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Introduction

By Byron H. Waksman

It gives us great pleasure to introduce Volume VII of “Progress in Allergy”. The almost fantastic increase in the volume of basic and applied research occurring in the last decade is reflected in an ever increasing rate of publication in such fields as Immunology, Physiology, Pharmacology and Pathology. To take examples in a single field, the “International Archives of Allergy and Applied Immunology” established in 1950 have increased in a period of 5 years from 4 to 12 issues per year; and the journal “Immunology”, established only 5 years ago, has already found it necessary to increase its publication from 4 to 6 times yearly. The starting of new journals in such special domains as Immunochemistry and Immunopathology is under active consideration. A new review series, “Advances in Immunology”, has made its appearance. The congresses and special symposia dealing with immunologic topics such as antibody formation, tolerance, homotransplantation, leukocytic functions, immunopathology, etc. have become too numerous to list. These changes make it desirable that “Progress in Allergy” be published henceforth on an annual basis.

One of the most fruitful developments of the last few years in Immunology has been the exploitation of gel-diffusion methods (see...
reviews by Ouchterlony in Volumes V and VI of this series) and of immunoelectrophoresis in particular (1,2) for the analysis of antigens and of various normal and pathological sera. At the same time, methods of characterizing and fractionating individual serum proteins, the antibody globulins in particular, have made great strides (3). The application of these new methods to classical problems in Immunology is illustrated by several of the reviews included in the present volume: the analysis of tissue antigens (Halbert), the study of hereditary -globulin groups (Fudenberg), and the attempt to identify alterations in the -globulin molecule, induced by its combination with antigen, responsible for its ability to induce anaphylaxis (Ishizaka). Schayer presents a review of a controversial topic, the existence of histamine in a form other than the easily released histamine, familiar from studies of anaphylaxis. He has assembled a body of data supporting the thesis that histamine plays a regulatory role in the microcirculation and is antagonized by adrenal cortical steroids. With Salvin’s review of immunologic phenomena associated with mycotic infections, we wish to bring up to date an area of infectious disease largely neglected in current immunologic investigations. The most exciting new development in the field of Immunology is the discovery of the role of the thymus early in life, and perhaps in the adult as well, as a source of immunologically competent cells (4-10). The evidence that this organ may act as a major source of lymphocytes and that lymphocytes in turn circulate freely through the other lymphatic tissues (11-17) opens an entire new field of investigation which has barely been touched on in recent symposia and review volumes (18). Malfunction of the thymus may be responsible for some types of hypogammaglobulinemia (see Good, Volume VI of this series) and perhaps for other abnormalities of immune function. A symposium on the thymus, held under the auspices of the National Academy of Sciences, National Research Council at the University of Minnesota, October 29-31, 1962, will be published shortly. The problem of lymphocyte circulation will be discussed by Gowans in a forthcoming volume of “Progress in Allergy”. The growth of the special discipline of Immunopathology, which deals with mechanisms of lesion formation in disease based on immunologic reactions, is illustrated in the publication of a second international symposium volume in this field (19). The concern with other facets of Medicine than the classic triad of asthma, eczema, and
hay fever is particularly striking in this collection of papers. It is noteworthy that no journal devoted to immunopathology exists at present. Articles in this field appear in journals devoted to such diverse disciplines as immunology, physiology, pharmacology, experimental pathology, ultrastructure research, transplantation, and clinical medicine.

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thymectomized rats; in Ciba Foundation Symposium on Haemopoiesis, p. 185 (Little Brown, Boston i960).


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