SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

SRI RAMACHANDRA FACULTY OF BIOMEDICAL SCIENCES AND TECHNOLOGY

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

Sri Ramachandra
Faculty of Biomedical Sciences and Technology

A brief profile of College/Faculty: The Faculty of Biomedical Sciences and Technology offers undergraduate and postgraduate courses in Biomedical Sciences, Biotechnology, Human Genetics and Applied Regulatory Toxicology. Well-equipped laboratories and modern class rooms with highly qualified and experienced faculty members make the college among the best in India. Extensive research activities that attract funding from national and international agencies are the hall marks of this college. The college offers the following Programmes:

Programmes offered (UG and PG)

B.Sc. Biomedical Sciences (under CBCS)

Biomedical Sciences deals with the scientific basis of health and disease in humans and is currently the most rapidly developing area in basic biological science. It involves studying how cells, tissues and organs function in our body by using the most ultramodern methods involving molecular approaches in basic medical science, Bioinformatics, Biotechnology, Immunology, Molecular Biology and Human Genetics. It adapts a multidisciplinary approach, which allows to investigate normal life processes and to study its mechanism of transformation to diseased state and finding a treatment for the disease. Biomedical Sciences in combination to various above said thrust areas have revolutionized research over the past decades, stimulating growth in a wide range of industries including agriculture, pharmaceuticals, veterinary science and medical research.

M.Sc. Biomedical Sciences Degree Program (under CBCS)

The Master's programme in Biomedical Sciences provides a unique combination of fundamental research and clinical application, with a special focus on multidisciplinary aspect such as biochemical, molecular and patho-physiological mechanism of diseases. Investigating and understanding the diseases give the skill and knowledge to work towards discovery and development of preventive/ therapeutic drugs. There is an increasing prevalence of non-communicable diseases as a result of lifestyle changes and urbanization in India. Infectious diseases are also still persisting as major health problems in Indian population. These are the challenges that are to be tackled in the new millennium, so there is a need to understand the pathogenesis and to develop the new markers and diagnostic protocols with respect to the relevant field. The requirement for Biomedical Scientist is important because they are expected to bridge the gap between biomedical research, diagnostics and clinical applications.

M.Sc. Human Genetics (under CBCS)

Human Genetics is one of the most vibrant, compelling, and relevant scientific disciplines of the 21st century and the department is proud to contribute to this constantly evolving science since 1998. The integrated research, academic and diagnostic activities housed within our department provides infinite learning opportunities for students. The program provides students a transformative education in all areas of human genetics; including medical genetics, cytogenetics, molecular genetics, cancer genetics, radiation genetics, immunogenetics and genetic counselling. The unique environment of a large medical centre for clinical rotations, a diagnostic lab for in-house training in genetic testing and the outstanding laboratory and research facilities empower students to be professionals with effective critical thinking skills. A great number of our students publish their final semester research project work in some of the best peer-reviewed journals in the world. Our 300+ postgraduates and 26 doctoral alumnae/alumni are making an impact with achievements in academics, research, service, and genetic counselling. Many of them have received doctoral degrees and professional awards from prestigious national and international institutions like Baylor College of Medicine, National University of Singapore, Institute Curie - Research Centre, University of Pennsylvania, to name just a few. As we move into our 25th year, we remain committed to our mission in cultivating a large, strong, and diverse pool of future researchers, healthcare providers, and educators with appropriate expertise in genetics and genomics.

SCOPE:

As the details of the human genome unfolded, the variety of opportunities for people with degrees and training in human genetics is continuing to expand. There are opportunities in basic and clinical research, in medical professions, and in interdisciplinary fields, such as patent law. The genetics workforce is not sufficient even now, and demand continues to increase. For example, as genetic testing becomes more commonplace, and a part of many routine medical evaluations, more laboratory geneticists will be needed to perform the tests, and clinicians and counsellors will be needed to interpret and explain the results to individuals and families. As genetics is recognized to be a basic part of all biological sciences, more and more teachers with expertise in genetics will also be needed. These are just a few examples of the growing demand for professions trained in genetics.

M.Sc. Biotechnology (under CBCS)

The Department of Biotechnology was started at Sri Ramachandra Medical College & Research Institute during October 1999. The first batch of students for the M.Sc. Biotechnology degree program was admitted in December 2001 and the department was later included under the Faculty of Biomedical Sciences and Technology. Under the excellent ambiance of healthcare sector, the department is dedicated to developing a strong multidisciplinary teaching program in biotechnology. Its commitment to research in different disciplines of Life Sciences underscores the importance of biotechnology in areas such as Molecular Biology, Plant Tissue Culture, Animal Cell Culture Environmental Biotechnology, Microbiology, Immunology, Cancer Biology and Biochemistry. In addition to qualified and experienced faculty members, eminent visiting alumni are also engaged in teaching and guiding students of MSc. and PhD scholars. The Department draws funding from Indian and foreign Governments like, Department of Science & Technology, DIHAR, MoES, Department of Biotechnology, Indian Council of Medical Research, Indo-French, Tamil Nadu State Council for Science & Technology and internal funding from the University [GATE, Chancellor's Summer Research Fellowship for Undergraduate students and Founder Chancellor, Thiru. N.P.V. Ramasamy Udayar research fellowships for PhD]. The department offers MSc Biotechnology and PhD programs. The M.Sc. Biotechnology program follows Choice Based Credit System (CBCS) where students are given the option to select elective subjects of interest in every semester. Since Biotechnology is an integrated field, faculties from various expertise teach cell biology, molecular biology, cancer biology, immune-technology plant, animal, microbiology, environment science and many other related disciplines.

Under the excellent ambience of a Faculty of Biomedical Sciences and Technology, SRIHER (DU) the department offers PhD and PG courses in Biotechnology, the MSc degree offered under the Choice Based Credit System (CBCS), helps students to choose subjects based on their areas of interest. To add credit, the department's postgraduate teaching is imparted by dedicated teachers who are actively engaged in research in their respective areas of specialization.

Placements:

Our alumni are placed at various prestigious international institutions like Harvard University, Texas Biomedical Research Institute, Heidelberg University, University of Mississippi Medical Center and Indian institutions such as CCMB; Christian Medical College, Vellore; Madurai Kamaraj University, Periyar University, Biocon.

M.Sc. Applied and Regulatory Toxicology (under CBCS)

CEFTE is an OECD GLP certified preclinical research organization (GLP/C-158/2021), functions as an independent unit of the SRIHER established in the year 2009. This centre offers this Master's program in "APPLIED AND REGULATORY TOXICOLOGY" a unique combination of Toxicological principles and its regulatory perspective in drug safety evaluation.

This program provides a broad, modem training in theoretical and practical aspects of fundamental and applied toxicology with interdisciplinary approach. This advanced degree program has been developed to meet the needs of employers like industry, academic and regulatory agencies. The department is located just opposite to Football playground adjacent to Sri Ramachandra Medical College. Dissemination of theoretical knowledge and practical skills by experienced in-house faculty and expert Toxicologists. Students are empowered with practical skills, hands on training and case studies to become competent Toxicologist .

Currently the department has well experienced faculty members, doctoral scholars and associated staff. Industrial experts and regulatory scientists from the experts panel are invited from outside to deliver lectures to MSc. students.

Department also offers PhD courses in Biomedical Sciences and Clinical research, the MSc degree offered under the Choice Based Credit System (CBCS), helps students to choose subjects based on their areas of interest.





Dr. Uma Sekar
Dr. Mohammed Nzeed
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Dr. Kalpana Balakrishnan


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Department of Human Genetics
A time to look back in admiration. A time to look forward in anticipation.