

THE CHINESE JOURNAL OF PHYSIOLOGY

2017 Volume 60 No. 6 ISSN 0304-4920

EXECUTIVE COMMITTEE

S.J. Tsai (President) J.M. Liao (Executive Secretary)
J.Y.H. Chan Y.Y.W. Chang J.C. Chen Y.J. Ho P.S. Hsieh J.J. Hwang C.C. Juan
Y.T. Lau Y.H. Lee P.S. Li H. Lin K.R. Shieh M.L. Tsai C.J. Tseng C.S. Tung
J.Y. Wang P.S. Wang M.H. Yen L.C.H. Yu (alphabetical order)

EDITOR-IN-CHIEF

P.S. Hsieh (Taipei, Taiwan, ROC)

ASSOCIATE EDITORS

H. Lin (Taipei, Taiwan, ROC) J.C. Chen (Taoyuan, Taiwan, ROC)
C.C. Juan (Taipei, Taiwan, ROC) L.C.H. Yu (Taipei, Taiwan, ROC)

HONORARY EDITOR

S. Chien (San Diego, CA, USA)

MANAGING EDITOR

C.H. Yu (Taichung, Taiwan, ROC)

ENGLISH EDITOR

K.B. Choo (Selangor, Malaysia)

EDITORIAL BOARD

T.G. Amstislavskaya (Novosibirsk, Russia)	K.C. Liang (Taipei, Taiwan, ROC)
Y.C. Chang (IHSinchu, Taiwan, ROC)	R.M. Liao (Taipei, Taiwan, ROC)
Q. Chen (Richmond, VA, USA)	J.Y. Liu (Taipei, Taiwan, ROC)
W.L. Cho (Taipei, Taiwan, ROC)	T. Opthof (HUTrecht, Netherlands)
M.A. Geyer (La Jolla, CA, USA)	M.M. Poo (Berkeley, CA, USA)
C.Y. Huang (Taichung, Taiwan, ROC)	D.Y. Tan (Jishou, Hunan, PRC)
W.J. Huang (Taipei, Taiwan, ROC)	D.C. Tarng (Jishou, Hunan, PRC)
Y.T. Huang (Taipei, Taiwan, ROC)	Y.F. Tsai (Taipei, Taiwan, ROC)
C.R. Jan (Kaohsiung, Taiwan, ROC)	C.J. Tseng (Kaohsiung, Taiwan, ROC)
P.H.S. Jen (Columbia, MO, USA)	M. AG van der Heyden (Utrecht, Netherlands)
K.W. Kim (Seoul, South Korea)	T. Wang (Guangzhou, Guangdong, PRC)
B. Knechtle (St. Gallen, Switzerland)	P.M. Wise (Davis, CA, USA)
E.H.Y. Lee (Taipei, Taiwan, ROC)	L. Yu (Tainan, Taiwan, ROC)
S.D. Lee (Taichung, Taiwan, ROC)	Y. Zhang (Shijiazhuang, Hebei, PRC)
Y.H. Lee (Taipei, Taiwan, ROC)	(alphabetical order)

EDITORIAL ASSISTANT

S.H. Su (Taipei, Taiwan, ROC)

December 31, 2017

CO-ISSUED BY

THE CHINESE PHYSIOLOGICAL SOCIETY AND AIRITI PRESS INC.

National Defense Medical Center, Taipei, Taiwan, Republic of China

THE CHINESE JOURNAL OF PHYSIOLOGY (ISSN 0304-4920) is the official journal of The Chinese Physiological Society and is published bimonthly per year by The Chinese Physiological Society. Second class postage paid at Taipei, Taiwan and at additional mailing offices. The annual subscription rate is NT\$12,500 (US\$400 abroad). Order should be addressed to: The Editorial Office, The Chinese Journal of Physiology. Department of Physiology and Biophysics, National Defense Medical Center, Taipei 11490, Taiwan, Republic of China. No part of this publication may be reproduced or transmitted in any form, or by any means, electronic or mechanical, without written permission from The Chinese Physiological Society. All rights are reserved. Indexed by Science Citation Index, Index Medicus, Chemical Abstracts, EMBASE, Medline, and BIOSIS. Copyright © 2017 by The Chinese Physiological Society and Airiti Press Inc. The publication of this journal is sponsored in part by the Ministry of Science and Technology, Executive Yuan, Taiwan, ROC. The website location for CJP is: <http://www.cps.org.tw>.

Instructions to Authors

Original papers concerned with all fields of physiology, pharmacology, anatomy, and biochemistry from laboratory and clinical research and written in English are considered for publication in the Chinese Journal of Physiology. Send the cover letter and original manuscript to the Editor-in-Chief, Dr. Po-Shiuan Hsieh, via Online Submission System (URL: <http://www.ipress.tw/J0009>).

To facilitate editorial processing, the following points with regard to the preparation of manuscript should be noted.

- Five article types are considered for publishing in the *Chinese Journal of Physiology*:
 - Original Article:** It is a substantial novel research study, with a complex story often involving several techniques or approaches. **Abstract length:** 400 words or fewer (The Abstract must not be structured into separate sections). **Article length:** 5000 words or fewer.
 - Short Communication:** It is a concise study and contains short technical notes, or preliminary experimental results. They should not exceed a total of five printed pages and not include more than three illustrations. **Abstract length:** 250 words or fewer. **Article length:** 2000 words or fewer.
 - Review Article:** It is published usually upon invitation to outstanding scientists on special topics. **Abstract length:** 400 words or fewer. **Article length:** 8000 words or fewer.
 - Case Report:** It reports a concise unique study of disease processer that may expand the differential diagnosis and improve patient care. A report should contain abstract, introduction, case report, discussion, (acknowledgment), references, tables, legends, and figures in sequence. **Abstract length:** 400 words or fewer. **Article length:** 5000 words or fewer.
 - Research Highlight:** It is by invitation only. It is kind of brief review focusing on the paper of exceptional significance written by the same author. It would be better that the research highlight can be combined with proceedings of the author research. **Abstract length:** 400 words or fewer. **Article length:** 5000 words or fewer.
- Manuscripts must be typewritten and double-spaced with margins on one side of paper. Pages should be numbered in lower central part.
- The manuscripts should be arranged in the following order: title page, abstract, key words, introduction, materials and methods, results, discussion, acknowledgments, references, tables, figure legends, and illustrations.
- The title page should contain the complete article title, a running page headline (short title) not to exceed 50 characters, the name of *Institute* where the work was done.
- References cited in the text should be by Arabic numerals in parenthesis and not by the names of the authors. The references list should be in alphabetical order and numbered consecutively. The style of citation should be as follows:
Journal Articles. Last name of first author, followed by initials; last names of each coauthor followed by initials, title of article (first word only capitalized); name of journal (abbreviated as in Index Medicus, published by the National Library of Medicine, USA), volume, inclusive pages, and year. *Examples:*
 - Chen, H.I., Shih, W.J. and Chen, T.P. A scientiphotographic study of pulmonary edema and hemorrhage induced by cerebral compression and norepinephrine. *Chinese J. Physiol.* 22: 65-73, 1976.
 - Childers, R.W., Merideth, J. and Moe, G.K. Supernormality in Bachmann's bundle: an *in vivo* and *in vitro* study. *Circ. Res.* 22: 363-370, 1968.
- A document without author(s) should be cited as a footnote at the bottom of the page where its content is mentioned.
- Book References.** Author(s) as above; title of book (main words capitalized); city of publication; publisher; year and pages. *Examples:*
 - Parmley, W.W. and Tyberg, J.V. Determinants of myocardial oxygen demand. In: *Progress in Cardiology*, edited by Yu, P.N. and Goodwin, J.F. Philadelphia, PA, USA: Lea & Febiger, 1976, vol. 5, pp. 19-36.
 - Winer, B.J. *Statistical Principles in Experimental Design*. New York, NY, USA: McGraw-Hill, 1971.
- Abstracts.** An abstract properly identified (Abstract) may be cited only when it is the sole source. *Examples:*
 - Turkenkopf, I., Olsen, J. and Johnson, P.R. Hepatic lipogenic enzyme activity in the preobese Zucker rat (fafa) (Abstract). *Federation Proc.* 38: 547, 1979.
 - Chang, J.P., Morgan, R.O. and Catt, K.J. Inositol phosphates, diacylglycerol, and arachidonic acid in GnRH action (Abstract 48). The 1st International Congress of Neuroendocrinology, San Francisco, USA, 1986, p. 35.
- Abbreviations and symbols for units of measurement should conform to international recommendation.
- Tables should be typed on separate sheets, be numbered in Arabic numerals and be accompanied by adequate headings. Explanatory matter should appear in foot notes that are identified by superscript letters or asterisks. Their appropriate position in the text should be indicated by a note in the margin.
- Figures should be large enough for reproduction. Figure legends should be typed separately.
- If there are colored pages in a manuscript, authors must agree on printing them in colored plates, which are at the expense of the authors, after this manuscript is accepted for the publication.
- To expedite the review process, authors are encouraged to submit names including E-mail address of 4-6 suggested reviewers.
- All printed pages in a manuscript should be charged to the authors before publication. Page charge is US\$40 per page.
- For research articles with human subjects, the patients have a right to privacy that should not be infringed without informed consent. Identifying information, including patients' names, initials, or hospital numbers, should not be published in written descriptions, photographs, and pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) gives written informed consent for publication. Informed consent for this purpose requires that a patient who is identifiable be shown the manuscript to be published. Authors should identify Individuals who provide writing assistance and disclose the funding source for this assistance.
- The copyright transfer form, the statement of conflict of interest, and the statement of human and animal rights should be attached with the submitted manuscript.