

## Tentative Outline

### Special Thematic Issue for Current Stem Cell Research & Therapy

Title of thematic issue: *Reflection on scientist's journey toward and beyond Stem Cells*

Guest Editors: *Shengwen Calvin Li, Ph.D.; Philip Hitchins Schwartz, Ph.D.*

#### Aims & Scope:

This Special Issue will organize around the theme "Research-based resolutions on stem cell biology & regenerative medicine." We want to emphasize the difficulty in identifying the right question and in following up with the right approach – a scientist's journey toward and beyond Stem Cells. An enthralling account of the author's relationship with colleagues in helping cast a self-critical eye on the often-exploitative labor of thinking process narrates out, such as "Aha" moments. They reflect on the conviction of "out of the box," which will inspire the reader. For example, how does one pursue an understanding of the molecular mechanisms that control normal and cancer-related stemness and the tools that are currently available for studying them both *in vitro* and *in vivo*? Any of these topics (keywords, below) reflecting insight will be considered for publication, but topics of interest are not limited to this selection. Either general studies or those focusing on specific principles, methodologies, and technologies could be of great interest.

**Keywords:** embryonic and adult stem cells, iPSC, Cancer stem cells, regenerative medicine

#### Subtopics:

The subtopics to be covered within this issue are listed below:

- Embryonic stem cells, induced pluripotent stem cells (iPSC) and reprogramming
- adult stem cells (cancer stem cells, neural stem cells, mesenchymal stem cells, etc.)
- hallmarks of stemness niche, hypoxia-driven microenvironment and nanotherapeutic target
- Scaffold-based tissue engineering: mechano-signal transduction in stem cells
- Addressing the heterogeneity of stem cells through a single-cell approach
- Human organotypic bio-constructs from organ-on-chip devices for human-predictive biological insights on therapeutic candidates derived from stem cells
- Ethical issues on stem cell research and regenerative medicine
- Stem cell-related clinical trials

#### Schedule:

- ✧ Manuscript submission deadline: Sept.30, 2020
- ✧ Peer Review Due: One month upon receipt of submissions
- ✧ Revision Due: One month upon peer-review reports
- ✧ Announcement of acceptance by the Guest Editors: Upon receipt of revision
- ✧ Final manuscripts due: December 20, 2020

#### Contacts:

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