DESCRIPTION

About the Journal

Genes & Diseases is an international journal for molecular and translational medicine. The journal primarily focuses on publishing investigations on the molecular bases and experimental therapeutics of human diseases. Publication formats include full length research article, review article, short communication, correspondence, perspectives, commentary, views on news, and research watch.

Aims and Scopes

Genes & Diseases publishes rigorously peer-reviewed and high quality original articles and authoritative reviews that focus on the molecular bases of human diseases. Emphasis will be placed on hypothesis-driven, mechanistic studies relevant to pathogenesis and/or experimental therapeutics of human diseases. The journal has worldwide authorship, and a broad scope in basic and translational biomedical research of molecular biology, molecular genetics, and cell biology, including but not limited to cell proliferation and apoptosis, signal transduction, stem cell biology, developmental biology, gene regulation and epigenetics, cancer biology, immunity and infection, neuroscience, disease-specific animal models, gene and cell-based therapies, and regenerative medicine.

ABSTRACTING AND INDEXING

Emerging Sources Citation Index (ESCI)
PubMed Central
Scopus
Directory of Open Access Journals (DOAJ)

EDITORIAL BOARD

Editor-in-Chief
Tong-Chuan He, Molecular Oncology Laboratory, University of Chicago Medical Center, USA

Deputy Editor-in-Chief
Ailong Huang, Chongqing Medical University, Chongqing, China
Senior Advisory Board

Chair
Han Lei, Chongqing Medical University, Chongqing, China

Members
Xuetao Cao, Institute of Basic Medical Sciences, Peking Union Medical College, Chinese Academy of Medical Sciences, Beijing, China
Jing Cheng, Professor and Academician of CAE, Tsinghua University, Beijing, China
Daiming Fan, Xijing Hospital, Xi'an, China
Lan-Juan Li, First Affiliated Hospital, Zhejiang University, Hangzhou, China
Zheng-guo Wang, Professor and Academician of CAE, Daping Hospital & Research Institute of Surgery, Third Military Medical University, Chongqing, China
Huangming Yang, Professor and Academician of CAE, Third Military Medical University, Chongqing, China
Susheng Zheng, Professor and Academician of CAE, Daping Hospital & Research Institute of Surgery, Third Military Medical University, Guangzhou, China
Honghao Zhou, Professor and Academician of CAE, Central South University, Hunan, China

Executive Associate Editors
Nickolai Dulin, Dept. of Medicine, University of Chicago, Chicago, USA
Fei Li, Chongqing Medical University, Chongqing, China
Wei Zhou, Emory University, Atlanta, GA, USA

Managing Editor
Ping Luo, Chongqing Medical University, Chongqing, China

Assistant Editors
Qiushan Tang, Chongqing Medical University, Chongqing, China

Associate Editors
Andreas Bikfalvi, Angiogenesis and Tumor Microenvironment Laboratory, INSERM U 1029, University of Bordeaux 1, Talence, France
Gerald W Dorn II, Washington University School of Medicine, St. Louis, MO, USA
M. Hicham Drissi, University of Connecticut Health Center, Farmington, CT, USA
Yangxin Fu, University of Chicago, Chicago, IL, USA
Jim Hu, University of Toronto (Hospital for Sick Children), Toronto, ON, Canada
Irena Levitan, Medicine, University of Illinois at Chicago, Chicago, USA
Xiongzhong Ruan, Centre for Nephrology, UCL Medical School, Royal Free Campus, University College London (UCL), London, UK
Andre van Wijnen, Dept. of Orthopedic Surgery, Mayo Clinic, Rochester, USA
Ronald JA Wanders, Emma Children’s Hospital AMC, Universiteit van Amsterdam, Academisch Medisch Centrum (AMC), Amsterdam Zuidoost, Netherlands
Da-Zhi Wang, Children’s Hospital Boston, Harvard Medical School, Boston, USA
Keping Xie, M D Anderson Cancer Center Houston, The University of Texas, Houston, TX, USA
Rosie R Xing, Chongqing Medical University, Chongqing, China
Qingbo Xu, James Black Centre, King’s College London, London, UK
Lin Zhang, UPCI Research Pavilion, Hillman Cancer Center, University of Pittsburgh, Pittsburgh, PA, USA

Statistics Editors
Dezheng Hou, University of Chicago, Chicago, Illinois, USA
Xiaoyan Iris Leng, Wake Forest University, Winston-Salem, NC, USA

Editorial Board Members
Giuseppe Altavilla, Department of Human Pathology, Medical Oncology Unit, University of Messina, Messina, Italy
Sergey Anisimov, Federal Almazov North-West Medical Research Centre, Saint-Petersburg, Russian Federation
Jesus Avila, Centro de Biología Molecular "Severo Ochoa", Universidad Autónoma de Madrid, Madrid, Spain
Marcelo Bonini, Section of Cardiology and Pharmacology, University of Illinois at Chicago, Chicago, USA
Timothy A. Chan, Memorial Sloan-Kettering Cancer Center, New York, NY, USA
Jianjun Chen, University of Chicago, Chicago, IL, USA
Hueng-Sik Choi, Hormone Research Center, Chonnam National University, Gwangju
Aiko P.J De Vries, Department of Nephrology, Leids Universitair Medisch Centrum (LUMC), Leiden, Netherlands
Mingqing Du, Department of Pathology, University of Cambridge, Cambridge, UK
Matthias Eckhardt, Universitaet Bonn, Bonn, Germany
Y. Murat ELÇİN, Faculty of Science Department of Chemistry, Ankara University, Ankara, Turkey
Jiliang Gao, National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, MD, USA
INTRODUCTION

About the Journal

Genes & Diseases is an international journal for molecular and translational medicine. The journal primarily focuses on publishing investigations on the molecular bases and experimental therapeutics of human diseases. Publication formats include full length research article, review article, short communication, correspondence, perspectives, commentary, views on news, and research watch.

Aims and Scope

Genes & Diseases publishes rigorously peer-reviewed and high quality original articles and authoritative reviews that focus on the molecular bases of human diseases. Emphasis will be placed on hypothesis-driven, mechanistic studies relevant to pathogenesis and/or experimental therapeutics of human diseases. The journal has worldwide authorship, and a broad scope in basic and translational biomedical research of molecular biology, molecular genetics, and cell biology, including but not limited to cell proliferation and apoptosis, signal transduction, stem cell biology, developmental biology, gene regulation and epigenetics, cancer biology, immunity and infection, neuroscience, disease-specific animal models, gene and cell-based therapies, and regenerative medicine.

Editorial Process

All manuscripts received are duly acknowledged. Upon submission, the Editorial Office will check the manuscript's conformity to technical quality and author guidelines, typically within one week. Manuscripts with insufficient conformity are returned to authors for revision. Manuscripts with insufficient originality, serious scientific or experimental flaws, or lack of interest to the readership of Genes & Diseases will be rejected by the Editor-in-Chief and/or Deputy Editor-in-Chief without further peer review. Manuscripts deemed suitable for publication are sent to the Executive Associate Editors. The Executive Associate Editors will make initial assessment and will serve as the managing editor, who in turn will appoint 2-3 editorial board members and/or external referees to complete peer reviews within 4 weeks. Based on the recommendations and comments made by peer reviewers, the Executive Associate Editor will make a formal recommendation to the Editor-in-Chief and/or Deputy Editor-in-Chief who will make the final decision within 1 week, in consultation with other editorial board members, if deemed necessary. The comments and recommendations (acceptance/rejection/ minor revision/ major revision in manuscript) received from reviewers are conveyed to the corresponding author. If necessary, the author is required to provide a point by point response to reviewers' comments and submit a revised manuscript. This process will be repeated till reviewers and editors are satisfied with the revised manuscript.

Manuscripts accepted for publication are copy edited for grammar, punctuation, print style, and format. Page proofs are sent to the corresponding author. The corresponding author is expected to return the corrected proofs within 48 hours. The whole process of submission of the manuscript, final decision, sending and receiving proofs is completed online. To achieve faster and greater dissemination of knowledge and information, the journal publishes articles online as 'Ahead of Print' immediately upon acceptance.

During submission, the contributor is requested to provide names of at least three qualified reviewers who have had experience in the subject of the submitted manuscript. The reviewers should not be affiliated with the same institutes as the contributor/s. However, the selection of these reviewers is at the sole discretion of the editor.

Contact Details for Submission

Paper should be submitted through the Genes & Diseases online submission system, http://ees.elsevier.com/gendis/. For questions on the submission and reviewing process, please contact the Editorial Office at: editor@genesndiseases.org; telephone +86-023-6848 5014.

BEFORE YOU BEGIN

Declaration of interest

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the
manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

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

**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 Statement**
The corresponding author is responsible for ensuring that all appropriate contributors are listed as authors and that all authors have agreed to the manuscript's content and its submission to *Genes & Diseases*. In any case where we become aware of an authorship dispute, authorship must be approved in writing by all of the parties. Contributors should provide a description of contributions made by each of them towards the manuscript. Description should be divided in following categories, as applicable: concept and design, literature search, clinical studies, experimental studies, data acquisition, data analysis, statistical analysis, manuscript preparation, manuscript editing and manuscript review.

**External Reviewers**
Please submit the names, institutional affiliations, and e-mail addresses of at least 3 potential external reviewers as well as a brief description of their expertise relevant to your manuscript. Suggested reviewers should be individuals qualified to evaluate the work you have submitted. The reviewers suggested may not be current, recent or extensive collaborators of yours, and must not be involved in the preparation of the manuscript. Reviewers must not be members of the same institution as the authors. Editorial Board members of *Genes & Diseases* should not be named as suggested reviewers.

Please note that the editor retains the sole right to decide whether or not the suggested reviewers are used. Failure to provide appropriate reviewer suggestions may result in your manuscript being returned to you without being reviewed.

Authors may request exclusion of certain reviewers if competing interests are anticipated. However, no more than 3 such names should be given. Entire groups or institutions cannot be specified for exclusion.

**Ethical Approval**
For manuscripts reporting studies involving human subjects, statements identifying the committee approving the studies and confirming that informed consent was obtained from all subjects must appear in the Experimental Procedures section. All experiments on live vertebrates or higher invertebrates must be performed in accordance with relevant institutional and national guidelines and regulations. In the manuscript, a statement identifying the committee approving the experiments and confirming that all experiments conform to the relevant regulatory standards must be included in the Experimental Procedures section. The editors reserve the right to seek comments from reviewers or additional information from authors on any cases in which concerns arise. For more information on ethics in publishing and ethical guidelines for journal publication see https://www.elsevier.com/publishingethics and https://www.elsevier.com/journal-authors/ethics
Report of Clinical Trials
All randomized controlled trials submitted for publication should include a complete Consolidated Standards of Reporting Trials (CONSORT) flow chart (available at http://www.consort-statement.org). This Journal has adopted the proposal from the International Committee of Medical Journal Editors (ICMJE) that requires, as a condition of consideration for publication of clinical trials, registration in a public trials registry. Purely observational studies (those in which the assignment of the medical intervention is not at the discretion of the investigator) do not require registration. Further information can be found at http://www.icmje.org.

Identification of Patients in Descriptions, Photographs and Pedigrees
A signed statement of informed consent to publish (in print and online) patient descriptions, photographs and pedigrees should be obtained from all subjects (parents or legal guardians for minors) who can be identified (including by the subjects themselves) in such written descriptions, photographs or pedigrees. Such persons should be shown the manuscript before its submission. Omitting data or making data less specific to de-identify patients is acceptable, but altering or falsifying any such data is not acceptable.

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.

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.

Changes to Authorship
Before the accepted manuscript is published in an online issue: requests to add or remove an author, or to rearrange the author names, must be sent to the Journal Manager from the corresponding author and must include: (a) the reason the name should be added or removed, or the author names rearranged and (b) written confirmation (email, fax, 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. Requests that are not sent by the corresponding author will be forwarded by the Journal Manager to the corresponding author, who must follow the procedure as described above. Note that: (1) Journal Managers will inform the Journal Editors of any such requests and (2) publication of the accepted manuscript in an online issue is suspended until the authorship has been agreed upon. After the accepted manuscript is published in an online issue: any requests to add, delete, or rearrange author names in an article published in an online issue will follow the same policies as noted above and result in a corrigendum.

Language (Usage and Editing Services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop (http://webshop.elsevier.com/languageediting/) or visit our customer support site (http://support.elsevier.com) for more information.

Supporting Documents
The following documents must be included (refer also to the Checklist that follows this guide for author):
• Conflict of Interest Statement. You may use the form that follows this guide for authors.
• Copyright Transfer Agreement. You may use the form that follows this guide for authors.
• Authorship Statement. You may use the form that follows this guide for authors. All the authors' signatures must be included.
• External Reviewer Suggestions. You may use the form that follows this guide for authors. AND, where applicable.
• Ethics Statement. Articles covering human or animal experiments must be accompanied by a letter of approval from the relevant review committee or authorities.
• Consolidated Standards of Reporting Trials (CONSORT) flow chart for randomized controlled trials submitted for publication.
• Articles where human subjects can be identified in descriptions, photographs or pedigrees must be accompanied by a signed statement of informed consent to publish (in print and online) the descriptions, photographs and pedigrees from each subject who can be identified.
• Where material has been reproduced from other copyrighted sources, the letter(s) of permission from the copyright holder(s) to use the copyrighted sources must be supplied.

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

Open access
Every peer-reviewed research article appearing in this journal will be published open access. This means that the article is universally and freely accessible via the internet in perpetuity, in an easily readable format immediately after publication. The author does not have any publication charges for open access. The Chongqinkg Medical University will pay to make the article open access. A CC user license manages the reuse of the article (see https://www.elsevier.com/openaccesslicenses). All articles will be published under the following license:

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.

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.

PREPARATION

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

PEER REVIEW
This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. For more information on the types of peer review, please visit: https://www.elsevier.com/reviewers/peer-review.
Use of word processing software
It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.
To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

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

Cover Letter
Submissions should be accompanied by a one-page cover letter from the corresponding author including full postal address, telephone number, and e-mail address. This letter should contain a brief explanation of the conceptual advance provided by the findings and the significance of the findings to a broad readership.
The cover letter should state clearly that 1) the reported work, in whole or in part, has not been under consideration for publication by any other primary scientific journals; and 2) all authors have read and concurred with the content of the manuscript.

Types of Articles
Contributions falling into the following categories will be considered for publication: full length article, review article, short communication, correspondence, perspective, commentary, views on news, and research watch. Please ensure that you select the appropriate article type from the list of options when making your submission.

Full Length Article
These may be randomized trials, intervention studies, studies of screening and diagnostic tests, laboratory and animal studies, cohort studies, cost-effectiveness analyses, case-control studies, and surveys with high response rates, which represent new and significant contributions to the field. Section headings should be: Abstract, Introduction, Material and Methods, Results, Discussion, Acknowledgments and Appendix (if applicable), and References. The Introduction should provide a brief background to the subject of the paper, explain the importance of the study, and state a precise study question or purpose. The Material and Methods section should describe the study design and methods (including the study setting and dates, patients/ participants with inclusion and exclusion criteria, or data sources and how these were selected for the study, patient samples or animal specimens used, explain the laboratory methods followed), and state the statistical procedures employed in the research. The Results section should comprise the study results presented in a logical sequence, supplemented by tables and/or figures. Take care that the text does not repeat data that are presented in tables and/or figures but only emphasize and summarize the essential features of any interventions, the main outcome measures, and the main results. The Discussion section should be used to emphasize the new and important aspects of the study, placing the results in context with published literature, the implications of the findings, and the conclusions that follow from the study results. Typical length: no more than 6000 words, 40-80 references.

Review Article
Review Article in Genes & Diseases are solicited and commissioned by the Editor-in-Chief and subject to peer review. The reviews provide an insightful overview of the recent advances in a particular field or area in experimental and translational medical research interesting to the specialist readership. Authors wishing to submit an unsolicited Review are encouraged to contact the editorial office prior to submission. Review articles are limited to 6,000 words, not counting an abstract of 200 words or fewer, as well as the figure legends and the references. It may not exceed a total of 4 tables/ figures.
Short Communication

Short manuscripts documenting high impact experimental results will be considered for publication as this category. Short manuscripts submitted for consideration are subject to the same rigorous peer review as for Original Articles. Short Communication may not exceed 2,000 words of text not counting the abstract, figure legends, and references; abstracts must not exceed 150 words and should be presented as a single paragraph with no subheadings. Only 4 figures/tables and 30 references may be included. The format of a Short Communication follows that of a Full Length Article, but the Results and Discussion are included in a single section.

Correspondence

Should a reader have constructive comments or criticisms relevant to a paper published in *Genes & Diseases*, it may be accepted for publication in the form of Correspondence after a fast-track editorial review. The Correspondence may not exceed a word limit of 1000, with no more than 10 references. The Correspondence may be published together with the response from the authors of the original paper(s) under discussion. The items of correspondence may be edited by the editor prior to the publication.

Perspectives

Perspectives are short, commissioned scholarly reviews and discussions of the primary research article(s) that are too technical for a Commentary but do not meet the criteria for a Review because of the narrow scope. The highlighted research article(s) may appear in the same or recent issue of *Genes & Diseases*, or in other major journals. Perspectives offer a point of view on a topic of current interest. They can be speculative and creative, and are meant to stimulate thought on a topic of interest to our readership. They are short, thoughtful, and to the point. They are not intended as comprehensive reviews of the literature. The text should not exceed 1,500 words, including up to two figures/tables. References are limited to 20. Perspectives authors must provide a competing financial interests statement before publication.

Commentary

As a flexible format, Commentaries are short, opinion articles commissioned by the Editors. The main criteria are that they should be of immediate interest to a broad readership and should be written in an accessible, non-technical style. In some cases, Commentaries accompany a primary research article in *Genes & Diseases* to highlight an exceptional advance or to discuss a controversy in the field. They may also focus on article(s) of exceptional significance that are published elsewhere. Commentaries do not normally contain primary research data. Their length is usually limited to 1,000 words and may include one figure or table. References are limited to 10. Commentary authors must provide a competing financial interests statement before publication. Commentaries may be peer reviewed at the editor’s discretion.

Views on News

Views on News are commissioned by the Editors only. They may be linked to articles in *Genes & Diseases*, or they may focus on article(s) of exceptional significance that are published elsewhere. Their length is usually limited to 800 words. References are limited to 10. Views on News are not peer reviewed. Authors must provide a competing financial interests statement before publication.

Research Watch

Research Watch is a format for short commissioned summaries of recent publications of exceptional and broad significance in major life science and biomedical journals. The text should not exceed 500 words with no more than 5 references. Research Watch summaries are not peer reviewed.

Article structure

**Introduction**

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

**Material and methods**

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

**Results**

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

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

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

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

**Abstract and Keywords**
Abstracts should be no more than 250 words in length. Abstracts for Full Length Articles should be unstructured with a concise description of relevant background, appropriate materials and methods used to obtain the results, and major findings and conclusions. Abstracts for Review Articles and Short Communication should be unstructured. Abbreviations and reference citations should be avoided. Below an abstract, at least 5 relevant keywords should also be provided in alphabetical order.

**Statistical Requirements**
Statistical analysis is essential for all research papers except case reports. Use correct nomenclature of statistical methods (e.g., two sample t test, not unpaired t test). Descriptive statistics should follow the scales used in data description. Inferential statistics are important for interpreting results and should be described in detail. All p values should be expressed to 2 digits to the right of the decimal point, unless \( p < 0.01 \), in which case the p value should be expressed to 3 digits to the right of the decimal point. The smallest p value that should be expressed is \( p < 0.001 \), since additional zeros do not convey useful information; the largest p value that should be expressed is \( p > 0.99 \).

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

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

**Formatting of funding sources**
List funding sources in this standard way to facilitate compliance to funder's requirements:
Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

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

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

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

Nomenclature and Units
Follow internationally accepted rules and conventions: use the international system of units (SI). If other quantities are mentioned, give their equivalent in SI. Authors wishing to present a table of nomenclature should do so on the second page of their manuscript.

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).

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

Tables
Tables should supplement, not duplicate, the text. They should have a concise table heading, be self-explanatory, and numbered consecutively in the order of their citation in the text. Information requiring explanatory footnotes should be denoted using superscripted lowercase letters in alphabetical order (a, b, c, etc.). Asterisks (*, **) are used only to indicate the probability level of tests of significance. Abbreviations used in the table must be defined and placed after the footnotes. If you include a block of data or table from another source, whether published or unpublished, you must acknowledge the original source.

Artwork and Media instructions
Submitting your illustrations, figures and other artwork (such as multimedia and supplementary files) in an electronic format helps us produce your work to the best possible standards, ensuring accuracy, clarity and a high level of detail.

A detailed guide on electronic artwork is available on our website: https://www.elsevier.com/author-schemas/artwork-and-media-instructions. You are urged to visit this site; some excerpts from the detailed information are given here.

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) in addition to color reproduction in print. Further information on the preparation of electronic artwork.

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

References
Indicate references by (consecutive) superscript Arabic numerals in the order in which they appear in the text. The numerals are to be used outside periods and commas, inside colons and semicolons. Genes & Diseases is currently using the JOURNAL OF AMERICAN MEDICAL ASSOCIATION (JAMA) reference style. For further detail and examples, please refer to the AMA Manual of Style, A Guide for Authors and Editors, Ninth Edition, ISBN 0-683-40206-4, copies of which may be ordered from Lippincott Williams & Wilkins (http://www.lww.com/index.html).

List: number the references in the list in the order in which they appear in the text.

Examples:

Reference to a journal publication:

Reference to a book:

Reference to a chapter in an edited book:

Submission Checklist
Only complete manuscript submissions will be considered for publication.

Complete submission must include:

- Cover Letter for manuscript submission
- Authorship Statement signed by all authors
- Signed Conflict of Interest disclosure statement
- Signed Copyright Transfer Agreement
- External Reviewer Suggestions.

AND, where applicable
• Letter of approval from review committee for use of human samples in research and human experiments
• Letter of approval from relevant authority for use of animals in experiments
• CONSORT flow chart for randomized controlled trial
• Signed consent to publish (online) from human subjects who can be identified in your manuscript
• Letter(s) of permission from copyright holder(s) to use copyrighted sources in your Manuscript

In the actual article, ensure that the following information is provided:

• Title page
• Article title
• Name(s) and affiliation(s) of author(s)
• Corresponding author details (name, e-mail address, full postal address, telephone and fax numbers)
• Abstract: unstructured for Full Length Article; unstructured for Review Article and Short Communication within 300 words
• At least 5 relevant keywords in alphabetical order
• Main text
• References in the correct format, cited in numerical order, and all references in the List are cited in the Text/Tables/Figures, and vice versa

AND, where applicable
• Acknowledgments
• All tables (including title, description, footnotes).
• All figure captions
• Electronic picture files of all figures; resolution of 300 dpi for halftone images, 500 dpi for combination art (halftone + line art), and 1000 dpi for line art

Submission and Publication Charges

• Submission Fee: A non-refundable manuscript processing fee of US $70 will be waived for the year 2019.
• Page Charges for accepted manuscripts will be waived for the year 2019.
• Color Figure Charges for accepted manuscripts will be waived for the year 2019.

Further considerations

Manuscript has been "spell-checked" and "grammar-checked"

• 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 http://support.elsevier.com.

Data references

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

Reference management software

Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
http://open.mendeley.com/use-citation-style/genes-and-diseases

When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.
Research data
This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

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

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

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

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

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

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

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

Data in Brief
You have the option of converting any or all parts of your supplementary or additional raw data into one or multiple data articles, a new kind of article that houses and describes your data. Data articles ensure that your data is actively reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. You are encouraged to submit your article for Data in Brief as an additional item directly alongside the revised version of your manuscript. If your research article is accepted, your data article will automatically be transferred over to Data in Brief where it will be editorially reviewed and published in the open access data journal, Data in Brief. Please note an open access fee of 500 USD is payable for publication in Data in Brief. Full details can be found on the Data in Brief website. Please use this template to write your Data in Brief.

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

AFTER ACCEPTANCE
**Online proof correction**  
Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.  
If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.  
We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Offprints**  
The corresponding author will be notified and receive a link to the published version of the open access article on ScienceDirect. This link is in the form of an article DOI link which can be shared via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier’s Webshop. Authors requiring printed copies of multiple articles may use Elsevier Webshop’s ‘Create Your Own Book’ service to collate multiple articles within a single cover.

**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.