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Book Reviews

NEOPLASTIC AND NORMAL CELLS IN CULTURE. By J.M. Vasiliev and I.M. Gelfand. New York, Cambridge University Press, 1981. 372 pp. $79.50.

Despite intensive efforts for several decades, our understanding of tumor cell biology is at the stage where we are still trying to formulate the basic questions involved. We have found that neoplastic cells have subtle alterations in such fundamental processes as cell proliferation, differentiation, and morphogenesis, areas only barely understood in normal cells. Nevertheless, a great deal has been learned about molecular processes in cancer cells, most of which has come from studying these cells in the controlled environment of cell culture.

The authors of this volume have set out to examine the behavior of both normal and neoplastic cells in culture. After introductory chapters on the basic properties of neoplastic cells and neoplastic transformation, the book explores two facets of cell-environment interactions in great depth: control of morphogenetic processes (cell shape and locomotion) and control of cell proliferation. The two tissues most studied in these areas are fibroblastic cells (the authors' own area of interest) and epithelial cell cultures. In discussions of certain areas in which less is known of the above systems (notably differentiation), examples from other tissues (e.g., hematopoietic and teratoblastoma cells) are employed. The general discussion in the final chapters examines such issues as the relationship between transformed cells *in vitro* and neoplastic cells *in vivo* and the relationship between the various manifestations of the transformed phenotype.

The focus of the book is the interactions between the cell and the environment in normal and neoplastic cultures; relatively less emphasis is placed on biochemical and genetic aspects. It is the authors' contention that all cell-environment interactions can be described by a few basic morphogenetic and growth activation reactions, induced by diverse factors. Thus, depending on the environment and reaction norm, a given cell may have either a normal or transformed phenotype. With scientific reservation and contrary data afforded equal time, the authors cite evidence for such a scheme, which would bring us considerably closer to defining the central questions in tumor cell biology.

This work is extremely well-written and well-organized, and offers a rather comprehensive review of the literature through 1978. As it seems that the use of tissue culture techniques in the study of neoplastic cells will only increase in importance, this volume represents a clear summary of work done, and a useful source of important questions for future research in this field.

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TEXTBOOK OF PEDIATRIC NUTRITION. Edited by Robert M. Suskind. New York, Raven Press, 1980. 662 pp. $55.00.

This large book is composed of forty-five chapters, contributed by different