



Plasticity, Robustness, Development and Evolution

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.

'This carefully constructed, systematic, and balanced new book provides a much-needed roadmap that guides the reader through the intricacies of development and its interplay with evolution.'

Mark S. Blumberg, *University of Iowa, USA*

'If, as Bateson and Gluckman write, "the conceptual flower-bed is full of vigorous weeds with deep roots," then this volume is just the spade needed to uproot tenacious but disproved ideas and to mix the soil so better ones can germinate and flourish.'

Scott F. Gilbert, *Swarthmore College, Pennsylvania, USA*

'... comprehensive and accessible, its contents have implications for fields as diverse as evolutionary theory and public health.'

Paul Griffiths, *University of Sydney, Australia*

'A masterful synthesis – by two masters of their fields.'

Armand Leroi, *Imperial College, London, UK*

'This elegantly written small volume... presents an integration of the many fields that are contributing to form the backbone of development (robustness) and the many processes that create its plasticity.'

Jay S. Rosenblatt, *Rutgers University, Newark, USA*

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