

## Preface

**Special issue “nicotinic neuronal receptors”**

The nicotinic acetylcholine receptors are key molecules in cholinergic nicotinic transmission at the neuromuscular junction, in the autonomic ganglia and in a number of brain areas, each of which has different biophysical, structural and pharmacological properties. Recently, neuronal nicotinic receptors have attracted the attention of academic and industrial scientists because of their relevance to our understanding of brain functions and their possible involvement in various pathologies. Although much is known about these molecules, there are a number of important issues still to be resolved. Have we discovered all the nicotinic receptor subunits? How many receptor subtypes are there? What role do nicotinic receptors play in the brain? Are native and heterologously expressed receptors similar or different? What do non-neuronal cells do with neuronal nicotinic receptors? Do we need selective and specific nicotinic drugs? Are neuronal nicotinic receptors involved in tobacco addiction? Will the possibility of a pathological role of nicotinic acetylcholine receptors become a reality or is it simply a means of obtaining research grants?

These and other issues were discussed by more than 200 scientists at the Congress entitled “Neuronal Nicotinic Receptors: from Structure to Therapeutics”, which was held in the superb Renaissance setting of the “Scuola Grande di S. Giovanni Evangelista” in Venice, 1–4 October 1999.

The meeting was organised by the Department of Pharmacology and CNR Center of Molecular and Cellular Pharmacology of the University of Milan, and was spon-

sored by the European Commission and Munich’s VerUm Foundation. A number of other institutions and companies also contributed to its success.

This special issue of the European Journal of Pharmacology is devoted to the Proceedings of the meeting, and we would like to thank the editors and the publisher for having agreed to publish these within a short delay.

Not all the problems mentioned above were resolved at the meeting, but we believe that the Proceedings constitute a global, critical and state-of-art review of the most important issues concerning neuronal nicotinic receptors. Both experts and newcomers to the topic will find these Proceedings a useful reference and stimulus for further research, basic and applied, in the field of nicotinic receptors.

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