Tentative Outline

Special Issue for MEDICINAL CHEMISTRY

Guest Editor: Mohammad A. Kamal

Medicinal Chemistry: Neurological and Endocrinological Disorders

Aims & Scope:

There is strong connection between our own body-physiological Chemistry and Environmental Chemistry of surrounding from bottom of earth to space. As anatomy of first human being, “Adam” was created by many elements collected from different part of the planet where we are breathing at the moment. By passing of time, human beings discovered chemistry of compounds of various complex natures and substances by using advance technology. On the other hand, it is still a debatable issue regarding ones understanding of the power held by the Creator of these chemicals versus ones benightedness. These chemicals created by the Creator pose both beneficial as well as toxic properties towards the human health affecting humanity nationwide. The nature of several of these chemicals have already been discovered however, there is still ongoing research in the discovery of new natural as well as synthetic compounds with respect to their physical, chemical, biological and pharmaceutical nature. There are millions of molecules, which play important roles in normal life of animal and plant kingdoms such as neurotransmitters (epinephrine or acetylcholine). Deregulations of these molecules become basis of many disorders such as neurodegenerative disorders, which involve numerous nature of illness (Alzheimer’s disease, Parkinson’s disease and Huntington’s disease). Many factors can affect metabolic process as a result, leading to metabolic dilemma in the human body via our hormonal imbalance. Some chemicals influence on our endocrine system, which eventually trigger Central Nervous System (CNS). Naturally, CNS controls secretion of hormones by endocrine glands into bloodstreams to act upon specific site of the body by binding to the specific cellular receptor protein etc. Thus it is sound to assume that both dilemma of neurodegenerative disorders and type 2 diabetes are two frustrating health disarrays, agitating millions in this era of science and technology all-around the world. This hot issue of Medicinal Chemistry (MC) requires authors to shed light on those important chemicals (inhibitors, pesticides, cosmetic, endocrine disrupting chemicals, endocrine-active substances etc.), which cause abnormality in the level of some enzymes, hormones, peptides, inflammatory modulators, microbiota, bacterial/viral infection and insulin signaling system being discussed in their articles (review, original research, case reports and letter). By this way, this special issue will help in depth understanding of the role of different chemicals in state of human health and various diseases, consequently approach towards drug development and clinical aspects for better progress in management strategies of different disorders. Overall, it will hopefully, cover current updates on advanced research in the discipline of medicinal chemistry with respect to neurological and endocrinological disorders.
Keywords:

Central Nervous System, Alzheimer's disease, Glucose homeostasis, Type 2 Diabetes Mellitus, Huntingtin gene, Neurodegenerative Disorders, Parkinson's disease, Obesity, Microbiology.

Tentative subtopics:
1. Current updates on advanced research in the discipline of medicinal chemistry with respect to Alzheimer’s disease
2. Molecular interaction of various chemicals with different macromolecules such as enzyme, receptor and hormones
3. Current updates in the field of medicinal chemistry with respect to Huntington's disease
4. Is there any chemical linkage in between role of miRNA?
5. Updates in the discipline of medicinal chemistry to control type-2 Diabetes Mellitus
6. Overview on Neuro-nanotechnological based approach in management of various disorders
7. Recent updates on advanced research in the discipline of medicinal chemistry with respect to Parkinson's disease
8. Present view on higher research in the discipline of medicinal chemistry with respect to inflammation
9. Medicinal chemistry versus Microbiology
10. Risk of cancer with respect to chemicals
11. Role of chemicals in mal-productivity
12. Chemistry beyond of behavioral disorders
13. Chemicals and Toxicity
14. Review on excipients, inactive ingredients and drug safety issues
15. Are manufactured chemicals upto the OH & S standard?

Tentative submission deadline: August 2014

PS: Interesting potential authors are requested to contact guest editor for availability of subtopic prior to submission of tentative summary by e-mail (meu.fabg@hotmail.com)