

"I greatly enjoyed studying Wallace Arthur's new book. I believe it is the first of its kind – a general evolution text that is focused on the integrated developing organism in a broad evolutionary and phylogenetic framework. The organization is novel and intriguing... [the] many illustrations are well chosen and executed; and the book is attractive and inviting. I no longer teach evolution, but if I did I would use this book because I believe it shows the directions in which evolutionary studies are heading."

Professor David Wake, University of California, Berkeley

"I have really enjoyed reading this book. One of its strengths is the almost conversational style. I found it easy to read, but also feel that it will be invaluable in teaching. One of our tasks in university level teaching is to develop students' critical thinking skills. We need to support them in their intellectual development from a 'just the facts' approach to being able to make critical judgements based on available evidence. The openness and honesty with which Professor Arthur speaks to uncertainty in science is refreshing and will be a baseline for discussions with students." Professor Patricia Moore, Exeter University

This book is aimed at students taking courses on evolution. Its approach and structure are very different from previously published evolution texts. The core theme in this book is how evolution works by changing the course of embryonic and post-embryonic development. In other words, it is an evolution text that has been very much influenced by the new approach of evolutionary developmental biology, or 'evo-devo'.

Key themes include: developmental repatterning; adaptation and coadaptation; gene co-option; developmental plasticity; the origins of evolutionary novelties and body plans; and evolutionary changes in the complexity of organisms. As can be seen from this list, the book includes information across the levels of the gene, the organism, and the population. It also includes the issue of mapping developmental changes onto evolutionary trees. The examples used to illustrate particular points range widely, including animals, plants, and fossils.

This book has a companion website www.wiley.com/go/arthur/evolution with Figures and Tables from the book for downloading.

WALLACE ARTHUR is Professor of Zoology at the National University of Ireland, Galway. He is one of the founding editors of the journal *Evolution & Development*. He obtained his PhD from the University of Nottingham, and held positions at several British universities before moving to Galway in 2004. He has been a Visiting Research Scholar at Harvard University and a Visiting Associate of Darwin College, Cambridge.

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Cover image: Adult and juvenile king penguins. The juvenile looks so different from the adult that, when it was first discovered, it was thought to belong to a different species, and was given the name 'woolly penguin'. © Roger Tidman.

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