



Fellowship in Interventional Orthobiologics – Orthorheumatology FEIORA (Under the aegis of Indian Stem Cell Study Group & affiliated to Trans European Stem cell society and in academic collaboration with RML law univ, Lucknow & IndianOrthopaedic Rheumatology Association)

FELLOWSHIP IN Interventional Orthobiologics- Orthorheumatology Rheumatology (FEIORA)

2020 onwards we had started “**Fellowship in Orthopedic Rheumatology**” under academic Collaboration of **Indian Orthopaedic Rheumatology Association(IORA)**, **Indian Stem cell Study Group** affiliated to Dr Ram Manohar Lohiya National Law university . In 2023 we started FERIO – Orthobiologics fellowship

On the required need and academic demand we are Combining two fellowship together from 2025 onwards which would be named as Orthobiologics Orthorheumatology Fellowship programme (Fellowship in Int Orthobiologics Orth rheum)= FEIORA

Need for FERIO Fellowship

Globally, Regenerative medicine in various medical specialties such as Orthopaedics holds the future in treating a spectrum of conditions (*such as Osteoarthritis, uncontrolled Rheumatoid Arthritis, Avascular osseous necrosis among others*) that are difficult to be cured with traditional treatment options. To address the challenges faced by Orthopaedicians due to neglect of the science of Regenerative Orthobiologics & Orthorheumatology in their traditional teaching curriculum and to equip them with the state of art regenerative orthopedic solutions, a structured learning program of Regenerative Orthobiologics is needed to enlighten the surgeons with the basics, current evidence, effective treatment protocols and legal guidelines in this field. However, there is a lack of such teaching programs at the National and International levels. The ***Fellowship in Regenerative Orthobiologics*** will thus be the first of its kind International academic joint venture in this regard.

The Fellowship aim is to educate young Orthopaedic Surgeons in the Interventional Orthobiologics & Orthorheumatological Clinical practice

- The duration of this fellowship shall be for 24 months (online classes 1st ,3rd sat every month)with offline classroom training programmes at one of the subcentres as Surat ,Trichy & Lucknow ,publication / project work and simultaneous case based online discussion classes) From Nov they would be presenting their research week along with FEIORA Journal club

- The fellowship shall be conducted in a hybrid manner with both online and offline teaching modules.
- There shall be clinical observership sessions in Centres of national repute in the field
- The teaching Curriculum shall also take care of legal aspects of regenerative medicine along with insights & guidance into the medical litigations in the clinical practice
- One Research publication shall be made mandatory for the fellows.
- One academic presentation at the ISCSG/IOA conference is mandatory for the fellows
- Academic collaboration with a reputed university /International Society and Indian Orthopaedic Rheumatology Association shall be established by ISCSG for this purpose.
- The fellowship shall be jointly awarded by the ISCSG and collaborating university/Institute/Society
- Fellows later can write in their resume FEIOA(Interventional Orthobiologics ,Orthorheumatology)

The finer details of the course module for this fellowship, laid out by the scientific committee members shall be shared at an appropriate juncture with all the stakeholders. The currently selected center for clinical observership includes SRKRC institution in Surat (*NABH accredited Regional Blood Transfusion & Research Centre*) and MCRC at Trichy. medical litigations around orthopaedic rheumatology and legal aspects of the proposed subject.

The total duration would be of two year during where the fellows would be exposed to Orthopaedic Rheumatology (*Medical part, Surgical and Rehabilitation part of Orthopaedic Rheumatology*), Basic and Advanced Orthobiologics , orthobiologics in around Orthopedic Rheumatology, medical litigations around orthopaedic rheumatology,Orthobiologics and legal aspects of the proposed subject

Course details

No of Fellows intake – 5 , Method of Selection – Interview and Clinical Test

Minimum requirements for selection:

- i. Age limit: under 40 years of age.
- ii. Life member of ISCSG ,IOA
- iii. Two years of clinical experience post Masters' degree or equivalent qualification in Orthopaedics
- iv. Five years of clinical experience post Diploma in Orthopaedics
- v. Demonstrates academic and research interest in the field of Orthopaedics with minimum 5 research publications preferably in the subspecialty of Regenerative Orthopaedics

Out line of Course curriculum

Sl. No	Exposure
1	Induction at Lucknow – 2 days training in <ul style="list-style-type: none">• Basics of Regenerative Clinical Medicine• Basics of OrthoRheumatology• Research, analytics & manuscript writing.• Legal aspect on Orthobiologics uses
2	Online lectures on various aspects of Regenerative Orthobiologics & Orthorheumatolgy
3	Trichy / Surat / Chennai – 2 days 2 days of practical exposure to Basics in stem cells & Regenerative Orthopaedic procedures
4	Oral presentations and other assigned academic work in either ISCSG or affiliated IORA conference
5	Lucknow – Final Exit Exam
6	Convocation at the next ISCSG/IORA annual conference

The boarding arrangements would be facilitated by the ISCSG trust for offline teaching sessions, the payments of which shall be borne by the fellows

Application for the fellowship: Last Date 31 st Dec 2024

Requirements:

- a. Letter of Intent - *Why the candidate should be included in the fellowship program?* (Min 250 words)
- b. Statement of purpose – *How the fellowship will help the candidate?* (Min 250 words)
- c. Brief CV (not more than 4 pages)
- d. MCI/NMC recognized Degree certificates for under-graduation and post-graduation
- e. Abstract proposal (350 words) for research work during the fellowship
- f. Two letters of recommendation from previous mentors/ Or Eminent National/ International stalwart of the Orthobiologics / Orthorheumatology subspeciality

FERIO National Course Chief



Prof Dr Manish Khanna

ISCSG , India

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**Dr (Prof) Manish khanna MS FIMSA
National Course Chief, FEIORA
Orthopaedic Rheumatologic Surgeon & Regenerative Orthobiologist
Founder ,Advisor , IORA
Founder President ,ISCSG association
Past Chair,Educational Day Committee,SICOT
EditorinChief,InternationalJournalOrthoRheum
Editorinchief ,Text Book Of Orth Rheum (Jaypee)**

Syllabus for FERIO

Module 1: Introduction

- 1.1 Introduction to Regenerative Medicine
- 1.2 Introduction to stem cells
- 1.3 Introduction to Medico-legal aspects
- 1.4 Orthorheumatology – Introduction
- 1.5 Approaching Mono/Polyarthritis
- 1.6 Management of Rheumatoid and associated arthropathy
- 1.7 Gouty arthritis And CPPD

Module 2: Platelet Biology

- 2.1 Platelet rich plasma – Preparation, types of PRP, pre and post procedural care
- 2.2 Platelet rich fibrin – Preparation, types of PRF
- 2.3 Application of platelet products in various diseases

Module 3: Regenerative Medicine

- 3.1 Stem cell biology Basic
- 3.2 Various Sources of Stem cells
- 3.3 Characterization of stem cells
- 3.4 Clinical uses in Medical sciences
- 3.5 Orthobiologics

Module 4: cellular therapy and Bone marrow concentrate

- 4.1 Harvesting of Bone marrow
- 4.2 Preparation of BMAC

Module 5: Mesenchymal stem cells

- 5.1 Biology of MSCs
- 5.2 Characterization of MSCs
- 5.3 Sources of MSCs
- 5.4 Various sources of MSCs
 - 5.4.1 Bone marrow MSCs
 - 5.4.2 Adipose tissue derived MSCs
 - 5.4.3 Placental derived MSCs
 - 5.4.4 Amniotic fluid MSCs
 - 5.4.5 Miscellaneous sources of MSCs

Module 6 Orthobiologics Application

- 6.1 OA
- 6.2 AVN
- 6.3 CLI
- 6.4 Delayed and Non Union