

Stem Cell Past Conference in 2019

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Conference Series LLC Ltd invites all the participants from all over the world to attend 11th World Congress on Cell Stem Cell Research during March 25-26, 2019 in Orlando, USA.

Stem cells are cells originate in all multi-cellular organisms. They were isolated in mice in 1981 and in humans in 1998. In humans there are several types of stem cells, each with variable levels of potency. Stem cell treatments are a type of cell therapy that introduces new cells into adult bodies for possible treatment of cancer, diabetes, neurological disorders and other medical conditions. Stem cells have been used to repair tissue damaged by disease or age.

Objective: **Stem Cell** Research-2019 has the platform to fulfil the prevailing gaps in the transformation of this science of hope, to serve promptly with solutions to all in the need. Stem Cell Research 2019 will have an anticipated participation of 120+delegates across the world to discuss the conference goal.

Success Story: Cell Science Conference Series LLC Ltd

The success of the Cell Science Conference Series LLC Ltd has given us the prospect to bring the gathering in Orlando, USA. Since its commencement in 2011 Cell Science series has witnessed around 750 researchers of great potentials and outstanding research presentations from around the world. Awareness of stem cells and its application is becoming popular among the general population. Parallel offers of hope add woes to the researchers of cell science due to the potential limitations experienced in the real-time.

About Organizers: Conference Series LLC Ltd is one of the leading Open Access publishers and organizers of international scientific conferences and events every year across USA, Europe Asia Conference Series LLC Ltd has so far organized 3000+Global Conference series LLC Ltd Events with over 600+ Conferences, 1200+ Symposiums and 1200+ Workshops on Medical, Pharma, Engineering, Science, Technology and Business with 700+ peer-reviewed open access journals in basic science, health, and technology. Conference Series LLC Ltd is also in association with more than 1000 International scientific and technological societies and associations and a team of 30,000 eminent scholars, reputed scientists as editorial board members.

Scientific Sessions: Stem Cell Research-2019 will encompass recent researches and findings in stem cell

technologies, stem cell therapies and transplantations, current understanding of cell plasticity in cancer and other advancements in stem cell research and cell science. Stem Cell Research-2019 will be a great platform for research scientists and young researchers to share their current findings in this field of applied science. The major scientific sessions in Stem Cell Research-2019 will focus on the latest and exciting innovations in prominent areas of cell science and stem cell research.

Track 1: Stem Cells

Stem Cells: An undifferentiated cell of a multicellular organism which is capable of giving rise to indefinitely more cells of the same type, and from which certain other kinds of cell arise by differentiation. Stem cells have the ability to differentiate into specific cell types. The two defining characteristics of a stem cell are perpetual self-renewal and the ability to differentiate into a specialized adult cell type. There are two major classes of stem cells: pluripotent that can become any cell in the adult body, and multipotent that are restricted to becoming a more limited population of cells

Track 2: Stem Cell Therapy

Stem-cell therapy is the use of stem cells to treat or prevent a disease or condition. Bone marrow transplant is the most widely used stem-cell therapy, but some therapies derived from umbilical cord blood are also in use.

Track 3: Stem Cell Apoptosis and Signal Transduction

Self-reestablishment and multiplication of foundational microorganism populaces is controlled, to some degree, by affectation of apoptosis. The quantity of foundational microorganisms is thusly a harmony between those lost to separation/apoptosis and those increased through multiplication. Apoptosis of immature microorganisms is accepted to be a dynamic procedure which changes because of natural conditions.

Track 4: Stem Cell Transplantation

Stem cell transplantation, sometimes referred to as bone marrow transplant, is a procedure that replaces unhealthy blood-forming cells with healthy cells. Stem cell transplants commonly are used to treat Leukaemia and lymphoma, cancers that affect the blood and lymphatic system.

Track 5: Cell Signalling In Development

Cell signalling mediated by morphogens is essential to

coordinate growth and patterning, two key processes that govern the formation of a complex multi-cellular organism. During growth and patterning, cells are specified by both quantitative and directional information. While quantitative information regulates cell proliferation and differentiation, directional information is conveyed in the form of cell polarities instructed by local and global cues

Track 6: Stem Cell [Embryology](#)

Embryonic stem (ES) cells are cells derived from the early embryo that can be propagated indefinitely in the primitive undifferentiated state while remaining pluripotent; they share these properties with Embryonic germ (EG) cells. Candidate Embryonic stem and embryonic germ cell lines from the human blastocyst and embryonic gonad can differentiate into multiple types of somatic cell.

Track 7: Diseases and Stem Cell Treatment:

Stem cell research is perhaps the most exciting medical technology of the 21st Century. Stem cells hold the promise of treatments and cures for more than 70 major diseases and conditions that affect millions of people, including diabetes, Parkinson's, Alzheimer's, cancer, multiple sclerosis, Lou Gehrig's Disease (ALS), spinal cord injuries, blindness, and HIV/AIDS.

Track 8: Novel Stem Cell Technologies:

Stem cell technology is a rapidly developing field that combines the efforts of cell biologists, geneticists, and clinicians and offers hope of effective treatment for a variety of malignant and non-malignant diseases. Stem cells are defined as totipotent progenitor cells capable of self renewal and multi lineage [differentiation](#). Stem cells survive well and show stable division in culture, making them ideal targets for in vitro manipulation

Track 9: Reprogramming Stem Cells: Computational Biology:

Computational biology, a branch of biology involving the application of computers and computer science to the understanding and modelling of the structures and processes of life. It entails the use of computational methods for the representation and simulation of biological systems, as well as for the interpretation of experimental data, often on a very large scale. The fields of stem cell biology and regenerative medicine research are fundamentally about understanding dynamic cellular processes such as development, reprogramming, repair, differentiation and the loss, acquisition or maintenance of pluripotency. In order to precisely decipher these processes at a molecular level, it is critical to identify and study key regulatory genes and transcriptional circuits. Modern high-throughput molecular profiling technologies provide a powerful approach to addressing

these questions as they allow the profiling of tens of thousands of gene products in a single experiment. Whereas bioinformatics is used to interpret the information produced by such technologies

Track 10: Tumour Cell Science:

Cancer cells are cells gone wrong in other words, they no longer respond to many of the signals that control cellular growth and death. Cancer cells originate within tissues and, as they grow and divide, they diverge ever further from normalcy. Over time, these cells become increasingly resistant to the controls that maintain normal tissue and as a result, they divide more rapidly than their progenitors and become less dependent on signals from other cells. Cancer cells even evade programmed cell death, despite the fact that their multiple abnormalities would normally make them prime targets for apoptosis. In the late stages of cancer, cells break through normal tissue boundaries and metastasize to new sites in the body.

Track 11: Stem Cell Banking:

An amniotic stem cell bank is a facility that stores stem cells derived from amniotic fluid for future use. Stem cell samples in private banks are stored specifically for use by the individual person from whom such cells have been collected and the banking costs are paid by such person

Track 12: Cellular Plasticity and Reprogramming:

Stem cell plasticity refers to the ability of some stem cells to give rise to cell types, formerly considered outside their normal repertoire of differentiation for the location where they are found. Included under this umbrella title is often the process of "trans differentiation" – the conversion of one differentiated cell type into another, and metaplasia – the conversion of one tissue type into another.

Track 13: Epigenetics:

The study of changes in organisms caused by modification of gene expression rather than alteration of the genetic code itself. Epigenetics are stable heritable traits that cannot be explained by changes in DNA sequence

Track 14: Cell and Gene Therapy:

Gene therapy is an experimental technique that uses genes to treat or prevent disease. In the future, this technique may allow doctors to treat a disorder by inserting a gene into a patient's cells instead of using drugs or surgery

Track 15: Stem Cell Biomarkers:

Stem cell markers are genes and their protein products used by scientists to isolate and identify stem cells. Stem cells can also be identified by functional

assays. Molecular biomarkers serve as valuable tools to classify and isolate embryonic stem cells (ESCs) and to monitor their differentiation state by antibody-based techniques. ESCs can give rise to any adult cell type and thus offer enormous potential for regenerative medicine and drug discovery

Track 16: Cell and Organ Regeneration:

Regenerative medicine is a branch of translational research in tissue engineering and molecular biology which deals with the "process of replacing, engineering or regenerating human cells, tissues or organs to restore or establish normal function.

Track 17: Stem Cell Niches:

Stem-cell niche refers to a microenvironment, within the specific anatomic location where stem cells are found, which interacts with stem cells to regulate cell fate. The word 'niche' can be in reference to the in vivo or in vitro stem-cell micro environment. During embryonic development, various niche factors act on embryonic stem cells to alter [gene expression](#), and induce their proliferation or differentiation for the development of the foetus.

Track 18: Drugs and Clinical Developments:

The clinical development plan is a complex document that entails the entire clinical research strategy of a drug, describing the clinical studies that will be carried out for a pharmaceutical entity, created by a pharmaceutical company

Track 19: Stem Cells And Veterinary Applications:

The stem cell field in veterinary medicine continues to evolve rapidly both experimentally and clinically. Stem cells are most commonly used in clinical veterinary medicine in therapeutic applications for the treatment of musculoskeletal injuries in horses and dogs. New technologies of assisted reproduction are being developed to apply the properties of spermatogonial stem cells to preserve endangered animal species. Same methods can be used to generate transgenic animals for production of pharmaceuticals or for use as biomedical models

Track 20: Cell Differentiation and Disease Modelling:

A disease model is an animal or cells displaying all or some of the pathological processes that are observed in the actual human or animal disease. Studying disease models aids understanding of how the disease develops and testing potential treatment approaches