DEVELOPMENTAL BIOLOGY
An official journal of the Society for Developmental Biology

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DESCRIPTION

*Developmental Biology* (DB) publishes original research on mechanisms of development, differentiation, and growth in animals and plants at the molecular, cellular, genetic and evolutionary levels. Areas of particular emphasis include transcriptional control mechanisms, embryonic patterning, cell-cell interactions, growth factors and signal transduction, and regulatory hierarchies in developing plants and animals.

Research Areas Include:

- Molecular genetics of development
- Control of gene expression
- Cell interactions and cell-matrix interactions
- Mechanisms of differentiation
- Growth factors and oncogenes
- Regulation of stem cell populations
- Evolution of developmental control
- Gametogenesis and fertilization

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Cell and Developmental biologists. Focuses on: mechanisms of development, differentiation, and growth in animals and plants.
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Introduction and article types
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Developmental Biology's goal is to publish high quality papers providing causal insight into the cellular and molecular mechanisms that govern developmental processes.

Studies which simply confirm an established functional role for a developmental component by presenting analysis in a new species lack sufficient novelty for consideration. Descriptive studies will only be considered if/when they represent a timely and novel insights or resources to the field.

The following article types are available for authors:

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Developmental Biology seeks to publish only the very best papers that contribute new information to our understanding of developmental mechanisms. We require that manuscripts specifically address biological relevance and conform to the following guidelines:

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Developmental Biology is pleased to publish classical experimental embryology papers that provide unusual new insights.

Experiments using interfering DNA or proteins to address gene function are expected to be highly controlled. In particular, experiments with Morpholino, RNAi, siRNA or dominant negative constructs are expected to contain very precise controls to address the specificity of the effects observed.

Studies in which the expression, structure or function of a gene/protein is altered but leads to no phenotypic consequences are not appropriate. Furthermore, studies of mutants which simply show that a gene/protein is required for development will be discouraged unless attempts are made to address the mechanistic basis, causal roles or tissues and processes affected.

Experiments using stem cells must advance our understanding of biological functioning. Studies that simply grow/isolate stem cells from a tissue and show what markers they express are not appropriate.

Studies using cell culture must show direct (in vivo) relevance in a developmental context.

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This article type is intended to raise new ideas and challenge current dogma. An abstract is still required but the format is flexible. Perspectives are subject to the same review process as original papers, but may receive expedited consideration.

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Technical notes provide a space for protocols and technologies that advance the field of Developmental Biology. Novel solutions and applications of technologies at the frontier with other areas of science will be considered of particular importance. No specific formatting requirements are applied to these articles, protocols are encouraged as long as an appropriate introductory background and aim of the technique and representative images are included.

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