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Contributors

Linda B. Adams  •  National Hansen’s Disease Programs Laboratory, Louisiana State University School of Veterinary Medicine, Skip Bertman Drive, Baton Rouge, LA 70803

Carlo Agostini  •  Department of Clinical and Experimental Medicine, Padua University School of Medicine, Via Giustiniani 2, 35128 Padua, Italy

Randall J. Basaraba  •  Mycobacteria Research Laboratories, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO 80523

Dov L. Boros  •  Department of Immunology and Microbiology, Wayne State University School of Medicine, 540 E. Canfield Ave., Detroit, MI 48201

Arturo Casadevall  •  Department of Medicine, Division of Infectious Diseases, and Department of Microbiology & Immunology, Albert Einstein College of Medicine, 1300 Morris Park Ave., Bronx, NY 10461

Stephen W. Chensue  •  Department of Pathology, University of Michigan Medical School, Ann Arbor, MI 48109, and Pathology and Laboratory Medicine, Veterans Affairs Ann Arbor Healthcare System, 2215 Fuller Road, Ann Arbor, MI 48105

Jerrold J. Ellner  •  Department of Medicine and Ruy V. Lourenco Center for the Study of Emerging and Reemerging Pathogens, UMD–New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103

Christian R. Engwerda  •  Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London WC1E 7HT, United Kingdom
Contributors

Andrew P. Fontenot  •  Department of Medicine, University of Colorado Health Sciences Center, Denver, CO 80262

Anthony A. Frank  •  Mycobacteria Research Laboratories, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO 80523

David L. Goldman  •  Department of Pediatrics, Division of Infectious Diseases, Albert Einstein College of Medicine, 1300 Morris Park Ave., Bronx, NY 10461

Paul M. Kaye  •  Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London WC1E 7HT, United Kingdom

James L. Krahenbuhl  •  National Hansen’s Disease Programs Laboratory, Louisiana State University School of Veterinary Medicine, Skip Bertman Drive, Baton Rouge, LA 70803

Steven L. Kunkel  •  Department of Pathology, University of Michigan Medical School, Medical Science Building 1, Ann Arbor, MI 48109

Lee S. Newman  •  National Jewish Medical and Research Center, 1400 Jackson St., Room G211, Denver, CO 80206, and University of Colorado Health Sciences Center, Denver, CO 80262

Ian M. Orme  •  Mycobacteria Research Laboratories, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO 80523

Stephan K. Schwander  •  Department of Medicine and Ruy V. Lourenço Center for the Study of Emerging and Reemerging Pathogens, UMD–New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103

Gianpietro Semenzato  •  Department of Clinical and Experimental Medicine, Padua University School of Medicine, Via Giustiniani 2, 35128 Padua, Italy

Oliver C. Turner  •  Mycobacteria Research Laboratories, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO 80523
Contributors ix

Joel V. Weinstock • Division of Gastroenterology, Department of Internal Medicine, University of Iowa Hospitals and Clinics, Iowa City, IA 52242

Thomas A. Wynn • Laboratory of Parasitic Diseases, Immunobiology Section, National Institute of Allergy and Infectious Diseases, National Institutes of Health, 50 South Drive, Room 6154, MSC 8003, Bethesda, MD 20892
Preface

The various granulomatous diseases are globally prevalent and afflict hundreds of millions of humans. The granulomatous tissue pathology was first described in tuberculous lungs over 200 years ago. Since then, great advances in the characterization of the granulomatous tissue response have been made. Work in the fields of descriptive histopathology, bacteriology, T-lymphocyte-mediated immunology, and cytokine/chemokine-related molecular biology contributed to our knowledge of the granulomatous response. With the advent of modern microbiology and immunology, several useful animal models that contributed important concepts to the understanding of this chronic multicellular tissue inflammation were created. The acquired knowledge established two major concepts: (i) granulomata are protective host responses and (ii) they can cause considerable tissue destruction and pathology.

Because granulomatous conditions occur in a wide array of diseases with microbial, fungal, protozoan, viral, helminthic, or metallic etiologic agents, the published literature is widely dispersed. Therefore, periodic summaries of the state of the art of the field are warranted. The aim of the present book was to bring together under one cover updated knowledge on experimental and clinical granulomatoses. There was no intent to include in the book all the existing granulomatous diseases; rather, the intent was to present prototypic models and diseases and to establish a blueprint for the formation and maintenance of the granulomatous process.

An overview of the chapters shows the tremendous progress made during the past decades. With regard to pathogens/invaders, the granuloma remains an acknowledged, efficient protective response. The importance of the T-lymphocyte-mediated immune response in sarcoidosis and Crohn’s disease, which as yet lack identifiable etiologic or inducer agents, has also been recognized. Cytokines and chemokines took center stage as the key mediators of tissue inflammation. Researchers now probe the role of cellular receptors, signal transducing factors, and gene regulation to gain a better understanding of the protective/destructive potential of the granulomata. It is hoped that such advances will be translated into improved modalities of therapy, especially in the separation of protection from tissue destruction.
The major goal of the book was to promote the interchange among microbiologists, immunologists, researchers of inflammation, and clinicians. I was fortunate to be able to secure in this venture the participation of contributors who are leaders in their field. Their efforts in providing high-quality thought-provoking chapters and their patience during the revisions are much appreciated. The essential help provided by Arthur M. Dannenberg and Noel R. Rose, who reviewed the proposal for the book and recommended its publication, is gratefully acknowledged.

Lastly, great appreciation and gratitude is expressed to Gregory Payne, Senior Editor of ASM Press, who enthusiastically received the suggestion of an updated granuloma-oriented book and patiently guided us to bring this book from inception to its final production.

Dov L. Boros
November 2002
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