

## **Guide to Authors**

*Journal of Exposure Science and Environmental Epidemiology (JESEE)*, a peer-reviewed publication publishes research important to exposure assessment for toxic substances, environmental epidemiology that includes a strong exposure analysis component and related disciplines that advance the exposure assessment process. *JESEE* also publishes original research presenting significant advances in exposure analysis such as measurements, modeling, instrumentation, and questionnaires; mechanisms of exposure via pathways that lead to routes of exposure; development of molecular biomarkers of exposure, health effects, and susceptibility; genomic, proteomic, and metabonomic approaches and studies that assess exposure in the context of health effects; studies on chemical, biological, and physical principles required to analyze human exposure from single and multiple media and routes; occupational exposure studies that enhance the understanding of environmental exposure; and, population-based studies of exposure to toxic substances.

<b>Editor</b>	Dana Barr PhD
<b>Frequency</b>	6 issues a year
<b>Abstracted in</b>	Current Contents EMBASE/Excerpta Medica SciSearch Research Alert The Biotechnology Citation Index Biology and Environmental Sciences SCIExpanded Current Contents Agriculture Biology & Environmental Sciences

### **Editorial Note**

Manuscripts are considered for publication with the understanding that they have not been published previously and are not under consideration by another publication. The journal will publish rapidly, after peer review, research important to exposure assessment, environmental epidemiology, and related disciplines. It will publish articles that describe original research results; reviews on subjects of contemporary importance to exposure assessment and epidemiology; preliminary communications; viewpoints; reports or proceedings of conferences (which will be published as issues of the journal at the expense of the organization that submits the proceedings); and brief announcements of scientific meetings or courses of interest to readers.

If you are interested in submitting a review, please contact the journal's Associate Editor of Reviews, Paul Liroy, PhD, at [plioy@ehsi.rutgers.edu](mailto:plioy@ehsi.rutgers.edu).

## **FORMAT OF PAPERS**

### **Preparation of Original Articles**

1. Cover letter
2. Title page (excluding acknowledgements)
3. Abstract and keywords
4. Introduction
5. Materials (or patients) and methods
6. Results

7. Discussion
8. Acknowledgements
9. References
10. Tables
11. Figures

**Cover letter**

The uploaded covering letter must state the material is original research, has not been previously published and has not been submitted for publication elsewhere while under consideration.

**Title page**

The title page should bear the title of the paper, the full names of all the authors, highest academic degree obtained, and their affiliations, together with the name, full postal address, telephone and fax numbers and e-mail address of the author to whom correspondence and reprint requests are to be sent (This information is also asked for on the electronic submission form). The title should be brief, informative, of 150 characters or less and should not make a statement or conclusion. The running title should consist of not more than 50 letters and spaces. It should be as brief as possible, convey the essential message of the paper and contain no abbreviations. Authors should disclose the sources of any support for the work, received in the form of grants and/or equipment and drugs.

**Abstract and Keywords**

The abstract should not exceed 200 words and three to six keywords should be included to aid web searches after publication.

**Introduction**

The Introduction should assume that the reader is knowledgeable in the field and should therefore be as brief as possible but can include a short historical review where desirable.

**Materials / subjects and methods**

This section should contain sufficient detail so that all experimental procedures can be reproduced and include references. Methods, however, that have been published in detail elsewhere should not be described in detail. Authors should provide the name of the manufacturer and their location for any specifically named medical equipment and instruments, and all drugs should be identified by their pharmaceutical names, and by their trade name if relevant.

**Results and discussion**

The results section should briefly present the experimental data in text, tables or figures. Tables and figures should not be described extensively in the text, either. The discussion should focus on the interpretation and the significance of the findings with concise objective comments that describe their relation to other work in the area. It should not repeat information in the results. The final paragraph should highlight the main conclusion(s), and provide some indication of the direction future research should take.

**House Style**

**Text:** Refer to JESEE 15(1), 1-5, 2005 for the official ISEA glossary of terms at <http://www.nature.com/jea/journal/v15/n1/full/7500411a.html>

**Reference texts:** Please consult any of the following texts for specific standards regarding units and statistical abbreviations:

- IUPAC's Quantities, Units and Symbols in Physical Chemistry (the green book, available at <http://www.rsc.org/Publishing/ReSource/AuthorGuidelines/AuthoringTools/NomenclatureAndSymbolism>)
- IUPAC Compendium of Chemical Terminology (the gold book, available at <http://www.iupac.org/publications/compendium/index.html>)
- Standard for Use of the International System of Units (SI): The Modern Metric System, IEEE/ASTM SI 10-2002. (The standard can be ordered from IEEE, Customer Service, PO Box 1331, Piscataway NJ 08855-1331; or from ASTM, 100 Barr Harbor Drive, West Conshohocken PA 19428)
- Biometry (2nd edn) by R. R. Sokal and F. J. Rohlf (Freeman, New York, 1981)
- Nonparametric Statistics for the Behavioral Sciences (2nd edn) by R. Siegel and N. J. Castellan Jr (McGraw-Hill, New York, 1988)

**Conventions:** In general, the journal follows conventions given in *Scientific Style and Format: The CBE Manual for Authors, Editors and Publishers* (1994) Cambridge University Press, Cambridge, UK, 6th edn. Please follow Chemical Abstracts and its indices for chemical names. For guidance in the use of biochemical terminology, please follow the recommendations issued by the IUPAC-IUBMB Joint Commission on Biochemical Nomenclature.

**Abbreviations:** Try to restrict the use of abbreviations to Systeme Internationale (SI) symbols and those recommended by the IUPAC. Abbreviations should be defined in parentheses after their first mention in the text, not in a list of abbreviations. Standard units of measurements (SI symbols) and symbols of chemical elements may be used without definition in the body of the paper. Abbreviations of standard biochemical compounds (e.g. ATP, DNA, nucleotides in nucleic acids) need not be defined.

### General

- Do not make rules thinner than 1pt (0.36mm)
- Use a coarse hatching pattern rather than shading for tints in graphs
- Colour should be distinct when being used as an identifying tool
- Spaces, not commas should be used to separate thousands
- Abbreviations should be preceded by the words they stand for in the first instance of use
- Use SI units throughout
- Text should be double spaced with a wide margin
- At first mention of a manufacturer, the town (and state if USA) and country should be provided

### Figures

Figures and images should be labelled sequentially, numbered and cited in the text. Figure legends should be brief, specific and appear on a separate manuscript page after the references section. Refer to (and cite) figures specifically in the text of the paper. Figures should not be embedded within the text. If a table or figure has been published before, the authors must obtain written permission to reproduce the material in both print and electronic formats from the copyright owner and submit it with the manuscript. This follows for quotes, illustrations and other materials taken from previously published works not in the public domain. The original source should be cited in the figure caption or table footnote. The use of three-dimensional histograms is strongly discouraged when the addition of the third dimension gives no extra information. Scale markers should be used in the image for electron micrographs, and indicate the type of stain used. Detailed guidelines for submitting artwork can be found in the artwork guidelines section at the end of this document.

## Tables

These should be labelled sequentially and cited within the text. Each table should be presented on its own page, numbered and titled. Reference to table footnotes should be made by means of Arabic numerals. Tables should not duplicate the content of the text. They should consist of at least two columns; columns should always have headings. Authors should ensure that the data in the tables are consistent with those cited in the relevant places in the text, totals add up correctly, and percentages have been calculated correctly. Unlike figures or images, tables may be embedded into the word processing software if necessary, or supplied as separate electronic files.

## Acknowledgements

These should be brief, and should include sources of support including sponsorship (e.g. university, charity, commercial organization) and sources of material (e.g. novel drugs) not available commercially.

## References

References should be listed alphabetically on a separate page at the end of the manuscript. To save space, the citation of appropriate recent review articles is encouraged. Only published articles and abstracts, and manuscripts in press should be cited in the references. References for abstracts should be followed by the designation "(abstr.)". In the reference list, references with six or fewer authors should list all names; for more than six authors, list the first six names followed by *et al.* Abbreviations of journal names must conform to those adopted by *Index Medicus*. The names of unlisted journals should be spelled out. Show inclusive page numbers. For papers in press, give the title of the publication and the journal name and indicate "in press" parenthetically. If the article is published online-only, or online ahead of print, provide the digital object identifier (doi). Refer to publications in the text as "(Schmidt and Jones, 2000)" or as "(Schmidt et al, 2000)" in the case of three or more authors. Authors should use the latest version of Reference Manager or Endnote for *JESEE* reference style.

*Journal article, up to six authors, followed by et al.:*

Zmirou D., Gauvin S., Pin I., Momas I., Just J., Sahraoui F. *et al.* Five epidemiological studies on transport and asthma: objectives, design and descriptive results. *J Expo Anal Environ Epidemiol* 2002; **12**: 186–196.

*Journal article, e-pub ahead of print:*

Moore-Maxwell C.A., Datto M.B., and Hulette C.M. Chemotherapy-induced toxic leukoencephalopathy causes a wide range of symptoms: a series of four autopsies. *Mod Pathol* 2004; e-pub ahead of print 2 January 2004; doi:10.1038/modpathol.3800049.

*Journal article, in press:*

Scher D.P., Sawchuk R.J., Alexander B.H., and Adgate J.L. Estimating absorbed dose of pesticides in a field setting. *J Toxicol Environ Health A* (in press).

*Complete book:*

West B.T., Welch K.B., and Galecki A.T. *Linear Mixed Models*. Chapman & Hall/CRC: Boca Raton, FL, 2004.

*Chapter in book:*

Wester R.C., and Maibach H.I. Animal models for percutaneous absorption. In: Wang R.G.M., Knaak J.B., and Maibach H.I. (eds). *Health Risk Assessment: Dermal and Inhalation Exposure and Absorption of Toxicants*. CRC Press: Boca Raton, FL, 1993, pp 89–103.

*Abstract:*

Chester G., and Ward R.J. An accurate method for measuring potential dermal exposure to pesticides. *Hum Toxicol* 1983; **2**(Suppl 2): 555 (abstract 452).

*Correspondence:*

Rao J.S., and Pudukall V.K. Gene-expression profile in human cells exposed to zinc [letter]. *J Toxicol Sci* 2007; **32**:193–196

**EndNote** (<http://www.endnote.com>) users should select the *Journal of Exposure Science and Environmental Epidemiology* output style for the correct reference style.

Personal communications must be allocated a number and included in the list of references in the usual way or simply referred to in the text; the authors may choose which method to use. In either case authors must obtain permission from the individual concerned to quote his/her unpublished work.

**Supplementary information**

Supplementary information (SI) is peer-reviewed material directly relevant to the conclusion of an article that cannot be included in the printed version owing to space or format constraints. The article must be complete and self-explanatory without the SI which is posted on the journals' web site and linked to the article. SI may consist of data files, graphics, movies or extensive tables. Authors should submit documents in their FINAL format as they are not edited, typeset or changed and will appear online exactly as submitted. When submitting SI authors are required to:

- Include a text summary (no more than 50 words) to describe the contents of each file.
- Identify the types of files (file formats) submitted.
- Include the text 'Supplementary information is available at (the journal's name)'s website' at the end of the article and before the references.

**Availability of data and materials**

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Authors of papers describing structures of biological macromolecules must provide experimental data upon request of editors if they are not already freely accessible in a publicly available database such as **Protein DataBank, Nucleic Acids Database or Biological Magnetic Resonance Databank**. Five separate copies of these data should be provided to the editors in an appropriate format (for example, CD or DVD) for the purposes of peer-review.

**SUBMISSION OF PAPERS**

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Cost	\$987	\$1,470	\$1,953	\$2,247	\$2,541	\$2,793	\$252 per additional colour figure

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### Duplicate publication

Papers must be original and not published or submitted for publication elsewhere. This rule applies to non-English language publications. NPG allows and encourages prior publication on

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### **Disclosure/Conflict of interest**

In the interests of transparency and to help readers form their own judgments of potential bias, authors should declare any competing financial interests in relation to the work described in their cover letter and in the conflict of interest section of their manuscript. In cases where the authors declare a competing financial interest, a statement to that effect is published as part of the article. If no such conflict exists, the statement will simply read that the authors have nothing to disclose.

For the purposes of this statement, competing interests are defined as those of a financial nature that, through their potential influence on behavior or content, or from perception of such potential influences, could undermine the objectivity, integrity or perceived value of a publication. They can include any of the following:

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It is difficult to specify a threshold at which a financial interest becomes significant, but note that many US universities require faculty members to disclose interests exceeding \$10,000 or 5% equity in a company. Any such figure is arbitrary, so we offer as one possible practical alternative guideline: "Declare all interests that could embarrass you were they to become publicly known after your work was published." We do not consider diversified mutual funds or investment trusts to constitute a competing financial interest.

The statement must contain an explicit and unambiguous statement describing any potential conflict of interest, or lack thereof, for any of the authors as it relates to the subject of the report. Examples include "Dr. Smith receives compensation as a consultant for XYZ Company," "Dr. Jones and Dr. Smith have financial holdings in ABC Company," or "Dr. Jones owns a patent on the diagnostic device described in this report." These statements acknowledging or denying conflicts of interest must be included in the manuscript under the heading 'Conflict of Interest'. The 'Conflict of Interest' disclosure appears in the cover letter, in the manuscript submission process and before the "References" section in the manuscript.

Following the conflict of interest heading, there must be a listing for each author, detailing the professional services relevant to the submission. Neither the precise amount received from each entity nor the aggregate income from these sources needs to be provided. Professional services include any activities for which the individual is, has been, or will be compensated with cash, royalties, fees, stock or stock options in exchange for work performed, advice or counsel provided, or for other services related to the author's professional knowledge and skills. This would include, but not necessarily be limited to, the identification of organizations from which the author received contracts or in which he or she holds an equity stake if professional services were provided in conjunction with the transaction.



Examples of declarations are:

**Conflict of interest.**

The authors declare no conflict of interest.

**Conflict of interest.**

Dr Caron's work has been funded by the NIH. He has received compensation as a member of the scientific advisory board of Acadia Pharmaceutical and owns stock in the company. He also has consulted for Lundbeck and received compensation. Dr Rothman and Dr Jensen declare no potential conflict of interest.

**Communication with the media**

Material submitted must not be discussed with the media. We reserve the right to halt the consideration or publication of a paper if this condition is broken. If a paper is particularly newsworthy, the press release will be sent to our list of journalists in advance of publication with an embargo that forbids any coverage of the manuscript, or the findings of the manuscript, until the time and date clearly stated. Authors whose papers are scheduled for publication may also arrange their own publicity (for instance through their institution's press offices), but they must strictly adhere to our press embargo and are advised to coordinate their own publicity with our **press office** ([press@nature.com](mailto:press@nature.com)).

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**Statement of Ethics**

**Authorship**

A manuscript will be considered for publication on the understanding that:

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3. if the paper is accepted it will not subsequently be published in the same or similar form in any language without the consent of publishers

Any changes to the author list after submission, such as a change in the order of the authors, or the deletion or addition of authors, needs to be approved by a signed letter from every author.

**Correspondence with the journal**

One author is designated the contact author for matters arising from the published paper (materials requests, technical comments and so on). It is this author's responsibility to inform all coauthors of matters arising and to ensure such matters are dealt with promptly. After acceptance for publication, proofs are e-mailed to this corresponding author who should circulate the proof to all coauthors and coordinate corrections among them.

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Plagiarism is when an author attempts to pass off someone else's work as his or her own. Duplicate publication, sometimes called self-plagiarism, occurs when an author reuses substantial parts of his or her own published work without providing the appropriate references. Minor plagiarism without dishonest intent is relatively frequent, for example, when an author reuses parts of an introduction from an earlier paper.

If plagiarism is found, the journal will contact the author's institute and funding agencies. The paper containing the plagiarism will be marked on each page of the PDF and depending on the extent of the plagiarism, the paper may also be formally retracted.

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Images submitted with a manuscript for review should be minimally processed (for instance, to add arrows to a micrograph). Authors should retain their unprocessed data and metadata files, as editors may request them to aid in manuscript evaluation. If unprocessed data is unavailable, manuscript evaluation may be stalled until the issue is resolved.

A certain degree of image processing is acceptable for publication (and for some experiments, fields and techniques is unavoidable), but the final image must correctly represent the original data and conform to community standards. The guidelines below will aid in accurate data presentation at the image processing level:

- Authors should list all image acquisition tools and image processing software packages used. Authors should document key image-gathering settings and processing manipulations in the Methods section.
- Images gathered at different times or from different locations should not be combined into a single image, unless it is stated that the resultant image is a product of time-averaged data or a time-lapse sequence. If juxtaposing images is essential, the borders should be clearly demarcated in the figure and described in the legend.
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For **gels and blots**, positive and negative controls, as well as molecular size markers, should be included on each gel and blot – either in the main figure or an expanded data supplementary figure. The display of cropped gels and blots in the main paper is encouraged if it improves the clarity and conciseness of the presentation. In such cases, the cropping must be mentioned in the figure legend.

- Vertically sliced gels that juxtapose lanes that were not contiguous in the experiment must have a clear separation or a black line delineating the boundary between the gels.
- Cropped gels in the paper must retain important bands.
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**Microscopy** adjustments should be applied to the entire image. Threshold manipulation, expansion or contraction of signal ranges and the altering of high signals should be avoided. If 'Pseudo-colouring' and nonlinear adjustment (for example 'gamma changes') are used, this must be disclosed. Adjustments of individual colour channels are sometimes necessary on 'merged' images, but this should be noted in the figure legend. We encourage inclusion of the following with the final revised version of the manuscript for publication:

- In the Methods section, specify the type of equipment (microscopes/objective lenses, cameras, detectors, filter model and batch number) and acquisition software used. Although we appreciate that there is some variation between instruments, equipment settings for critical measurements should also be listed.
- The display lookup table (LUT) and the quantitative map between the LUT and the bitmap should be provided, especially when rainbow pseudocolour is used. It should be stated if the LUT is linear and covers the full range of the data.
- Processing software should be named and manipulations indicated (such as type of deconvolution, three-dimensional reconstructions, surface and volume rendering, 'gamma changes', filtering, thresholding and projection).
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## **Bioethics**

### **Human and other animal experiments**

For primary research manuscripts reporting experiments on live vertebrates and/or higher invertebrates, the corresponding author must confirm that all experiments were performed in accordance with relevant guidelines and regulations. The manuscript must include in the Supplementary Information (methods) section (or, if brief, within of the print/online article at an appropriate place), a statement identifying the institutional and/or licensing committee approving the experiments, including any relevant details regarding animal welfare, patient anonymity, drug side effects and informed consent.

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The Editor may seek advice about submitted papers not only from technical reviewers but also on any aspect of a paper that raises concerns. These may include, for example, ethical issues or issues of data or materials access. Very occasionally, concerns may also relate to the implications to society of publishing a paper, including threats to security. In such circumstances, advice will usually be sought simultaneously with the technical peer-review process. As in all publishing decisions, the ultimate decision whether to publish is the responsibility of the editor of the journal concerned.

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**Accept**, with or without editorial revisions. Invite the authors to revise their manuscript to address specific concerns before a final decision is reached.

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### **Anonymity**

We do not release reviewers' identities to authors, except when reviewers specifically ask to be

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Reviewer selection is critical to the publication process, and we base our choice on many factors, including expertise, reputation, and specific recommendations.

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In cases where coauthors disagree about a correction, the editors will take advice from independent peer-reviewers and impose the appropriate correction, noting the dissenting author(s) in the text of the published version.

### **Non-Native Speakers of English**

Researchers who are not native speakers of English who submit manuscripts to international journals sometimes receive negative comments from referees or editors about the English-language usage in their manuscripts, and these problems can contribute to a decision to reject a paper. To help reduce the possibility of such problems, we strongly encourage such authors to take at least one of the following steps:

- Have your manuscript reviewed for clarity by a colleague whose native language is English.
- Use one of the many English language editing services that are available, such as that offered by Nature Publishing Group Language Editing (<http://languageediting.nature.com>). An editor will improve the English to ensure that your meaning is clear and to identify problems that require your review.

Please note that the use of Nature Publishing Group Language Editing is at the author's own expense and in no way implies that the article will be selected for peer review or accepted by an NPG journal (or any other journal). The decisions that the editors of any NPG journal make based on the quality and suitability of a manuscript for that journal are entirely independent of whether that manuscript has been language-edited by Nature Publishing Group Language Editing.

## Guidelines for preparing artwork for Nature Publishing Group

This guide is to assist authors whose manuscripts have been accepted for publication by Nature Publishing Group. It will help you to prepare artwork so that it will be processed as quickly and smoothly as possible, and give the best possible results in the final printed version. Please follow these instructions carefully.

We request that at submission, ALL figures are of a high enough quality to be assessed in the peer review process.

### Electronic file formats

#### **We prefer:**

Adobe Illustrator (.ai or .eps)	Fonts to be included.
CorelDRAW (.cdr) version 8 or above	Fonts to be included.
Photoshop (.psd)	Please supply with layers intact.

#### **We can accept:**

TIFF (.tiff)	Compress if file size is large
EPS (.eps)	Fonts to be included.
MS Word (.doc)	If embedding images, do not compress the image size using image toolbar print settings as this will render at too low a resolution. Reduce the scale instead or increase page size. <u>Do not</u> output to .prn (print to file).
MS PowerPoint (.ppt)	
MS Excel (.xls)	
JPEG (jpg)	Compress if file size is large. Please supply the highest possible quality (between 10 and 12) to prevent reduction of quality.
Adobe Acrobat (.pdf)	Use Print PDF or Press PDF settings. Always use embed fonts options setting (Fonts tab). Fonts to be included.
PICT*	Compress if file size is large.
Freehand (.FHx)*	Fonts to be included
TeX and LaTeX	
ChemDraw™	Please apply settings in the ACS-1996 style sheet.

We cannot accept CorelDRAW before version 8, DeltaGraph or SigmaPlot.

#### **\*Note for users of E-Journal Press**

The formats listed above are those preferred/accepted by our production department. However, if you are submitting .FHx, PICT or .PRS files, the conversion engine may be unable to accept them. Instead, if a failure occurs, you will be able to upload a PDF version of the original source file.

#### **Image types:**

Raster formats (bitmapped images)

Best for photographs and scans  
(Photoshop or TIFF files are preferred)  
Best for graphs and schematic diagrams

Line (or vector) formats

## **Figures in print**

### **Resolution**

Minimum resolution of 300 dpi at the size the image is to appear in print. 72dpi files are not usable.

Halftone images	<b>300 dpi</b>
Images containing text	<b>400 dpi</b> ( <b>600 dpi</b> where image contains small text or other fine detail)
Line art	<b>1000 dpi</b>

### **Sizing**

Single image width	<b>86 mm</b> (should be able to fit into a single column of the printed journal)
Multi-part image width	<b>178 mm</b> (should be able to fit into a double column of the printed journal)
Text size	<b>8 point</b> (should be readable after reduction – avoid large type or thick lines)
Line width	<b>Between 0.5 and 1 point</b>

Figures should be:

- as small as possible (for reasons of space in the journal)
- supplied in a comparable size to similar figures in printed issues of the journal
- able to fit into a single column of the printed journal wherever possible (single column width is 86mm wide and double column is 178mm)
- able to be reduced significantly without loss of quality wherever possible.

### **Text**

Lettering should be:

- in a sans serif typeface (preferably Helvetica or Arial)
- in the same typeface throughout
- not placed directly over images or shaded areas
- bold upright (not italic) and lowercase when labelling multipart figures
- in one-letter code in Courier for amino acid sequences
- 8 point for labels. Ensure that lettering will remain readable after reduction (avoid large type or thick lines) – we recommend that lines are between 0.5 and 1 point.

## **Colour artwork**

The colour printing process requires files to be in CMYK format.

We prefer authors to convert their artwork to CMYK format before submission – this means that the author can approve any change in colour that occurs during the conversion process.

However, conversion from RGB to CMYK is very critical and depends upon profiles, so if you are not well versed with conversion, please supply the RGB files. We will convert these with standard profiles, so as to minimize the loss in colours.

## **Colour on the web**

Authors who wish their articles to have FREE colour figures on the web (only available in the HTML (full text) version of manuscripts) must supply separate files in the following format. These files should be submitted as supplementary information and authors are asked to mention they would like colour figures on the web in their submission letter and on the Colour Artwork Production Form.

Width	<b>500 pixels</b> for single images <b>900 pixels</b> for multi-part images (authors should select “constrain proportions”, or equivalent instructions, to allow the application to set the correct height automatically).
Resolution	<b>125 dpi</b> (dots per inch)
Format	<b>JPEG</b> (.jpg) for photographs <b>GIF</b> (.gif) for line drawings or charts
File naming	Please save image with .jpg or .gif extension to ensure it can be read by all platforms and graphics packages.

Authors may be asked to pay the full colour fee for figures that are not submitted in the format described above.

## **Supplementary Information files**

### **Accepted file formats**

- Quick Time files (.mov)
- Graphical image files (.gif)
- HTML files (.html)
- MPEG movie files (.mpg)
- JPEG image files (.jpg)
- Sound files (.wav)
- Acrobat files (.pdf)
- MS Word documents (.doc)
- Postscript files (.ps)
- MS Excel spreadsheet documents (.xls)
- PowerPoint files (.ppt)
- TeX and LaTeX



**File size and specifications**

File sizes must be as small as possible, so that they can be downloaded quickly. The number of files should be limited to eight, and the total file size should not exceed 8MB. Individual files should not exceed 1MB. Please seek advice from the editorial office before sending files larger than our maximum size to avoid delays in publication.

Images should not exceed **640 x 480 pixels** (9 x 6.8 inches at 72 pixels per inch) but we would recommend **480 x 360 pixels** as the maximum frame size for movies. We would also recommend a frame rate of **15 frames per second**.

If applicable to the presentation of the supplementary information, use a **256 colour palette**.

Please consider the use of lower specification for all these points if the supplementary information can still be represented clearly. Our recommended maximum data rate is **150 KB/s**. Further advice on file types is also available from the [Tips](#) webpage.

Further questions about the submission or preparation of supplementary information should be directed to the editorial office.