

ANNUAL ACTIVITY REPORT

2013 - 14



Chettinad

Academy of Research and Education

(Deemed to be University Under Section 3 of the UGC Act 1956)

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Our Mission

- ✦ Create a nurturing and supportive environment to ensure a fulfilling, demanding and intellectually stimulating experience for the students.
- ✦ Enable students to imbibe values, cultivate a desire for lifelong learning and maximize their potential.
- ✦ Prepare students for employment in the global arena.
- ✦ To establish a team of well qualified faculty that will enable the institution to grow holistically.
- ✦ Provide the best state-of-the-art infra structure.
- ✦ Offer quality health services to all strata of society.
- ✦ To facilitate independent innovative research and share knowledge of understanding with society.
- ✦ To contribute to the social, economical and national development.

Finance Committee

1. Chairperson

Prof. Dr. V. Raji
Vice Chancellor

2. Representative of UGC

Dr. D.K. Paliwal
Officer on Special Duty, Ministry of Human Resource Development
Government of India, New Delhi

3. Person nominated by the Society or Trust

Mr. SP.Palaniappan

4. Two nominees of the Board of Management, one of whom shall be a member of the Board.

Mr. C. Muthukumar &
Dr. R. Jayachandran

Mrs. R. Vijayalakshmi, Finance Officer
Secretary.

Planning and Monitoring Board

1. Chairperson

Prof. Dr. V. Raji
Vice Chancellor

2. One nominee of the UGC

Dr. Anuradha Banerjee
Associate Professor
Center for the study of Regional Development,
School of Social Sciences,
Jawaharlal Nehru University, NEW DELHI – 110 067

3. Outside Eminent experts

1. Dr. Vijay Viswanathan
2. Dr. Kaliraj
3. Mr. V. Chandramoleeswaran

4. Internal Members

1. Mr. M. Manickam
2. Dr.K. Ravindran
3. Mrs. L. Lakshmi
4. Dr. Pradeep G Nayar
5. Dr. B. Ramathilagam
6. Dr. R. Murugesan
7. Mrs. Leela P. Murugesan

Mr. Spk.Chidambaram, Registrar,
Secretary

Research Advisory Committee

Convenor

1. **Dr. RM. Pitchappan,**
Director Research

External Members

1. **Dr. K.M. Paknikar**
2. **Prof. Dr. T.J. Pandian**
3. **Dr. T. Balasubramanian**
4. **Dr. D. Chandramohan**
5. **Dr. B. Gopalan**
6. **Dr. G. Balakrishna Nair**
7. **Dr. Latha Venkatesan**
8. **Prof. Dr. N.K. Ganguly**
9. **Prof. Dr. Muralidhar Kambadur**

Internal Members

1. **Dr. R. Murugesan**
2. **Dr. K. Ravindran**
3. **Dr. K. Ramesh Rao**
4. **Dr. D.C. Mathangi**

Board Of Research Studies

Board of research studies is a committee constituted to support, regulate, govern and steer the research activities of Chettinad Academy of Research and Education. The committee has eminent and well known scientists and specialists as its members. They meet periodically to review the research guidelines of the University and update the best research practices to suit the current and future trends in biomedical research.

Chairperson

1. **Dr. RM. Pitchappan,**
Director Research

External Members

1. **Dr. A. Sankaran**
2. **Dr. AV. Srinivasan**

Internal Members

1. **Dr. R. Murugesan**
2. **Dr. K. Ramesh Rao**
3. **Dr. A. Ruckmani**
4. **Dr. R. Murali**
5. **Dr. D.C. Mathangi**
6. **Dr. Radha Pandiyan**
7. **Dr. Meenakshi Mohan Ram**
8. **Dr. Agnishwar Girigoswami**
9. **Dr. A.R. Ashok Palaniappan**

Internal Quality Assurance Cell (IQAC)

Chettinad Academy of Research and Education was accredited in the year 2010, within a year of its establishment as a Deemed to be University, with a B grade (2.83 on a scale of 4) by the National Assessment and Accreditation Council, India. Following this accreditation the Internal Quality assurance cell (IQAC) was formed by the University with all the stakeholders and it has been proactive in all the initiatives of the University especially in the maintenance of standard and quality in all the endeavors of the University. In addition the IQAC submits the Annual Quality Assurance Report to the NAAC regularly. IQAC conducts regular internal seminars in the areas of academics, examination and research to update the faculty and students on the current trends. It has also conducted one National conference on "Outreach – a catalyst towards improved Educational outcomes" with the sponsorship from NAAC in the last academic year. The conference had a wide participation from academicians from most states of India.

Chairperson

Dr. V. Raji, Vice Chancellor

External Members

Dr.V. Anitha, Dental Surgeon

Mr.V. Chandramoleeswaran – President,
CMSCM Private Limited

Mr.Ramesh Khanna – Advocate

Internal Members

Mr.SpK.Chidamabaram, Registrar

Dr.K.Ravindran, Dean

Dr.R. Arun Kumar

Dr. N. Pandiyan

Dr.K.Ramesh Rao

Dr.D.Rajasekaran

Mrs.L.Lakshmi

Mrs. Veena M. Joseph

Mrs.Leela P. Murugesan

Co-ordinators

Dr. D.C. Mathangi

Mr. R.Lakshmanan

Recognition, Accreditation and Membership

1. Chettinad Hospital and Research Institute is recognized by Medical Council of India and Chettinad College of Nursing is recognized by Nursing Council of India.
2. **Recognized as a Scientific and Industrial Research Organization** by the Department of Scientific and Industrial Research, Ministry of Science & Technology, Govt. of India.
3. **NABL accredited** diagnostic laboratory.
4. **Member of Asia Pacific Quality Network and Association of Indian Universities.**

Courses Offered at Chettinad Academy of Research and Education

Faculty of Medicine Under Graduate Courses

- MBBS

Post Graduate Courses

D.M./M.Ch. Super Specialty Degree Courses

- D.M. (Cardiology)
- D.M. (Neurology)
- D.M. (Neonatology)
- M.Ch. (Cardio Vascular & Thoracic Surgery)
- M.Ch. (Neuro Surgery)
- M.Ch. (Urology)

M.D / M.S. Courses

- M.D. (Anatomy)
- M.D. (Physiology)
- M.D. (Biochemistry)
- M.D. (Pathology)
- M.D. (Microbiology)
- M.D. (Pharmacology)
- M.D. (Community Medicine)
- M.D. (General Medicine)
- M.D. (Anesthesiology)
- M.D. (Dermatology, Venereology and Leprosy)
- M.D. (Respiratory Medicine)
- M.S. (Orthopedics)
- M.S. (Ophthalmology)
- M.D. (Paediatrics)
- M.D. (Psychiatry)
- M.D. (Radio – Diagnosis)
- M.S. (Oto Rhino Laryngology)

Faculty of Allied Health Sciences Under Graduate Courses

- B.Sc. (Allied Health Sciences)
- B.Sc. (Medical Bionanotechnology)
- B.Sc. (Medical Biotechnology)

Post Graduate Courses (2 years)

- M.Sc. (Medical Bio-Nanotechnology)
- M.Sc. (Occupational Health & Industrial Safety)
- M.Sc. (Marine Pharmacology)
- M.Sc. (Medical Biotechnology)
- M.Sc. (Clinical Research & Experimental Medicine)
- M.Sc. (Computational Biology)
- M.Sc. (Bioinformatics)
- M.Sc. (Pharmaceutical Chemistry)
- M.Sc. (Health & Yoga therapy)
- M.Sc. (Counseling Psychology)
- M.Sc. (AHS) (Radiology & Imaging Science Technology)
- M.Sc. (AHS) (Echocardiography and Cardiovascular Imaging Technology)

Doctor of Philosophy (Ph.D.) Programme

Faculty of Nursing Under Graduate Courses

- B.Sc. (Nursing)
- Post Basic B.Sc (Nursing)

Post Graduate Courses

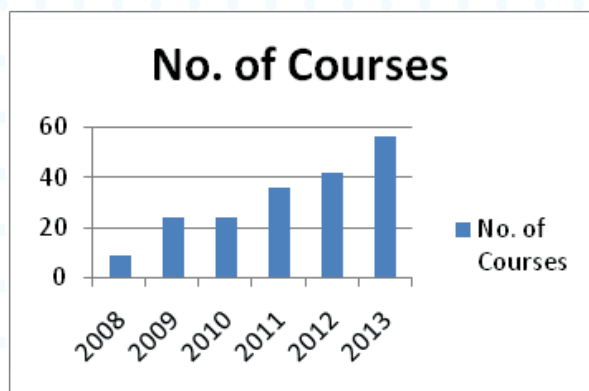
- M.Sc. (Medical Surgical Nursing) (Cardio Vascular and Thoracic Nursing)

Diploma Course

- Post Basic Diploma Programmes in Nursing
 - Post Basic Diploma in Neuro Science Nursing
 - Post Basic Diploma in Neonatal Nursing
 - Post Basic Diploma in Cardio Thoracic Nursing
 - Post Basic Diploma in Critical Care Nursing
 - Post Basic Diploma in Operation Room Nursing
 - Post Basic Diploma in Emergency & Disaster Nursing
 - Post Basic Diploma in Nurse Practitioner in Midwifery

Contd...

Innovative Courses at Chettinad Academy of Research and Education



Pushing the horizons of innovation

Being recognized as a 'Deemed to be University', CARE has not just been growing (see graph) but has been pushing the horizons of innovation ... the following innovative courses bear testimony to the monumental effort of the dedicated management and faculty.

1. M.Sc. (Medical Bio-Nanotechnology)

Nanotechnology is an interdisciplinary area drawing talents from Mathematics, Physics, Chemistry, Biology, Medicine and Computer Science. To exploit various applications of nanomaterials, one needs to have a thorough understanding of the various disciplines of Science and Technology. Realizing this special feature of this area, Chettinad Academy of Research and Education has initiated this two years (semester pattern) unique innovative M.Sc. program in Medical Bionanotechnology. The objective of this course is to provide students with a detailed knowledge of nanotechnology and its application in the medical field in an ethical and safe manner. The rapid development and the possibility of commercialization of nano-enabled products in the world market demand appropriate development of human resource in this field. The syllabus is designed to meet the challenges and opportunities that this field bears. The programme will prepare students to enter their profession with a broad perspective and deep knowledge related to the principal divisions of the respective fields of specialization through courses, research experience and thesis work. It introduces concepts in nano-materials followed by synthesis, characterizations and applications include imaging, labeling, targeting, and drug delivery to demonstrate the technological impact in biomedical sciences.

4. M.Sc. (Marine Pharmacology)

For a long time, Marine Pharmacology deals with the pharmacological potential of marine natural products. Since the approval of Prialt® (ziconotide, conotoxin MVIIA) the synthetic equivalent of a conopeptide found in marine snails, by US Food & Drug Administration (FDA) in 2004, a renaissance has occurred in this area of research. The recent global marine pharmacology preclinical pipeline included 592 marine compounds. Efficacy of marine substances brings new solutions for tackling some of the major public health problems of the 21st century. The marine bio-resources of India have wealth of potential therapeutic agents which have not been explored. Hence a systematic and scientific study of pharmacology of marine natural products will help the development of drugs for less curative diseases such as cancer, AIDS and degenerative disorders.

We offer a highly interdisciplinary approach involving, marine biology, marine natural product's chemistry, marine bioinformatics, pharmacology, preclinical and clinical research to systematically screen this rich source for the benefit of humanity. With the goal of generating human resource for the emerging potential of drugs from marine sources, such an innovative interdisciplinary PG course in Marine Pharmacology is offered by CARE.

5. M.Sc. (Occupational Health and Industrial Safety)

Management of health and safety in the workplace is a legal and moral obligation. Our M.Sc. Occupational Health and Industrial Safety course has an interdisciplinary approach that integrates various disciplines to address the problems in a comprehensive manner. This innovative course is one of its kinds as a full time two years regular programme. A range of conceptual and practical issues on occupational health raised in the course are, on the one hand, tested in the field set up and, on the other hand, enriched by networking with experts and practitioners. It has potential for epidemiological environmental monitoring and corollary toxicology studies in hazardous occupations for recognition and evaluation of risk factors, development and use of tools for early diagnosis of health impairment and design of appropriate intervention measures for the prevention of hazards at work places.

The interdisciplinary faculty and infra structural facilities from Environmental Health Laboratory and allied departments such as Anatomy, Physiology, Biochemistry, Microbiology, Pathology, Pharmacology, Biostatistics add unique strength to conducting this course by CARE. Further, in India, no other University is offering this course.

9. M.Sc. (Counseling Psychology)

Counseling Psychology is the largest specialty area within Psychology. The Society of Counseling Psychology describes this field as "a psychological specialty that facilitates personal and interpersonal functioning across the lifespan with a focus on emotional, social, vocational, educational, health - related, developmental and organizational concerns." The major role of counseling psychologists involve the practical application of psychological ethics and rules to help a person transform, improve and adjust or manage his situation in a better manner.

10. M.Sc. (Pharmaceutical Chemistry)

Pharmaceutical Chemistry is a scientific discipline at the intersection of Chemistry and Pharmacy involved with designing, synthesizing and developing Pharmaceuticals. It is a highly interdisciplinary science combining Organic Chemistry with Biochemistry, Computational Chemistry, Pharmacology, Bioinformatics, Molecular Biology, Statistics and Physical Chemistry. The interdisciplinary subject aims to meet the market potential and global development of the skilled man power in Pharmaceutical Industries and Institutes. The objective of this course is to provide students with a detailed knowledge of Pharmaceutical Chemistry and their application in the medical field in an ethical and safe manner. The syllabus is designed to meet the needs of this field and the course will be of great use for students intending to pursue higher studies. The programme is intended to prepare students to enter their profession with a perspective and breadth of knowledge related to the principal divisions of the respective fields of specialization through Courses, research experience and thesis thus moulding them to be not just qualified but also to be an 'entrepreneur'.

11. M.Sc. (AHS) (Echocardiography and Cardiovascular Imaging Technology)

Cardiovascular imaging plays a vital role in the management of the cardiovascular disorders. Knowledge of various imaging modalities is critical to understanding their advantages. Over the past 10 years, a tremendous expansion in cardiovascular imaging has happened that makes clinicians to better understand all aspects of the cardiac anatomy and functions. This technology has changed modern medical practice. Echocardiography is by far the most used cardiac imaging modality worldwide, remains the primary mode of initial investigation in suspected cardiovascular disease and become essential in the management of patients with all types of heart diseases.

M.Sc. in Echocardiography & Cardiovascular Imaging is a degree with good employment potential both at the national and international levels as trained echo technologists are in high demand in corporate hospitals. There is also tremendous scope for pursuing a career in teaching, research and also opportunities abound abroad. Starting salary would be high and it is a right course for the graduates from medical sciences who look to improve their career stream.

14. B.Sc. (Allied Health Sciences)

This course provides strong foundation in medical sciences along with hands on training in practical skills. This will enable them to assist confidently in technology driven medical procedures. With the enormous development in the health care industry, these graduates will be much in demand both within the country and outside as Medical Technologists. The specialties offered in B.Sc. Allied Health Sciences are Anesthesia Technology, Cardiac Technology, Medical Laboratory Technology, Radiology and Imaging Science Technology, Renal Dialysis Technology, Perfusion Technology, Cath Lab Technology, Blood Banking Technology, Dermato-Cosmetology Technology, Emergency Room and Trauma Care Technology, Respiratory Care Technology, Neuroscience technology

15. B.Sc. (Medical Bionanotechnology)

Medicine of 21st century is looking at nanotechnology as the ideal solution for the diagnosis and treatment of many diseases. Of the many applications of nanotechnology to the medical sector, drug delivery, imaging agents and bionanosensors for diagnosis, biomedical devices and medical implants have created many new jobs. But industry-ready workforce needs good-hands on training. The three year B.Sc. Bionanotechnology course aims to provide training for a new generation to arm them with the skills needed for this new era, and to prepare students for careers in health care industry, pharmaceutical industry, environment industry and food industry.

16. B.Sc. (Medical Biotechnology)

Biotechnology is fast emerging as a platform for new products and markets on many fronts, especially in biopharma and health care products. Medical biotechnology has potential to improve drug safety and efficacy, and it leads to a new era in disease prevention. The 3-year B.Sc Medical Biotechnology course will cover a number of topics central to application of Biotechnology to medicine, and provide training to prepare the students for careers in industries producing pharmaceuticals and healthcare products.

Institutional Human Ethics Committee - Reg. No. ECR/212/Inst/TN/2013 (DCGI)

- a. Chair person- Dr. Rajeswari, Retd. Deputy Director, ICMR, Chennai
- b. Member Secretary – Dr. Ruckmani.A, Prof. & HOD, Pharmacology
- c. External Members
 - 1. Dr.A. Karuppiah, Head, Dept of Sociology, Madras University
 - 2. Dr.S. Paneerselvam, Head, Dept of Philisophy, Madras University
 - 3. Mr. T. Balaji, Legal Advisor, Chennai
 - 4. Mrs.Tamil Selvan, Lay person, Chennai
- d. Internal Members
 - 1. Dr. R. Murugesan, Director, Faculty of Allied Health Sciences
 - 2. Dr. D.Rajasekaran, Prof. & Head, Department of General Medicine
 - 3. Dr. Balamurugan, Prof, Dept of Pathology
 - 4. Dr.R.Arunkumar, Asso. Prof, Dept of Pharmacology

Institutional Animal Ethics Committee - Reg. No. 944/ac/o6/CPCSEA

- a. Chair person – Dr. Ravindran.K, Dean
- b. Member Secretary – Dr. Ruckmani.A, Prof. & HOD, Pharmacology
- c. External Members
 - 1. Dr. Parvathavardini, Prof & Head, Department of Pharmacology, Tagore Medical College
 - 2. Mr. Rudra Krishna, Governing Body member, Blue Cross, Chennai
 - 3. Dr. Ilavarasan, Captain Srinivasa Murti Drug Research Institute for Ayurveda and Siddha, Arumbakkam, Chennai
 - 4. Dr. Srinivasan, Department of Veterinary Clinical Medicine, Madras Veterinary College
- d. Internal Members
 - 1. Dr. Meenakshi Mohanram, Asso. Prof, Dept of Dermatology
 - 2. Dr.Sanjay Andrew, Professor, Dept. of Physiology
 - 3. Dr. Madhavi.E, Asst. Prof, Dept of Pharmacology
 - 4. Dr. Sobita Devi, Veterinary Medical Officer, Institutional Animal House

Our University has been registered
for clinical trials too ...

CTRI/2009/091/000452

CTRI/2009/091/001098

CTRI/2011/09/002012

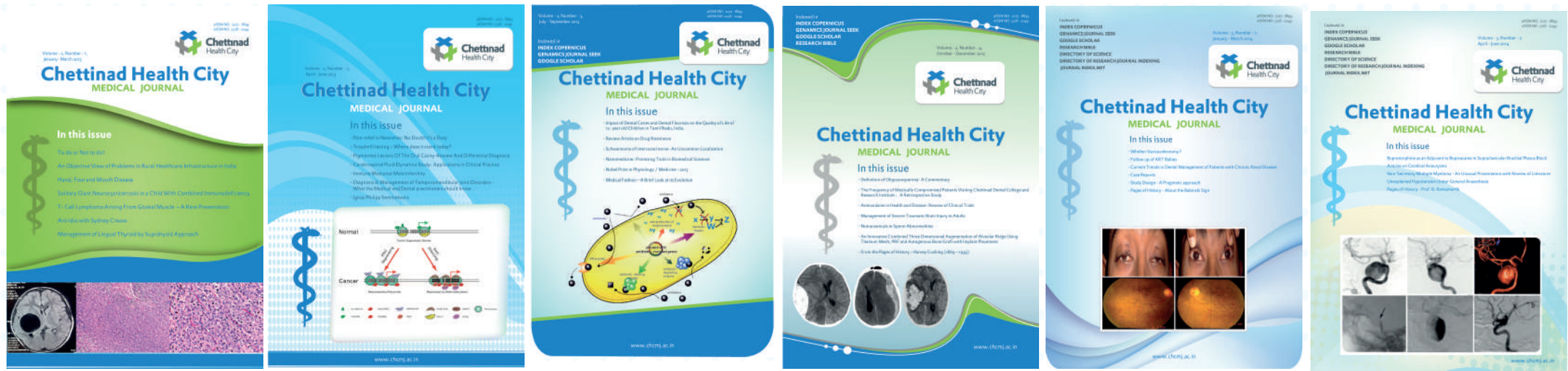
CTRI/2012/12/003191

CTRI/2013/05/003615

Chettinad Health City Medical Journal (Academic Journal)

Chettinad Academy of Research and Education has launched a Medical Journal "Chettinad Health City Medical Journal (Academic Journal)" both in print and online version. The ISSN No for the printed version is 2277-8845 and online version is 2278-2044.

- The journal is a peer reviewed quarterly medical journal, and carries original articles, review articles, important message from the pages of medical history, medical update, and case reports of clinical interest. The journal is indected with index copernicus & scholar google.
- 10 issues have come out till date. This journal has received excellent reviews from Peers and members of Medical Community



Indexed in Index Copernicus & Scholar Google

Research Projects at Chettinad Academy of Research and Education

Through Institutional Funding

1. Leucocytes in semen sample – Is it really significant?
2. Standardization of oocyte cryopreservation
3. Stoichiometrically Different Magnetic Nanoparticle Induced Cytotoxicity in Different Cell Lines.
4. Detection of antibiotic resistant genes of nosocomial pathogens using multiplex PCR
5. Immunogenetic predisposition to oncogenic HPV infection among cytologically (cervical) normal women from Tamil Nadu, India

Other Research Projects

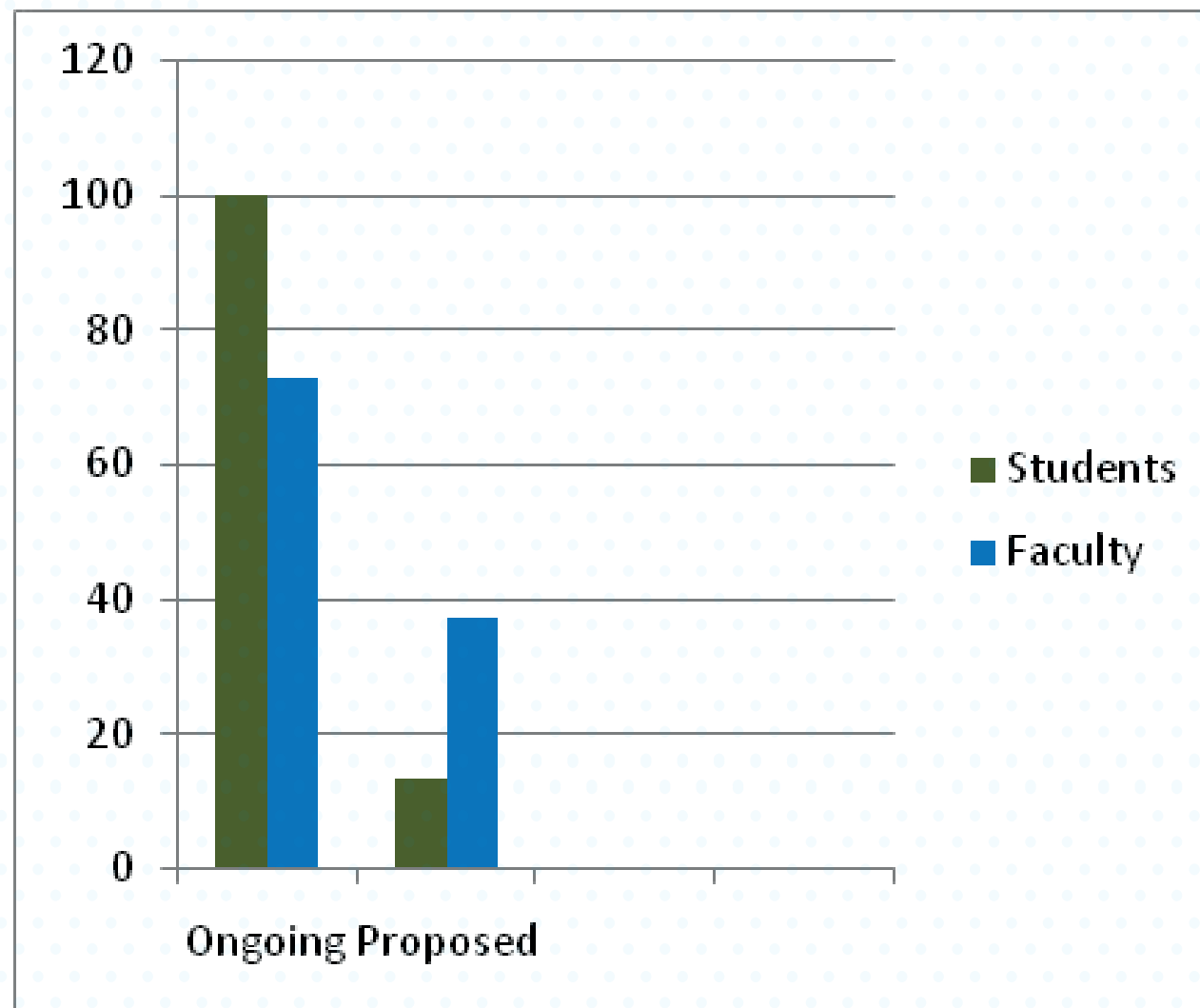
1. Modified radical mastoidectomies under general anaesthesia versus local anaesthesia with conscious sedation - risks and benefits.
2. Evaluation of two doses of Dexmedetomidine infusion for intraoperative sedation in patients undergoing regional anaesthesia.
3. Comparison of intravenous clonidine and dexmedetomidine for attenuation of hemodynamic response for laryngoscopy and endotracheal intubation
4. Influence of intrathecal clonidine and fentanyl on postoperative analgesic profile of spinal ropivacaine in ambulatory surgery.
5. Comparison of hemodynamic changes following positioning of patients using lumbar wedge and pelvic wedge for Caesarean section under spinal anesthesia.
6. Copper / Zinc imbalance in Hypothyroid and Sub - clinical Hypothyroid patients
7. Magnesium & Uric Acid levels in Euthyroid, Hypothyroid & Hyperthyroid cases
8. Liver markers in sub-clinical hypothyroid and Hypothyroid cases
9. Determination of Reference interval for ALT, AST, ALP
10. Prevalence of HPV in precancerous and cancerous lesions of oral cavity
11. Nasalance in patients with adenoids
12. Hearing evaluation among mobile phone users
13. Endoscopic myringoplasty, a study of cases done at Chettinad health city
14. Computed tomographic measurement of the greater palatine canal in the Indian population, a prospective study of 100 cases
15. Standardization of vitrification of oocytes

40. Ophthalmic manifestations of dengue fever in paediatric population
41. Comparison of cord blood thyroid stimulating hormone in different modes of delivery
42. Bedside diagnostics of malaria by optimal method in children with suspected malaria and its comparison with routine microscopy
43. Prevalence of group A beta-hemolytic Streptococci in upper respiratory tract infection in pediatric population
44. Nutrition profile of school going children
45. Prevalence of overweight and obesity in school going children & prevailing psychological problems among those children
46. Clinico-microbiological profile of patients with hand, foot and mouth disease
47. Correlation between urinary pH and urinary tract infections in pediatric population
48. Impact of Chronic Stress on Blood Glucose Level in Rats
49. Critical experimental evaluation of different animal models for type II diabetes mellitus
50. Anti inflammatory activity of Argentum metallicum Vs Silver nano particle in rats
51. Green synthesis of silver nano particle from homeopathic medicines
52. Mental health status and marital adjustment among psychiatric patients belonging to different diagnostic categories
53. Correlation between Clinical/USG/Pathological / Clinico pathological study in Acute Appendicitis – A prospective study
54. CARAT scoring in patients with bronchial asthma and allergic rhinitis
55. Investigation of aetiological comorbidity in a tertiary care hospital in Chennai
56. Identification and systems analysis of novel driver genes in the progression of colon carcinoma
57. Long term followup of patients undergoing anterior cervical discectomy with standalone cage fusion
58. A RCT to assess the vit k status of pre term(32 weeks)/VLBW(<1.5 kg) after 3 regimes (0.3 vs 0.5 vs 1 mg
59. Follow up of Assisted RT babies
60. Comparative study of salivary and blood CRP (pilot Study)
61. Usefulness of pulse oximetry in MSL babies

Completed projects by students	60
Completed projects by faculty	17
Ongoing projects by students	100
Ongoing projects by ph.d. Students	21
Ongoing projects by faculty	73
Proposed projects by faculty	37
Proposed projects by students	13
Funded projects	
1. Internal funding (CARE)	5
2. ICMR funding	9

Faculty registered for Part time PhD with CARE – 39

Projects	Ongoing	Proposed
Students	100	13
Faculty	73	37



Toxicology			
10	Balaji TK, Manickam S, Vaithianathan G, Sharmila R and Rajila RHS. 2013. Nimesulide Induced Histopathological changes in the Vas Deferens of Mice. Journal of Clinical and Diagnostic Research. 7(10):2116-2118.	0.6	National
11	Rajeswaramma G, Madhavi E, Venu G, Naidu JG and Ruckmani A. 2013. Comparative study of labetalol and nifedipine in patients with mild to moderate pregnancy induced hypertension. International Journal of Obstetrics & Gynecology and Reproductive Biology. Photon.114: 175-181.	3.96	International
Anatomy			
12	Ramakrishnan V, Anilkumareddy Y, Aruna S, Balaji TK, Ananthi S. 2013. A Cadaveric Study On Anatomical Variations Of The Superficial Palmar Arch. International Journal of Medical Research & Health Sciences. 3 (1): 144- 148. (Dec)	0	International
13	Rajila RHS, Vaithianathan G, Balaji TK and SharmilaSaran. 2014. Flexor digitiminibrevi – variations, development & its significance to ulnar neurovascular bundle. Int J of Research in Health Sciences. 2(1): 320-325.	0	International
14	Sharmilasaran, Balaji TK, Rajila RHS, Vaithianathan G, Syamly and Janani Y. 2014. Multiple Anatomical Variations in an upper limb – A case report. Medical Science. 2 (1): 93 – 98.	0	International
15	Janani Y, Rajila RHS, Balaji TK, Sharmilasaranand Batmanabane M. 2014. A study on the communicatins of median nerve with musculocutaneous and ulnar nerves. Int Journal of Research in Heath Sciences. 2 (2):480-487.	0	International
16	Rajila RHS, Sudha S, Ashok Victor and Gangadevi R. 2013. Aortic valve annular dimension in Indian population. Journal of Clinical and Diagnostic Research. 7(9): 1842 – 1845.	0.6	National
17	KhizerhussainAfroz, Aswinprakash, Ramesh P, Vaithianthan G, Balaji T.K, John paul Judson. 2014. Variation in innervations of lumbricals of hand. International Journal of Innovative Research & Development. 3(5) :243 -246.		International
18	Senthilkumar. 2013. Schwannoma of Intercostal nerve- An uncommon Localization. Chettinad Health City Medical Journal. 2(3): 92-93.		National
Community Medicine			
19	Ranjani. 2013. Neutraceuticals in male factor infertility. Chettinad Health CityMedical journal. 2(4): 133-136.	0	National
20	Swarnapriya K, Sathyadharan P and Vasantha NS. 2014. Epidemiology of Eclampsia in a Tertiary Health Centre. Journal of Evolution of Medical and Dental Sciences. 3(13)5021-5029.	0	National
Computational Biology			
21	Prasad M and Palanivelu P. 2014. Bioinformatics analyses of a thermophilic fungal recombinant chitinase. Indian Journal of Science and Technology	0	National
22	Prasad M and Palanivelu P. 2014. Immobilization of a thermostable fungal recombinant chitinase on chitosan	1.05	International

Microbiology			
35	Priyadarshini S, Jeya M and Jayaraman P. 2013. bla KPC gene detection in clinical isolates of Carbapenem resistant Enterobacteriaceae in a tertiary care hospital. Journal of Clinical and Diagnostic Research. 7(12): 2736-2738.	0.6	International
36	Umamageswari SSM, Jeya M and Suja C. 2013. Study of Bacterial and Fungal profile of external ocular infection in a tertiary care centre. National Journal of Laboratory Medicine. 2(3): 6-10.	0	National
37	Priyadarshini S, Jeya M and Pothini J. 2013. A Comparative Study of Enzyme Linked Immunosorbent Assay (ELISA) With Immunofluorescence Assay (IFA) For The Detection Of Anti Nuclear Antibodies. Int J Pharm Bio Sci. 4(4): 75-80.	0.67	International
38	Umamageswari SSM, Jeya M and Perumal J. 2013. Virulence Factors And Susceptibility Pattern Of Isolates Of Tribe Proteae From Clinical Samples In A Tertiary Care Hospital. Int J Pharm Bio Sci. 4(4):456-46.	0.67	International
39	Rajasekaran D. 2013. Tackling Antimicrobial Resistance in Tertiary Hospital, Antimicrobial Stewardship Programme (ASP) – a Review Article published in Chettinad Health City Medical Journal. 2(3): 88-91.	0	National
40	Priyadarshini S, Nirupa S and Jeya M. 2014. Evaluation of modified Hodge test as an indicator of Klebsiellapneumoniaecarbapenemase (KPC) production by using bla KPC gene PCR. Int J Med Res Health Sci. 3(1): 65-70.	4.81	International
41	Vasanthi R, Dhandapanikarthikeyan and Jeya M. 2014. Study of biofilm production and antimicrobial resistance pattern of the bacterial isolates from invasive devices. Int J Pharm Bio Sci. 2: 274-28.	0.67	International
42	Jayanthi S and Jeya M. 2014. Plasmid profile analysis and blaVIM gene detection of metallo β -lactamase (MBL) producing Pseudomonas aeruginosa isolates from clinical samples. Journal of clinical and Diagnostic research. – Accepted.	0.6	International
43	Sankararaman K, Vijayalakshmi K and Jeya M. 2014. Prevalence of Multidrug resistant bacteria and bla KPC 2 gene detection of carbapenem resistant isolates from clinical samples of ICU in a tertiary care unit. International Journal of Research and Health Sciences. 2(1):201-206.	0	International
44	Kandasamy S, Vijayalakshmi K and Jeya M. 2014. Prevalence of multidrug resistant bacteria and blaKPCa 2 gene detection of carbapenem resistant isolates from clinical samples of intensive care units in a tertiary care hospital. Int J Res Health Sci. 2(1):201-206.	0	International
45	Priyadarshini S, Jeya M and Jayaraman P. 2013. blaKPC gene detection in clinical isolates of Carbapenem resistant Enterobacteriaceae in a tertiary care hospital. Journal of Clinical and Diagnostic Research. 7(12): 2736-2738.	0.14	National
46	Janani R and Jeya M. 2014. Prevalence of extended-spectrum beta-lactamase and carbapenemase producing klebsiella isolates in a tertiary care hospital. Int J Res Health Sci. 2(1): 195-200.		International
OBG			
47	Swarnapriya K, Sathyadharan P, Vasantha NS and Anoop S. 2014. Isolated splenic vein thrombosis in a	0	International

Physiology			
59	Devendraraj SD, Mathangi DC, Mitasarkar and Bhattacharya R. 2013- oxidative stress following Combined toxicity of Cyanide and Organophosphate & their response to Alpha – Ketoglutarate and Atropine in Rats. Journal of Physiology and Health. 109:201-209.	0	International
60	Basha A, Mathangi DC, Shyamala R and Rao R. 2014. Protective effect of Light emitting diode phototherapy on fluorescent light induced retinal damage in Wistar strain albino rats. Annals of Anatomy - accepted for publication: Ms. Ref. No.: AANAT1619R2.	1.96	International
61	Srihari R, Mathangi K, Sriteja Y, Remya KJ, Mathangi DC and Shyamala R 2014. Second digit and fourth digit ratio is an adjunct tool to predict obstructive sleep apnea. Indian Journal of Physiology and Pharmacology. (in press)	0.7	National
62	Srihari S, Mathangi DC and Shyamala R. 2014. OSA – an awakening disorder. IOSR Journal Of Pharmacy. 4(4):4-7.	0	International
63	Mathangi K, Shweta A and Mathangi DC. 2014. Myopia and Digit Ratio in Medical College Students. PLOS ONE. 9(2). e89800. (Feb)	3.75	International
64	Prathibha KM, Johnson P, Mathangi DC and Subhashini AS. 2013. Evaluation of Salivary Profile among Adult Type two Diabetes Mellitus Patients in South India. Journal of Clinical and Diagnostic Research. 7(8): 1592-1595.	0.6	National
65	Nayak P, Sharma SB and NVS Chowdary. 2013. Aluminum and Ethanol Induce alteration in superoxide and peroxide handling capacity (SPHC) in frontal and temporal cortex. Indian Journal of Biochemistry & Biophysic. 50(5): 402-410.	1.026	National
66	Khan SD and Pandiyan N. 2013. Immune Mediated Male Infertility –Review Article. Chettinad Health City Medical Journal. 2(2): 44-47.	0	National
67	Venkateshgobi V, Ananthi S, Aruna S, Kannan G, Narayanan G and Balaji K. 2013. Study of intercondylar foramen of humerus – Clinical and radiological aspects. IOSR Journal of Nursing and Health Sciences. 2(4): 24-27.	0	National
68	Navin S, Krishnamurthy N, Ashakiran S and Dayanand CD. 2013. The Association of Hypomagnesaemia, High normal Uricaemia & Dyslipidaemia in the patients with diabetic Retinopathy. Journal of Clinical and Diagnostic Research. 7(9): 1852 – 1854.	0.6	National
Pulmonology			
69	Sharma MV and Viswambhar V. 2013. Low body mass index and low serum albumin level as risk factors for carbon dioxide retention during acute exacerbation of chronic obstructive pulmonary disease. International Journal of Innovative Research in Science, Engineering and Technology. 2(8): 3508- 3511.	0	International

85	Rajakumar SA, Amulya L, Thirumal R, Nalini AP and Rontgen R. 2013. Natural Anticoagulant – Protein s Deficiency and pregnancy outcome – A Rare Case Report. International journal of Medical and Applied Sciences. 2(3): 268-270.	o	International
86	Kavitha K, Nalini AP and Prabha S. 2013. Sertolileydig cell tumour of the ovary with sporadic multinodular goiter: A rare case report. J of Evol. Of Med. And Dental Scien. 2(33):6356-6359.		National
87	Chandrakala, Bhardwaj NS, Mohammadi K and Lakshmimenon. 2013. Stridor in Epiglottic Cyst: A rare presentation. Int J Head Neck Surg. 4(2):110-111.		International

13. Effectiveness of Music Therapy on Bio Physical & Psychological problems of The elderly residing in Geriatric Homes, Kancheepuram District, Tamil Nadu, India – Prof. Mrs. L. Lakshmi – International Nursing Conference 2013 on the theme “Contemporary issues in nursing”.
14. A study to assess the level of knowledge on curriculum renovation among final year nursing students at selected college of nursing in Kanchipuram district, Tamil Nadu – Mrs. Suganthi. A - International Nursing Conference 2013 on the theme “Contemporary issues in nursing”.
15. Nursing Education – Past, Present & Future – Prof. L. Lakshmi, Prof. Stell Suguna Kumari, Ms. Suganthi - International Nursing Conference 2013 on the theme “Contemporary issues in nursing”.
16. Leucocytospermia does it mean anything? – Dr. Ranjani – Chet-Nat-Ferti – Col
17. Impact of mobile phones in semen parameters – Dr. Asha - Chet-Nat-Ferti – Col
18. Immotile sperms are they really immotile? – Dr. Ramesh Raja - Chet-Nat-Ferti – Col
19. Poster – Prevalence of Abnormal GTT in south Indian Subfertile PCOS Women –Dr. Kanchana Devi – National Conference 2014 – Indian Society of Assisted Reproduction
20. Oral – Presentation – Endometrial Thickness & Pregnancy outcome in ART Cycles – Dr. Gayathri Devi - National Conference 2014 – Indian Society of Assisted Reproduction
21. Sperm Predictors of IUI Success – Ms. Prathima, Chettinad Andrology Colloquium
22. Prof. R. Murugesan, National Seminar on Innovative Technologies in novel Drug Delivery System - current Challenges & Future Opportunities (ITNDDS'13) organized by K M College of Pharmacy, Madurai on 30-Nov-2013.
23. Prof.R. Murugesan, Fifth International Conference on Signal and Image Processing “ Big Data in Medicine” organized by BNM Institute of Technology, Bangalore from 8th to 10th Jan 2014.
24. Dr.Agnishwar, National seminar on “Nanomedicine: Current Trends and Future Prospects” “Nanoparticle in drug and vaccine delivery” VIT university, Chennai, 30.04.2014.
25. Ebenezar KK. Poster presentation on Cytotoxic effect of prodigiosin, a Serratia marcescens isolate from head waste of marine shrimp *Metapenaeus dobsonii* on human lymphocytes. International Conference on Biomarker Research – 2013 organized by Jawaharlal Nehru Institute of Advanced Studies (JNIAS) & Society of Biomarker Research (SBR), Hyderabad, AP, India. (September 2013).
26. Dr. Ashok Palaniappan, Oral presentation on “Identification and systems analysis of stage-specific novel driver genes in the progression of colon adenocarcinoma” organized by BS Abdur Rahman University, (5th June 2014).
27. Mr. J.P. Rath, National seminar on “Nanomedicine: Current Trends and Future Prospects” , “Nanoparticle in drug and vaccine delivery”, VIT University, Chennai, 30.04.2014.

Personnel at Chettinad Academy of Research and Education

To augment the quality of the impressive list of courses on offer, CARE has highly qualified and experienced faculty, technical support staff and administrative staff.

The Constituent Colleges:

Chettinad Hospital & Research Institute

The College which houses the Faculty of Medicine and Allied Health Sciences.

Chettinad College of Nursing

Chettinad College of Nursing offers training in Nursing at both the undergraduate and postgraduate levels.

Students strength

Faculty strength

Student faculty ratio

1421

338

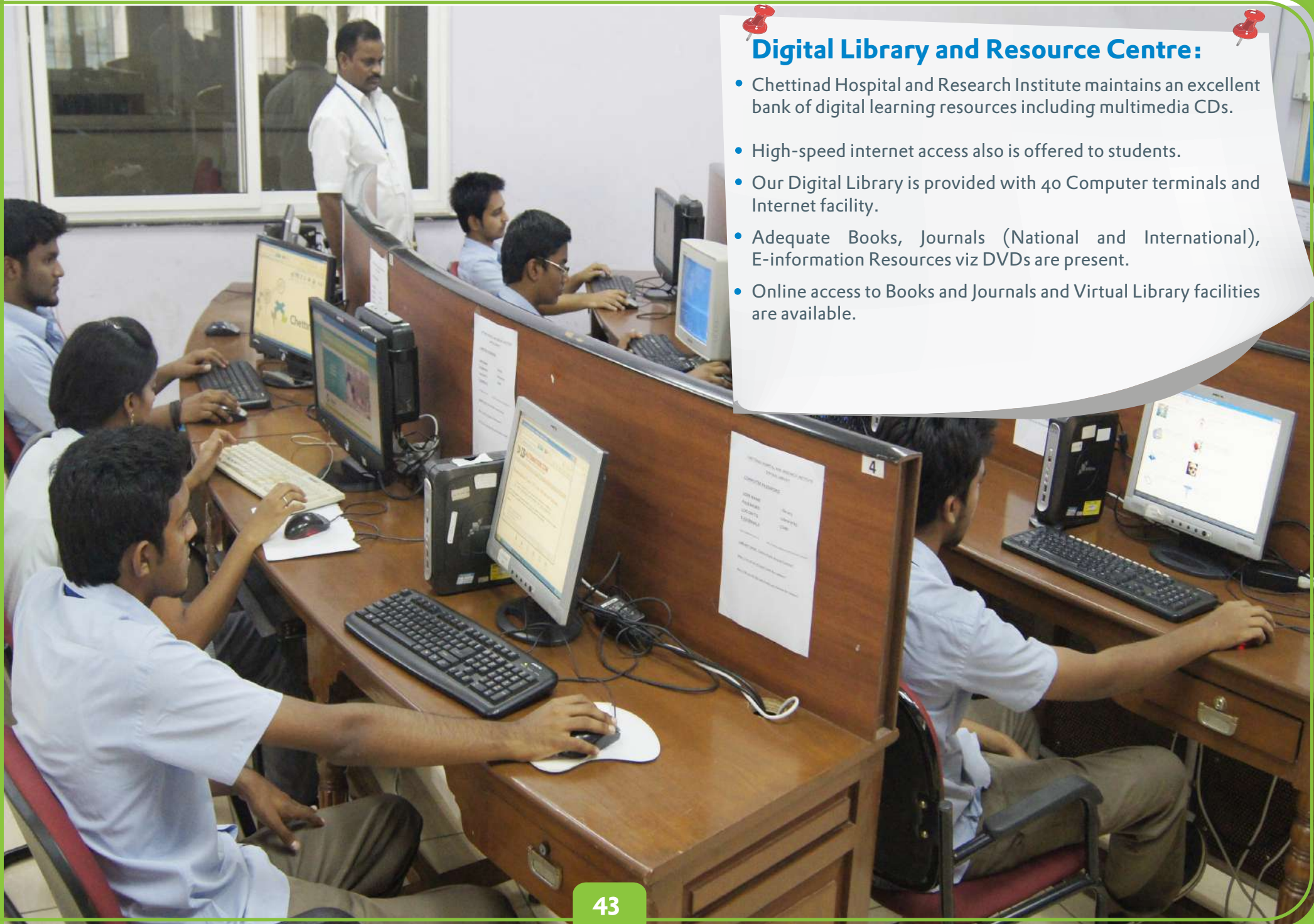
4 : 1

Administrative staff 202

Technical support staff 605

Teaching/ non teaching staff ratio (338 : 807) 1 : 2

Number of Students	UG	PG	Diploma	Research
in the two constituent colleges	1215	140	05	61



Digital Library and Resource Centre:

- Chettinad Hospital and Research Institute maintains an excellent bank of digital learning resources including multimedia CDs.
- High-speed internet access also is offered to students.
- Our Digital Library is provided with 40 Computer terminals and Internet facility.
- Adequate Books, Journals (National and International), E-information Resources viz DVDs are present.
- Online access to Books and Journals and Virtual Library facilities are available.

Amenities facilitating learning

Lecture Halls

The Chettinad Academy of Research and Education has 9 air-conditioned, multimedia-enabled lecture halls and LAN - Internet at every desk to make each lecture an unforgettable experience.



Information Technology

Usage of Software in Computers:

- Teaching and learning process: Chettinad Learning Management System
- Library management: Autolib
- Examination wing: EMS (VB 6)
- Attendance: Savior
- SMS facility for communication to parents : IBlue ERP
- College Attendance and student Management : IBlue ERP

Hostel students learn subjects through wi-fi connected Learning Management System (LMS)



someone could get you imprisoned..
...being a mute spectator is just as bad.



How serious is it ?

- A student indulging in ragging can be:
- Expelled from the institution / hostel
 - Made ineligible for a scholarship
 - Debarred from examinations
 - Denied admission to any institution
 - Prosecuted under criminal law



Ragging someone could get you imprisoned..
...being a **mute spectator** is just as bad



ராகிங் தடை செய்யப்பட்ட
தண்டனைக்குரிய குற்றமாகும்
**Ragging is Prohibited.
It is Punishable**

What is ragging ?

Any act resulting in:

- Mental / physical / sexual abuse
- Verbal abuse
- Indecent behaviour
- Criminal intimidation / wrongful restraint
- Undermining human dignity
- Financial exploitation / extortion
- Use of force

How serious is it ?

A student indulging in ragging can be:

- Expelled from the institution / hostel
- Made ineligible for a scholarship
- Debarred from examinations
- Denied admission to any institution
- Prosecuted under criminal law





Students, staff and others enjoying multi-cuisine food in "FOOD-COURT"



Training in Skills

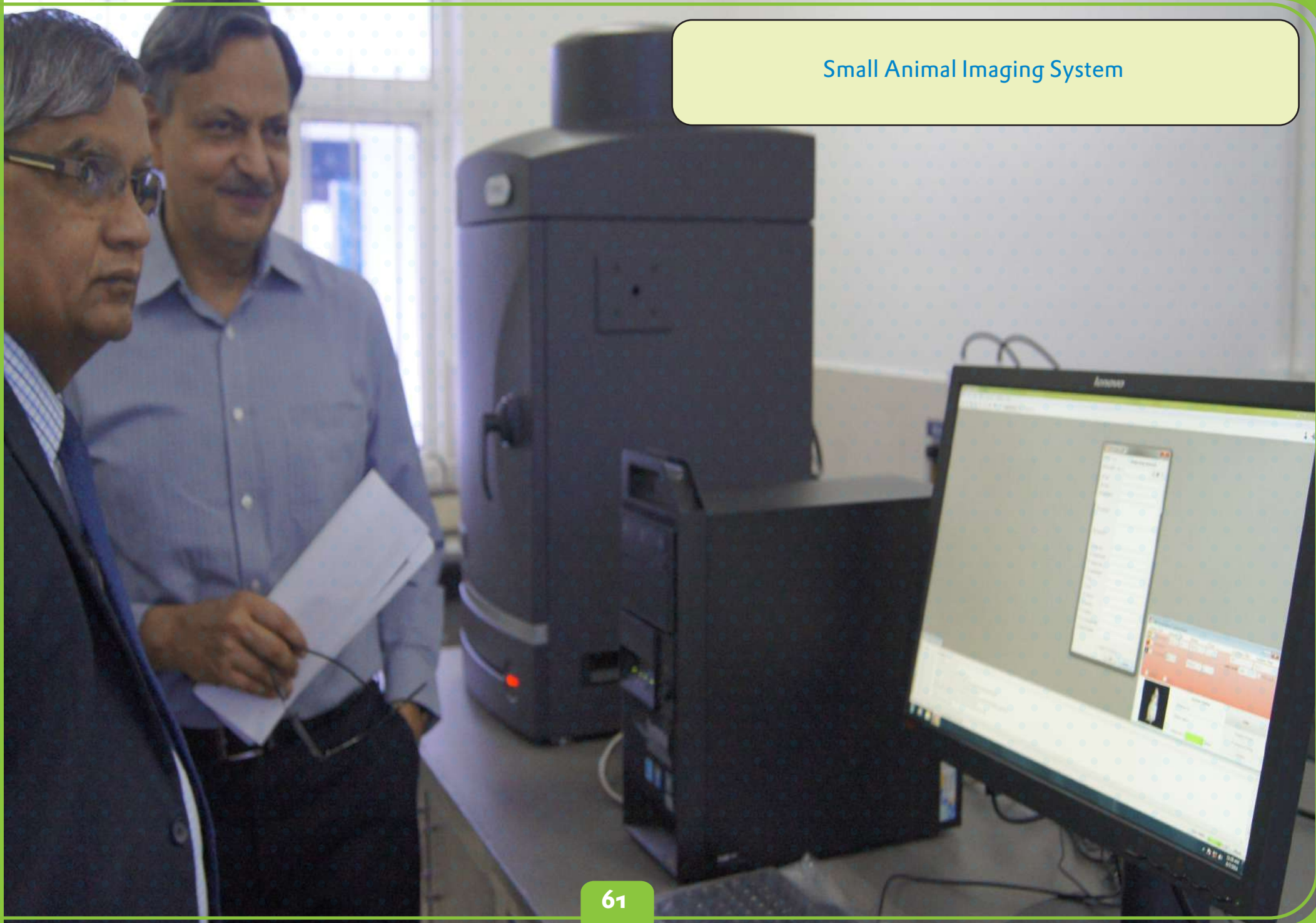
Skills Laboratory provides skills training to students

Swimming Pool for Students





Small Animal Imaging System





Malvern nano ZS90: Measuring nano particle size using dynamic light scattering technique.
One can also measure zeta potential and electrophoretic mobility

Faculty Development

Growth is the sign of life. At CARE, all care is taken to ensure the growth of its renowned faculty.

The following details bear testimony to the same...

The Faculty of Chettinad Academy of Research and Education are encouraged and motivated to attend academic programs such as seminars, workshops and conferences.

The faculty are also proactive in organizing such academic programs .

Number of conferences attended by faculty during 2013-14: 151

Sl.No	Departments	Conference attended		
		National	International	Total
1.	Nursing	4	3	7
2.	Reproductive Medicine	40	1	41
3.	Anatomy	4	0	4
4.	Physiology	8	0	8
5.	Microbiology	14	0	14
6.	Pharmacology	2	0	2
7.	Forensic Medicine	6	0	6
8.	Community Medicine	1	1	2
9.	General Medicine	1	0	1
10.	Respiratory Medicine	4	1	5
11.	Dermatology	1	0	1
12.	Psychiatry	3	0	3
13.	Paediatrics	16	0	16
14.	General Surgery	4	0	4
15.	Ophthalmology	2	0	2
16.	Obstetrics & Gynaecology	12	0	12
17.	Anaesthesia	3	0	3
18.	Radiology	3	0	3
19.	Faculty of Allied Health Sciences	13	4	17
	Total	141	10	151



Seminar on Plagiarism - conducted by IQAC of CARE, attended by all staff



Workshop was conducted on Career Orientation and Hands on Training
(One Week) 14th Feb 2014

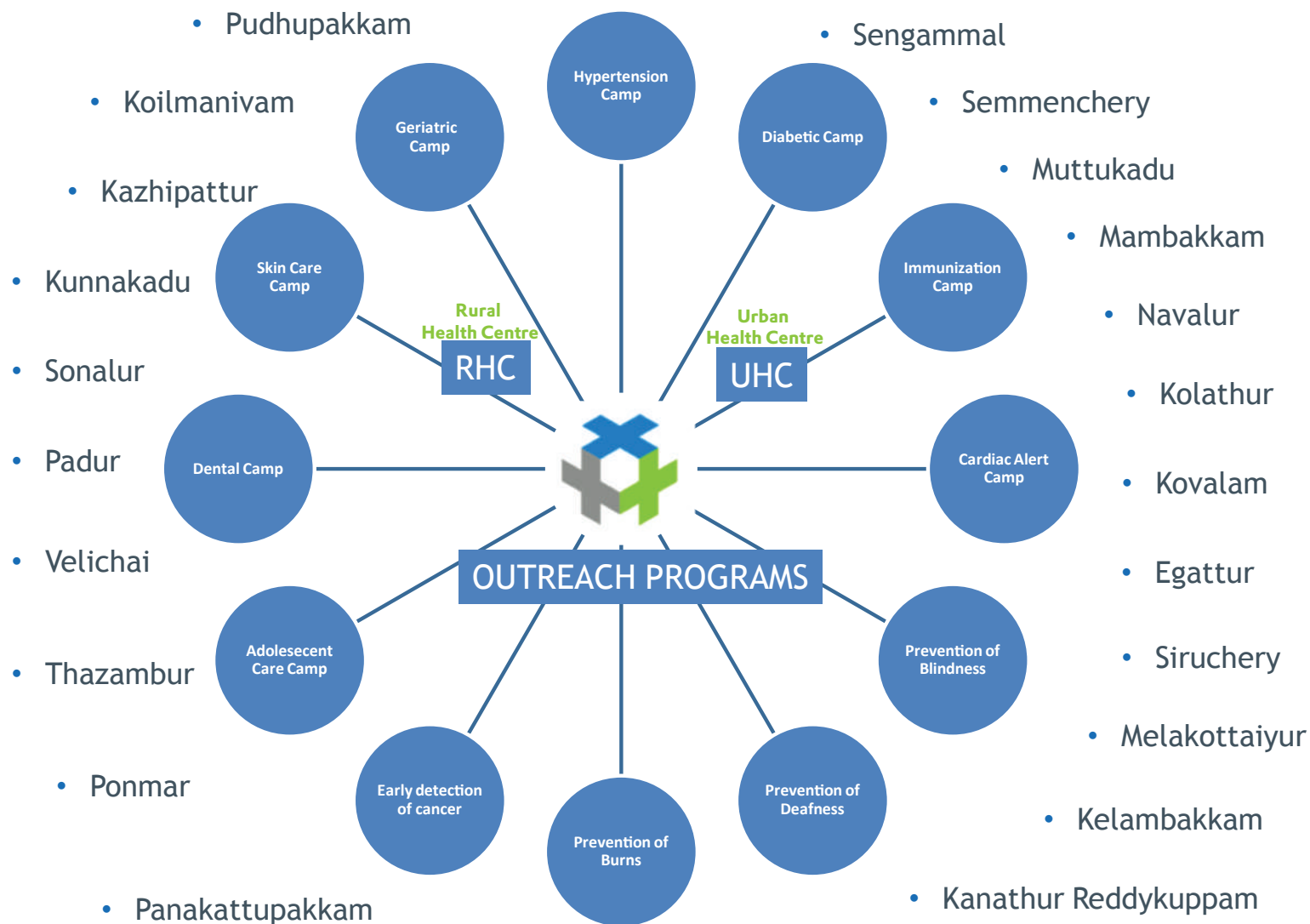
Student Development

Chettinad Academy of Research and Education encourages all round development through a series of regularly conducted events where students are given ample opportunity to showcase their talents, develop their managerial acumen and enhance their extracurricular skills. We also offer awards to meritorious students in a variety of disciplines.

Facilities available to students:

1. Laptop for all students (At subsidized rate)
2. Learning Management System for web based learning
3. Wi-fi Connection
4. Group Insurance
5. Free Medical Facilities
6. Computers with internet facility for each department
7. In-house residential quarters
8. 24 hrs water and power supply
9. Academic leave for attending conference
10. Comfortable transport with Air Conditioned vehicles
11. Sports (Indoor & Outdoor)
12. Gymnasium
13. 500 Cycles for within campus mobility
14. Canteen (Food court)
15. Recreational facilities
16. Free Laundry
17. Beauty Parlour
18. Screening of Movies for hostel students
19. Swimming Pool for Boys
20. ATM

Community Out-reach Programmes



Extension/ Outreach activities (camp) conducted IV year B.Sc. Nursing and II year Post Basic B. Sc. Nursing Students

Sl.No	Date	Type of Camp	Place	Students of	Visited Patients	Referred
1	27.10.2013	Medical Camp	Triplicane	B.Sc. Nsg IV Year	152	23
2	24.11.2013	Medical Camp	Poonthamalli	B.Sc. Nsg IV Year	512	12
3	01.12.2013	Medical Camp	Ayanavaram	B.Sc. Nsg IV Year	282	15
4	08.12.2013	Polio Camp	Kannagi Nagar	B.Sc. Nsg IV Year	446	-
5	15.12.2013	General Medical Camp	Thuraipakkam	B.Sc. Nsg IV Year	256	-
6	22.12.2013	General Medical & Dental Camp	Triplicane	B.Sc. Nsg II Year	109	32
7	19.01.2014	General Medical & Dental Camp	Ponneri	B.Sc. Nsg II Year & P.B.B.Sc. Nursing II year	150	17
8	19.01.2014	Polio Camp	Kelampakkam Phc	B.Sc. Nsg IV Year & P.B.B.Sc. Nursing II year	512	-



Examination and Evaluation

Examination:

Examination wing is an independent, fully computerized and automated section with the following features functional:-

- a. Database of students
- b. Database of Rules and Regulations of all courses
- c. Database of Panel of Examiners – as approved by the Academic Council
- d. Preparation of Question papers
- e. Preparation of Hall Tickets
- f. Appointment of Examiners
- g. Preparation of Tabulated Mark Register (TMR)
- h. Compilation and declaration of final results
- i. Convocation related data

Evaluation:

a. Internal assessment:

Continuous internal evaluation system is in force. Assignments, Project Work, Seminar and other components of learning methods are also considered for Internal Assessment.

b. End of semester/year examination:

The Examinations (both Theory and Practical) are conducted at the end of each semester/ year. All the students pursuing degree programmes (postgraduates, undergraduate and diploma) undergo external evaluation at the end of each semester/year. With regard to practicals and projects, the internal examiners also evaluate the students along with the external examiners. The question papers for the relevant subject are set by experts of the respective specialty. Answer sheets are encoded with bar coding system before forwarding it to the evaluators and later decoded for preparing tabulated mark register.

Results

Our students have shown consistent performance with excellent results since the inception of this institution.

Academic Awards

Sl. No	Name of the Student	Event	Nature of Award
1.	Ms. Sudha, II MBBS	Association of Anatomists, Tamilnadu at SRM Medical College on 05.10.2013	Best Undergraduate Dissertation Award
2.	Ms. Bharani, III MBBS	Association of Anatomists, Tamilnadu at SRM Medical College on 05.10.2013	Dr. Leela Krishnamurthi Award for Best Undergraduate Oral Paper Presentation
3.	Dr. Santhini, M.D. Biochemistry	AMBI MIDCON – 2014 , Sri Manakula Vinayagar Medical College & Hospital	Best Oral Presentation
4.	Dr. Abirami, M.D. Microbiology	MAHER Biosummit 2013	Best Paper Presentation
5.	Dr. Uppili Venkat Ragavan, M.D. Community Medicine	"Say No to TOBACCO" IFMSA, Medical Students association of India	Best Poster Award
6.	Ms. Aswini. G , III B.Sc. Nursing	World Schizophrenia day – Quiz competition (2014)	First Place
7.	Ms. Pavithra , III B.Sc. Nursing		
8.	Ms. Clincy, III B.Sc. Nursing		
9.	Ms. Nandhini Devi, III B.Sc. Nursing		
10.	Ms. Athira Gopidas, III B.Sc. Nursing		
11.	Ms. Dhaneesha, III B.Sc. Nursing		
12.	Mr. Antony, III B.Sc. Nursing		
13.	Mr. Freddy Micheal, III B.Sc. Nursing		
14.	Ms. Aswini. G , III B.Sc. Nursing	World Mental Health Day – Painting Competition	Awarded Cash Prize of Rs. 3000/-
15.	Ms. Anjuli Deru, , III B.Sc. Nursing		
16.	Dr. Shah Dupesh Khan	Chettinad Andrology Colloquium	3 rd Place in Free paper presentation



Orientation for Students

IVF babies meet held on 31.08.2013
IVF babies meet was conducted by
the Dept. of Reproductive Medicine on 31.08.2013



Fourth Convocation of Chettinad Academy of Research and Education Held on 29.11.2013

Chettinad Academy of Research and Education, held its fourth convocation at the Sigapi Achi Convention Centre on 29th November 2013. Prof. Dr.V.Raji, the Vice Chancellor presided over the function and awarded the Degrees and Diplomas to the 108 graduating students. Dr.V.Shantha, Chairman, Cancer Institute was the Chief Guest. She delivered the convocation address and presented the Rajah Muthiah & Sigapi Achi Awards for proficiency to the students. Twelve students received the awards.



IVF Fellowship Award Ceremony Held on 30.05.2013

Dr. Baskara Prakash has been awarded fellowship in Clinical Andrology and
Dr. Gayathri Devi has been awarded fellowship in Clinical Andrology & Reproductive Medicine



International Nursing Conference Held On 8th & 9th August 2013

Two days "International Nursing Conference 2013" was held on 8th & 9th August in the 375 Auditorium. About 400 participants attended the programme





Nurses Day Celebrated On 15.05.2014

This day was celebrated as the anniversary of the birth of Florence Nightingale, who is widely considered as the founder of modern nursing.

Chetfest Culturals held on 8th, 9th & 10th April 2014

To encourage students in cultural activities an intercollege culturals viz. "CHETFEST" was conducted.







SIGAPI ACHI CONVENTION CENTRE

ANNUAL ACTIVITY REPORT
2013 - 14