

## Instructions to Authors

### SCOPE

#### General Guidelines

*Journal of Microbiology* (J. Microbiol., JM) publishes papers that deal with research on microorganisms, including archaea, bacteria, yeasts, filamentous fungi, microalgae, protozoa, and simple eukaryotic microorganisms. The fields considered for publication include Microbial Systematics and Evolutionary Microbiology, Microbial Ecology and Environmental Microbiology, Microbial Genetics, Genomics and Molecular Biology, Microbial Physiology and Biochemistry, Microbial Pathogenesis and Host-Microbe Interaction, Systems and Synthetic Microbiology and Bioinformatics, and Virology.

#### Specific Guidelines

JM does not consider manuscripts consisting mainly of the following:

- Simple identification of microorganism(s)
  - Cloning and sequencing of cDNAs or genes that have previously been reported in other species
  - Purification of proteins previously reported for other species
  - Conventionally achieved protein expression
  - Incomplete NMR or other spectroscopic assignments
  - Conventionally achieved protein crystallization
- Crystallization of proteins whose homologous structures have already been reported
- Simple antibiotic resistance patterns of clinical isolates
- Simple sequence types of clinical isolates
- Clinical statistics
- Simple production and biotechnological applications of natural or recombinant products.
- Simple expression of cloned gene(s) in a microbial host
- Antimicrobial activities of natural products without providing information regarding defined mechanisms and purified compounds
- In most cases, methodological papers will not be published unless they are novel and significant.

#### Guidelines for Descriptions of Novel Prokaryotic Taxa:

1. JM no longer accepts a paper reporting novel species based on the descriptions of single strain species. Only manuscripts reporting descriptions of novel taxa using multiple strains will be considered for publication. Single-strain species descriptions will be considered only in the following exceptional cases:
  - 1) isolation and characterization of ecologically important "candidate" or "uncultured" taxa,
  - 2) description of novel taxa above the rank of genus,
  - 3) description of multiple species in a genus,
  - 4) description of metabolically novel or important prokaryotic species.Authors wishing to publish a manuscript describing an exceptional single strain must submit a cover letter to the Editor-in-Chief, emphasizing why a proposed taxon is of exceptional importance and interest.
2. For genome sequencing data, the closed or almost complete genome sequence of the type strain of the proposed type species must be provided at the manuscript submission stage.
3. In addition to describing the overall genome relatedness index of the strains compared, the interpretation of genome data according to ecology, metabolism, biotechnology, and other biological contexts is highly encouraged.
4. JM no longer considers DNA-DNA hybridization results produced by wet experiments as a measure of genomic DNA relatedness but only accepts *in silico* overall genome relatedness indices such as average nucleotide identity (ANI).
5. Certificates confirming the deposition of novel type strains in two recognized culture collections in two different countries should be included with the manuscript submission.

### EDITORIAL POLICY

#### Originality

Only papers that report novel and significant scientific findings in microbiology will be considered and accepted for publication in JM. Thus, any manuscript submitted to JM must report original research. JM accepts a submitted manuscript on the condition that the presented work has not been published and is not under consideration for publication elsewhere.

#### Authorship

Credit for authorship should be based on the four criteria: (1) substantial contributions to conceptualization, design, and the acquisition, analysis, and interpretation of data; and (2) drafting of the article or revising it critically for significant intellectual content; and (3) final approval of the version to be published; and (4) agreement to be accountable for all aspects of the work, ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Any contributions for the paper which do not fit all four of these criteria should be listed in the "Acknowledgements" of the paper.

The corresponding author is responsible for ensuring that all the listed authors have agreed to all of the content, including the author list and author contribution statements and approved the manuscript submission to the journal. The corresponding author is also responsible for managing all communication between the journal and all co-authors before and after publication.

To avoid any possible dispute during processing, changes to authorship (e.g., including or excluding an author, changing the order of authors' names or affiliation number) during revision must be agreed upon by all authors and brought to the editor's attention in the cover letter submitted with the revised version. New authors must also confirm that they fully comply with the journal's authorship requirements.

#### Plagiarism and Permission

Authors must do their best to avoid plagiarism. As defined in the 1995 Random House Compact Unabridged Dictionary, plagiarism is the use or close imitation of the language and thoughts of another author and their representation as one's own original work. Plagiarism is not limited to the text. Author(s) may not use any part of a manuscript, including figures and tables, from another publication without permission. Author(s) cannot reuse their previously published work without a specific address; this is considered self-plagiarism. Fabrication, manipulation, and falsification of data are also viewed as misconduct in JM. Submitted manuscripts are screened for possible plagiarism or duplicate publication using similarity check once received. If plagiarism or duplicate publication is detected, the manuscript may be rejected. Author(s) must respond to requests from the JM editors when the original data and research notes require verification.

#### Availability of Materials

By publishing in JM, author(s) agree that any microbial strains, plasmids, viruses, or other materials such as prions or cell lines newly described in the articles be made available, in a timely fashion, to members of the scientific community for non-commercial purposes. JM strongly encourages author(s) to deposit important strains in publicly accessible culture collections and to refer to these collections and strain numbers in the manuscript (When the paper describes a novel species, the type strain of the species must be deposited in two culture collections in two different countries and the deposit certificates should be simultaneously submitted with the manuscript.). Authors should also indicate laboratory strain designations and donor sources when they distribute culture(s) or subculture specimen(s).

## Nucleic acid and protein sequences

Any novel nucleotide or amino acid sequences described in the manuscript should be available through one of public databases (GenBank, EMBL, DDBJ, and KOBIC), and the accession numbers should be included in the Materials and Methods section. Sequence data must be made available on publication.

## Microarray data

Microarray data must be deposited in public databases, such as GEO, ArrayExpress, or CIBEX, and the assigned number must be included in an appropriate section of the manuscript. Microarray data must be made available on publication.

## Structural determination

The atomic coordinates and related experimental data (structure factor amplitudes/intensities and/or NMR restraints) must be deposited at a member site of the Worldwide Protein Data Bank (wwPDB) before publication. The PDB code must be included in a separate paragraph in the Materials and Methods section. Atomic coordinates and experimental data must be made available on publication.

## Supplementary Data

Supplementary data contains experimental data and figures that cannot be presented in the printed version due to space or technical limitations. Supplementary data should be as concise as possible and must be related to the main conclusion(s) of the paper. Data will be reviewed along with the paper and must be approved by the editors and referees. Instead of appearing in the printed version of the journal, it will be published online in SpringerLink (<http://www.springerlink.com/content/120956>) at the time of publication.

## Conflict of Interest

Author(s) must agree to disclose all affiliations, funding sources, and financial or management relationships that could be perceived as potential sources of bias. Conflicts of interest should be noted in the manuscript (after the "Acknowledgements"). If an undisclosed competing interest comes to light after publication, JM will take action in accordance with internal policies and the Committee on Research Ethics guidelines of Microbiological Society of Korea. In cases where the author(s) have no conflicts of interest to report, a statement to that effect can be automatically generated in the final publication version of the article.

## Ethics

Manuscripts dealing with any experimental work on humans or animals should meet the relevant regulations or requirements imposed by institutional or governmental authorities:

- (1) All research on human subjects should be conducted in accordance with the ethical standards outlined in the Helsinki Declaration of 1975 (revised 2013), and the research protocol must be approved by an Institutional Review Board (IRB) prior to conducting experiments.
- (2) All research involving experimental animals should be reviewed and approved by the author(s)' Institutional Animal Care and Use Committees (IACUC) prior to commencing the study, and should be performed in accordance with relevant institutional and national guidelines and regulations.

Details of the ethical approval status of the research must be described in the "Ethical Statement" section of the manuscript (after "Conflict of Interest"), including the IRB and/or IACUC approval number(s). Should the study be exempt from ethics approval, author(s) should clearly state the reasons in the generated statement.

## Sex and Gender Equity

Ensure correct use of the terms for sex (when reporting biological factors) and gender (identity, psychosocial, or cultural factors), and unless inappropriate, report the sex and/or gender of study participants, the sex of animals or cells, and describe the methods used to determine sex and gender. If the study involved an exclusive population, for example, sex/gender-specific cases such as those of prostate cancer, the author(s) should define how they determined race and ethnicity, justifying their relevance.

## PREPARATION OF MANUSCRIPTS

### I. Article Types and Organization

#### Full-length Articles

Full-length articles are considered the usual format for JM. Each manuscript should present the results of an independent and complete study. The main text file should contain the following: Title Page, Abstract, Introduction, Materials and Methods, Results, Discussion, Acknowledgements, References, Tables, and Figure Legends. The Results and Discussion sections may be combined and may also include additional subheadings.

The entire manuscript should be double spaced, and line and page numbers should be included in the submitted text file. The font size should not exceed 12 pt. Manuscripts may be editorially rejected on the basis of poor English or a lack of format conformity to the instructions.

#### Title Page

On the title page, include the title, author names, and each author's affiliation. Current addresses of all authors should appear as a footnote. Place an asterisk after the name of the corresponding author and provide e-mail addresses and telephone and fax numbers for correspondence. A running title of no more than 10 words should be provided.

#### Abstract

The abstract should not exceed 250 words and should concisely summarize the basic content of the paper in a single paragraph. Abbreviations and references should be avoided.

#### Introduction

The introduction should provide sufficient background information to understand the purpose and impact of the present study. Avoid extensive review of the topic and present only the necessary information relevant to the study.

#### Materials and Methods

The Materials and Methods section should provide sufficient technical details to permit the experiments to be reproduced. Sources of unusual chemicals, equipment, or microbial strains should be identified. New procedures should be described in detail, but previously published procedures should be referenced, with a brief indication of key parameters.

#### Results

The Results section and associated figures and tables should concisely and accurately describe the experimental findings of the study.

#### Discussion

The Discussion section should focus on the interpretation of the results, and not simply repeat the Results or Introduction section. The Results and Discussion sections may be combined.

#### Acknowledgements

Acknowledgements of financial support and personal assistance are to be provided in separate paragraph(s) and kept as concise as possible.

#### Conflict of Interest

Author(s) must disclose any relationships that could be perceived as potential sources of bias.

#### References

The References section should include all journal articles, books, patents, and theses cited in the text, tables, or figures. Arrange the citations in alphabetical order based on the first author's surname. Abbreviate journal names according to BIOSIS Serial Sources, in italics. Cite the references in the text by author name(s) with the publication year. Single- and double-authored papers are cited by both authors' surnames, whereas papers with more than ten authors are cited by the first author's surname, followed by *et al.* in italics. Other relevant sources such as articles submitted for publication, unpublished data, or personal communications should not be listed in this section, but can be cited in the text.

JM recommends the use of tools such as EndNote for reference management and formatting. The current Endnote reference styles are available on the journal website. Follow the styles shown in the examples below.

Anagnostopoulos, C. and Spizizen, J. 1961. Requirements for transformation in *Bacillus subtilis*. *J. Bacteriol.* **81**, 741–746.

Berry, L.J., Moore, R.N., Goodrum, K.J., and Couch, R.E. Jr. 1977. Cellular requirements

for enzyme inhibition by endotoxin in mice, pp. 321–325. In Schlessinger, D. (ed.), *Microbiology-1977*. American Society for Microbiology, Washington, D.C., USA.

**Dhole, A., Ortega, I., and Berauer, C.** 1989. Effect of oxygen on *in vitro* growth of *Mycobacterium leprae*. *Abstr. U-82*, pp. 168. *Abstr. 89th Annu. Meet. Am. Soc. Microbiol.*

**Leadbetter, E.R.** 1974. Order II. Cytophagales nomen novum, pp. 99. In Buchanan, R.E. and Gibbons, N.E. (eds.), *Bergey's Manual of Determinative Bacteriology*, 8th ed. The Williams & Wilkins Co., Baltimore, Maryland, USA.

**Miller, J.H.** 1972. Experiments in molecular genetics, pp. 352–355. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York, N.Y., USA.

**Na, J.U., Youn, H., and Kang, S.O.** 1993. Physicochemical characterization of chlorosome isolated from *Chlorobium limicola* NCIB 8327. *Korean J. Microbiol.* **32**, 9–16.

**Powers, R.D., Dotson, W.M.Jr., and Hayden, F.G.** 1982. Program Abstr. 22nd Intersci. Conf. Antimicrob. Agents Chemother., iv Abstr. 448.

**Sigma Chemical Co.** 1989. Sigma manual. Sigma Chemical Co., St. Louis, Missouri, USA.

**Smyth, D.R.** 1972. Ph.D. thesis. University of California, Los Angeles, California, USA.

## Protocol Articles

The aim of protocol articles is to publish the research protocols from the leading laboratories in all fields of microbial science that are not described in sufficient detail in the Materials and Methods sections of the original research articles. Protocol articles are welcomed; authors wishing to submit a protocol article should contact the editorial office for pre-submission inquiries with a potential title and content, which should include the following headings: Abstract, Overview, Applications, Methods (containing considerations and limitations of methods), Materials, Protocols, and Expected Results.

## Mini-reviews

The aim of mini-reviews is to provide a concise summary of a fast-moving field that is currently of interest and relevant to the readers of JM. Mini-reviews are also welcome; author(s) wishing to submit a minireview should contact the editorial office to provide a potential title and subject. All mini-reviews submitted by author(s) are subject to editorial review.

## Fast-track Publication (Accelerated Publication)

A fast-track process is available for author(s) who wish to publish their papers quickly. Author(s) should contact the Editorial Office (e-mail: [msk@msk.or.kr](mailto:msk@msk.or.kr), fax: +82-2-3453-3322) for fast-track submission. Author(s) must submit a cover letter stating the novel and significant results of the research and justifying the need for fast-track publication. The review process will be conducted as rapidly as possible, usually within 7–10 working days of receipt, and publication of accepted papers in an issue will follow within one or two months of the date of acceptance. Manuscripts requiring major revisions will not be accepted but can be considered for a normal review.

## II. Figures and Tables

### Figures

#### General

All figures and tables must be cited in the order that they appear in the manuscript. Figures should be provided as separate files, not embedded in the text file. Each figure should include a single illustration and fit on a single page in the portrait format. If a figure consists of separate parts, it is important that it be submitted as a single composite illustration file containing all parts of the figure. In the author PDF, figures are included sequentially at the end of the article. JM does not redraw the author-provided figures. It is the author's responsibility to ensure that figures are provided at a sufficiently high resolution to ensure high-quality reproduction in the final article. Color photographs are typically discouraged. However, if necessary, include an extra copy at the time of manuscript submission so that a cost estimate for printing may be obtained. The cost of printing color photographs will be the responsibility of the author(s).

Please note that it is the responsibility of the author(s) to obtain permission from the copyright holder to reproduce figures or tables that have previously been published elsewhere.

The following file formats will be accepted:

- PDF (preferred format for diagram)
- DOCX/DOC (single page only)
- PPT (suitable for diagrams and/or images, figures must be a single page)
- EPS (suitable for diagrams and/or images)
- PNG (suitable for images)
- TIFF (suitable for images)
- JPEG (suitable for photographic images, less suitable for graphical images)
- BMP (suitable for images)

#### Figure size and resolution

Figures are resized during publication of the final full text and PDF versions

to conform to the JM standard dimensions, which are detailed below.

- width of 600 pixels (standard), 1200 pixels (high resolution)
- width of 85 mm for half-page width figure
- width of 170 mm for full-page width figure
- maximum height of 225 mm for the figure and legend
- image resolution of approximately 300 dpi (dots per inch) at the final size

### Figure legends

Legends should provide sufficient information so that figures are understandable without frequent reference to the text. However, detailed experimental methods must be described in the "Materials and Methods" section, not in a figure legend. The legends should be included in the main manuscript text file, at the end of the document rather than as a part of the figure file. Define all symbols and abbreviations used in the figure. For each figure, the following information should be provided: figure number, in sequence, using Arabic numerals (i.e., Figure 1, 2, 3, etc.); a short title for the figure with a maximum of 15 words; a detailed legend with a maximum of 300 words.

### Electronic manipulation of images

Enhancement of digital images using image-editing software can increase the clarity of figures and is an acceptable practice if carried out responsibly. It is crucial, however, that artifacts are not introduced and the original data are not misrepresented. Details of significant electronic alterations to the images must be provided in the text of the article. Linear adjustment of the color, contrast, or brightness is permitted but must be applied to the entire image, not only parts of it. Original, unmanipulated source images should be retained by the author as JM will support requests from referees to view the original files.

### Tables

Tables must include enough information to warrant table format. Tables should be supplied in Word or Excel format, and must be editable (not inserted as a picture). Each table should be numbered in sequence using Arabic numerals (i.e., Table 1, 2, 3, etc.). Each table should be placed on a separate page. The headings should be sufficiently clear so that the meaning of the data will be understandable without reference to the text. Explanatory footnotes should be related to the legend or table using superscript, lower-case letters and should not include detailed descriptions of the experiment. All abbreviations should be defined after the footnotes, below the table.

### Abbreviations and Conventions

Conventional standard abbreviations should be used when abbreviation is justified. For further information, author(s) are directed to the instructions of the American Society for Microbiology ([http://mbio.asm.org/site/misc/journal-ita\\_abb.xhtml](http://mbio.asm.org/site/misc/journal-ita_abb.xhtml)).

### Nomenclature

Standard nomenclature (chemical and biochemical nomenclature, nomenclature of microorganisms, and genetic nomenclature) should be used. For further information, author(s) are directed to the instructions of the American Society for Microbiology ([http://mbio.asm.org/site/misc/journal-ita\\_nom.xhtml](http://mbio.asm.org/site/misc/journal-ita_nom.xhtml) for nomenclature).

## SUBMISSION OF MANUSCRIPTS

### General Information for Initial Submission

All submissions to JM must be made electronically via the web-based online manuscript submission and review system: [www.editorialmanager.com/tjom](http://www.editorialmanager.com/tjom). This site will guide authors step-by-step through the submission process. Please note that the name, affiliation, and title of each author must be provided. The submission system will also instruct authors on the process of creating and uploading figures and manuscripts, as well as whether the resulting files are acceptable for submission. It is recommended that all tables and figures be assembled into a single file together with the main text for submission.

The manuscript must be accompanied by a cover letter stating the title of the manuscript and the names of author(s), with complete mailing addresses and telephone, fax, and email contact information for the corresponding author.

Manuscripts should be double spaced, and all pages, including the abstract, figures, and tables, should be numbered in sequence. Manuscript page margins must be at least 2.5 cm on all four sides.

The default language style at JM is American English. Author(s) who are not confident in their English writing should have their manuscripts checked by someone with full professional proficiency in English. Manuscripts may be rejected for publication because of poor English.

The Editorial Office will acknowledge the receipt of manuscripts within 48 hours of submission. The Editorial Office should be contacted if confirmation is not received within this period, or if author(s) have any queries regarding the submission.

#### Editorial Office

The Microbiological Society of Korea (Rm. 810 (New Bldg.), The Korea Science & Technology Center 22 7gil, Teheran-ro, Gangnam-gu, Seoul 06130, Republic of Korea.

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#### Submission of Revised Manuscripts

Papers may be returned to author(s) for revision. Author(s) will be given three months after receipt of the reviewers' comments to revise their paper. Revisions must be submitted via the online submission system under the heading "Submit Manuscript Online." Author(s) should click on the link "Submit a revised manuscript" and then upload their revised files. Authors submitting a revised manuscript after review are asked to include the following:

- (1) A rebuttal letter, indicating point-by-point how you have addressed the comments raised by the reviewers. If you disagree with any of the points raised, please provide adequate justification in your letter.
- (2) A marked-up version of the manuscript that highlights changes made in response to the reviewers' comments in order to aid the Editors and reviewers.

#### Checklist for Final Submission

1. All author(s) have read and approved the final version submitted.
2. References are formatted according to the style required by JM.
3. Abstract is 250 words or less.
4. Short running title of fewer than 10 words is provided.
5. Key words are provided (should be inserted in the submission step).
6. A cover letter has been prepared (should be inserted in the submission step).
7. A correspondent footnote (mailing address, email, phone and fax) is included.
8. Line and page numbers have been included on each page.
9. Any figures that are to be reproduced in color are so indicated.

## EDITORIAL PROCESS

#### Review Process

When a manuscript is submitted to JM, the Editorial Office checks if the manuscript was prepared according to the guidelines, gives it a manuscript number (e.g., TJOM-D-15-00154) and assigns it to one of the members of the editorial board for review. The manuscript number should be referred to in any subsequent communications between the corresponding author and the editor or the Editorial Office. All manuscripts are reviewed confidentially by members of the editorial board or by qualified reviewers. To expedite the review process, author(s) may recommend at least three reviewers who have expertise in the field, who are not members of their institution(s), who have not recently been associated with their laboratory(ies), and who could not otherwise be considered to pose a conflict of interest regarding the submitted manuscript. The reviewers operate under the Guidelines for Reviewers and are expected to complete their reviews as soon as possible.

#### Decision

The corresponding author is generally notified of the editor's decision to accept, reject, or require modification or revision by the editor or the Editorial Office within 4 to 5 weeks of submission. Manuscripts that have been rejected may be resubmitted once the major criticisms have been properly addressed. When a manuscript is returned to the corresponding author for modification or revision,

it should be returned to the editor within 3 months, or it may be considered withdrawn. The author(s) should supply the Response to the Reviewers and a letter or certificate for English editing (if requested by the Editorial Office) along with the modified or revised manuscript. As with the initial submission, resubmitted manuscripts should be accompanied by a cover letter stating that the manuscript is a resubmission and describing briefly the changes made. When an editor has decided that a manuscript is acceptable for publication, the corresponding author and the Editorial Office will be notified. If necessary, the corresponding author will be asked to re-edit the manuscript.

#### Appeals of Decisions

Author(s) who wish to appeal a decision should contact the Editor-in-Chief, explaining in detail their reasons for the appeal. All appeals will be discussed with at least one other editor. If those editors do not agree, the appeal will be discussed at a full editorial meeting. JM may or may not then seek external advice on appeals. JM does not consider second appeals.

## MANUSCRIPTS ACCEPTED FOR PUBLICATION

#### Proofs

The Editorial Office will deliver electronic page proofs and a page charge/reprint order form to the corresponding author. Author(s) will receive proofs approximately 1 to 2 weeks after final acceptance of the manuscript. Page proofs should be corrected, signed by the corresponding author, and returned to the Editorial Office (msk@msk.or.kr) via e-mail within 3 days of receipt of the proofs. With the exception of typographical errors, incorrect data, or updated information regarding references, no extensive changes will be made to the manuscript at the proof stage. Important new information or references of unpublished data or personal communications that have become available in the time between acceptance of the manuscript and receipt of the proofs may be added with the permission of the editor. Failure to act promptly to approve page proofs may delay publication of the manuscript. Page proofs are considered to be the final version of the manuscript.

#### Publication Charges

The corresponding author will be charged 60,000 KRW (members)/80,000 KRW (non-members)/60 USD (overseas) per printed page. Invited reviews are not subject to page charges.

For fast-track (accelerated) publication, the corresponding author will be charged 200,000 KRW (members)/240,000 KRW (non-members)/240 USD (overseas) per printed page.

#### Reprints

The charge for reprints is 50,000 KRW (45 USD) for the initial 50 copies. Additional copies are available for 30,000 KRW (25 USD) per 50 copies. Reprints can be ordered and purchased through the page charge/reprint order form that is sent to the corresponding author prior to publication.

#### Copyright

The corresponding author is responsible for signing a copyright transfer agreement on behalf of all the authors. This agreement form is sent to the corresponding author when the manuscript is accepted and scheduled for publication. Unless the signed agreement form is received, JM will not publish the manuscript.

#### Errata, Corrigenda, and Retraction

Author(s) are requested to bring any errors made by the Journal or the author(s) to the attention of the Editorial Office as soon as possible. Corrections will be published as Errata or Corrigenda in a later issue of the journal.

Articles may be retracted by any of the author(s), academic or institutional sponsor, or JM, because of scientific misconduct, such as duplicate publication, plagiarism, fabrication, manipulation, or falsification of data. Retractions will be listed on the Contents page.

