Special Issue

Bioactive Lipids: Chemical, Biological Properties and Pharmaceutical Applications

Message from the Guest Editors

Lipids are a large and diverse group of naturally occurring organic compounds with a great structural variety among the different chemical classes. They are biologically active and ubiquitous metabolites that have different functions from structural cell components, including energy storage and signaling. Over 100,000 bioactive lipids have been identified as signaling molecules involved in the regulation of molecular mechanisms in both physiologic and pathologic systems, such as arthritis, cancer, heart disease, obesity, and neurodegenerative disorders. Therefore, a characterization of new lipidic molecules such as a deeper understanding of their cellular functions, from cell signaling to metabolic and gene regulation, could unveil the role of these lipids as diagnostic or prognostic biomarkers of disease. This Special Issue will cover all fields of research in bioactive lipids, including chemical and biological properties, the isolation and structure characterization of new lipids, mechanisms of action and medicinal applications, synthetic approaches, and new methods for the purification and quantification of active lipids.

Guest Editors

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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