Record Nr. UNINA9911020128803321 **Titolo** Biological asymmetry and handedness Chichester;; New York,: Wiley, 1991 Pubbl/distr/stampa **ISBN** 9786612122385 9781282122383 128212238X 9780470514160 0470514167 9780470514177 0470514175 Descrizione fisica 1 online resource (340 p.) Collana Ciba Foundation symposium;; 162 Altri autori (Persone) BockGregory MarshJoan 591.4 Disciplina Soggetti Stereochemistry Left- and right-handedness Laterality Morphology (Animals) **Embryology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Editors, Gregory R. Bock and Joan Marsh. Papers presented at the Symposium on Biological Handedness and Symmetry, held at the Ciba Foundation, London, 20-22 Feb. 1991. "A Wiley-Interscience publication." Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto BIOLOGICAL ASYMMETRY AND HANDEDNESS: Contents: Introduction: Origins of the handedness of biological molecules; Macromolecular asymmetry; Asymmetry in protein structures; Bacterial motility: handedness and symmetry; Intracellular handedness in ciliates; Two types of bilateral symmetry in the Metazoa: chordate and bilaterian; Asymmetries during molluscan embryogenesis; Handed asymmetry, handedness reversal and mechanisms of cell fate determination in

nematode embryos; Development of the left-right axis in amphibians;

Development of handed body asymmetry in mammals

Establishment of left-right asymmetry in vertebrates: genetically distinct steps are involvedAsymmetries of cerebral neuroanatomy; The asymmetrical genetic determination of laterality: flatfish, frogs and human handedness; The inheritance of left-handedness; Disturbance of morpho ogical laterality in humans; Laterality and motor control; Final general discussion; The evolution of human laterality; Summing-up; Index of contributors; Subject index

## Sommario/riassunto

Examines the progress of leading scientists working on various aspects of handedness in order to consider the occurrence of handedness in the biological world. Provides in-depth coverage of the origin and development of morphological asymmetry occurring in most types of living organisms.