ISSN: 2160-5866 Vol. 4, No. 7, July 2014



Journal of Behavioral and Brain Science





www.scirp.org/journal/jbbs

Journal Editorial Board

ISSN Print: 2160-5866 ISSN Online: 2160-5874 http://www.scirp.org/journal/jbbs

Editor-in-Chief

Dr. Juan J. Canales

University of Canterbury, New Zealand

.....

Editorial Board

Prof. Ahmed Abdel Khalek Abdel Razek	Mansoura University, Egypt
Prof. Jafri Malin Abdullah	University Sains Malaysia, Malaysia
Prof. Ana Adan	University of Barcelona, Spain
Dr. Aynur Akay	Dokuz Eylül University, Turkey
Prof. Saleh Mohammad Al-Hussain	Jordan University of Science and Technology, Jordan
Dr. Declan William Ali	University of Alberta, Canada
Prof. Gjumrakch Aliev	University of Atlanta, USA
Dr. Alessandro Bertolino	University of Bari, Italy
Prof. Stefan J. Borgwardt	University of Basel, Switzerland
Dr. Raymond Chuen-Chung Chang	University of Hong Kong, China
Prof. Chuansheng Chen	University of California, USA
Dr. Kanwaljit Chopra	University Institute of Pharmaceutical Sciences, Panjab University, India
Dr. Christos Constantinidis	Wake Forest School of Medicine, USA
Dr. Alexandre Croquelois	University of Lausanne, Switzerland
Dr. Darin D. Dougherty	Harvard Medical School, USA
Dr. Valentina Echeverria	Bay Pines Veterans Affairs Healthcare System, USA
Dr. Perry Neil Fuchs	University of Texas at Arlington, USA
Dr. Cheng-Xin Gong	New York State Institute for Basic Research in Developmental Disabilities, USA
Prof. Yasuo Iwasaki	Department of Neurology Toho University Omori Hospital, Janpan
Dr. Chella Kamarajan	SUNY Downstate Medical Center, USA
Dr. James J. Levitt	Brockton VA Medical Center, USA
Dr. Liana Lins Melo	Universidade Federal de São Paulo, Brazil
Prof. Joseph Mizrahi	Israel Institute of Technology, Israel
Prof. Kazushi Okamoto	Aichi Prefectural University, Japan
Prof. George Perry	University of Texas at San Antonio, USA
Dr. Arcady Putilov	Russian Academy of Medical Sciences, Russia
Dr. Irawan Satriotomo	University of Wisconsin, USA
Dr. Vijay K. Sharma	National University Hospital, Singapore
Prof. Karam F. A. Soliman	Florida A&M University, USA
Dr. David C. Spencer	Oregon Health & Science University, USA
Dr. Zheng Su	Genentech Inc., USA
Prof. Makio Takeda	Kobe University, Japan
Dr. M. Afzal Upal	Defence Research & Development, Canada
Prof. Xin-Fu Zhou	Flinders University, Australia



Table of Contents

Volume 4 Number 7	July	2014
Effect of <i>Citrus aurantium</i> L. Essential Oil and Its Interaction with Fluoxetine on Anxiety in Male Mice		
S. Saketi, M. Bananej, M. H. Jahromy		285
Evaluation of Activity Patterns in Quinpirole-Treated Rats		
C. L. Paíno		291
Effects of Age on the Disruption of Cognitive Performance by Exposure to Space Radiation		
B. M. Rabin, B. Shukitt-Hale, K. L. Carrihill-Knoll		297
EEGbands: A Computer Program to Statistically Analyze Parameters of Electroencephalographic Signals		
M. A. Guevara, A. Sanz-Martin, M. Hernández-González		308
Retrieval of Pups by Female Rats Undernourished during the Pre- and Neonatal Period		
J. Felix, M. Regalado, C. Torrero, M. Salas		325
Pregnancy: Protection of the Hyperactive Brain, or a Risk Factor?		
Z. I. Nanobashvili, I. G. Bilanishvili, A. G. Surmava, N. G. Bukia, M. P. Butskrikidze, L. I. Machavariani, N. T. Samsieshvili, M. G. Barbaqadze, I. G. Khachidze, N. A. Khizanishvili		334
The Sixth Sense-Emotional Contagion; Review of Biophysical Mechanisms Influencing Infor Transfer in Groups	mation	
A. McDonnell		342

Journal of Behavioral and Brain Science (JBBS)

Journal Information

SUBSCRIPTIONS

The *Journal of Behavioral and Brain Science* (Online at Scientific Research Publishing, <u>www.SciRP.org</u>) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$79 per issue. To subscribe, please contact Journals Subscriptions Department, E-mail: <u>sub@scirp.org</u>

SERVICES

Advertisements Advertisement Sales Department, E-mail: <u>service@scirp.org</u>

Reprints (minimum quantity 100 copies) Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

COPYRIGHT AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:

Copyright © 2014 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/

COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:

Copyright © 2014 by author(s) and Scientific Research Publishing Inc.

REUSE RIGHTS FOR INDIVIDUAL PAPERS:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

DISCLAIMER OF LIABILITY

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact: E-mail: <u>jbbs@scirp.org</u>





Journal of Behavioral and Brain Science

ISSN: 2160-5866 (Print) ISSN: 2160-5874 (Online) http://www.scirp.org/journal/jbbs

Journal of Behavioral and Brain Science (JBBS) is an international journal dedicated to the latest advancement of behavioural and brain function. Articles dealing with the neuroanatomical and neurochemical basis of behavior are especially welcomed. Multidisciplinary contributions from all fields of the neurosciences are encouraged so long as emphasis is placed in investigating the biological substrates of behavior and of mental processes underlying behavior.

University of Canterbury, New Zealand

Editor-in-Chief

Dr. Juan J. Canales

Editorial Board

Prof. Ahmed Abdel Khalek Abdel Razek Prof. Jafri Malin Abdullah Prof. Ana Adan Dr. Aynur Akay Prof. Saleh Mohammad Al-Hussain Dr. Declan William Ali Prof. Gjumrakch Aliev Dr. Alessandro Bertolino Prof. Stefan J. Borgwardt Dr. Raymond Chuen-Chung Chang Prof. Chuansheng Chen Dr. Kanwaljit Chopra Dr. Christos Constantinidis Dr. Alexandre Croquelois Dr. Darin D. Dougherty Dr. Valentina Echeverria Dr. Perry Neil Fuchs Dr. Cheng-Xin Gong Prof. Yasuo Iwasaki Dr. Chella Kamarajan Dr. James J. Levitt Dr. Liana Lins Melo Prof. Joseph Mizrahi Prof. Kazushi Okamoto Prof. George Perry Dr. Arcady Putilov Dr. Irawan Satriotomo Dr. Vijay K. Sharma Prof. Karam F. A. Soliman Dr. David C. Spencer Dr. Zheng Su Prof. Makio Takeda Dr. M. Afzal Upal Prof. Xin-Fu Zhou

Subject Coverage

This journal invites original research and review papers that address the following issues in bioscience and biotechnology. Topics of interest include, but are not limited to:

• Neuropharmacology and Psychopharmacology

- Cognitive Neuroscience
- Neurobiology
- Neurology

- Neurosurgery
- Psychiatry

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the *JBBS*.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handle electronically through the website. All papers are refereed through a peer review process. Authors are responsible for having their papers checked for style and grammar prior to submission to JBBS. For more details about the submissions, please access the website.

Website and E-Mail

http://www.scirp.org/journal/jbbs E-mail: jbbs@scirp.org