The book is divided into eight parts covering all the elements involved in microarray technology. In Chapter 1, the authors explain extensively how different classes of glass treatment interact with the genetic material and how this step can affect the final result. Chapter 2 describes in great detail how to design an oligonucleotide probe and also gives to the reader an idea of the impact and applications of this powerful technique. Chapter 3 details the steps, and possible problems that one can encounter when setting up a microarray facility. In Chapter 4, the author covers the use of robotic arrayers and print heads, and discusses the solutions that work best in spotting. Chapters 5 and 6, show how to normalize the data obtained and the technical errors that can result in misleading information. They also include a section that, together with Chapter 8, provides procedures for analysis using specific software. Finally, Chapter 7 addresses the statistical impact of experimental design, as well as issues of power estimation. Despite the wide field broached by this book, one of its chief successes lies with the fact that in each chapter the authors provide a clear review of every step of the technique, including both its potential and pitfalls. This allows all readers, especially beginners, to understand the development and impact of this important technique. As the editor notes in the preface, this volume is surely intended to serve as a standard reference work of value not only to researchers, but also undergraduate students. Readers will find this beginner's guide book very informative regarding current knowledge of microarray design and data analysis.

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S. Sell (Ed.), Stem Cells Handbook, The Humana Press, Totowa, New Jersey, 2003 , Price: US$ 175.00, ISBN: 1-59259-411-5.

In the last decade stem cell research has enormously expanded, covering fields, such as that of the nervous system, that have been only partially investigated in the past. The discovery that stem cells are present not only in the developing brain but also in the adult has opened new perspectives for their usage. In addition, the finding that stem cells of different origin may transdifferentiate into each other has raised the interest of neuroscientist into haematopoietic, dermal or bone marrow and amnion mesenchymal stem cells. The observation that in some case fusion between donor and host cells may occur has suggested the need for further investigations on these issues. In addition to their potential in replacing elements which are lost, these cells may also be used, either as such or genetically-modified, to provide trophic or immunomodulatory factors to the host tissue.

The book edited by S. Sell furnishes an interesting overview of the field, providing a series of reviews on stem cells in most tissues: to use the words of Doyonnas and Blau (last chapter) it provides ''an exciting inventory of the state-of-the-art''. These reviews give to the reader the basic information and concepts on stem cells, and the main references for obtaining further information. Therefore, this book maybe very useful to the readers of this journal in order to enter smoothly in the field of stem cell research, and to the neuroscientist who wants to get information about stem cells out of the nervous system. The book comprises a first part related to embryonic stem cells from the earliest stages of development, then a second one on stem cells in different tissues and organs (dermis, bone marrow, nervous system, endothelium, heart, kidney, gastrointestinal tract, liver and pancreas, lung and mammary gland). Moreover, it deals with the relationships between stem cells and cancer. The final chapter provides a nice resumé of most issues in stem cell research. In addition, as a researcher in Neuroscience, I found interesting chapters 16 and 17: in the first one Mansergh et al. provided a broad summary of the different stem cells which can be found and used in the nervous system, and of their therapeutic potential. In the second, Snyder and collaborators provide a general description of the use of stem cells in different diseases (for example, in cerebellar models and in white matter diseases) and in the therapy of cerebral ischemia, brain tumours and amyloid plaques, and on the effects of the environment on their proliferation, migration and differentiation. They also provide several practical advices on neural stem cell isolation and propagation.

To sum up, I strongly recommend this book as a compendium to PhD students and researchers who need to get a general and up-to-date overview of the field. If I had to express a criticism to the book, I would say that more effort should have been spent on drawings and figures to catch reader's attention.

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