Kindly get the contents for making Prospectus and Flier to be made for this Fellowship in Stem Cells and Regenerative Medicine Program

FELLOWSHIP IN STEM CELLS AND REGENERATIVE MEDICINE (FSCRM) PROSPECTUS / FLIER CONTENTS

Objective:

Fellowship in Stem cells and Regenerative Medicine (F-SCRM) is an 11 month intensive dual Residential / Partially –residential* program offered to physicians or participants desiring for Advanced Clinical and Technical training in the field of Stem Cells and Regenerative Medicine

The goal of this Fellowship Programme is to provide Physicians / Surgeons/Dentists/ Super specialists with a comprehensive academic, research and clinical training in "Stem Cells and Regenerative Medicine" (Stem Cell Therapy). The program trains a fellow on Stem Cell Clinical Applications, Stem Cells Molecular Pathophysiology, Stem Cell Technologies, Evaluation, Diagnosis and Treatment, Standard Stem Cell Clinical Management in all or Specialised area of diseases for the award of Fellowship in Stem cells and Regenerative Medicine (Stem Cell Therapy). There will be a very strong emphasis on Clinical Research, Practical experience, Scholarly activity and learning experience. This Fellowship will enable candidates to have a strong foundation to receive the Post-Doctoral Fellowship Award from the University and consequently have a successful career in clinical practice.

Programme:

The Fellowship seeks MBBS/BDS/BPT/MD/MS/MCh/DM/DNB/MDS (Republic of India and MCI accredited) qualified Surgeons / Physicians / Superspecialists or Foreign Medical Graduates with equivalent qualifications with a very strong commitment to academic and evidence based medicine and research. It provides both didactic and self- directed teaching opportunities at both clinical and research skills.

Name of the Course

Fellowship in Stem Cells and Regenerative Medicine (Fellow SCRM)

Course Duration.

11 months

Residential Program

- 6 Months in Santosh Deemed to be University (Theory sessions)
- 3 Months in Auto Stem Laboratories, Chennai (Stem Cell Technology laboratory exposure, Project works)
- 2 Months in Santosh Deemed to be University (final submission works, assessments and award of fellowship)

Partial (Blended) Residential Program

- 6 Months in Theory sessions Blended mode (On or Offline)
- 3 Months in Auto Stem Laboratories, Chennai (Stem Cell Technology laboratory exposure, Project works, Offline)
- 2 Months in Santosh Deemed to be University (final submission works, assessments and award of fellowship Blended mode (On or Offline))

Course fee.

Rs. 10,00,000 /- (Rupess Ten Lakhs only)

INTRODUCTION

Stem cells are undifferentiated cells responsible for the formation of entire fetus, maintenance and functional integrity of tissues under steady-state conditions and their repair following injury (in adults). They are inexhaustive (show self-renewal property), can multiply extensively, have different proliferation and differentiation controls than normal body cells. Stem cells demonstrate extensive regenerative abilities and has enormous potential to cure hitherto incurable diseased like neurodegenerative disorders, spinal cord injury, diabetes etc. Of late, cord blood stem cell banking becoming a common practice all over the world. Combine with the power of tissue engineering, stem cells could be used to create artificial bio-organs and tissue constructs for various applications such as bone fractures, skin reconstruction, corneal regeneration etc. As with the potentials, stem cells also bring with it equally challenging problems, such as teratogenesis and cancer (with ES cell applications), ineffective host integration (with allogenic stem cell sources). Further, it is equally important to understand the unique conditions a stem cell demands for proper growth, differentiation and integration (both in vivo and in vitro) and for clinical and non-clinical applications.

FELLOWSHIP IN STEM CELLS AND REGENERATIVE MEDICINE RESIDENTIAL / NON – RESIDENTIAL PROGRAMME

Total credits : 70 Credits

Hours per week : 25 hrs/week (Lectures, Laboratory/clinical sessions)

Course per Month: One subject

Clinical Work : Stem Cell Therapy and Clinical Trials

LECTURES, LABORATORY and CLINICAL SESSIONS

A. Soft Skill Development Technology

(5 Credits)

Paper 1: This includes exposure to Stem Cell Therapy centres, Cord Blood Banking institutions, Instrumentations, Laboratory Exposure, Special Operative Techniques, Presentations, Assignments.

B. Didactic Lectures

(15 Credits)

Paper 2. Advanced Molecular Biology of Stem Cells (AMB) (5 credits)

Paper 3. Embryonic Stem Cell Technology (EST) (5 Credits)

Paper 4. Adult Stem Cell Technology (AST) (5 Credits)

C. Ethical And Regulatory Systems

(5 credits)

Paper 5: Ethical and Regulatory Compliance

D. Stem Cell Laboratory Module

(25 Credits)

Paper - 6 Stem Cell Isolation methods and techniques (Credit 5)

Paper - 7 Stem cell Characterisation techniques (Credit 5)

Paper - 8 Quantitative and qualitative analytical techniques (Credit 5)

Paper - 9 PCR and Flowcytometry applications to stem cell research (Credit 5)

Paper - 10 Primary Culture Techniques and Transdifferentiation (Credit 5)

E. Clinical Processing and Laboratory Projects

(5 credits)

F. Stem Cell Clinical Sessions - Opreative Sessions

(10 Credits)

Based on number of cases assisted or individually attended or operated under the expert supervision.

- **1.** Stem cell Regenerative Therapy (5 credits)
- **2.** Selection of stem cells (2 credits)
- 3. Stem Cell Infusion Procedures and Techniques (3 credits)

G. Sessions in Imaging Clinics

(5 Credits)

A, B, C, F, G sessions are held in Santosh Deemed to be University, Ghaziabad and D & E Sessions are held in ASL, Chennai. ASL provide all the course materials, lectures, clinical training and materials for and on behalf of Santosh Deemed to be University whereas Santosh Deemed to be University provide space, technical assistances, hospital access, patient referrals, logistics and other necessary assistances for taking the lectures and clinical sessions for this program.

FELLOWSHIP EXAMINATION PATTERN / ASSESSMENT

Assessment has been done on three categories. All carries 100 marks each.

- 1. Examination MCQ and Written methods (either on-line and off line mode)
- On the subjects coming under A, B, C sessions
- 2. Laboratory Assessment laboratory tests, project assessments
- On the laboratory works coming under D, E sessions
- 3. Clinical Assessments
- On the laboratory works coming under F, G sessions

Those securing 50% and above in each examination is qualified to receive the Fellowship Award.

Fellowship Grades:

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90 - 100 : "O" (Outstanding)
80 - 89 : A++ (Excellent)
70 - 79 : A+ (Very Good)
60 - 69 : A (Good)
50 - 59 : P (Pass)
> 50 (Fail)
NA (Not Appeared)
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