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Titolo	Cellular Dedifferentiation and Regenerative Medicine / / by Xiaobing Fu, Andong Zhao, Tian Hu
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Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	A brief history of Regeneration -- The origin of cells in Regeneration -- Cell dedifferentiation -- Cell transdifferentiation -- Cell reprogramming -- Dedifferentiation vs Transdifferentiation vs Reprogramming -- The extent of cell dedifferentiation -- Maintenance of cell differentiated identity -- Unstable differentiated state -- Epidermal cell dedifferentiation and skin regeneration -- Peripheral nerve regeneration and Schwann cell dedifferentiation -- Central nervous system and dedifferentiation -- Dedifferentiation and Heart -- Dedifferentiation and Kidney -- Dedifferentiation and other 4 systems -- The relationship between cell dedifferentiation and development of cancer and several diseases.
Sommario/riassunto	This book focuses on the contribution of cell dedifferentiation to the regenerative process in all body systems, as well as its underlying molecular mechanisms and applications. The book is divided into four parts, the first of which addresses the history of cell dedifferentiation and regenerative medicine. In turn, Part II compares three routes by

which cells change their phenotype: dedifferentiation, transdifferentiation, and reprogramming. Part III includes an extensive review of cell dedifferentiation events in all nine body systems for lower organisms and mammals, respectively. The final part reviews the relationship between cell dedifferentiation and the development of cancer and several other diseases, while also outlining the prospects of and future research directions in cell dedifferentiation and regenerative medicine. The main purpose of the book is to underline the importance of cell dedifferentiation in stem cell and regenerative medicine by providing a systematical review of dedifferentiation in all body systems, together with the latest reliable evidence.
