

**Tentative Outline**  
**Special Issue for the MicroRNA Journal.**  
*Guest Editor(s): Palmiro Poltronieri*

**miRNA Deregulation and Changes in Gene Expression  
in Tumours and Viral Infections**

**Aims & Scope:**

“miRNA deregulation and changes in gene expression in tumours and viral infections” intend to review and discuss latest research developments show that a relevant output of transcription and the mechanisms regulating the production of proteins. As an output of posttranscriptional regulatory mechanisms, mRNA transcripts are regulated by mRNA splicing complexes and activated or repressed by the activity of microRNAs. Various pathological states have been shown associated to deregulated expression of microRNAs; among these are cancer, neurological diseases, retroviral infections. In the stress granule, mRNAs can be stored and put in stand-by through the action of RISC and miRNAs with complementary sequences. Alternatively spliced transcripts may escape from the regulation of their cognate miRNAs. In addition, depending on the particular localisation of different cell state, miRNAs may positively regulate their target mRNAs.

This special issue deals with deregulation states in human diseases, viral infections and cancers and on the mechanisms dependent on microRNAs to review the role of microRNAs in shaping the mRNA transcripts output, including changes in splicing that affect the mRNA-microRNA interaction, with profound alterations in cell pathological states

**Key words: mRNAs, splicing, mRNA:miRNA interaction, stress granules, gene expression changes**

**Subtopics:**

miRs gene targets in silico and validation through molecular assays

miRs and RISC activity changes in various cell compartments

miR-dependent activation of mRNA translation

alternative splicing and loss of regulation of miRNA-mRNA interactions

Stress Granules

DNA and RNA viruses

Genomic study

Animal study and clinical trials

**Schedule:**

Manuscript submission deadline: 30 March 2016

Peer Review Due: 1st May 2016

Revision Due: 1st June 2016

Notification of acceptance by the Guest Editor: 10th June 2016

Final manuscripts due: 31st June 2016