Stem Cell Research and Therapeutics

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Editors

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Preface

This book is an updated reference for one of the most exciting field of biomedical researches- Stem Cell Research and its therapeutic applications. Stem cell research holds great promise for the treatment of many human diseases that currently lack effective therapies. The set of chapters in this book provide insights into both basic stem cell biology and clinical applications of stem cell-based cell replacement therapies for a variety of human diseases, including cardiovascular diseases, neurological disorders, and liver degeneration. It also covers novel technologies for the culture and differentiation of both human embryonic stem cells and adult tissue stem cells. This book summarizes our current state of knowledge in stem cell research and integrates basic stem cell biology with regenerative medicine in an overall context. It is an essential reference for students, postdoctoral fellows, academic and industrial scientists, and clinicians.

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The editors wish to dedicate this book to our mentors Ron Evans, Fred Gage, and, in memory of Daniel E. Koshland, Jr.

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