A necessary book for all who use cell culture. No other words can better tell the reader about this compendium of the most innovative culture techniques we hold to try to reach the ultimate goal of cell culture, "to create an identical tissue *ex vivo*" as clearly stated by Prof. John W. Haycock (Dept. of Materials Science and Engineering, Kroto Research Inst., University of Sheffield, UK) in his preface. Just the Editor affiliation is telling us which are the crucial steps we are encountering to progress in our ability toward the desired goal of the tissue creation: the materials we use to culture cells! It is nearly half a century that traditionally we employ glass and polystyrene substrates, which provides a flat two-dimensional surface. The 3D culture models need other types of materials to better mimic the in vivo spatial organization of cell-to-cell architectural interactions. The book provide a full excursus on all of these opportunities, including the use of scaffolds and presents new technologies to accurately shape it at micrometer resolution. In conjunction to the advancements of the 3D culture techniques, it can't be missed the favorable conjunction of the stem cell culture potentiality which is well documented in some chapters. For those who wish to enter the field, some introductory reviews explain the present-day challenges in 3D culture while more detailed protocols talk about bioreactors and agarose constructs. Several examples (skin, chondrocytes, neuron for nerve regeneration, human bladder, hair follicles, endothelial cells and osteoblasts) of tissue-engineered productions are presented in step-by-step details together with several microscopic techniques to follow the 3D cells growth.

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