

The instrument's mirror is now being completed by a specialist of the Paris Observatory. According to the press, the mirror was originally cast at the beginning of World II and secretly taken to Saint-Michel to keep it out of the hands of the Germans. It was returned to Paris in 1952 to be completed. It weighs 1½ tons.

The special dome, the sixth at the Haute-Provence Observatory, will be equipped with eight suction devices that are expected to make possible better photographs by eliminating unnecessary air movements within the dome. Other equipment includes a 16½-foot spectro-scope and an electronic camera.

The installation of the telescope will take only a few weeks; however, the mirror will not be ready before October. Since the final adjustments will also take a few more months, the telescope is not expected to be in full operation until the beginning of 1958. It will be used under the direction of Charles Fehrenbach, science professor at the University of Marseille, and director of both the Marseille and Haute-Provence Observatories.

Missouri Medical Center

The University of Missouri has dedicated its \$13,600,000 Medical Center. In addition to the 441-bed teaching hospital, the center includes a Medical Science Building and a nurses home. The new facility makes possible a 4-year medical course for the first time since 1910.

Antibodies

U.S. Public Health Service scientists have reported the first direct measurement of the rate at which the tissues of a human being manufacture antibodies against disease. They made their observations by transplanting from one person to another the lymph node system involved in producing antibodies.

The research patient, a 64-year old woman, was selected for the study because she had the rare disease hypogammaglobulinemia. This disease offers an ideal opportunity for studying the mechanisms of immunity, because (i) the lack of antibodies characteristic of this condition enables measurements of production, once a system for manufacturing them has been "installed"; (ii) patients with hypogammaglobulinemia will tolerate transplants that would deteriorate in a few days in normal people; (iii) transplantation of the lymph node system is theoretically beneficial to the patient.

The studies were conducted by C. M. Martin and N. B. McCullough of the

National Institute of Allergy and Infectious Diseases, in cooperation with J. B. Waite of the National Cancer Institute. Their results appear in the current issue of the *Journal of Clinical Investigation*.

In June 1955 the transplantation was undertaken. The surgeons made eight incisions in each thigh. In a concurrent operation on the patient's sister, they obtained 16 lymph nodes and planted a slice of node in each incision. The other eight slices were preserved for comparison studies.

On the 7th, 14th, and 20th days after transplantation, the patient was challenged with injections of typhoid vaccine. She responded by making typhoid H and O antibodies. The transplanted nodes were performing the function her own system had lacked—that of producing antibodies against disease. She had further responses to booster doses of vaccine on the 68th and 98th days. Presumably the death of the nodes occurred between the 150th and 160th days. A sensitivity to tuberculin antigen acquired from the donor remained months after the transplants apparently ceased functioning.

Applying statistical methods to observed levels of antibodies and dividing by the weight of the transplanted tissue (845 milligrams) the research team obtained a series of values for each day that represent the first direct measurement in a human being of the rate at which tissue manufactures a protein (in this case antibodies) in the blood.

The findings suggest that human lymphoid tissue normally responds with remarkable speed, versatility, and production capacity to a challenge from an invading organism and can "tailor make" antibodies of different patterns to meet different challenges just as quickly as other tissues are turning out unvarying products such as enzymes and hormones.

Kimble Award Nominations

Nominations for the sixth Kimble methodology research award may be sent to the Conference of State and Provincial Public Health Laboratory Directors until 1 June. This award, established by the Kimble Glass Company, consists of \$1000 and a silver plaque. It will be presented at the annual meeting of the conference to be held in Cleveland, Ohio, in November.

Candidates' work to be considered for nomination should be either (i) a fundamental contribution that serves as a baseline for development of diagnostic methods that fall within the province of the public health laboratory, or (ii) the adaptation of a fundamental contribution to make it of use in a diagnostic laboratory. Candidates must be from the

United States, its territories, or Canada.

Nominations may be made by authors, their associates, or others. A nomination should be accompanied by a statement justifying the recommendation, six summaries of the work, and six reprints. If reprints are not available, six summaries with bibliography will be accepted.

Nominations may consist of a group of workers or one author. If the former, the cash award will be divided among the workers but the plaque accompanying the cash award will become the property of the laboratory where the work is done. Nominations should be sent to the chairman of the nominating committee, Howard L. Bodily, State Department of Public Health, Division of Laboratories, 2151 Berkeley Way, Berkeley 4, Calif.

Improving Advanced Undergraduate Courses in the Biological Sciences

An idea for redesigning college courses and textbooks in the biosciences to meet the criticism that courses are not keeping pace with fundamental advances in their fields is being tested by the Committee on Educational Policies of the Biology Council, Division of Biology and Agriculture, National Academy of Sciences—National Research Council. The plan is to ask an *ad hoc* panel of competent people in a given field to redefine course objectives and develop a comprehensive outline, to be published for the guidance of instructors and authors. The panel would produce only the single report, for the aim is not to replace one orthodoxy by another but to initiate what could become a continuing process of cooperative reevaluation of courses.

Aided by a National Science Foundation grant, the committee is testing the plan in two areas. If trial indicates the approach is sound, the committee hopes that professional societies and others concerned with particular subjects will be encouraged to sponsor similar critical studies of college courses.

The test fields are parasitism and systematic botany. Members for both panels were selected on the basis of suggestions from a number of sources, including the American Society of Parasitologists and the American Society of Plant Taxonomists. Reports, which are due by July, will be published in journals or by the Academy—Research Council. Both panels will appreciate suggestions and ideas on the form and content of undergraduate courses in their subjects.

Members of the *ad hoc* panel on systematic botany courses are Lincoln Constance (University of California, Berkeley), chairman, Harlan Lewis (University of California, Los Angeles), Reed

Rollins (Harvard University), Robert Thorne (State University of Iowa), W. Herbert Wagner, Jr. (University of Michigan). The parasitism panel includes: Clay G. Huff (Naval Medical Research Institute), *chairman*, L. O. Nolf (State University of Iowa), Richard J. Porter (University of Michigan), Clark P. Read (Johns Hopkins University), A. Glenn Richards (Minnesota), A. J. Riker (University of Wisconsin), and Leslie A. Stauber (Rutgers University).

Harvard Postdoctoral Dental Program

Harvard University, starting in September 1957, will launch a new program in dental medicine intended to prepare young dental graduates for careers in academic dentistry. The 5-year postdoctoral study program, made possible through a grant of \$162,000 from the Public Health Service, will be carried on within the Harvard School of Dental Medicine.

The new program will be under the immediate direction of Reidar F. Sognaes, associate dean of the school, and will be carried on in collaboration with the basic science department of the Harvard Medical School and the affiliated clinics at the Forsyth Dental Infirmary for Children, Children's Hospital, and the Massachusetts General Hospital. Three postdoctoral students will be admitted to the program in the first year, with three additional students added each year for the first 3 years. For the present, the program will be limited to a total of nine students.

Coffinite in New Zealand

Coffinite, a highly radioactive uranium mineral, has been found in rocks of the Buller Gorge region of the South Island of New Zealand, J. J. Reed and G. G. Claridge of New Zealand have reported. The mineral, first discovered in 1955 on the Colorado Plateau in the United States, has also been made in the laboratory. Coffinite is a uranous silicate with the chemical formula $USiO_4$; it contains as much as 61 percent uranium. Highest amounts of uranium in minerals are found in the uraninites, which have about 85 percent.

University of Wisconsin-Milwaukee

The University of Wisconsin-Milwaukee was created by merger of the former Milwaukee Center of the University of Wisconsin and the Wisconsin State College, Milwaukee. Now in its

first year of operation, it is a 4-year, degree-granting autonomous unit of the University of Wisconsin that is under the control of the University Board of Regents.

This new section of the university is composed of a College of Letters and Science, a School of Education, a Division of Commerce, a Division of Engineering, and a Division of Pharmacy. A 1-year program in home economics completes the programs currently available. Graduate work leading to a masters degree is available in education, social work, engineering, commerce, and some areas in letters and science.

Joseph G. Baier, professor of zoology, has been named dean of the College of Letters and Science. Eldon D. Warner, associate professor of zoology, is chairman of the zoology department, and other appointments are as follows: Ray U. Brumblay, associate professor and chairman of the chemistry department; Ruth I. Walker, professor and chairman of the botany department; T. Alton Rouse, professor and chairman of the physics department; and Harvey Uber, professor and chairman of the geography department.

Zoological Nomenclature

The International Commission on Zoological Nomenclature has announced that beginning 29 Sept. it will start voting on the following cases involving the possible use of its plenary powers for the purposes specified. Full details were published in the 29 Mar. issue of the *Bulletin of Zoological Nomenclature* (vol. 13, Double-Part 2/3 and Part 4): (i) VIVIPARIDAE Gray (J.E.), 1847, validation and counter-proposal for suppression of *Viviparus* Montfort, 1810 (Cl. Gastropoda); (ii) *mississippiensis* (emend. of *mississippiensis*), validation of, as specific name for North American Alligator (Cl. Reptilia); (iii) MUNTIDAE Pocock, 1923, and ODOBENIDAE Allen (J.A.), 1880, validation of for the Barking Deer and Walrus, respectively (Cl. Mammalia); (iv) *Dicthyoploca* Jordan, 1911, validation (Cl. Insecta, Order Lepidoptera); (v) *Staphylinus* Linnaeus, 1758, designation of *Staphylinus erythropterus* (emend. of *erythropterus*) Linnaeus, 1758, as type species of (Cl. Insecta, Order Coleoptera); (vi) *Anopheles* Meigen, 1818, designation of type species for (Cl. Insecta, Order Diptera); (vii) *picta* Walckenaer, 1802 (*Aranea*) and *Theridium* (emend. of *Theridion*) Walckenaer, 1805, validation (Cl. Arachnida); (viii) *Vespertilio murinus* Linnaeus, 1758, type species of *Vespertilio* Linnaeus, 1758, clarification of interpretation of (Cl. Mammalia); (ix) *Toxo-*

rhynchites Theobald, July 1901, validation (Cl. Insecta, Order Diptera); (x) *truncatula* Bruguière [1792] (*Bulla*), interpretation of and *umbilicata* Montagu, 1803 (*Bulla*) validation (Cl. Gastropoda). Comments should be sent as soon as possible and in duplicate to the Secretary of the Commission, Francis Hemming, 28 Park Village East, Regent's Park, London, N.W.1.

Proposed Legislation

Of the many bills introduced in Congress, some have a special relevance to science and education. A list of such bills introduced recently follows:

S 889. Authorize a 4-year program of federal assistance to states and communities to enable them to increase public elementary- and secondary-school construction. Smith (R N.J.), *et al.* Senate Labor and Public Welfare.

S 1021. Amend National Science Foundation Act to authorize award of certain scholarships. Pastore (D R.I.) Senate Labor and Public Welfare.

H J Res 200. Establish an international university. Burdick (R N.D.) House Foreign Affairs.

HR 4014. Protect public health by amending the Federal Food, Drug, and Cosmetic Act to provide for safety of chemical additives in food. Delaney (D N.Y.) House Interstate and Foreign Commerce.

HR 4015. Protect the public health by amending Federal Food, Drug, and Cosmetic Act to provide for safety of chemicals in cosmetics. Delaney (D N.Y.) House Interstate and Foreign Commerce.

HR 4134. Encourage prevention of air and water pollution by allowing cost of treatment works for abatement of air and stream pollution to be amortized at an accelerated rate for income-tax purposes. Simpson (R. Pa.) House Ways and Means.

HR 4139. Authorize and request President to undertake to mobilize in U.S. an adequate number of outstanding experts, coordinate and utilize their services in an endeavor to discover means of curing and preventing cancer. Staggers (D W.Va.) House Interstate and Foreign Commerce.

HR 4211. Provide for further research and technical assistance required for control of mosquitoes and other arthropods capable of adversely affecting health and welfare of man. Magnuson (D Wash.) House Interstate and Foreign Commerce.

HR 4217. Amend further the Federal Civil Defense Act of 1950, as amended, to authorize Federal Civil Defense Administration to procure radiological instruments and detection devices. Ostrag (R N.Y.) House Armed Services.

S J Res 48. Provide for training of