JAMDA is the official journal of AMDA: Dedicated to Long Term Care Medicine. JAMDA provides monthly coverage of the issues most important to healthcare professionals providing long term care. Original research and review articles cover topics such as geriatric medicine, dementia and cognitive impairment, rehabilitation, chronic comorbid conditions, the frail elder, sarcopenia, medication management and prescribing issues, multi-resistant organisms and infectious diseases, falls prevention, assisted living risks and challenges, palliative/end of life care, education, technology/robotics, as well as health policy, outcomes evaluation and guidelines for administrators, physicians and staff who work in long-term care, rehabilitation sites, assisted living, and home care.

Peer-reviewed articles include original studies, reviews, clinical experience articles, case reports, editorials and letters to the editor. Subscribe to JAMDA or join AMDA and receive JAMDA as a member benefit.

Benefits to authors
We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our author services.

Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our Support Center.

IMPACT FACTOR

2016: 5.775 © Thomson Reuters Journal Citation Reports 2017

ABSTRACTING AND INDEXING

CINAHL
Cumulative Index for Nursing and Allied Health Literature
Current Contents / Clinical Medicine
MEDLINE®
EMBASE
Excerpta Medica
Science Citation Index Expanded
EDITORIAL BOARD

Editor-in-Chief
John E. Morley, MD, BCh, St. Louis University Medical Center, Div. of Geriatric Medicine, 1402 S. Grand Boulevard, Room M238, St. Louis, 63104, Fax: (314) 771-8575

Associate Editors
David R. Thomas, MD, CMD, St. Louis University Medical Center, St. Louis, MO
Julie K. Gammack, MD, St. Louis University Medical Center, St. Louis, MO
Milla O. Little, DO, CMD, St. Louis University Medical Center, St. Louis, MO
Barbara Resnick, PhD, CRNP, FAAN, FAANP, University of Maryland School of Nursing, Baltimore, MD

Managing Editor
Valerie Tanner, St. Louis University Medical Center, Div. of Geriatric Medicine, 1402 S. Grand Boulevard, Room M238, St. Louis, 63104, Fax: (314) 771-8575

Editor Emeritus
Dan Osterweil

Editorial Board
Steven M. Albert, PhD, MSPH, University of Pittsburgh, School of Public Health, Pittsburgh, PA
Wilbert S. Aronow, MD, New York Medical College, New Rochelle, NY
Connie W. Bales, PhD, RD, Duke University Center for Aging, Durham, NC
Barbara M. Bates-Jenson, PhD, RN, UCLA School of Nursing/Medicine and VA Gr LA GRECC, Pasadena, CA
Manju T. Beier, PharmD, FASCP, University of Michigan and Geriatric Consult Res LCC, Ann Arbor, MI
Dan G. Blazer, MD, PhD, Duke University Medical Center, Durham, NC
Gideon A. Caplan, MBBS, FRACP, Prince of Wales Hospital, Randwick, Australia
Matteo Cesari, MD, PhD, University of Sacred Heart, Rome, Italy
Leung-Wing Chu, Wageningen University, Netherlands
Dulce M. Cruz-Oliver, MD, Saint Louis University School of Medicine, St. Louis, MO
Lenise A. Cummings-Vaughn, MD, Saint Louis University School of Medicine, St. Louis, MO
Lisette CPGM de Groot, MSc, PhD, Wageningen University, Netherlands
Abhijalsh K. Desai, MD, Sheppard Pratt Health System, Baltimore MD and Saint Louis University School of Medicine, St. Louis, MO
T.S. Dharmarajan, MD, MACP, AGSF, Montefiore MC, Bronx, NY
Jacob Dimant, MD, CMD, Lutheran Medical Center and Lutheran Augustana Center, Brooklyn, NY
Ligia J. Dominguez, MD, University of Palermo, Palermo, Italy
David Dosa, MD, MPH, Brown University, Providence, RI
Paul J. Drinka, MD, CMD, Wisconsin Veterans Home at King, King, WI
G. Paul Eleazer, MD, University of South Carolina School of Medicine, Columbia, SC
William J. Evans, MD, University of Arkansas, Little Rock, AR
Connie J. Evashwick, ScD, FACHE, Saint Louis University School of Public Health, St. Louis, MO
Luigi Ferrucci, PhD, MD, National Institute on Aging, NIH, and Harbor Hospital, Baltimore, MD
Joseph H. Flaherty, MD, Saint Louis University School of Medicine, St. Louis, MO
Radha Ramana Murthy Gokula, MD, CMD, University of Toledo, Toledo, OH
George T. Grossberg, MD, Saint Louis School of Medicine, St. Louis, MO
Victor A. Hirth, MD, MHA, University of South Carolina and Palmetto Health, Columbia, SC
Paul R. Katz, MD, CMD, Baycrest Geriatric Health Centre, University of Toronto, Ontario, Canada
Heather H. Keller, RD, PhD, University of Guelph, Guelph, Ontario, Canada
Anne M. Kenny, MD, University of Connecticut Health Center, Center on Aging, Farmington, CT
Reto W. Kressig, MD, University Hospital Basel, Geriatrics, Basel, Switzerland
Francesco Landi, MD, PhD, University of Sacred Heart, Rome, Italy
Larry Lawhorne, MD, Wright State University Boonshoft School of Medicine, Dayton, OH
Steven Levenson, MD, CMD, Baltimore, MD
Leslie S. Libow, MD, Jewish Home and Hospital and Life Care and Mt. Sinai School of Medicine, New York, NY
Jay S. Luxenberg, MD, Jewish Home, San Francisco, CA
Kenneth W. Lyles, MD, Duke University and VA Medical Center, Durham, NC
Edward R. Marcantonio, MD, SM, Harvard University and Beth Israel Deaconess Medical Center, Boston, MA
Barbara J. Messinger-Rapport, MD, PhD, FACP, CMD, Cleveland Clinic, Cleveland, OH
Joseph G. Ouslander, MD, CMD, Institute for Quality Aging, Boca Raton, FL
Naushira Pandya, MD, CMD, Nova SE University College of Osteopathic Medicine, Ft. Lauderdale, FL
Miguel A. Paniagua, MD, Saint Louis University School of Medicine, St. Louis, MO
Giuseppe Paolisso, MD, University of Naples, Napoli, Italy
Debra Parker Oliver, PhD, MSW, University of Missouri, Columbia, MO
Steven L. Phillips, MD, CMD, Geriatric Care of Nevada, Reno, NV
Kaisu H. Pitkälä, PhD, Washington University School of Medicine, St. Louis, MO
Marilyn J. Rantz, PhD, RN, FAAN, University of Missouri -Columbia, Columbia, MO
INTRODUCTION

*JAMDA* is the premiere Journal for issues in post-acute and long-term care. Therefore, primary priority is given to submissions in these focus areas.

Types of articles

**ORIGINAL STUDIES**

Please provide a structured abstract using the following headings: Objectives, Design, Setting, Participants, Intervention (if any), Measurements, Results, and Conclusion. The text portion should be approximately 7-8 double-spaced pages in length, using the following format:

- **Introduction** - should describe the question posed that the research was designed to answer.
- **Methods** - should describe the design, how it was carried out, selection and assignment of subjects, treatment, outcome measurements, and statistical methods.
- **Results** - should be listed in order of importance and include any adverse effects.
- **Discussion** - should provide a brief synopsis of the findings, limitations of the study, and a comparison with relevant findings from other studies.
- **Conclusion** - should provide a brief summary of the implications of the study findings.

**Meta-analyses** will be considered original research.

**Brief Reports** are a condensed version of Original Studies, limited to 6-8 double-spaced pages including title page, abstract, text, references, tables, and figures. This category is ideal for reporting preliminary results of a study or reporting a small study.

**REVIEW ARTICLES**

A review article is a systematic, critical assessment of the literature and data sources relevant to clinical topics (including treatment) that are commonly encountered in long-term care settings. Authors should emphasize factors such as cause, diagnosis, prognosis, prevention, or therapeutic intervention(s). All articles and date sources reviewed should include information about a specific type of study (e.g., case study, double-blind, randomized trial), population, intervention, and outcomes. Articles or data sources should be selected systematically for inclusion in the review and critically evaluated. The selection process should be described in the paper. The typical length is 10-12 double-spaced pages, not including tables, figures, and references. Submission of a textbook replication is discouraged. The review section also includes **Brief Reviews**. These articles are narrow in scope, answering a single clinical question, such as: What is an effective intervention for prevention of injurious falls? All review articles should be formatted using the following headings: Objectives/Introduction; Methods (data sources, type of study); Results; Discussion; Conclusion. Review articles should have a brief abstract with or without subheadings.

**CONTROVERSIES IN LONG TERM CARE**

These articles will deal with behaviors or practices in long term care settings that lack an evidence base, but rather are guided by opinions of local leaders and/or regulations without a clearly tested process that leads to a beneficial outcome. The following structure should be used: Problem, Significance of the Problem, Discussion, Conclusion. These articles should include a brief abstract without subheadings. These should be no longer than 6-8 double-spaced pages.

**CLINICAL EXPERIENCE**

These articles should address the use of assessment and/or intervention methods in the long-term care setting (home, assisted living, and nursing facilities), which have the potential to improve quality of care or quality of life. Examples: Algorithms, clinical practice guidelines, the impact of regulatory requirements on practice or policy, and procedure implementation. These reports may describe a clinical experience or an investigation that is preliminary but that may be of clinical or scientific interest. The manuscript should include a short Introduction and Rationale, a Methods section to include subjects and approach, and an Outcomes or Results section. In the case results are not available, some mention should be made of methods to be employed to measure outcome of the
work process. The reports are limited to 10 double-spaced narrative manuscript pages with 1-2 tables and/or figures, plus a brief, structured abstract using the headings above. Forms and checklists are welcome as tables or appendices.

**CASE REPORTS** should be approximately 3-5 double-spaced, typewritten pages and contain instructional value, such as those of successful interventions in managing uncommon syndromes or unsuccessful ones where a diagnosis was made after the fact. These articles should include a brief abstract without subheadings.

**QUALITY IMPROVEMENT IN LONG-TERM CARE**

These articles are case-based presentations of nursing home behavior/practice that led to an adverse regulatory or legal outcome. The discussant should review state-of-the-art practice/clinical guidelines that, if applied, would have resulted in a satisfactory conclusion. The format to use is: Case presentation, comments, recommendations. These articles should include a brief abstract without subheadings.

**LONG-TERM CARE AROUND THE GLOBE**

This section reports on long-term care services in different countries and health systems aimed to educate and exchange information. When feasible, these articles should include a brief structured abstract stating objectives, design, methods, results and conclusion.

**SPECIAL ARTICLES**

Special articles are usually solicited by the editor. Topics of interest to the readers, which do not easily fit into any of the regular categories, will appear in this section. These articles should include a brief abstract without subheadings.

**UPDATES FROM THE AMDA MEETING**

Topics for Updates articles come from lectures or workshops presented at the annual AMDA meeting. Examples of Updates articles are the Clinical Updates in Nursing Home Medicine by Messinger-Rapport et al published each fall beginning in the September 2008 issue. These should be discussed with and topics approved by the editor prior to submission.

**IN TOUCH**

This section affords authors the opportunity to share personal experiences with the readers. They are generally 3-5 double-spaced pages, non-clinical in nature, and should pertain, in some way, to long term care issues. Appropriate topics include: compassion, quality of life, human value, dignity of death and the sanctity of life. A short story format, fact or fiction, is acceptable.

**IN THE TRENCHES**

Debuted in the June 2008 issue, page 291 (T.R. Cote), this provides an opportunity for authors to share with other long-term care providers tools they have developed to advance better care for their patients. It can be a one-page "how-to" illustration or a two- to three-page description followed by a figure that illustrates the procedure or instrument.

**LETTERS**

Letters should be double-spaced and approximately 1-3 pages in length. Those referring to an article published in the journal should be submitted within 1 month of the article's appearance. The editor may send it to the author of the paper for a response. References and a small illustration are acceptable.
Contact details for submission
If you have questions for the editorial office, contact Valerie Tanner, Managing Editor; email: tannerv@slu.edu; phone: 11 314-977-8464 (US). If you need technical support while working in the online submission system, click the support link to send an e-mail, or call: for the Americas (toll-free for US & Canada) 11 888-834-7287; for Asia & Pacific 181 3 5561 5032; for Europe & the rest of the world 1353 61 709190.

Submission checklist
You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

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

All necessary files have been uploaded:
Manuscript:
• Include keywords
• All figures (include relevant captions)
• All tables (including titles, description, footnotes)
• Ensure all figure and table citations in the text match the files provided
• Indicate clearly if color should be used for any figures in print
Graphical Abstracts / Highlights files (where applicable)
Supplemental files (where applicable)

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

For further information, visit our Support Center.

BEFORE YOU BEGIN

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

Declaration of 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'. More information.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see 'Multiple, redundant or concurrent publication' section of our ethics policy 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 CrossCheck.
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.

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 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:

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

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.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.
For 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 open access publication fee for this journal is **USD 3600**, excluding taxes. Learn more about Elsevier's pricing policy: [https://www.elsevier.com/openaccesspricing](https://www.elsevier.com/openaccesspricing).

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

This journal has an embargo period of 12 months.

**Language (usage and editing services)**
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the [English Language Editing service](https://www.elsevier.com/languageediting) 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 [http://ees.elsevier.com/jamda/](http://ees.elsevier.com/jamda/). Authors are encouraged to submit using Google Chrome, Mozilla Firefox, or older versions of Internet Explorer (9 or 10).

Submission items include a cover letter (save as a separate file for upload), suggested reviewers, title page (saved separately from the manuscript main text), the manuscript (including abstract, manuscript text, references, and table/figure legends, without any author identifiers). Revised manuscripts should also be accompanied by a unique file (separate from the covering letter) with responses to reviewers' comments. The preferred order of files is as follows: cover letter, response to reviewers (revised manuscripts only), title page, manuscript file(s), table(s), figure(s). Files should be labeled with appropriate and descriptive file names (e.g., Text.doc, Fig1.eps, Table3.doc). Do not use an underscore (_) in the file name. Upload text, tables and graphics as separate files. Do not import figures or tables into the text document and do not upload your text as a PDF.

**COVER LETTER**

Briefly describe the contributions of each author. Financial disclosure and any information regarding conflict of interest should be addressed in the cover letter at the time of first submission. Authors should state that the manuscript, or parts of it, have not been and will not be submitted elsewhere for publication. Authors are highly encouraged to include a list of three or more potential reviewers for their manuscript, with email address, affiliation, city, state, and country.

**TITLE PAGE**
List all authors, indicating title and affiliation for each. Every individual who contributed to the article in any way should be acknowledged. Provide a mailing address and phone/fax/email information for the corresponding author and an alternate correspondent, if possible. Please provide 3-6 key words for indexing, and a running title of no more than 45 characters.

TEXT

The entire text should be free of any author identification. Please double-space the entire manuscript and number the pages. NOTE: It is important to submit a clean manuscript that does not have evidence of track changes or comments in the margins. Please turn those features off prior to submission.

ASSURANCES

Acknowledgment of support should be reported after the Conclusion section and before References. When human subjects are involved, the article should also include a statement that the research protocol was approved by the relevant institutional review boards or ethics committees and that written consent was obtained from all participants. Alternatively, author(s) should indicate when a waiver of consent was obtained from the IRB.

REVIEW PROCESS

Submissions are reviewed by the editor, and are usually sent to two external reviewers. The typical turnaround time from submission to authors receiving the reviewers' comments is less than 6 weeks; however, at times there are delays.

CRITERIA

Evaluation of an article's suitability for publication is based on: the originality of the material, the clarity of the writing, the appropriateness of the study methods, validity of the data, and how well the conclusions are supported by the data. The information must be important and of interest to long term care providers.

PUBLISHING AN ONLINE-ONLY ARTICLE IN JAMDA

If your article is rated by the reviewers and the editor as acceptable for publication, JAMDA may suggest publishing your article online only, depending upon the priority the reviewers assign to your article. When an article is published online only, it is still listed in the Table of Contents of the printed Journal, and a link is provided to the online publication on JAMDA's website. The abstract would also appear in the printed Journal. It would still be included in all the usual reporting websites such as PubMed, OVID (Medline), and the citation indices. If your article is selected for online only publication, you will be notified in the Editor's decision letter.

Referees
Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our Support site. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

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

Subdivision - unnumbered sections
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.

Material and 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.

Theory/calculation
A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

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 Appendix 1, Appendix 2, etc. Tables and figures in appendices should be given separate numbering: Table A1; Fig. A1, 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. 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 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.

Structured abstract
A structured abstract, by means of appropriate headings, should provide the context or background for the research and should state its purpose, basic procedures (selection of study subjects or laboratory animals, observational and analytical methods), main findings (giving specific effect sizes and their statistical significance, if possible), and principal conclusions. It should emphasize new and important aspects of the study or observations.

Keywords
Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.
**Abbreviations**
Define abbreviations that are not standard. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the text. Ensure consistency of abbreviations throughout the article.

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

**Formatting of funding sources**
List funding sources in this standard way to facilitate compliance to funder's requirements:

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

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

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

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

**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.

**Math formulae**
Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

**Artwork**

**Electronic artwork**

**General points**
- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.

A detailed guide on electronic artwork is available.

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

**Formats**
If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.
Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

**EPS (or PDF):** Vector drawings, embed all used fonts.
**TIFF (or JPEG):** Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
**TIFF (or JPEG):** Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
**TIFF (or JPEG):** Combinations bitmapped line/halftone (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
Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with the following symbols, in order: *, †, ‡, §, ¶, **, ††, etc. 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.

References
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). References should be cited in numerical order. 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 encouraged.

A DOI can be used to cite and link to electronic articles where an article is in-press and full citation details are not yet known, but the article is available online. 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., Ambe 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.
Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

Reference style
Full references should be used. List the first four authors' last names and initials; if more than four, insert "et al." after the third name. References should be annotated in the text with superscript numbers and listed at the end of the article in the order in which they appear. Medline abbreviations should be used for journal titles.


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

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.

3D radiological data
You can enrich your online article by providing 3D radiological data in DICOM format. Radiological data will be visualized for readers using the interactive viewer embedded within your article, and will enable them to: browse through available radiological datasets; explore radiological data as 2D series, 2D orthogonal MPR, 3D volume rendering and 3D MIP; zoom, rotate and pan 3D reconstructions; cut through the volume; change opacity and threshold level; and download the data. Multiple datasets can be submitted. Each dataset will have to be zipped and uploaded to the online submission system via the '3D radiological data' submission category. The recommended size of a single uncompressed dataset is 200 MB or less. Please provide a short informative description for each dataset by filling in the 'Description' field when uploading each ZIP file. Note: all datasets will be available for download from the online article on ScienceDirect. So please ensure that all DICOM files are anonymized prior to submission. More information.

AFTER ACCEPTANCE
**Proofs**

One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to [download the free Adobe Reader, version 9](https://get.adobe.com/reader/) (or higher). Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the [Adobe site](https://www.adobe.com/).

If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and scan the pages and return via e-mail. 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. We will do everything possible to get your article published quickly and accurately. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Offprints**

The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's [Webshop](https://www.elsevier.com/). Corresponding authors who have published their article 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](https://www.elsevier.com/support) 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](https://www.elsevier.com/myarticles/trackarticle) or find out when your accepted article will be published.

© Copyright 2014 Elsevier | [http://www.elsevier.com](http://www.elsevier.com)