CHEST

# Giants in Chest Medicine
## Leonardo M. Fabbri, MD

VIDEO

*Peter J. Barnes, DM, Master FCCP*
*London, England*

Leo Fabbri is a true giant in respiratory research, particularly in the fields of asthma and COPD, in which he has made important contributions to their understanding and management. He is Professor of Respiratory Medicine, Honorary Professor of Internal Medicine, and Director of the Department of Department of Oncology, Hematology and Respiratory Diseases at the University of Modena and Reggio Emilia, Modena, Italy. He received his Doctorate in Medicine and Surgery, University Padua, in 1972; Board in Occupational Medicine, University Padua, in 1975; and Board of Respiratory Medicine, University Bologna, in 1978. In 1980, he spent a year at Tulane University with Hans Weill and John Salvaggio. He then moved to the Cardiovascular Research Institute at the University of California in San Francisco with Jay Nadel for 2 years, which is where we first met.

Dr Fabbri initially trained in occupational medicine and became an assistant professor at the University of Padua in 1982, where he developed a particular interest in occupational asthma. His distinguished career in respiratory medicine continued and grew, as Associate Professor at the University of Ferrara in 1991, and as Professor and Director at the University of Modena in 2000.

**ABOUT THE AUTHOR/AFFILIATIONS:** Peter J. Barnes, DM, Master FCCP, is from the National Heart & Lung Institute.

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**ADDITIONAL INFORMATION:** See video interview of Dr Fabbri online at journal.publications.chestnet.org.

**CORRESPONDENCE TO:** Peter J. Barnes, DM, Master FCCP, National Heart & Lung Institute, Dovehouse St, London SW3 6LY, England; e-mail: p.j.barnes@imperial.ac.uk

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*Leonardo M. Fabbri, MD*

Dr Fabbri started his research on the epidemiology of occupational lung diseases, examining both lung function changes due to continuous exposure and occupational asthma induced by the small-molecular-weight isocyanates. His interest in occupational asthma extended to airway hyperresponsiveness associated with both occupational and nonoccupational asthma, particularly the relationship between airway hyperresponsiveness and inflammation. In a series of important studies conducted at the Cardiovascular Research Institute, Dr Fabbri contributed to our knowledge regarding the role of neutrophilic inflammation in the transient increase of ozone-induced airway hyperresponsiveness in dogs. After returning to Italy, in collaboration with his colleagues at the University of Padua, he confirmed the role of neutrophilic inflammation in late asthmatic reactions



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induced by isocyanates in exposed workers. Dr Fabbri subsequently showed that neurogenic inflammation may represent an important component of the effects of isocyanate exposure and that airway mucosal inflammation in isocyanate asthma is similar to nonoccupational asthma.

Both the animal studies and the studies in occupational asthma represent important pillars regarding the concept of the role of inflammation in airway hyperresponsiveness and of anti-inflammatory treatment of asthma, particularly with inhaled corticosteroids, which Dr Fabbri examined in clinical trials. He and his colleagues and fellows then shifted their main interest to airway and lung inflammation in patients with COPD, discovering the fundamental roles of CD8+ lymphocyte infiltration of the airway mucosa, the presence of airway and lung eosinophilic inflammation during exacerbations, and the differences in inflammation between COPD and severe asthma, even when patients have a similar age and airflow limitation.

Dr Fabbri has always linked the results of his experimental work to daily clinical practice. To further that interest, he served on the expert panels that produced guidelines initially on asthma (Global Initiative for Asthma [GINA]) and then COPD (Global Initiative for Chronic Obstructive Lung Disease [GOLD]). He organized, designed, and participated in several pivotal randomized trials that contributed evidence regarding the role of inhaled steroids, long-acting bronchodilators, combination therapy, and roflumilast in the management of asthma and/or COPD. Finally, over the last 10 years, he has focused his main interest on the concept of COPD as the pulmonary component of the chronic multimorbidity epidemic, which is becoming the most important health challenge of the century; he has contributed to the development of the field in terms of concepts, clinical studies, and educational activities. As President of the European Respiratory Society, Dr Fabbri co-organized a seminal research seminar on complex chronic comorbidities in Rome in 2007. The focus of his mission while serving for a year as President of the European Respiratory Society was on complex chronic comorbidities, developing and establishing new relationships between the respiratory community and other relevant medical and scientific communities (eg, cardiology, diabetes, oncology, internal medicine).

During this engaging interview, Dr Fabbri talks about how his research evolved and about some of the people who influenced his career and research. He discusses the differences between working in Italy and the United States; the importance of stimulating, training, and supporting colleagues and fellows to perform research and to work with them; and then offers his views on future developments in his fields of research.

## Suggested Readings


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