

British Association for Lung Research review series

New perspectives on basic mechanisms in lung disease

Series editor: Duncan F Rogers



Introduction

Duncan F Rogers

Eleven years ago a small group of researchers identified a need for a society attracting workers from different scientific disciplines who shared a common interest in the experimental study of the lung, both in health and in disease. The British Association for Lung Research was the result of their discourse and its aims were to "promote interest and encourage studies in the field of experimental research related to the elucidation and treatment of lung disease." Three meetings a year are held, with one day thematic workshops in the spring and autumn and a two day symposium in the summer. Topics for the meetings reflect the diversity of interest and expertise of the membership. Consequently we have held meetings on emphysema, chemicals and lung toxicity, non-respiratory functions of the lung, lung cancer, lung inflammation, pulmonary vascular remodelling, animal models, and new methods in lung research. The association is particularly keen to encourage younger scientists, and our meetings often contain sections where a newcomer can win the coveted title of "young scientist." The proceedings of some of its meetings have been published and the inclusion of a publications secretary on the committee emphasises our intention for such publishing to continue and expand. A large body of dedicated members of the association is to be found traversing Britain in search of the mix of science and conviviality that is the hallmark of our meetings. Many is the time an unexpected opportunity for fruitful collaboration has emerged between workers with different subjects attending a meeting of the association. The topics of forthcoming meetings will include toxicology of the lung, sleep and the lung, cytokines, and acute lung injury.

Respiratory medicine grows ever more complex and is expanding so rapidly that all but a few individuals (health care professional and research scientist alike) are unable to assimilate the mountain of publications on their subject that appears relentlessly on the library shelves. Expansion into other areas is becoming increasingly daunting. Consequently, we have become dependent on "the review" to keep us informed and up to date in our own subject or to introduce us to a new topic. To meet demand, *Thorax* has established a long running and successful series of reviews on all aspects of lung disease and its treatment. None the less, the new executive editor sought something more. He envisaged a series of science based reviews on basic mechanisms underlying lung disease that would provide novel insights into

pathophysiology and therapeutic potential. The British Association for Lung Research was an obvious source of scientific expertise in a range of respiratory specialties and we were invited to contribute to *Thorax* a series of reviews that reflected the diverse interests of the members.

Seven broad categories within the association were identified and within each a subject was chosen as being topical. Thus under pathology Mary Sheppard and Kim Harrison, in the first article of the series, consider inflammatory and fibroblastic factors in the pathogenesis of interstitial lung disease. There follow reviews from the disciplines of physiology, biochemistry, pharmacology, and toxicology and from the specialty of occupational medicine. John Widdicombe (physiology) seeks to intrigue us by questioning why the airways should be so vascular. Terry Tetley (biochemistry) will examine the importance of enzymatic imbalances in lung diseases, with emphasis not only on catabolic but also on anabolic mechanisms. Val Alabaster and Brian Moore (pharmacology) will assess the effectiveness of existing drug intervention in asthma and indicate areas with therapeutic potential for the future. Mechanisms of pathogenicity of respirable industrial fibres will be discussed by Ken Donaldson, Bob Brown, and Geraldine Brown (occupational medicine), and an article examining the mechanisms that explain why one type of lung cell is susceptible to damage by a particular chemical while others remain unaffected is by a trio of the association's committee members, David Dinsdale, Roy Richards, and Lewis Smith (toxicology). The pulmonary circulation demanded the status of a category because it is so often ignored. Bill MacNee's review on neutrophil traffic in the lungs will redress the balance. Many topics will have been omitted but we hope that there will be something for everyone as the series develops.

The title of the series, "New Perspectives on Basic Mechanisms in Lung Disease," highlights the intention that each article will be a review of current thinking founded on science based research. While aiming the reviews at the interested general reader, we hope also to spring a few surprises on the specialist. If you wish to learn more, we will welcome you to membership of the British Association for Lung Research.

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