

An outstanding look at the complex field of evo-devo—from traditional avenues of research to more novel topics—as reported and speculated on by a panel of scientific experts

The process of development transforms small single-cell zygotes into large complex animals and plants. The way this happens represents a visually stunning synchrony of processes from cell growth to cell death and differentiation. The modification of developmental trajectories can result in evolutionary change. Evo-devo thus sits at the intersection of research into the processes and mechanisms of development and the processes and mechanisms of evolution.

Providing outstanding breadth of coverage in evo-devo, *Advances in Evolutionary Developmental Biology* presents a comprehensive review of the milestones of research in evolution and development and outlines the exciting research agenda for the field going forward. Compiling the viewpoints of a diverse group of field experts, this timely text expands the now-mature science of evo-devo into more complex areas of research and offers eye-opening chapters on:

- “The genetic tool-kit”: the life history of an important metaphor
- The evolution of sex determination in animals
- The evolution and development of eusocial insect behavior
- Evo-devo on chip
- From black and white to shades of gray: unifying evo-devo through the integration of molecular and quantitative approaches
- Advances in understanding limb regeneration in a developmental and evolutionary context
- Ectodermal organ stem cells: morphogenesis, population regenerative behavior, and evo-devo
- Perspectives in evo-devo of the vertebrate brain
- Evolution and development of language
- Advancing evolutionary developmental biology

Advances in Evolutionary Developmental Biology is an essential reference destined to become the go-to source for ideas and hypotheses for a new generation of graduate students in evolutionary and developmental biology.

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