Record Nr. UNINA9910254101903321 Autore Goin Francisco Titolo A Brief History of South American Metatherians: Evolutionary Contexts and Intercontinental Dispersals / / by Francisco Goin, Michael Woodburne, Ana Natalia Zimicz, Gabriel M. Martin, Laura Chornogubsky Dordrecht:,: Springer Netherlands:,: Imprint: Springer., 2016 Pubbl/distr/stampa **ISBN** 94-017-7420-X Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (245 p.) Collana Springer Earth System Sciences, , 2197-9596 Disciplina 560 Soggetti Geobiology Climate change Radiation protection Radiation—Safety measures **Biodiversity** Biogeosciences Climate Change Effects of Radiation/Radiation Protection Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto 1. Introduction -- 2. South American Living Metatherians: Physiological Ecology and Constraints -- 3. Dispersal of Vertebrates from between the Americas, Antarctica, and Australia in the Late Cretaceous and Early Cenozoic -- 4. Evolutionary Contexts -- 5. Phylogeny and Diversity of South American Metatherians -- 6. Paleobiology and Adaptations of Paleogene Metatherians -- 7. Milestones in the Evolution of South American Metatherians. Sommario/riassunto This book summarizes major aspects of the evolution of South American metatherians, including their epistemologic, phylogenetic, biogeographic, faunal, tectonic, paleoclimatic, and metabolic contexts. A brief overview of the evolution of each major South American lineage

("Ameridelphia", Sparassodonta, Didelphimorphia, Paucituberculata, Microbiotheria, and Polydolopimorphia) is provided. It is argued that due to physiological constraints, metatherian evolution closely followed

the conditions imposed by global temperatures. In general terms, during the Paleocene and the early Eocene multiple radiations of metatherian lineages occurred, with many adaptive types exploiting insectivorous, frugivorous, and omnivorous adaptive zones. In turn, a mixture of generalized and specialized types, the latter mainly exploiting carnivorous and granivorous-folivorous adaptive zones, characterized the second half of the Cenozoic. In both periods, climate was the critical driver of their radiation and turnovers.