CURRENT MEDICINAL CHEMISTRY

ABOUT THE JOURNAL

Current Medicinal Chemistry covers all the latest and outstanding developments in medicinal chemistry and rational drug design. Each issue contains a series of timely in-depth reviews and guest edited thematic issues written by leaders in the field covering a range of the current topics in medicinal chemistry. Current Medicinal Chemistry is an essential journal for every medicinal chemist who wishes to be kept informed and up-to-date with the latest and most important developments.

THEMATIC ISSUE

New targets for treating chronic pain and inflammation

*Lead Guest Editor: Francesca Guida **Guest Editor: LivioLuongo

*Francesca Guida, Affiliation Department of Experimental Medicine, Division of Pharmacology, Second University of Naples, 80138 Naples, Italy;

**LivioLuongo, Affiliation Department of Experimental Medicine, Division of Pharmacology, Second University of Naples, 80138 Naples, Italy; Lorenzo Di Cesare Mannelli, Affiliation Department of Neuroscience, Psychology, Drug Research and Child Health – Neurofarba-Pharmacology and Toxicology Section, University of Florence, 50139 Florence, Italy;

Inflammation is caused by tissue injury and triggers a cascade of biochemical reactions that prime the nervous system for pain perception. Moreover, long term inflammatory condition supports adaptive changes in the nervous system that can cause an altered pain signal process. Indeed, different chronic (i.e. neuropathic) or inflammatory injuries to the nervous system, can trigger structural and functional changes in the peripheral or central sensory circuits, resulting in specific pattern modifications responsible for behavioural dysfunctions (hyperalgesia and allodynia) and neurological comorbidities.

Current treatments for chronic pain which include anti-inflammatory drugs, opioids, and other drug classes such as antidepressants and anticonvulsants are quite unsatisfying. Thus, novel methodological approaches and new pharmacological targets to treat chronic pain states are needed. The identification of new targets, as well as, the development of novel approaches focusing on the optimization of side-effects of the classical drugs in inflammatory states would be desirable.