

Template for preparing your submission to G3: Genes|Genomes|Genetics using Overleaf

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*Corresponding author: Please insert the email for the corresponding author. The corresponding author should be marked with the relevant number in the author list, as shown in the example.

1 Abstract

2 The abstract should be written for people who may not read the entire paper, so it must stand on its own. The impression it makes usually determines
3 whether the reader will go on to read the article, so the abstract must be engaging, clear, and concise. In addition, the abstract may be the only part of the
4 article that is indexed in databases, so it must accurately reflect the content of the article. A well-written abstract is the most effective way to reach intended
5 readers, leading to more robust search, retrieval, and usage of the article.
6 Please see additional guidelines notes on preparing your abstract below.

7 **Keywords:** Keyword; Keyword2; Keyword3

8 This G3: Genes | Genomes | Genetics journal template is provided
9 to help you write your work in the correct journal format. Instructions
10 for use are provided below. Note that by default line numbers
11 are present to aid reviewers and editors in reading and comment-
12 ing on your manuscript. To remove line numbers, remove the
13 `lineno` option from the `\documentclass` declaration.

8 Guide to using this template in Overleaf

9 This template is provided to help you prepare your article for
10 submission to G3: Genes | Genomes | Genetics.

11 Author affiliations

12 For the authors' names, indicate different affiliations with the
13 symbols: *, †, ‡, §. After four authors, the symbols double, triple,
14 quadruple, and so forth as required.

15 Your abstract

16 In addition to the guidelines provided in the example abstract
17 above, your abstract should:

- 18 • provide a synopsis of the entire article;
- 19 • begin with the broad context of the study, followed by specific
20 background for the study;
- 21 • describe the purpose, methods and procedures, core findings
22 and results, and conclusions of the study;
- 23 • emphasize new or important aspects of the research;
- 24 • engage the broad readership of G3 and be understandable to
25 a diverse audience (avoid using jargon);

- be a single paragraph of less than 250 words; 26
- contain the full name of the organism studied; 27
- NOT contain citations or abbreviations. 28

Introduction 29

30 Authors should be mindful of the broad readership of the journal
31 and set the stage for the importance of the work to a generalist
32 reader. The scope and impact of the work should be clearly stated.

33 In individual organisms where a mutant is being studied, the
34 rationale for the study of that mutant must be clear to a geneticist
35 not studying that particular organism. Similarly, study of partic-
36 ular phenotypes should be justified broadly and not on the basis
37 of interest for that organism alone. General background on the
38 importance of the genetic pathway and/or phenotype should be
39 provided in a single, well-reasoned paragraph near the beginning
40 of the introduction.

Materials and methods 41

42 Manuscripts submitted to G3 should contain a clear description of
43 the experimental design in sufficient detail so that the experimental
44 analysis could be repeated by another scientist. If the level of detail
45 necessary to explain the protocol goes beyond two paragraphs,
46 give a short description in the main body of the paper and prepare
47 a detailed description for supporting information. For example,
48 details would include indicating how many individuals were
49 used, and if applicable how individuals or groups were combined
50 for analysis. If working with mutants indicate how many
51 independent mutants were isolated. If working with populations

1 indicate how samples were collected and whether they were ran-
2 dom with respect to the target population.

3 Statistical analysis

4 Indicate what statistical analysis has been performed; not just the
5 name of the software and options selected, but the method and
6 model applied. In the case of many genes being examined simulta-
7 neously, or many phenotypes, a multiple comparison correction
8 should be used to control the type I error rate, or a rationale for
9 not applying a correction must be provided. The type of correction
10 applied should be clearly stated. It should also be clear whether
11 the p-values reported are raw, or after correction. Corrected p-
12 values are often appropriate, but raw p-values should be available
13 in the supporting materials so that others may perform their own
14 corrections. In large scale data exploration studies (e.g. genome
15 wide expression studies) a clear and complete description of the
16 replication structure must be provided.

17 Results and discussion

18 The results and discussion should not be repetitive and give a fac-
19 tual presentation of the data with all tables and figures referenced.
20 The discussion should not summarize the results but provide an
21 interpretation of the results, and should clearly delineate between
22 the findings of the particular study and the possible impact of
23 those findings in a larger context. Authors are encouraged to cite
24 recent work relevant to their interpretations. Present and discuss
25 results only once, not in both the Results and Discussion sections.
26 It is acceptable to combine results and discussion in order to be
27 succinct.

28 Additional guidelines

29 Numbers

30 Use numerals rather than words to express whole and decimal
31 numbers in scientific text, titles, headings, tables, and figure cap-
32 tions. Comma for numbers greater than 999.

33 Units

34 Use abbreviations of the customary units of measurement only
35 when they are preceded by a number: "3 min" but "several min-
36 utes". Write "percent" as one word, except when used with a
37 number: "several percent" but "75%." To indicate temperature in
38 centigrade, use ° (for example, 37°); include a letter after the de-
39 gree symbol only when some other scale is intended (for example,
40 45°K).

41 Nomenclature and italicization

42 Italicize names of organisms even when when the species is not
43 indicated. Italicize the first three letters of the names of restriction
44 enzyme cleavage sites, as in HindIII. Write the names of strains in
45 roman except when incorporating specific genotypic designations.
46 Italicize genotype names and symbols, including all components of
47 alleles, but not when the name of a gene is the same as the name of
48 an enzyme. Do not use "+" to indicate wild type. Carefully distin-
49 guish between genotype (italicized) and phenotype (not italicized)
50 in both the writing and the symbolism.

51 Cross references

52 Use the `\nameref` command with the `\label` command to insert
53 cross-references to section headings. For example, a `\label` has
54 been defined in the section [Materials and methods](#).

In-text citations

Add citations using the `\citep{}` command, for example ([Neher](#)
56 [and Hallatschek 2013](#)) or for multiple citations, ([Neher and Hal-](#)
57 [latschek 2013](#); [Rödelsperger et al. 2014](#)).
58

For examples of different references, please see the example
59 bibliography file (accessible via the Project menu in the Overleaf
60 editor). This contains examples of articles ([Neher and Hallatschek](#)
61 [2013](#); [Rödelsperger et al. 2014](#)), a book ([Sturtevent 2001a](#)), a book
62 chapter ([Sturtevent 2001b](#)), ahead-of-print work ([Starita et al. 2015](#)),
63 a preprint ([Falush et al. 2016](#)) and software ([Kruijer 2015](#)).
64

Examples of article components

The sections below show examples of different header levels,
66 which you can use in the primary sections of the manuscript (Re-
67 sults, Discussion, etc.) to organize your content.
68

First level section header

Use this level to group two or more closely related headings in a
70 long article.
71

Second level section header

Second level section text.
73

Third level section header: Third level section text. These headings
74 may be numbered, but only when the numbers must be cited in
75 the text.
76

Figures and tables

Figures and Tables should be labelled and referenced in the stan-
78 dard way using the `\label{}` and `\ref{}` commands.
79

Sample figure

Figure 1 shows an example figure.
80
81

Sample table

Table 1 shows an example table. Avoid shading, color type, line
83 drawings, graphics, or other illustrations within tables. Use tables
84 for data only; present drawings, graphics, and illustrations as
85 separate figures. Histograms should not be used to present data
86 that can be captured easily in text or small tables, as they take up
87 much more space.
88

Tables numbers are given in Arabic numerals. Tables should
89 not be numbered 1A, 1B, etc., but if necessary, interior parts of the
90 table can be labeled A, B, etc. for easy reference in the text.
91

Sample equation

Let X_1, X_2, \dots, X_n be a sequence of independent and identically
93 distributed random variables with $E[X_i] = \mu$ and $\text{Var}[X_i] = \sigma^2 <$
94 ∞ , and let
95

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_i X_i \quad (1)$$

denote their mean. Then as n approaches infinity, the random vari-
96 ables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.
97

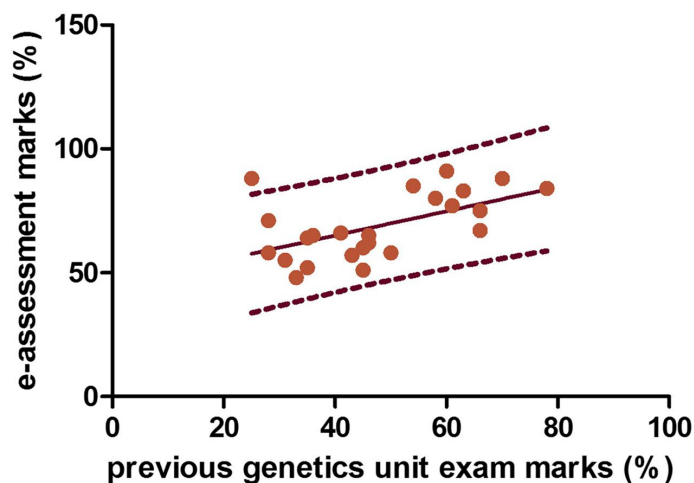


Figure 1 Example figure from <http://dx.doi.org/10.1534/g3.115.017509>. Please include your figures in the manuscript for the review process. You can upload figures to Overleaf via the Project menu. Images of photographs or paintings can be provided as raster images. Common examples of raster images are .tif/.tiff, .raw, .gif, and .bmp file types. The resolution of raster files is measured by the number of dots or pixels in a given area, referred to as “dpi” or “ppi.”

- minimum resolution required for printed images or pictures: 350dpi
- minimum resolution for printed line art: 600dpi (complex or finely drawn line art should be 1200dpi)
- minimum resolution for electronic images (i.e., for on-screen viewing): 72dpi

Images of maps, charts, graphs, and diagrams are best rendered digitally as geometric forms called vector graphics. Common file types are .eps, .ai, and .pdf. Vector images use mathematical relationships between points and the lines connecting them to describe an image. These file types do not use pixels; therefore resolution does not apply to vector images. Label multiple figure parts with A, B, etc. in bolded type, and use. Legends should start with a brief title and should be a self-contained description of the content of the figure that provides enough detail to fully understand the data presented. All conventional symbols used to indicate figure data points are available for typesetting; unconventional symbols should not be used. Italicize all mathematical variables (both in the figure legend and figure), genotypes, and additional symbols that are normally italicized.

1 Data availability

2 The inclusion of a Data Availability Statement is a requirement for
3 articles published in G3. Data Availability Statements provide a
4 standardized format for readers to understand the availability of
5 data underlying the research results described in the article. The
6 statement may refer to original data generated in the course of the
7 study or to third-party data analyzed in the article. The statement
8 should describe and provide means of access, where possible, by
9 linking to the data or providing the required unique identifier.

10 For example: Strains and plasmids are available upon request.
11 File S1 contains detailed descriptions of all supplemental files.
12 File S2 contains SNP ID numbers and locations. File S3 contains
13 genotypes for each individual. Sequence data are available at
14 GenBank and the accession numbers are listed in File S3. Gene
15 expression data are available at GEO with the accession number:

GDS1234. Code used to generate the simulated data can be found
at <https://figshare.org/record/123456>.

Acknowledgments

Acknowledgments should be included here.

Funding

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Conflicts of interest

Please either state that you have no conflicts of interest, or list relevant information here. This would cover any situations that might raise any questions of bias in your work and in your article’s conclusions, implications, or opinions. Please see https://academic.oup.com/journals/pages/authors/authors_faqs/conflicts_of_interest.

Literature cited

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Table 1 Students and their grades

Student	Grade^a	Rank	Notes
Alice	82%	1	Performed very well.
Bob	65%	3	Not up to his usual standard.
Charlie	73%	2	A good attempt.

^a This is an example of a footnote in a table. Lowercase, superscript italic letters (a, b, c, etc.) are used by default. You can also use *, **, and *** to indicate conventional levels of statistical significance, explained below the table.