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Nota di contenuto	Frontmatter -- Contents -- Acknowledgments -- Prologue -- 1. Fossils, Ontogeny, and Phylogeny -- 2. Evo-Devo, Plasticity, and Modules -- 3. Fossilized Vertebrate Ontogenies -- 4. Bones and Teeth under the Microscope -- 5. Proportions, Growth, and Taxonomy -- 6. Growth and Diversification Patterns -- 7. Fossils and Developmental Genetics -- 8. "Missing Links" and the Evolution of Development -- 9. Mammalian and Human Development -- 10. On Trilobites, Shells, and Bugs -- Epilogue: Is There a Moral to Developmental Paleontology? -- Notes -- Bibliography -- Index
Sommario/riassunto	How can we bring together the study of genes, embryos and fossils? Embryos in Deep Time is a critical synthesis of the study of individual development in fossils. It brings together an up-to-date review of

concepts from comparative anatomy, ecology and developmental genetics, and examples of different kinds of animals from diverse geological epochs and geographic areas.Can fossil embryos demonstrate evolutionary changes in reproductive modes? How have changes in ocean chemistry in the past affected the development of marine organisms? What can the microstructure of fossil bone and teeth reveal about maturation time, longevity and changes in growth phases? This book addresses these and other issues and documents with numerous examples and illustrations how fossils provide evidence not only of adult anatomy but also of the life history of individuals at different growth stages. The central topic of Biology today-the transformations occurring during the life of an organism and the mechanisms behind them-is addressed in an integrative manner for extinct animals.