DESCRIPTION

Disability and Health Journal is a scientific, scholarly, and multidisciplinary journal for reporting original contributions that advance knowledge in disability and health. Topics may be related to global health, quality of life, and specific health conditions as they relate to disability. Such contributions include:

- Reports of empirical research on the characteristics of persons with disabilities, environment, health outcomes, and determinants of health
- Reports of empirical research on the Systematic or other evidence-based reviews and tightly conceived theoretical interpretations of research literature
- Reports of empirical research on the Evaluative research on new interventions, technologies, and programs
- Reports of empirical research on the Reports on issues or policies affecting the health and/or quality of life for persons with disabilities, using a scientific base.

Disability and Health Journal describes and analyzes health and health related states using conceptual frameworks, including the international classification of functioning, disability and health. The Journal provides a forum for peer reviewed articles that identify, evaluate and promote existing and emerging models of healthcare delivery and/or health promotion which contribute to the improvements of health across the lifespan.

The Journal focuses on individual health, public health, rehabilitation, health promotion, and community participation (e.g. employment, recreation, personal relationships and access to services).

IMPACT FACTOR

2018: 1.471 © Clarivate Analytics Journal Citation Reports 2019

EDITORIAL BOARD

Editors
Suzanne McDermott, University of South Carolina, Columbia, South Carolina, United States
Margaret A Turk, State University of New York Upstate Medical University, Syracuse, New York, United States

Editorial Board
Kevin N. Alschuler, University of Washington, Seattle, Washington, United States
Brian Barger, Georgia State University School of Public Health, Atlanta, Georgia, United States
Erin D. Bouldin, Appalachian State University, Boone, North Carolina, United States
Coleen Boyle, Centers for Disease Control and Prevention, Atlanta, Georgia, United States
Luis Columna, Syracuse University, Syracuse, New York, United States
Katherine Froehlich-Grobe, Baylor Institute for Rehabilitation, Dallas, Texas, United States
Allyson Gail Hall, University of Alabama at Birmingham, Birmingham, Alabama, United States
Jean P. Hall, UNIVERSITY OF KANSAS MED CTR, Kansas City, Kansas, United States
Susan Havercamp, OHIO STATE UNIVERSITY, Columbus, Ohio, United States
Willi Horner-Johnson, Oregon Health & Science University, Portland, Oregon, United States
Amy J. Houtrow, University of Pittsburgh, Pittsburgh, Pennsylvania, United States
Lisa Iezzoni, MASSACHUSETTS GENERAL HOSP, Boston, Massachusetts, United States
Amie Jackson-McLain, University of Alabama at Birmingham, Birmingham, Alabama, United States
William Johnson, Arizona State University-Skysong, Scottsdale, Arizona, United States
Russell Kirby, University of South Florida, Tampa, Florida, United States
Gloria Krahn, Oregon State University, Corvallis, Oregon, United States
Sarah Beth Laditka, University of North Carolina at Charlotte, Charlotte, North Carolina, United States
Linda M. Long-Bellil, University of Massachusetts Medical School Department of Family Medicine and Community Health, Worcester, Massachusetts, United States
Joshua Mann, University of Mississippi Medical Center, Jackson, Mississippi, United States
Dorothy Marge, State University of New York Upstate Medical University, Syracuse, New York, United States
Michael Marge, State University of New York Upstate Medical University, Syracuse, New York, United States
Michael McKee, University of Michigan, Ann Arbor, Michigan, United States
Monika Mitra, Brandeis University, Waltham, Massachusetts, United States
Christopher P. Morley, State University of New York Upstate Medical University, Syracuse, New York, United States
Nancy Mudrick, Syracuse University, Syracuse, New York, United States
Elizabeth K. Rasch, National Institutes of Health, Bethesda, Maryland, United States
Carrie Shandra, Stony Brook University, Stony Brook, New York, United States
Edwin Trevathan, Vanderbilt University School of Medicine, Nashville, Tennessee, United States
INTRODUCTION

Disability and Health Journal is a scientific, scholarly, and multidisciplinary journal for reporting original contributions that advance knowledge in disability and health. Topics may be related to global health, quality of life, and specific health conditions as they relate to disability. Such contributions include reports on:

- Empirical research on the characteristics of persons with disabilities, environment, health outcomes, and determinants of health;
- Systematic or other evidence-based reviews and tightly conceived theoretical interpretations of research literature;
- Evaluative research on new interventions, technologies, and programs;
- Issues or policies affecting the health and/or quality of life for persons with disabilities, using a scientific base.

Disability and Health Journal describes and analyzes health and health related states using conceptual frameworks, including the International Classification of Functioning (ICF), and the social and medical models of disability. The Journal provides a forum for peer reviewed articles that identify, evaluate and promote existing and emerging models of healthcare delivery and/or health promotion that contribute to the improvements of health across the lifespan.

The Journal focuses on individual health, public health, health promotion, health education, wellness, community participation (e.g., employment, recreation, personal relationships and access to services) and tertiary prevention (e.g., rehabilitation, reducing the incidence of secondary conditions).

Types of Articles

Original Research. Original Articles are scientific reports of the results of original epidemiologic (including secondary data analysis) and clinical research. The text is limited to 4000 words (not including abstract, acknowledgments, figure legends, tables, references, and ancillary online-only material), with a structured abstract of 250 words or less (see instructions below for structure), and a maximum of 6 tables and/or figures, and no more than 40 references (unless this is waived by the Editor). Research reports must contain sufficient information to allow readers to understand how a study was designed and conducted, including variable definitions, instruments and other measures, and analytic techniques. We recommend reviewing guidelines and checklists related to specific research at the EQUATOR Network to ensure sufficient detail is provided in the manuscript (http://www.equator-network.org). NEW: Submitting a checklist such as that from STROBE is now a requirement for submission (see editorials published in the April 2014 issue). Download the checklist through http://www.equator-network.org/reporting-guidelines/strobe/, complete it by adding a column that specifies where in the manuscript each component has been followed, and upload it with your submission.

Brief Reports. Brief Reports can provide their results clearly in a shorter format or represent pilot work, small number of subjects (including a case report if it represents a unique circumstance or experience), new methodology, or nonstandardized measurements. The text is limited to 2500 words (not including abstract, acknowledgments, figure legends, tables, references, and ancillary online-only material) and a maximum of 3 tables and/or figures total. A structured abstract of 250 words or less is required (see instructions below for structure).

Evidence-based Review Articles. Review manuscripts are valuable within the relatively new but growing field of Disability and Health, and DHJO welcomes such submissions. DHJO supports the international agenda to advance review research that provides knowledge synthesis about the present state of research, gaps in research or implementation, evidence to support or change practice, and guidance for policy. There are many types of reviews,1-3 and the body of science and protocols to inform effective reviews is increasing.4-11 Literature or narrative reviews that cite multiple references found through a library search are not considered evidence-based reviews. Clear definitions and specific criteria for rating articles are important for the users of the review articles, be they researchers, clinicians, policy-makers, or consumers.7 To provide consistency and to maintain the expectations of our readers, DHJO has developed more specific guidance for authors.
At a minimum, the submission should include the following key components:

A manuscript title that reflects the review type
Clear definition of the review aims and the reason the review type was chosen
Systematized search/selection process description
Flowchart of search/selection process
Appraisal of the articles at some level (recognizing inherent difficulties) and acknowledging the biases within studies with appropriate descriptions
Table of selected and reviewed articles (including extracted data) with some organization based on study design, condition, utility, or other relevant factor
Table (may be the same Table as above) that includes a summary of articles' elements: research design, sample size, study method, and statistical approach as appropriate
Additional tables or graphs may portray reference to unifying concepts and underlying framework; narrative reporting of results should summarize the findings related to study aims or other defined concepts
Interpretation of results in the Discussion should consider quality, strength of evidence, applicability, relevance to stakeholders, support/refutation in existing literature, and limitations
Whenever possible a rating system should be used to quantify the importance of each manuscript in the final review
Conclusions should be carefully derived

A structured abstract of 250 words or less is required (see instructions below). The text is limited to a maximum of 5000 words of text (not including abstract, acknowledgments, figure legends, tables, references, and ancillary online-only material), with no more than a total of 6 tables and/or figures.

Systematic reviews must have PRISMA completed and submitted. If Tables of selected articles are large/long, they may be published as ancillary online-only appendices.


Commentary. Manuscripts are editor-solicited or negotiated after correspondence with Editors.

Topics relate to articles within the issue, timely perspectives on emerging issues in the field, or opinions and judgments on trends or new perceptions. Presentations may cover such areas as policy, ethics, current events, or controversies. A point/counterpoint format would also be of interest. The text is limited to a maximum of 3000 words of text (not including abstract and references). It is expected that there will be references to support the manuscript content. An Abstract that is a brief narrative summary without subheadings that does not exceed 150 words is required.
Authors wishing to submit an unsolicited Commentary should send proposals with a brief, 250-word synopsis of the planned Commentary to disabilityandhealthjnl@gmail.com for pre-submission approval by the Editors. Authors of approved proposals will receive instructions for submission from the Editorial Office.

Editorial. Editorials are solicited by the Editors.

Letters to the Editor. Letters discussing a recently published article in the Journal should be received within 4 weeks of the article's publication. The text is limited to a maximum of 500 words of text, one table and/or figure, and 5 references; no abstract is needed. Ensure that the article about which you are writing is included in the list of references. Letters not meeting these specifications are generally not considered.

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.

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. See also https://www.elsevier.com/conflicitsofinterest. 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.

Disability and Health Journal requires all authors to provide full disclosure of any and all relevant financial interests. Further, we require all authors of all types of articles (including letters) to specify the nature of potential conflicts of interest, financial or otherwise. This disclosure includes direct or indirect financial or personal relationships, interests, and affiliations relevant to the subject matter of the manuscript that have occurred over the last two years, or that are expected in the foreseeable future. This disclosure includes, but is not limited to, grants or funding, employment, affiliations, patents (in preparation, filed, or granted), inventions, honoraria, consultancies, royalties, stock options/ownership, or expert testimony. This policy of full disclosure is similar to the policies of the International Committee of Medical Journal Editors, the Journal of the American Medical Association, and other such organizations.

Conflict of interest statements must be included on the Title Page at the time of submission for all article types. If an author has no conflicts of interest to declare, this must be explicitly stated. Authors should err on the side of inclusion when in doubt.
The corresponding author will be required to indicate that this information has been fully included in the manuscript at the time of submission. In addition, corresponding authors are required to acknowledge that the conflict of interest disclosures are complete for both themselves and their co-authors, to the best of their knowledge. Omission of relevant information may lead to rejection of the submission at any stage in the process.

Except where explicitly stated otherwise, Disability and Health Journal conforms to the guidelines set forth by the International Committee of Medical Journal Editors (ICMJE). See Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication (February 2006); available at http://icmje.org

**Submission declaration**
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.

**Submission declaration**
Manuscripts that are disseminated prior to acceptance by the Disability and Health Journal will not be considered for publication. Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see https://www.elsevier.com/postingpolicy), 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 including electronically in the same form, in English or in any other language, without the written consent of the copyright-holder.

Previous presentation of abstracts at meetings regarding the research is acceptable but should be noted on the title page. For copyrighted and/or previously published material (including figures or tables) that is duplicated in the submission, written, signed permissions from the copyright holder must be uploaded at time of submission.

**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').

**Authorship**
All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the content. The corresponding author affirms that he or she had access to all data from the study, both what is reported and what is unreported, and also that he or she had complete freedom to direct its analysis and its reporting, without influence from sponsors. The corresponding author also affirms that there was no editorial direction or censorship from the sponsors. Preparation of drafts of manuscripts by employees of the sponsor who are not listed as authors is expressly prohibited.

Authorship credit should be based on substantial contributions to: (1) conception and design or analysis and interpretation of data; (2) drafting the article or revising it critically for important intellectual content; and (3) final approval of the version to be submitted/published. All three
conditions must be met. Participation solely in the acquisition of funding or the collection of data does not justify authorship. General supervision of the research group is also not sufficient. Any part of an article critical to its main conclusions must be the responsibility of at least one author.

Only those with key responsibility for the material in the article should be listed as authors; others contributing to the work should be recognized in the Acknowledgement section. Editors may require authors to justify the assignment of authorship. For more information about considerations related to authorship, please see http://icmje.org/ethical_1author.html.

**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.

**Copyright**

This journal offers authors a choice in publishing their research: open access and subscription.

For subscription articles

Upon acceptance of an article, authors will be asked to complete a "Journal Publishing Agreement" (for more information on this and copyright, see https://www.elsevier.com/copyright). 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 (please consult https://www.elsevier.com/permissions). 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: please consult https://www.elsevier.com/permissions.

For open access articles
Upon acceptance of an article, authors will be asked to complete an "Exclusive License Agreement" (for more information see https://www.elsevier.com/OAauthoragreement). Permitted reuse of open access articles is determined by the author's choice of user license (see https://www.elsevier.com/openaccesslicenses).

**Retained author rights**
As an author you (or your employer or institution) retain certain rights. For more information on author rights for:
Subscription articles please see https://www.elsevier.com/journal-authors/author-rights-and-responsibilities.
Open access articles please see https://www.elsevier.com/OAauthoragreement.

**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 agreements and developed policies to allow authors whose articles appear in journals published by Elsevier to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit https://www.elsevier.com/fundingbodies.

**Open access**
Please visit our Open Access page from the Journal Homepage for more information.

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

**Language (usage and editing services)**
As needed, please have your work reviewed by a colleague for whom English is a first language, or visit http://webshop.elsevier.com/languageservices for other resources. Submissions may be rejected if the grammar and spelling errors are significant enough to detract from the content of the manuscript.

For general guidelines about disability-appropriate language, please see http://www.txdcc.state.tx.us/resources/publications/pfanguage.asp.

**Permissions**
If any material has been published previously (figure, tables, etc), provide written permission from the copyright holder to use such material. Authors are responsible for obtaining permission and payment of any fees associated with reuse. For more information, see the Permissions FAQ for Authors. For assistance, please contact Elsevier's Permissions Helpdesk: +1-800-523-4069 x3808; +1-215-239-3805; permissionshelpdesk@elsevier.com.

Signed written permissions are also needed from persons named in the Acknowledgments and from the patient or legal guardian for publication of recognizable photographs, if any.

**Informed consent and patient details**
Patients have a right to privacy that should not be infringed without informed consent. Identifying information, including patients' names, initials, or hospital numbers, should not be published in written descriptions, photographs, and pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) gives written informed consent for publication. Informed consent for this purpose requires that a patient who is identifiable be shown the manuscript to be published.
Identifying details should be omitted if they are not essential. Complete anonymity is difficult to achieve, however, and informed consent should be obtained if there is any doubt. For example, masking the eye region in photographs of patients is inadequate protection of anonymity. If identifying characteristics are altered to protect anonymity, such as in genetic pedigrees, authors should provide assurance that alterations do not distort scientific meaning and editors should so note. Upload written, signed permissions from the patient or legal guardian for publication of recognizable photographs at the time of submission.

When reporting experiments on human subjects, authors should indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. If doubt exists whether the research was conducted in accordance with the Helsinki Declaration, the authors must explain the rationale for their approach, and demonstrate that the institutional review body explicitly approved the doubtful aspects of the study. When reporting experiments on animals, authors should be asked to indicate whether the institutional and national guide for the care and use of laboratory animals was followed.

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 and copies of the consents or evidence that such consents have been obtained must be provided to Elsevier on request. For more information, please review the Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals, https://www.elsevier.com/patient-consent-policy. 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
All manuscripts should be submitted to Disability and Health Journal via our online manuscript submission and peer review system at http://ees.elsevier.com/dhjo. Additional instructions about the electronic submission process are available at the website. If authors experience any difficulty during the submission process or require any assistance, please visit our Support Center.

Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts 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, source files are needed for processing after acceptance. All correspondence, including notification of the Editor's decision and requests for revision, takes place by e-mail removing the need for a paper trail.

Submit your article
Please submit your article via http://ees.elsevier.com/dhjo.

Referees
Please submit the names, addresses and e-mail addresses of three potential reviewers. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

As a general rule, two independent reviewers evaluate each manuscript. On occasion, the editor will request an additional review for statistical adequacy, methodology evaluation, or for other reasons.

Disability and Health Journal excludes reviewers who work in the same department or unit of an institution as any author, or those who have any other obvious conflict of interest. The identity of individual reviewers remains confidential to all parties except the Editorial Office.

Authors should be aware that manuscripts might be returned without outside review when the Editors deem that the paper is of insufficient general interest for the readership of Disability and Health Journal or that the scientific priority is such that is unlikely to receive favorable reviews. Editorial rejection is done to speed up the editorial process and to allow the authors more time to promptly submit manuscripts elsewhere. All other submissions (with the general exceptions of Editorials and Correspondence) will be subject to peer review.
PREPARATION

Use of Word Processing Software

NEW: At initial submission, the manuscript file (without author identifying information) may be submitted as a single Word or PDF file, including references, figure legends, figures, and tables; the Title Page with author identifying information must be uploaded separately. All manuscript components need to be included to allow for evaluation of your manuscript. If the editors determine that the work is potentially publishable, source files of the manuscript, figures, and tables will be required as well as other submission elements such as permissions as needed (see below). Include a cover letter and a title page with counts as specified below. Authors are urged to use appropriate guidelines when preparing a manuscript (http://www.equator-network.org), and completion of a guideline checklist is now required for original research submissions. Please note that most manuscripts submitted to Disability and Health Journal will likely use the STROBE guideline.

For revised manuscripts, it is important that the file be saved in the native format of the wordprocessor 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 wordprocessor'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: https://www.elsevier.com/guidepublication). 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 wordprocessor.

Cover Letter

In the cover letter, be sure to state that the manuscript, or any part of it, has not been published and will not be submitted elsewhere for publication while being considered by the journal. If there is any overlap between the submission and any other material, published or submitted, detail the nature of and reason for the overlap; as relevant, upload a copy of the other material.

Article Structure

Title page

Please include a separate title page with the full names of authors, degrees, academic or professional affiliation, and complete address, phone number, and e-mail address of the corresponding author. Up to five key words should be indicated on the title page. The title page must include publishable statements of funding or conflicts of interest. Note any previous presentation of abstracts at meetings regarding the research. (See the section on Disclosure of Financial Interests and Potential Conflicts of Interest below for further information.) Acknowledgments (which typically appear before the references) may be placed on the title page to maintain author anonymity.

The title page must include a word count for the abstract, a complete manuscript word count (to include body text and figure legends), number of references, and number of figures/tables. Please see below for the maximum length of submissions by article type.

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.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. 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. Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be 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.

• **Disclosures.** Disclosure includes, but is not limited to, grants or funding, employment, affiliations, patents (in preparation, filed, or granted), inventions, honoraria, consultancies, royalties, stock options/ownership, or expert testimony. The conflict of interest statements should be included on the Title Page at the time of submission for all article types. If an author has no conflicts of interest to declare, this must be explicitly stated. Authors should err on the side of inclusion when in doubt. Do not include any conflict of interest statement(s), disclosure(s), and/or financial support information, including donations in the Acknowledgments section.

**Abstract**

For Original Research, Brief Reports, and Review Articles, abstracts should not exceed 250 words and should be written in the form of:

**Background.** This is a concise statement of why this research was done, placing it in the context of current knowledge or controversies.

**Objective/Hypothesis.** This is a clear statement of the precise objective or question addressed in the paper. If a hypothesis was tested, it should be stated.

**Methods.** The basic design of the study and its duration should be described. The methods used should be stated and the statistical data/methods provided.

**Results.** The main results of the study should be given in narrative form. Any measurements or other information that may require explanation should be defined. Any important information not included in the presentation of results should be declared. Levels of statistical significance should be indicated, as well as any other factors crucial to the outcome of the study.

**Conclusions.** Conclusions of the study that are directly supported by the evidence reported should be given along with the clinical application, and speculation about the potential impact on current thinking.

Other article types should have a brief narrative summary without subheadings that does not exceed 150 words.

**Subdivision**

The manuscript files for Original Research and Brief Reports should be structured with sections entitled and ordered as follows: Abstract, Introduction, Methods, Results, Discussion, Conclusion, Acknowledgements (if not on title page), References, Figure Legends. Please begin sections on separate pages. Acronyms must be spelled out on first use in the text, and where used in tables or figures, in each of their legends/titles/footnotes.

**Introduction**

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

**Methods**

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

**Results**

Results should be clear and concise.

**Discussion**

This should explore the significance of the results of the work, not repeat them. Avoid extensive citations and discussion of published literature.

**Conclusions**

The main conclusions of the study may be presented in a short Conclusions 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.

Ancillary Material
Supplementary material, relevant to the work but not critical to support the findings, is made available via links in the online article but not published in print. Ancillary material is not intended for print publication but is available for reviewers and highly interested readers through the Journal's website. Examples include additional lengthy tables, in-depth photographs of scientific methods, or short videos. All such material will be posted exactly as received and should be submitted as intended for viewing.

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

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

Keywords
Immediately after the abstract, provide a maximum of 5 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.

Acknowledgments
Although Acknowledgments typically follow the discussion section and precede the reference section, to maintain author anonymity Acknowledgments can be moved to the Title Page. This section should include acknowledgments for personal and technical assistance, individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.). If a research group is listed as an author, then the individual members of the research team should also be named here. Authors should identify individuals who provide writing assistance and disclose the funding source for this assistance.

Acknowledgments must appear in the original submission. If changed during the revision process, the reason must be detailed in the revision notes and point-by-point responses to the reviewers and editors.

Because readers may infer endorsement of the data and conclusions, all persons acknowledged must give written permission for their contribution to be noted in print. It is the corresponding author’s responsibility to obtain written permission. Upload written, signed permissions from each person named in the Acknowledgments at the time of submission. (Example available here.)

Source(s) of support, including grants, equipment, drugs, and/or other support that facilitated conduct of the work described in the article or the writing of the article itself, must appear in the disclosures portion on the title page, not in Acknowledgments.

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.

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, using superscript Arabic numbers. Many wordprocessors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Artwork
Electronic Artwork
Figures should be numbered in the order of their mention with Arabic numerals (ie, 1, 2, 3); avoid 1a, 1b, 1c numbering; numerical sequence and separate captions are preferred. Figures must be uploaded as separate files in .tif, .eps, or .jpg format. Figure captions must be a separate page within the manuscript file and not included in the figure file(s). Please ensure that the resolution of the figures is sufficient for publication; for example, photographic images should be at least 300 ppi, and line art should be at least 1000 ppi. See below for more information.

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 on a separate page in the manuscript file.
• Size the illustrations close to the desired dimensions of the printed version.
• Submit each illustration as a separate file.
A detailed guide on electronic artwork is available on our website: https://www.elsevier.com/artworkinstructions

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, JPEG, or EPS and with the correct resolution. If you submit usable color figures, Elsevier will publish these figures in color on the Web (e.g., ScienceDirect and other sites) at no additional charge regardless of whether or not these illustrations are reproduced in color in the printed version.

For color reproduction in print, authors are expected to pay the extra cost associated with reproduction of color illustrations in the print version of the Journal. If the submission is accepted, the publisher will contact you with pricing and instructions for payment.

Illustrations services
Elsevier's WebShop (http://webshop.elsevier.com/illustrationservices) 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; our illustrators can take your image(s) and work with you to 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 on a separate page of the manuscript file, 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
Number tables consecutively in accordance with their appearance in the text with Arabic numerals (ie, 1, 2, 3) and should have brief titles. Do not use 1a, 1b, 1c numbering; numerical sequence and separate captions are preferred. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

Tables must be uploaded as separate files in document format (eg, .doc). Add numbers to each table. Place the title of the table at the top of each table. Footnotes for tables should be indicated by symbols: *, †, ‡, §, ||, ¶, #, **, ††, ‡‡, §§, ||||, ¶¶, etc.

References
References must be listed numerically, corresponding to their order of appearance in the text. Citation in the text is by superscript Arabic numerals. Other than requiring numbered references, there are no strict formatting requirements on the list of references at submission; references can be in any format as long as the format is consistent and the information is correct and complete. If accepted, the reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage.

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” indicates 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.

References in 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.

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. This identifier will not appear in your published article. Example: Oguro, M, Imahiro, S, Saito, S, Nakashizuka, T. Mortality data for Japanese oak wilt disease and surrounding forest compositions, Mendeley Data, v1; 2015.
Reference management software
Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal’s style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:  
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

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

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

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

Data linking
If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

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

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

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

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

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

**Data 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.

**Submission Checklist**

The order of the documents should be as follow:

1. Cover letter, include statements of originality and authorship (see above)
2. Title page, as described above (in .doc format)
3. Manuscript, including abstract, main text, acknowledgements, references, and figure legends (in .doc format)
4. Tables (in .doc format) and/or figures (in .tif, .eps, or .jpg format) in separate files
5. Ancillary information for online only availability
6. Copy of IRB approval and/or permissions, as needed

Authors are required to submit all files in electronic form. Files should be labeled with logically descriptive file names (e.g., "Manuscript.doc." Figure_1.tif). Please note that original source files, not PDF files, are required.

The following list will be useful during the final checking of an article before sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

**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
- Phone numbers

All necessary files have been uploaded, and contain:

- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations:

- Manuscript has been “spell-checked” and “grammar-checked”
- References are complete and correct
- 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 Web), from persons named in the Acknowledgments, and from a patient or legal guardian for publication of recognizable images or descriptions
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print, or to be reproduced in color on the Web (free of charge) and in black-and-white in print
- If only color on the Web is required, black-and-white versions of the figures are also supplied for printing purposes

For any further information please visit our customer support site at https://service.elsevier.com/.

**AFTER ACCEPTANCE**

**Use of the Digital Object Identifier**

The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal
medium for citing a document, particularly "Articles in press" because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format; here an article in the journal *Physics Letters B*):

http://dx.doi.org/10.1016/j.physletb.2010.09.059

When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

**Proofs**

Authors should carefully check all proofs, as it is their responsibility to see that all errors are corrected and queries answered. The authors have final responsibility for the accuracy of the publication.

Corresponding authors will receive an e-mail with a link to our ProofCentral 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 upload all of your corrections within 48 hours. 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. Note that Elsevier may proceed with the publication of your article if no response is received.

**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 Author Services. 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