Respiratory Physiology: Introduction

The exchange of gases between the cells of the body and the outside environment is the essence of respiratory physiology. In land-living animals, such as man, the air forming his environment must be pumped back and forth to the gas-exchange surface of the lung within his body, by contrast with the water-living fish in which the environment itself flows over virtually external gills. Thus, the lung has acquired, in evolution, a secondary function of ventilation, like a bellows, which is added to its primary function of gas exchange, in which it is analogous to the gill. In this number of British Medical Bulletin about half the papers are concerned with the secondary mechanism of ventilation, and the remainder with the distribution of gas and blood in the lung, the pulmonary blood flow, and gas transport in the blood. We have omitted all work on tissue respiration, so this is really a symposium confined to recent work on the physiology of the lung.
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*Scientific Editors: P. Hugh-Jones & E. J. M. Campbell*

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