# JOURNAL OF MOLECULAR EVOLUTION

# Aims and Scope

Journal of Molecular Evolution covers experimental and theoretical work aimed at deciphering features of molecular evolution and the processes bearing on these features, from the initial formation of macromolecular systems onward. Topics addressed in the Journal include the evolution of informational macromolecules and their relation to more complex levels of biological organization, up to populations and taxa. This coverage accommodates well such subfields as comparative structural and functional genomics, population genetics, the molecular evolution of development, the evolution of gene regulation and gene interaction networks, and in vitro evolution of DNA and RNA

#### Editor-in-Chief

Emile Zuckerkandl Department of Biological Sciences Stanford University Gilbert 109 Stanford, California 94305-5020, USA Fax: (650) 322-3009

e-mail: EmileIMMS@aol.com

#### Instructions to Authors

# **Submission of Manuscripts**

Manuscripts must be written in grammatically correct English. They should be clear, concise, complete, and meticulously prepared. Four copies of the manuscript and all illustrations may be submitted to any of the three Editors of the Journal, including the names of five potential referees, at the following addresses:

Giorgio Bernardi Stazione Zoologica "Anton Dohrn" Villa Comunale I-80121 Napoli, Italy Tel.: +39-81-583-3300

Fax: +39-81-764-1355 e-mail: bernardi@alpha.szn.it

Takashi Gojobori Center for Information Biology National Institute of Genetics 1111 Yata, Mishima, Shizuoka-ken 411-8540 Japan

Telephone: 81-559-81-6847 Fax: 81-559-81-6848

e-mail: tgojobor@genes.nig.ac.jp

Martin Kreitman Department of Ecology and Evolution University of Chicago 1101 E. 57th Street Chicago, IL 60637 Telephone: 773-702-1222 Fax: 773-702-9740

e-mail: mkre@midway.uchicago.edu

Authors who are unsure about the suitability of an article for inclusion in the Journal are encouraged to contact one of the Editors prior to submission

## Copyright

Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review, or thesis); that it is not under consideration for publication elsewhere; that its publication has been approved by all co-

authors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is carried out; that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher; that the manuscript will not be published elsewhere in any language without the consent of the copyright holders; that written permission of the copyright holder is obtained by the authors for material used from other copyrighted sources; and that any costs associated with obtaining this permission are the authors' responsibility.

## **Preparation of Manuscripts**

The Journal strongly encourages authors to submit electronically prepared manuscripts in Word-Perfect 5.1, Microsoft Word (Macintosh), or Microsoft Word (PC). Follow the instructions set forth here exactly; if, for example, the reference section is incorrectly styled, the value of the diskette submission will be reduced. Disk submission does not eliminate the requirement of submitting four hard copies of the manuscript.

Manuscripts should be typewritten or prepared on a word processor, with all material doublespaced, on one side of letter-sized paper, with suitably wide margins. All pages should be numbered consecutively, beginning with page 1, the title page. Tables and figures should be num-bered serially, and legends to illustrations should be prepared on separate sheets. Tables and fig-ures will be placed near their first mention in the text; all tables and figures must be referred to in the manuscript.

Title Page: The following elements must be included:

- Title of the article:
- Name(s) and initial(s) of author(s), preferably with first names spelled out;
- Affiliation(s) of author(s);
- Footnotes to the contribution title;
- Name, address, telephone and fax numbers, and e-mail address of the corresponding au-

Abstract: Each article is to be preceded by a succinct abstract, of up to 250 words, that highlights the objectives, methods, results, and conclusions of the paper.

Key Words: To identify the subjects under which the article may be indexed, 6-10 key words should be provided.

References: In the text, references to the literature should be by author and year; where there are two authors, both should be named; with three or more only the first author's name plus "et al." need be given. The list at the end of the paper should include only works mentioned in the text and should be arranged alphabetically by name of first author. References should be cited as follows:

Journal papers-name(s) and initial(s) of author(s), year in brackets, full title, name of the journal as abbreviated in Chemical Abstracts, volume number, first and last page numbers:

Quiring R, Walldorf U, Koter U, Gehring WJ (1994) Homology of the *eyeless* gene of Drosophila to the small eye gene in mice and aniridia in humans. Science 265:785-789

• Books-name(s) of author(s), year in brackets, full title, edition, publisher, place of publication, page number:

Maizels N, Weiner AM (1993) The genomic tag hypothesis: modern viruses as molecular fossils of ancient strategies for genomic replication. In: Gesteland RF, Atkins JF (eds) The RNA world. Cold Spring Harbor Laboratory Press, New York, pp. 577-602

Li W-H (1997) Molecular evolution. Sinauer Associates, Sunderland, MA

Responsibility for the accuracy of bibliographic references rests entirely with the author. Use as few "in press" citations as possible. In press citations must include the name of the journal that has accepted the paper.

Footnotes: Those in the text should be numbered consecutively. Footnotes to the title or authors are marked by asterisks and placed on the title page.

Sequences: Sequences that are used merely as data points in statistical calculations or graphs should, if possible, be referred to by their accession numbers only. Authors should be quoted by name when their sequences are discussed individually or presented in alignments.

Illustrations: These should be suitable for reproduction, and should clarify or shorten the text. Information provided in figure legends should not be repeated in the text. Figures and graphs should always be mentioned in the text and numbered with Arabic numerals. Each figure must be labeled on its back, indicating figure number, author name, and an indication of the top of the figure where necessary. Authors are encouraged to provide .eps or .tif files whenever possible, in addition to hard copies.

Color Figures: Color will be printed at the author's expense: \$1,150 for the first page (there is no limit to the number of figures) and \$575 for additional pages within the same article. Please contact one of the Editors if color is essential but funding is unavailable

Computer Software: Any software referred to among methods used must be obtainable either commercially or upon request from the authors. In submitting a manuscript to the Journal, authors accept the obligation to furnish upon request any information necessary for reproducing the methodologies on which their results are based. The methods used for preparing and analyzing alignments must be stated precisely.

Mathematical Equations: These should be clearly prepared, and annotated if necessary. Primes and dots must be called to the attention of the typesetter. Differentiate legibly between number 1, capital letter I, and lower case letter I. Use fractional exponents instead of root signs and the solidus (/) for fractions wherever their use saves vertical space. Use exp () notation when the exponent is sizable. All equations must be numbered sequentially, on the right-hand side of the column, in parenthetic Arabic numerals.

Organisms: Must be identified by their scientific binomen.

Homology: This term should not be used in the sense of structural similarity, but only in its biological sense of derivation of structures from a common ancestral structure.

Abbreviations, Symbols, Units, etc.: Acronyms and symbols must be defined at first mention, in titles, abstracts, as well as within the text. For nomenclature, abbreviations, symbols, and units, authors should follow internationally accepted rules, including those adopted by the Commission on Biochemical Nomenclature.

# Offprints

Fifty reprints are provided to the corresponding author, at no charge. Additional offprints may be ordered when page proofs are returned. Reprints ordered after publication are significantly more expensive.