Carl L. Larson receives Research Career Award

University of Montana--Missoula. Office of University Relations

1-17-1963
FOR RELEASE THURSDAY, JANUARY 17

Dr. Carl L. Larson, director of the Stella Duncan Memorial Institute and professor of microbiology at Montana State University, has received a $83,105 Research Career Award from the National Institutes of Health, MSU President H. K. Newburn announced.

The award will help support Dr. Larson's research in immunity and allergy in infectious disease and hypersensitivity, covering salary and project expenses over a five-year period, Dr. Newburn said.

Dr. Larson, who headed the Rocky Mountain Laboratory at Hamilton from 1950 to 1961, terminated 23 years' service with the U. S. Public Health Service in October to take his current assignment. At the University, he is conducting basic research in allergy, financed in part by a bequest to MSU from alumna Stella Duncan Johnstone.

The appointment of Dr. Larson to head the Stella Duncan research program, coupled with the financial boost provided by the USPHS award and the availability of the latest research facilities in the new Health Science building, means an acceleration of action in an important area of basic research at the University, according to Dean Robert W. Coonrod of the College of Arts and Sciences.

As the recipient of the USPHS Research Career Award, Dr. Larson will continue his studies of immunity and allergy in tuberculosis, tularemia and related diseases. He has been working in this field for some time, both independently and with the staff of the National Institute of Allergy and Infectious Diseases.

The researcher says he will concentrate on tuberculosis because it exhibits all the phenomena found in the field of immunology and knowledge of TB is basic to the understanding of the other diseases. His general line of research will be the study of resistance in TB, both as a specific problem and as a broad biological one.

(more)
Dr. Larson says the question of mass immunization against TB will inevitably come up because of the rising incidence of cases of tuberculosis caused by organisms resistant to antibiotics.

The population is also becoming more susceptible to the tubercle bacillus because early detection and treatment of TB cases nowadays prevent wide exposure to the disease, he explains. Now, roughly a third or less of the adult population of a city would be found to be resistant to TB (based on tuberculin tests). The percentage was much higher in the past, he notes. Most people used to have a mild immunizing brush with TB early in life, but now new cases are isolated before many persons come into contact with them, he points out.

The problem of producing a satisfactory immunizing agent for the prevention of tuberculosis is a complex one, according to Dr. Larson. BcG vaccine is now used extensively but, because it produces a positive tuberculosis reaction and is a live, attenuated vaccine, it is not used widely in the United States. There are conflicting reports on its efficacy, but based upon differences in strains of BcG used by various groups, it appears that these conflicts can be settled and that satisfactory resistance can be produced in persons exposed to fully antigenic strains of BcG.

Research workers hope that a killed vaccine can be found which will lead to immunity without producing a positive tuberculosis reaction, Dr. Larson continued. Recent studies carried out in conjunction with members of the staff of the Rocky Mountain Laboratory have shown that a high degree of resistance can be produced in mice immunized with cell walls of attenuated tubercle bacilli, he reported. These results suggest that methods can be devised to isolate the antigen responsible for inducing resistance, the MSU researcher said.

###