HOT TOPIC TITLE: CANCER EPIGENETICS

Aims & Scope:

In last several years, the focus for the origin and progression of human cancers has shifted from genetic to epigenetic regulation, with particular attention to methylation and acetylation events. These epigenetic changes are now increasingly being accepted to have profound effect on the eventual expression of oncogenes as well as the suppression of tumor suppressors. As such, epigenetic events have been proposed as attractive cancer drug targets. A few drugs targeting the epigenetic changes have already been approved by FDA for cancer treatment. However, the subject is still in its infancy and our knowledge is rapidly evolving. This thematic issue is an attempt to summarize our current state of knowledge on the various epigenetic events that are relevant to tumor progression and recurrence, with particular focus on how epigenetic events can be exploited as novel therapeutic targets for the benefit of cancer patients worldwide.

Key words: Cancer epigenetics, Methylation, Acetylation, Post-transcriptional modifications, Post-translational modifications, HDACs, microRNAs

Subtopics:

- Is there a role for epigenetic enhancement of immunomodulatory approaches to cancer treatment?
- Epigenetics in clinical management of children and adolescents with brain tumors
- Mechanisms for inhibition of colon cancer cells by sulforaphane through epigenetic modulation and hTERT down-regulation
- Multimodal HDAC inhibitors with improved anticancer activity
- Lung cancer stem cells: An epigenetic perspective
- Transforming cancer epigenetics with nutritive approaches
- Outlook on epigenetic therapeutic approaches for treatment of gastric cancer
- Regulation of EMT in non-small cell lung cancer
- miRNAs and cancer epigenetics

Schedule:

Manuscript submission deadline: December 01, 2015
Peer Review Due: December 31, 2015
Revision Due: January 30, 2016
Notification of acceptance by the Guest Editor: January 31, 2016
Final manuscripts due: February 01, 2016