

# Editorial Statement

## *A word of welcome — and a changing of the guard*

With the exception of the classic *Roux's Archives of Developmental Biology* (founded in Germany in 1894 by Wilhelm Roux as the *Archiv für Entwicklungsmechanik der Organismen*), it was not until after the Second World War that journals focusing exclusively on biological development appeared on the international scene. The first of these was the Japanese publication, *Embryologia* (now called *Development, Growth & Differentiation*), which came out in 1950. In Europe, thanks especially to the efforts of Professor M.W. Woerdeman, of The Netherlands, the *Journal of Embryology and Experimental Morphology* (now known as *Development*) began to be published in 1953 by British embryologists. At first exclusively oriented towards animal development, the journal totally excluded pathological studies and only rarely gave consideration to development in unicellular and vegetal organisms.

In 1959 the US publication, *Developmental Biology*, appeared. This journal had a more integrative outlook and considered development as a continuous spectrum of phenomena with varied manifestations depending on the organism or structure under consideration, but with a common denominator expressed in a series of basic concepts (growth, differentiation, morphogenesis, maturation and aging, regulation and regeneration). This approach was what provided the initial impetus for the Spanish journal, *Anales del Desarrollo/Annals of Development* (1960), which with the publication of this issue is beginning a new phase in its history. Other publications that appeared later under the auspices of several scientific societies were the Soviet journal *Ontogenez* (1970), *Cell Differentiation and Development* (1972) — formerly *Cell Differentiation* — and *Differentiation* (1973), all of which are still being published. In addition, articles on biological development began appearing either in isolation or in special sections set aside for this specialty in various journals, thus indicating the multidisciplinary interest of such articles and the ever-increasing importance of the field.

These reasons alone would suffice to justify the renovation and relaunching of a scientific journal that has existed for nearly 30 years but which found its readership restricted to the Spanish-speaking scientific community due to the language in which it was published. There are further reasons, however, for making us feel confident that the new version of the journal will soon take its place among the top publications in the field. The journal maintains the integrative spirit that was its initial hallmark, for we feel this still provides the best approach to a field in continual expansion due to its wide range. The objects of study in developmental biology include all organisms from viruses to man, the experimental methods employed range from molecular studies on up to theoretical approaches, and the aspects covered include manifestations of normal development as varied as cell differentiation, morphogenesis and growth, or pathological phenomena such as aging, regeneration and neoplastic transformation. The aim of the journal, therefore, is to provide interdisciplinary information of interest both to experimental researchers with special training in developmental biology and to scientists from other disciplines who find such studies stimulating and attractive.

The authors are well aware that although the term «development» is difficult to define, what is clear is that it is one thing to do experiments on a system that is undergoing «development» — organisms are always at some more or less advanced stage of development — and quite another to discover what the mechanisms are that are responsible for this process. It is the latter type of endeavor that *The International Journal of Developmental Biology* will be most interested in promoting.

Unfortunately — or fortunately, perhaps, since therein lies the fascination — there is no single avenue of approach for understanding the problem of biological development, nor is there any single mechanism or master key governing the multiplicity of approaches now considered valid. When this is the case, the danger always exists of falling into the proliferation of highly-specialized studies in a field that tends to become overly restricted in scope. This was the point that J.T. Bonner made when commenting on a recent trend in molecular genetics as applied to developmental biology: «*To win a battle or produce an organism, generals and genomes need their armies; alone they are but an unreal abstraction... Development involves cells, not just genomes. The cell is a unit that can be broken up by abstractions, but one cannot build an organism with cell parts*». The point is particularly well taken and relevant for the Editors of this Journal.

Apart from its integrative outlook and role as a source of interdisciplinary information, the Journal is also international in scope and purpose. That is, it will aim at stimulating and furthering effective relations between groups of developmental biologists in different countries. To this end, *The International Journal of Developmental Biology* will periodically publish special volumes devoted entirely to individual countries, research centers focusing on developmental biology, specific fields of specialization or topics of current interest that will help provide more complete and updated information on a field that is itself developing at a remarkable rate. This volume on Finland is the first of these special issues, and with it the Editors hope to further international familiarity with the work of the Finnish community of scientists, thereby contributing in a substantial way to the fund of information available on developmental biology.

We would like to take this occasion to express our gratitude to all those who contributed to the Journal in various ways over the past three decades, and especially to those who served on the Editorial Board; to Dr. Eero Lehtonen, the Finnish Editor of this inaugural issue, for his patient help and expert advice; and finally to the University of the Basque Country Press, without whose support *The International Journal of Developmental Biology* could not have been revised and relaunched in English.

Miguel Guirao  
Outgoing Editor

Juan Aréchaga  
New Editor