 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, growth, homeostasis and regeneration 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: Regulation of stem cells and regeneration Gene regulatory networks Morphogenesis and self organization Differentiation in vivo and in vitro (organoids) Growth factors and oncogenes Genetics and epigenetics of development Evolution of developmental control Analysis of development at the single cell level

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AUDIENCE

Cell and Developmental biologists. Focuses on: mechanisms of development, differentiation, and growth in animals and plants.
ABSTRACTING AND INDEXING

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Elsevier BIBOBASE
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Laurinda Jaffe, UConn Health, Farmington, Connecticut, United States of America
Rulang Jiang, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, United States of America
Developmental Biology and Genetics
Jane Johnson, The University of Texas Southwestern Medical Center, Dallas, Texas, United States of America
Neural development, Neuronal specification, Somatosensory, bHLH transcription factors, Neural progenitors, neuroendocrine cancer of the lung and prostate

Randy Johnson, The University of Texas MD Anderson Cancer Center, Houston, Texas, United States of America
Hippo signaling, Liver development, Regeneration and disease, Mouse development and genetics, Organogenesis, Cancer

Ryoichiro Kageyama, Riken Center for Brain Science, Wako, Japan
Neural development, neural stem cell, segmentation clock, transcription factor, Notch signaling, ultradian oscillation, mouse

Hisato Kondoh, Japan Tobacco Inc Biohistory Research Hall, Takatsuki, Japan
Developmental Biology

Paul A. Krieg, The University of Arizona College of Medicine Tucson, Tucson, Arizona, United States of America
Heart and vascular system, Endothelial cells, Myocytes, Transcription, Homeobox genes, Xenopus

Paul Kulesa, Stowers Institute for Medical Research, Kansas City, Missouri, United States of America

Justin Kumar, Indiana University Bloomington, Department of Biology, Bloomington, Indiana, United States of America
Developmental Biology

Paul Kulesa, Stowers Institute for Medical Research, Kansas City, Missouri, United States of America
Heart and vascular system, Endothelial cells, Myocytes, Transcription, Homeobox genes, Xenopus

Hisato Kondoh, Japan Tobacco Inc Biohistory Research Hall, Takatsuki, Japan
Developmental Biology

Kenro Kusumi, Arizona State University, Tempe, Arizona, United States of America
Genomics, Genetics, Regeneration, Development, Evolution, Reptile, Conservation Biology

Carole LaBonne, Northwestern University, Evanston, Illinois, United States of America

Brian Link, Medical College of Wisconsin, Milwaukee, Wisconsin, United States of America

Karen Liu, King's College London, London, United Kingdom
Neural crest, Xenopus, mouse, human iPSC, human stem cells, genetics

Malcolm Logan, King's College London, London, United Kingdom
Limb development, Tbx genes, congenital limb defects, bone development and repair, muscle, regeneration, mouse, chick

Ahmed Mahmoud, University of Wisconsin-Madison School of Medicine and Public Health, Madison, Wisconsin, United States of America
cardiovascular, regeneration, metabolism

Suzanne Mansour, The University of Utah, Salt Lake City, Utah, United States of America
inner ear, genetics, development, FGF signaling

Christophe Marcelle, Monash University, Clayton, Victoria, Australia
Wnt pathway, TGF beta pathway, Notch pathway, Skeletal Muscle, Cell fate decision, Lineage tracing, Stem cells, Muscle fusion, Avian embryos

Ralph Marcucio, University of California San Francisco, San Francisco, California, United States of America

Benjamin Martin, Stony Brook University, Stony Brook, New York, United States of America
Developmental Biology, Zebrafish, Neuromesodermal Progenitors, Mesoderm, Xenograft, EMT, Metastasis, Morphogenesis

James Martin, Baylor College of Medicine, Houston, Texas, United States of America
Cardiovascular biology, tissue regeneration, genomics, craniofacial development, atrial fibrillation

Mark Martindale, University of Florida Whitney Laboratory for Marine Bioscience, Saint Augustine, Florida, United States of America

Roberto Mayor, University College London, London, United Kingdom
Cell and Developmental Biology

David McClay, Duke University, Durham, North Carolina, United States of America
Sea urchin, Morphogenesis, Gene regulatory networks, Epithelial-mesenchymal transition, Neural development, Cell adhesion, Innate immunity, Invertebrate development, Gastrulation, scRNA-seq

Daniel Medeiros, University of Colorado Boulder, Boulder, Colorado, United States of America

Cathy Mendelsohn, Columbia University, New York, New York, United States of America

Mayssa Mokalled, Washington University in St Louis School of Medicine, Saint Louis, Missouri, United States of America
Neurogenesis, Glia, Spinal cord, Regeneration, Injury

Lee Niswander, University of Colorado Anschutz Medical Campus, Aurora, Colorado, United States of America
Birth defects, Neural tube, Gene-environment, Epigenomics

Michael B O'Connor, University of Minnesota Twin Cities, Minneapolis, Minnesota, United States of America
TGF beta signaling, Morphogens, Steroid hormone signaling, Metamorphosis, Developmental Timing

Guillermo C. Oliver, Northwestern University Feinberg School of Medicine, Chicago, Illinois, United States of America
Organogenesis, Lymphatics, Development, Cardiovascular, Endothelial cells

David Ornitz, Washington University in St Louis School of Medicine, Saint Louis, Missouri, United States of America

Olivier Pourquié, Harvard University, Cambridge, Massachusetts, United States of America

Victoria Prince, The University of Chicago, Chicago, Illinois, United States of America
Zebrafish, Nervous system, Hindbrain, Neural crest, Cell migration, Evolution
Elizabeth Robertson, University of Oxford, Oxford, United Kingdom
Minna Roh-Johnson, The University of Utah School of Medicine, Salt Lake City, Utah, United States of America
Cell biology, Developmental biology, Cytoskeleton, Cell migration, Cancer biology, Immunology, Mouse, Zebrafish
Michael Rudnicki, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada
Stem Cell Biology, Myogenesis, Satellite Cells, Molecular Biology, Transcriptional Regulation, Transcriptional Networks, Gene Expression, Signal Transduction, Differentiation, Molecular Genetics
Alejandro Sánchez Alvarado, Stowers Institute for Medical Research, Kansas City, Missouri, United States of America
Planaria, New research organisms, Regeneration, Stem cells, Single cell, Hox genes
Makoto Sato, Kanazawa University, Kanazawa, Japan
neural stem cell, column formation, axon guidance, Drosophila, visual system, mathematical model, mechanobiology, neural development
Andreas Schedl, University of Côte d'Azur, Nice, France
Developmental biology, stem cell research, kidney formation, adrenal gland, Wnt signalling, sexual dimorphism
Thomas Schilling, University of California Irvine, Irvine, California, United States of America
Developmental biology, cell biology, genetics, neurobiology, skeletal biology, systems biology
Gerhard Schlosser, University of Galway, Galway, Ireland
Placodes, Xenopus, Nervous system, Peripheral nervous system, Evolution of development, Sensory organs, Ear, Lateral line
Ashley Seifert, University of Kentucky, Lexington, Kentucky, United States of America
Regeneration biology, tissue regeneration, evolution and development, skin development, appendage development
Lila Solnica-Krezel, Washington University in St Louis School of Medicine, Saint Louis, Missouri, United States of America
Developmental Biology, Genetics, Embryogenesis, Gastrulation
Beatriz Sosa-Pineda, Northwestern University Feinberg School of Medicine, Chicago, Illinois, United States of America
Liver, Pancreas, Cancer, Regeneration, Mouse, Morphogenesis
Michelle Southard-Smith, Vanderbilt University Medical Center, Nashville, Tennessee, United States of America
Claudio Stern, University College London, London, United Kingdom
(No new submissions)
Andrea Streit, King's College London, London, United Kingdom
Yi-Hsien Su, Institute of Cellular and Organismic Biology Academia Sinica, Taipei, Taiwan
Developmental Biology, EvoDevo, Deuterostomes, sea urchin, hemichordate
Xin Sun, University of California San Diego, Department of Pediatrics, La Jolla, California, United States of America
Organogenesis, Stem cells, Regeneration, Lung, Neural control of organ, Mouse
Lori Sussel, University of Colorado Denver Barbara Davis Center for Childhood Diabetes, Denver, Colorado, United States of America
Pancreas development, Islet biology, T1D, T2D, Transcriptional regulation, RNA processing
Cliff Tabin, Harvard Medical School, Boston, Massachusetts, United States of America
Yoshiko Takahashi, Kyoto University, Kyoto, Japan
Developmental Biology
Patrick Tam, The University of Sydney, Sydney, New South Wales, Australia
Developmental Biology, Stem Cell Biology, Functional Genomics
Miguel Torres, Spanish National Cardiovascular Research Center, Madrid, Spain
Limb, Meis, Heart, Cardiac, Cell competition, Epicardium
Paul Trainor, Stowers Institute for Medical Research, Kansas City, Missouri, United States of America
Neural crest cells, craniofacial biology, mouse development, vitamin A, retinoic acid signaling, rDNA transcription, ribosome biogenesis
Mark Van Doren, Johns Hopkins University, Baltimore, Maryland, United States of America
John B. Wallingford, The University of Texas at Austin, Austin, Texas, United States of America
Morphogenesis, Cell polarity, Neural tube defects, Ciliogenesis, Cilia beating, Ciliopathies, Proteomics, Birth defects
Deneen Wellik, University of Michigan Medical School, Ann Arbor, Michigan, United States of America
Hox genes, Musculoskeletal, Morphogenesis, Organogenesis, MSCs/mesenchymal stromal cells, Muscle biology, Mouse genetics
Athula H. Wikramanayake, University of Miami, Department of Biology, Coral Gables, Florida, United States of America
Cnidarians, Echinoderms, AV axis, Cell polarity, Maternal mRNAs, Wnt, Endomesoderm specification, Gastrulation, Evolution

Christopher Wright, Vanderbilt University School of Medicine, Nashville, Tennessee, United States of America
Joseph Yost, The University of Utah, Salt Lake City, Utah, United States of America
Katherine E. Yutzey, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, United States of America

Heart cardiac valve, ECM, Congenital birth defects, Mouse

Yimin Zou, University of California San Diego Division of Biological Sciences, La Jolla, California, United States of America

Neuroscience
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Introduction and article types

Scientific Guidelines for Authors submitting to Developmental Biology

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:

Expression profiling and gene expression studies must contain supporting functional data. Studies solely based on analysis of expression by microarray, northern blots, PCR or in situ hybridization that are too descriptive or preliminary would not justify full review.

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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Resource papers are original research papers which provide important and timely information that will have an impact on the work of developmental biologists. Examples of such papers are studies describing novel spatial gene expression patterns and gene phylogeny, new model systems or containing a usable collection of data of particular value to the field. This would not include, for example, a description of the expression pattern of a gene in one species that has already been described in another species, or an expression pattern with no obvious link to a developmental process.
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**Short Communications**

Short communications are intended to provide quick publication of good impact results, thus portraying current advances in the field of Developmental Biology. This new format of paper in DB should contain approximately four figures and a single scientific conclusion. Although there is no specific word limit, typical short communications are in the range of 2,000–3,000 words.

**Review Articles**

Review articles are intended to reach a broad audience of readers from investigators in the field to new graduate students learning the material for the first time. We encourage submissions of review articles on established topics in the field but also on timely and provocative areas of research. Review Articles are by invitation; scientists who wish to contribute a review should send a pre-submission inquiry to one of the editors.

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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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Developmental Biology supports the presentation of all experimental data in its final published articles online and in print. For this reason word length and figure numbers are not restricted (except for Short Communications) and supplementary data are generally not supported.
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*Ethics in publishing*

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**Reporting guidance**
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and editorial review of sex and gender information in study design, data analysis, outcome reporting and research interpretation - however, please note there is no single, universally agreed-upon set of guidelines for defining sex and gender.

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