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Sommario/riassunto	Cilia are tiny microtubule-based organelles projecting from the plasma membrane of practically all cells in the body. In the past 10 years a flurry of research has indicated a crucial role of this long-neglected

organelle in the development and function of the central nervous system. A common theme of these studies is the critical dependency of signal transduction of the Sonic hedgehog, and more recently, Wnt signaling pathways upon cilia to regulate fate decisions and morphogenesis. Both primary and motile cilia also play crucial roles in the function of the nervous system, including the primary processing of sensory information, the control of body mass, and higher functions such as behavior and cognition, serving as "antennae" for neurons to sense and process their environment. In this book we describe the structure and function of cilia and the various tissues throughout the brain and spinal cord that are dependent upon cilia for their proper development and function.