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Nota di contenuto	Challenge and Promise: A Snap-Shot on the Molecular Biology of Notch Signaling -- Overview of Basic Mechanisms of Notch Signaling in Development and Disease -- Ligand-induced cis-inhibition of Notch signaling: the role of an extracellular region of Serrate -- Phosphorylation and proteolytic cleavage of Notch in canonical and non-canonical Notch signaling -- Maheshvara a conserved RNA helicase regulates Notch signaling in Drosophila melanogaster -- Molecular Regulation of Notch Signaling by Gremlin -- Regulation of Notch Signaling in Drosophila melanogaster: the role of the Heterogeneous Nuclear Ribonucleoprotein Hrp48 and Deltex -- Interaction of Long Non-Coding RNAs and Notch Signaling: Implications for Tissue Homeostasis Loss -- Insulin-dependent non-canonical activation of Notch in Drosophila: a story of Notch-induced muscle stem cells proliferation -- Molecular mechanisms of Notch signaling in lymphoid cell lineages development: NF-B and beyond -- Index.
Sommario/riassunto	This thoroughly revised second edition is an up-to-date overview of the current knowledge of Notch and Notch signaling in embryology and

cancer. It summarizes the newest achievements on this topic from Notch's flag-ship function in the development of the embryo and for various inherited diseases to the Notch signaling pathway's role in the development of leukemia and in a number of cancers, including skin cancer, intestinal cancer and others. Additionally, the emerging new role of the Notch signaling pathway as a promising target for prevention and therapy of various diseases, including cancer, is discussed. In the years since the previous edition, there have been numerous developments and insights within this rapidly moving field, making this new edition urgently needed. This volume also features discussions of current insights on Notch's role for embryologic tissue patterning, for stem cells, in senescence, and on the regulation of Notch signaling by epigenetic and other factors including microRNAs, long non-codingRNAs, and more. Taken as a whole, with its companion books – Notch Signaling in Embryology and Notch Signaling in Cancer – this is a definitive discussion of the topic, presented by internationally-recognized contributors. Presented in a coherent and accessible structure, this revised and updated second edition is an essential and up-to-date guide for oncologists, embryologists, researchers and advanced students.
