STEM CELL RESEARCH

TABLE OF CONTENTS

- Description p.1
- Impact Factor p.1
- Abstracting and Indexing p.1
- Editorial Board p.2
- Guide for Authors p.4

DESCRIPTION

*Stem Cell Research* is dedicated to publishing high-quality manuscripts focusing on the biology and applications of stem cell research. Submissions to *Stem Cell Research*, may cover all aspects of stem cells, including embryonic stem cells, tissue-specific stem cells, cancer stem cells, developmental studies, genomics and translational research. Special focus of SCR is on mechanisms of pluripotency and description of newly generated pluripotent stem cell lines.

The journal publishes

- Original articles
- Short reports
- Review articles
- Communications
- Methods and reagents articles
- Lab Resource: Stem Cell Line

IMPACT FACTOR

2019: 4.489 © Clarivate Analytics Journal Citation Reports 2020

ABSTRACTING AND INDEXING

Scopus
Chemical Abstracts
PubMed/Medline
Web of Science
Journal Citation Reports - Science Edition
Biotechnology Citation Index
Biological Abstracts
BIOSIS Citation Index
PubMed/Medline
ISI
Directory of Open Access Journals (DOAJ)
EDITORIAL BOARD

Editor-in-Chief

Thomas Zwaka, Icahn School of Medicine at Mount Sinai Department of Microbiology, New York, New York, United States
Stem cells, Regenerative Medicine, Gene editing, Transcriptional control

Associate Editors

Teresa V. Bowman, Albert Einstein College of Medicine, Developmental and Molecular Biology, Bronx, New York, United States
Stem cells, Hematopoiesis, Zebrafish, Splicing, MDS

Paul Gadue, The Children's Hospital of Philadelphia Raymond G Perelman Center for Cellular and Molecular Therapeutics, Philadelphia, Pennsylvania, United States

Bradley J. Merrill, University of Illinois at Chicago, Chicago, Illinois, United States

Lab Resources Editors

Adriana Beltran, University of North Carolina at Chapel Hill School of Medicine, Department of Pharmacology, Chapel Hill, North Carolina, United States
Stem Cells, Gene editing, Organoids, Cell differentiation, Transcription Factors.

Barbara Corneo, Columbia University Irving Medical Center, New York, New York, United States

Sunita D’Souza, Dir-Center for Modeling Pediatric Diseases, Memphis, United States

Christopher Navara, University of Texas at San Antonio, San Antonio, Texas, United States

Dmitry Ovchinnikov, The University of Queensland Australian Institute for Bioengineering and Nanotechnology, Brisbane, Australia

Wenli Yang, University of Pennsylvania Perelman School of Medicine; Department of Medicine, Division of Translational Medicine and Human Genetics, Institute for Regenerative Medicine, Philadelphia, Pennsylvania, United States

Editorial Board

Helen Abud, Monash University Monash Biomedicine Discovery Institute, Clayton, Australia

Peter Andrews, The University of Sheffield Department of Biomedical Science, Sheffield, United Kingdom
Human, Embryonic stem cells, Pluripotent stem cells, Differentiation, Cancer

Nissim Benvenisty, Azrieli Center for Stem Cells and Genetic Research, Jerusalem, Israel
Differentiation and genetic manipulation of human embryonic stem cells, Human genetic disorders and human pluripotent stem cells, Genomic analysis of human development, Oncogenic properties of stem cells

Pia Bernasconi, Foundation IRCCS Carlo Besta Neurological Institute, Milano, Italy

Benedikt Berninger, MRC Centre for Developmental Neurobiology, London, United Kingdom

Mick Bhatia, McMaster University, Hamilton, Ontario, Canada

Alexander Birbair, Federal University of Minas Gerais, Belo Horizonte, Brazil
Pericytes, Niche, Microenvironment, Blood vessels, Cancer

Josh Brickman, University of Copenhagen, Novo Nordisk Foundation Center for Stem Cell Biology (DanStem), Copenhagen, Denmark
Pluripotency, Endoderm, Transcription

Leif Carlsson, Umeå Centre for Molecular Medicine, Umea, Sweden
Eye development, Embryonic stem cells, Mouse genetics/transgenic

HongKui Deng, Peking University Stem Cell Research Center, Beijing, China
Cellular reprogramming, Regenerative medicine, Directed differentiation of human pluripotent stem cells

Chris Denning, University of Nottingham, Nottingham, United Kingdom

Elaine Dzierzak, The University of Edinburgh, Edinburgh, United Kingdom
Hematopoietic development

Bernd Fleischmann, University Hospital Bonn Institute of Physiology, Bonn, Germany
Stem Cell Biology, Regenerative Medicine of the Cardiovascular Medicine, Cellular Signaling

William Fleming, Oregon Health & Science University, Portland, Oregon, United States

Deborah French, The Children’s Hospital of Philadelphia Department of Pathology and Laboratory Medicine, Philadelphia, Pennsylvania, United States

Pamela Gehron Robey, National Institutes of Health, Department of Health and Human Services, National Institute of Dental and Craniofacial Research, Skeletal Biology Section, Bethesda, Maryland, United States
Stem cells, Bone, Cartilage, Connective tissues, Skeletal diseases

Thomas Graf, Center for Genomic Regulation, Barcelona, Spain

Neil Hanley, The University of Manchester Faculty of Biology Medicine and Health, Manchester, United Kingdom
Human embryogenesis, Pancreas, Liver

Anthony Holland, University of Bristol, Bristol, United Kingdom

Juan Carlos Izpisúa Belmonte, Salk Institute for Biological Studies, La Jolla, California, United States
Embryogenesis, Regenerative medicine, Organoids, Epigenetics, Gene-editing

Moustapha Kassem, Odense University Hospital Department of Endocrinology, Odense C, Denmark
Steven Kattman, Cellular Dynamics International Inc, Madison, Wisconsin, United States
Charles Keller, Oregon Health & Science University, Portland, Oregon, United States
Andreas Kurtz, Berlin Brandenburg Center for Regenerative Therapies, Berlin, Germany

Stem cell, Cell data management, Tissue modelling, Organoids, Extracellular matrix

Georges Lacaud, Cancer Research UK Manchester Institute, Macclesfield, United Kingdom

Developmental hematopoiesis, Hemogenic endothelium, Hematopoietic stem cells, Transcription factors, Leukemia

Xiajun Li, ShanghaiTech University, Shanghai, China
Haifan Lin, Stem Cell Center, Yale University, New Haven, United States. ShanghaiTech University, Shanghai, China
Steve Oh, Bioprocessing Technology Institute, Singapore, Singapore
Janet Paluh, SUNY Polytechnic Institute College of Nanoscale Sciences, Albany, New York, United States
Martin Pera, Jackson Laboratory, Bar Harbor, Maine, United States
Benjamin Reubinoff, Hadassah University Medical Center Sidney and Judy Swartz Embryonic Stem Cell Research Center of The Goldyne Savad Institute of Gene Therapy and The Department of Obstetrics and Gynecology, Jerusalem, Israel

Human Embryonic Stem Cells, Regeneration, Cell therapy

Mara Riminucci, University of Rome La Sapienza, Roma, Italy

Bone physiology, Skeletal progenitors, Genetic Skeletal Diseases, Fibrous Dysplasia.

Kazuhiko Sakurada, RIKEN, Medical Sciences Innovation Hub Program, Tokyo, Japan

Complex systems science, AI, Clinical science, Stem cell biology

Pierre Savatier, Stem Cell and Brain Research Institute, Bron, France

Christoph Schaniel, Icahn School of Medicine at Mount Sinai Department of Pharmacological Sciences, New York, New York, United States

Hematopoiesis, Hematopoietic stem cells, Cancer, Induced pluripotent stem cells, Cardiovascular

Timm Schroeder, Swiss Federal Institute of Technology Department of Biosystems Science and Engineering, Basel, Switzerland

Paul Simmons, The University of Texas Health Science Center at Houston Brown Foundation Institute of Molecular Medicine for the Prevention of Human Diseases, Houston, Texas, United States

Igor Slukvin, University of Wisconsin-Madison Department of Pathology and Laboratory Medicine, Madison, Wisconsin, United States

Pluripotent stem cells, Hematopoietic stem cells, Hematopoietic development, Endothelial development, Mesoderm specification, Hemogenic endothelium, Hemangioblast

Ed Stanley, Monash University, Clayton, Victoria, Australia

Ludovic Vallier, Cambridge Stem Cell Institute, Cambridge, United Kingdom

Pluripotency, Liver, cell cycle, Differentiation, Endoderm.

Anthony Whetton, The University of Manchester, Manchester, United Kingdom

Blood, Cancer Biology, Cell biology, Cell differentiation, Oncogenes, Transcription.

Joseph C. Wu, Stanford Cardiovascular Institute, Stanford, California, United States

Cardiovascular diseases, Stem cells, Genomics, Drug discovery, Precision medicine

Peter Zandstra, The University of British Columbia Michael Smith Laboratories, Vancouver, British Columbia, Canada

Bioengineering, Synthetic biology, Computational modeling, Regenerative medicine, Engineering development

Juan Carlos Zuniga-Pflucker, University of Toronto Department of Immunology, Toronto, Ontario, Canada

Thymus biology, T cell development, Notch, Hematopoiesis
INTRODUCTION

*Stem Cell Research* is dedicated to publishing high-quality manuscripts focusing on the biology and applications of stem cell research. Submissions to *Stem Cell Research*, may cover all aspects of stem cells, including embryonic stem cells, tissue-specific stem cells, cancer stem cells, developmental studies, stem cell genomes, and translational research.

Presubmission inquiries are encouraged. Acceptance of manuscripts will be based on scientific excellence and priority, as judged by editors and reviewers, on relevance to the central themes of the journal, and on the interest of the results to a broad readership of stem cell biology. A manuscript of high intrinsic quality may be returned if it seems better suited to a more specialized journal. Manuscripts that present preliminary observations or an incremental increase in understanding are not encouraged.

**Types of article**

- Research papers
- Short communications
- Review articles
- Technical notes (Methods and Reagents)
- Lab resources

**Research papers.** Research papers should not exceed 55,000 characters (including spaces, references, methods, figure legends, and an abstract of 200 words or less). We accept a maximum of 7 figures/tables for research papers.

**Short communications.** Articles intended for the short communication section of *Stem Cell Research* should not exceed 32,000 characters (including spaces, references, methods, figures, and an abstract of 200 words or less). Short communications may contain a maximum of 4 figures/tables.

**Review articles.** *Stem Cell Research* also publishes review articles, which as for research articles should be limited to 55,000 characters. *Stem Cell Research* does not accept unsolicited review articles. All review articles will be subject to review before publication.

**Technical notes (Methods and Reagents).** The journal publishes articles describing novel Technical notes (methods and/or reagents). These may take the form of research papers or short communications.

**Lab resources.** Peer reviewed manuscript which details the establishment of new pluripotent stem cell lines derived from embryos, generated by SCNT and reprogramming or the establishment of genetically modified stem cell sub-lines. See scientific guidelines for mandatory requirements. Manuscripts should be formatted according to the provided article template for single and multiple lines.

**Contact details for submission**

Manuscripts for Stem Cell Research should be submitted via the journal's online submission and editorial system, [https://ees.elsevier.com/scr](https://ees.elsevier.com/scr).

For questions on the submission and reviewing process, please contact the Editorial Office at scr@elsevier.com.

**Customer support is available 24/7**

Please use our help site at: [https://service.elsevier.com/](https://service.elsevier.com/). Here you will be able to learn more about the online submission system via interactive tutorials, explore a range of problem solutions via our knowledgebase, and find answers to frequently asked questions. You will also find our 24/7 support contact details should you need any assistance from one of our customer service representatives.
Submission checklist
You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:
- E-mail address
- Full postal address

All necessary files have been uploaded:

Manuscript:
- Include keywords
- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print

Graphical Abstracts / Highlights files (where applicable)

Supplemental files (where applicable)

Further considerations
- Manuscript has been 'spell checked' and 'grammar checked'
- All references mentioned in the Reference List are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Internet)
- A competing interests statement is provided, even if the authors have no competing interests to declare
- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

For further information, visit our Support Center.

BEFORE YOU BEGIN

Ethics in publishing
Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

Declaration of competing interest
All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors should complete the declaration of competing interest statement using this template and upload to the submission system at the Attach/Upload Files step. Note: Please do not convert the .docx template to another file type. Author signatures are not required. If there are no interests to declare, please choose the first option in the template. This statement will be published within the article if accepted. More information.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

Preprints
Please note that preprints can be shared anywhere at any time, in line with Elsevier's sharing policy. Sharing your preprints e.g. on a preprint server will not count as prior publication (see 'Multiple, redundant or concurrent publication' for more information).
Use of inclusive language
Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

Author contributions
For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example

Changes to authorship
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.
Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

Article transfer service
This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. More information.

Copyright
Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (see more information on this). Permitted third party reuse of open access articles is determined by the author's choice of user license.

Author rights
As an author you (or your employer or institution) have certain rights to reuse your work. More information.

Elsevier supports responsible sharing
Find out how you can share your research published in Elsevier journals.

Role of the funding source
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

Open access
Please visit our Open Access page for more information.
Elsevier Researcher Academy

Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's Author Services.

Referees
Authors are encouraged to suggest four competent reviewers in their field (please include telephone number, fax number, and/or e-mail address) and may also suggest individuals whom they wish to have excluded from the review process.

Additional Information

Key resources table

We encourage authors to submit a key resources table during submission. The Key Resources Table serves to highlight materials and resources (including genetically modified organisms and strains, cell lines, reagents, software, experimental models, and original source data for computational studies) essential to reproduce results presented in the manuscript. Literature listed in the Key Resources Table must be included in the References list. We highly recommend using RRIDs (see https://scicrunch.org/resources) as the identifier for antibodies and model organisms in the Key Resources Table. Please do not add custom headings or subheadings to the Key Resources Table. Please download and fill out this template. The Key Resources Table should be referenced at the end of the Materials & Methods section and uploaded as a separate file in the submission process.

PREPARATION

NEW SUBMISSIONS
Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process. As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.

Peer review
This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.

REVISED SUBMISSIONS

Use of word processing software
Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). See also the section on Electronic artwork.
To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Article structure
Please ensure that your submission is in the correct order, as described below.
**Subdivision - numbered sections**
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

**Introduction**
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

**Material and methods**
Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

**Results**
Results should be clear and concise.

**Discussion**
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

**Conclusions**
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

**Essential title page information**
- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Present the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Highlights**
Highlights are mandatory for this journal as they help increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

**Abstract**
A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.
**Graphical abstract**

Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

Authors can make use of Elsevier's Illustration Services to ensure the best presentation of their images and in accordance with all technical requirements.

**Keywords**

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**Abbreviations**

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

**Acknowledgements**

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

**Formatting of funding sources**

List funding sources in this standard way to facilitate compliance to funder’s requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Artwork**

**Image manipulation**

Whilst it is accepted that authors sometimes need to manipulate images for clarity, manipulation for purposes of deception or fraud will be seen as scientific ethical abuse and will be dealt with accordingly. For graphical images, this journal is applying the following policy: no specific feature within an image may be enhanced, obscured, moved, removed, or introduced. Adjustments of brightness, contrast, or color balance are acceptable if and as long as they do not obscure or eliminate any information present in the original. Nonlinear adjustments (e.g. changes to gamma settings) must be disclosed in the figure legend.

**Electronic artwork**

**General points**

- Make sure you use uniform lettering and sizing of your original artwork.
- Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Indicate per figure if it is a single, 1.5 or 2-column fitting image.
- For Word submissions only, you may still provide figures and their captions, and tables within a single file at the revision stage.
• Please note that individual figure files larger than 10 MB must be provided in separate source files.

A detailed guide on electronic artwork is available.

You are urged to visit this site; some excerpts from the detailed information are given here.

**Formats**
Regardless of the application used, when your electronic artwork is finalized, please 'save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

- EPS (or PDF): Vector drawings. Embed the font or save the text as 'graphics'.
- TIFF (or JPG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.
- TIFF (or JPG): Bitmapped line drawings: use a minimum of 1000 dpi.
- TIFF (or JPG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

**Please do not:**
- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low.
- Supply files that are too low in resolution.
- Submit graphics that are disproportionately large for the content.

**Color artwork**
Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF) or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) in addition to color reproduction in print. Further information on the preparation of electronic artwork.

**Figure captions**
Ensure that each illustration has a caption. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

**References**

**Citation in text**
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

**Web references**
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

**Data references**
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

**Reference management software**
Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.
Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
http://open.mendeley.com/use-citation-style/stem-cell-research
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

Please use Stem Cell Research reference style in the reference manager software of choice while preparing your manuscript. In text citations should appear as First Author-Year and bibliography references as Author(s)-Year-Title-Journal-Volume/Book chapter-Pagination. Use of DOI is highly encouraged. The reference style used by the journal will be also applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct.


Journal abbreviations source
Journal names should be abbreviated according to the List of Title Word Abbreviations.

Video
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Data visualization
Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions here to find out about available data visualization options and how to include them with your article.

Supplementary material
Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

Research data
This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.
Data linking
If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

Mendeley Data
This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the Mendeley Data for journals page.

Data in Brief
You have the option of converting any or all parts of your supplementary or additional raw data into one or multiple data articles, a new kind of article that houses and describes your data. Data articles ensure that your data is actively reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. You are encouraged to submit your article for Data in Brief as an additional item directly alongside the revised version of your manuscript. If your research article is accepted, your data article will automatically be transferred over to Data in Brief where it will be editorially reviewed and published in the open access data journal, Data in Brief. Please note an open access fee of 600 USD is payable for publication in Data in Brief. Full details can be found on the Data in Brief website. Please use this template to write your Data in Brief.

Data statement
To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

AFTER ACCEPTANCE

Online proof correction
To ensure a fast publication process of the article, we kindly ask authors to provide us with their proof corrections within two days. Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.
**Offprints**
The corresponding author will be notified and receive a link to the published version of the open access article on ScienceDirect. This link is in the form of an article DOI link which can be shared via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier’s Author Services.

**AUTHOR INQUIRIES**
Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.

© Copyright 2018 Elsevier | https://www.elsevier.com