

Tentative Outline

Special Thematic Issue for the journal *Current Neuropharmacology*

Alternative models in neuropharmacology: the Zebrafish (*Danio rerio*)

Guest Editors:

Célia R. Carlini

Carla Denise Bonan

- **Scope of the Thematic Issue:**

The zebrafish (*Danio rerio*) has been received attention as a powerful animal model for a wide range of human brain disorders. Zebrafish is a small, low-cost and genetically tractable aquatic vertebrate species with a high degree of morphological, physiological and genetic homology to humans. Zebrafish strikes a compromise between system complexity and practical simplicity. Although fishes are often considered primitive vertebrates because of their early evolutionarily appearance, the structure and function of their brain, as well as their rich behavioral repertoire, are comparable to those of mammals. Therefore, this fish is a powerful animal models for investigating mechanisms underlying complex behaviors, to model neurological and neuropsychiatric disorders and identifying molecular targets for drug treatment.

Keywords: 6 to 8 keywords should be provided.

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- Zebrafish as model to study behaviors
- Zebrafish as model to study neurodegenerative diseases
- Zebrafish as model to study neurological diseases
- Zebrafish as model to study sleep and memory
- Zebrafish as model to study anxiety, depression and related pathologies

Tentative titles of the articles and list of contributors:

Tentative titles of the articles and list of contributors with their names, designations, addresses and email addresses should be provided.

1. **Ethanol Exposure**- Robert Gerlai – Department of Psychology – University of Toronto Mississauga –
Electronic address: robert_gerlai@yahoo.com

2. **Aggression** – Rui F. Oliveira ISPA-Instituto Universitário , Lisboa, Portugal; Instituto Gulbenkian de Ciência ,
Oeiras, Portugal. Electronic address: ruiol@ispa.pt.

3. **Stress responses** – Leonardo Barcellos - Programa de Pós-Graduação em Bioexperimentação,
Universidade de Passo Fundo (UPF), Electronic address: lbarcellos@upf.br.

4. **Social Behavior** – Caio Maximino - Grupo de Pesquisas em Neuropsicofarmacologia e Psicopatologia
Experimental, Brazil; Laboratório de Neurociências e Comportamento "Frederico Guilherme Graeff", Universidade
Federal do Sul e Sudeste do Pará, Marabá, Brazil. Electronic address: cmaximino@unifesspa.edu.br

5. **Memory** – Carla Denise Bonan – Escola de Ciências da Saúde e da Vida – Pontifícia Universidade Católica
do Rio Grande do Sul – Pontifícia Universidade Católica do Rio Grande do Sul – cbonan@pucrs.br

6. Anxiety – Angelo Piato – Programa de Pós-graduação em Farmacologia e Terapêutica, Instituto de Ciências Básicas da Saúde, Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil.

Electronic address: angelopiato@ufrgs.br.

7. Depression – Allan V. Kalueff - School of Pharmacy, Southwest University, Chongqing, China; Ural Federal University, Ekaterinburg, Russia; Laboratory of Biological Psychiatry, Institute of Translational Biomedicine, St. Petersburg State University, St. Petersburg, Russia; Russian Scientific Center of Radiology and Surgical Technologies, Ministry of Healthcare of Russian Federation, St. Petersburg, Russia. Electronic address:

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8. Epilepsy and seizures – Denis B. Rosemberg- Laboratory of Experimental Neuropsychobiology, Department of Biochemistry and Molecular Biology, Natural and Exact Sciences Center, Federal University of Santa Maria, 1000 Roraima Avenue, Santa Maria, RS, 97105-900, Brazil. dbrosemberg@gmail.com.

9. Alzheimer's disease – Monica Vianna - Escola de Ciências da Saúde e da Vida – Pontifícia Universidade Católica do Rio Grande do Sul – Pontifícia Universidade Católica do Rio Grande do Sul -monica.vianna@pucrs.br

11. Fear, avoidance, imaging – Hitoshi Okamoto, Japan Sci & Technol Agcy, Core Res Evolut Sci & Technol, Chiyoda Ku, Tokyo, Japan. Electronic address: hitoshi@brain.riken.jp

10. Model for toxicological screening – Robert L. Tanguay, Oregon State Univ, Sinnhuber Aquat Res Lab, Dept Environm & Mol Toxicol, 28645 East Highway 34, Corvallis, OR 97333 USA. Electronic address:

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OR Huang CJ (Huang, Changjiang), Wenzhou Med Coll, Dept Prevent Med, Wenzhou 325035, Zhejiang, Peoples R China Electronic address: cjhuang5711@163.com

12. Neurobehavioral pharmacology - Edward D. Levin, Duke Univ, Med Ctr, Dept Psychiat, Neurobehav Res Lab, Box 3412, Durham, NC 27710 USA. Electronic address: edlevin@duke.edu

Schedule:

✧ Thematic issue submission deadline: Nov 2020

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