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Sommario/riassunto	<p>The nervous system is the product of biological evolution and is shaped by the interplay between extrinsic factors determining the ecology of animals, and by intrinsic processes that dictate the developmental rules that give rise to adult functional structures. This special topic is oriented to develop an integrative view from behavior and ecology to neurodevelopmental processes. We address questions such as how do sensory systems evolve according to ecological conditions? How do neural networks organize to generate adaptive behavior? How does cognition and brain connectivity evolve? What are the developmental mechanisms that give rise to functional adaptation? Accordingly, the book is divided in three sections, (i) Evolution of sensorimotor systems; (ii) Cognitive computations and neural circuits, and (iii) Development and brain evolution. We hope that this initiative will support an interdisciplinary program that addresses the nervous system as a unified organ, subject to both functional and developmental constraints, where the final outcome results of a compromise between different parameters rather than being the result of several single variables acting independently of each other.</p>