# PAPER-SPECIFIC PUBLISHING CRITERIA

## Criteria for stem cell papers

Development welcomes and encourages the submission of stem cell papers that offer new insights into the cells, pathways or molecules involved in self-renewal, cell fate specification, differentiation, regeneration and reprogramming. Stem cell biology papers need not be limited to developing organisms. Development will also consider reports of technical advances in stem cell identification and manipulation. Reports of in vitro differentiation protocols are welcome but these studies should be based on or should provide insight into molecular mechanisms, and the reported protocols should demonstrate efficiency, robustness and reproducibility across several independent stem cell lines or cultures.

## Criteria for Techniques and Resources papers

Techniques and Resources papers should describe a novel technique or substantial advance of an existing technique, or a new resource that will have a significant impact on developmental biology research. Techniques and Resources papers can be in short (Research Report) or long (Research Article) format. Of particular interest are technical papers describing: new methods for the live imaging of cellular processes, single cells or whole organs during different stages of development in an experimental organism; new genetic techniques for the analysis of in vivo gene function; and new approaches for studying stem cells during development, in adult organs and during regeneration. The new technique should be described in sufficient detail to be easily replicated in other laboratories, and validation of the approach should be included. Technical papers submitted in the Research Article format should include an application of the technique to an area of developmental or stem cell biology. We also welcome submission of Resource papers describing new databases, systems-level datasets or genetic resources that will be of major value to the developmental biology community. The data or resource described must be made available to the community with minimal restrictions upon publication.

## Criteria for papers reporting results of screens

Where a study involves a genome-wide or high-throughput screen, authors need to provide additional and novel insight into the functions of the identified targets by either verifying at least one target such that it is shown to be a crucial functional component of the network or phenotype of interest, or by using the data to make system-wide predictions about how the transcriptional network acts. Experiments should ideally be performed to test these predictions where it is feasible to do so.

# EDITORIAL POLICIES CONCERNING MANUSCRIPT PREPARATION

## Experimental subjects

Authors must name the committee(s) that have approved experiments involving human subjects or human tissue in the Materials and Methods section of their paper and include with their submission a statement to confirm that informed consent was obtained from all subjects or tissue donors. For work involving human eggs or embryos, any financial recompense to donors must be declared. For research involving live vertebrates and higher invertebrates, experiments must comply with all relevant institutional and national animal welfare laws, guidelines and policies. The corresponding author will be asked to confirm this at submission, and a statement confirming that experiments conform to the relevant regulatory standards is required in the Materials and Methods section of a paper.

## Reagents

Please note that by publishing in *Development*, it is understood that authors are prepared to make available to their qualified academic colleagues, in a timely manner and with minimal restrictions, the materials or specialized reagents (for example, antibodies or DNA probes) needed to duplicate their research results.

## Microarray data

When microarray data are used to infer global properties of how signalling pathways or

transcription factors control a developmental process, the microarray data must be made available to the reviewers and editors at the time of manuscript submission and must be deposited and released in a public repository prior to publication, with the accompanying accession number cited in the paper. If a microarray experiment has been used to identify candidate genes potentially involved in a developmental process (such as targets of a signalling pathway or transcription factor), and if the accompanying paper focuses on one or two identified target genes and confirms their implication in the process, then the microarray data do not need to be deposited and released prior to publication, but should be released within six months of publication. A detailed description of how these data were obtained is still required for publication.

When submitting microarray data with a paper, please do not submit large raw and/or analysed microarray data files as supplementary data to the journal. Instead, please submit them to either the Gene Expression Omnibus http://www.ncbi.nlm.nih.gov/geo/ or ArrayExpress http://www.ebi.ac.uk/arrayexpress repositories and supply the journal with an accession number and any necessary passwords to enable the reviewers and editors of a manuscript to access the data. Submission should be in a MIAME-compliant and widely accessible format (see http://www.mged.org/Workgroups/MIAME/miame.html for more information). Microarray data files of 10 Mb or less can be submitted to the journal as supplementary material.

### Sequence data

Sequences must be submitted to the EMBL Database Library or GenBank, with a release date corresponding to the date of publication. Protein sequences that have been determined by direct sequencing of the protein must be submitted to SWISS-PROT at the EBI at http://www.ebi.ac.uk/swissprot/Submissions/spin/. All accession numbers should be included in the manuscript. Experimental data should be submitted to the appropriate databases, with a release date corresponding to the date of publication.

### Image manipulation

The adjustment of digital images with computer software is acceptable. However, the final image must remain representative of the original data, and the corresponding author will be asked to confirm this at submission. Unacceptable image manipulation includes the addition, alteration or removal of a particular feature of an image, and the splicing of multiple images to suggest they represent a single field in a micrograph or gel. Adjustments applied to the whole image are generally acceptable if no specific feature of the original data is obscured as a consequence. If evidence of such inappropriate manipulation is detected, *Development* will ask for the original data to be supplied and, if necessary, might revoke acceptance of the article.

### Author Contributions

*Development* requires that the independent contributions of each author be stated (for primary research papers). Such statements can designate those authors who developed the concepts or approach, performed experiments or data analysis, and prepared or edited the manuscript prior to submission. The Author Contributions statement should be given after the Acknowledgments.

## GENERAL INFORMATION

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- Title - please supply a short title of no more than 32 characters. Please make the title a clear and concise summary of your specific findings and avoid specialist abbreviations.
- Please also provide three keywords for indexing.
- Abstract - Please provide a brief summary of no more than 250 words and do not include references in it. The summary should: succinctly and clearly introduce the topic of the paper; highlight the most important results; and explain any conceptual advances arising from them.
- Introduction - This should succinctly provide the background information that is required to set the results into their proper biological context. It should not contain subheadings.

- Materials and Methods - This section should include all the necessary detail to understand and to replicate the experiments performed, in conjunction with cited references. This section should also include a description of any statistical or mathematical methods that were used in the study. Please include primer sequences in this section: if numerous, please supply together with any other essential information relating to the primers as a supplementary table.
- Results - This section should describe the results of the experiments performed and can be broken up by subheadings. Please ensure that the distinction between new results and published findings/established facts is clear.
- Discussion - This section should explain the significance of the results and should place them into a broader context.
- Please note, in Research Reports the Results and Discussion sections should be combined into a single section.
- Please give Latin names and taxonomic authority (e.g. Linnaeus) for the experimental species.
- Please provide names and locations (town, state, country) of equipment suppliers and of anyone who has gifted reagents to you.

## FILE FORMATS

For manuscript text and tables, our preferred file format is **Microsoft Word .docx** (or .doc), but other word-processing formats can be submitted.

Please also note that files utilizing OLE (Object Linking and Embedding) technology to display information or to embed files are currently not supported by our online submission system.

### Please do not:

Insert any figures into the manuscript document.

### Preparing mathematical equations and simulations

**Display equations:** Please number all display equations, consecutively.
They should take the form:

$$C_{\mathrm{T}} = \frac{2Mg}{\rho \bar{C} R_{\mathrm{D}} U_{\infty}^{2}} \quad , \qquad (1)$$

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**Mathematical simulations:** Mathematical simulations (e.g. Mathematica) can be published as supplementary data. Please provide all files necessary to run the simulation and include appropriate instructions in the legend (for an example, see http://dev.biologists.org/content/137/14/2265/suppl/DC1).

## PREPARING THE TEXT

### Please:

- Use SI units only, units for time should be written out in full (days, hours, minutes, seconds).
- Define abbreviations the first time they are used in text - uppercase should be typed without stops (USA, UK); lowercase with stops (u.v.).
- Type a space between a digit and a unit, e.g. 1 mm (except 1%, 4°C).
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- Use s.e.m. and s.d. for standard errors, etc.
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### Please do not:

- Italicize Latin words.

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Each reference cited in the text must be listed in the References and vice versa: please check these carefully. Literature citations in text are as follows:

- One author - (Jones, 1995) or (Jones, 1995; Smith, 1996).
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### Reference list

References are listed in alphabetical order according to the surname and initials of the first author. Use the following style:

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- **Matlin, K. S. and Caplan, M. J.** (1992). Epithelial cell structure and polarity. In *The Kidney: Physiology and Pathophysiology* (ed. D. W. Seldin and G. Giebisch), pp. 447-473. New York: Raven Press Ltd.
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The Latin name and taxonomic authority (e.g. Linnaeus) should be given for all experimental species.

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