**Book Reviews**

Kenneth M. Yamada  
*Cell Interactions and Development*  

The subject of this book is of riveting interest to all who are puzzled by the many unsolved problems of the developmental potencies of cells and the mechanisms which control and determine their differentiation. A major progress in this forest of unresolved issues is the deepening study of the molecular basis of cell interactions and this book is an excellent survey of the advances made in recent years in this direction.

The book is a collection of 10 contributions, which are all of high quality, even if their subject does not cover equally fundamental aspects of developmental biology. Perhaps the most fundamental ones are treated in contributions 1 (Fertilization, by P.M. Wassarman) and 4 (Embryonic induction, by K. Kratochwil, of the Austrian Institute of Molecular Biology in Salzburg, the only non-American contributor). But it would be hardly fair to say that subjects like the biochemistry of cell adhesion (contribution 3, by S. Roth) or regulation of morphogenesis by the pericellular matrix (contribution 8, by B.P. Toole and C.B. Underbill) are less essential for the understanding of the molecular mechanism of developmental processes.

Even the more specific subjects, like the sexual differentiation and ‘mating strategies’ of some microorganisms, treated in contribution 2 by U.W. Goodenough and J. Thorner, or the role of fibronectin cell interactions (contribution 9, by K.M. Yamada) and the others are not far from fundamental importance.

Generally speaking, it should be emphasized – and the authors freely do so – that the contributions are not comprehensive surveys or historical reviews of the more fundamental subjects (how could have otherwise such names as Lillie or Runnström remained unmentioned in connection with fertilization, or Holtfreter, Needham or Brachet in relation to embryonic induction). Rather, they concentrate on the latest advances and emphasize the new aspects of ‘old’ problems at the level of molecular biology. And this makes them particularly valuable for those who know the background and wish to keep up-to-date with the latest developments.

A. Wolsky, New York, N.Y.

S.A. Latt, G.J. Darlington *Methods in Cell Biology, vol. 26 Prenatal Diagnosis: Cell Biological Approaches*  

Despite the fact that prenatal diagnosis is successful in a great number of genetic diseases, it is not nearly as common in use as would be desirable.

Ignorance of the suitable methods and laboratory procedures may account for that. The authors of the present volume succeeded in filling this gap by offering the reader a comprehensive collection of the different clinical and laboratory methods used today in antenatal diagnosis.

Fetoscopy and ultrasonic investigation techniques are described in detail, pointing out advantages and risks of this direct approach to anatomical or functional fetal abnormalities.
A major part of the volume deals with the cellular and biochemical methods: ‘Morphological and biochemical heterogeneity of amniotic fluid cells in culture. Prenatal cytogenetic diagnosis. Prenatal diagnosis of inherited metabolic diseases. Application of cell fusion techniques to induce amniotic fluid cells to express special functions and for complementation analysis’, are only a selection of the topics discussed by specialists. This volume is not only of interest to the clinicians but also to all the scientists and laboratory staff in charge of the investigation of the material collected ante partum.

M.A. Spycher, Zurich