



# SRI RAMACHANDRA

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Category - I Deemed to be University) Porur, Chennai

## SRI RAMACHANDRA FACULTY OF CLINICAL RESEARCH

Details of UG & PG Programmes

# ADMISSIONS

## OPEN 2023 - 24



Accredited by  
National Assessment and  
Accreditation Council  
with 'A++' Grade  
(CGPA 3.53 on 4 Point Scale)



NABH Accredited  
Tertiary Hospital



ज्ञान-विज्ञान विमुक्तये  
Graded as Category-I  
University by thr UGC



website: [www.sriramachandra.edu.in](http://www.sriramachandra.edu.in)

# Sri Ramachandra Faculty of Clinical Research

Year of Establishment : 2018

## **⋮ A brief profile of College/Faculty**

Clinical research is the branch of science that systematically determines the safety and effectiveness of medications, devices, diagnostic products, and treatment regimens for use in human subjects. Clinical research is a component of medical and health research intended to produce valuable knowledge for understanding human disease, preventing, and treating illness, and promoting health. Clinical research embraces a continuum of clinical studies involving approaches to decipher disease mechanisms; translational research; therapeutic interventions including development and clinical trials of drugs; biologics, devices, and instruments; prevention (primary and secondary) and health promotion; epidemiology; community-based and managed care-based research, etc. under proper ethical guidelines.

Faculty of Clinical Research at SRIHER was established in the year 2018 with the aim of introducing students to various aspects of Clinical research and train them into research professionals. It has dedicated faculty members with excellent academic and research expertise. Faculty of clinical research offers undergraduate (B.Sc. Clinical Research), post graduate (M.Sc. Clinical Research, M.Sc. Stem Cell and Regenerative Biology) and doctoral (Ph.D.) programs.

The Faculty of Clinical Research evolved from the Central Research Facility (CRF) of SRIHER, which has been supporting various research and development activities of the University since 2007. Central Research Facility comprises various research laboratories on Cancer Biology, Stem cell research, Molecular Genetics, and other exciting areas of Biomedical Sciences along with an instrumentation facility and a clinical research division (CRD). CRF has been providing infrastructure and instrumentation support to various faculty members, researchers, and doctoral research students to carry out their research projects across the University. It also extends the support for academic practical sessions for the courses offered under the faculty of clinical research. Students from Faculty of Clinical Research have also gained motivation and support for innovation from Sri Ramachandra Innovation Incubation centre (SRIIC) supported under the BioNEST program by Biotechnology Industry Research Assistance Council (BIRAC).

Faculty of Clinical Research greatly benefits from the clinical research division, where over 100 clinical trials have been successfully completed so far. The clinical trial division has state of the art infrastructure and has access to the necessary hospital and laboratory facilities to conduct clinical trials on various disciplines in the field of medicine. The division caters to the need of providing hands-on training for the students of clinical research.

## Programs offered (UG and PG)

All the programs offered under the faculty are under Choice Based Credit System (CBCS).

### 1. B.Sc. Clinical Research (3 Years Full Time)

This is a professional undergraduate program in Clinical research that combines the basic learning from allied health sciences program with a strong focus on Clinical Research towards the end of the program. The undergraduate program shall be helpful for students who are research oriented and are interested to pursue health sciences-based research. The program provides options for students to pursue either pre-clinical or clinical research streams for their post-graduation.

#### Major Components of the Course

The program comprises of introduction on basic medical sciences to candidates along with courses like microbiology, biochemistry, medicinal chemistry to enable them understand the basic research element later on the course. The candidates will be introduced to clinical research setting, regulatory procedures, practical aspects of clinical trial conduct and management including:

- Overview about Drug discovery process
- Pharmacology- Determination of the appropriate quantity of drugs for the body and their impact on it
- Pre-clinical studies
- Regulatory guidelines related to clinical trials
- Research design, data management, and biostatistics

**Job Opportunities:** The Program is one of the new era professional courses at the undergraduate level, which can offer various job opportunities in the field of Clinical Trials in Hospitals, Contract Research Organizations (CROs), Pharma services industry and so on.

### 2. M.Sc. Clinical Research (2 Years Full Time)

This is a professional master's degree program in Clinical Research which will provide a platform for eligible candidates to acquire advanced knowledge and skills in various aspects of clinical research, required in teaching, healthcare, research institutions, Pharma/Biotech industries and R & D/Clinical Research organizations.

#### Major Components of the Course

The candidates will be introduced to clinical research setting, regulatory procedures, practical aspects of clinical trial conduct and management including:

- Advanced study of the sub-specialties of research design, data management, epidemiology and biostatistics
- Pre-clinical studies, Pharmacology, Advanced therapies
- Regulatory guidelines related to clinical trials
- Internship in CROs/ pharma industry
- Hands on training in real clinical trial settings

**Job Opportunities:** The Program has good scope for employment for a large number of trained professionals in India and abroad, since new drug-discovery / Clinical Research / Clinical trials are booming world over and there is a growing demand for well-trained clinical research professionals.

### **Career Options:**

Employers: Contract Research Organizations (CRO), Site Management Organizations (SMOs), Pharma Industries, Biotech Industries, Hospitals involved in Clinical Trials and IT companies

### **Suitable Positions:**

Clinical Trail Assistants (Coordinators)/ Clinical Research associates/ Clinical Team Leader/ Project Manager/ Medical and Regulatory Manager/ Manager- Quality Assurance/ Medical Director/ Director- Clinical operations/ Clinical Data Management/ Pharmacovigilance/ Medical Writing/ Data Analytics.

## **3. M.Sc. Stem Cell and Regenerative Biology (2 Years Full Time)**

This interdisciplinary course is designed to meet the increasing demand in the fields of Stem Cells, Tissue Engineering and Regenerative Biology. The course provides a strong theoretical foundation in Molecular, Cellular and Developmental Biology together with extensive hands-on training in laboratory techniques in Stem Cells, Scaffold Fabrication for 3D Cultures and Bio-analytical techniques. The course provides a unique perspective to students pursuing research-based career opportunities in this rapidly evolving field in academia, pharmaceutical and biomedical companies worldwide.

### **Job Opportunities:**

Following completion, graduates will be equipped with the theoretical and practical skills to pursue a career in Academic Institutions, R & D Institutes, Industry (e.g., Regenerative Medicine, Biotechnology, Pharma, Toxicology sectors), Patenting and Intellectual Property, Scientific writing and Policy Regulation around the world.



**Team of Faculty Members**

## Faculty Profile



**Dr. P. Ramachandran**  
MD, DNB

Dr. P. Ramachandran, did his medical graduation (1977) and post-graduation (1980) from JIPMER, Pondicherry. He is the Head of Faculty of Clinical Research. He is also Professor of Pediatrics and Associate Dean of PG studies (Clinical) at SRIHER. After working in different teaching institutions in Tamil Nadu Government, he retired in 2011 as Director & Superintendent I/C, Institute of Child Health & Hospital for Children, Egmore, Chennai and joined Sri Ramachandra as Professor of Pediatrics. He has published research papers in both national and international journals related to infectious diseases. He has been the Editor-in- Chief of Indian Journal of Practical Pediatrics, an official journal of Indian Academy of Pediatrics. His areas of clinical and academic interest are Pediatric infectious diseases, critical care, nutrition and medical education. Areas of research include infection surveillance, vaccine trials and pneumonia. Research projects done: Study of pneumonia in children; Polio and influenza vaccine studies; Multicentric Hib meningitis surveillance.

Dr. H. Balaji Raghavendran, Associate professor is responsible for the Biomaterials Laboratory at SRIHER. He completed his Ph.D. in Biochemistry from University of Madras, 2005. He has 5 years of post-doctoral fellowship in South Korea and worked as Associate Professor, Tissue engineering group, Orthopaedics Department, Faculty of Medicine, University of Malaya until 2020. He ventured into the field of Biomaterials and Stem cells for Orthopaedic application with his background in 15 years of Biomaterials research. His team has developed novel biomaterials for bone and cartilage application. His current research focus is on development of Next generation Biomaterials for Orthopaedic applications and Wound healing. Handles core theory papers for the Stem cells Regenerative Biology and Clinical Research courses.



**Dr. Balaji Raghavendran**



**Dr. Vinoth Kumar Lakshmanan**

Dr. Vinoth-Kumar Lakshmanan, Associate Professor is the Principal Investigator for Cancer Biomarker Laboratory at SRIHER and Adjunct Professor of Nicole Steinmetz Fellow and Group Leader at Institute of Advanced Materials, IAAM, Sweden. He obtained Ph.D from Louis Pasteur University, France, Post-Doctoral from University of Regensburg and Karlsruhe Institute of Technology (KIT), Germany. After cumulating 17 years of international faculty experiences from Medical Universities Amrita, Chonnam and Gulf, he engaged in identifying good biomarkers for cancer and this led to determine the role of secretory protein in prostate cancer, and how they might contribute to metastasis. He also studies loss and gain of function using inducible strategy in the cell lines and the goal is to develop mouse metastatic xenograft model in which he could see tumor affecting the organ in which cancer could be studied.

Dr. Alan M. Punnoose, Associate Professor, is responsible for the Stem Cell and Regenerative Biology Laboratory at SRIHER. The lab focuses on bioengineered constructs for cardio-vascular, wound healing applications; enhancing potency of MSCs, senescence and in vitro drug testing models. A biotechnologist by training, he worked on transcription factors for his PhD (2006) at the Max Delbrück Center for Molecular Medicine, Germany. After his post-doctoral work at the Max Planck Institute for Molecular Genetics, Germany; he joined SRIHER (2008) to work on tissue engineering. He is the Course coordinator for the MSc Stem Cell and Regenerative Biology Program and handles various core theory and practical courses for the program.



**Dr. A M Punnoose**



**Dr. Felsy Premila**

Dr G Felsy Premila, has completed her professional education in Dentistry, Masters in Hospital Management and pursuing PhD in public health. In addition, she has completed certified courses in technical and scientific writing, epidemiology, clinical research, and clinical informatics. She holds a position of an investigator and co-investigator in funded research projects under SPARC collaborating with University of Western Australia, GATE Grant, and ISPPD Research Grant. Adding to her credit, she has scientific articles published in national and international journals and authored book chapters. She has around 13 years of experience in academic teaching and 8 years of research experience.

Dr. Mahalakshmi has completed her Ph.D. in Cancer Epigenetics from SASTRA University. She ventured into the field of Clinical Trials with her background in pre-clinical cancer research. She has experience in Clinical Trial Documentation, Regulatory aspects of clinical trials, Pharmacovigilance. Her current research focus is on lung cancer epigenetics with focus on drug resistance.

She handles various core courses for the Clinical Research programs.



**Dr. Mahalakshmi**



**Mr. N. Kannan**

An expert in Clinical Trial operations with 15 years of experience with various pharma industries and CROs in domains such as oncology, stem cell therapy in vascular surgery and orthopedics, diabetes research, etc. He possesses strong domain knowledge in the field of clinical trials (phases (I - IV) of clinical trials), Medical Devices regulations, BA/BE Studies. Vast experience in clinical data management, Pharmacovigilance, Audit and Regulatory Affairs.

He handles core clinical trial courses for the Clinical Research programs.

## Visiting Faculty

Dr. Srikanth has conducted over 54 Clinical Trials and has a first-hand experience of the issues and challenges in conducting clinical trials.

He shall mentor the clinicians and researchers with his vast experience of clinical trials to promote clinical research by delivering key lectures.

Dr. Srikanth will also organize periodic hands-on workshops for students of B.Sc. and M.Sc. Clinical Research Programs. He helps in strengthening the curriculum of Clinical Research programs.



**Dr. Srikanth  
Krishnamoorthy**

Consultant Pulmonologist  
Institute of Lung Care & Research  
&  
Head- Department of Clinical Research  
Hindusthan Hospital, Coimbatore

# SRIHER Faculty of Clinical Research

has signed a  
Memorandum of Understanding (MoU)  
with  
**ICMR National Institute for Research in Tuberculosis (NIRT)**  
on  
6th January 2023



## Highlights of the MoU

- Conducting joint research and development projects
- Exchange of students, researchers, and faculty
- Exchange of academic information and materials
- Conducting lectures, conferences, workshops and organizing symposia
- Publishing research articles and generation of Intellectual Property Rights (IPR) benefitting both the Institutions
- Continuing education programs

# Glimpse of Student Activities



**Students performing experiments - Academic Practical Sessions**



**Student Interaction with Professionals from Contract Research Organizations (CROs)**



**Good Clinical Practice (GCP)  
Workshop**

**Webinar on 'New Drug & Clinical Trial  
Rules 2019'**



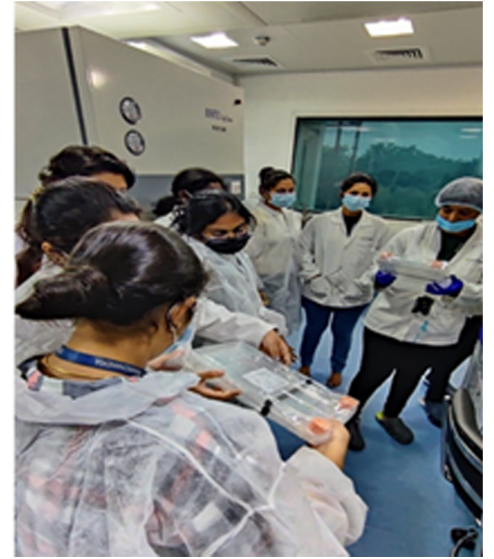
# Industry Visits



Scitus Pharma Services Pvt. Ltd. & Innospecs Bioresearch Pvt. Ltd.



Life Cell International



**Stempeutics, Bangalore**



**Grow Research Lab,  
Narayana Nethralaya, Bangalore**



**3D Bioprinting, Avay Biosciences, Chennai**

## **Internships**

Our students have done their internships with various reputed institutions

- ICMR – National Institute for Research in Tuberculosis (NIRT)
- Zifo Genomics
- Navya Tech
- Scitus Pharma Services Pvt. Ltd.
- Glocare Labs Pvt. Ltd.
- Innospecs Bioresearch Pvt. Ltd.
- Aaranya Biosciences Pvt. Ltd.
- CSIR – Central Leather Research Institute (CLRI)
- Life Cell International
- IIT-Madras – Bioincubator