PLACENTA
The Official Journal of the International Federation of Placenta Associations incorporating the following:
- Australia and New Zealand Placenta Research Association
- European Placenta Group
- Japanese Placenta Association
- the Placenta Association of the Americas

TABLE OF CONTENTS

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

DESCRIPTION

Includes: Trophoblast Research, the Annual Supplement that is available for free online.

Placenta publishes high-quality original articles and invited topical reviews on all aspects of human and animal placentation, and the interactions between the mother, the placenta and fetal development. Topics covered include evolution, development, genetics and epigenetics, stem cells, metabolism, transport, immunology, pathology, pharmacology, cell and molecular biology, and developmental programming. The Editors welcome studies on implantation and the endometrium, comparative placentation, the uterine and umbilical circulations, the relationship between fetal and placental development, clinical aspects of altered placental development or function, the placental membranes, the influence of paternal factors on placental development or function, and the assessment of biomarkers of placental disorders.

Original articles may be full-length papers or Short Communications. Papers describing innovative techniques that will advance the field may be submitted as a Technical Note with a format like a Short Communication. Case Reports are acceptable if they illustrate a point of general importance, and Book reviews and Letters to the Editors are also published.

Placenta is the official journal of the International Federation of Placenta Associations, and is committed to supporting the scientific community with rapid processing of manuscripts. There are no page charges, and colour plates are free. Reviews are published on an open access basis, while original articles are made available free online 1 year after publication. Authors may chose to pay for open access publication in order to make their article freely available.

PLUS the annual supplement Trophoblast Research with freely accessible full text articles online!

IMPACT FACTOR

2017: 2.434 © Clarivate Analytics Journal Citation Reports 2018
ABSTRACTING AND INDEXING

Scopus
MEDLINE®
Science Citation Index Expanded
Bibliography of Reproduction
BIOSIS Previews
Current Contents (Life Sciences, Clinical Medicine)
Excerpta Medica
Reference Update
Science Citation Index
SciFinder

EDITORIAL BOARD

Editors
V. Clifton, NHMRC Senior Research Fellow and Associate Professor Lyell McEwin Hospital, Robinson Institute, Haydown Rd, Elizabeth Vale, SA 5112, South Australia, Australia
M. Knöfler, Associate Professor, Dept. of Obstetrics and Gynecology Reproductive Biology Unit, Medical University Vienna, Währinger Gürtel 18-20, A-1090 Vienna, Austria
Y. Sadovsky, Director Magee-Womens Research Institute, Professor of OBGYN, Microbiology and Molecular Genetics, University of Pittsburgh, 204 Craft Avenue, Pittsburgh, PA 15213, Pennsylvania, USA

Trophoblast Research Editor
G.E. Lash, Reproductive and Vascular Biology Group. Institute of Cellular Medicine, Newcastle University, Medical School, Framlington Place, Newcastle upon Tyne, NE2 4HH, UK

Trophoblast Research Co-Editor
A.C. Staff, Oslo, Norway

Editorial Board Members
C. Albrecht, Bern, Switzerland
J. Baker, Stanford, California, USA
A.M. Carter, Odense, Denmark
L.W. Chamley, Auckland, New Zealand
T. Cindrova-Davies, Cambridge, England, UK
B. Cox, Toronto, Ontario, Canada
P. Gowland, Nottingham, UK
S. Hansson, Lund, Sweden
J. James, Auckland, New Zealand
A. Jawerbaum, Buenos Aires, Argentina
G. Johnson, College Station, Texas, USA
T. Lao, Shatin, Hong Kong
J. Larkin, Pittsburgh, Pennsylvania, USA
P. Latos, Vienna, Austria
U. Markert, Jena, Germany
H. Mistry, Nottingham, UK
T. Morgan, Portland, Oregon, USA
NR Nayak, Detroit, Michigan, USA
M. Neeman, Rehovot, Israel
M. Parast, La Jolla, California, USA
W.T. Parks, Pittsburgh, Pennsylvania, USA
A. Perkins, Southport, Queensland, Australia
J. Pollheimer, Vienna, Austria
S.J. Renaud, London, Ontario, Canada
K. Shankar, Little Rock, Arkansas, USA
M. Stark, Adelaide, South Australia, Australia
M. Takayama, Tokyo, Japan
T. Tilburgs, Cambridge, Massachusetts, USA
C. Wadsack, Graz, Austria
Y.-L. Wang, Beijing, China
M. Westwood, Manchester, UK

Editors Emeritus
G.J. Burton, Cambridge, UK
GUIDE FOR AUTHORS

INTRODUCTION

PLACENTA invites submission of full-length papers and short communications of high quality research that provide novel insight into any aspect of placental biology. Technical notes are welcome if a new technique or methodology is described that clarifies or expands experimental studies. Letters to the Editors are selectively published and may comment on any issue important to placentology, including comments about articles published in PLACENTA or may communicate isolated findings that do not justify publication as a short communication. Reviews are usually solicited by the Editors. Unsolicited reviews: authors must submit a pre-submission inquiry to the Editors prior to manuscript submission. Please note Case reports are no longer acceptable to Placenta.

PLACENTA covers all aspects of the human and animal placenta including evolution, development, histology, physiology, metabolism, endocrinology, microbiology, pathology, immunology, pharmacology, cell biology, biochemistry, and molecular mechanisms underlying placental function. We welcome articles describing aspects of placentalt structure or function and studies of implantation, comparative placentation, fetoplacental interactions, trophoblastic neoplasia and placental vascular biology. Authors should justify use of cell lines as models for trophoblast function.

All manuscripts should be written in English and each will be evaluated in a similar manner, irrespective of country of origin. Neither the journal, nor the publisher will assume any responsibility for statements in the articles, which are the sole responsibility of the authors.

Unless requested otherwise, manuscripts from Europe and Africa will be handled by Martin Knöfler (Vienna, Austria), manuscripts from the USA, Canada and all of the Americas will be handled by Yoel Sadovsky (Pittsburgh, USA) and those from Australia, Asia, India and Middle East by Vicky Clifton (Brisbane, Australia).

Types of papers

Original articles: a full-length report of original basic or clinical investigation that provides novel insights into the placenta and places the findings in a mechanistic, functional, or evolutionary context (up to 4000 words, up to 75 references, and up to 6 tables and/or figures). A structured abstract of no more than 250 words with the following sections (Introduction, Methods, Results, Discussion) is required. The rest of the paper should be structured as follows: Introduction, Methods, Results, Discussion, References.

NOTE

Original (full length) articles must be up to 4000 words (includes the introduction, methods, results and discussion), excluding up to seventy-five(75) references - Exceptions to this word count will have to be justified in the cover letter to the Editor.

Short communications/Technical notes: short scientific reports or methodological advances must not exceed 1,000 words (abstract, introduction, methods, results and discussion) with no more than two (2) tables or illustrations and twenty-five (25) references. An unstructured abstract of no more than 100 words is required. The text should also be structured in four parts: Introduction, Methods, Results and Discussion, but the Results and Discussion sections may be combined.

Review articles: : a comprehensive review of prior publications subject related to the placenta (up to 4000 words and up to 100 references). Exceptions to this word count will have to be justified in the cover letter to the Editor. An unstructured abstract of no more than 250 words is required. The Introduction should indicate why the topic is important and should state the specific objective(s) of the review. The Conclusion may include the clinical implications and observations that may need additional research. Systematic reviews should follow the PRISMA guidelines. Meta-analysis of observational studies should follow the MOOSE guidelines. Further information can be obtained from the EQUATOR web site: http://www.equator-network.org/resource-centre/library-of-health-research-reporting/reporting-guidelines.
Letters to the Editor: a question or challenge to an article published recently in the journal. Letters must be received within 6 weeks of publication of the article to which they refer and should be no longer than 250 words with up to 7 references and 1 figure and/or table.

NOTE
Placenta will not charge authors for pages for publication of articles.

Contact details for submission
Submission of manuscripts proceeds entirely online at https://www.evise.com/profile/api/navigate/PLAC

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.

Studies in humans and animals
If the work involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans. The manuscript should be in line with the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals and aim for the inclusion of representative human populations (sex, age and ethnicity) as per those recommendations. The terms sex and gender should be used correctly.

Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Institutes of Health guide for the care
and use of Laboratory animals (NIH Publications No. 8023, revised 1978) and the authors should clearly indicate in the manuscript that such guidelines have been followed. The sex of animals must be indicated, and where appropriate, the influence (or association) of sex on the results of the study.

**Declaration of 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 competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. [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. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

**Contributors**

Submission of multi-authored manuscripts to this journal requires the consent of each author and all have to sign the covering letter. All authors of, and all contributors (including medical writers and editors) must specify their individual contributions at the end of the text. The following format is suggested: 'I declare that I participated in the (here list contributions made to the study) and that I have seen and approved the final version. I have the following conflicts of interest' (list here all relevant conflicts and source of funding). This should be listed in the 'Comments' field in EVISE.

**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 a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (more information). Permitted third party reuse of gold 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.

**Funding body agreements and policies**
Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the gold open access publication fee. Details of existing agreements are available online. After acceptance, open access papers will be published under a noncommercial license. For authors requiring a commercial CC BY license, you can apply after your manuscript is accepted for publication.

**Open access**
This journal offers authors a choice in publishing their research:

**Subscription**
- Articles are made available to subscribers as well as developing countries and patient groups through our universal access programs.
- No open access publication fee payable by authors.
- The Author is entitled to post the accepted manuscript in their institution's repository and make this public after an embargo period (known as green Open Access). The published journal article cannot be shared publicly, for example on ResearchGate or Academia.edu, to ensure the sustainability of peer-reviewed research in journal publications. The embargo period for this journal can be found below.

**Gold open access**
- Articles are freely available to both subscribers and the wider public with permitted reuse.
- A gold open access publication fee is payable by authors or on their behalf, e.g. by their research funder or institution.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.
For gold open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:

**Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)**
For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The gold open access publication fee for this journal is **USD 3400**, excluding taxes. Learn more about Elsevier's pricing policy: [https://www.elsevier.com/openaccesspricing](https://www.elsevier.com/openaccesspricing).

**Green open access**
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our [green open access page](https://www.elsevier.com/openaccess) for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. [Find out more.](https://www.elsevier.com/openaccess)

This journal has an embargo period of 12 months.

**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](https://www.elsevier.com/language-editing-service) available from Elsevier's WebShop.

**Informed consent and patient details**
Studies on patients or volunteers require ethics committee approval and informed consent, which should be documented in the paper. Appropriate consents, permissions and releases must be obtained where an author wishes to include case details or other personal information or images of patients and any other individuals in an Elsevier publication. Written consents must be retained by the author but copies should not be provided to the journal. Only if specifically requested by the journal in exceptional circumstances (for example if a legal issue arises) the author must provide copies of the consents or evidence that such consents have been obtained. For more information, please review the Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals. Unless you have written permission from the patient (or, where applicable, the next of kin), the personal details of any patient included in any part of the article and in any supplementary materials (including all illustrations and videos) must be removed before submission.

**Submission**
Submission to this journal proceeds totally online. Use the following guidelines to prepare your article. Via the homepage of this journal, [https://www.evise.com/profile/api/navigate/PLAC](https://www.evise.com/profile/api/navigate/PLAC), you will be guided stepwise through the creation and uploading of the various files. The system automatically converts source files to a single PDF file of the article, which is used in the peer-review process. Please note that even though manuscript source files are converted to PDF files at submission for the review process, these source files are needed for further processing after acceptance. All correspondence, including notification of the Editors’ decision and requests for revision, takes place by e-mail removing the need for a paper trail.

**Referees**
To expedite the review process Authors are required to provide the editorial office with the names and email addresses of up to 5 potential Referees that are able to competently review the article submitted for possible publication. The Referees are not to be associated with or involved with the article in any way or be from the same institution as the Author(s) involved with the article.

**PREPARATION**
**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.

**Use of word processing software**
It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. 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.

LaTeX
You are recommended to use the Elsevier article class elsarticle.cls to prepare your manuscript and BibTeX to generate your bibliography. Our LaTeX site has detailed submission instructions, templates and other information.

**Article structure**

**Introduction**
The Introduction should describe the question addressed by the report, the relevant background and must state the objective of the research. The literature review should be relevant but not detailed.

**Materials and methods**
The Methods section should describe the research methodology in sufficient detail that others could reasonably be expected to be able to duplicate the work. However, if the methodology has been previously published, the appropriate reference should be cited, and a full description is not required. The sequences of oligonucleotides, if not previously published, should be provided. Novel DNA or protein sequences should be deposited in an appropriate database (e.g., Genbank, EMBL, SWISS-PROT), with the accession numbers included in the manuscript (see below). Provide suppliers' names for all antibodies used. Methods of statistical analysis should be identified and, when appropriate, the basis for their selection stated. Statistical software programs used should be cited in the text. \( P \) values should be expressed to no more than three decimal places. Reports in which statistical difference is lacking must provide some indication of the study's power to detect such differences.

**Results**
The Results section should present the findings in appropriate detail. Tables and figures may be used, but duplication between text and tables or figures is to be avoided.

**Discussion**
The Discussion section should be used to critically appraise the implications of the findings and to compare them with those of other studies. Repetition of the results section should be avoided.

**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. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lowercase superscript letter immediately after the author's name and in front of the appropriate address. Provide 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.

**Abstract**

Provide a structured abstract that briefly states 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 and non-standard or uncommon abbreviations should be avoided. However, if absolutely essential, references must cite the author(s) and year(s) and abbreviations must be defined at their first occurrence in the abstract.

*Original articles*: A structured abstract of no more than 250 words is required.

*Short communications/Technical notes*: An unstructured abstract of no more than 100 words is required.

*Review articles*: An unstructured abstract of no more than 250 words is required.

**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.

**Highlights**

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and 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). You can view example Highlights on our information site.

**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.

**Nomenclature and units**
Authors should adhere to the internationally accepted convention for the naming of proteins and genes. For the human, gene symbols should be italicised, with all letters in uppercase (e.g., *EGF* for epidermal growth factor). Protein designations are the same as the gene symbol, but are not italicised; all letters are in uppercase (*EGF*). mRNAs and cDNAs use the same formatting conventions as the gene symbol. The same principles apply for the mouse, except that only the first letter should be in uppercase (*Egf* and *Egf*). For full details and other species refer to [http://en.wikipedia.org/wiki/Gene_nomenclature](http://en.wikipedia.org/wiki/Gene_nomenclature).

Follow internationally accepted rules and conventions: use the international system of units (SI). If other quantities are mentioned, give their equivalent in SI. You are urged to consult IUB: Biochemical Nomenclature and Related Documents: [http://www.chem.qmw.ac.uk/iubmb/](http://www.chem.qmw.ac.uk/iubmb/) for further information.

**Footnotes**
Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

**Artwork**
**Electronic artwork**
**General points**
- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.
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**
If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.
Regardless of the application used other than Microsoft Office, 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 all used fonts.
- TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
- TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
- TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

**Please do not:**
- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- 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) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. **Further information on the preparation of electronic artwork.**

Figure captions
Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. 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.

Tables
Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

**Table(s) for studies of human placenta**
Authors submitting manuscripts about human placentas are strongly encouraged, but not required, to complete Table 1: Clinical characteristics of pregnancies for placentas studied, available as a download here: **Guide for authors Table 1**. In the Methods section of the author's manuscript, please cite the source for this Table as: Nelson DM, Burton GJ, A technical note to improve the reporting of studies of the human placenta, Placenta (2010), doi:10.1016/j.placenta.2010.12.008 and complete the clinical data listed in the downloaded Table. Table 1 should then appear immediately after the references in the author's submitted manuscript so that reviewers will have easy access to the data contained. Multiple tables can be included in studies when patients from different clinical groups are studied, e.g. controls, preeclampsia, diabetes mellitus, etc. Editors will assure that authors will not be penalized for multiple entries of "unknown" into the Table, both by instructions to reviewers and by evaluation of the content of reviews. The reference citation above and the Table(s) reporting clinical characteristics are not included in the tally of Figures and Tables for the manuscript as a whole. If the author's manuscript is accepted for publication in Placenta, the Table will be cited in a footnote to direct readers to Supplementary Data where the Table 1 will appear for viewing. Again, the Table will not count in the page allocation of the author's manuscript.

References
Authors are responsible for the accuracy of references. References appearing for the first time in a table or figure should be cited in the text where the table or figure is mentioned. References cited must have been published in peer-reviewed publications.

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 and Zotero, as well as EndNote. Using the word processor 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.

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/placenta

When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

Reference style

Text: Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.
Example: ‘….. as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result ....’

List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.

Examples:
Reference to a journal publication:
Reference to a journal publication with an article number:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a website:
Reference to a dataset:

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.

Where relevant, full size gels need to be provided (if only a cut gel is provided in the actual paper). Authors must also confirm that all sequences and other high-throughput data were uploaded to a publically accessible resources (NCBI-Geo, or similar).

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 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**

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, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. 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 Webshop. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**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