TABLE OF CONTENTS

• Description p.1
• Audience p.2
• Impact Factor p.2
• Abstracting and Indexing p.2
• Editorial Board p.2
• Guide for Authors p.5

DESCRIPTION

Biochemical and Biophysical Research Communications (BBRC) is the premier international journal devoted to the very rapid dissemination of timely and significant experimental results in diverse fields of biological research. For short communication papers, we offer the fastest submission to acceptance of any journal within life sciences, with "accept" decisions rendered within three weeks of submission. We will now consider full-length research papers and review articles.

The journal covers most of areas of life science, and is divided into the following sections: Biochemistry Biophysics Cell Biology Cellular Pathology and Cancer Computational Biology and Bioinformatics Genetics Immunology and Inflammation Microbiology and Virology Nanomedicine and Bionanomaterials Neuroscience Pharmacology Physiology Plant Biology Structural Biology

Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our Support Center.

Announcement: BBRC has traditionally only published short communications of novel results. From 2023, the journal now publishes short communications, full-length research papers, and reviews.

What type of paper should I choose on submission?

For short communications, we will still aim to make an accept or reject decision within two weeks of submission. If you have novel results that you can consolidate into 4,600 words, with no more than four figures, then you may continue to choose the short communication route.

Short communications should be concise, no more than 4,600 words and up to four display items. They should offer novel insights and warrant a rapid peer review process. The 4,600 word count includes the title page, all sections of the manuscript (including the references), and the figure and table legends. Papers that exceed these limits will be reassigned within the submission system as a full-length research paper.

If you submit a full-length research paper or a review paper, we will continue to offer a fast turnaround (with a decision after review within 30 days of submission), and we'll also make sure that any revisions that we request of you will not require significant resource expenditure on your part.

Full-length research papers should present a comprehensive account of original research. These papers are not restricted by length or number of figures.
Review papers should be authoritative, state-of-the-art accounts of the selected research field and be of high interest, balanced, and accurate. Beyond summaries of important scientific developments and ideas, authors are encouraged to identify and discuss how the field may be impacted or develop in the future, including insights that may be of significance to the scientific community. The number of co-authors of review articles is limited to five, and each author is expected to make a substantial contribution to the writing of the manuscript.

There are no restrictions on length for review papers, and we welcome both comprehensive reviews and short reviews that offer an insight into more recent advances in a field.

AUDIENCE
Biochemists, bioinformaticians, biophysicists, immunologists, cancer researchers, stem cell scientists and neurobiologists.

IMPACT FACTOR
2022: 3.100 © Clarivate Analytics Journal Citation Reports 2023

ABSTRACTING AND INDEXING
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Embase
EMBiology
Biological Abstracts
Chemical Abstracts
Current Contents - Life Sciences
Embase
PubMed/Medline
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Apoptosis/cell death, Autophagy, Cell signaling, Neurodegenerative disease

Michael Lichten, Bethesda, Maryland, Maryland, United States of America
DNA Repair and Recombination, Gene regulation and chromatin remodeling, Yeast Genetics and Epigenetics

Konstantin A. Lukyanov, Skolkovo Institute of Science and Technology, Skolkovo, Russian Federation
Fluorescent proteins, Fluorescence labeling and imaging, Super-resolution fluorescence microscopy, Bioluminescence, Optogenetics

Carlos Martinez-Alonso, Spanish Scientific Research Council, Madrid, Spain
Immunology and Inflammation, Cancer Research, Cell Biology

Hisao Masai, Tokyo Metropolitan Institute of Medical Science, Setagaya-Ku, Japan
DNA replication, G-quadruplex, cell cycle, genome stability, chromatin organization, Cdc7, Rif1, Claspin, PriA, Escherichia coli, Fission yeast, Replication checkpoint

Tetsuro Matano, National Institute of Infectious Diseases, Shinjuku-Ku, Japan
Virology, Immunology, Vaccine, Retrovirus, COVID-19

Katsuhiko Mikoshiba, ShanghaiTech University, Shanghai, China
Neuroscience; Oxidative Stress and Antioxidants; Protein Folding

James Ntambi, University of Wisconsin-Madison, Madison, Wisconsin, United States of America
Metabolic regulation, bile acid, liver metabolism, lipid signaling, lipid synthesis, beta-oxidation, fatty acid metabolism, membrane lipid, acetyltransferase, adipose tissue metabolism, peroxisome proliferator-activated receptor gamma coactivator 1-alpha (PGC-1alpha) (PPARC1alpha), energy metabolism, dyslipidemia, gluconeogenesis, endoplasmic reticulum stress (ER stress), glucose metabolism, acetoacetate, metabolic syndrome

Sergio Pantano, Pasteur Montevideo Institute, Montevideo, Uruguay
Computational/Structural Biology, Molecular Simulations, Bioinformatics, Physical Virology

Duanqing Pei, Westlake University School of Life Sciences, Hangzhou, China
Cell Fate Control

Sven Pettersson, Karolinska Institute, Stockholm, Sweden

Jacques Pouysségur, Valrose Institute of Biology, Nice, France
Hypoxia Signalling; Cancer Biology; Bioenergetics/Mitochondria

Luigia Santella, Zoological Station Anton Dohrn, Napoli, Italy
Fertilization and Early Development, Cell and Developmental Biology, Oocyte Meiotic Maturation, Calcium Signaling

Igor Stagljar, University of Toronto, Toronto, Ontario, Canada
Cancer signalling, Chemical biology, Cancer therapeutics, Protein-protein interactions, Proteomics, Systems biology, Membrane transport

Kiyoshi Takatsu, University of Toyama, Department of Immunobiology and Pharmacology, Toyama, Japan
Immunology and Inflammation

Naoyuki Taniguchi, Osaka International Cancer Institute, Osaka, Japan
Glycobiology and Reactive Oxygen Species involved in disease prevention, diagnosis and treatment, Glycosyltransferases, Nglycan, Superoxide dismutases, Carbonic anhydrases, Maillard reaction, Cell surface proteins, Growth factor receptors, Keratan Sulfate, Cancer, COPD. Alzheimer’s disease, Biochemistry, Glycobiology, Reactive oxygen and nitrogen species

Juan Pablo Tosar, University of the Republic Uruguay, Montevideo, Uruguay
RNA Biology, Small RNAs, Extracellular RNA, Extracellular Vesicles

Liping Wang, Chinese Academy of Sciences Shenzhen Institutes of Advanced Technology, Shenzhen, China
Neuroscience

Eric Westhof, Institute of Molecular and Cellular Biology, Strasbourg, France
Relationships between sequences, three-dimensional structures, evolution and functions of RNA molecules, especially those with catalytic activity, RNA
Maryam Zarghooni, BlueRock Therapeutics, Toronto, Ontario, Canada
Biochemistry, Genetics, Immunology and Cell Biology
Alec Zhang, The University of Texas Southwestern Medical Center, Dallas, Texas, United States of America
Surface receptors and signaling, cancer, cancer immunology, and stem cells
Boris Zhivotovsky, Karolinska Institute Institute of Environmental Medicine, Stockholm, Sweden
Apoptosis/Cell Death, Autophagy, Cancer Biology
GUIDE FOR AUTHORS

Announcement:
BBRC has traditionally only published Short Communications of novel results. From 2023, the journal now publishes Short Communications, Full Length Research papers and Reviews.

What type of paper should I choose on submission?

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If you submit a full length research paper or a review paper, we will continue to offer a fast turnaround (with a decision after review within 30 days of submission), and we'll also make sure that any revisions that we request of you will not require significant resource expenditure on your part.

Full Length Research papers should present a comprehensive account of original research. These papers are not restricted by length or number of figures.

Review Papers should be authoritative, state-of-the-art accounts of the selected research field, be of high interest, balanced and accurate. Beyond summaries of important scientific developments and ideas, authors are encouraged to identify and discuss how the field may be impacted or develop in the future, including insights that may be of significance to the scientific community. The number of co-authors of review articles is limited to five and each author is expected to make a substantial contribution to the writing of the manuscript.

There are no restrictions on length for review papers, and we welcome both comprehensive reviews and short reviews that offer an insight into more recent advances in a field.

INTRODUCTION
Biochemical and Biophysical Research Communications (BBRC) is the premier international journal focusing on the very rapid dissemination of timely and significant experimental results in diverse fields of biological research. The journal is broad scope, and is divided into the following sections, each with a team of dedicated expert editors: Biochemistry, Biophysics, Cell Biology, Cellular Pathology, and Cancer, Computational Biology and Bioinformatics, Genetics, Immunology and Inflammation, Microbiology and Virology, Nanomedicine and Bionanomaterials, Neuroscience, Pharmacology, Physiology, Plant Biology, Structural Biology.

Please note that BBRC does not favorably review manuscripts identifying a miRNA-target pair without additional insights into the repression mechanism or significant advances in understanding regulatory pathways. In addition, the following elements should be an integral part of the study:

In silico prediction of miRNA targets must be experimentally verified using appropriate luciferase constructs and assays. To exclude non-functional miRNA/mRNA interactions, a reporter system including the whole 3’UTR of the target gene downstream of the "luciferase" or GFP should be considered. To maximize physiological relevance, any miRNA modulation should be validated by measuring the expression of the putative protein and should preferentially include miRNA inhibition rather than miRNA overexpression experiments.

Types of paper
BBRC has traditionally only published Short Communications of novel results. From 2023, the journal now publishes Short Communications, Full Length Research papers and Reviews. Special content, such as thematic issues, are by invitation-only.

What type of paper should I choose on submissions?
If you have a novel result that needs to be published quickly and you can present it concisely (within the guidelines below), please submit as a short communication.

Short communications should be concise, no more than 4,600 words and up to four display items. They should offer novel insights and warrant a rapid peer review process. The 4,600 word count includes the title page, all sections of the manuscript (including the references), and the figure and table legends. Papers that exceed these limits will be reassigned within the submission system as a Full Length Research Paper.

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There are no restrictions on length for review papers, and we welcome both comprehensive reviews and short reviews that offer an insight into more recent advances in a field.

Type of Peer Review

The practice of peer review is to ensure that good science is published. It is an objective process at the heart of good scholarly publishing and is carried out on all reputable scientific journals. Our Editorial Board plays a vital role in maintaining the high standards of BBRC while ensuring that it retains the speed of publication necessary for a rapid communication journal.

Editors are not involved in decisions about papers which they have written themselves or have been written by family members or colleagues or which relate to products or services in which the editor has an interest. Any such submission is subject to all of the journal's usual procedures, with peer review handled independently of the relevant editor and their research groups.

Type of Peer Review:

Short Communications - rapid review with decision in two weeks of submission:

Authors of manuscripts can expect an accept or reject decision normally within 2 weeks of receipt. Publication will then take place immediately unless the author has, upon submission, requested an embargo.

For short communication papers, the decision to publish a paper rests with the handling Editor. On submission, authors will choose the section most suitable for their work. The paper will be initially assessed by an in-house scientific editor to ensure the integrity of the science in the paper and that it falls within the scope of the journal. Suitable papers are then assigned to an Editor based on their expertise.

The Editor will then make a thorough assessment of the paper and may accept the paper as it is, send it to a colleague for review, or reject it. Requests for revisions are rare. Should the Editor request revisions, the paper will be treated as a new submission.

Full Length Research papers and Review Papers - painless and fast peer review

The journal operates a single anonymized review process for Full Length Research papers and Review Papers. On submission, authors will choose the section suitable for their work. The paper will be initially assessed by an in-house scientific editor to ensure the integrity of the science in the paper and that it falls within the scope of the journal. The scientific editor may then liaise with a suitable Editor to determine if the paper is suitable to be sent for review. For those papers deemed in scope and meeting the requirements for scientific integrity, two independent referees will be sought to review the paper. An Editor with suitable expertise will then make the final decision on the paper after review.
Timelines
We expect to provide a first decision on whether or not a paper is suitable for review within a week of submission, often sooner.

If a paper is sent to review, we aim to provide a decision of revise/reject/accept after review within 30 days of submission.

We endeavour to provide a painless peer review process, with only one round of revision for each paper (except in exceptional circumstances) and aim to render an editorial decision within a week of submission of the revised paper.

Contact details for submission
Papers should be submitted using the BBRC online submission system https://www.editorialmanager.com/BBRC/default.aspx. Authors who have questions regarding the electronic submission process could visit our support center

BEFORE YOU BEGIN

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If the work involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans. The manuscript should be in line with the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals and aim for the inclusion of representative human populations (sex, age and ethnicity) as per those recommendations. The terms sex and gender should be used correctly.

Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Research Council's Guide for the Care and Use of Laboratory Animals and the authors should clearly indicate in the manuscript that such guidelines have been followed. The sex of animals must be indicated, and where appropriate, the influence (or association) of sex on the results of the study.

Declaration of competing interest
Corresponding authors, on behalf of all the authors of a submission, must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. All authors, including those without competing interests to declare, should provide the relevant information to the corresponding author (which, where relevant, may specify they have nothing to declare). Corresponding authors should then use this tool to create a shared statement and upload to the submission system at the Attach Files step. Please do not convert the .docx template to another file type. Author signatures are not required.

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The below guidance only refers to the writing process, and not to the use of AI tools to analyse and draw insights from data as part of the research process.

Where authors use generative artificial intelligence (AI) and AI-assisted technologies in the writing process, authors should only use these technologies to improve readability and language. Applying the technology should be done with human oversight and control, and authors should carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete or biased. AI and AI-assisted technologies should not be listed as an author or co-author, or be cited as an author. Authorship implies responsibilities and tasks that can only be attributed to and performed by humans, as outlined in Elsevier's AI policy for authors.
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Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify compliance, your article may be checked by Crossref Similarity Check and other originality or duplicate checking software.

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Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. When coding terminology is used, we recommend to avoid offensive or exclusionary terms such as "master", "slave", "blacklist" and "whitelist". We suggest using alternatives that are more appropriate and (self-) explanatory such as "primary", "secondary", "blocklist" and "allowlist". These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

Reporting sex- and gender-based analyses
Reporting guidance
For research involving or pertaining to humans, animals or eukaryotic cells, investigators should integrate sex and gender-based analyses (SGBA) into their research design according to funder/sponsor requirements and best practices within a field. Authors should address the sex and/or gender dimensions of their research in their article. In cases where they cannot, they should discuss this as a limitation to their research's generalizability. Importantly, authors should explicitly state what definitions of sex and/or gender they are applying to enhance the precision, rigor and reproducibility of their research and to avoid ambiguity or conflation of terms and the constructs to which they refer (see Definitions section below). Authors can refer to the Sex and Gender Equity in Research (SAGER) guidelines and the SAGER guidelines checklist. These offer systematic approaches to the use and editorial review of sex and gender information in study design, data analysis, outcome reporting and research interpretation - however, please note there is no single, universally agreed-upon set of guidelines for defining sex and gender.
Definitions
Sex generally refers to a set of biological attributes that are associated with physical and physiological features (e.g., chromosomal genotype, hormonal levels, internal and external anatomy). A binary sex categorization (male/female) is usually designated at birth ("sex assigned at birth"), most often based solely on the visible external anatomy of a newborn. Gender generally refers to socially constructed roles, behaviors, and identities of women, men and gender-diverse people that occur in a historical and cultural context and may vary across societies and over time. Gender influences how people view themselves and each other, how they behave and interact and how power is distributed in society. Sex and gender are often incorrectly portrayed as binary (female/male or woman/man) and unchanging whereas these constructs actually exist along a spectrum and include additional sex categorizations and gender identities such as people who are intersex/have differences of sex development (DSD) or identify as non-binary. Moreover, the terms "sex" and "gender" can be ambiguous—thus it is important for authors to define the manner in which they are used. In addition to this definition guidance and the SAGER guidelines, the resources on this page offer further insight around sex and gender in research studies.

Author contributions
For transparency, we require corresponding authors to provide co-author contributions to the manuscript using the relevant CRediT roles. The CRediT taxonomy includes 14 different roles describing each contributor’s specific contribution to the scholarly output. The roles are: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; and Writing - review & editing. Note that not all roles may apply to every manuscript, and authors may have contributed through multiple roles. More details and an example.

Authorship
All authors should have made substantial contributions to all of the following: (1) the conception and design of the study, or acquisition of data, or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, (3) final approval of the version to be submitted.

Changes in authorship
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. The Editor will not consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. If you wish to make changes after the manuscript has been submitted (but before it’s been accepted), publication of the manuscript will be suspended while the Editor considers the request.

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**Language (usage and editing services)**
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**Submission**
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

**PREPARATION**

**Queries**
For questions about the editorial process (including the status of manuscripts under review) or for technical support on submissions, please visit our Support Center.

**Use of word processing software**
Please submit your paper in Word Document format. Include a cover letter with your submission to appear before the manuscript. It should be in letter format and address the submission to BBRC, including a brief outline of the manuscript and why you think it is important to the readers of BBRC. The text of the manuscript should be in single-column format and include page numbers. Keep the layout of the text as simple as possible. Please do not include any line numbers or running headers or footers such as the manuscript title or corresponding author name. Please remove any "hidden edits" from your paper prior to submission by using track changes then accept changes. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. Do not embed "graphically designed" equations or tables, but prepare these using the word processor's facility. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see
also the Guide to Publishing with Elsevier: https://www.elsevier.com/guidepublication). Do not import the figures into the text file but, instead, indicate their approximate locations directly in the electronic text and on the manuscript. See also the section on Electronic illustrations.

To avoid unnecessary errors you are strongly advised to use the "spell-check" and "grammar-check" functions of your word processor.

Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described. Any Methods exclusively used for supplemental figures may be described in the supplemental material, however Methods pertaining to figures in the main text should be presented in the main text.

**Introduction**

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

**Material and methods**

Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

**Results**

Results should be clear and concise.

**Discussion**

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

**Essential title page information**

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Highlights**

Highlights are mandatory for this journal as they help increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).
Abstract
A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

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