Description

Comparative Biochemistry & Physiology (CBP) publishes papers in comparative, environmental and evolutionary physiology.

Part B: Biochemical and Molecular Biology, focuses on biochemical physiology, primarily bioenergetics/energy metabolism, cell biology, cellular stress responses, enzymology, intermediary metabolism, macromolecular structure and function, gene regulation, evolutionary genetics. Most studies focus on biochemical or molecular analyses that have clear ramifications for physiological processes.

All four CBP journals, receive editorial direction from all the major societies in the field European Society for Comparative Physiology and Biochemistry, Chinese Association for Physiological Sciences, Japanese Society for Comparative Physiology and Biochemistry, Canadian Society of Zoologists (CBP Section), Society for Experimental Biology, (formerly the American Society for Zoologists) Society for Integrative and Comparative Biology, Australian and New Zealand Society for Comparative Physiology and Biochemistry, Russian Physiological Society.

Audience

Physiologists, Biochemists, Biologists, Veterinary and Medical Researchers.

Impact Factor

2018: 1.990 © Clarivate Analytics Journal Citation Reports 2019
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<td>University of Miami, Div. of Marine Biology &amp; Fisheries, Miami, Florida, United States</td>
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<td>Oklahoma State University Stillwater, Stillwater, Oklahoma, United States</td>
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<td>Inna Sokolova</td>
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<td>George Somero</td>
<td>Stanford University Hopkins Marine Station, Pacific Grove, California, United States</td>
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<tr>
<td>Tomohiko Suzuki</td>
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<td>Yoshio Takei</td>
<td>The University of Tokyo, Dept. of Marine Bioscience, Chiba, Japan</td>
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<td>Akihiro Takemura</td>
<td>University of the Ryukyus, College of Science, Okinawa, Japan</td>
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</tr>
<tr>
<td>Daniel Warren</td>
<td>Saint Louis University, Saint Louis, Missouri, United States</td>
</tr>
<tr>
<td>Shugo Watabe</td>
<td>Kitasato University, School of Marine Biosciences, Kanagawa, Japan</td>
</tr>
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<td>Andrew Whitehead</td>
<td>University of California Davis, Davis, California, United States</td>
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<tr>
<td>Philip Withers</td>
<td>University of Western Australia, Dept. of Zoology, Crawley, Western Australia, Australia</td>
</tr>
<tr>
<td>Tianjun Xu</td>
<td>Shanghai Ocean University, Shanghai, China</td>
</tr>
<tr>
<td>Tania Zenteno-Savín</td>
<td>Biological Research Centre of the Northwest, La Paz, Mexico</td>
</tr>
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INTRODUCTION

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The journal publishes original articles emphasizing comparative and environmental aspects of the physiology, biochemistry, molecular biology, pharmacology, toxicology and endocrinology of animals. Adaptation and evolution as organizing principles are encouraged. Studies on other organisms will be considered if approached in a comparative context.

Part A. Molecular and Integrative Physiology covers molecular, cellular, integrative, and ecological physiology. Topics include bioenergetics, circulation, development, excretion, ion regulation, endocrinology, neurobiology, nutrition, respiration, and thermal biology. Studies on regulatory mechanisms at any level or organization such as signal transduction and cellular interactions and control of behaviour are encouraged.

Part B. Biochemistry and Molecular Biology covers biochemical and molecular biological aspects of metabolism, enzymology, regulation, nutrition, signal transduction, promoters, gene structure and regulation, metabolite and cell constituents, macromolecular structures, adaptational mechanisms and evolutionary principles.

Part C. Toxicology and Pharmacology covers chemical and drug action at different levels of organization, biotransformation of xenobiotics, mechanisms of toxicity, including reactive oxygen species and carcinogenesis, endocrine disruptors, natural products chemistry, and signal transduction. A molecular approach to these fields is encouraged. Measured rather than nominal exposure concentrations of toxicants must be reported whenever possible. For water-borne exposures of aquatic organisms, reporting of detailed chemistry data for the exposure waters is encouraged. When reporting data obtained from bioassays (e.g., LC50 tests), raw data (i.e., the value of the measured biological response variable(s) for each treatment and each observation time) should be submitted as online supplementary material.

Part D. Genomics and Proteomics covers the broader comprehensive approaches to comparative biochemistry and physiology that can be generally termed as "-omics", e.g., genomics, functional genomics (transcriptomics), proteomics, metabolomics, and underlying bioinformatics. Papers dealing with fundamental aspects and hypotheses in comparative physiology and biochemistry are encouraged rather than studies whose main focus is purely technical of methodological.

Naturally, a certain degree of overlap exists between the different sections, and the final decision as to where a particular manuscript will be published after passing the rigorous review process lies with the editorial office.

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A Research Paper is a paper that focuses on an experimental question of broad interest to the comparative physiology community.

• Word count (excluding references): typically 4000 -8000 words, with at least 2 figures / tables.
• Papers are normally subdivided into sections titled: Abstract, Introduction, Materials and Methods, Results, Discussion, and References. Results and discussion may be combined if appropriate.

A Short Communication is like a Regular Article in scope, but is of a nature that a complete story can be presented in a brief communication. As Short Communications are expected to have higher than average impact on the field rather than report on incremental research, they will receive prioritized and rapid publication.

• Word count: less than 3000 words, with no more than 2 figures / tables.
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A Methods article is focused on applying a novel technology or approach that would inform the CBP readership about a novel technology applied to a comparative physiology question.

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