EDITORS' PREFACE

The Archives Italiennes de Biologie, the oldest Italian journal of Biology and Physiology, began to be published in 1882 by Prof. Angelo Mosso in Turin, and continued until 1936 under the care of V. Aducco, Professor of Physiology at the University of Pisa. The publication of the Archives was interrupted in 1936 and resumed only long after the end of World War Two, in 1957.

The Archives Italiennes de Biologie have played a prominent role in the history of the Italian biological and physiological sciences. Noticeable, the first volume published in 1882 started with the discovery of the platelets by Bizzozzero, followed by a series of relevant neuroanatomical works performed by Golgi (1882-1891) and Marchi (1886-1892); the journal published also papers by Marchiafava and Celli (1884-1890) on malaria infection, as well as paper by Luciani on the physiology of the motor cortex (1883) and the cerebellum (1891-1895).

The last years of the XIX century saw the publication of the landmark work by Ruffini (1893, 1894) and Perroncito (1902) on the peripheral nervous endings, notably on the neuromuscular spindles; in the same years, Staderini (1895) reported the discovery of the medullary structure, which was named after him. Physiological studies on fatigue (1890), mountain-sickness (1901-1905), and respiration (1886-1904) were reported in the classic papers by Mosso, while Pagano (1900) and Siciliano (1900) described for the first time the baroceptive and chemoceptive reflexes, which are involved in the regulation of the circulation and respiration.

In 1957, publication of the Archives Italiennes de Biologie was resumed by Giuseppe Moruzzi, who was Professor of Physiology at the University of Pisa and became Chief Editor of the Archives. under his direction, the Archives Italiennes de Biologie became one of the most prestigious international vehicles for publications of neurophysiological and nuerobiological findings, including many fundamental studies by Moruzzi himself and some of his Italian and foreign collaborators on the ascending reticular system and on the sleep-wake mechanisms. After 1980, this tradition was continued by Prof. Ottavio Pompeiano, Director of the Institute of Physiology, who further expanded the sphere of interest of the Archives. Under his guidance, Archives became a forum for the publication and debate of important research topics in physiology and molecular neuroscience, ranging from the reticular to the vestibular systems, from postural mechanisms to motor control, from sleep to brain plasticity. An example of this, are the interesting collections of original papers published in recent issues of the Archives on the vestibular mechanisms (Vol. 137, Suppl., Vol. 138, issues 1 and 2, 2000, in honour of O. Pompeiano and V. Wilson), sleep mechanisms (Vol. 139, issues 1-2 and 3, 2001, in honour of N. Kleiman), and motor control (Vol. 140, issues 3 and 4, 2002, in honour of C. Terzuolo).

In 1967 (Vol. 105), for the prestigious role achieved in the international scientific arena, the Archives Italiennes de Biologie appointed a formal Editorial Board, which included highly respected scientists from many countries, such as Prof. Alf Brodal (Oslo), Prof. M.G.F. Fuortes (Bethesda), Prof. Y. Laporte (Toulouse) and Prof. C. Terzuolo (Minneapolis, Minnesota).

One of the most outstanding members of the Editorial Board of the Archives established at that time, was Prof. Rita Levi Montalcini, who, during the period 1962-1979, published in the Archives some of her pioneer papers on the Nerve Growth Factor (NGF), as well as on the growth regulation of the sympathetic nerve cells. In May 2002, an International Conference was organized in Modena by Dr. Luigi Aloe to honour the scientific achievements of Prof. Rita Levi Montalcini.

This Symposium was most appropriate to celebrate the important contribution that Prof. Rita Levi Montalcini, a Nobel Prize laureate, has offered to the development of the modern Neurobiology and other allied disciplines in Italy and worldwide in her long and prolific career. The Archives Italiennes de Biologie are proud and honoured to devote this issue to the publication of a selected collection of some recent contributions on NGF that were presented at that Conference.

Ottavio Pompeiano and Pietro Pietrini Chief Editors of the Archives Italiennes de Biologie