## instruction for authors

Journal Problems of Cryobiology and Cryomedicine publishes original papers, reviews and short reports covering the issues of low temperature biology and medicine, as well as those of related fields of science.

The manuscript should be submitted in Ukrainian or English in electronic form via e-mail to journal@cryo.org. ua or using the web-site www.cryo.org.ua/journal. Manuscripts should conform to the following requirements. The text should be printed in A4 pages. MS Word is preferable, use Times New Roman 14 pt and 1.5 spacing. Manuscript should be not more than 12 pages for original research paper, 15 pages for review and 5 pages for short communications. (Please consult Editorial Office if you need more space).

Start your manuscript with informative and concise title, then indicate full names of the authors, their parent institutions (departments) where the authors performed the research.

Your paper should contain the summary (about 1000 symbols) describing the aim, main methods and conclusions of the research. Follow the summary by up to 10 keywords.

The original research paper could be based on the experimental or theoretical data, as well as on the development of methodical approach. Recommended division of the paper is as follows: introduction, materials and methods, results and discussion (together or separately), conclusion. It is recommended to introduce the original research with general description of the problem as well as its relationship to important fundamental and/ or applied issues, to make short analysis of recent research and publications, which initially reported the issue, to state unsolved aspects of the issue which is the object of the presented study, as well as the proceeding from these objectives (aim) of the investigation. The Materials and Methods section should be sufficiently detailed to allow the work to be reproduced. Results and discussion could be present separately or together in one section depending on logical design of the paper. In any case the results should be described clearly and without repeating of the same data in figures and in tables. Describe in the text only the found regularities without stating all the numeral data shown in the figures or tables. Statistical analyses should be stated if applicable. The use of SI units is obligatory. The discussion should be accompanied by interpretation and substantiation of the findings. Finally the paper should contain the conclusion on the performed research and the prospects of further investigations.

Short communication is a reduced version of original paper and serves for providing the cutting-edge information about obtained results without an expanded discussion. Short communication does not contain the subheadings, not more than 3 figures and/or tables, and maximally 10 references. The review papers to be prepared after preliminary arrangement with the Editorial Board. It is supposed that the review paper would substantially cover the state of art in a appropriate relevant scientific issue in the frames of the journal topic.

The text of the manuscript should contain the definition of abbreviations at their first usage, references should be numbered and given in square brackets right after citation. Mathematical and chemical symbols, equations and formulas

are to be placed in the manuscript using the text processing software. The tables are to be placed in separate pages after the main text and references. Give the notes to the table directly under it. Place the numbered figures and illustrations on separate pages after the text, and enclose their electronic copies as separate files. Provide the figures with the concise title and explanations essential to understand the illustrated content. The illustrations should be of professional quality and to be done in black and white (grayscale); photos, diagrams to be presented as an image in eps, jpeg or tiff formats, the images should be minimum 8 cm in width and at least 300 dpi resolution. Charts and graphs prepared with MS Excel application to be submitted as the original file (xls) with the source data, in case of other applications, these should be presented as an image. Formulas, tables and figures are to be numbered consecutively in Arabic numerals, respectively: (1); Table 1, Fig. 1; parts of composite figures to be denoted by capital letters (A, B, C, etc.). The illustrations should be prepared considering bilingual journal format, thus it is recommended not to oversize the labels and captions within the figures, rather to place all the large annotations in the figure description. Do not use pseudo-3D plots where not appropriate. Use white backgrounds for plots and no gradient filling for the columns, line thickness should be at least one point. Arial is preferable to use for all the numbering and letters on the plots.

Generally we use Vancouver style (NLM) for citations with some specific details. Place the references after the main text in alphabetical order as a numbered list. Put the reference number in square brackets immediately after the citation. The unpublished data should be only acknowledged in the text, do not put them into the list. The reference description should contain the following information: name(s) of the author(s), article title, journal or book title; for periodicals state the year of publication, volume number, number of issue, page number limits; for monographs state the place of publication, publisher, year of publication.

Scheme of references

Journal article:

Narozhnyi SV, Rozanova YeD, Nardid OA. [Effect of low-temperature storage on proteins encapsulated in alginate microspheres]. Visnyk problem biologii i medycyny. 2018; (2): 206-9. Russian.

Petrenko YuA, Rogulska OYu, Mutsenko VV, et al. A sugar pretreatment as a new approach to the  $\rm Me_2SO$ - and xenofree cryopreservation of human mesenchymal stromal cells. CryoLetters. 2014; 35(3): 239–46.

Book:

Jain NC. Essentials of Veterinary Hematology. Philadelphia, PA: Lea and Febringers; 1993. 417 p

Belous AM, Grischenko VI. [Cryobiology]. Kyiv: Naukova dumka; 1994. 430 p. Russian.

Atramentova LÖ, Utevska OM. [Statistical methods in biology]. Kharkiv: V.N. Karazin Kharkiv National University, 2007. 288 p. Ukrainian.

Part of a book:

Zhang TT. Cryopreservation of gametes and embryos of aquatic species. In: Fuller BJ, Lane N, Benson EE, editors. Life in the Frozen State. Florida: CRC Press LLC; 2004. p. 415–36.

Electronic document:

European Convention for the Protection of Vertebrate Animals used for Experimental and Other Scientific Purposes. European



Treaty Series No. 123 Strasbourg, 18.III.1986. Strasbourg: Council of Europe; 1986. 53p. [Cited 01.02.2016] Available from: https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168007a67b

Hawkins VE, Takakura AC, Trinh A, et al. Purinergic regulation of vascular tone in the retrotrapezoid nucleus is specialized to support the drive to breathe. eLife [Internet]. 2017 Apr 7 [cited 2017 Nov 19]; 6:e25232. Available from: https://elifesciences.org/articles/25232

## Patent:

Ohlrogge JB, Benning C, Gao H, Girke TA, White JA, inventors; Board of Trustees Operating Michigan State University, assignee. Plant seed specific promoters. United States patent US 7,081,565. 2006 Jul 25.

If you face any problems related to the preparation of manuscripts please do not hesitate to contact the Editorial office.

Provide the information about the corresponding author: surname, first name, institution, position and title, postal address, telephone number, e-mail address.

In case the manuscript would not conform to these requirements it will be sent back for revision.

Submitted papers will be peer-reviewed. The Editorial Board takes the responsibility to provide a comprehensive peer-review of all submitted manuscripts. Our journal operates a closed blind peer-review process. Firstly an Editor decide whether the manuscript is suitable for further peer review. Thereafter the materials will be estimated by appropriate experts. Reviewers report about the possibility/impossibility of further publication and/or ways for manuscript improvement up to the level required for publication. Editors will make the decision on the basis of the submitted manuscript compliance with the generally accepted criteria (including those mentioned in short Publishing Ethics and Policy), its importance for scientific community, meeting the journal's aims and scope, notices of reviewers, and, if necessary, correspondence with the authors.

All the researches in living organisms should comply with the principles of bioethics. On that matter our journal adheres to the Recommendations of the International Committee of Medical Journal Editors and International Association of Veterinary Editors. Investigations conducted with human subjects, human material, or human data must comply with the Declaration of Helsinki. For all researches involving human subjects, an informed consent to participate in the study should be obtained from participants. Experiments in animals must be performed in accordance with institutional. national, or international guidelines, in particular, European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes (Strasbourg, 1986) and Directive 2010/63/Eu of the European Parliament and of the Council of the European Union on the protection of animals used for scientific purposes. In addition local bioethics committee should approve all the procedures involving living organisms. Any indispensable decline from the regulations must be approved by bioethics committee and described in details.

Articles published in Problems of Cryobiology and Cryomedicine are Open-Access articles distributed under the terms and conditions of the Creative Commons Attribution License (CC BY-NC). We provide immediate open access

to its content adhering to the principle that making research freely available to the public supports a greater global exchange of knowledge, increase visibility and readership. Non-commercial use and distribution of the publications are permitted, retaining the credits to the authors and the Journal. The Journal holds the exclusive license to be the first publisher of the articles in print form and on-going non-exclusive license to disseminate the published content in various ways. The published version of the article could be deposited by authors to institutional or public repositories immediately on publication, stating a link to the URL of the published article on the journal's web-site.

We do not charge the authors for article submission and/ or processing and do not provide off-prints. The operation of the Journal is supported by National Academy of Sciences of Ukraine.

Read more about Publishing Policy and Ethics etc. at the web-site www.cryo.org.ua/journal.