. Research programs may be planned for a 4- to 6-month austral summer, or for a 14-month period, including the Antarctic winter of 1966. Salary and expenses for travel and equipment will be included in a grant to the investigator's institution. Deadline for applications: *1 March*. Scientists should transmit an outline of their proposed program with a specific foreign expedition to: Office of Antarctic Programs, NSF, Washington, D.C. 20550.

The National Center for Atmospheric Research (NCAR) in Boulder, Colorado, has established an aviation facility to provide aviation services for **atmospheric research**. The facility will employ light planes, and high-performance aircraft of governmental agencies. A permanent staff of engineers and flight personnel will enable the NCAR facility to be capable of instrumentation development, evaluation, and aircraft installation, in addition to operating aircraft for scientific projects. Instrumentation and recording equipment will also be made available to scientific groups operating their own aircraft.

As one of the facility's service functions, a quarterly, *Scientific Aviation Newsletter*, containing general articles is being published. Further information is available from John W. Hinkleman, Jr., manager of the Aviation Facility at NCAR.

Proposals on general **hydromechanics research** are being invited by the Bureau of Ships for the fiscal year starting 1 July 1965. Support for the program is administered by the David Taylor Model Basin, near Washington, D.C. Areas of interest are: resistance, propulsion, stability, control, seakeeping characteristics, radiation of underwater sound, and hydromechanics problems applicable to surface and subsurface Navy craft. Deadline for submission of proposals: *15 March*. (Stuart F. Crump, Contract Research Administrator, David Taylor Model Basin, Attention: Code 513, Washington, D.C.)

Grants, Fellowships, and Awards

The **Society of Biological Psychiatry** has announced three annual awards for research papers of first, second, and third place, in the amounts of $500, $250, and $100, respectively. Application is open to psychiatric investigators; membership in the society is not required. Deadline for submission, in triplicate: *1 March*. (Harold E. Himwich, Chairman, Committee on Research Awards, Society of Biological Psychiatry, Galesburg State Research Hospital, Galesburg, Illinois 61401)

The American Chemical Society's division of **history of chemistry** has announced the opening of nominations for the 1965 Dexter Award. The award consists of a plaque and a $1000 honorarium. It is made on the basis of "services which have advanced the history of chemistry in any of the following ways: by publication of an important book or article; by the furtherance of the teaching of the history of chemistry; by significant contributions to the bibliography of the history of chemistry; or by meritorious services over a long period of time which have resulted in the advancement of the history of chemistry." Deadline for nominations, in duplicate: *10 March*. (Sidney M. Edelstein, Secretary, Division of History of Chemistry, ACS, Dexter Chemical Corp., 845 Edgewater Road, Bronx, New York 10474)

Postdoctoral fellowships in **experimental marine biology** are available at the Institute of Marine Science, University of Miami, Florida. They are financed by the Heart Institute of the National Institutes of Health. Stipends are $5000, plus a $500 dependency allowance for each child. Deadline for applications: *15 March*. (Charles E. Lane, Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Miami 33149)

Assistantships, fellowships, and National Science Foundation cooperative and summer fellowships for the 1965–66 academic year are available in **forestry** at the State University of New York, College of Forestry, Syracuse University. Assistantships carry a stipend of about $2400; research fellowship stipends vary from $2350 to $3200. Research fellowships are in the general fields of cellulose, wood, and polymer chemistry; plant biochemistry; pulp and paper technology; the physics, technology, and utilization of wood; and forest and wood pathology. Deadline for all applications: *1 March*. (Associate Dean for Graduate Studies, State University College of Forestry at Syracuse University, Syracuse 13210)

The American Museum of Natural History, New York City, has announced the availability of two Ogden Mills research fellowships for the 1965–66 year. Preference will be given to anthropologists in the early postdoctoral years; there are no other rigid requirements for application. Appointments carry a grant of $5000, together with dependency allowances. Applications, accompanied by three letters of recommendation, should include a description of research aims, and the proposed program for the fellowship year. Deadline for applications: *15 February*. (Harry L. Shapiro, Department of Anthropology, The American Museum of Natural History, New York City 10024)

Meeting Notes

The 17th annual science conference to be held under the auspices of the **Pakistan Association for the Advancement of Science** is scheduled 12–17 February, in Karachi. Topics scheduled to be included are land drainage and land reclamation; flood control; ground water development and its use for land reclamation; exploration of minerals; marine biology; organization of industrial research; and beneficiation of low grade ores and extractive metallurgy. (Niaz Ahmad, Secretary General, Pakistan Association for the Advancement of Science, University of Karachi, Karachi)

The 19th annual symposium on **fundamental cancer research** will be devoted to "developmental and metabolic control mechanisms and neoplasia." The meeting is scheduled 4–6 March at the University of Texas, Houston. Topics of discussion will include biosynthesis and control mechanisms, molecular basis of early development, molecular basis of later development and control, and comparative studies on control mechanisms in normal and neoplastic tissues. (D. N. Ward, Department of Biochemistry, University of Texas, Houston 25)

Wesleyan University and the Commission on Undergraduate Education in the Biological Sciences (CUEBS) will sponsor a conference on **historical and conceptual perspectives on the gene**, 14 June to 3 July. The conference will be financed by the National Science Foundation, and is designed for teachers of genetics. Reg-

istration is open to college and university professors teaching genetics, introductory biology, or the history or philosophy of science. Participation will be limited to 20; each participant will receive a living allowance of $140, plus a travel allowance. Deadline for applications: *5 March*. (Earl D. Hanson, Conference Director, Shanklin Laboratory, Wesleyan University, Middletown, Connecticut 06457)

Courses

A summer institue on **fundamental radiation shielding problems** is scheduled 21 June through 16 July at Manhattan, Kansas. It will be cosponsored by the Department of Defense's Office of Civil Defense, the American Nuclear Society's shielding division, the National Academy of Sciences' subcommittee on radiation shielding, and the American Society of Civil Engineers in cooperation with the department of nuclear engineering at Kansas State University. Participation is open to persons in nuclear engineering, applied physics, and applied mathematics. The course will concentrate on basic theory of gamma photon penetrations, and emphasize applications relating to protection from fallout radiation; also, initial radiation problems involving gamma and neutron penetrations will be discussed. Participants should be familiar with FORTRAN language, and the Boltzmann transport equation. There will be no fee or charge for the program unless graduate credit is desired (K.S.U. fee for course graduate credit is $52). Faculty participants will receive $125 per week for expenses, plus a travel allowance. Industry participants will be considered on a space available basis. Deadline for applications: *15 March*. (William R. Kimel, Head, Department of Nuclear Engineering, Kansas State University, Manhattan 66504)

The Georgia Institute of Technology will be the host for the 1965 **protective relaying** conference, 6–7 May at Atlanta. It will be sponsored by the Engineering Experiment Station and the School of Electrical Engineering, and will be conducted by the Department of Continuing Education. Advances in the field of protection of heavy electrical equipment and devices will be discussed. The course fee will be $10. (Department of Continuing Education, Georgia Institute of Technology, Atlanta)

The University of Maryland will conduct an **information sciences** institute, 21 June to 1 July. The institute, sponsored by the university's Computer Science Center, will consist of two seminars: "Image Processing" (21–25 June) will discuss image evaluation, encoding and approximation; optical, electro-optical and digital image processing techniques; physiological and psychological models for image processing and perception; and image processing for pattern recognition. "Pattern Recognition" (28 June to 1 July) will cover recognition decision theory; trainable and self-organizing systems; heuristics; and neural and brain models for pattern recognition. Registration will be limited to 150. Tuition for the entire institute is $250; for seminar 1, $150; for seminar 2, $130. (Clive C. Veri, Coordinator, Division of Conferences and Institutes, University of Maryland, College Park 20742)

An advanced course in "quantitative cyto- and histochemistry in **exfoliative cytology**" will be taught at the University of Chicago, 29 March to 24 April. It will be supported by a grant from the Illinois division, American Cancer Society. Enrollment will be limited to 30. (University of Chicago, Center for Continuing Education, 130 E. 60 St., Chicago)

New Journals

The National Institute of Arthritis and Metabolic Diseases (NIAMD) has announced the publication of a monthly journal, **Arthritis and Rheumatic Diseases Abstracts**. It contains abstracts of current world literature on arthritis and rheumatic disease, and includes over 250 abstracts dealing with clinical and fundamental aspects of the disorders, as well as with social and epidemiological factors. Subscriptions to the journal are available to qualified investigators and practitioners, free of charge. (*Arthritis and Rheumatic Diseases Abstracts*, vol. 1, No. 1, 64 pp., Nov. '64, Abstracts No. 1–271, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Maryland 20014)

The **American Journal of Hygiene** has announced that with its January issue, its name will be changed to the *American Journal of Epidemiology*. The change is intended to represent a shift in emphasis, rather than a reorientation of the journal. Papers which are epidemiologic in character, as well as laboratory studies with epidemiologic implications, will continue to be accepted. In addition, however, studies of the epidemiology of noninfectious conditions are being solicited. (N. Nathanson, Managing Editor, *The American Journal of Epidemiology*, 615 N. Wolfe Street, Baltimore, Maryland 21205)

Recent Deaths

Philip J. Clark, 44; professor of zoology at Michigan State University; 24 December.

Edward Oliver Essig, 80; professor in the department of entomology and parasitology, University of California, Berkeley; 23 November.

Arthur A. Hall, 83; former professor of electrical engineering at the West Virginia University College of Engineering; 13 December.

William F. Hamilton, 71; emeritus professor of physiology at the Medical College of Georgia; 18 December.

Paul H. Hoch, 62; New York State Commissioner of Mental Hygiene and professor of clinical psychiatry at the College of Physicians and Surgeons, Columbia University; 15 December.

Anton Alexander Benedetti-Pichler, 70; retired professor of chemistry at Queens College; 10 December.

H. Horton Sheldon, 71; chairman of the department of physics, Roosevelt University; 23 December.

S. Town Stephenson, 54; academic vice president and former dean of the faculty, Washington State University; 15 December.

Horace M. Trent, 56; head of the applied mathematics staff at the U.S. Naval Research Laboratory, and former professor of physics, magnetism, acoustics, and electronics at Mississippi A&M and Mississippi State colleges; 17 December.

Leopold Weil, 58; protein chemist with the Eastern Utilization Research and Development Division, Agricultural Research Service, U.S. Department of Agriculture; 7 December.

Edwin Bidwell Wilson, 85; retired professor emeritus of vital statistics at the Harvard School of Public Health; 28 December.

Harold Edward Wise, 62; associate dean and deputy research administrator, University of Nebraska, and 1963 vice president of AAAS and chairman of the AAAS education section; 28 November.