**Seminar in Thoracic and Cardiovascular Surgery** is devoted to providing a forum for cardiothoracic surgeons to disseminate and discuss important new information and to gain insight into unresolved areas of question in the specialty. Each issue presents readers with a selection of original peer-reviewed articles accompanied by editorial commentary from specialists in the field. In addition, readers are offered valuable invited articles: State of Views editorials and Current Readings highlighting the latest contributions on central or controversial issues. Another prized feature is expert roundtable discussions in which experts debate critical questions for cardiothoracic treatment and care. Seminars is an invitation-only publication that receives original submissions transferred ONLY from its sister publication, The Journal of Thoracic and Cardiovascular Surgery. As we continue to expand the reach of the Journal, we will explore the possibility of accepting unsolicited manuscripts in the future.

**Abstracting and Indexing**

MEDLINE®

**Editorial Board**

*Editor*

Erle H. Austin III, MD, University of Louisville School of Medicine, Louisville, KY  
Harvey I. Pass, MD, NYU Langone Medical Center, New York, NY  
Todd K. Rosengart, MD, Baylor College of Medicine, Houston, TX
GUIDE FOR AUTHORS

*Seminars in Thoracic and Cardiovascular Surgery* is devoted to providing a forum for cardiothoracic surgeons to disseminate and discuss important new information in the field and to gain insight into unsettled or unresolved areas of question in the specialty. Each issue presents readers with a selection of original, peer-reviewed articles accompanied by editorial commentaries from specialists in the field. In addition, readers are offered valuable invited articles: State of the Art reviews, News and Views editorials and Current Readings highlighting the latest contributions on central or controversial issues. Another prized feature is the expert roundtable discussions in which experts debate critical questions for cardiothoracic surgery.

ARTICLE TYPES

News and Views

Description: Authors are invited to write a paper on a “hot topic” and expand on a recent article found in another journal (NEJM, Nature, Cell, etc.). The goal of this section is to expand on the review in an article that is 5–6 pages in length with a thoughtful analysis with references to support it.

Articles should follow these guidelines: 2000–2500 words of text = 3 printed pages 30 references = 1 printed page 3–5 figures/tables and legends = 2 printed pages.

State of the Art

Description: Authors are invited to write a review article on a topic selected by the editor.

Articles should follow these guidelines: 3500 words, double-spaced (15 typed pages) = 5 printed pages 35 references, double spaced = 1 printed page 6 figures or tables = 1 ½ printed pages.

Current Readings

Invited Authors will be selected by the editors and this individual will select 5–6 articles to write about. Each manuscript from the invited author will examine the seminal articles on a topic from the past 2–3 years. The manuscripts will have a short 1–2 paragraph summary with 5 key points as to why it is important to practitioners of cardiac and thoracic surgery and therapies. At the end of each group of manuscripts the author will provide a synthesis of all the readings along with his/her own critical review and interpretation of the information. The synthesis can also provide a historical context for the topic, presenting the current reading articles as the newest best information—since xyz (the classic article(s) on a topic) has been published here are the best most relevant articles, showing where we’ve come from to get to cutting edge practice.

Articles should follow these guidelines: 2100 words (250 words per page), double-spaced = 3 printed pages 6 tables or figures = 1 ½ printed pages—may be re-printed figures/tables from articles covered, with permissions 1400 words, double-spaced (Guest Author’s own synthesis of articles) = 2 printed page.

Editorial Commentary

Editorial Commentaries are intended to provide a broad perspective on the importance of this paper for the readers of Seminars. Please indicate why this paper is significant to the field and worthy of the reader’s attention. In addition, please outline the strengths and weaknesses of the paper. Your expertise in this field and your views will be appreciated by our readership.

Fewer than 800 words, Catchy title, Brief summary (less than 50 words), Academic degrees and affiliations for all authors.

Original Submissions
Seminars is an invitation-only publication that receives original submissions transferred ONLY from its sister publication, *The Journal of Thoracic and Cardiovascular Surgery*. As we continue to expand the reach of the Journal, we will explore the possibility of accepting unsolicited manuscripts in the future.

**REQUIRED FOR ALL ARTICLE TYPES**

**Central Message**

The central message contains the essence of the manuscript. There is an absolute limit of **200 characters including spaces**. It is not a brief summary of results. Rather, for clinical manuscripts, it is the inference(s) that will be supported by the results. It is often identical to the conclusions of the abstract. Only if one can simply and succinctly understand the findings of the study and articulate what they mean will one be able to convey them clearly to the reader. Once the central message is written, the entire manuscript – tables, figures and text – should be sharply focused on those results that are supportive of the paper's message. Other information should be either included in appendices (electronic only) or eliminated altogether.

The central message will be included immediately beneath the title of the paper in the table of contents and on the first page of accepted manuscripts.

**Central Picture**

The authors should submit only one picture which can be a separate illustration or one of their figures that summarizes an important component of their manuscript to be used as the Central Picture. The central picture should be only one (or at the most two) panels of multi-paneled figures. The purpose of the illustration is to provide a snapshot of the paper with a single memorable visual image. This figure will appear on the first page of the manuscript and in both the print and electronic tables of contents. Do not use a multiple framed figure; these tend to be illegible at thumbnail size. For the best Central Picture results, please consider the following criteria:

1) Color is required for all figures (the journal does not provide gratis color printing, however, all images will remain in color in the online version),
2) The size of the Central Picture is approximately 2 in. high by 1.5 in. wide,
3) Select only a single frame or panel from a multi-section figure,
4) Author photo(s) are acceptable Central Pictures; provide author name as figure legend,
5) Text pictures are discouraged and if submitted should have a minimum number of words because text is not legible at thumbnail size,
6) If the Central Picture is also submitted as a figure, then it must be cited in your manuscript text and a full length figure legend should be included.

**Central Picture Legend**

- The central picture should be accompanied by an abbreviated legend; the legend has an absolute limit of **90 characters including spaces**.
- Provide the abbreviated legend in the submission fields and in the legend section of the paper.
- If a photo of the author(s) is used as the central picture, please provide their name(s) as the legend.

**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:

*Cover letter:*
• Includes one author, who has been designated corresponding author with contact details: 1) Email address with affiliation and 2) Full postal address.

**Manuscript:**
• 4–6 keywords
• All figures with relevant captions, as separate high-resolution EPS or TIFF files with clear indication if color should be used for any figures in print
• All tables (including titles, description, footnotes)
• 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)
• Relevant declarations of interest have been made
• Journal policies detailed in this guide have been reviewed

For further information, visit our [Support Center](https://www.elsevier.com/locate/semtcvs).

**BEFORE YOU BEGIN**

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

**Conflict 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 conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. If there are no conflicts of interest then please state this: 'Conflicts of interest: none'. See also [https://www.elsevier.com/conflictofinterest](https://www.elsevier.com/). Please download and submit this form with your manuscript [https://www.elsevier.com/__data/promis_misc/ICMJE_COI.pdf](https://www.elsevier.com/__data/promis_misc/ICMJE_COI.pdf). Further information and an example of a Conflict of Interest form can be found at: [http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing](http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing).

**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](https://www.crossref.org/).

**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').
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.

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 1700**, excluding taxes. Learn more about Elsevier's pricing policy: 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 open access page 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.

This journal has an embargo period of 12 months.

**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 WebShop.

**Submission**
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

**Submit your article**
Please submit your article via https://www.evise.com/profile/api/navigate/STCVS.

**Estimating manuscript length**
We ask for your cooperation in keeping within our page limitations for each issue of the journal. Please refer to the first page of these guidelines for the requested length of your manuscript. The following approximations are offered to help you calculate length:
Three 8½ × 11 pages, double-spaced with 1.5-inch margins, in standard 10- or 12-point word processor type (approximately 250 words per page) = 1 printed page 35 references (all lines double-spaced) = 1 printed page 4 tables or figures with legends = 1 printed page Example: A manuscript contains 15 pages of text with 17 references and 6 tables: 15 pages of text = 5 printed pages, 17 references = ½ printed page, 6 figures or tables = 1½ printed page

PREPARATION

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.

Article structure
Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when cross-referencing text: refer to the subsection by heading as opposed to simply 'the text'.

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

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.

Appendices
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

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 lower-case 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**
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.

**Keywords**
Immediately after the abstract, provide 4–6 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.

**Acknowledgements**
Collate acknowledgements in a separate section at the end of the article before the references and do not 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]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number]; and the United States Institutes of Peace [grant number].

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.

**Units**
Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

**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 Figure Instructions**
- All figures must be submitted in electronic format in color (which will appear online for free) as separate files, and all images should be at least 5 inches wide. Preferred images formats are EPS or TIF. Include the figure legends at the end of the manuscript file.
- Graphics software such as Photoshop and Illustrator, **not** presentation software such as PowerPoint, should be used to create art.
- Color images need to be CMYK and at least 300 dpi.
- Gray scale images should be at least 300 dpi.
- Line art (black and white or color) and combinations of gray scale and line art should be at least 1200 dpi.
- For best reproduction, **avoid** screening, shading, and lettering on a dark background.
• All time varying outcome figure must have confidence limits provided as well as the number of patients at risk. The confidence limits can be provided as shaded areas or bars on the figure, in the table with the patients at risk in the figure, in the legend or in a separate online table.
• If any patients are identifiable from imaging, illustrations, photographs, or case report information, then the release forms (or appropriate release statements) giving permission for publication must be submitted with the manuscript at initial submission. Most reports should avoid identifiable information, which should be included only in the very rare instances where such images are essential to the manuscript.

A detailed guide on electronic artwork is available on our website: https://www.elsevier.com/artworkinstructions.

**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.

**Illustration services**
Elsevier's WebShop offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

**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 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. Please ensure that data presented in tables do not duplicate results described elsewhere in the article. Avoid using vertical rules and shading in table cells.

**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.

**Reference links**

Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is highly encouraged.

A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.

**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.

**References in a special issue**

Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

**Reference formatting**

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be 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. If you do wish to format the references yourself they should be arranged according to the following examples:

**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.

**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:

Note shortened form for last page number. e.g., 51–9, and that for more than 6 authors the first 6 should be listed followed by 'et al.' For further details you are referred to 'Uniform Requirements for Manuscripts submitted to Biomedical Journals' (J Am Med Assoc 1997;277:927–34) (see also Samples of Formatted References).

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

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 videos, 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.

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. 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.

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.

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