



## Ion Channels as Therapeutic Targets for Pain

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### Message from the Guest Editor

Dear Colleagues,

Pain still remains an immense clinical challenge. Our ability to effectively treat acute and especially chronic painful conditions often causes unwanted side-effects that degrade the quality of life. The last decade has seen an explosive growth in our understanding of how the sensation of pain is initiated at the peripheral terminals of primary afferent neurons – nociceptors. These specialized nerve terminals express a diverse array of ion channel - receptors that transduce noxious chemical, thermal and mechanical stimuli. Together, these ion channels serve to detect impending and ongoing tissue damage arising from pathophysiologic states such as inflammation and nerve injury. This section will focus on the therapeutic potential of targeting specific ion channels expressed in nociceptors to more effectively treat painful conditions.

Prof. Dr. Mark A. Schumacher

*Guest Editor*





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