

Instruction for Authors

(last update: December 2023)

Scope

Open Chemistry is a peer-reviewed, open access that publishes original research, reviews and short communications in the fields of chemistry in an ongoing way. Our central goal is to provide a hub for researchers working across all subjects to present their discoveries, and to be a forum for the discussion of the important issues in the field. The journal publishes in Open Access and only peer-reviewed papers. The peer-review process is single-blinded.

Open Chemistry has article processing charges (APCs) – 1500 EURO (plus VAT (if applicable), plus money transfer charges). For more information, please read [Article Processing Charges](#) document available in the supplementary information section on the journal homepage.

Editorial Policy

Unpublished material

Submission of a manuscript implies that the work described is not copyrighted, published or submitted elsewhere, except in abstract form. The corresponding author should ensure that all authors approve the manuscript before its submission.

Conflict of interest

When authors submit a manuscript, they are responsible for recognizing and disclosing financial and/or other conflicts of interest that might bias their work and/or could inappropriately influence his/her judgment. If no specified acknowledgement is given, the Editors assume that no conflict of interest exists.

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Authorship

Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. Where there are others who have participated in certain substantive aspects of the research project, they should be named in an Acknowledgement section.

The list of authors cannot be changed after the original submission without the permission of the journal Editorial Office.

Data sharing policy

Open Chemistry journal requires authors to follow data sharing policy. Research data should be made widely available to the research community in order to demonstrate the robustness and validity of the research presented in the journal, to encourage replication of the results, and to provide the community with opportunities to learn. By publishing in the journal authors are required to provide a data availability statement (DAS) in their articles. Authors are encouraged to share their data but not required to. The decision to publish will not be affected by whether or not authors share their research data.

Peer Review process

The Editors reserve the right to decline the submitted manuscript without review, if the studies reported are not sufficiently novel or important to merit publication in the journal. Manuscripts deemed unsuitable (insufficient originality or of limited interest to the target audience) are returned to the author(s) without review. The Editor seeks advice from experts in the appropriate field. Research articles and communications are refereed by a minimum of two reviewers, review papers by at least three. The journal uses double-blind peer review model. Authors are requested to suggest persons competent to review their manuscript. However, please note that this will be treated only as a suggestion, and the final selection of reviewers is exclusively the Editor's decision. The final decision of acceptance is made by Managing Editor or, in case of conflict, by the Editor-in-Chief.

Scientific Misconduct

This journal publishes only original manuscripts that are not also published or going to be published elsewhere. Multiple submissions/publications, or redundant publications (re-packaging in different words of data already published by the same authors) will be rejected. If they are detected only after publication, the journal reserves the right to publish a Retraction Note. In each particular case Editors will follow [COPE's Core Practices](#) and implement its advice.

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Open Chemistry encourages the submission of both substantial full-length bodies of work and shorter manuscripts that report novel findings. There are no specific length restrictions for the overall manuscript or individual sections; however, we urge the authors to present and discuss their findings in a concise and accessible manner. All submitted manuscripts must be written in English language.

Manuscripts submitted under multiple authorship are reviewed on the assumption that all listed authors concur in the submission and are responsible for its content; they must have agreed to its publication and have given the corresponding author the authority to act on their behalf in all matters pertaining to publication. The corresponding author is responsible for informing the coauthors of the manuscript status throughout the submission, review, and production process.

All submissions must be made via online submission system Editorial Manager (<https://www.editorialmanager.com/openchem>). In case of problems, please contact the Managing Editor of this journal (openchemistry@degruyter.com).

Publication Formats

Open Chemistry considers submissions of:

- Research Article – The default format for reporting research results. There is no length restriction.
- Review Article – Used to submit literature reviews on a topic of interest. The article should contain a broad, balanced and fair perspective of the topic, identifying trends and/or gaps in the literature or providing a new synthesis of existing literature. Reviews should be scientifically sound and should describe the most relevant and recent contributions.
- Rapid Communication - are intended to present information of exceptional novelty and exciting results of significant interest to the readers. An empirical report resulting from analysis of collected data to address one or more research questions and/or hypotheses. Authors are asked to explain in the cover letter why their contribution should be handled via the rapid channel.
- Commentaries, Erratum, Letters to the Editor.

Electronic Formats Allowed

We accept submission of text, tables and figures as separate files or as a composite file. For your initial submission, we recommend you upload your entire manuscript, including tables and figures, as a single PDF file. If you are invited to submit a revised manuscript, please provide us with individual files: an editable text and publication-quality figures.

- Text files can be submitted in the following formats:
 - ❖ MS Word – standard DOCUMENT (.DOC)

- ❖ RICH TEXT FORMAT (.RTF)
- ❖ PDF (not applicable for re-submitted or accepted manuscripts, see below).
- Tables should be submitted as MS Word or PDF (not applicable for re-submitted or accepted manuscripts, see below). Please note that a straight Excel file is not an acceptable format.
- Graphics files can be submitted in any of the following graphic formats: EPS; BMP; JPG; TIFF; GIF or PDF. Please note that Powerpoint files are not accepted.

Post-acceptance, text files of the revised manuscript and tables are required for use in the production. All tables and figures are cited/referred in the text. Authors may place all tables/figures at the end of text (or in a separate file). During copy-setting, tables/figures may be placed in text near their first reference/citation. Authors may also indicate the location(s) of tables and figures in the text if these elements are given separately or at the end of the manuscript.

First-Time Submission of Manuscripts

It is important that authors include a cover letter with their manuscript. You may also explain why you consider your manuscript to be suitable for publication in *Open Chemistry*, why your paper will inspire the other members of your field, and how will it drive academic discussion forward.

Submission of Revised Articles

Resubmitted manuscripts should be accompanied by a letter outlining a point-by-point response to Editor's and reviewers' comments and detailing the changes made to the manuscript. A copy of the original manuscript should be included for comparison if the Editor requests one. If it is the first revision, authors need to return the revised manuscript within 28 days; if it is the second revision, authors need to return the revised manuscript within 14 days. Additional time for resubmission must be requested in advance. If the above-mentioned deadlines are not met, the manuscript will be treated as a new submission.

For resubmitted manuscripts, please provide us with an editable text and publication-quality figures. Supply any figures as separate high-resolution, print-ready digital versions.

In addition to the editorial remarks, authors are asked to take care that they have prepared the revised version according to the Journal's style.

Organization of the Manuscript

We draw particular attention to the importance of carefully preparing the title, keywords and abstract, as these elements are indicators of the manuscript content in bibliographic databases and search engines.

Title

We suggest the title should be informative, specific to the project, yet concise (75 characters or fewer). Please bear in mind that a title that is comprehensible to a broad academic audience and readers outside your field will attract a wider readership. Avoid specialist abbreviations and non-standard acronyms. Titles should not be presented in title case (words should not be capitalized). Please also provide a brief "running title" of not more than 50 characters.

Authors, Affiliations, Addresses

please, provide the first names (or initials – if used), middle names (or initials – if used), and surnames for all authors. Affiliations should include:

- Department
- University or organization
- City
- Postal code
- State/province (if applicable)
- Country

One of the authors should be designated as the corresponding author to whom inquiries regarding the paper should be directed. It is the corresponding author's responsibility to ensure that the author list and the summary of the author contributions to the study are accurate and complete.

Abstract

The abstract should not exceed 200 words. The abstract should give a summary of the content of the paper. Mention the main findings without going into methodological detail and summarize briefly the most important items of the paper. Because the abstract will be published separately by abstracting services, it must be complete and understandable without reference to the text.

Keywords

List keywords for the work presented (maximum of 5), separated by commas. We suggest that keywords do not replicate those used in the title.

Introduction

The introduction should put the focus of the manuscript into a broader context and should supply sufficient background information to allow the reader to understand and evaluate the results without referring to previous publications on the topic. As you compose the introduction, think of readers who are not experts in this field. Include a brief review of the key literature - use only those references required to provide the most salient background rather than an exhaustive review of the topic. Relevant controversies or disagreements in the field should be mentioned so that a non-expert reader can delve into these issues further. The introduction should conclude with a brief statement of the rationale for the study, the hypothesis that was addressed or the overall purpose of the experiments reported, and should provide a comment about whether that aim was achieved.

Methods

This section should include sufficient technical information to enable the experiments to be reproduced. Protocols for new methods or significant modifications to existing methods should be included, while previously published or well-established protocols should only be referenced. Describe new methods completely and give sources of unusual chemicals, equipment, strains etc. Studies presented should comply with our recommendations for distribution of materials and data (see below). In theoretical papers comprising the computational analyses, technical details (methods, models applied or newly developed) should be provided to enable the readers to reproduce the calculations.

Statements to Methods

Informed consent (*if applicable*)

Ethical approval (*obligatory*)

Authorization for the use of human subjects, Authorization for the use of experimental animals) should be elaborated in the methodological section of your manuscript.

If there is no ethical approval needed, please add this statement: The conducted research is not related to either human or animal use.

Results

This section should provide statistical analyses of all of the experiments that are required to support the conclusions of the paper. Reserve extensive interpretation of the results for the Discussion section. Details of experiments that are peripheral to the main thrust of the article and that detract from the focus of the article should not be included. Present the results as concisely as possible in text, table(s), or figure(s) (see below). Avoid extensive use of graphs to present data that might be more concisely presented in the text or tables. Graphs illustrating methods commonly used need not be shown except in unusual circumstances. Limit photographs to those that are absolutely necessary to show the experimental findings. Number figures and tables in the order in which they are cited in the text, and be sure to cite all figures and tables. Styles and fonts should match those in the main body of the article. Large datasets,

including raw data, should be submitted as supporting files. The section may be divided into subsections, each with a concise subheading.

Discussion

The Discussion should provide an interpretation of the results in relation to previously published work and to the experimental system used. It should not contain extensive repetition of the Results or reiteration of the Introduction. This section should spell out the major conclusions of the work along with some explanation or speculation on the significance of these conclusions. The discussion should be concise and tightly argued.

Authors' Statements

Acknowledgments (optional)

This section should describe recognition of personal assistance: people who contributed to the work, but do not fit the criteria for authors should be listed along with their contributions. You must ensure that anyone named in the acknowledgments agrees to being so named.

Research funding (obligatory)

This section should describe sources of funding that have supported the work. If there is no research funding, please write: Authors state no funding involved.

Author contribution (obligatory)

Please include proper contribution categories for each author. Applicable categories are listed on this website: <https://casrai.org/credit/> (according to CRediT taxonomy <https://casrai.org/CRediT/> in a form of a list e.g. J.Z - conceptualization; G.M. - formal analysis...)

Conflict of interest (obligatory)

To ensure fair and objective decision-making, authors must declare any associations that pose a conflict of interest (financial, personal or professional) in connection with evaluated manuscripts. Non-financial competing interests include a declaration of political, personal, religious, ideological, academic, and intellectual competing interests. Authors from pharmaceutical companies, or other commercial organizations that sponsor clinical trials, should declare these as competing interests on submission.

If there is no conflict of interest, please write: Authors state no conflict of interest.

Data availability statement (should be included if applicable)

In accordance with our data sharing policy, the final manuscript that reports results derived from research data must include a Data Availability Statement (DAS). The provision of a DAS will be verified as a condition of publication. The DAS should include information on where data supporting the results reported in the article can be found, including, where applicable, hyperlinks to publicly archived datasets analysed or generated during the study. Where research data are not publicly available, this must be stated in the manuscript along with any conditions for accessing the data. Please use one of the following statements:

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- The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.
- Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.
- All data generated or analysed during this study are included in this published article [and its supplementary information files].
- The data that support the findings of this study are available from [third party name] but restrictions apply to the availability of these data, which were used under license for the current study, and so are not publicly

available. Data are however available from the authors upon reasonable request and with permission of [third party name].

Other statements (e.g. Informed consent, Authorization for the use of human subjects, Authorization for the use of experimental animals) should be elaborated in the methodological section of your manuscript (as stated earlier).

References

Because all references will be linked electronically to the papers they cite, proper formatting of the references is crucial. A complete reference should give the reader enough information to find the relevant article. Please pay particular attention to spelling, capitalization and punctuation. **Completeness of references is the responsibility of the authors.**

For all references, list the first six authors; add "et al." if there are additional authors. Standard abbreviations of journal names according to Thomson Scientific should be used (<http://ip-science.thomsonreuters.com/cgi-bin/jrnlst/jloptions.cgi?PC=master>).

Please use the Vancouver/ICMJE style for the reference list.

References should be listed and numbered in the order they appear in the text. In the text, citations should be indicated by the reference number in brackets [1]. Multiple citations within a single set of brackets should be separated by commas [1,2]. In case there are more than three sequential citations, they should be given as a range [1-4]. References in figure captions and tables should be listed after references in the text.

Please use the following style for the reference list:

Published papers

- Halpern SD, Ubel PA, Caplan AL. Solid-organ transplantation in HIV-infected patients. *N Engl J Med.* 2002;347(4):284-7. doi:10.1157 2002-x34742847.
- Rose ME, Huerbin MB, Melick J, Marion DW, Palmer AM, Schiding JK, et al. Regulation of interstitial excitatory amino acid concentrations after cortical contusion injury. *Brain Res.* 2002;935(1-2):40-6. doi.10.18.x548689553.
- Ellingsen AE, Wilhelmsen I. Sykdomsangst blant medisins- og jusstudenter. *Tidsskr Nor Lægeforen.* 2002;122(8):785-7. Norwegian.
- Mansharamani M, Chilton BS. The reproductive importance of P-type ATPases. *Mol Cell Endocrinol.* 2002;188(1-2):22-5. Corrected and republished from: *Mol Cell Endocrinol.* 2001;183(1-2):123-6.

Unpublished material/forthcoming and preprints

- Tian D, Araki H, Stahl E, Bergelson J, Kreitman M. Signature of balancing selection in *Arabidopsis*. *Proc Natl Acad Sci U S A.* Forthcoming 2002.
- Alvarez R. Near optimal neural network estimator for spectral x-ray photon counting data with pileup. arXiv:1702.01006v1 [Preprint]. 2017 [cited 2017 Feb 9]: [11 p.]. Available from: <https://arxiv.org/abs/1702.01006>
- Bar DZ, Atkatsk K, Tavaréz U, Erdos MR, Gruenbaum Y, Collins FS. Biotinylation by antibody recognition- A novel method for proximity labeling. *BioRxiv* 069187 [Preprint]. 2016 [cited 2017 Jan 12]. Available from: <https://www.biorxiv.org/content/10.1101/069187v1>

Electronic journal articles

- Aboud S. Quality improvement initiative in nursing homes: the ANA acts in an advisory role. *Am J Nurs* [Internet]. 2002 Jun [cited 2002 Aug 12];102(6):[about 1 p.]. Available from: <https://ovidsp.tx.ovid.com/> Subscription required.

Books and book chapters

- Murray PR, Rosenthal KS, Kobayashi GS, Pfaller MA. *Medical microbiology*. 4th ed. St. Louis: Mosby; 2002.
- Gilstrap LC 3rd, Cunningham FG, VanDorsten JP, editors. *Operative obstetrics*. 2nd ed. New York: McGraw-Hill; 2002.
- Meltzer PS, Kallioniemi A, Trent JM. Chromosome alterations in human solid tumors. In: Vogelstein B, Kinzler KW, editors. *The genetic basis of human cancer*. New York: McGraw-Hill; 2002. p. 93-113.

Theses

- Borkowski MM. *Infant sleep and feeding: a telephone survey of Hispanic Americans* [dissertation]. Mount Pleasant (MI): Central Michigan University; 2002.

Conference proceedings

- Harnden P, Joffe JK, Jones WG, editors. *Germ cell tumours V. Proceedings of the 5th Germ Cell Tumour Conference*; 2001 Sep 13-15; Leeds, UK. New York: Springer; 2002.

Conference paper

- Christensen S, Oppacher F. An analysis of Koza's computational effort statistic for genetic programming. In: Foster JA, Lutton E, Miller J, Ryan C, Tettamanzi AG, editors. *Genetic programming. EuroGP 2002: Proceedings of the 5th European Conference on Genetic Programming*; 2002 Apr 3-5; Kinsdale, Ireland. Berlin: Springer; 2002. p. 182-91.

Newspaper articles

- Tynan T. Medical improvements lower homicide rate: study sees drop in assault rate. *The Washington Post*. 2002 Aug 12;Sect. A:2 (col. 4).

Figures and Figure Legends

Authors may use photographs, schemes, diagrams, line graphs and bar charts to illustrate their findings. Figures included with online submissions should be suitable for onscreen viewing and desktop printing. High resolution images should be provided on request or on manuscript acceptance. The figures and their lettering should be clear and easy to read, e.g., no labels should be too large or too small. Photomicrographs should include a scaled bar and indicate the size. We remind authors that it is not acceptable scientific conduct to modify any separate element within an image (adjustments of the entire image in brightness, contrast and color balance are justified only if they do not misrepresent the original, observed data). Composite figures composed of grouped images such as insets from different fields or separate parts of gels must be explained in the figure legend and differentiated by use of dividing lines or other means to make composites unambiguous. Figures should be numbered consecutively using Arabic numerals and referred to in the text by number. Figure legends should follow the main text, each on a separate page. Each figure legend should have a concise title and should provide enough information so that the figure is understandable without frequent reference to the text. It should inform the reader of key aspects of the figure, but the figure should also be discussed in the text. The legend should be succinct, while still explaining all symbols and abbreviations. Avoid lengthy descriptions of methods.

Tables and Table Captions

Tables must include enough information to warrant table format and should be used only where information cannot be presented in the text. Tables should be typed as text, using either 'tabs' or a table editor for layout; please do not use graphics software to create tables. Tables occupying more than one printed page should be avoided, if possible; larger tables can be published as an appendix. Do not use picture elements, text boxes, tabs, or returns in tables. Tables that contain artwork, chemical structures, or shading must be submitted as illustrations. Tables should be

numbered consecutively using Arabic numerals and referred to in the text by number. Table legends should follow the main text, each on a separate page. Each table should have an explanatory caption which should be as concise as possible. The headings should be sufficiently clear so that the meaning of the data is understandable without reference to the text. Footnotes can be used to explain abbreviations but should not include detailed descriptions of the experiment. Citations should be indicated using the same style as outlined above.

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In-line equations should be typed as text. The use of graphics programs and 'equation editors' should be avoided.

Abbreviations

Please keep abbreviations to a minimum. In addition to abbreviations for Systeme International d'Unités (SI) units of measurement, other common units (e.g., bp, kb, and Da), and chemical symbols for the elements, the following should be used without definition: DNA; cDNA; RNA; cRNA; RNase; DNase; rRNA; mRNA; tRNA; AMP, ADP, ATP, dAMP, ddATP, GTP, etc.; ATPase, dGTPase, etc.; NAD; NAD⁺; NADH; NADP; NADPH; NADP⁺; poly(A), poly(dT), etc.; oligo(dT), etc.; UV; PFU; CFU; MIC; Tris; DEAE; EDTA; EGTA; HEPES; PCR; and AIDS. Abbreviations for cell lines (e.g., HeLa) as well as viruses (e.g., HIV-1, JC virus, BK virus) also need not be defined. Non-standard abbreviations should not be used unless they appear at least three times in the text. List all non-standard abbreviations, acronyms and symbols in alphabetical order, along with their expanded form, at the end of the text. Define them as well upon first use in the text.

Formatting and Typesetting

All pages must be numbered consecutively. The whole text (including legends, footnotes, and references) should be formatted double-spaced with no hyphenation and automatic word-wrap (no hard returns within paragraphs). Please type your text consistently, e.g. take care to distinguish between '1' (one), 'I' (capital I) and 'l' (lower-case L) and '0' (zero) and 'O' (capital O), etc. Manuscript pages should have line numbers. The font size should be no smaller than 12 points.

Footnotes and endnotes should be avoided. Allowable footnotes/endnotes may include: the designation of the corresponding author of the paper, the current address of an author (if different from that shown in the affiliation), abbreviations and acronyms. Do not create symbols as graphics or use special fonts that are external to your word processing program; use the "insert symbol" function. Indicate paragraph lead-ins in bold type and italicize any words that should appear in italics. All Latin names should be italicized, including species names and common structures such as: et al.; in vivo; in vitro; ex vivo; in silico; etc.; de novo; a priori; ab initio; vice versa; in situ; ad hoc; sensu stricto; i.e.; ca. /circa; n.b. /nota bene. Decimal multiples or submultiples of units are indicated by the use of prefixes. There should be a single space between most units and the corresponding number; the only exceptions are: 1%, 1‰, 1°C, 1°, 1', 1".

Supplemental Material

We encourage authors to submit essential supplementary files that additionally support the authors' conclusions along with their manuscripts (the principal conclusions should be fully supported without referral to the supplemental material). Supplemental material will always remain associated with its article and is not subject to any modifications after publication. The decision to publish the material with the article if it is accepted will be made by the Editor. Supporting files of no more than 10 MB in may be submitted in a variety of formats, but should be publication-ready, as these files will be published exactly as supplied. Material must be restricted to large or complex data sets or results that cannot be readily displayed because of space or technical limitations. Material that has been published previously is not acceptable for posting as supplemental material.

Supporting files should fall into one of the following categories:

- Dataset
- Additional Figure or Table
- Text
- Protocol

- Multimedia - Audio/Video/Animations (AVI, MPEG, WAV, Quicktime, animated GIF or Flash)

If the software required for users to view/use the supplemental material is not embedded in the file, you are urged to use shareware or generally available/easily accessible programs. To prevent any misunderstandings, we request that authors submit a text file (instruction.txt) containing a brief instruction on how to use the files supplied. All supporting information should be referred to in the manuscript, with titles (and, if desired, legends) for all files listed under the heading 'Supporting Information'.

Review papers should be organized into Title page, Abstract, Keywords, main body of text with headings/subheadings as appropriate (the first section being invariably the "Introduction"), Acknowledgments, References list, Table(s), Figures and separate Figure legends (if applicable).

Rapid communications may range in length from communications through to more in-depth studies. Regardless of the length, an article should be a novel and important research study of high quality and of interest to specific research community.

Nomenclature

We strongly recommend the use of correct and established nomenclature wherever possible. Always report numerical data (length, weight, and volume) in the appropriate SI units. Please refer to International Union of Pure and Applied Chemistry (IUPAC) recommendations available for standard metric units. For these units and for molarity, use the prefixes ($p= 10^{-12}$, $n = 10^{-9}$, $\mu= 10^{-6}$, $m = 10^{-3}$, $c = 10^{-2}$, $d = 10^{-1}$, $h = 10^2$, $k = 10^3$, $M = 10^6$, $G = 10^9$, etc.). Use $\mu\text{g/ml}$ or $\mu\text{g/g}$ in place of the ambiguous ppm. When fractions are used to express units, it is preferable to use whole units, such as 'g' or 'min', in the denominator instead of fractional or multiple units, such as μg or 10 min (for example 'pmol/min' is preferable to 'nmol/10 min', and ' $\mu\text{mol/g}$ ' is preferable to 'nmol/ μg '). It is also preferable that an unambiguous form such as exponential notation be used; for example, ' $\mu\text{mol g}^{-1} \text{min}^{-1}$ ' is preferable to ' $\mu\text{mol/g/min}$ '. Units of temperature are presented in degrees centigrade (i.e. 37°C).

The recognized authority for the names of chemical compounds is Chemical Abstracts. For guidelines to the use of biochemical terminology, consult Biochemical Nomenclature and Related Documents. Do not express molecular weight in Daltons: molecular weight is a unitless ratio; molecular mass is expressed in daltons. For enzymes, use the recommended name assigned by the Nomenclature

Committee of the International Union of Biochemistry. Use the EC number when one has been assigned.

For genes, proteins, strains, clones etc. use the recommended name by consulting the appropriate genetic nomenclature database. Genes, mutations, genotypes, and alleles should be indicated in italics; protein products of the loci are not italicized. It is sometimes advisable to indicate the synonyms for the gene the first time it appears in the text. Gene prefixes such as those used for oncogenes or cellular localization should be shown in roman: v-fes, c-MYC, etc.

Distribution of materials and data

The publication of an article in Open Chemistry is subject to the understanding that authors will make all data and associated protocols available to readers on request. The Methods section should include details of how materials and information may be obtained. In cases of dispute, authors may be required to make any primary data available to the Journal Editor.

The authors are encouraged to distribute freely any materials used in experiments (cells, strains, clones, antibodies etc.) to academic researchers for their own use. Authors are expected to use established public repositories wherever possible. All newly reported data including datasets, images, and information (Nucleotide and Amino Acid Sequences, Structural Determinations, Microarray Data, Genomic and Proteomic studies, Taxonomy etc.) should be deposited in public resources and must be accessible without restriction from the date of publication. Please provide the relevant entry name, accession number or identification code in the Methods section. Please note that an author's web site is not acceptable for providing this type of information. Authors must deposit their data before submitting their manuscripts, or update data already available, so that editors and referees can retrieve the

information directly from the database. Referees may be asked to comment on the terms of access to materials, methods and/or datasets, and Editors reserve the right to refuse publication in cases where authors are unable to provide adequate assurances that essential resources will be made freely available to the community.

Suggested databases include, but are not limited to:

- ArrayExpress
- BioModels Database
- Center for Information Biology Gene Expression Database (CIBEX)

Database of Interacting Proteins

- DNA Data Bank of Japan (DDBJ)
- EMBL Nucleotide Sequence Database
- fMRI Data Center
- GenBank
- Gene Expression Omnibus (GEO)
- Nucleic Acid Database
- Protein Data Bank (<http://rcsb-deposit.rutgers.edu> and <http://pdbdep.protein.osaka-u.ac.jp>)
- UniProtKB/Swiss-Prot

In addition, as much as possible, please provide accession numbers or identifiers for all entities such as genes, proteins, mutants, diseases, etc., for which there is an entry in a public database, for example:

- Ensembl
- Entrez Gene
- FlyBase
- InterPro
- Mouse Genome Database (MGD)
- Online Mendelian Inheritance in Man (OMIM)

In the case of new software, source code should ideally be made available, for example as supporting information with the rest of the paper, or by deposition at a publicly accessible resource such as sourceforge.net. For a new algorithm, a detailed description should be published in the paper. In cases where the software/algorithm is not central to the paper, we nevertheless encourage authors to make all relevant materials freely available. Software can be provided under license where necessary, but any restrictions on the availability or on the use of materials might be judged to diminish the significance of a paper, and therefore influence the decision about whether a paper should be published subject to those conditions.

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Manuscripts containing information related to human or animal use should clearly state that the research has complied with all relevant national regulations and institutional policies and has been approved by the authors' institutional review board or equivalent committee. These statements should appear in the Methods section (or for contributions without this section, within the main text or in the captions of relevant figures or tables). Copies of the guidelines and policy statements must be available for review by the Editor if necessary. The editors reserve the right to seek additional information or guidance from reviewers in any cases in which concerns arise. Research using animal subjects should be conducted according to the **Principles of Laboratory Animal Care** and similar documents, (e.g. <http://grants.nih.gov/grants/olaw/olaw.htm>).

For manuscripts reporting experiments on live vertebrates or higher invertebrates, authors must identify the committee approving the experiments, and must confirm that all experiments were performed in accordance with relevant regulations. Clinical investigation with human subjects must have been conducted by following the tenets of the **Helsinki Declaration** (<http://www.wma.net/en/30publications/10policies/b3/>). For manuscripts reporting experiments involving human subjects, authors must identify the committee or review board approving the experiments, and provide a statement indicating approval of the research.

Our human participant policy conforms to the **Uniform Requirements of the International Committee of Medical Journal Editors** (<http://www.icmje.org/>). Patients have a right to privacy that should not be infringed upon without informed consent. Identifying information (patients' names, hospital unit numbers) should not be published unless the information is essential for scientific purposes and the patient (or parent or guardian) gives written informed consent for publication. Information about the signed document of informed consent obtained from participants should appear as an appropriate statement in the published article. We encourage authors to submit a sample of a patient consent form, and may require additional submissions on some occasions.

Outline of the production processes

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