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Editorial

Introduction to the Fifteenth Anniversary Issue of *Molecular Neurobiology*

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When *Molecular Neurobiology* was first established in the twentieth century, its creators believed themselves to be living in the most exciting times in the history of neuroscience. We and others felt that a synthesis of evolving knowledge in the neurosciences—a review journal—was required for publication several times a year. We also believed then, and remain convinced today, that a collaboration of knowledge in molecular neurobiology would include cellular, molecular, and behavioral/systems approaches. We aimed to encourage conceptual advances and to add to the construction of a knowledge base on the neurobiology of disease and translational neuroscience research. Subsequently, the first issue of *Molecular Neurobiology* was initiated in 1987. In the Editorial introduction to that issue, the Co-Editors Nicolas Bazan and David U'Prichard tried to anticipate the progress in neuroscience that would be reviewed in forthcoming pages of the journal. David U'Prichard served as Co-Editor for the first six years of *Molecular Neurobiology*, with Jacques Mallet, a member of the founding Editorial Advisory Board, later stepping into that role. We were particularly enthused about many prospects, including discoveries in gene expression; regulation of neuronal receptors; increased understanding of synaptic function made possible by new electrophysiology technology, as well as patch-clamping; new molecular insights into neuronal plasticity, learning and memory, ontogenesis, development, and aging; and especially, breakthrough discoveries in the molecular and genetic bases of diseases of the nervous system. The valuable contributions in the Inaugural Issue of *Molecular Neurobiology* included the following authors: Colin Barnstable, Paul Greengard, Robert Lefkowitz, Solomon Snyder, Hermona Soreq, and John Tallman.

Fifteen years and, indeed, a few hundred reviews later we are astonished at the progress that has been made over the last few years of the twentieth century in the field of neuroscience.

This Fifteenth Anniversary Issue celebrates the vast territory covered by the neurosciences of the early twenty-first century, and in its depth reveals the amazing quality and quantity of knowledge gained through the works of thousands of minds. The articles in this issue span across evolution, development, behavior, function, structure, and pathogenesis of diseases of the nervous system. The topics include the genetic evolution of sodium ion channels; developmental issues of neuronal migration and patterning, construction of the

cytoarchitecture of the Node of Ranvier, and vertebrate retinal cell differentiation; the synaptic regulation and functioning of serotonin signaling and $GABA_A$ receptors; pathogenetic mechanisms involving acetylcholine receptors in congenital myasthenias, A beta amyloid accumulation in Alzheimer's disease, and hypoxia-induced transcriptional alterations in Alzheimer's disease; the molecular regulation of the biological clock; the role of apolipoproteins in psychiatric disorders; the use of viral vectors for gene transfer into neurons; and the potential neuroprotective role of the endocannabinoid system.

The contributors to this Special Issue hail from the Netherlands, Italy, Japan, France, the United Kingdom, Switzerland, Canada, and finally the heartland and almost all the coasts of the United States. In this respect too, our Fifteenth Anniversary Issue is a microcosm of fifteen years of contributions to *Molecular Neurobiology* from around the world. There is also a short commentary by the 1992 Nobel Laureate in Medicine and Physiology, Edmond Fischer, titled "Basic Biological Research at the Dawn of a New Century." As it happened, Nicolas Bazan visited Edmond Fischer in Seattle the day before he delivered the Undergraduate Commencement Speech at the University of Washington. Edmond Fischer described the thoughts he was planning to share with the graduating class, and graciously consented to our inclusion of his views in this celebrating issue. We believe that all, especially the youngest generation of neuroscientists, can enrich themselves by considering Edmond Fischer's perspective.

We are especially pleased that several articles were contributed by members of the Editorial Advisory Board of *Molecular Neurobiology.* The journal has been very fortunate throughout the years to benefit from the wide range of expertise of its Advisory Board. In addition to their service in the peer review of submitted articles, they have made many valuable recommendations, not least of which is bringing to our attention the names of potential contributors. We hope it is not too much of a tease to mention our excitement at the many fine articles we have lined up for the next few issues publishing in 2003, on exciting topics as widely ranging as the ones in this Fifteenth Anniversary Issue.

Lastly, we are particularly grateful to all the people of Humana Press who have brought this journal into the hands of its readers for a decade and a half. In earlier days they patiently endured the fits and starts of our fledgling endeavor, with the initial unpredictability of manuscript flow. As we look to the future of *Molecular Neurobiology* together, we aim to transform our publication process with the inclusion of electronic submission and review, which will reduce the time to press of our contributors' reviews, and increase the impact and timeliness of our articles.

Happy Birthday to us! We hope you enjoy these fine articles as well as those to come!