



SRI RAMACHANDRA

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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

Website: www.sriramachandra.edu.in

PROSPECTUS FOR ADMISSION TO Ph.D. PROGRAM UNDER FOREIGN NATIONALS / NRI CATEGORY (April, 2020 session)

International Candidate (Foreign Nationals & NRIs) are eligible to apply for Ph.D. Program (Full-Time or Part-Time) provided they satisfy equivalent eligibility requirements as prescribed in Sri Ramachandra Institute of Higher Education and Research (Deemed to be University), Ph.D. Regulations (2019). www.sriramachandra.edu.in

Any candidate desiring to enroll for Ph.D. Program in a Full time or Part time basis should contact the Office of the Asst. Director – International Relations through email (admissions.international@sriramachandra.edu.in) / letter and will submit a brief CV and an outline of topic of interest. An application should be submitted through online application system (<https://www.sriramachandra.edu.in/university/nri-admission-fees.php?pos=6>). This application, CV and an outline of topic of interest will be forwarded to the concerned Principal / Dean for identification of the potential supervisor and to determine if facilities are available for the intended area of research (please refer Regulation 5.11.1 to 5.11.9)

1. ADMISSION THROUGH ENTRANCE EXAMINATION (WRITTEN TEST AND INTERVIEW) :-

- (a) **Full-Time:** Candidates applying for Founder-Chancellor Shri.N.P.V.Ramasamy Udayar Research Stipendiary Fellowship for Ph.D.
- (b) **Part-Time** : External

2. ADMISSION THROUGH COUNSELLING:-

Full-Time: Candidates with UGC/ CSIR/ ICMR/ DBT/ DST NET-JRF/ AICTE-GATE/ AYUSH/ INSPIRE Fellowship or JRF/SRF fellows in funded research projects of this Deemed University will be called directly for counselling and admission. They should submit application and meet eligibility criteria as outlined in the Ph.D. regulation uploaded in the Deemed University website.



ADMISSION TO Ph.D. PROGRAM

(April, 2020 session)

Ph.D. ADMISSION UNDER THE FACULTY OF MEDICINE / DENTISTRY / PHARMACY / NURSING / PHYSIOTHERAPY / BIOMEDICAL SCIENCES / MANAGEMENT / ALLIED HEALTH SCIENCES / PUBLIC HEALTH / SPORTS & EXERCISE SCIENCES / CLINICAL RESEARCH / FOR ENGINEERING AND TECHNOLOGY (see para 3)

1. FULL-TIME CANDIDATES:-

(A) Candidates applying for Ph.D. Program under Deemed University Founder-Chancellor Shri. N.P.V.Ramasamy Udayar Research Fellowship with stipend:-

These fellowships are designed to motivate talented and meritorious medical and allied health sciences and para-medical sciences postgraduates to take up Ph.D. Research on a full-time basis at the constituent colleges/faculties of Sri Ramachandra Institute of Higher Education and Research (Deemed to be University).

The Deemed University offers Fellowships, each carrying a stipend of Rs.12,000/- p.m. with a contingency grant of Rs.25,000/ p.a. for a period of 3 years for candidates undertaking research on full time basis for the Ph.D. Program of the Deemed University in the several disciplines including Medicine and Surgery—all branches and Basic Medical Sciences / Dentistry / Pharmacy / Nursing / Human Genetics / Biomedical Sciences / Biotechnology / Bioinformatics / Physiotherapy / Management / Allied Health Sciences / Audiology and Speech-Language Pathology / Clinical Nutrition / Clinical Psychology / Optometry / Trauma Care Management / Public Health/ Sports & Exercise Sciences/ Clinical Research and also Engineering and Technology (see para 3)

The fellowships will be governed by the terms and conditions prescribed and are tenable only at Sri Ramachandra Institute of Higher Education and Research (Deemed University).

The fellowships will be advertised in newspapers and also on the Deemed University website along with the Ph.D. admission notification. Candidates shall apply for the fellowship in the prescribed application. The applicants will be required to appear for Entrance Examination (written test and personal interview). A merit list of candidates qualifying will be prepared. Depending on the number of candidates, shortlisted of candidates will be called for counselling. Selection shall be based solely on merit. The marks/grades scored at the postgraduate examination will also be taken into account for the selection process.

A Selection Committee with experts as may be co-opted, will be constituted for the selection of students for the award of the fellowships.

ENTRANCE EXAMINATION

Candidates wishing to apply for admission to Ph.D. Program under Full Time (seeking Founder-Chancellor Shri N.P.V. Ramasamy Udayar Fellowships) will have to qualify through entrance examination.

Performance of the candidate will be calculated on written test (70% weightage) and interview (30%

weightage). Interview will be conducted for each candidate after the entrance exam, and the exact date and time will be intimated later.

The qualifying marks for provisional admission to Ph.D. Program are 50% in the entrance examination i.e., aggregate of marks obtained in written test and interview taken together).

Ph.D. ENTRANCE EXAMINATION PATTERN

- (i) Syllabus for Entrance Examination is available in the website www.sriramachandra.edu.in
- (ii) The duration of the examination will be 2 (two) hours.
- (iii) The Entrance Examination will be conducted in ENGLISH only. The question booklet will consist of 120 multiple choice questions (single best response).
- (iv) The written test will have two sections, Section A & B.
 - Section-A Research Methodology: Common to all disciplines will have 60 questions (answer all questions)
 - Section-B Discipline Specific: Candidates will attempt questions from one of the following:-
Medicine / Dentistry / Pharmacy / Nursing / Physiotherapy / Biomedical Sciences / Management / Allied Health Sciences / Public Health / Sports & Exercise Sciences / Clinical Research
The candidates will indicate the selected faculty/discipline in the application form. The Section-B will have 75 questions and the candidate may attempt any 60 questions. The first 60 questions attempted will be considered for evaluation.
- (v) All questions carry equal marks. There will be no negative mark for wrong answer.
- (vi) Results will be published in the Deemed University website: www.sriramachandra.edu.in

(B) Candidates already holding Research Fellowships:

Candidates with UGC/ CSIR/ ICMR/ DBT/ DST NET-JRF/ AICTE-GATE/ AYUSH/ INSPIRE Fellowship or having qualified other UGC recognized national eligibility test with a valid fellowship at the time of entrance exam or who work in funded research projects as JRF/SRF in the Deemed University are **exempted** from appearing for Entrance Examination and interview and they will be called directly for counselling and admission. However, they should submit application and prescribed fee on or before date as indicated in the notification.

In all cases, the decision of the Vice-Chancellor shall be final.

2. PART TIME CANDIDATES (EXTERNAL)

Once a potential research supervisor has been identified, the candidate will be asked to submit a detailed proposal / review of research topic within two weeks. This will serve as the written examination and will be graded for 70% of the total marks. The research proposal will be evaluated and an oral examination will be scheduled either in person or using an appropriate technology tool. The Dean (Research) will constitute the Admission Committee which will include the Dean (Research), Principal / Dean of the

college / faculty and proposed supervisor. The oral examination will have a weightage of 30% of the total marks.

The qualifying marks for provisional admission to Ph.D. Program are 50% in the entrance examination i.e., aggregate of marks obtained in written test and interview taken together). However, a relaxation of 5% of marks (from 50% to 45%) shall be allowed for the candidates belonging to SC/ST/OBC (Non-Creamy layers) / Differently-abled category in the entrance examination.

3. Ph.D. ADMISSION UNDER FACULTY OF ENGINEERING AND TECHNOLOGY:

The admission process will involve the following steps for both Full-Time and Part-Time Candidates

- Interested candidate will submit a CV along with brief outline of the topic of interest
- If a potential supervisor and the needed facilities are available to carry out the research, the Provost, Engineering and Technology will ask the candidate to take the entrance examinations. If the faculty or the facilities are not available, the candidate will be advised to seek other avenues for research.
- If it is determined that provisions exist to carry out research in SRET, the candidate may proceed to take the entrance examination.
- A candidate selected on the basis of the results of the entrance examination and the academic qualifications will be directed to register as an internal Full-Time, internal Part-Time or external Part-Time PhD student.
- The entrance examination will be in the form of a written and an oral examination.
- The written examination may involve writing an essay or a research paper detailing the **student's** area of interest. It may be a review of a research topic or a proposal dealing with a research problem. The student may take up to a week to complete the written examination. If justified for the nature of problem involved, the Engineering and Technology Faculty may provide additional time to complete the written examination. Oral presentation of the essay /paper will be to a team of examiners consisting of the potential research supervisor, a second member of the Faculty of Engineering and Technology and an industry or an academic expert appointed by the Vice Chancellor / Dean of Research / Provost of Engineering and Technology. The written portion of the examination will carry 70% of the marks while 30% of the marks will be assigned to the oral examination. Multiple choice examinations will not be part of the written examinations in Engineering and Technology.

Those candidates who fulfill all criteria for provisional registration as per regulations (including those candidates who hold approved scholarships / fellowships) will be called for counselling . Counselling will be held at the Deemed University campus and those eligible will be notified to attend the counselling on the specified date and time. During counselling , Founder-Chancellor Fellowships will be offered to those full time eligible candidates. Guidance to identify Research Supervisors will also be provided to the candidates. After counselling , all eligible candidates will be issued '**application for Provisional Registration**' for Ph.D. Program.

Sri Ramachandra Institute of Higher Education & Research (DU)

Sri Ramachandra Medical College and Research Institute was established by Sri Ramachandra Educational and Health Trust in the year 1985 as a private non-profit, self-financing Institution dedicated to serve the society as a Centre of Excellence with emphasis on Medical Education, Research and Healthcare. In view of its academic excellence, the Government of India declared Sri Ramachandra Medical College & Research Institute as a Deemed University in September, 1994 under Section 3 of the University Grants Commission Act, 1956. The Trust achieved the task of establishing this institution as a “Centre of Excellence” under the leadership of Late Shri.N.P.V.Ramasamy Udayar who was the Founder & Managing Trustee of the Trust and also the first Chancellor of the Deemed University. Shri.V.R.Venkataachalam is currently the Chancellor of the Deemed University and also the Managing Trustee of the Trust. Shri.R.V.Sengutuvan is the Pro-Chancellor of the Deemed University. From 2018 onwards, the Deemed to be University is renamed as Sri Ramachandra Institute of Higher Education & Research (DU).

ACCREDITATION:

- The Deemed University is graded as a Category-I University in India by the UGC and ranked 33rd among Universities in the NIRF – 2019.
- Sri Ramachandra Deemed University has been accredited (cycle-2) by National Assessment and Accreditation Council (NAAC) with CGPA of 3.62 on four point scale at ‘A’ Grade.
- In the National Institutional Ranking Frame work (NIRF–2019) SRMC & RI has been placed at 11th rank among the Medical Colleges in the country.
- In the National Institutional Ranking Frame work (NIRF–2019) College of Pharmacy has been placed at 20th rank among the Pharmacy Colleges in the country.
- The Clinical Laboratory is accredited seven times by National Accreditation Board for Laboratories (NABL).
- The ISO certified Central Research Facility with Sophisticated Instrumentation Laboratory, Clinical Trial Division and Sri Ramachandra Innovation Incubation Centre.
- The Centre for Toxicology & Development Research (CEFTE) is issued Good Laboratory Practices (GLP) compliance certificate by NGCMA, DST, Govt. of India. Sri Ramachandra is the first Medical University in the country to get the GLP certification from the Department of Science and Technology (DST), Govt. of India.
- The Faculty of Public Health has the distinction of being recognized by the ICMR as a “SRUICMR Centre for Advanced Research on Air Quality, Climate and Health” and also as a WHO collaborating Centre for “Occupational & Environmental Health”.
- UNESCO Chair in Bioethics has been established at the Deemed University.
- Department of Human Genetics accredited by AERB as Biodosimetry laboratory.
- 5th Rank in Swachh campus by MHRD for Universities (Residential) in India.

Academic Entities of the University

The following are the academic entities of SRIHER:

- 1. Sri Ramachandra Medical College and Research Institute**
- 2. Sri Ramachandra Dental College and Hospital**
- 3. Faculty of Pharmacy**
- 4. Faculty of Nursing**
- 5. Faculty of Physiotherapy**
- 6. Faculty of Allied Health Sciences**
- 7. Faculty of Management**
- 8. Faculty of Biomedical Sciences, Technology and Research**
- 9. Faculty of Public Health**
- 10. Faculty of Sports & Exercise Sciences**
- 11. Faculty of Clinical Research**
- 12. Sri Ramachandra Engineering and Technology**

Academic Programs :

Currently, the university offers 152 undergraduate and postgraduate programs in medical, dental, para-medical and allied health sciences disciplines. The enrolment stands in excess of 7188 students.

Ph.D. PROGRAM AT DEEMED UNIVERSITY (FULL-TIME AND PART-TIME)

The Deemed University offers enrolment for Ph.D. in the several disciplines including Medicine & allied subjects, Surgery & allied subjects and Basic Medical Sciences / Dentistry / Pharmacy / Nursing / Human Genetics / Biomedical Sciences / Biotechnology / Bioinformatics / Physiotherapy / Management / Allied Health Sciences / Audiology and Speech-Language Pathology / Clinical Nutrition / Clinical Psychology / Public Health / Sports & Exercise Sciences / Clinical Research / Engineering & Technology.

The Deemed University has awarded 242 Ph.D. Degrees in all faculties to date. There are currently over 300 Ph.D. Scholars on roll.

The Integrated MD/MS-Ph.D. Fellowships funded by ICMR is a flagship program of the Deemed University for medical post-graduates. The Deemed University offers Founder-Chancellor Shri N.P.V.Ramasamy Udayar Research Fellowship with stipend for full time scholars enrolled in Ph.D. program.

RESEARCH IN THE DEEMED UNIVERSITY

The major and minor research projects operational in the University are broadly classified as

- (a)** International collaborative projects,
- (b)** Sponsored research projects funded by national agencies like Department of Science and Technology, Department of Bio-Technology, Indian Council of Medical Research, AYUSH, Defense Research Development Organization etc., and International funding agencies like NIH, Fogarty, Wellcome Foundation, MRC London, Smile Train, USA, Transforming Faces Canada etc.,

- (c) Industry - institutional R&D consultancy projects jointly funded by DST, industries and international agencies,
- (d) Multinational and multi centric clinical trials, and
- (e) Individual research projects by faculty.

Besides the above extramurally funded research projects, the university awards from its own budgetary allocation some projects and

- (i) UG – Summer Research projects
- (ii) Ph.D. projects
- (iii) Founder-Chancellor Ph.D. Research Fellowships and
- (iv) GATE Research Starter Grants to Young Faculty

All Post graduate students have a mandatory requirement to complete the Postgraduate dissertation and in addition several undergraduate include a research project in their curriculum .

As an innovative research strengthening initiative, the Deemed University has established 11 Centres of Research on thrust areas of strength demonstrated by the faculty.

1. Centre for Life Style diseases modification and prevention.
2. Centre for Indian Systems of Medicine Quality Assurance and Standardization.
3. Centre for Regenerative Medicine and Stem Cell Research.
4. Centre for Biomedical Nanotechnology.
5. Centre for Pre-Clinical and Translational Medicine & Research.
6. Centre of Sports Sciences.
7. Health Professional Education & Faculty Development.
8. Centre for Global Collaboration.
9. Centre for Healthcare Quality & Patient Safety.
10. Centre for Perinatal Sciences.
11. Centre for International Patient services.

Central Research Facility

The Central Research Facility, established in the year 2007, is the "A to Z gateway" for research, to take care of all logistics of research planning, research projects administration, research documentation, besides providing a centralized sophisticated equipment facility. It includes the University-Industry Liaison Centre with IRP/Patents Cell on a 'ready to use platform' to the entire University.

This facility in a plinth area of 25,000 sq.ft. has a medical informatics and study design unit, Contract Clinical Trials Division, Epidemiology Research unit, Project Development and Documentation Unit, Traditional Research Unit and a University Sophisticated Instrumentation Centre. All high-tech equipments for the genomics, proteomics, spectroscopy, chromatography, radioisotopy, microscopy, NMR facilities along with walk-in-cold room [4o C], cryopreservation unit [-80oC and – 146oC], cold room [-20oC] etc. are available besides a centralised administrative office. All research and development activities of the University are co-ordinated by the Pro-Chancellor [Research].

Presently there are 520 major and minor research projects operational in the University which are broadly classified as

- International collaborative projects,
- Sponsored research projects funded by national agencies like Department of Science and Technology, Department of Bio-Technology, Indian Council of Medical Research, Council of Scientific and Industrial Research etc.
- Industry - institutional R&D consultancy projects jointly funded by DST, industries and international agencies
- Multinational and multi centric clinical trials, and
- Individual research projects by faculty and postgraduate students including Ph.D. students.

The University has received the following International and National level research recognitions; [i] The Department of Environmental Health Engineering as the "WHO Collaborating Centre for Research & Training in Occupational Health; [ii] It is also recognised as the Training & Examination Centre for the National Examination Board of Occupational Safety & Health [NESOSH], UK, [iii] The Department of Human Genetics as the "Biodosimetry Laboratory" by the Atomic Energy Regulatory Board, [iv] The 'Herbal Research Laboratory" of Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) as the "ICMR/AYUSH Golden Triangle Project [GTP] Centre for validation and standardisation of Indian Systems of Medicine Drugs; [v] The PURSE-HIS Epidemiology Research Unit of DST to Department of Cardiology & Cardiac Care Centre, [vi] The DBT-Tissue-Engineering Unit for cardiomyocytes and chondrocytes to the departments of Cardio-thoracic surgery, Arthroscopy and Pathology.

Teaching-Research & Development MoUs have been signed by the University during 2007-08 with [1] Indian Institute of Technology, Madras; [2] Anna University, Chennai ; [3] Central Leather Research Institute, Chennai; [4] Sathyabama University, Chennai and [5] SSN Engineering College, Kalavakkam. The MoUs in pipeline are- (a) Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, (b) National Centre for Biological Sciences (NCBS), Bangalore, (c) Centre for Cellular & Molecular Biology (CCMB), Hydereabad, and (d) National Institute of Epidemiology (NIE), Chennai.

The Department of Scientific and Industrial Research [DSIR], India has recognised Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) as Scientific & Industrial Research Organisation [SIRO] and the Department of Science & Technology, Government of India has provided Customs/Central Excise Duty Exemption registration to Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) for 5 years.

While 21 sponsored research projects with a grant release of Rs.10.71 crores have been sanctioned to the University by various funding agencies during 2007, 15 major research centres/projects are under active consideration for funding by ICMR, DST, AYUSH and DBT.

Clinical Trials Division

The Central Research Facility has also developed an exclusive Contract Clinical Trial Facility adhering to the international requirements taking care of privacy and confidentiality of study subjects,

documentation and analysis facility with necessary accreditation of the facility. Of the ongoing 44 clinical trials, 21 have been granted during 2007 by international pharmaceutical companies.

University – Industry Liaison Centre (UILIC)

Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) has established the UILIC in the Central Research Facility with approved university level consultancy rules in tune with UGC/CSIR norms. In addition to routine consultancy projects, the university, during 2007-08, has developed major Industry -Institutional collaboration with M/s Bristol Myers Squibb, USA on, "DBT – Centre of Excellence for Teaching & Training in Drug Discovery and Translational Medicine". R & D collaborations are also being developed with M/s Genzym Corporation, USA, M/s Nicholas Piramal Life Sciences Limited, India; M/s. Agada health Sciences, India; M/s. Arvind Remedies; M/s. Rumi Herbals etc.

Central Animal Facility for Developmental Research And Toxicology

A world class fully air-conditioned "Central Animal Facility for Developmental Research and Toxicology" with facilities for breeding, maintenance, experimentation and laboratory studies has been exclusively developed in a plinth area of 15,000 sq.ft. This animal facility will be utilized for experimental research in accordance with the principles of good laboratory practices and CPCSEA guidelines of the Government of India. Further, it will facilitate research & development in partnership with academic institutions, industries and funding agencies for drug discovery-cum-validation, devices development and all aspects of Translational Medical Research. The Centre will also be involved in skilled manpower development through education and training in laboratory animal care and experimental techniques.

The 'Research Vision' of Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) is to evolve the University as an "International Centre of Excellence in Translational Medical Education & Research and Biomedical Nanotechnology".

LABORATORIES ATTACHED TO SPECIFIC FACULTIES:

The Deemed University has research laboratory facilities in the faculty of Pharmacy, Nursing, Physiotherapy, Allied Health Sciences, Biomedical Sciences to carryout research.

SRI RAMACHANDRA HOSPITAL:

Sri Ramachandra Hospital is a major Tertiary care and Referral centre located within the Deemed University campus. The Hospital caters to the needs of the students for their learning and training in various specialties. Placed in a suburban locality and amidst major highways, the hospital serves a cross section of the community belonging to every economic segment of the society. On an average 5,000 patients visit the out-patient facility every day. The diagnostic capability available at the hospital is comparable to any University Hospital in any advanced country. The sophisticated clinical laboratory, AABB accredited blood bank and a wide range of imaging facilities including C.T. Scan, MRI, Multi Detector Slice Spiral CT, Cardiac Angiography, Cerebral Angiography and Gamma Camera add to the diagnostic armamentarium of the Hospital.

LIBRARY:

A centrally air-conditioned large Library, known as Sri Ramachandra Learning Centre is ideally located in an area of 40,000 sq.ft. The students and faculty gain free access to a large collection of Medical and related books and journals gathered over a period of 35 years which provide rich study and reference material. The Library has a good stock of audio and video-cassettes on various subjects and facilities for microfiche access.

The “e-Learning Resource Centre” with 48 new updated systems and Wi-Fi facility with access to Medlars, Internet and CD-ROM facilities. It is an excellent learning centre in which a huge collection of models of anatomical interest are also exhibited for the benefit of the students and faculty. Apart from this, book bank services are also available for the students. In addition to hard copies, around 1,000 journals are also available online at the active learning centre through “ProQuest & MEDLARS”, where unlimited access is available to the students.

HOSTELS:

There are separate hostel facilities for both men and women students with 3500 single rooms inside the campus to accommodate undergraduate and postgraduate students in medical and other disciplines. The campus has continuous running soft water supply and power supply. The avenues of trees and green plants give a resort-like-ambience which is highly conducive to pleasant learning and peaceful living within the campus. Hostels are also equipped with internet facility for the benefit of the residents.
