Associates, was in charge of the project, and David Z. Robinson of Baird participated in the development.

Amateur Satellite Observers

The Astrophysical Observatory of the Smithsonian Institution has been assigned the task of initiating a nonprofessional satellite observation program, and Armand Spitz, director of the Spitz Laboratories, Yorklyn, Del., has been selected to act as coordinator of visual satellite observations.

Spitz will work with J. Allen Hynek, associate director of the satellite tracking program, and will supervise the coordination of the organized groups of nonprofessional observers throughout the country and the world. Among these are the Astronomical League, the American Association of Variable Star Observers, the Western Amateur Astronomers, the International Astronomical Federation, and others. Spitz will coordinate communication between these groups so that observations can be quickly transmitted to orbit computation headquarters.

Although the visual satellite observer corps will be operated on a volunteer basis, the selection of members will be based on skill and willingness to accept the responsibility for watching the sky at specified times. The principal reward to the observers will be the knowledge that their work will have unquestioned scientific value; without this assistance the satellites might be lost.

Appropriate recognition to observers who have participated in the program will be made by the officers of the satellite program so that observers will have a permanent record of their contribution. Observers who wish to participate in the satellite program should not write to Spitz directly, but should get in touch with their local amateur astronomy organizations, which will have received full instructions from central organizations.

New TB Vaccine

A new method of producing immunity to tuberculosis in mice was described recently by Guy Youmans, chairman of the bacteriology department at Northwestern University. The vaccine produced an immunity in mice equal to that found in mice immunized with BCG. BCG contains strains of living tubercle bacilli that have lost their power to produce disease, but still have the power to stimulate immune responses by the body. The new vaccine is made by grinding up tuberculosis bacteria and spinning them in a centrifuge to separate the different sized particles that are inside the cells. The particles are not alive but are still active as immunizing agents.

This is the first time that such separated, nonliving particles have been used successfully in producing immunity to tuberculosis. Chief members of the research team responsible for the development were Youmans, his wife Anne Youmans, and Irving Millman.

In the new method, tuberculosis bacteria were ground up in a sugar solution with powdered glass for 18 hours. This fragmented the membrane cover around the bacterial cells and let the inside contents escape.

The solution of suspended particles then was spun over and over again in an ultracentrifuge at speeds up to 40,000 revolutions per minute. Each time the solution was centrifuged, layers of fluid were separated and removed, until the different sized particles from within the bacteria were isolated in separate solutions or fractions.

To test whether any of these fractions could produce immunity, the investigators divided mice into three groups. One group received an injection of the fraction being tested; a second group received living BCG vaccine; and the third group received no injections. One month later the mice were infected with tubercle bacilli. Of the mice not protected, all died. Of those given BCG or the new vaccine, 60–70 percent lived.

Scientists in the News

LEON H. SCHMIDT, director of the Institute of Medical Research at Christ Hospital, Cincinnati, Ohio, has been awarded the seventh annual Eminent Chemist award of the Cincinnati Section of the American Chemical Society. The award was presented at the society's meeting on 23 Feb.

JOHN VON NEUMANN, member of the Atomic Energy Commission, recently received the Medal of Freedom from President Eisenhower. In a ceremony at the White House that was attended by Defense Secretary Charles E. Wilson and Adm. Arthur W. Radford, chairman of the Joint Chiefs of Staff, the President said that Neumann's work on "variously highly classified missions . . . resolved some of the most difficult technical problems of national defense."

WALTER H. ZINN, director of the Atomic Energy Commission's Argonne National Laboratory since 1946, has submitted his letter of resignation to the University of Chicago, which operates the laboratory. In his letter he commented: "As you know, the responsibilities as director of a research and development organization are complex and demanding. There is no reason to suppose that they will become less so in the future." He was asked to appear before the Congressional Joint Committee on Atomic Energy, but requested permission not to appear.

SIR BEN LOCKSPEISER will retire on 10 Mar. from the post of secretary to the Committee of the Privy Council for Scientific and Industrial Research, London. He is to be succeeded by H. W. MELVILLE, who is now Mason professor of chemistry at the University of Birmingham, Birmingham, England. Melville will take up his new appointment in August.

The following appointments to the faculty of the University of Michigan received approval of the regents at their meeting on 10 Feb.

HORACE W. DAVENPORT was appointed professor of physiology and chairman of the department of physiology in the Medical School, effective with the opening of the 1956–57 academic year. He has been professor and head of the department of physiology at the University of Utah College of Medicine since 1945.

THEODORE H. HUBBELL, curator of insects in the Museum of Zoology and professor of zoology, was appointed director of the Museum of Zoology, effective 12 Feb. His appointment fills the vacancy left by the death last May of Prof. J. Speed Rogers.

FRANCIS M. HENDERSON was named Fulbright lecturer in the department of engineering mechanics in the College of Engineering for 1956–57. He is senior lecturer in hydraulics in the School of Engineering, Canterbury University College, New Zealand.

JOHN C. AYRES was appointed associate professor of zoology, half time in the literary college, and half time in the Great Lakes Institute, beginning with the 1956–57 year. He also will be on a full-time basis in the Great Lakes Institute during the summer session. Ayres has been on the Cornell University faculty since 1949.

G. B. B. M. SUTHERLAND, since 1949 professor of physics and director of the Biophysics Research Center at the University of Michigan, has been named director of the National Physical Laboratory, London. Sutherland, who will take up the appointment next September, succeeds SIR EDWARD BULLARD, who retired on 31 Dec.

HOLGER ERDTMAN, Swedish chemist and expert on the chemistry of wood and wood products, visited the University of Illinois during February to deliver five talks in the annual Karl