

# BioTechniques Author Guidelines

This document outlines how to prepare articles for submission. We recommend you read these guidelines in full before submitting your article or making an article proposal.

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## Journal aims & scope

*BioTechniques* is a peer-reviewed, open-access journal dedicated to publishing original laboratory methods, related technical and software tools, and methods-oriented review articles that are of broad interest to professional life scientists, as well as to scientists from other disciplines (e.g., chemistry, physics, computer science, plant and agricultural science and climate science) interested in life science applications for their technologies.

Since 1983, *BioTechniques* has been a leading peer-reviewed journal for methods-related research. The journal considers:

- Reports describing innovative new methods, platforms and software, substantive modifications to existing methods, or innovative applications of existing methods, techniques & tools to new models or scientific questions
- Descriptions of technical tools that facilitate the design or performance of experiments or data analysis, such as software and simple laboratory devices
- Surveys of technical approaches related to broad fields of research
- Reviews discussing advancements in techniques and methods related to broad fields of research
- Letters to the Editor and Expert Opinions highlighting interesting observations or cautionary tales concerning experimental design, methodology or analysis

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## Audience

The audience for *BioTechniques* consists of research scientists working at the laboratory bench. The journal is as a valuable reference for all those whose research interests involve laboratory work in the life sciences.

## At-a-glance article formatting checklist

Sections	Word limit (excluding abstract and references)	Abstract	Method Summary	Graphical Abstract	Author Contributions	Key words	Article subheadings	Future Perspective & Executive Summary	Reference limit	Figures and tables permitted (Combined limit of <b>eight in total</b> – additional will be made supplementary)	Supporting cover letter	Protocol*
Article												
Review/Practical Guide	7000			Optional					75			N/A
Benchmark	1500			Optional					20			Encouraged
Report	3000			Optional					50			Encouraged
Letter to the Editor	1500								20			Encouraged
Expert opinion	1500								20			N/A

\*Authors are encouraged to create their protocols on protocols.io, and cite them in the submission. This supports reproducibility and access to research.

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## Search engine optimization

### Why are search engines important?

One of the most common ways for readers to find an article is using a search engine, such as Google, Google Scholar or Bing. Therefore it is important to write your article with a few points in mind, to help interested readers find your work.

### How can I help my article be discovered?

Include key phrases that represent your research in the abstract. Think about what you might search for when looking for articles yourself, and include this.

Make sure the most important/relevant key phrase is also in the article title whilst ensuring the content has a natural flow.

Choose appropriate keywords that reflect the content of your work – where different words are commonly used to describe the same thing (i.e., a full term and an abbreviation), include both.

Aim to be as concise as possible in the abstract (within the journals' word limit of 120 words or fewer).

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## Article types

*BioTechniques* publishes a range of article types, descriptions of which are outlined below. Authors are encouraged to consult the '**at-a-glance formatting checklist**' for details on word counts and other formatting requirements.

The information below gives an overview of the requirements for each article type published by *BioTechniques*. However, authors should consult the ICMJE "*Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals*" (<http://www.icmje.org/recommendations/>), in particular the section on "*Preparing a Manuscript for Submission to a Medical Journal*" prior to submitting to *BioTechniques*, for more detailed information.

## Benchmarks, Reports and Letters to the Editor

Authors of these peer-reviewed article types **must** provide a supporting cover letter on submission briefly detailing:

- Relevance to the journal's audience;
- Where the novelty in the study lies;
- Direct and potential implications of the findings.

Authors are also advised to consult the **Methods Reporting Checklist for Authors**, available [here](#).

### *Experimental details and data:*

Only where a novel experimental procedure has been employed full details must be provided, such that a skilled scientist would be able to reproduce the results presented. Details of routine or previously reported experimental procedures should be provided via references only. Experimental procedures and/or data running to more than two Word document pages should be placed in a supplementary information file.

*BioTechniques* encourages authors to submit their data to an open repository, allowing readers to form a complete picture of the manuscript, and to utilize the data in future research endeavours. Where authors are able to do this, please provide details on how to find this information in the main body of the manuscript and at the end of the abstract.

Authors should include ethical information in the methods section of their research articles.

### 1. Benchmark

Benchmarks are peer-reviewed short communications describing new methods or brief but substantive modifications of existing methods. Authors must demonstrate either significantly improved results compared to standard protocols or equivalent results with substantial time or cost savings. Benchmarks should contain a short 3–4 sentence Abstract (120 words). In addition, a 1–3 sentence Method Summary (focusing only on the method itself and not supporting data) is also required at submission. The Introduction, Results & Discussion section should be combined in Benchmark articles. Authors are encouraged to provide brief enumerated protocols using the *BioTechniques* template found in these guidelines or other appropriate supplementary materials when necessary.

**Required sections:** (for a more detailed description of these sections see [Article sections](#)):

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Title (maximum 120 characters)  
Running head (maximum 50 characters)  
Author(s) names, contributions & affiliations  
Abstract (maximum 120 words)  
Method Summary  
Keywords (3–10)  
Main body with no subheadings  
References  
Reference annotations  
Financial disclosure/Acknowledgements  
Ethical conduct of research  
Other pertinent information such as data sharing

## 2. Report

Reports describe new techniques, materials, and protocols useful in biological and biochemical research laboratories. Manuscripts should present well-rounded studies reporting either innovative methodological advances or novel modifications to existing methods that are of substantive value to the field. Reports should contain four sections: (i) Abstract, (ii) Introduction, (iii) Materials and Methods, and (iv) Results and Discussion. A 1–3 sentence Method Summary (focusing on only the method itself and not supporting data) is required at submission.

**Required sections:** (for a more detailed description of these sections see [Article sections](#)):

Title (maximum 120 characters)  
Running head (maximum 50 characters)  
Author(s) names, contributions & affiliations  
Abstract (maximum 120 words)  
Method Summary  
Keywords (3–10)  
Introduction

- Should only cite directly pertinent references
- Should not include data or conclusions from the work being reported

Materials & methods/Experimental

- Where an organization was paid or otherwise contracted to help conduct the research (e.g., data collection and management), this should be detailed
- Should include information indicating that the research was approved or exempted from the need for review by the responsible review committee (institutional or national). Where no formal ethics committee is available, a statement indicating that the research was conducted according to the principles of the Declaration of Helsinki should be included
- Information on the selection and description of participants should define how authors measured race or ethnicity and justify their relevance

Results & Discussion

- Numeric results should be given not only as derivatives (e.g. percentages) but also as the absolute numbers from which the derivatives were calculated
- Statistical significance of results should be specified, if any
- Authors should avoid claiming priority or alluding to work that has not been completed

Conclusions

Future perspective  
Executive Summary  
References  
Reference annotations  
Financial disclosure/Acknowledgements  
Ethical conduct of research  
Other pertinent information such as data sharing

### 3. *Letter to the Editor*

Letters to the Editor highlight interesting observations or cautionary tales concerning experimental design, methodology or analysis. Authors should present their observations with supporting data and recommend potential solutions to the problems raised.

**Required sections:** (for a more detailed description of these sections see [Article sections](#)):

Title (maximum 120 characters)  
Running head (maximum 50 characters)  
Author(s) names, contributions & affiliations  
Keywords (3–10)  
Main body with no subheadings  
References  
Reference annotations  
Financial disclosure/Acknowledgements  
Ethical conduct of research  
Other pertinent information such as data sharing

For authors presenting information regarding clinical trials, the guidelines recommended by CONSORT (<http://www.consort-statement.org/>) and GPP3 (<http://www.ismpp.org/gpp3>) should be followed. In addition, where available the clinical trial registration number should be included at the end of the abstract, and on the first mention of the trial in the main body of text. Unregistered clinical trials should be declared as such, and the reason for nonregistration should be provided. Mention of other trials should also include the relevant registration number, where available.

Secondary outcomes, exploratory analyses, and post hoc analyses should be clearly identified as such; these may be included in the primary publication or published separately, in which case they should clearly reference the primary publication and should not be published before it.

**Observational studies:** where observational research has been carried out, authors should follow the recommendations of STROBE (<http://www.strobe-statement.org/>).

## Reviews & Practical Guides

These are surveys of technical approaches related to broad fields of research. Authors should present a balanced perspective on the subject, avoid overemphasis of their own work, and attempt to acknowledge all significant contributions to the field. While Reviews and Practical Guides are generally solicited by the editors, prospective authors are welcome to submit proposals. For additional information on the scope and format of Reviews and Practical Guides, please contact the editors directly.

### *Systematic Reviews:*

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Systematic reviews should be conducted following the recommendations of PRISMA (<http://www.prisma-statement.org/>).

**Required sections:** (for a more detailed description of these sections see [Article sections](#)):

- Title (maximum 120 characters)
- Running head (maximum 50 characters)
- Author(s) names, contributions & affiliations
- Abstract (maximum 120 words)
- Keywords (3–10)
- Introduction
- Main body with subheadings
- Conclusions
- Future perspective
- Executive Summary
- References
- Reference annotations
- Financial disclosure/Acknowledgements
- Ethical conduct of research

## White Paper

White Papers are authoritative reports that bring together the opinions and current thinking of leading stakeholders or recognized experts. They may offer recommendations, outline proposals and aim to set out current ‘consensuses’ related to an issue. The issue under discussion should be of immediate importance to the advancement of the field. White Papers will be accepted at the discretion of the Editor.

**Word limit:** 4000–8000 words (excluding abstract, keywords and references).

**Required sections:** (for a more detailed description of these sections see [Article sections](#)):

- Title (maximum 120 characters)
- Running head (maximum 50 characters)
- Author(s) names & affiliations
- Abstract (maximum 120 words)
- Keywords (3-10)
- Body of article
- References: limit of 50 references
- Acknowledgements: author acknowledgements, plus, where relevant, details of individuals who contributed to the article, but who did not fulfill the [criteria](#) to be listed as authors
- Disclosures: to include funding information, financial and/or conflict-of-interest disclosures, disclosure of any writing assistance (and the funding source for this), and any other relevant information
- There is a combined limit of 4 figures and tables. Any additional tables and figures must be submitted as supplementary information, which will be available online only.

## Interviews

Interviews are conducted with key opinion leaders in the field, and can include a look back over their career and achievements to date, a discussion on their current research, and their thoughts and observations on the field as a whole. Individuals are invited to take part in an Interview, either verbal or written, at the Editor’s discretion, and the contents of the interview undergo internal review. The

opinions expressed in an Interview are those of the Interviewee, and do not necessarily reflect the views of Future Science.

## Expert Opinions

Expert Opinion articles are short articles that provide an insight into, or a snapshot of issues of topical importance to the journal's target audience or researchers and other professionals. The intention is that the article should offer an expert perspective on a topic of recent interest.

**Required sections:** (for a more detailed description of these sections see [Article sections](#)):

- Title
- Author(s) names, contributions & affiliations
- Keywords
- Main body with subheadings if preferred
- References
- Reference annotations
- Financial disclosure/Acknowledgements
- Ethical conduct of research

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## Article sections

The following list provides notes on the key article sections; authors should consult the 'at-a-glance formatting checklist' to determine which sections are required for their submission.

### Title

Concisely and clearly conveys the scope/novelty of the article; not more than 120 characters. Should not include abbreviations if possible, and should avoid redundant language such as "A study of...".

### Running head

Abbreviated title to appear in the header of the article PDF pages; not more than **50 characters**.

### Author(s) names & affiliations

Including full name, postal address, phone and fax numbers, and e-mail address. Note: we can only list one corresponding author. Where available, authors should also add their ORCID iD during the manuscript submission process. For more information on ORCID, see below.

#### *Guidance on author sequence:*

Author sequence is at the authors' discretion; however, Future Science journals suggest following the recommendations in GPP3 Appendix Table 2 (<https://www.ismpp.org/gpp3>), whereby authors are listed either in order of the level of their contribution, or alphabetically. The corresponding author should always be indicated.

#### *Guidance on a change of affiliation during writing:*

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Where an author has changed their affiliation prior to the publication of an article, the affiliation should reflect where the major part of the work was completed. Current affiliation and contact information should be listed in an acknowledgement.

#### **Authorship criteria:**

*BioTechniques* follows the [recommendations of the ICMJE](#) as regards authorship – authorship should be based on the following 4 criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
2. Drafting the work or revising it critically for important intellectual content; AND
3. Final approval of the version to be published; AND
4. Agreement 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.

Contributors who do not fulfill all four criteria should be listed in the acknowledgements section.

#### **Group authorship:**

When a group name is included as an author (i.e., the XYZ Study Group), the respective group member names should be listed in the acknowledgements section. In relevant Medline/PubMed-indexed journals, these individuals are acknowledged as contributors to the article. The submitting author/agent should therefore ensure that group member names are included in full, are spelled correctly, and appear in the order they wish them to be listed on Medline/PubMed. More guidance from Medline can be found here: <https://www.nlm.nih.gov/bsd/policy/authorship.html>.

#### **Changes to authorship:**

Should a change to authorship be required either before or after article publication, this should be brought to the attention of the Journal Editor. This will then be investigated, and corrections made if deemed appropriate by the Editor and with the agreement of all authors involved.

## **Author Contributions**

Please list the contributions to the manuscript made by each author.

## **Abstract**

Not more than 120 words; no references should be cited in the abstract. The abstract should highlight the importance of the field under discussion within the journal's scope, and clearly define the parameters of the article.

For clinical trials, the guidelines recommended by CONSORT should be followed when writing the abstract (<http://www.consort-statement.org/>), and the clinical trial registration number included at the end of the abstract, where available.

Data deposition: where data have been deposited in a public repository, authors should state at the end of the abstract the data set name, repository name and number.

## **Method Summary**

Where required, please include a 1–3 sentence description of the method introduced in the manuscript. This should be concise and clearly detail the methodological novelty of the research. Please do not discuss experimental results or the advantages of the methods.

## **Keywords**

A selection of 5-10 words that encapsulate the scope of the article.

## Body of the article

The article content should be arranged under relevant headings and subheadings to assist the reader.

## Future Perspective

A speculative viewpoint on how the article will impact the field, what further research is needed, etc.

## Executive Summary

Bulleted summary points that illustrate the main conclusions made throughout the article. Where appropriate, relevant headings that correspond to those in the manuscript should be inserted.

## Accession Numbers

All appropriate datasets, images, and information should be deposited in public resources. Please provide the relevant accession numbers (and version numbers, if appropriate) after first use of the entity and at the end of the abstract (see “abstract” section above). Please also provide accession numbers of all entities such as genes, proteins, mutants, diseases, etc. for which there is an entry in a public database.

## Acknowledgements

Author acknowledgements, plus, where relevant, details of individuals who contributed to the article, such as study group members, or those who contributed but who did not fulfill the [criteria](#) to be listed as authors.

## Disclosures

See further information below.

## Other pertinent information

Where relevant, authors should provide information regarding data availability, links to protocols on protocols.io, and information regarding materials sharing, cell line authentication, RRIDs and so on. See the Editorial Policies section for further information.

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## ORCID member organization

Future Science Group is pleased to be a Member Organization of ORCID, the Open Researcher and Contributor ID, underlining our commitment to transparency and discoverability for our authors: <https://www.future-science-group.com/orcid>

## What is ORCID?

ORCID provides researchers with a unique identifier – an ORCID iD – plus a mechanism for linking their research outputs and activities to their ORCID iD.

An ORCID iD is a unique and persistent digital identifier that ensures your work is correctly associated with you, regardless of whether your name is similar to (or the same as!) another individual, or if your name changes.

ORCID is integrated into many systems used by publishers, funders, institutions and other research-related services.

## Why register?

Your ORCID iD:

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- Distinguishes you and ensures your research outputs and activities are correctly attributed to you
- Reliably and easily connects you with your contributions and affiliations
- Reduces form-filling: you enter data once, have it reused often
- Improves recognition and discoverability for you and your research outputs
- Is interoperable: it works with many institutions, funders, and publishers
- Is persistent: you can use it throughout your research career

Watch “Why ORCID?” to learn more: <https://vimeo.com/237730655>

## Connect your ORCID iD to Future Science Group

Future Science Group’s submission system, ScholarOne, supports ORCID, giving you the option to include an ORCID iD when you submit a manuscript to us.

If you already have an ORCID iD, simply associate this when creating your account on ScholarOne. Alternatively, if you have yet to register for an ORCID iD, click the appropriate link to create one:

Create an Account

1 E-Mail / Name

2 Address

3 User ID & Password

Next

**ORCID®**

Select the appropriate option below to associate an ORCID iD to your account.

 [Create an ORCID iD](#)

[Associate your existing ORCID iD](#)

*Open Researcher and Contributor ID (ORCID) is a non-profit organization dedicated to solving the long-standing name ambiguity problem in scholarly communication by creating a central registry of unique identifiers for individual researchers and an open, transparent linking mechanism between ORCID and other current author identifier schemes. To learn more about ORCID, please visit <http://orcid.org/content/initiative>.*

By providing an ORCID iD during the submission process, it can then be incorporated by the journal into your accepted article’s metadata, ensuring your work is appropriately attributed to you and that your ORCID record is updated accordingly.

Your ORCID iD will also be published within the article so that readers can link to your public ORCID profile, and from there to your other work.

Learn more about ORCID at <https://orcid.org/help>

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## Disclosures

The following provides further information on financial, COI, ethical and data sharing disclosures that should be included in all relevant publications.

### Financial & competing interests disclosure

Disclosing any information about the interests of the author(s) that could influence how readers receive and understand the work. This includes information related to:

- **The work under consideration for publication** – detailing any resources received directly or indirectly (via your institution) to enable the completion of the work (with a timeframe **from the initial conception of the work, to the present**) – such as grants. This includes funding for any **writing assistance** that has been used in the creation of the manuscript, which should be stated along with the sources of funding for such assistance.
- **Relevant financial activities outside the submitted work** – disclosing interactions (i.e., personal, academic or financial relationships) with any entity that could be considered broadly relevant to the work, that could be perceived to influence, or that gives the appearance of potentially influencing, the submitted work. Authors should disclose any such interactions that have occurred for a period of **36 months prior to the submission**.
- **Intellectual property**
- **Any other relationships not covered above** that could be perceived by readers to have influenced, or give the appearance of potentially influencing, the work.

For further detail, authors should refer to the Future Medicine **Author Disclosure Form** (available [here](#)), which should also be completed and submitted alongside their manuscript submission.

These requirements are based on the ICMJE Conflict of Interest policies (<http://www.icmje.org/conflicts-of-interest/>).

#### *Example financial & competing interests disclosure:*

“This work was supported by a grant from FUNDING BODY (grant no.: XYZ12345). AUTHOR 1 has received consultancy fees from COMPANY A and COMPANY B. AUTHOR 2 has received speaker fees from COMPANY C, has been an advisory board member for COMPANY D, and owns stock in COMPANY E. Author 3 holds a patent for XXX (patent number: XXX). The authors have no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed.

Medical writing and editorial support were provided by WRITER of MEDICAL COMMUNICATIONS COMPANY, and were funded by COMPANY A.”

## **Ethical conduct of research**

For studies involving data relating to human or animal experimental investigations, authors should obtain appropriate institutional review board approval and state this within the article (for those investigators who do not have formal ethics review committees, the principles outlined in the Declaration of Helsinki should be followed, and this should be stated accordingly).

In addition, for investigations involving human subjects, authors should obtain informed consent from the participants involved and include an explanation of how this was obtained in the manuscript.

### ***Example ethical disclosure:***

“The authors state that they have obtained institutional review board approval from INSTITUTION for the research described. In addition, they have obtained verbal and written informed consent from the patients for the inclusion of their medical and treatment history within this work.”

## Data sharing statement

For studies reporting the original results of a clinical trial or the secondary analysis of clinical trial data, authors should include a data sharing statement, as described on the ICMJE website:

<http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/clinical-trial-registration.html>

Authors are asked to specify whether their manuscript reports **either** the original results of a clinical trial, **or** the secondary analysis of clinical trial data that have been shared with them.

### Original results of a clinical trial

For the reporting of original results, authors will be asked to complete the following table (found in the Author Disclosure Form), which will form the basis of the data sharing statement:

Will individual, de-identified participant data be available (including data dictionaries)?	
What data in particular will be shared?	
What other documents will be available, if any (e.g., study protocol, statistical analysis plan, etc.)?	
When will data be available (start and end dates)?	
By what access criteria will data be shared? To include: <ul style="list-style-type: none"> <li>- With whom?</li> <li>- For what types of analyses?</li> <li>- By what mechanism?</li> </ul>	

#### Examples:

“The authors certify that this manuscript reports original clinical trial data. The data will not be made publicly available.”

“The authors certify that this manuscript reports original clinical trial data. Individual, de-identified participant data that underlie the results reported in this article (text, tables, figures, and appendices) are available from the corresponding author following publication, including the clinical study report and study protocol.”

“The authors certify that this manuscript reports original clinical trial data. Data reported in this manuscript are available within the article or posted publicly at [www.clinicaltrials.gov](http://www.clinicaltrials.gov), according to the required timelines. Additional data from the study (e.g., study protocol) are available upon reasonable request.”

### Secondary analysis of shared clinical trial data

For the reporting of secondary analyses of clinical trial data that have been shared with the authors, a statement to this effect must be included, including the source of the data.

#### Example:

“The authors certify that this manuscript reports the secondary analysis of clinical trial data that have been shared with them, and that the use of this shared data is in accordance with the terms (if any) agreed upon their receipt. The source of this data is: \*\*\*\*\*.”

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## References

### Key points

Authors should focus on recent papers and papers older than 5 years should not be included except for an over-riding purpose.

Primary literature references, and any patents or websites, should be numerically listed in the reference section in the order that they occur in the text (including any references that only appear in figures/tables/boxes).

Information from manuscripts submitted but not accepted should be cited in the text as “unpublished observations” with written permission from the source.

Avoid citing a “personal communication” unless it provides essential information not available from a public source, in which case the name of the person and date of communication should be cited in the text, with written permission from the source.

References should be denoted numerically and in sequence in the text, using Arabic numerals placed in square brackets, i.e., [12].

Reference annotations: 6–8 references should be highlighted that are of particular significance to the subject under review as “\* of interest” or “\*\* of considerable interest”, along with a brief (1–2 line) synopsis.

The Future Science EndNote style can be downloaded from our website at:

<https://www.future-science.com/authorguide>

### Format

Author’s names should appear without full stops in their initials

List up to six authors’ names. If there are more than six authors, then quote the first three only followed by *et al.*

A full stop follows authors’ names

Article title given in full

Journal name should be in italics and abbreviated to standard format

Volume number, with the issue number in brackets (if available), followed by comma, not bold

Page number range separated by a hyphen with no spaces, followed by the year in brackets, and then a full stop

### Reference annotations

Papers or of particular interest should be identified using one or two asterisk symbols:

\* = of interest

\*\* = of considerable interest

Each of the chosen references should be annotated with a brief sentence explaining why the reference is considered to be of interest/particular interest.

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## Making the most of your article

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We encourage authors to enhance their article with digital assets, such as graphical abstracts and infographics, to help readers discover and learn about their research. More information is available [here](#).

With in-house graphics and video teams, we are able to offer a range of services to assist you in the preparation of all digital enhancements. If you are interested in including any digital enhancements with your article, please discuss with the Journal Editor.

## Graphical abstracts

*BioTechniques* encourages the use of graphical abstracts, a concise, visual summary of the main findings of the article, helping readers to quickly understand the findings of the paper and its relevance to them.

Graphical abstracts will be made freely accessible to all readers and feature prominently on the article webpage alongside the main abstract. They will also be used by the journal Editors to promote articles to audiences via social media.

Graphical abstracts will be peer-reviewed alongside the article and should be submitted with the first draft. However this does not need to be the final version – we are happy to accept a rough sketch or equivalent that will resemble the final version. The final version can then be created whilst the draft is being reviewed and finalized based on the reviewers' feedback.

## Infographics

Infographics go beyond the graphical abstract and provide a more in-depth, at-a-glance overview of the information presented in the article. An example is available at <https://www.futuremedicine.com/doi/10.2217/fon-2017-0646>. Infographics will appear at the end of the article PDF and online alongside the article. These will also be used by the Editor when sharing details of the article via social media (for more information on our social media activities please see the [Post-publication tools](#) section).

## Video abstracts

Video abstracts give you the opportunity to introduce readers to your work in your own words. Various formats are accepted, including the author discussing their work on camera or providing audio commentary that is complemented with a series of slides/images. Video abstracts should be short and to the point – no more than 2–3 mins in total. The aim is to create something that will draw in potentially interested readers – so it's important to keep the language clear, and include any key words or phrases associated with the work.

Video abstracts are featured alongside articles as well as on our **YouTube channel** (where they are tagged with keywords, a short description and a link to the original publication). For an example video abstract please visit <https://www.futuremedicine.com/doi/10.2217/fon-2017-0636>. Download our guide to preparing a video abstract (available on our website [here](#)) or check out our [handy video](#).

## Video Journal of Biomedicine

The [Video Journal of Biomedicine](#) is a new platform from the Future Science Group that complements our peer-reviewed journals. The journal provides a platform for authors to present

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their latest research or discuss their recently published, peer-reviewed paper in a short, high-quality, open access, interview-style video. Each video, published alongside the article as well as on the [Video Journal of Biomedicine](#) platform, provides the author with the opportunity to personally discuss their latest work in more detail; highlighting its importance to the field, placing it in context, and discussing future implications. By watching the video, readers will gain a comprehensive understanding of the subject.

For an example please visit [here](#).

If you are interested in a video alongside your article, please email [Joanne Walker](#) in the first instance.

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## Figures, tables, boxes & supplementary files (incl. video)

The use of figures and diagrams is encouraged wherever relevant. The author should include illustrations and tables to condense and illustrate the information they wish to convey. Commentary that augments an article and could be viewed as 'stand-alone' should be included in a separate box. All figures, tables and boxes should be submitted in an editable format (e.g., in Word, Excel or Illustrator).

Figures, tables and boxes should be numbered consecutively according to the order in which they have been first cited in the text.

If any of the figures or tables used in the manuscript requires **permission** from the original publisher, it is the author's responsibility to obtain this. More details on obtaining permissions can be found in [here](#) and in the **copyright section** below.

### Figure/table/box guidelines

**File format:** All figures, tables and boxes should be submitted in an **editable format**. For figures that will be included without editing (i.e., photos, imaging data, etc.) please submit as a .jpeg, .pdf or .tiff. Other figures (i.e., graph/bar charts or complex illustrations) should ideally be provided as Adobe Illustrator files (.ai or .eps) if possible, otherwise as a .jpeg, .pdf or .tiff. Tables/boxes should be provided as Microsoft Word, Microsoft Excel or Adobe Illustrator files, and must be editable. If you are uncertain whether the format of your files is appropriate, please check with the Journal Editor.

**Resolution:** Figure resolution should be as high as possible, ideally 300 dpi or higher for a .jpeg. Images that are blurry or illegible in any way will not be accepted.

**Font:** If possible, please use Helvetica 8pt.

**Abbreviations:** All abbreviations used within Figures/tables/boxes should be defined in the legend (even if previously defined in the body of the manuscript).

**Photomicrograph:** Please ensure that **scale bars** are included in figures where appropriate (i.e., photomicrographs). Symbols, arrows or letters used in photomicrographs should contrast with the background. Please explain internal scale and identify the method of staining in photomicrographs.

Future Science is able to offer a number of design services to authors, from polishing an existing figure to creating one from scratch (subject to fees). If you would be interested in learning more about this service, please contact [Joanne Walker](#).

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## Chemical structures

If possible, please submit structures drawn in ISISDraw or ChemDraw format. However, chemical structures can be redrawn in-house. Please use the following conventions:

Always indicate stereochemistry where necessary – use the wedge and hash bond convention for chiral centers and mark cis/trans bonds as such.

Draw small peptides (up to five amino acids) in full; use amino acid abbreviations (Gly, Val, Leu, etc.) for larger peptides.

## Electronic files

Please submit any other illustrations/schemes in an editable electronic format such as Illustrator, PowerPoint, Excel or as postscripted/encapsulated postscripted (.ps/.eps) files.

Photos should be provided at a resolution of 600 dpi, or as high as possible.

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#### ***What should I submit to the journal to show permission has been obtained?***

Please send us copies of letters or forms granting you permission for the use of copyrighted material so that we can see that any special requirements with regard to wording and placement of credits are fulfilled. Keep the originals for your files. If payment is required for use of the figure, this should be covered by the author.

### **Supplementary materials, including videos**

Figure, tables and boxes larger than one A4 page will be included as online-only supplementary information. At the Editor's discretion data or experimental details can also be included.

Our articles can be supported by other videos online, including mechanism of action videos, videos of procedures, etc.

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Videos are freely available to all readers and featured alongside the article abstract as supplemental files within the Details section (as in the example below). Videos will be shared via social media (across Twitter, LinkedIn and Facebook) and can also be made available via the Future Science Group YouTube channel.

The screenshot shows the Future Science website interface. At the top, there is a navigation bar with 'Future Medicine' logo and links for 'JOURNALS', 'BOOKS', 'ABOUT US', and 'CONTACT US'. On the right, there are icons for 'Search', 'My Cart', and 'Sign In'. Below the navigation bar, the article title is 'Direct-to-consumer genetic testing: where and how does genetic counseling fit?' by Anna Middleton, Alvaro Mendes, Caroline M Benjamin, and Heidi Carmen Howard. The article is published online on 11 May 2017. A video player is embedded in the 'Details' section, showing a woman speaking. Below the video, there is a thumbnail for 'Personalized Medicine'. The article abstract is partially visible, discussing direct-to-consumer genetic testing for disease.

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## Protocols & Software

### Protocols

*BioTechniques* recommends authors submit concise, reproducible protocols to protocols.io. An example of such a protocol can be found here: <http://bit.ly/2rPyrkL>.

*BioTechniques* requests that protocol authors add their protocol to the *BioTechniques* collection when prompted. Protocols.io links to *BioTechniques* publications will resolve on publication.

### Software

Software and associated documentation should be available on the author's web site or a suitable repository for editor and reviewer access at the time of manuscript submission. Authors are required to guarantee the availability of software and documentation for 3 full years following publication.

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## Units of measurement

Measurements of length, height, weight and volume should be reported in metric units (meter, kilogram or liter) or their decimal multiples.

Temperatures should be in degrees Celsius.

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Centrifuge speeds should be given in g rather than rpm.

Any other units should be reported using the International System of Units (SI) where possible.

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## Statistics

Describe statistical methods with enough detail to enable a knowledgeable reader with access to the original data to judge its appropriateness for the study and to verify the reported results.

When possible, appropriate indicators of measurement error or uncertainty (such as confidence intervals or error bars) should be included.

Please define any statistical terms, abbreviations and symbols used.

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## Submission and Fees

Please ensure that solicited manuscripts are submitted on or before the agreed deadline. If a manuscript requires authorization by your organization before submission, please remember to take this into account when working towards these deadlines.

First draft submission should be made via our [online submission system](#) in the first instance. If possible, manuscripts should be submitted in MS Word v. 6–8 format. However, we can convert most word-processing packages.

To help with the speed of processing of an article, authors should ensure that their article has been edited for language and grammar by a fluent English speaker prior to submission (see ‘Pre-submission editing services’ below for more help with this request).

*BioTechniques* encourages its authors to deposit their data in an appropriate repository, where possible. Details on how to find these data should be provided in the manuscript and at the end of the abstract.

### Pre-submission editing services

Future Science partners with Enago to provide pre-submission editing services for our authors.

Editing services include:

- Language check
- Copyediting
- Substantive editing

For more information, please visit the website here: <http://futurescience.enago.com>

### Submitting agents

Any third party (such as a medical writer or assistant) can submit via ScholarOne Manuscripts as a Submitting Agent. A “Guide to Article Submission for Submitting Agents” is available [here](#).

### Required forms

These documents should be completed and submitted alongside article submissions as appropriate.

**Author Disclosure Forms** – required for **all** submissions.

**Open Access Forms** – required for **all** submissions.

**Accelerated Publication Form** – required if the accelerated publication option is being taken. For authors opting to use the Accelerated Publication service, please complete the form available on our website. For more information on this option, see below.

## Peer review

Once the manuscript has been received in-house, it will undergo initial internal review by the Journal Editor. Articles deemed suitable for consideration will then proceed to external peer review (dependent on article type – for more details, see the section on External peer review below). This usually takes around 4 weeks, although an Accelerated Publication option is also available. Please provide a list of suitable peer reviewers with your initial submission.

## Revision

After peer review is complete, time is allowed for any revisions (suggested by the referees/Editor) to be made. This period is approximately 2 weeks, but this is subject to the nature of the revisions.

## In-house production

Accepted manuscripts will undergo production in-house. This will involve type-setting, copy-editing, proof-reading and re-drawing of any graphics. Authors will receive proofs of their article for approval and sign off.

## Production process

Manuscript accepted by Journal Editor, and sent to the Production team

Manuscript is typeset, figures/tables formatted, and house styles applied

Manuscript is imported into the PXE Digital Publishing Platform (see: <http://powerxeditor.aptaracorp.com/>), and copyedited

**Author receives an email with information on how to access their article on the PXE platform (please be vigilant in case the email goes into your junk email folder). They are asked to:**

- Answer any queries highlighted by the Production Editor
- Conduct any final minor edits to the text that they wish to make
- Sign the article back over to the Production Editor
- The FSG Production Editor will look over their edits, **add in any figures that are pending** and return the proof to the author for approval.

This process may be repeated, until all the Production Editor's queries have been addressed

The Production Editor then creates a final PDF of the article from the PXE platform, and conducts any final edits to the layout etc. – at this point the article content and layout is finalized

XML files of the final article are produced

Article is published online, in the journal's 'Ahead of print' section

Once all the articles for a journal issue are complete, they are compiled into the final journal issue and assigned page numbers

## Fees

Information regarding *BioTechniques* fees can be found [here](#).

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## Editorial policies

Please see [here](#) for full details of our cross-journal policies. Policies specific to *BioTechniques* can be found below.

### Pre-prints

Future Science journals are happy to consider manuscripts that have previously been posted on pre-print servers, as long as the manuscript is not being considered elsewhere, as per our standard policy. Authors are also welcome to post their article to a pre-print server whilst it is under consideration by a Future Science journal (please see the information on our 'Self-archive policy' above). We advise authors to inform the Journal Editor as to where the manuscript has been posted.

### Material sharing

Authors are expected to make biological materials described in their article available upon reasonable request from researchers. Authors are encouraged to deposit biological materials to public repositories such as Addgene, ATCC, DNASU, Fungal Genetic Stocks Center, European Mouse Mutant Archive, EuroScarf, Knockout Mouse Project, Jackson Laboratory, Mutant Mouse Regional Resource Centers, PlasmID. Depositing with repositories enables preservation, authentication, and timely access to relevant new materials generated in publications so that future researchers to perform replication or follow-on studies.

### Data deposition

We encourage the deposition of data to a discipline-specific, community recognized repository where one exists, or a generalist repository if no suitable specific resource is available. Repositories can be found via sites such as re3data.org. Where data have been deposited in a public repository, authors should state at the end of the abstract the dataset name, repository name and number.

### Cell line authentication

Authors are encouraged to authenticate all cell lines used in their research efforts. *BioTechniques* specifically requires authors to check any cell lines used in their experiments against the current database of misidentified cell lines curated by the International Cell Line Authentication Committee (ICLAC) available at <http://iclac.org/databases/crosscontaminations/>. Any cell line appearing in this database used in an experiment in a submitted manuscript must be accompanied by recent cell line authentication data (e.g. short tandem repeat profiling) to support the proper identification of the cell line used in the experiments. In addition, reviewers and editors reserve the right to request additional cell line authentication data for all cell lines used in any experiment described in a submitted manuscript. For further information on this policy, please contact the editors.

### Research Resource Identifiers (RRIDs)

*BioTechniques* takes part in the Resource Identification Initiative, an effort designed to provide unique identification numbers for biomedical reagents used in research. The numbers provided by the Resource Identification Initiative through their website portal are called Research Resource Identifiers (RRIDs). *BioTechniques* requests that all authors provide appropriate RRIDs for any antibodies or genetically modified organisms referenced within their manuscripts. Authors can check the Research Identification Portal (<https://scicrunch.org/resources>) to find the correct RRID for any specific antibody or genetically modified organism.

An example of proper antibody RRIDs citation in a manuscript is: “Using antibodies available in our laboratory, including a commercial antibody against  $\beta$ - tubulin (PA5–16863; Thermo Fisher Scientific, Waltham, MA; RRID: AB\_10986058).”

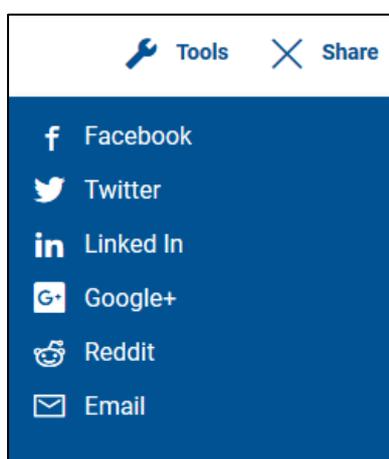
Note that for all antibodies and other reagents, authors should now include manufacturer, location, catalog number, and RRID. For additional information on locating specific RRIDs, visit <https://scicrunch.org/> or contact the editors.

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## Post-publication tools

### Social media

Sharing the news that your article has been published, via social media, is a great way to let your peers know about your work. Twitter, Facebook and LinkedIn are all great places to spread the word. All Future Science articles include sharing links at the top of the page, making it easy for you to create posts for your various accounts:



### Twitter

Tips for creating a tweet about your article:

Include a link to your article! Consider using a URL shortener, such as [Bitly](#), to shorten your article URL.

Include an image – tweets that include images attract far more engagement than those that don't. We are happy for authors to include images of any figures, or perhaps another image you think reflects the content of your article well

- Be sure to check any image you use is in the public domain

Use appropriate hashtags (utilize <http://hashtagify.me/> for information on hashtags) – by marking out a key word or phrase by preceding it with a hashtag (such as #AlzheimersDisease), your tweet will be searchable and discoverable by other users. Many people follow certain hashtags regularly, so do have a look to find out what the key terms are for your subject area.

@mention your co-authors, institution, funders etc. – most universities and some individual departments have their own Twitter accounts, and by mentioning their username (such as @futuresciencegp), they will be notified of your tweet in the Mentions section of their account. Once you have their attention, they may click to read your article or share your tweet with their followers! The tweet will also be visible to anyone who follows you, as normal.

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- Beware of the difference between @mention and @reply – an @reply places the username at the front of your tweet, and is generally used to reply to another user's tweet or to send them a specific message. By placing the username at the start of your tweet (i.e., with no text before it), the tweet will only be visible to the user you've replied to, or anyone who follows both you and the other user. So if you want your tweet to be widely seen, include the username within your tweet but not at the beginning.

@mention the journal (@fsgfso) – all Future Science Group journals (see above) have a Twitter account, and we'll be sure to re-tweet you if you mention us!

Ask your co-authors to re-tweet your message, to spread the word further to their networks. You can also encourage people to re-tweet in your tweet itself!

## Facebook

You may think that Facebook is just for personal use, but it can be a great tool to spread the word about your article. Post information about your article on your own profile, add depth to your information along with a related image, and a link to the article. Don't forget to copy in @futuresciencegroup so we can 'like' and share it as well.

## LinkedIn

Future Science Group and many of the individual journals have their own [LinkedIn groups](#). We encourage authors to join these groups, and post about their article (or any other topics they think would be of interest to the group members).

## Sharing on an FSG specialist website

Many Future Science Group journals are partnered with an associated [specialist website](#); an online community offering medical professionals easy access to breaking news, peer-reviewed articles and multimedia content. For a fee, your article can be featured on the journal's partner site, and made exclusively accessible to site's registered members. The article abstract will be hosted on the site, with a direct link to the article PDF featured on the homepage, shared via social media and highlighted in the website's weekly newsletter. This will automatically ensure your article reaches its target audience, helping to increase its readership and extend its impact. If you are interested in finding out more about this option, as well as other options for reaching your target audience via our digital sites, please contact [Joanne Walker](#) for further information.

## Article metrics

Various article metrics are available on an article's page on our website, including download numbers and citations, and information from Altmetric and Dimensions.

### Altmetric

All Future Medicine articles are tracked by [Altmetric](#), with each article receiving an Altmetric score reflecting the quantity and reach of the attention it has received. Click on this score on each article page to find out more about how much and where an article is being talked about! For more information on Altmetric, go to <https://www.altmetric.com>.

### Dimensions

Information from the [Dimensions](#) platform can be viewed alongside articles, including citation information. Click on the Dimensions badge on the article page to find out more information.

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## Protocol submissions

### General requirements

Protocols that are created in connection with the preparation of your manuscript should be uploaded to Protocols.io. Please note that we cannot accept protocols that have also been prepared for distribution by a manufacturer with a commercial product. If a protocol is available with your manuscript, be sure to include a reference and the DOI in the reference section of your article. Each protocol should be detailed and organized so that a researcher could print out the protocol and perform the experiment using only that document. Feel free to include any commentary, hints, data tracking systems, charts, etc. that you find useful when carrying out the experiments.

### Protocol format

Protocols should be formatted to suit Protocols.io and include the following sections (where applicable).

#### *Reagents*

Please list all of the reagents used in performing the experiment and the vendor name and location. For reagents that are unusual or difficult to find, please also include a catalog number. Reagents that are purchased ready-to-use should be listed in this section.

#### *Procedure*

Include the title of each major step (such as tissue collection, cell lysis, neutralization, precipitation, etc.) as a heading with each task numbered below. Numbers should be continuous throughout the procedure. For example, the first heading may include steps 1-4 and the second heading steps 5-7.

Helpful hints: Provide any commentary or hints that will help the investigator correctly perform the experiment.

Attention: Draw attention to any critical steps with specific instructions on the correct procedure, what makes this step critical, and what to do to ensure success. Is it dependent on timing, dilution, speed, temperature, etc.?

Rest: Please note any steps where the experiment can be stopped, the duration that it can be held (overnight, 2 h, etc.), and instructions for properly holding (4°C, with shaking, in the dark, etc.).

#### *Figures and tables*

Useful figures, graphs, charts, etc. can be used. They must be included as separate files and adhere to our figure requirements as stated above. Tables should be created in Microsoft Word and included as part of the protocol text.

#### *Recipes*

List the recipes of all solutions made in the laboratory. Reagents purchased ready-to use do not need to be listed in this category, but all purchased reagents that require modification (such as dilution or addition of  $\beta$ -mercaptoethanol) should be listed here.

#### *Troubleshooting*

If known, please list common problems, possible causes, and methods of correction. This can be submitted as a table or listed in the text.

### ***Equipment***

List all equipment used with the accompanying vendor name. Upon first mention in the text, also include the vendor's location (city/state and country). Include catalog numbers for equipment that may be difficult to find.

### ***References***

List all necessary references in the same format detailed above.

These are guidelines for structuring your document, but not all categories may apply. When submitting your protocol, please submit it alongside your article as a supplementary document for review.