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Nota di contenuto	Chapter 1. How Dietary Deficiency Studies have Illuminated the Many Roles of Vitamin A during Development and Postnatal Life -- Chapter 2. Maternal-fetal Transfer of Vitamin A and its Impact on Mammalian Embryonic Development -- Chapter 3. Retinoic Acid-Regulated Target Genes during Development: Integrative Genomics Analysis -- Chapter 4. RA Signaling in Limb Development and Regeneration in Different Species -- Chapter 5. Retinoic Acid Signaling and Heart Development -- Chapter 6. Retinoic Acid Signaling and Development of the Respiratory System -- Chapter 7. Retinoic Acid Signaling and Zebrafish Dentition during Development and Evolution -- Chapter 8. Fetal Alcohol Spectrum Disorder: Embryogenesis under Reduced Retinoic

Acid Signaling Conditions.

Sommario/riassunto

This book covers subjects that have major impacts on society, such as the mechanism of maternal-fetal transfer of vitamin A, and the effects of alcohol on retinoic acid signaling and mammalian embryonic development. There has been an awareness of the importance of consuming vitamins throughout human history, but empirical studies of their physiological role and mode of action only began about 150 years ago. Since then, the biochemical nature of vitamin A and its active derivative, retinoic acid, have been identified and researchers around the globe have investigated retinoic acid’s physiological function in growth processes and in maintaining life Written by leading experts, this book discusses the latest findings and advances in retinoic acid research. It addresses topics such as the role of retinoic acid signaling in a multitude of processes, including limb, heart and respiratory system development, as well as its role in maintaining postnatal organ systems. This book is a valuable resource for scientists involved in vitamin A/retinoic acid research and readers interested in developmental biology.