Record Nr. UNINA9910453110703321 Autore Rogers Lesley J. **Titolo** Divided brains: the biology and behaviour of brain asymmetries // Lesley J. Rogers, Giorgio Vallortigara, Richard J. Andrew [[electronic resource]] Cambridge:,: Cambridge University Press,, 2012 Pubbl/distr/stampa **ISBN** 1-107-23422-0 1-139-61003-1 1-107-25419-1 0-511-79389-8 1-139-62491-1 1-139-61561-0 1-139-61189-5 1-139-62119-X 1-283-94367-0 Descrizione fisica 1 online resource (ix, 229 pages) : digital, PDF file(s) Disciplina 612.8/2 Soggetti Cerebral dominance Brain - Duality Brain - Anatomy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Machine generated contents note: List of illustrations; Preface; 1. Introduction; 2. Function; 3. Evolution; 4. Development; 5. Causation; 6. Applications and future directions; References; Index. Sommario/riassunto Asymmetry of the brain and behaviour (lateralization) has traditionally been considered unique to humans. However, research has shown that this phenomenon is widespread throughout the vertebrate kingdom and found even in some invertebrate species. A similar basic plan of organisation exists across vertebrates. Summarising the evidence and highlighting research from the last twenty years, the authors discuss lateralization from four perspectives - function, evolution, development

and causation - covering a wide range of animals, including humans.

The evolution of lateralization is traced from our earliest ancestors, through fish and reptiles to birds and mammals. The benefits of having a divided brain are discussed, as well as the influence of experience on its development. A final chapter discusses outstanding problems and areas for further investigation. Experts in this field, the authors present the latest scientific knowledge clearly and engagingly, making this a valuable tool for anyone interested in the biology and behaviour of brain asymmetries.