Record Nr. UNINA9910789715203321 Autore Bateson P. P. G (Paul Patrick Gordon), <1938-> **Titolo** Plasticity, Robustness, Development and Evolution / / Patrick Bateson, Peter Gluckman [[electronic resource]] Cambridge: ,: Cambridge University Press, , 2011 Pubbl/distr/stampa **ISBN** 1-107-21585-4 1-139-12422-6 1-283-29571-7 9786613295712 1-139-12234-7 1-139-11660-6 1-139-12726-8 0-511-84238-4 1-139-11224-4 1-139-11443-3 Descrizione fisica 1 online resource (ix, 156 pages) : digital, PDF file(s) SCI072000 Classificazione Disciplina 571.8 Soggetti Developmental biology **Evolution (Biology)** Phenotypic plasticity Adaptation (Biology) Survival analysis (Biometry) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Setting the scene -- 2. Clarifications -- 3. Developmental robustness -- 4. Plasticity -- 5. Integration of robustness and plasticity -- 6. Current functions of integrated developmental processes -- 7. Evolution of developmental processes -- 8. Impact of developmental processes on evolution -- 9. Development and evolution intertwined. Sommario/riassunto How do we understand and explain the apparent dichotomy between plasticity and robustness in the context of development? Can we identify these complex processes without resorting to 'either/or' solutions? Written by two leaders in the field, this is the first book to

fully unravel the complexity of the subject, explaining that the epigenetic processes generating plasticity and robustness are in fact deeply intertwined. It identifies the different mechanisms that generate robustness and the various forms of plasticity, before considering the functional significance of the integrated mechanisms and how the component processes might have evolved. Finally, it highlights the ways in which epigenetic mechanisms could be instrumental in driving evolutionary change. Essential reading for biologists and psychologists interested in epigenetics and evolution, this book is also a valuable resource for biological anthropologists, sociobiologists, child psychologists and paediatricians.