

eBio - Formatting Guidelines

Qualitative requirements. Care should be taken in manuscript preparation. Substance, quality, and clarity of presentation are all very important and will receive critical review.

Original research articles should be written for an interdisciplinary readership. Discipline-specific terminology should be briefly defined or referenced. All articles should generally have the following sections: Abstract, Introduction, Methods, Results, Discussion, Acknowledgments, and Literature Cited.

The **Abstract** should give a tight synopsis of what the manuscript is about and should succinctly state the objectives and scope of the research results and principal conclusions.

The **Introduction**, with clarity and brevity, should identify the problem or question being investigated, include historic perspectives, and summarize the overall research goals.

The **Materials and Methods** section should describe the design of the research and provide a sufficient level of detail so that results could be reproduced; the methodology for all data presented should be adequately described in this section, with any specialized methods concisely explained for a wide range of science-oriented readers.

The **Results** section should present the findings in a clear and simple format. Detailed figures and tables should be included to the extent useful for effective communication of results and the interpretation of their significance. The Materials and Methods section and the Results section should be tightly linked.

The **Discussion** section should not be a restatement of results, but should appropriately revisit the primary findings and summarize and evaluate them within the context of other discoveries. It is helpful to raise questions that remain and that are worthy of further consideration. The Discussion section should not be a prolonged general review of the literature.

The **Acknowledgments** section should note significant help received and financial assistance.

The **Literature Cited** section needs qualitative constraint and should only include literature of significance.

Notes (short communications) may describe limited research observations that show promise for follow-up research (1-2 figures). When submitting notes, authors should support their observations with enough background information to put them in context, including a concise discussion of the scientific significance of the data and references to the primary literature. In addition to a title page that includes author names and affiliations, manuscripts for notes submissions should include the following sections: (1) an abstract, (2) a section called "Summary" that combines the introduction, results, and conclusion, (3) Materials and Methods, (4) Acknowledgements, and (5) Literature Cited.

Research summaries and general interest articles should be condensed, yet generally readable broadly-based summaries of previously published articles. The summaries and articles are intended to provide an information link among researchers from different disciplines and between researchers and the general public. Figures, tables, and photographs should be included. Articles can have a variety of formats, but should always include an Abstract, Introduction, and Literature Cited section.

Manuscripts on Scholarship of Teaching and Learning (SoTL). eBio accepts articles and notes in the areas of SoTL that connect with its disciplinary focus of laboratory-based life sciences.

Format basics. Manuscripts should be submitted double spaced in the 12 pt. Times New Roman font (please include a note if other fonts were used, e.g., for symbols). The text should be left-justified text in one column with an 8.5" by 11" page format, with 1" margins on all sides. Pages should be numbered and line numbering should be turned on. The top of the first page should list the article title

and author name(s), with numbered superscripts referencing their affiliation(s), address(es), phone number(s), and e-mail address(es). An asterisk should note who the corresponding author is. The first line of each paragraph should be indented by using an inserted 0.25" tab, rather than by using a "split boundary margin" in the ruler. The checklist below serves as a reference for other formatting considerations.

Headings. Major headings, i.e., Introduction, Materials and Methods, etc., should use title case (i.e., first letter of each major word capitalized) and be centered and in bold, with a blank line above and below. Subheadings, or 2nd-level headings, should be in bold on their own left-justified lines, in sentence case (only first letter of the first word capitalized), with a blank line above. Sub-subheadings, or 3rd-level headings, should be in italic at the beginning of indented paragraphs, in sentence case, followed immediately by a period, without a blank line above.

Footnotes/Endnotes. For research articles, footnotes should only be used in tables. For research summaries and general interest articles, footnotes may be used in the manuscript text, and should be placed in a separate section towards the end of the manuscript (i.e., formatted as endnotes, rather than page-by-page footnotes).

Scientific names, authorities for the names and common names of each species should be given at least once (either the first time mentioned in the text, or, if applicable, in a table or appendix that lists the species discussed) in the following format, *Genus species* Authority (Common Name). Once a scientific name has been mentioned, the simplest and most widely recognized accurate name appropriate for the context of the article—usually the common name—should be used throughout the remainder of the manuscript. In subsequent mentions of a species' scientific name, the abbreviation of the genus name is preferred, except when the name begins a sentence, or when the use is ambiguous. Please note that the journal policy is to capitalize the first letters of the common names of all species.

Within-text references. Multiple literature citations within parentheses should be listed in alphabetical order, not chronological order. Use "et al." if there are more than 2 authors. For citations by the same author(s) published in the same year, add a letter to the year (e.g., 1988a, 1988b) to distinguish them. For multiple sources by the same author(s), the name(s) are listed only once with the years separated by commas, unless there are multiple sources by the same author(s); in that case, semi-colons are used to separate the lists that include comma-separated elements. Note the following examples:

(McKnight and Smith 1925, Osgood et al. 2012, Samuels 1993)
(McKnight and Smith 1925; Osgood et al. 2009, 2012; Samuels 1993)
(McKnight and Smith 1925; Osgood et al. 2012; Samuels 1993a, b)

Use and acknowledgment of personal communications and unpublished data. Authors should have written permission (from their original source) for the citation of personal communications and any use of unpublished data that is not their own. Citations should be made as parenthetical within-text references, including name, affiliation, and location, as per the following examples.

(J. Smith, Department of Genetics, Columbia University, New York, NY, 2012, pers. comm.)
(L. Roberts, Histology Department, Columbia University, Baltimore, MD, 2005 unpubl. data).

Figure basics. The journal has a page size of 6.875 by 10 inches, with a maximum printable area in most instances of 5.25 by 8.3 inches.

All figures (graphs, maps, photos, etc.) need to be referenced within the manuscript, and numbered in the order in which they are first referenced. Figures should be submitted as separate 600 dpi

resolution files in the same size they are to appear in the journal. They should not be embedded in the manuscript.

Several images may be mounted together as a composite figure. Figures should be crisp and clear, without fuzziness, pixilation, or jagged lines. Avoid the use of bold formatting and heavy lines and the use of solid black coloration in bar graphs. Figure text should be in Helvetica or comparable sans serif font. Make sure all text is of sufficient size to be legible, but no larger than 10 pt size. Figure captions should be provided for all figures.

Each manuscript is published separately with its own cover. Cover photos to be considered should be in color and sized to 6" wide in landscape mode.

Each photo caption should identify the source from which the photo was taken and/or the name of the photographer. It should also note that the photo is being "Used with permission".

Table basics. Table widths may be 5.25" in portrait mode, or 8.3" in landscape mode, with text at 910 pt. Times New Roman.

Tables should be placed toward the end of the manuscript after the Literature Cited section, or they may be submitted as separate files. Tables should be created and formatted as Microsoft Word tables (choose "insert" in the "Table" menu) or as simple rows of single-tab delimited text (never with the use of spaces). Tables created in Excel should be simply copied and pasted into the Word file, rather than placed by choosing "insert ... object".

Supplemental files. Authors have the option to have supplemental online file links referenced in their articles (i.e., data and information that enhances, but is not essential for understanding of the article or whose size or format would make inclusion in the article difficult). These files are subject to peer-review and the decision to include them is made by the author in collaboration with the Manuscript Editor. Supplemental files will be posted on the journal's website at the same time that the PDF of an article is posted. Supplemental files should be smaller than 10 MB in size. Supplemental files can be of a wide variety of formats and can be compressed, but should fall into one of the following categories: Dataset, Figure, Table, Text, Protocol, Audio, 3D object files, or Video. Finalized supplemental files should be publication-ready, since they will not be copy edited. The within-article text reference to a hotlinked supplemental file is formatted as follows.

Supplemental Table 1 (available online at <https://eaglehill.us/ebio-authorname-file#.pdf>).

Literature Cited. Citations are listed in alphabetical order. There should be formatted as hanging paragraphs with one line return at the end of each citation and no use of tabs or series of spaces. The following examples should be carefully reviewed. Please note the sequence of information, use of italics, capital vs. lower case letters, initials, the use of spaces, parentheses, abbreviations, use of en-dashes and regular dashes, inclusion of total number of pages for books, use of capital letters for book titles, use of lower case letters for journal article titles, use of full journal names rather than abbreviations, etc. In particular, only the first author's surname precedes his/her initials—for all other authors and for the list of editors of the parent publication, the initials are given before the surname; no spaces between an author's initials; no spaces between volume number, colon, and page numbers. For book titles, capitalize all major words. For all other titles (reports, articles, theses, etc.) only capitalize the first letter of the first word.

Chapter or section of a book or a proceedings volume

Fuller, M.T. 1993. Micromanipulated bivalents can trigger mini-spindle formation in *Drosophila melanogaster* spermatocyte cytoplasm. Pp. 71–147, In M. Bate and A.M. Aria (Eds.). Development of *Drosophila melanogaster*. Volume I. Cold Spring Harbor Laboratory Press, Plainview, NY. 298 pp.

Journal articles

Bonaccorsi, S., Jr., M. Grazia Giansanti III, and M Gatti. 1998. Spindle self-organization and cytokinesis during male meiosis in asterless mutants of *Drosophila melanogaster*. *Journal of Cell Biology* 142:751–761.

Feldgarden, M., and M.A. Riley. 1998. High levels of colicin resistance in *Escherichia coli*. *Evolution* 52:1270–1276.

Reports

Kleinheinz, G.T. and E. Englebert. 2005. *Escherichia coli* and the beach: Implications for public health. In *Current Research on Escherichia coli*. National Institutes of Health. Report No. 2005-01. 29 pp.

Theses or dissertations

Hasin, P. 2005. Aneuploidy in human peripheral blood lymphocytes following *in vitro* exposure to 0.1THz radiation. Dissertation. Tel-Aviv University, Tel-Aviv, Israel. 156 pp.

Online sources

Stevens, P.F. 2005. Plant DNA C-values Database. Release 4.0, October 2005.
<http://www.kew.org/genomesize/homepage>. Accessed February 14, 2012.

Additional guidelines. The following is a routine checklist of editorial considerations. It is intended for reference use.

Routine checklist of editorial considerations

The following is a routine checklist to be used to review whether your manuscript has met basic journal formatting guidelines. Final manuscripts that significantly depart from these guidelines may be returned for revision prior to being copy edited.

Title, author names and affiliations, Abstract, and Acknowledgments

The title should generally be no more than 60 characters long, including spaces.

Capitalize first letter of words in title, other than words like “and, by, for, from”, etc.

Spell out at least full first names of author(s).

Flag each author name and address with a matching superscripted number, and add an asterisk for the corresponding author. Author addresses should be full mailing addresses, including zip or postal codes.

Include a brief Abstract for your article, generally with no more than 120 words.

Include a brief Acknowledgments section to thank those who significantly helped with or supported the research.

Main body of article

Paragraphs should be indented using a left 0.25" tab, not by using a “First line indent”, and not by using multiple spaces.

Do not use multiple spaces within the text, including before the start of a new sentence.

Instead of ampersands (&), use “and”.

Use double curly (typographer’s) quotes rather than straight quotes. “xxx” ... vs ... 'xxx'

Use curly apostrophe rather than straight apostrophes.

Use prime and marks to denote inches and feet (" and ') ... and minutes and seconds (' and ").

Only place punctuation marks within quotes when the marks are part of the quote. Thus: “xxx”, “yyy”, and “zzz”.

Use “xxx” instead of ‘xxx’, except for quotes within quotes, with single quotation marks for the inner quote.

Follow comma convention for lists ... a, b, and c

Place commas after ... e.g., ... i.e., ... et al., ... do not italicize

Preferentially use parentheses instead of brackets, except when nested... (xxx) instead of [xxx] ... (xxx [yyy] zzz).

Major headings, e.g, Introduction ... Capitalize first letter of each word, other than words like “and, by, for, from”, etc. Insert a blank line above and below. Format in bold.

Subheadings, or 2nd level headings ... Place on separate line. Capitalize first letter of first word and proper names. Insert blank line above. Format in bold.

Sub-subheadings, or 3rd level headings ... Place at start of normal paragraph. Capitalize first letter of first word and proper names. Format in italics but not bold. Follow with a period.

When referring to a figure, use Figure within a sentence, but Fig. if referenced within parentheses.

Cite informal observations by colleagues as ... (name, affiliation, location, pers. comm.) or (name, affiliation, location, unpubl. data).

Species names

Scientific names ... Italicize. Do not underline. Capitalize genus name. Do not italicize sp. or spp.

Common names ... Capitalize the first letters of the name.

The first time a species is mentioned after the Abstract, the scientific name with authority name(s) should be given, followed by the common name in parentheses. Alternatively, scientific names and authorities can be provided in a table or appendix.

After a scientific name has been mentioned once, the simplest, most widely recognized name appropriate for the context should be used (usually the common name).

Pay attention to whether the naming authority should be in parentheses, which denote that the species has been reclassified taxonomically since the original description. Unless needed due to the taxonomic focus of the manuscript, omit the year from the authority.

Citations within main body of text

Citations within text should be listed alphabetically rather than chronologically.

Do not use commas between authors and year published ... (Xxxxx 1999) ... not (Xxxxx, 1999).

When referencing specific pages for a source, provide the page numbers immediately following the year of publication and colon with no spaces. ... Xxxxx 2001:24–45

Page numbers for a source should be written out in full ... 132–138 ... not 132–8.

Use comma or semi-colon citation separators, as follows: (Xxxxx 1988, Yyyy 1989, Zzzzz 1966) ... But ... (Xxxxx 1988, 1989; Yyyy 1989; Zzzzz 1966).

Numbers and measurements

Use the symbol ~ when giving an approximate measurement (e.g., ~25 m), but use ca. when giving an approximate date (e.g., ca. 825 B.P.)

Use abbreviated English units (with metric units in parentheses, when necessary)

Arabic numerals should be used in preference to words when the number designates anything that can be counted or measured, except at the beginning of a sentence or to avoid ambiguity, e.g., ...

One item was found. ... We found 1 item.

Set off mathematical operators by single spaces when used with numbers or variable symbols; e.g., 37.8 ± 3.46 mm, $P > 0.05$.

When mathematical symbols are used as modifiers rather than operators, do not set off with a space ... the +2.3 difference ... length of >5 cm

Do not underline mathematical operators (e.g., use \pm , \leq , \geq rather than an underlined +, <, >).

Use en dashes (option key + dash key) rather than regular dashes or hyphens when indicating a range or span between numbers or things: 28–48 ... 5 October–14 November ... north–south

In lieu of parentheses, em dashes may be used.

Use commas as part of 5-digit or greater numbers, but not 4-digit numbers ... 20,000 units... 1200 units

Use only subscripted and superscripted characters as automatically provided by the word-processor.

Literature Cited section

Format citations as hanging paragraphs with a single paragraph return at the end. Do not use tabs or multiple spaces.

Names of authors should not be fully capitalized, e.g., ... R.G. Smith ... not ... R.G. SMITH

Substitute initials for author full first and middle names, with a period after each initial and no space between initials, e.g., R.B. Smith ... not ... R. B. Smith.

Note sequencing of author names and initials and comma before the “and” ... Smith, Sr., A., B.B. Brown, Jr., and C.C. Gold III. 2000. Note that with the exception of the first author, the given name initials are placed before the surname.

If author names are identical for multiple citation listings, repeat names of authors rather than using an underscore.

Remove spaces in journal volumes, issues, and pages: e.g., Smith, A. 1917. Article title. Journal Name 60(1):83–87.

In titles of books, capitalize the first letter of each word, other than words like “and, by, for, from”, etc.

For titles of articles, reports, dissertations, and theses, only capitalize the first letter of the first word and proper names.

For titles that have a colon, always capitalize the first letter of the first word after the colon.

Use full journal names rather than abbreviations.

For books, reports, etc., list the publisher city, state or province, and country. List number of pages.

For theses and dissertations, list the academic institution, city, state or province, and country. List number of pages.

Cite web pages like other citations, giving the individual or institutional author(s), the title of web page, web address where it can be found, and the date it was accessed by the author. ... Title 1999. Available on line at www.aia/seaice/1999. Accessed 25 September 2006.

Figures

Scale figures to fit the printed page (generally, 5.125" wide and up to 8.3" tall). Try experimental photocopy reductions to be sure. Figures can be formatted in landscape mode.

Each figure should be submitted as a separate high-quality high-resolution jpg or pdf file (600 dpi for grayscale, 350 dpi for color).

Make sure text of scaled figures is no larger than 10 pt. (~ 2 mm). Use only sans serif font such as Helvetica for labeling.

Bold formatting of text should be avoided.

Lines heavier than hairlines should be avoided. ... Avoid using gridlines.

Figures should have no background color.

Avoid filling in broad figure elements with solid black. Use distinct shades of gray or different line patterns instead.

For each character string (axis labels, legends, etc.), capitalize only the first letter of the first word and proper names.

Make sure printouts of scaled figures are crisp and clear with ample contrast (no fuzziness or jagged lines).

Tables

Scale tables to fit the printed page (generally 5.125" wide and up to 8.3" tall). Try experimental photocopy reductions to be sure. Tables can be formatted in landscape mode.

Format tables as simple rows of single-tab delimited text. NEVER use spaces or multiple tabs to separate elements in a table.

Format tables in 9 pt. Times New Roman.

For column headings and table "cells", capitalize the first letter of the first word and proper names.

Do not insert vertical lines in tables.