

# Manuscript Submission

---

## Manuscript Submission

Submission of a manuscript implies: that the work described has not been published before; that it is not under consideration for publication anywhere else; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities – tacitly or explicitly – at the institute where the work has been carried out. The publisher will not be held legally responsible should there be any claims for compensation.

## Permissions

Authors wishing to include figures, tables, or text passages that have already been published elsewhere are required to obtain permission from the copyright owner(s) for both the print and online format and to include evidence that such permission has been granted when submitting their papers. Any material received without such evidence will be assumed to originate from the authors.

## How to submit your manuscript

Please prepare your manuscript following the guidelines here [as explained step by step](#).

# Journal-specific and general guidelines for authors

---

## Editorial policy

The journal follows the Springer Nature [Peer Review Policy, Process and Guidance](#), Springer Nature [Journal Editors' Code of Conduct](#), and COPE's [Ethical Guidelines for Peer-reviewers](#).

Approximately 3% of the manuscripts are rejected without review based on formal criteria as they do not comply with the submission guidelines. Each manuscript is assigned to at least one peer reviewer. The journal follows a single-blind reviewing procedure. The period from submission to the first decision is up to 14 weeks. The approximate rejection rate is 10%. The final decision on the acceptance of a manuscript for publication is made by the Editor-in-Chief.

If Editors, including the Editor-in-Chief, publish in the journal, they do not participate in the decision-making process for manuscripts where they are listed as co-authors.

Special issues published in the journal follow the same procedures as all other issues. If not stated otherwise, special issues are prepared by the members of the Editorial Board without guest editors.

## Journal-specific guidelines

We recommend that you familiarize yourself with the [samples of manuscripts](#) and follow the format that most closely matches the subject of the manuscript. Please note also that the style of references to cited literature may vary from one journal to another. Please choose the style appropriate for the journal to which you are planning to submit a manuscript. Please consult the guidelines for authors or the editor when necessary.

## Copyright transfer agreement

A completed [copyright transfer agreement](#) (in Russian or English) should be submitted together with the manuscript through the Editorial Publishing System or via e-mail, if a journal is not registered in this system.

# Instructions for Authors

---

## Title Page

Please make sure your title page contains the following information.

### **Title**

The title should be concise and informative.

### **Author information**

The name(s) of the author(s).

- The name(s) of the author(s).

- The affiliation(s) of the author(s): (department), institution, city, (state), zip code, country. Footnotes to the list of authors should be indicated by superscript lower-case italicized letters.

- A clear indication and an active e-mail address of all authors.

- If available, the 16-digit ORCID of the author(s); use the following format: Shuaiqi Li(<https://orcid.org/0000-0006-3034-6315>) and Xiaoxu Han (<https://orcid.org/0000-0004-3016-6317>).

Please do not include address information.

### **Abstract**

Please provide an abstract of 150 to 250 words. The abstract should not contain any undefined abbreviations or unspecified references.

For life science journals only (when applicable).

- Trial registration number and date of registration for prospectively registered trials.
- Trial registration number and date of registration, followed by “retrospectively registered”, for retrospectively registered trials.

## Keywords

Please provide 4 to 6 keywords which can be used for indexing purposes.

## Text

### Text Formatting

- When preparing manuscripts, we suggest that you use [manuscript samples](#) that meet publisher's requirements.
- Use only standard fonts: 10-point Times New Roman for text, Symbol for Greek symbols, MathematicalPi2 for handwritten and gothic symbols.
- Use tab stops or other commands for indents, not the space bar.
- Do not end a line by pressing Enter unless this is the end of a paragraph.
- Make full use of your text editor functions: creation of footnotes, enabling and disabling automatic hyphenation, list formatting, indents, etc. Do not use field functions.
- Use the table function, not spreadsheets, to make tables. Avoid creating tables by hand using multiple spaces or tabs and containing no cells.
- Use the International System of Units (SI) for physical quantities and units of measure, and IUPAC nomenclature for chemical compounds.
- Use periods rather than commas in decimals (correct: 0.25, incorrect: 0,25).
- Symbols \*, ', ±, single Greek letters, single italic or boldface characters, single variables or variables with either superscript or subscript letters, units of measure, numbers, and simple mathematical or chemical formulas (e.g.,  $a^2 + b^2 = c^2$ ;  $H_2SO_4$ ) should be typeset as text rather than embedded objects. Do not use Equation, MathType or other tools.
- Dates should be rendered in the following format: January 27, 2014.
- There should not be periods after manuscript title, list of authors, affiliations, keywords, section headings and subheadings, table titles and most of the units of measure.

- Italicize variables and physical quantities, but not abbreviations of words in superscripts and subscripts.

- Save your file in docx format (Word 2007 or higher) or doc format (older Word versions).

## Headings

Please use no more than three levels of displayed headings:

### **FIRST-LEVEL HEADING (centered)**

Second-Level Heading (centered)

**Third-level heading.** (Beginning of a paragraph)

## Formulas

Mathematical formulas created using MathType should be in one frame. Do not compose a single formula of several MathType objects or a MathType object and text, table, or embedded frame.

For MathType formulas, standard font settings should be used. Do not change these settings for any element of a formula.

Please put a formula that do not fit ordinary lines to a separate line or use format that is most suitable; e.g.,  $a/b$  and  $a \times b^{-1}$  is better than a common fraction with a numerator displayed above the line and a denominator displayed below the line.

## Contractions and Abbreviations

Avoid word contractions altogether and word abbreviations whenever possible. They should be defined at first mention and used consistently thereafter.

## Units of Measure

- Use the International System of Units (SI) for physical quantities and units of measurement.

- Separate units of measure from numbers by a space. Exceptions are: 90°, 20°C, 50%, 10‰.

- Use units of measure consistently throughout the manuscript.

- In ranges and series, retain only the final unit of measure (10–12 mg; 5, 10, and 20 kV; 25–30%; 30, 60, and 90°C). The degree when it indicates angles sign is an exception.

- Units of measure for quantities under the log sign should be given in square brackets:  $\ln t$  [min].

## Footnotes

- Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.
- Number footnotes to the text consecutively; those to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data).
- Always use footnotes instead of endnotes.

## Statements and Declarations

Include the following standard sections for Statements and Declarations. Please follow the [link](#) for details.

- ACKNOWLEDGMENTS. Any information about any assistance received when carrying out the work and preparing the manuscript.
- FUNDING. Information on grants and other sources of financial support.
- COMPLIANCE WITH ETHICAL STANDARDS.
- CONFLICT OF INTEREST. Disclose possible conflicts of interest (competing interests) for each author.
- OPEN ACCESS. This section is included if the article is published in open access mode. In that case, the Creative Commons license should be indicated.
- AUTHOR CONTRIBUTIONS. This section is optional and describes the contribution of each author to the study.
- SUPPLEMENTARY INFORMATION. This section notifies of the availability of supplementary materials.
- ADDITIONAL INFORMATION. Everything that should be stated but is not suitable for other sections.

## Reference

### Citation

Reference citations in the text should be identified by numbers in square brackets. Some examples:

- Negotiation research spans many disciplines [3].

- This result was later contradicted by Becker and Seligman [5].
- This effect has been widely studied [1–3, 7].

## Reference list

The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text.

All references are numbered in order of their appearance in the manuscript.

Every item in the list of references should contain a reference to one source.

The entries in the list should be numbered consecutively.

If available, please always include DOIs as full DOI links in your reference list (e.g. “<https://doi.org/abc>”).

- Journal article

F. X. Gamelin, G. Baquet, S. Berthoin, D. Thevenet, C. Nourry, S. Nottin, and L. Bosquet, “Effect of high intensity intermittent training on heart rate variability in prepubescent children,” *Eur. J. Appl. Physiol.* **105**, 731–738 (2009). <https://doi.org/10.1007/s00421-008-0955-8>

Ideally, the names of all authors should be provided, but the usage of “et al.” in long author lists will also be accepted:

J. Smith, M. Jones, Jr., L. Houghton, et al., “Future of health insurance,” *N. Engl. J. Med.*, **965**, 325–329 (1999).

- Book

J. South and B. Blass, *The Future of Modern Genomics* (Blackwell, London, 2001).

- Book chapter

B. Brown and M. Aaron, “The politics of nature,” in *The Rise of Modern Genomics*, Ed. by J. Smith, 3rd ed. (Wiley, New York, 2001), pp. 230–257.

- Online document

J. Cartwright, Big stars have weather too. IOP Publishing PhysicsWeb. <http://physicsweb.org/articles/news/11/6/16/1>. Accessed June 26, 2007.

- Dissertation

J. W. Trent, Experimental acute renal failure, Ph. D. Thesis (University of Southern California, Los Angeles, 1975).

Always use the standard abbreviation of a journal's name according to the ISSN List of Title Word Abbreviations, see [ISSN.org LTWA](#) or [CASSI](#). If you are unsure, please use the full journal title.

## Tables

- All tables are to be numbered using Arabic numerals.
- Tables should always be cited in text in consecutive numerical order.
- For each table, please supply a table caption (title) explaining the components of the table.
- Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.
- Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body.
- Use the table function, not spreadsheets, to make tables. Avoid creating tables by hand using multiple spaces or tabs and containing no cells.
- For table formats, please see [sample manuscripts](#).

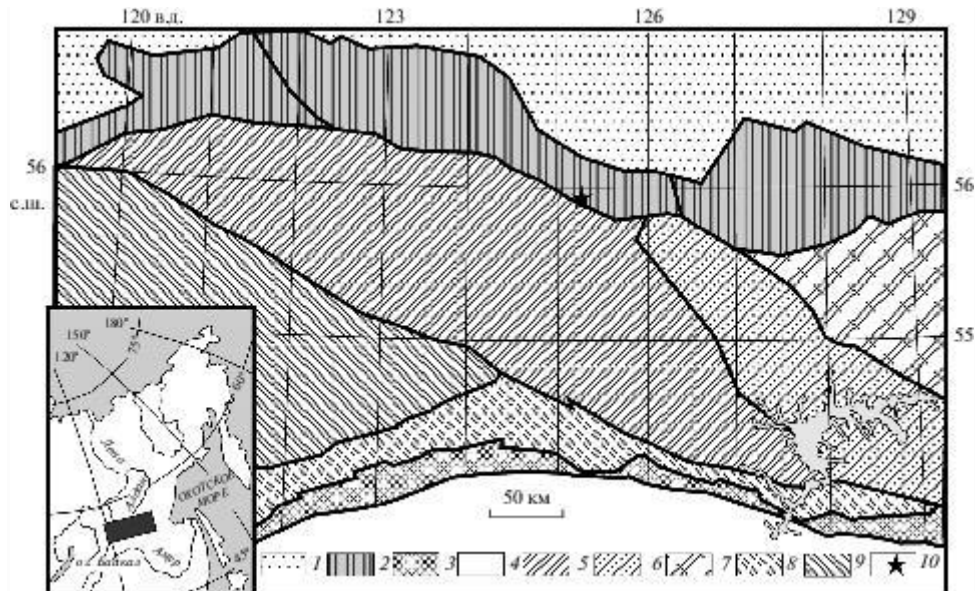
## Artwork and Illustrations Guidelines

### General Requirements

- Supply all figures electronically.
- Indicate what graphics program was used to create the artwork.
- All illustrations should be placed at the end of the text body together with their figure captions. If a figure consists of several parts, they should be arranged one after another and have a common caption. In a file, illustrations should not be placed in table cells or grouped in a similar way. The original files of illustrations should be submitted along with the manuscript.
- Name your figure files with "Fig" and the figure number, e.g., Fig1.eps. Each file should contain one figure. If an illustration consists of several parts, they should be grouped in the same file with the correct arrangement of parts.
- Vector illustrations should be presented in the format of the graphics editor used to prepare these illustrations. EPS format is also acceptable.
- All other illustrations are acceptable in any standard graphics formats, though TIFF is preferable.
- If the editorial board is unable to accept and transfer quality illustration files, you can submit them directly to the publisher at [mailing@pleiadesonline.com](mailto:mailing@pleiadesonline.com) by e-mail either as an attachment or as a link to a file exchange site. Indicate the journal title, issue number, the first author, and the reason why these files are being submitted separately. Illustrations cannot be used without this information.
- Illustrations should have sizes that match either one-column or two-column layout: 8–8.5 and 17–17.5 cm, respectively;

- Photographs should be submitted in two variants: with and without text and inscriptions. In other illustrations, inscriptions should not touch any parts of the illustrations;
- For inscriptions, please use standard TrueType fonts;
- Do not add shading or grids to the background of graphs.

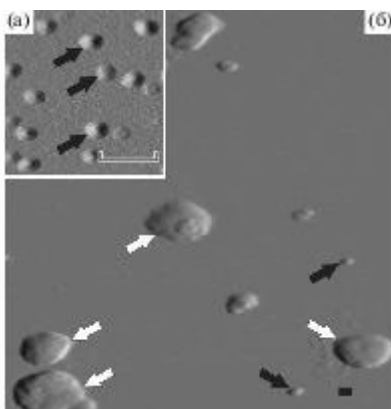
## Line Art



[Line drawings example file \(Download eps, 5,3 MB\)](#)

- Graphs and diagrams should be prepared in vector graphics editors;
- Vector illustrations should have a resolution of at least 600 dpi;
- Line widths should not be less than 0.5 pt;
- Vector illustrations should not have dotted fill patterns like Noise, Black&White Noise, and Top noise;
- All fonts should be embedded in a file.

## Halftone Art

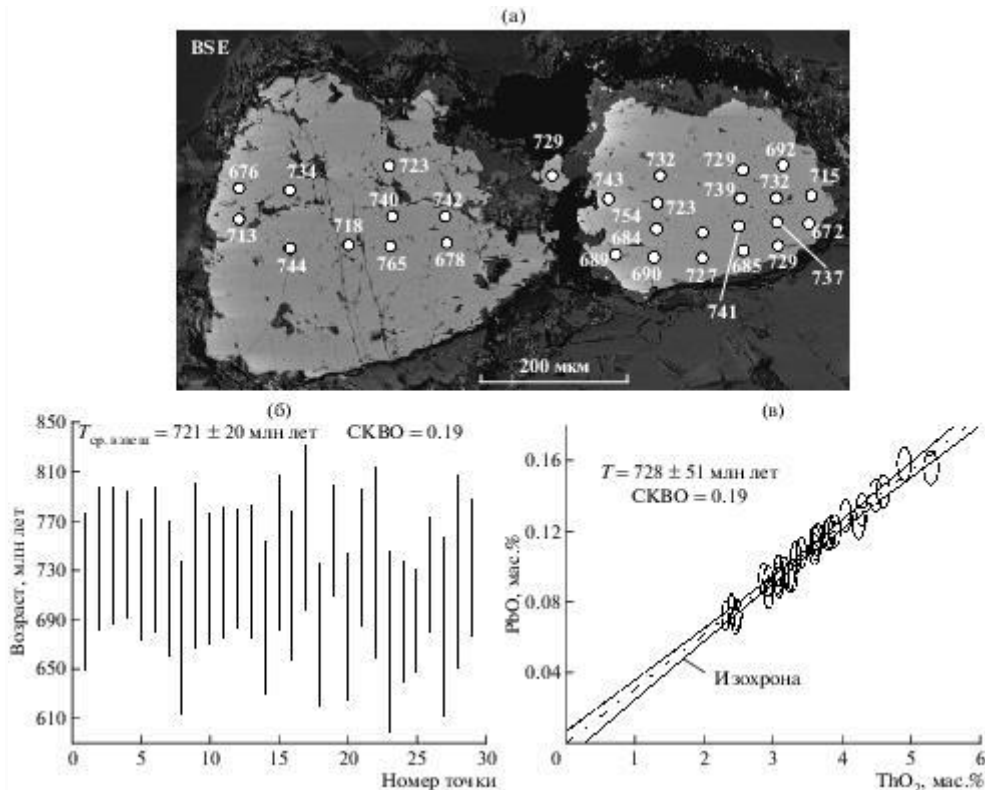


[Halftone Illustrations example file \(Download eps, 1,2 MB\)](#)

- Halftones should have a minimum resolution of 300 dpi.



## Combination Art



[Combined Halftone/Line drawings example file \(Download eps, 3,4 MB\)](#)

- Combination artwork should have a minimum resolution of 600 dpi.

## Color Art

- Graphs and diagrams should be prepared in vector graphics editors;
- Our journals are published in black and white in print and in color online.
- Color illustrations in print can be published for a fee upon agreement with the editorial board.
- Publication of color illustrations in the online version of a journal is free if the technical requirements are met.
- In other cases, the publication fee for color illustrations is determined individually depending on the journal, quality of illustrations, and adherence to technical requirements.
- Additional requirements for color illustrations:
  - 8 bit/channel mode;
  - CMYK color space.
- In other cases, the publication fee for color illustrations is determined individually depending on the journal, quality of illustrations, and adherence to technical requirements.
- When the authors agree that color illustrations will be printed as black and white illustrations without additional editing, the following requirements should be met:
  - The choice of colors for lines and objects should exclude the loss of information when printed in black and white. It is recommended to print color illustrations

on a black and white printer and check if objects with different colors are distinguishable. Avoid references to colors in figure captions;

- Colored lines on graphs and diagrams should be marked with letters, symbols, or numbers, or else the style of lines should be different;
- Colored regions should also be marked with different symbols rather than similar symbols of different colors;
- If different colors of the same brightness are adjacent, it is desirable to identify their border with a thin line;
- When there are many colored regions with similar color tones in the figure, they should be additionally marked with symbols or hatching;
- It is preferable to make all inscriptions either black or white depending on the background.

### Figure Lettering

- To add lettering, it is best to use Helvetica or Arial (sans serif fonts).
- Keep lettering consistently sized throughout your final-sized artwork, usually about 2–3 mm (8–12 pt).
- Variance of type size within an illustration should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.
- Avoid effects such as shading, outline letters, etc.
- Do not include titles or captions within your illustrations.

### Figure Numbering

- All figures are to be numbered using Arabic numerals.
- Figures should always be cited in text in consecutive numerical order.
- Figure parts should be denoted by lowercase letters (a, b, c, etc.).
- If an appendix appears in your article and it contains one or more figures, continue the consecutive numbering of the main text. Do not number the appendix figures, "A1, A2, A3, etc." Figures in online appendices [Supplementary Information (SI)] should, however, be numbered separately.

### Figure Captions

- Each figure should have a concise caption describing accurately what the figure depicts. Include the captions in the text file of the manuscript, not in the figure file.
- Figure captions begin with the term Fig. in bold type, followed by the figure number, also in bold type.
- No punctuation is to be included after the number, nor is any punctuation to be placed at the end of the caption.
- Identify all elements found in the figure in the figure caption; and use boxes, circles, etc., as coordinate points in graphs.
- Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption.

### Permissions

If you include figures that have already been published elsewhere, you must obtain permission from the copyright owner(s) for both the print and online format. Please be aware that some

publishers do not grant electronic rights for free and that the publisher will not be able to refund any costs that may have occurred to receive these permissions. In such cases, material from other sources should be used.

## **Accessibility**

In order to give people of all abilities and disabilities access to the content of your figures, please make sure that

- All figures have descriptive captions (blind users could then use a text-to-speech software or a text-to-Braille hardware)
- Patterns are used instead of or in addition to colors for conveying information (colorblind users would then be able to distinguish the visual elements)
- Any figure lettering has a contrast ratio of at least 4.5:1

## **Supplementary Information (SI)**

Pleiades Publishing and Springer accepts electronic multimedia files (animations, movies, audio, etc.) and other supplementary files to be published online along with an article or a book chapter. This feature can add dimension to the author's article, as certain information cannot be printed or is more convenient in electronic form.

Before submitting research datasets as Supplementary Information, authors should read the journal's Research data policy. We encourage research data to be archived in data repositories wherever possible.

## **Submission**

- Supply all supplementary material in standard file formats.
- Please include in each file the following information: article title, journal name, author names; affiliation and e-mail address of the corresponding author.
- To accommodate user downloads, please keep in mind that larger-sized files may require very long download times and that some users may experience other problems during downloading.
- High resolution (streamable quality) videos can be submitted up to a maximum of 25GB; low resolution videos should not be larger than 5GB.

## **Audio, Video, and Animations**

- Aspect ratio: 16:9 or 4:3
- Maximum file size: 25 GB for high resolution files; 5 GB for low resolution files
- Minimum video duration: 1 sec
- Supported file formats: avi, wmv, mp4, mov, m2p, mp2, mpg, mpeg, flv, mxf, mts, m4v, 3gp.

## Text and Presentations

- Submit your material in PDF format; .doc or .ppt files are not suitable for long-term viability.
- A collection of figures may also be combined in a PDF file.

## Spreadsheets

- Spreadsheets should be submitted as .csv or .xlsx files (MS Excel).

## Specialized Formats

- Specialized format such as .pdb (chemical), .wrl (VRML), .nb (Mathematica notebook), and .tex can also be supplied.

## Collecting Multiple Files

- It is possible to collect multiple files in a .zip or .gz file.

## Numbering

- If supplying any supplementary material, the text must make specific mention of the material as a citation, similar to that of figures and tables.
- Refer to the supplementary files as “Online Resource”, e.g., “... as shown in the animation (Online Resource 3)”, “... additional data are given in Online Resource 4”.
- Name the files consecutively, e.g. “ESM\_3.mpg”, “ESM\_4.pdf”.

## Captions

- For each supplementary material, please supply a concise caption describing the content of the file.

## Processing of supplementary files

- Supplementary Information (SI) will be published as received from the author without any conversion, editing, or reformatting.

## Accessibility

In order to give people of all abilities and disabilities access to the content of your supplementary files, please make sure that

- The manuscript contains a descriptive caption for each supplementary material
- Video files do not contain anything that flashes more than three times per second (so that users prone to seizures caused by such effects are not put at risk)

## Copyright protection

Supplementary materials are a part of the article, and they are subject to all the requirements for the article by the applicable law. Supplementary materials are eligible for copyright protection and the author must sign the respective [copyright transfer agreement](#) that covers the respective supplementary materials.

## Publishing Ethics

---

### Ethical Responsibilities of Authors

This journal is committed to upholding the integrity of the scientific record. As a member of the Committee on Publication Ethics (COPE) the journal will follow the COPE guidelines on how to deal with potential acts of misconduct.

Authors should refrain from misrepresenting research results which could damage the trust in the journal, the professionalism of scientific authorship, and ultimately the entire scientific endeavour. Maintaining integrity of the research and its presentation is helped by following the rules of good scientific practice, which include\*:

- The manuscript should not be submitted to more than one journal for simultaneous consideration.
- The submitted work should be original and should not have been published elsewhere in any form or language (partially or in full), unless the new work concerns an expansion of previous work. (Please provide transparency on the re-use of material to avoid the concerns about text-recycling ('self-plagiarism').
- A single study should not be split up into several parts to increase the quantity of submissions and submitted to various journals or to one journal over time (i.e. 'salami-slicing/publishing').
- Concurrent or secondary publication is sometimes justifiable, provided certain conditions are met. Examples include: translations or a manuscript that is intended for a different group of readers.
- Results should be presented clearly, honestly, and without fabrication, falsification or inappropriate data manipulation (including image based manipulation). Authors should adhere to discipline-specific rules for acquiring, selecting and processing data.
- No data, text, or theories by others are presented as if they were the author's own ('plagiarism'). Proper acknowledgements to other works must be given (this includes material that is closely copied (near verbatim), summarized and/or paraphrased), quotation marks (to indicate words taken from another source) are used for verbatim copying of material, and permissions secured for material that is copyrighted.

**Important note: the journal may use software to screen for plagiarism.**

- Authors should make sure they have permissions for the use of software, questionnaires/(web) surveys and scales in their studies (if appropriate).

- Research articles and non-research articles (e.g. Opinion, Review, and Commentary articles) must cite appropriate and relevant literature in support of the claims made. Excessive and inappropriate self-citation or coordinated efforts among several authors to collectively self-cite is strongly discouraged.
- Authors should avoid untrue statements about an entity (who can be an individual person or a company) or descriptions of their behavior or actions that could potentially be seen as personal attacks or allegations about that person.
- Research that may be misapplied to pose a threat to public health or national security should be clearly identified in the manuscript (e.g. dual use of research). Examples include creation of harmful consequences of biological agents or toxins, disruption of immunity of vaccines, unusual hazards in the use of chemicals, weaponization of research/technology (amongst others).
- Authors are strongly advised to ensure the author group, the Corresponding Author, and the order of authors are all correct at submission. Adding and/or deleting authors during the revision stages is generally not permitted, but in some cases may be warranted. Reasons for changes in authorship should be explained in detail. Please note that changes to authorship cannot be made after acceptance of a manuscript.

\*All of the above are guidelines and authors need to make sure to respect third parties rights such as copyright and/or moral rights.

Upon request authors should be prepared to send relevant documentation or data in order to verify the validity of the results presented. This could be in the form of raw data, samples, records, etc. Sensitive information in the form of confidential or proprietary data is excluded.

If there is suspicion of misbehavior or alleged fraud the Journal and/or Publisher will carry out an investigation following COPE guidelines. If, after investigation, there are valid concerns, the author(s) concerned will be contacted under their given e-mail address and given an opportunity to address the issue. Depending on the situation, this may result in the Journal's and/or Publisher's implementation of the following measures, including, but not limited to:

- If the manuscript is still under consideration, it may be rejected and returned to the author.
- If the article has already been published online, depending on the nature and severity of the infraction:
  - an erratum/correction may be placed with the article
  - an expression of concern may be placed with the article
  - or in severe cases retraction of the article may occur.

The reason will be given in the published erratum/correction, expression of concern or retraction note. Please note that retraction means that the article is **maintained on the platform**, watermarked "retracted" and the explanation for the retraction is provided in a note linked to the watermarked article.

- The author's institution may be informed
- A notice of suspected transgression of ethical standards in the peer review system may be included as part of the author's and article's bibliographic record.

## Fundamental errors

Authors have an obligation to correct mistakes once they discover a significant error or inaccuracy in their published article. The author(s) is/are requested to contact the journal and explain in what sense the error is impacting the article. A decision on how to correct the literature will depend on the nature of the error. This may be a correction or retraction. The retraction note should provide transparency which parts of the article are impacted by the error.

## Suggesting / excluding reviewers

Authors are welcome to suggest suitable reviewers and/or request the exclusion of certain individuals when they submit their manuscripts. When suggesting reviewers, authors should make sure they are totally independent and not connected to the work in any way. It is strongly recommended to suggest a mix of reviewers from different countries and different institutions. When suggesting reviewers, the Corresponding Author must provide an institutional email address for each suggested reviewer, or, if this is not possible to include other means of verifying the identity such as a link to a personal homepage, a link to the publication record or a researcher or author ID in the submission letter. Please note that the Journal may not use the suggestions, but suggestions are appreciated and may help facilitate the peer review process.

## Authorship principles

These guidelines describe authorship principles and good authorship practices to which prospective authors should adhere to.

## Authorship clarified

The Journal and Publisher assume all authors agreed with the content and that all gave explicit consent to submit and that they obtained consent from the responsible authorities at the institute/organization where the work has been carried out, **before** the work is submitted.

The Publisher does not prescribe the kinds of contributions that warrant authorship. It is recommended that authors adhere to the guidelines for authorship that are applicable in their specific research field. In absence of specific guidelines it is recommended to adhere to the following guidelines\*:

All authors whose names appear on the submission

- 1) made substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data; or the creation of new software used in the work;
- 2) drafted the work or revised it critically for important intellectual content;
- 3) approved the version to be published; and
- 4) agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

\* Based on/adapted from:

[ICMJE, Defining the Role of Authors and Contributors,](#)

[Transparency in authors' contributions and responsibilities to promote integrity in scientific publication, McNutt et al, PNAS February 27, 2018](#)

## **Disclosures and declarations**

All authors are requested to include information regarding sources of funding, financial or non-financial interests, study-specific approval by the appropriate ethics committee for research involving humans and/or animals, informed consent if the research involved human participants, and a statement on welfare of animals if the research involved animals (as appropriate).

The decision whether such information should be included is not only dependent on the scope of the journal, but also the scope of the article. Work submitted for publication may have implications for public health or general welfare and in those cases it is the responsibility of all authors to include the appropriate disclosures and declarations.

## **Data transparency**

All authors are requested to make sure that all data and materials as well as software application or custom code support their published claims and comply with field standards. Please note that journals may have individual policies on (sharing) research data in concordance with disciplinary norms and expectations.

## **Role of the Corresponding Author**

**One author** is assigned as Corresponding Author and acts on behalf of all co-authors and ensures that questions related to the accuracy or integrity of any part of the work are appropriately addressed.

The Corresponding Author is responsible for the following requirements:

- ensuring that all listed authors have approved the manuscript before submission, including the names and order of authors;
- managing all communication between the Journal and all co-authors, before and after publication;\*
- providing transparency on re-use of material and mention any unpublished material (for example manuscripts in press) included in the manuscript in a cover letter to the Editor;
- making sure disclosures, declarations and transparency on data statements from all authors are included in the manuscript as appropriate (see above).

\* The requirement of managing all communication between the journal and all co-authors during submission and proofing may be delegated to a Contact or Submitting Author. In this case please make sure the Corresponding Author is clearly indicated in the manuscript.



## Author contributions

In absence of specific instructions and in research fields where it is possible to describe discrete efforts, the Publisher recommends authors to include contribution statements in the work that specifies the contribution of every author in order to promote transparency. These contributions should be listed at the separate title page.

**Examples of such statement(s) are shown below:**

- Free text:

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by [full name], [full name] and [full name]. The first draft of the manuscript was written by [full name] and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

[Example: CRediT taxonomy:](#)

- Conceptualization: [full name], ...; Methodology: [full name], ...; Formal analysis and investigation: [full name], ...; Writing - original draft preparation: [full name, ...]; Writing - review and editing: [full name], ...; Funding acquisition: [full name], ...; Resources: [full name], ...; Supervision: [full name],....

For **review articles** where discrete statements are less applicable a statement should be included who had the idea for the article, who performed the literature search and data analysis, and who drafted and/or critically revised the work.

For articles that are based primarily on the **student's dissertation or thesis**, it is recommended that the student is usually listed as principal author:

[A Graduate Student's Guide to Determining Authorship Credit and Authorship Order, APA Science Student Council 2006](#)

## Affiliation

The primary affiliation for each author should be the institution where the majority of their work was done. If an author has subsequently moved, the current address may additionally be stated. Addresses will not be updated or changed after publication of the article.

## Changes to authorship

Authors are strongly advised to ensure the correct author group, the Corresponding Author, and the order of authors at submission. Changes of authorship by adding or deleting authors, and/or changes in Corresponding Author, and/or changes in the sequence of authors are **not** accepted **after acceptance** of a manuscript.

**Please note that author names will be published exactly as they appear on the accepted submission!**

Please make sure that the names of all authors are present and correctly spelled, and that addresses and affiliations are current.

Adding and/or deleting authors at revision stage are generally not permitted, but in some cases it may be warranted. Reasons for these changes in authorship should be explained. Approval of the change during revision is at the discretion of the Editor-in-Chief. Please note that journals may have individual policies on adding and/or deleting authors during revision stage.

### **Author identification**

Authors are recommended to use their ORCID ID when submitting an article for consideration or acquire an ORCID ID via the submission process.

### **Deceased or incapacitated authors**

For cases in which a co-author dies or is incapacitated during the writing, submission, or peer-review process, and the co-authors feel it is appropriate to include the author, co-authors should obtain approval from a (legal) representative which could be a direct relative.

### **Authorship issues or disputes**

In the case of an authorship dispute during peer review or after acceptance and publication, the Journal will not be in a position to investigate or adjudicate. Authors will be asked to resolve the dispute themselves. If they are unable the Journal reserves the right to withdraw a manuscript from the editorial process or in case of a published paper raise the issue with the authors' institution(s) and abide by its guidelines.

### **Confidentiality**

Authors should treat all communication with the Journal as confidential which includes correspondence with direct representatives from the Journal such as Editors-in-Chief and/or Handling Editors and reviewers' reports unless explicit consent has been received to share information.

### **Compliance with Ethical Standards**

To ensure objectivity and transparency in research and to ensure that accepted principles of ethical and professional conduct have been followed, authors should include information regarding sources of funding, potential conflicts of interest (financial or non-financial), informed consent if the research involved human participants, and a statement on welfare of animals if the research involved animals.

Authors should include the following statements (if applicable) in a separate section entitled "Compliance with Ethical Standards" when submitting a paper:

- Disclosure of potential conflicts of interest
- Research involving Human Participants and/or Animals
- Informed consent

Please note that standards could vary slightly per journal dependent on their peer review policies (i.e. single or double blind peer review) as well as per journal subject discipline. Before submitting your article check the instructions following this section carefully.

The corresponding author should be prepared to collect documentation of compliance with ethical standards and send if requested during peer review or after publication.

The Editors reserve the right to reject manuscripts that do not comply with the above-mentioned guidelines. The author will be held responsible for false statements or failure to fulfill the above-mentioned guidelines.

## Competing Interests

**Authors:** are requested to disclose interests that are directly or indirectly related to the work submitted for publication. Interests within the last 3 years of beginning the work (conducting the research and preparing the work for submission) should be reported. Interests outside the 3-year time frame must be disclosed if they could reasonably be perceived as influencing the submitted work. Disclosure of interests provides a complete and transparent process and helps readers form their own judgments of potential bias. This is not meant to imply that a financial relationship with an organization that sponsored the research or compensation received for consultancy work is inappropriate.

**Editorial Board Members and Editors:** are required to declare any competing interests and may be excluded from the peer review process if a competing interest exists. In addition, they should exclude themselves from handling manuscripts in cases where there is a competing interest. This may include – but is not limited to – having previously published with one or more of the authors, and sharing the same institution as one or more of the authors. Where an Editor or Editorial Board Member is on the author list they must declare this in the competing interests section on the submitted manuscript. If they are an author or have any other competing interest regarding a specific manuscript, another Editor or member of the Editorial Board will be assigned to assume responsibility for overseeing peer review. These submissions are subject to the exact same review process as any other manuscript. Editorial Board Members are welcome to submit papers to the journal. These submissions are not given any priority over other manuscripts, and Editorial Board Member status has no bearing on editorial consideration.

Interests that should be considered and disclosed but are not limited to the following:

**Funding:** Research grants from funding agencies (please give the research funder and the grant number) and/or research support (including salaries, equipment, supplies, reimbursement for attending symposia, and other expenses) by organizations that may gain or lose financially through publication of this manuscript.

**Employment:** Recent (while engaged in the research project), present or anticipated employment by any organization that may gain or lose financially through publication of this manuscript. This includes multiple affiliations (if applicable).

**Financial interests:** Stocks or shares in companies (including holdings of spouse and/or children) that may gain or lose financially through publication of this manuscript; consultation fees or other forms of remuneration from organizations that may gain or lose financially; patents or patent applications whose value may be affected by publication of this manuscript.

It is difficult to specify a threshold at which a financial interest becomes significant, any such figure is necessarily arbitrary, so one possible practical guideline is the following: "Any undeclared financial interest that could embarrass the author were it to become publicly known after the work was published."

**Non-financial interests:** In addition, authors are requested to disclose interests that go beyond financial interests that could impart bias on the work submitted for publication such as professional interests, personal relationships or personal beliefs (amongst others). Examples include, but are not limited to: position on editorial board, advisory board or board of directors or other type of management relationships; writing and/or consulting for educational purposes; expert witness; mentoring relations; and so forth.

Primary research articles require a disclosure statement. Review articles present an expert synthesis of evidence and may be treated as an authoritative work on a subject. Review articles therefore require a disclosure statement. Other article types such as editorials, book reviews, comments (amongst others) may, dependent on their content, require a disclosure statement. If you are unclear whether your article type requires a disclosure statement, please contact the Editor-in-Chief.

The above should be summarized in a statement and placed before the reference list under appropriate headings 'Funding' and 'Conflict of interest'. Please see the various examples of wording below and revise/customize the sample statements according to your own needs.

When all authors have the same (or no) conflicts and/or funding it is sufficient to use one blanket statement.

**Examples of statements to be used when funding has been received:**

Partial financial support was received from [...]

The research leading to these results received funding from [...] under Grant Agreement No[...].

This study was funded by [...]

This work was supported by [...] (Grant numbers [...] and [...])

**Examples of statements to be used when there is no funding:**

The authors did not receive support from any organization for the submitted work.

No funding was received to assist with the preparation of this manuscript.

No funding was received for conducting this study.

No funds, grants, or other support was received.

**Examples of statements to be used when there are interests to declare:**

**Financial interests:** Author A has received research support from Company A. Author B has received a speaker honorarium from Company W and owns stock in Company X. Author C is consultant to company Y.

**Nonfinancial interests:** Author C is an unpaid member of committee Z.

**Financial interests:** The authors declare they have no financial interests.

**Nonfinancial interests:** Author A is on the board of directors of Y and receives no compensation as member of the board of directors.

**Financial interests:** Author A received a speaking fee from Y for Z. Author B receives a salary from association X. X where s/he is the Executive Director.

**Nonfinancial interests:** none.

**Financial interests:** Author A and B declare they have no financial interests. Author C has received speaker and consultant honoraria from Company M and Company N. Dr. C has received speaker honorarium and research funding from Company M and Company O. Author D has received travel support from Company O.

**Nonfinancial interests:** Author D has served on advisory boards for Company M, Company N and Company O.

**Examples of statements to be used when authors have nothing to declare:**

The authors have no relevant financial or nonfinancial interests to disclose.

The authors have no conflicts of interest to declare that are relevant to the content of this article.

All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or nonfinancial interest in the subject matter or materials discussed in this manuscript.

The authors have no financial or proprietary interests in any material discussed in this article.

Authors are responsible for correctness of the statements provided in the manuscript. See also Authorship Principles. The Editor-in-Chief reserves the right to reject submissions that do not meet the guidelines described in this section.

## Research involving human participants, their data or biological material

### **Ethics approval**

When reporting a study that involved human participants, their data or biological material, authors should include a statement that confirms that the study was approved (or granted exemption) by the appropriate institutional and/or national research ethics committee (including the name of the ethics committee) and certify that the study was performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. If doubt exists whether the research was conducted in accordance with the 1964 Helsinki Declaration or comparable standards, the authors must explain the reasons for their approach, and demonstrate that an independent ethics committee or institutional review board explicitly approved the doubtful aspects of the study. If a study was granted exemption from requiring ethics approval, this should also be detailed in the manuscript (including the reasons for the exemption).

### **Retrospective ethics approval**

If a study has not been granted ethics committee approval prior to commencing, retrospective ethics approval usually cannot be obtained and it may not be possible to consider the manuscript for peer review. The decision on whether to proceed to peer review in such cases is at the Editor's discretion.

### **Ethics approval for retrospective studies**

Although retrospective studies are conducted on already available data or biological material (for which formal consent may not be needed or is difficult to obtain) ethics approval may be required dependent on the law and the national ethical guidelines of a country. Authors should check with their institution to make sure they are complying with the specific requirements of their country.

### **Ethics approval for case studies**

Case reports require ethics approval. Most institutions will have specific policies on this subject. Authors should check with their institution to make sure they are complying with the specific requirements of their institution and seek ethics approval where needed. Authors should be aware to secure informed consent from the individual (or parent or guardian if the participant is a minor or incapable) See also section on Informed Consent.

### **Cell lines**

If human cells are used, authors must declare in the manuscript: what cell lines were used by describing the source of the cell line, including when and from where it was obtained, whether the cell line has recently been authenticated and by what method. If cells were bought from a life science company the following need to be given in the manuscript: name of company (that provided the cells), cell type, number of cell line, and batch of cells.

It is recommended that authors check the [NCBI database](#) for misidentification and contamination of human cell lines. This step will alert authors to possible problems with the cell line and may save considerable time and effort.

Further information is available from the [International Cell Line Authentication Committee](#) (ICLAC).

Authors should include a statement that confirms that an institutional or independent ethics committee (including the name of the ethics committee) approved the study and that informed consent was obtained from the donor or next of kin.

## **Research Resource Identifiers (RRID)**

Research Resource Identifiers (RRID) are persistent unique identifiers (effectively similar to a DOI) for research resources. This journal encourages authors to adopt RRIDs when reporting key biological resources (antibodies, cell lines, model organisms and tools) in their manuscripts.

### **Examples:**

**Organism:** Filip1tm1a(KOMP)Wtsi RRID:MMRRC\_055641-UCD

**Cell Line:**RST307 cell line RRID:CVCL\_C321

**Antibody:**Luciferase antibody DSHB Cat# LUC-3, RRID:AB\_2722109

**Plasmid:**mRuby3 plasmid RRID:Addgene\_104005

**Software:**ImageJ Version 1.2.4 RRID:SCR\_003070

RRIDs are provided by the [Resource Identification Portal](#). Many commonly used research resources already have designated RRIDs. The portal also provides authors links so that they can quickly [register a new resource](#) and obtain an RRID.

## **Clinical Trial Registration**

The World Health Organization (WHO) definition of a clinical trial is “any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes“. The WHO defines health interventions as “A health intervention is an act performed for, with or on behalf of a person or population whose purpose is to assess, improve, maintain, promote or modify health, functioning or health conditions” and a health-related outcome is generally defined as a change in the health of a person or population as a result of an intervention.

To ensure the integrity of the reporting of patient-centered trials, authors must register prospective clinical trials (phase II to IV trials) in suitable publicly available repositories. For example [www.clinicaltrials.gov](http://www.clinicaltrials.gov) or any of the primary registries that participate in [WHO](#)

[International Clinical Trials Registry Platform](#). The trial registration number (TRN) and date of registration should be included as the last line of the manuscript abstract.

For clinical trials that have not been registered prospectively, authors are encouraged to register retrospectively to ensure the complete publication of all results. The trial registration number (TRN), date of registration and the words 'retrospectively registered' should be included as the last line of the manuscript abstract.

## **Standards of reporting**

Pleiades Publishing and Springer Nature advocate complete and transparent reporting of biomedical and biological research and research with biological applications. Authors are recommended to adhere to the minimum reporting guidelines hosted by the [EQUATOR Network](#) when preparing their manuscript.

Exact requirements may vary depending on the journal; please consult the journal editor when necessary.

Checklists are available for a number of study designs, including:

Randomised trials ([CONSORT](#)) and Study protocols ([SPIRIT](#))

Observational studies ([STROBE](#))

Systematic reviews and meta-analyses ([PRISMA](#)) and protocols ([Prisma-P](#))

Diagnostic/prognostic studies ([STARD](#)) and ([TRIPOD](#))

Case reports ([CARE](#))

Clinical practice guidelines ([AGREE](#)) and ([RIGHT](#))

Qualitative research ([SRQR](#)) and ([COREQ](#))

Animal pre-clinical studies ([ARRIVE](#))

Quality improvement studies ([SQUIRE](#))

Economic evaluations ([CHEERS](#))

## **Summary of requirements**

The above should be summarized in a statement and placed under a heading of 'Compliance with Ethical Standards'.

Examples of statements to be used when ethics approval has been obtained:



- All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by the Bioethics Committee of the Medical University of A (No. ...).
- This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of University B (Date.../No. ...).
- Approval was obtained from the ethics committee of University C. The procedures used in this study adhere to the tenets of the Declaration of Helsinki.
- The questionnaire and methodology for this study was approved by the Human Research Ethics committee of the University of D (Ethics approval number: ...).

Examples of statements to be used for a retrospective study:

- Ethical approval was waived by the local Ethics Committee of University A in view of the retrospective nature of the study and all the procedures being performed were part of the routine care.
- This research study was conducted retrospectively from data obtained for clinical purposes. We consulted extensively with the IRB of XYZ who determined that our study did not need ethical approval. An IRB official waiver of ethical approval was granted from the IRB of XYZ.
- This retrospective chart review study involving human participants was in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The Human Investigation Committee (IRB) of University B approved this study.

Examples of statements to be used when no ethical approval is required/exemption granted:

- This is an observational study. The XYZ Research Ethics Committee has confirmed that no ethical approval is required.
- The data reproduced from Article X utilized human tissue that was procured via our Biobank AB, which provides de-identified samples. This study was reviewed and deemed exempt by our XYZ Institutional Review Board. The BioBank protocols are in accordance with the ethical standards of our institution and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Authors are responsible for correctness of the statements provided in the manuscript. See also Authorship Principles. The Editor-in-Chief reserves the right to reject submissions that do not meet the guidelines described in this section.

## Informed consent

All individuals have individual rights that are not to be infringed. Individual participants in studies have, for example, the right to decide what happens to the (identifiable) personal data gathered, to what they have said during a study or an interview, as well as to any photograph that was taken. This is especially true concerning images of vulnerable people (e.g., minors,

patients, refugees, etc.) or the use of images in sensitive contexts. In many instances authors will need to secure written consent before including images.

Identifying details (names, dates of birth, identity numbers, biometrical characteristics (such as facial features, fingerprint, writing style, voice pattern, DNA or other distinguishing characteristic) and other information) of the participants that were studied should not be published in written descriptions, photographs, and genetic profiles unless the information is essential for scholarly purposes and the participant (or parent/guardian if the participant is a minor or incapable or legal representative) gave written informed consent for publication. Complete anonymity is difficult to achieve in some cases. Detailed descriptions of individual participants, whether of their whole bodies or of body sections, may lead to disclosure of their identity. Under certain circumstances consent is not required as long as information is anonymized and the submission does not include images that may identify the person.

Informed consent for publication should be obtained if there is any doubt. For example, masking the eye region in photographs of participants is inadequate protection of anonymity. If identifying characteristics are altered to protect anonymity, such as in genetic profiles, authors should provide assurance that alterations do not distort meaning.

#### **Exceptions where it is not necessary to obtain consent:**

- Images such as x rays, laparoscopic images, ultrasound images, brain scans, pathology slides unless there is a concern about identifying information in which case, authors should ensure that consent is obtained.
- Reuse of images: If images are being reused from prior publications, the Publisher will assume that the prior publication obtained the relevant information regarding consent. Authors should provide the appropriate attribution for republished images.

#### **Consent and already available data and/or biologic material:**

Regardless of whether material is collected from living or dead patients, they (family or guardian if the deceased has not made a pre-mortem decision) must have given prior written consent. The aspect of confidentiality as well as any wishes from the deceased should be respected.

#### **Data protection, confidentiality, and privacy:**

When biological material is donated for or data is generated as part of a research project authors should ensure, as part of the informed consent procedure, that the participants are made aware what kind of (personal) data will be processed, how it will be used and for what purpose. In case of data acquired via a biobank/biorepository, it is possible they apply a broad consent which allows research participants to consent to a broad range of uses of their data and samples which is regarded by research ethics committees as specific enough to be considered "informed". However, authors should always check the specific biobank/biorepository policies or any other type of data provider policies (in case of non-bio research) to be sure that this is the case.

### **Consent to Participate:**

For all research involving human subjects, freely given, informed consent to participate in the study must be obtained from participants (or their parent or legal guardian in the case of children under 16) and a statement to this effect should appear in the manuscript. In the case of articles describing human transplantation studies, authors must include a statement declaring that no organs/tissues were obtained from prisoners and must also name the institution(s)/clinic(s)/department(s) via which organs/tissues were obtained. For manuscripts reporting studies involving vulnerable groups where there is the potential for coercion or where consent may not have been fully informed, extra care will be taken by the editor.

### **Consent to Publish:**

Individuals may consent to participate in a study, but object to having their data published in a journal article. Authors should make sure to also seek consent from individuals to publish their data prior to submitting their paper to a journal. This is in particular applicable to case studies. A consent to publish form can be found [here](#). ([Download docx, 36 kB](#))

### **Summary of requirements:**

The above should be summarized in a statement and placed in a 'Declarations' section before the reference list under a heading of 'Consent to participate' and/or 'Consent to publish'. Other declarations include Funding, Competing interests, Ethics approval, Consent, Data and/or Code availability and Authors' contribution statements.

Please see the various examples of wording below and revise/customize the sample statements according to your own needs.

### **Sample statements for "Consent to participate":**

Informed consent was obtained from all individual participants included in the study.

Informed consent was obtained from legal guardians.

Written informed consent was obtained from the parents.

Verbal informed consent was obtained prior to the interview.

### **Sample statements for "Consent to publish":**

The authors affirm that human research participants provided informed consent for publication of the images in Figure(s) 1a, 1b and 1c.

The participant has consented to the submission of the case report to the journal.

Patients signed informed consent regarding publishing their data and photographs.

Sample statements if identifying information about participants is available in the article:

Additional informed consent was obtained from all individual participants for whom identifying information is included in this article.

Authors are responsible for correctness of the statements provided in the manuscript. See also Authorship Principles. The Editor-in-Chief reserves the right to reject submissions that do not meet the guidelines described in this section.

Images will be removed from publication if authors have not obtained informed consent or the paper may be removed and replaced with a notice explaining the reason for removal.

## Open access publishing

---

Authors will have the option to choose how their article is published.

Traditional publishing model: published articles are made available to institutions and individuals who subscribe to *Russian Metallurgy (Metally)* or who pay to read specific articles. There is no charge to publish.

Open Access (OA) model: published articles are freely and permanently available online. Anyone, anywhere can read and build upon this research.