tor of the new program and Extension Teaching and Field Service Bureau associate professor, will visit high schools within 200 miles of Austin to confer individually with teachers on methods of improving laboratory instruction, sources, and use of materials. They will also aid in organizing science clubs, fairs, and other programs designed to encourage science students. Finally, they will participate in in-service training programs for teachers and address professional meetings.

Grants, Fellowships, and Awards

■ The American Heart Association has awarded grants-in-aid totaling $1,042,817 to 180 scientists engaged in research in this country and in three foreign countries in the field of cardiovascular diseases. These funds come from contributions by the public to the Heart Fund campaign conducted each February.

Almost every known field of biological investigation is represented in the list of projects. Many fall into the category of basic research, with a number of investigations concerned with tracing the metabolic pathways of heart muscle. The grants also provide for an intensive inquiry into the nature of atherosclerosis, including studies of substances found in the blood which under normal conditions appear to "clear" it of fats after a heavy meal, and of the effects of hormones on the fat content of the blood.

In addition, there are studies of enzymes that may serve as the body's mechanism for breaking up blood clots, studies of the use of anticlotting drugs in the long-term treatment of coronary artery disease, studies of the circulation and functioning of the kidney, and studies of the influence of the nervous system in setting up a chronic constriction of the smallest arteries. A number of investigations are in the field of rheumatic fever, and some of them will seek to explain why a streptococcal infection leads to rheumatic fever in some individuals but not in others. Further, some projects are seeking to improve existing surgical procedures and to develop new ones, procedures, for example, for operating on the heart in a "dry field" using heart-lung machines or lowered body temperatures. Experimental studies in blood vessel grafts to replace diseased arteries are also receiving support.

■ The American Dermatological Association is again offering a series of awards for the best essays submitted for original work, not previously published, relative to some fundamental aspect of dermatology or syphilology. The cash awards will range from $500 to $200. Essays will be judged on the basis of originality of ideas, potential importance of work, experimental methods and use of controls, evaluation of results, and clarity of presentation. For information write to J. Lamar Callaway, Secretary, American Dermatological Association, Duke Hospital, Durham, N.C.

■ Nine grants, totaling $367,182, to conduct research and demonstrations in the field of hospital service and administration have been announced by the U.S. Public Health Service. Aimed at finding ways to improve the care of patients in hospitals and health facilities, reduce costs, and help make the benefits of hospital and health services more widely available, this research is part of the Hospital Survey and Construction (Hill-Burton) Program.

■ The Rockefeller Foundation has awarded a grant of $105,000 to the Boyce Thompson Institute for Plant Research to be spent over a 5-year period. The money will be used to support the work of Lawrence P. Miller, Robert G. Owens, and S. E. A. McCallan on mechanisms of fungicide action. The investigation will include the use of radioisotopes to study the uptake and metabolism of fungicides by fungus spores and host plants, determination of the effect of fungicides on enzyme systems in spores, and studies on the nature of the fungicidal action of sulfur.

■ A $300,000 program of research concerned with preserving the human resources of the state of Michigan has been initiated at the University of Michigan. The program is financed by an appropriation from the state legislature and will cover a 12-month period. Fourteen projects have been undertaken by various schools and colleges of the university.

■ The National Foundation for Infantile Paralysis has made grants totaling $1,952,155.05 to 27 institutions for scientific research in the fields of virology and epidemiology, prevention and treatment of aftereffects of polio, and support of poliomyelitis respirator centers.

The awards reflect efforts by the National Foundation to rescue polio patients with paralyzed respiratory systems from dependence on mechanical breathing devices. Eight of the current grants are to polio respiratory centers supported by the National Foundation. The program, begun in 1950, has attracted world-wide medical attention and now encompasses 15 treatment-research centers.

The foundation has also made 19 grants totaling $1,211,983 to aid teaching programs bearing on the treatment of poliomyelitis patients.

Miscellaneous

■ Opportunities for research in a number of fields bearing on the use of southern farm crops are now being offered at the Southern Research Branch, New Orleans, of the Agricultural Research Service, U.S. Department of Agriculture. Openings range from a starting salary of $8990 per year for mature scientists to $3175 per year for scientific aides. The positions are graded under federal Civil Service in accordance with training and experience. Chemists specializing in organic, physical, or analytic chemistry or biochemistry are needed; also needed are physicists, cotton technologists, chemical and textile engineers, and mechanical engineers to help develop cotton-processing machinery. Application should be made through the U.S. Civil Service Commission, Eighth Civil Service Region, 1114 Commerce St., Dallas, Tex. For information write to C. H. Fisher, Chief of the Southern Utilization Research Branch, 1100 Robert E. Lee Blvd., New Orleans 19, La.

■ As a tribute to the memory of an outstanding physician, teacher, and investigator, the associates and friends of John Punnett Peters are seeking funds to create a resident lectureship or visiting professorship in his name. The lectureship would be offered periodically to outstanding scientists in all areas of medicine from any part of the world.

For information write to Paul H. Lavietes, Secretary, John Punnett Peters Memorial Fund, Yale University School of Medicine, New Haven 11, Conn.

■ A program to keep blind people informed of the progress of science has been initiated by T. A. Benham, assistant professor of physics at Haverford College, who has been blind since the age of 2 years. Books in scientific fields and a monthly magazine, *Science Recorded,* will be made available as tape recordings. The recordings of books will be accompanied by a supplement in Braille, which will contain explanatory material in the form of mathematical equations, graphs, tables, and a summary of the spellings of scientific words.

■ University of Michigan botanists will begin work this fall on the state's first complete, up-to-date handbook on local flora in more than 50 years. The cost of the undertaking will be an estimated $60,000.

The principal investigator for the project will be Edward G. Voss, of 1015 Lincoln Ave., Ann Arbor. Much of his work will be centered in the university herbarium, which contains about 300,000 specimens of flowering plants.