

# ADVANCED CENTRE FOR REGENERATIVE MEDICINE AND STEM CELL RESEARCH IN CUTANEOUS BIOLOGY (AcREM-STEM)

University of Kerala



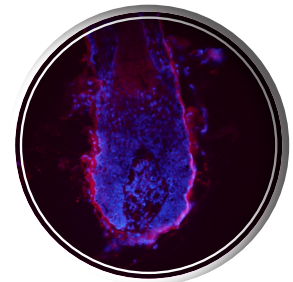
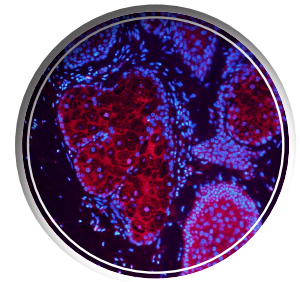
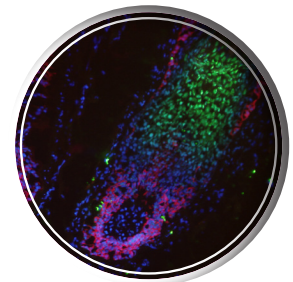
**Advanced Centre for Regenerative Medicine & Stem Cell Research in Cutaneous Biology (AcREM-STEM)** is a premier research centre under the Department of Zoology, University of Kerala, located at the Kariavattom Campus. The centre is dedicated to cutting-edge research, advanced training, and innovation in regenerative medicine, stem cell biology, healthy ageing, cancer biology, ayurveda biology, skin and hair microbiome studies and translational life sciences.

Advanced Centre for Regenerative Medicine & Stem Cell Research in Cutaneous Biology serves as a hub for interdisciplinary research, bringing together expertise in cell biology, molecular biology, biomaterials, genomics, and biomedical sciences to address pressing challenges in cutaneous biology. We also specialise in handling of alternative animal models. We offer facilities for *in vitro*, *in vivo*, *ex vivo* and behavioural studies.

## State-of-the-art facility

Bringing precision and high-quality research into the world of Regenerative Medicine and Stem Cell Research in Cutaneous Biology.

The centre is equipped with state-of-the-art instrumentation and core facilities, enabling students and researchers to conduct high-quality in research, aligned with national and international standards.



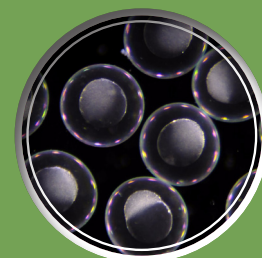
## Services

- Toxicity analysis in cell lines and alternative animal models as per OECD guidelines
- Evaluation of anticancer potency
- *In-vitro*, *in-vivo* and *ex-vivo* studies to address hair-skin regeneration & pathology
- Cutaneous microbiome studies and evaluation of antimicrobial potency
- Healthy ageing studies using alternate animal model systems and cell lines
- Nutraceuticals and functional food development
- Scientific validation of ayurvedic formulations
- Targeted Immunotherapeutics and Patient-specific (Personalized) Stem Cell Processing.
- Consultation and training for establishing alternative animal models, cell culture facility and microbiome
- Behavioural studies
- Support for scientific writing
- Affordable internships and trainings

## Alternative animal models

- *Caenorhabditis elegans*\*
- *Hydra vulgaris* & *Hydra magnipapillata*
- *Drosophila melanogaster*\*
- Zebra fish (*Danio rerio*)
- Daphnia
- Moina spp.
- Rotifers
- Artemia (Brine Shrimp)

*\*Transgenic lines also available.*



## What we Offer?

### **An ideal platform for:**

FYUGP & M.Sc. dissertation

Ph.D. thesis works

Training and research work for industrial R&D professionals and faculties.

# Why Choose Us?

- Guidance from experts and trained professionals
- Translational & Interdisciplinary Focus
- High-end facilities for research

## Highlights

### Techniques

- Cell based assays
- FACS
- ELISA
- Western blotting
- qRT-PCR
- Immuno Cytochemistry (ICC),  
Immuno Histochemistry (IHC) &  
Immuno Fluorescence

### Facilities

- *In vitro*, *ex vivo* and  
embryo culture facility
- Bio-banking
- 4°C cold room
- Board room facility

### Instrumentations

- Phase contrast fluorescence microscope  
(inverted and upright)
- Stereo microscope
- Nanophotometer
- UV-spectrophotometer
- Microplate reader
- Chemi doc
- Cryostat
- Microtome



## Meet our Experts

### Director

#### Dr. Sreejith P.

PGDSDC., FAS  
Hon. Director of AcREM-STEM  
& HOD, Assistant Professor,  
Department of Zoology, Kerala  
University

### Adjunct faculty

#### Dr Kesav K.Singh

Joy and Bill Harbert Endowed Chair  
in Cancer Genetics, Professor of  
Genetics I Pathology I Dermatology I  
Environmental Health,  
Founding Editor-in-Chief I  
Mitochondrion Journal,  
Director I Cancer Genetics Program  
Adjunct Faculty Member

### Emeritus Scientist

#### Dr. Malini Laloraya

FNASc. FRE  
Emeritus Scientist (ICMR),  
AcREM-STEM, Kerala University;  
Associate Editor, Reproduction  
(a Society for Reproduction and  
Fertility Journal, UK), and Former  
Scientist G (Professor) at Rajiv  
Gandhi Centre for Biotechnology,  
India

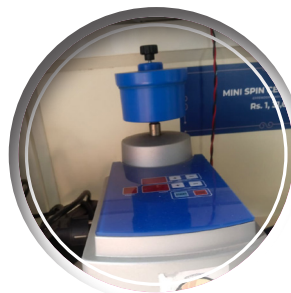
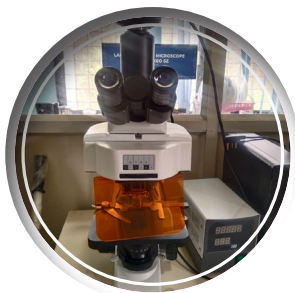
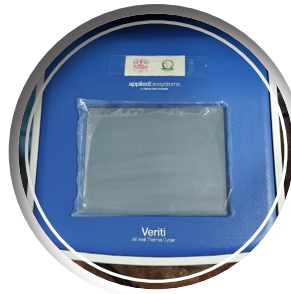
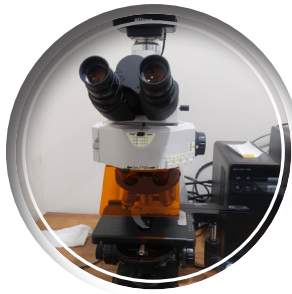
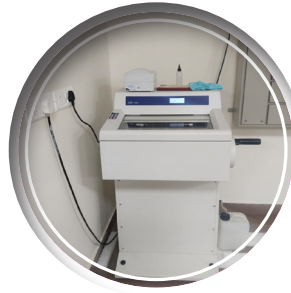
### Medical Director

#### Dr.S.A.Hafiz

MBBS, DGM (Geri) MS (UK) MSC  
(Regen Med) FRCP (Glasgow)  
FRCP Edinburgh  
Hon. Medical Director,  
Deputy Director of Health  
Services and Principal,  
Kerala State Institute of Health  
and Family Welfare, Trivandrum







## Contact

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University of Kerala

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