

General Physiology and Biophysics

An International Journal

General Physiology and Biophysics appears quarterly and is devoted to the publication of original research papers concerned with general physiology, biophysics and biochemistry at the cellular and molecular level. The coverage of the journal includes:

- membrane physiology and biophysics (ion channels, receptors, transporters, protein-lipid interactions, surface phenomena, model membranes),
- intercellular and intracellular signalling (neurotransmission, endocrine regulations, messengers, secretory mechanisms, regulatory proteins, calcium signalling pathways, nitric oxide),
- excitability and contractility (neurophysiology, smooth, cardiac and skeletal muscle physiology, excitation-contraction coupling, cellular motility),
- biophysical analysis of cellular function (bioenergetics, volume regulation, thermodynamics, mathematical models),
- metabolic regulations (enzymology, ATPases, plant and microbial metabolism),
- cellular aspects of pharmacology, toxicology and pathology (receptor-drug interaction, the action of drugs and toxins on signalling and regulatory functions, free radicals, lipid peroxidation, ischemic preconditioning, calcium paradox),
- accounts of advances in relevant techniques and methodology.

Mini Reviews should not exceed 15 pages. *Review* articles will generally be published by invitation only. Theoretical contributions are acceptable as long as they formulate testable hypotheses. *Short Communications* will be published as quickly as possible. *Letters to the Editor* with comments on findings published in the journal will be also accepted. The language of the journal is English.

Editors

Prof. Pavol Balgavý, Department of Physical Chemistry of Drugs, Faculty of Pharmacy, Comenius University, Odbojárov 10, 832 32 Bratislava, Slovakia

Tel.: +421-2-5011 7290; Fax: +421-2-5011 7100; E-mail: pavol.balgavy@fpharm.uniba.sk

(Model membranes; Lipid bilayers; Membrane proteins; X-ray/neutron diffraction scattering; NMR spectroscopy; ESR spectroscopy; Spin labels; Calorimetry)

Dr. Miroslav Barančík, Institute of Heart Research, Slovak Academy of Sciences, Dúbravská cesta 9, P.O. Box 104, 840 05 Bratislava, Slovakia

Tel.: +421-2-5477 4405; Fax: +421-2-5477 6637; E-mail: miroslav.barancik@savba.sk

(Intracellular signaling; Cardiovascular physiology; Mitochondria; Protein kinase; Drug resistance; Remodelation of extracellular matrix; Apoptosis)

Prof. Viktor Bauer, Institute of Experimental Pharmacology, Slovak Academy of Sciences, Dúbravská cesta 9, 841 04 Bratislava, Slovakia

Tel.: +421-2-5477 3586; Fax: +421-2-5477 5928; E-mail: exfabauv@savba.sk

(Pharmacology; Pharmacokinetics; Toxicology; Smooth muscles; Autonomic neurotransmission; Reactive oxygen species)

Dr. Evelynne Benoit, Neurobiologie Cellulaire et Moléculaire, UPR9040 CNRS, bât. 32–33, 91198 Gif sur Yvette Cedex, France

Tel.: +33-0-169 823 652; Fax: +33-0-169 824 141; E-mail: benoit@nbcn.cnrs-gif.fr

(Electrophysiology; Confocal microscopy; Neuropharmacology; Neurotoxicology; Ion channels)

Dr. Albert Breier, Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Vlárská 5, 833 34 Bratislava, Slovakia

Tel.: +421-2-57510 146; Fax: +421-2-57510 144; E-mail: Breier@up.upsav.sk

(Membrane biochemistry; Transport ATPases; Multidrug resistance of cancer cells)

Prof. Tibor Hianik, Department of Nuclear Physics and Biophysics, Faculty of Mathematics, Physics and Informatics, Comenius University, Mlynská dolina F1, 842 48 Bratislava, Slovakia

Tel.: +421-2-6542 6774; Fax: +421-2-6542 5882; E-mail: tibor.hianik@fmph.uniba.sk

(Biomembranes; Model membranes; Membrane mechanical and thermodynamical properties; Membrane fusion; Protein-lipid interactions; Ionic transport; DNA-protein interactions; Biosensors)

Dr. Richard Imrich, Institute of Experimental Endocrinology, Slovak Academy of Sciences, Vlárská 3, 833 06 Bratislava, Slovakia

Tel.: +421-2-5932 7725; Fax: +421-2-5932 7725; E-mail: richard.imrich@savba.sk

(Hypothalamic; Pituitary; Adrenal; Inflammation; Cytokine; Steroid; Interleukin; Sympathetic; Autonomic; Catecholamine; Adrenoreceptor; Rheumatoid arthritis; Autoimmunity)

Prof. Ján Lehotský, Department of Medical Biochemistry, Comenius University, Jessenius Faculty of Medicine, Malá Hora 4, 036 01 Martin, Slovakia

Tel.: +421-43-4131 565; Fax: +421-43-4136 770; E-mail: lehotsky@jfmed.uniba.sk

(Neurosciences; Excitable cells; Transport and signalling processes; Metabolism; Transport ATPases; Free radicals)

Prof. Gabriela Nosálová, Institute of Pharmacology, Comenius University, Jessenius Faculty of Medicine, Sklabinská 26, 037 53 Martin, Slovakia

Tel.: +421-43-4132 535; Fax: +421-43-4134 807; E-mail: gabriela.nosalova@jfmed.uniba.sk

(General pharmacology; Pharmacology of respiratory system; Cough suppressive therapy; Bronchodilators agents; Antiasthmatic drugs; The role of NO; Prostaglandins and leucotriens in respiratory tract; Therapy of antibiotics; Adverse reactions of drugs; Antiglaucomatic agents)

Dr. Karol Ondriaš, Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Vlárská 5, 833 34 Bratislava, Slovakia

Tel.: +421-2-5477 4102; Fax: +421-2-5477 3666; E-mail: karol.ondrias@savba.sk

(Membrane channels; Molecular electrophysiology; Bilayer lipid membrane; Hydrogen sulfide; Nitric oxide-electrophysiology)

Dr. Olga Pecháňová, Institute of Normal and Pathological Physiology, Slovak Academy of Sciences, Sienkiewiczova 1, 813 71 Bratislava, Slovakia

Tel.: +421-2-5292 6271; Fax: +421-2-5296-8516; E-mail: olga.pechanova@savba.sk

(Hypertension; Cardiovascular system; Endothelium; Nitric oxide; Reactive oxygen species)

Dr. Miroslav Pirsšel, Cancer Research Institute, Slovak Academy of Sciences, Vlárská 7, 833 91 Bratislava, Slovakia

Tel.: +421-2-5932 7303; Fax: +421-2-5932 7350; E-mail: miroslav.pirsel@savba.sk

(DNA repair; Cancer; Ageing; DNA replication; Cell cycle; Transcription; Mammalian cells; Apoptosis)

Dr. Peter Proks, Department of Physiology, Anatomy and Genetics, Parks Road, Oxford OX1 3PT, United Kingdom

Tel.: +44-1865285818; Fax: +44-1865285813; E-mail: peter.proks@dpag.ox.ac.uk

(Ion channels; Electrophysiology; Potassium channels; Exocytosis; Ion channel modelling)

Prof. Ján Slezák, Institute for Heart Research, Slovak Academy of Sciences, Dúbravská cesta 9, 840 05 Bratislava, Slovakia

Tel.: +421-2-5751 0134; Fax: +421-2-5249 2410; E-mail: slezak@up.upsav.sk

(Experimental cardiology; Cardiovascular physiology; Electron microscopy; General physiology; Morphology of cardiovascular system; Histochemistry)

Dr. Peter Šmigáň, Institute of Animal Biochemistry and Genetics, Slovak Academy of Sciences, Moyzesova 61, 900 28 Ivanka pri Dunaji, Slovakia

Tel.: +421-2-4594 3591; Fax: +421-2-4594 3932; E-mail: peter.smigan@savba.sk

(Bioenergetics; Transmembrane transport; Structure and function of membranes; Anaerobiosis; Biogenesis of mitochondria; Mitochondrial diseases)

Dr. Vladimír Štrbák, Institute of Experimental Endocrinology, Slovak Academy of Sciences, Vlárská 3, 833 06 Bratislava, Slovakia

Tel.: +421-2-5477 2709; Fax: +421-2-5477 4247; E-mail: vladimir.strbak@savba.sk

(Cellular mechanisms of secretion; Cell volume; Endocrinology; Diabetes; Neuroendocrinology)

Prof. Ľudovít Varečka, Department of Biochemistry and Microbiology, Slovak University of Technology, Radlinského 9, 812 37 Bratislava, Slovakia

Tel.: +421-2-5932 5514; Fax: +421-2- 5249 3198; E-mail: ludovit.varecka@stuba.sk

(Membrane structure and properties; Transport processes across cell membranes; Signalling pathways; Ca²⁺ homeostasis; Animal and microbial cells; Molecular biology of transport and signalling processes)

Dr. Štefan Zórad, Institute of Experimental Endocrinology, Slovak Academy of Sciences, Vlárská 3, 833 06 Bratislava, Slovakia

Tel.: +421-2-5477 2800; Fax: +421-2-5477 4908; E-mail: stefan.zorad@savba.sk

(Metabolism; Hormones; Membrane receptors; Signal transduction)

Coordinating Editor

Dr. Ľubica Lacinová, Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Vlárská 5, 833 34 Bratislava, Slovakia

Tel.: +421-2-5477 2311; Fax: +421-2-5477 3666; E-mail: lubica.lacinova@savba.sk

Managing Editor

Dr. Olga Krizánová, Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Vlárská 5, 833 34 Bratislava, Slovakia

Tel.: +421-2-5477 5266; Fax: +421-2-5477 3666; E-mail: olga.krizanova@savba.sk

Technical Editor

Dr. Branislav Uhrík, Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Vlárská 5, 833 34 Bratislava, Slovakia

Tel.: +421-2-5477 2111; Fax: +421-2-5477 3666; E-mail: branislav.uhrik@savba.sk

INSTRUCTIONS FOR AUTHORS

A. General

Manuscripts should be submitted electronically as an e-mail attachment to the **Editorial Office**. Authors unable to submit the manuscript electronically for technical reasons should contact the Editorial Office, General Physiology and Biophysics, Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, 833 34 Bratislava, Vlárská 5, Slovakia.

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Both Word and PDF versions are required.

The text of the manuscript (including title, Abstract, Key words, main text, References and Figure legends) should be submitted as a single text file (.doc or .rtf). Tables should be uploaded as text (.doc or .rtf) and Figures separately as .jpg, .eps or .tiff files. Standard fonts should be used (Times New Roman or Courier for the general text and Arial for the figures). Authors are required to keep the format and arrangement of the whole text as described in section Preparation of manuscripts.

It is presumed that manuscripts have not been published and have not been simultaneously submitted elsewhere.

B. Preparation of manuscripts

1. *Manuscripts* should be in English, typed double-spaced with 2.5 cm margins, and an unjustified right margin. Use a standard 12 point typeface (e.g., Times, Arial, or Courier) throughout the manuscript. Number each page at the bottom. Use hard return only at the end of paragraphs. Do not use any hyphenation to divide words at the right margin. Please take care to distinguish properly between digit "1" and letter "l" (also 0 and O).
2. Abbreviations in parentheses should be preceded by the full term when first used (except for those which are very common).
3. If you use symbols or special characters the PDF of the corresponding text file must show exactly how they have to look like.
4. Numbers, constants and mathematical operators (sin, cos, log, etc.) should be in regular font as distinguished from variables, which should be written in italics (dy/dx , not *dy/dx*).
5. Scientific investigations involving humans or animals must have approval of the appropriate ethics committee. Animal experiments should be carried out in accordance with EU (86/609/EEC) or the NIH guidelines. Investigations involving humans must be accompanied by a statement that informed consent was obtained from all subjects.
6. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations that could inappropriately influence, or be perceived to influence, their work. Disclosure information must include any financial relationship that each author has with any sponsoring organization and the for-profit interests the organization represents, and with any for-profit product discussed or implied in the text of the article.
7. The text should be arranged under the following headings: Introduction; Materials and Methods; Results; Discussion; Acknowledgement and References.
8. Title page should include the title of the article, authors' names (first name in full and initials of the middle names), without academic degrees, the name of the institutions, addresses and e-mail address for the first author (in case he (she) is not the corresponding author). Give a short title which should be printed at the head of the right-hand pages of the article. On the bottom give a full name, address and e-mail address of the corresponding author.
9. An *Abstract* of not more than 200 words together with up to 5 key words should be submitted on a separate sheet. If needed, the abbreviations used in the text with their full explanations could be listed here, too.
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Hodgkin A. L., Huxley A. F., Katz B. (1952): Measurement of current-voltage relations in the membrane of the giant axon of *Loligo*. *J. Physiol. (London)* **116**, 424–448

b) *Monographs*:

Zachar J. (1971): *Electrogenesis and Contractility in Skeletal Muscle Cells*. University Park Press, Baltimore and London

c) *Chapters from monographs*:

Haggis G. H. (1964): The structure and function of membranes. In: *Introduction to Molecular Biology*. (Eds. G. H. Haggis, D. Michie, A. R. Muir, K. B. Roberts and P. M. B. Walker), pp. 151–192, Longmans, London

Abbreviation of journal titles should correspond to those used in Current Contents. In case of any doubt the way how the journal quotes itself should be used. Personal communications or unpublished papers should not be included in the list of references. In the text the name of the author should be followed by the year of publication. Where there are more than two authors, only the first should be named, followed by “et al.”

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13. Numerical data should be expressed in SI units (Système International d’Unités).

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