



**VELAMMAL MEDICAL COLLEGE**  
HOSPITAL AND RESEARCH INSTITUTE



# **ANNUAL REPORT**

## **2021 - 2022**



# Velammal Medical College Hospital & Research Institute

## Mission

By continuously assessing and improving the quality of health care, the nature of service and total dedication of staff, let us ensure that all the patients easily receive the benefits of completely satisfying medical treatment and care.

## Vision

To build a healthy society of sound body, mind and spirit through quality education and health care of global standards. To make these pillars of society affordable and easily accessible to one and all, thus securing the moral and physical well being of generation to come.



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HOSPITAL AND RESEARCH INSTITUTE

**Annual Report - 2021-2022**



A shining beacon of light, Smt. Velammal faced life courageously and with uncommon grace. Despite being struck by loneliness, poverty and an insecure future at a very early age, her spirit remained indomitable. With unshakable faith, relentless hard work and indefatigable cheer and compassion towards others, she created a home filled with joy and virtue. Her memory has been immortalised by her son, Shri. Muthuramalingam, who built a legacy in her name – one that illuminates a path for future generations and heals all who are touched by it. Velammal lives on.

Every great leader is driven by a force greater than them. Fuelled by a vision that is clearly imprinted on their minds, they tread resolutely ahead with conviction and passion. The best among them do not tread alone; they inspire others to journey with them.

Smt. Velammal Avargal was one such guiding light to her distinguished son, Shri. Muthuramalingam.

The righteous dignity with which she conducted her life and worked towards the wellbeing of society served as the inspiration for her young son and moulded him into the esteemed leader he is today. Such was the influence and wisdom she imparted, that he went on to spread her light far and wide. Shri Muthuramalingam built a legacy honouring his mother's ethics and the values of service and equality that she held dear. It is visibly embodied in schools and educational institutes that shape young minds into future leaders and innovators.

Her compassion is reflected in the advanced and affordable healthcare offered by the Velammal Hospital and the affiliated schools of medical education that prepare compassionate healthcare workers who will secure the health and future of generations to come.



## CHAIRMAN'S MESSAGE



Some people are destined for greatness, no matter how humble their beginnings. Shri. M. V. Muthuramalingam is one such shining example. His mother's poignant words and his life experiences taught him to never give up. No matter what challenge life placed in his path, he has always approached it head on and was driven to achieve greater heights. This admirable perseverance was displayed early in childhood, having faced adversity after adversity. He pursued a degree in engineering, overcoming the challenges of his rural upbringing and he single-handedly established one of South India's most prestigious group of educational institutions. His dogged determination, courageous enthusiasm and pursuit of excellence is legendary and an inspiration to all who follow his journey.

"When it comes down to the brass tacks, where does the wealth of any society lie? It is in the health and well-being of its people. In all my years of experience, I learnt one very simple yet very significant lesson. The need of society is like an ocean and the services we render are mere drops. The Velammal Hospital was established keeping this ideal in mind. Our fees are 30% lower than the best hospitals and no unnecessary investigations are carried out. Our doctors are driven by compassion and excellence to duty, not targets and our priority is always first and foremost towards our patients.

**Hence our motto - "Patient First"**  
**- Shri. M.V. Muthuramalingam**

## TO SHAPING MINDS TO HEALING BODIES



The Velammal Group has a rich legacy of serving society. This virtuous vision had humble beginnings, with a small school in Mogappair, catering to 183 students with a meager 13 dedicated staffs.

Over the years it has thrived under the watchful guidance of its founder, innovative and success-oriented ideas and has grown into the Velammal Group of Institutions. It is managed by the Velammal Education Trust (VET), Veeramakali Memorial Welfare Trust (VMWT) & Ramana Educational Trust (RET). The group comprises of over 52 schools and 3 Engineering colleges synonymous with quality education and high standards of teaching.

Furthering this illustrious legacy is the Velammal Hospital, The Medical College and Research Institute, School & College of Nursing and College of Allied Health Sciences. Established with the aim to provide world-class healthcare services to all, unparalleled patient care by highly skilled doctors and medical staff. The Velammal Group is determined to make Madurai a hub of medical expertise, led by a highly service oriented culture and values that promote excellence in all spheres.

**1986**

Velammal Matriculation School  
Mugappair East, Chennai.

Velammal Matric. Hr. Sec. School  
T.S. Krishna Nagar, Mugappair, Chennai.

**1991**

Velammal Matric. Hr. Sec. School  
Block No. 7, Mugappair West, Chennai.

**1994**

Velammal Matric. Hr. Sec. School  
Thiruppuvanam, Sivagangai District.

**1995**

Velammal Engineering College  
Velammal New-Gen Park, Surapet, Chennai.

**2000**

Velammal Matric. Hr. Sec. School  
Velammal New-Gen Park, Surapet, Chennai.

**2003**

Velammal Matric. Hr. Sec. School  
Velammal Knowledge Park, Panchetti, Chennai.

**2004**

The Velammal International School  
Velammal Knowledge Park, Panchetti, Chennai.

**2006**

Velammal Matric. Hr. Sec. School  
Madurai - Rameshwaram High Road,  
Viraganoor, Madurai.

**2008**

Velammal Institute of Technology  
Velammal Knowledge Park, Panchetti, Chennai.  
Velammal Vidyalaya  
Mel Ayanambakkam, Chennai.  
Velammal Matric. Residential School  
Ladanendal, Sivagangai District  
RVK - The Velammal Future School  
Venkateshwara Nagar, Ambattur, Chennai.  
Velammal Sports School of Excellence  
Velammal New Gen Park, Surapet, Chennai.

**2009**

Velammal Bodhi Campus  
Velammal Knowledge Park, Panchetti, Chennai.

**2010**

Velammal Vidyalaya  
Velammal Village, Anuppanadi, Madurai

Velammal Matriculation School  
Muthuthevan Patti, Theni

**2011**

Velammal Vidyalaya  
Kakkavadi, Karur  
Velammal Matriculation School  
Kakkavadi, Karur  
Velammal School of Excellence  
Velammal New Gen Park, Surapet, Chennai.  
Velammal Vidyashram  
Velammal New Gen Park, Surapet, Chennai.  
Velammal School of Excellence  
Velammal Village, Anuppanadi, Madurai

**2012**

Velammal Medical College Hospital  
& Research Institute  
Velammal Village, Anuppanadi, Madurai

## BOARD OF TRUSTEES



**Shri. M. V. Muthuramalingam**

Chairman,  
Velammal Educational Trust

“Healthy living is the fundamental right of every human being. It is our duty to ensure that quality healthcare is within reach of the common man. After all, a healthy society is a wealthy one”



**Shri. M.V.M. Velmurugan**  
**CEO,**

Velammal Educational Trust

“Healthcare is an ever evolving field. The sign of a progressive society is one that is open to growth. Therefore, it is vital to stay at the forefront using the latest in technological advancements, without losing sight of what’s important - compassion.”



**Shri. M.V.M. Velmohan**  
**Correspondent,**

Velammal Educational Trust

“The Velammal Group has set the bar high for education and now, healthcare. While it is a proud achievement for us, it is also a responsibility to ensure that the standards are always upheld, by constantly improving our services, facilities and infrastructure.”



**Shri. M.V.M. Sasi Kumar**  
**Director,**

Velammal Educational Trust

“Any meaningful change in society must begin at the roots. The same applies to medical care as well. To build a healthy society, we must begin by making quality medical care available to all. This is where our endeavour begins.”

## LEADERSHIP TEAM

**Shri. M.V. Muthuramalingam**  
Chairman, Velammal Educational Trust

**Dr. T. Thirunavukkarasu**  
**Dean**  
Velammal Medical College  
Hospital and Research Institute

**Er. R. Manivannan**  
**CAO**  
Velammal Medical College  
Hospital and Research Institute

**Dr. S. R. Dhamodharan**  
**Medical Superintendent**  
Velammal Medical College  
Hospital and Research Institute

**Dr. P. K. Mohanty**  
**Vice Principal**  
Velammal Medical College  
Hospital and Research Institute

## Medical Education Unit

S.No	Name of the Faculty	Designation
1	Dr.T. Thirunavukkarasu	Head, Dean
2	Dr. S. John Rajpathy	MEU Co-ordinator
3	Dr. S. Muthuramalingam	Co-ordinator - Clinical
4	Dr. P. K. Mohanty	Member
5	Dr. S. Nataraja Rathinam	Member
6	Dr. Raj Kishore Mahato	Member
7	Dr. Rathna Ramamurthy	Member
8	Dr. P. Sasikala	Member
9	Dr. K. Suganthi	Member
10	Dr. K. Yegamuthu	Member
11	Dr. S. B. Rena Rosalind	Member
12	Dr. K. Jeyashree	Member
13	Dr. TrupthuBhodhare	Member
14	Dr. R. Ramesh	Member

## Curriculum Committee

S.No	Name of the Faculty	Designation
1	Dr.T. Thirunavukkarasu	Chairperson
2	Dr. P. K. Mohanty	Co- Chairperson
3	Dr. S. John Rajpathy	MEU Co-ordinator
4	Dr. Raj Kishore Mahato	Member - Paraclinical
5	Dr. K. Suganthi	Member - Preclinical
6	Dr. S. B. Rena Rosalind	Member - Medical
7	Dr. R. Ramesh	Member

## Faculty Development Committee

S.No	Name of the Faculty	Designation
1	Dr.T. Thirunavukkarasu	Chairperson
2	Dr. S. John Rajpathy	MEU Co-ordinator
3	Dr. S. Muthuramalingam	Co-ordinator- Clinical
4	Dr. S. Nataraja Rathinam	Member
5	Dr. P. Sasikala	Member
6	Dr. K. Yegamuthu	Member
7	Dr. K. Jeyashree	Member



## Research Advisory Committee

S.No	Name of the faculty	Designation and Department
1	Dr. T. Thirunavukkarasu	Chair person - Dean
2	Dr. Jancy Charles	Co-ordinator - Department of Microbiology
3	Dr. S. Anu	Co-ordinator - Department of Physiology
4	Dr. M. Virgin Joena	Member - Department of General Medicine
5	Dr. S. Nataraja Rathinam	Member - Department of Paediatrics
6	Dr. Kavitha	Member - Department of Neurology
7	Dr. Vijay Pradap	Member - Department of ENT
8	Mr. Vijay Anto	Member – Statistician, Department of Community Medicine

## Institutional Ethics Committee

S.No	Name of the faculty	Designation
1	Dr BKC Mohan Prasad	Chairperson
2	Dr Raj Kishore Mahato	Member Secretary
3	Dr Chandrasekaran	Member - Clinician
4	Dr Muthuramalingam	Member - Clinician
5	Dr K. Sasikala	Member - Clinician
6	Dr Trupti Bodhare	Member - Basic Medical Scientist
7	Dr. K Suganthi	Member - Basic Medical Scientist
8	Mrs Usha Rani Patnaik	Member - Social Scientist
9	Mr M Krishnamoorthy	Member - Lawyer
10	Mr M Murugesan	Member - Layperson representative

## Institutional Animal Ethics Committee

S.No	Name of the faculty	Designation
1	Dr. T. Thirunavukkarasu	Chairperson
2	Dr. Venkat Ramanaiah	Scientist
3	Dr. RajkishoreMahato	Scientist & In-charge of Animal house
4	Dr. Thamilarasi	Scientist
5	Dr. Vanarani	Veterinarian
6	Dr. Arunjunai Rajan	Main nominee
7	Dr. ThirupathyKumaresan	Link nominee
8	Dr. Jayakrishnan	Scientist
9	Dr. Vallaiappan	Socially aware nominee

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## INTRODUCTION



Velammal Medical College Hospital and Research Institute, Madurai, established in the year 2012, provides World class healthcare quality services for all category people of South Tamilnadu at affordable cost. It is recognized by all section of people as a premier Healthcare Institution.

Today it stand sasabeacon, and an outstanding, example of success achieved in a short span of time. Velammal Medical College Hospital & Research Institute was commissioned by Velammal Educational Trust at Madurai. The institution obtained the Essentiality Certificate from the Government of Tamilnadu during the year 2012 to start the Medical College from the Academic year 2013-14 onwards. With a functional Hospital the Medical College was commissioned which got affiliated to The Tamilnadu Dr.M.G.R. Medical University and got approved Medical College with an annual intake of 150 students per year from the Academic year 2013-14 from the Medical Council of India.

The National Medical Council authorised the commencement of broad specialization Post Graduation courses with 43 seats in various departments starting in 2020, and this year six additional seats have been designated for the departments of OBG, Paediatrics, and Psychiatry, each of which has two seats.

The Institution is spread across a land of 140 Acres with the built-up area of 28 Lakhs sqft building. There are about 2750 Employees including 390 specialists across departments, 1050 Nurses and more than 250 paramedical staff working in our Institution. The Institution has a bed strength of 2100 which includes 25 Emergency beds, 150 ICU beds which is the largest ICU unit in South Tamilnadu and 65 Dialysis Units. Other features include 550 Air-conditioned rooms, 21 Modular Operation Theatres with State-of-the-Art facility, 2 Cath Labs, 2 MRI Scans, 2 CT scans, X-Ray Machines and Hi-Tech Endoscopy, Ultrasound and Doppler Machines, ECMO Machine, 2D and 3D Echo Machines and Modern IVF Lab. We are catering around 1700 – 1800 Outpatients and 800 – 900 Inpatients daily. Our healthcare system is outfitted with cutting-edge laboratory facilities that have NABL accreditation and are operational 24/7. On a daily basis, we handle about 2500 biochemistry samples, 500 microbiology samples, 2800 haematology samples, 700 clinical pathology samples, 15 histopathology samples, and 10 cytopathology samples. In 2021, our hospital treated 3,64,436 out patients, 33,738 in-patients, performed 8,051 Major surgery, 13,735 minor surgery and 988 birth. So far hospital have treated more than 43,00,000 in Out patient's department, more than 3,00,000 In Patients, over 85,000 Surgeries and more than 7,500 deliveries.

Since 2017, our facility has successfully performed 58 liver transplants, 84 kidney transplants, and two pancreas transplants, demonstrating our expertise and competence in the transplant programmes. Our landmark achievement includes the receiving of “Best Transplant Hospital award” for the Fourth year in a row by the Ministry of Health and Family Welfare, Government of Tamilnadu. In south Tamilnadu we are providing maximum number of treatments and surgeries under Chief Minister Comprehensive Health Insurance Scheme, Tamilnadu (CMCHISTN). In this scheme we render cashless medical service to the downtrodden people. Velammal Medical College Hospital and Research Institute will continue to promote affordable patient care and clinical research for therapeutic in order to accomplish our honourable chairman Shri. M.V.Muthuramalingam vision (Patient first).

Dr. T. Thirunavukkarasu  
Dean  
VMCH&RI

## ABOUT THE HOSPITAL

### Milestones

2012

Velammal Hospital  
Established

2013

February : Neonatal ICU  
Inaugurated.  
November : Prenatal ICU  
Inaugurated.

2017

January : Kidney transplant  
Programme commenced  
February : Liver Transplant  
programme commenced

2021

August 03 : Vaccination centre and Poison Care Centre Inaugurated  
August 08 : Bhoomi Pooja for Velammal Global Hospital  
August 14 : Awarded Best Transplant Hospital in South Tamilnadu by Govt. of Tamilnadu  
August 15 : Awarded Best Service Award by Govt. of Tamilnadu during COVID-19 Pandemic



Velammal Hospital is the largest private hospital in south Tamilnadu located in the heritage city of Madurai. Right from inception VMCRI has been focusing on raising the overall standard by bench marking with the best in the country and giving greater emphasis on world class medical service. The hospital spread across 140 acres of land with a built-up area of 2 million (20 lakhs) Sq.feet.

There are around 2100 beds and state of the art infrastructure with all facilities to serve patients at full occupancy rate. Around 450 top-notch doctors in relevant disciplines are part of the Velammal Hospital family. It includes 111 doctors, 1100 nurses and 250 technicians who are warm hearted, responsive, qualified and experienced to run the show with ease. Velammal Hospital Offers an advanced array of primary and speciality medical care services with 21 operation theatres, 55 dialysis units, 2 cath lab, and other supporting facilities and amenities all in abundance to reduce process time and provide comfortable patient experience.

There are around 7 pharmacies spread across the campus that functions round the clock to enable prompt delivery and easy accessibility. Velammal Hospital had never made any bit of compromise on its expense and efforts in bringing up the facility in abundance with state-of-the-art technology.

Velammal groups have a predominant presence in varied domains of education and service. With the strong lineage from the Velammal group, Velammal Hospital Leaves no stone unturned to bring unparalleled service inpatient care. The infrastructure with global standards, superlative technology, eminent doctors, certified technicians, skilled supporting staff, scientifically proven systems along with strong culture and values stay alive as it continues to grow, nurturing it to be an excellent healthcare service provider.



## ESTABLISHING A CENTRE OF EXCELLENCE IN MEDICAL CARE



**No.1**

*Multi-speciality Hospital  
in South Tamilnadu*

**2100**

*Well-equipped  
Beds*

**450+**

*Renowned Doctors  
and Surgeons*

**1100+**

*Dedicated  
Nursing Staf*

**250+**

*Expert Technicians*

**14 Lakh +**

*Patients Treated*

**50,000+**

*Operations Conducted*

Velammal Hospital was established in Madurai in 2012, with the promise of making medical care of international standards available and affordable to all. The hospital's pursuit of excellence was put in practice right from day one, meeting the standards of international care in all aspects. It is the No.1 Multi-speciality Hospital and largest private facility in South Tamilnadu, with 2100 beds.

At the heart of this hospital is its expert team of 450 highly qualified doctors and renowned surgeons, 1100 dedicated nursing staff, 250 skilled technicians and efficient medical staff who are always on call. Staying at the forefront of medical care requires the latest in lifesaving technology and state-of-the-art infrastructure. This ensures that the hospital functions at 100% efficiency, even at full-occupancy.

Providing the right calibre of medical care requires the right calibre of medical professionals. Velammal Medical College Hospital and Research Institute, School of Nursing and College of Allied Health Sciences were established to impart medical education of high standards, to produce compassionate, empathetic and socially responsible professionals.



At Velammal Hospitals, patient care extends beyond their medical needs. It stems from the need to care for one another and thus, serve the greater good. “Patient First” is the credo by which the hospital functions. Every aspect of the hospital is designed keeping this in mind, from its calm and serene location amidst nature, to its accessible, warm and welcoming architecture.

From the moment a patient enters the facility, they have all the support and reassurance they need to make their experience comfortable and hassle-free. Staffs are trained to handle patient requirements and requests with compassion and respect. This encompasses easy accessibility to doctors, ease of admission and discharge, transparency in payments and insurance claim processes. Velammal staff go the extra mile to ensure that patients are aware of and benefit from various government schemes and aid. Even after discharge patients receive thorough post-operative care with follow-up calls to assess their recovery and progress.

Patient care extends to their spiritual needs as well, with a Temple, Mosque and Chapel specially designed for patients and their attenders to seek guidance and strength. Here, world-class medical expertise is delivered with the utmost warmth, as it should be.



## FACILITIES

2100 BED FACILITY



550 AIR-CONDITIONED BED FACILITY



23 STATE-OF-THE-ART OPERATION THEATRES



65 DIALYSIS UNITS



2 CATH LABS



2 MRI SCAN UNITS



2 CT SCAN UNITS



## MULTIPLE SPECIALITIES, ONE GOAL: COMPREHENSIVE PATIENT CARE



### Expertise, Delivered with Empathy.

- Cardio Thoracic Surgery
- Cardiology
- Neuro Surgery
- Neurology
- General Medicine
- General Surgery
- Reproductive Medicine
- Obstetrics & Gynaecology
- Paediatrics
- Nephrology
- Urology
- Surgical Gastroenterology
- Medical Gastroenterology
- Plastic & Cosmetic Surgery
- Orthopaedics
- Ophthalmology
- Dermatology

As South Tamil Nadu's No.1 Multi-speciality Hospital, Velammal Hospital offers unparalleled medical care across specialities. This is achieved through the unmatched expertise and dedication of the 29 Departments that function independently to serve the needs of the patients. Each department is lead by a team of renowned doctors who are among the best in their fields. They are supported by a contingent of highly trained and skilled nurses, technicians and allied staff to provide medical care of international standards. Every department has a specialist on call 24/7, ensuring patients are always well taken care of, no matter what their needs. Velammal Hospital is defined by commitment to excellence in medical expertise, patient care, professionalism and compassion, to provide holistic care to one and all.

## Specialisations

### Global Expertise, Home-grown Care



Velammal Hospital is known for its impeccable medical expertise in a wide range of specialities. Every department is led by a team of renowned doctors who are experts in their fields, with a wealth of experience backing them up. Their attention to detail and commitment to patient care is unparalleled. Each team is supported by highly trained medical and non-medical support staff, the latest technologies, state-of-the-art equipment and world-class infrastructure. All, to provide patients with the best medical care in South Tamil Nadu.

To ensure that patients always have access to a doctor, Velammal Hospital has specialists available around-the-clock, one of the few hospitals to do so. No matter what emergencies arise, everyone is assured an excellent medical care at all times.

#### Expertise in:

Cardiology | Cardio Thoracic Surgery | Respiratory Medicine  
 General Medicine | General Surgery | Oncology | Medical Oncology  
 Surgical Oncology | Breast And Endocrine  
 Medical Endocrinology | Medical Gastroenterology | Dermatology  
 Surgical Gastroenterology | Dental | ENT  
 Interventional Radiology | Nephrology | Urology  
 Neurology | Neuro Surgery | Ophthalmology | Orthopaedics | Pain Clinic  
 Vascular Surgery | Paediatrics | Paediatric Surgery  
 Obstetrics & Gynaecology | Reproductive Medicine  
 Plastic Surgery | Rheumatology | Psychiatry



## DEPARTMENT OF ABDOMINAL ORGAN TRANSPLANTATION

Making-Second Chances-Possible



SINCE 2017:

ORGAN	TYPE	TOTAL
Liver	Live	17
	Cadaver	21
Kidney	Live	15
	Cadaver	15
Pancreas	Cadaver	2

### Services

**Liver Transplant (DDLT/LDLT) | Kidney Transplant (DDKT / LDKT) | Pancreas Transplant**

**Multi-organ Transplant (Combined Liver / Kidney Transplant Centre and combined**

**Pancreas / Kidney Transplant Centre)**

**Intestinal Rehabilitation Program and Transplant | Paediatric Liver and Kidney Transplant**

Velammal Medical College Hospital is one of Tamilnadu most sought-after transplant hospitals. The transplant programmes began in 2017, under the supervision of internationally trained specialists and has since then grown to become one of the hospital's main attractions. The transplant programme has been awarded by the Government of Tamilnadu for 4 consecutive years owing to international standards of quality and outcomes. Currently, South India's largest transplant centre, this department was the first to conduct a Pancreas transplant and the first to conduct a Pancreas Liver transplant on a 1 year old baby. Among its accomplishments is a successful live donor liver transplant for Acute liver failure.

### Kidney Transplant

The first ever transplant at Velammal Medical College Hospital was carried out in January 2017 with a live-related kidney transplant. The programme is overseen by internationally trained Nephrologists and the outcomes are all on par with international standards. Today, patients visit from all over the country and abroad for cadaveric and live-related transplants.

### Liver Transplant

Velammal pioneered the liver transplant programme in India in 2017. In 2018, the Tamilnadu Government awarded Velammal Medical College Hospital for the largest number of cadaveric transplants, in the private hospital category. The best liver transplant surgeons in the country, excellent facilities and transplant care and the most affordable services, makes this the most successful transplant programme in Tamilnadu.

## 24 HOUR AMBULANCE SERVICES

Ambulance Services | Poison Care Centre Blood Bank | Intensive Care Unit

850+  
*Pickups per Year*

No. of Ambulance: 5

2 High-tech  
Ambulance

2 Normal  
Ambulance

1 Neonatal  
Ambulance



Velammal Hospital is equipped to deal with emergencies around-the-clock, with specialists on call 24/7 and emergency services staffed by ever vigilant doctors, nurses and technicians. No matter what situation arises, Velammal Hospital is ever dependable and easily accessible.

The Velammal fleet of ambulances plays a vital role in saving lives. They are equipped with highly trained technicians and life-saving emergency equipment such as defibrillators, ventilators, oxygen cylinders and essential medications that help stabilise critical patients and provide immediate treatment, before transporting patients to the hospital.

They come with high-tech communications equipment that allows the first responders to communicate with the hospital and ensure vital information is relayed immediately, thus saving time and saving lives. The velammal fleet consists of 3 types of ambulances:

**Neonatal Ambulances:** Designed exclusively for neonates, the ambulance is equipped with radiant warmers, resuscitation systems, neonatal ventilators, transport incubators and is designed to minimise sounds and vibrations so as to carefully transport new borns to the hospital.

**Mobile ICU:** The Intensive Care ambulances are dispatched to emergency situations where patients require a higher degree of attention. They are staffed by highly trained paramedics who can provide critical care and equipped with defibrillator, ventilator, pulse oximeter, cardiac monitor, publisher and more.

**Antenatal Ambulance:** An exclusive ambulance for pregnant women, designed to take care of deliveries during transit. It offers a sterile and safe environment for emergency births and is manned by expert nurses.

## BLOOD BANK



### Services

- 24/7 services
- 1000 units of blood storage
- Leukofiltration of red blood cells
- Antibody titration
- Apheresis
  - Leucopheresis
  - Plateletpheresis (Single Donor Platelets)
  - Plasma Exchange Procedures
  - Red blood cell exchange
- Platelet Concentrate
- Washed RBC
- Plasma & Platelet Storage
- Mobile Blood Bank Bus
- Cryo-precipitate

As an approved 'Regional Blood Transfusion Centre, the fully-automated blood bank at Velammal Hospital is available around-the-clock and is a boon for patients in need. This highly efficient system enables grouping, Rh typing, cross-matching and testing to detect unidentified antibodies and infections.



## INTENSIVE CARE UNIT



### ICU Units

- Intensive Coronary Care Unit
- Intensive Surgical Care Unit
- Paediatric Intensive Care Unit
- Neonatal Intensive Care Unit
- Intensive Medical Care Unit
- Intensive Respiratory Care Unit
- Intensive Neuro Care Unit

When it comes to saving lives, attention to detail plays a vital role. That is why all the ICUs at Velammal Hospital are equipped with the most modern and highly precise monitoring systems that measure vitals and alert the staff at the slightest anomalies.

The 140 bed unit contains the latest in ventilators, IV lines, pumps, feeding tubes, drains, catheters and more, to provide maximum comfort and the highest standards of care to critical patients suffering from a wide range of ailments.

This department relies on second-by-second monitoring and lightning fast response times. That is why there is a quality control unit that ensures the equipment is always functioning at 100%, safety protocols are followed and the highest standard of hygiene is maintained, to prevent spread of infection among the most vulnerable of patients.

The ICUs at Velammal Hospital are staffed with specialised intensivists and highly trained support staff, with access to the most advanced medical equipment and resources that are not commonly available. The staff to patient ratio is also significantly higher than in the rest of the hospital. These details ensure that lives are saved and nothing is left to chance.



## POISON CARE UNIT



Velammal Hospital is the one stop destination for all toxicological emergencies. From snake bite poisoning to envenomation and drug overdoses, the staff is highly trained and equipped with life-saving knowledge and gather relevant information to ensure speedy first aid and treatment.

## LABORATORIES



The most important step in medical care is the very first step – diagnosis. Only when the doctor is able to correctly diagnose an illness or ailment, can the correct treatment take place. That's why diagnostic tests and scans play a very vital role in medicine. Allowing doctors to see what's happening inside the body, providing them with all the information they need to prescribe the best course of treatment.

Velammal Hospital has an extensive central laboratory that is equipped with the most advanced diagnostic tools and equipment, enabling quicker and more efficient patient care, by reducing wait times and assuring them of 100% accuracy. The lab is run by an efficient team of highly-trained technicians with expertise in cancer, cardiovascular diseases, infectious diseases and neurology. There are three distinct fields of diagnostics housed within the central laboratory:

## LABORATORIES



### Microbiology

This laboratory is devoted to the culturing, examination and identification of microorganisms like bacteria and fungi, antigen and antibody detection of bacteria and viruses and molecular diagnosis of viruses and other markers. It plays a vital role in the detection and prevention of infectious diseases.

### Services

- Serology • Bacteriology • Virology • Parasitology
- Mycology • Mycobacteriology • Molecular techniques





## Biochemistry

This laboratory deals with the study of chemical processes in the body through bodily fluids such as blood, serums, plasma etc. These tests are compared with a healthy sample to understand the nature of illness and the course of treatment.

### Services

- Electrophoretic analysis • Developing protocol for rare assay parameters
- Spectrophotometric analysis of heavy metals, drugs and other rare parameters
- All ELISA parameters • Tissue extract analysis



## Pathology

The scope of the department of Pathology includes diagnostic, education and research. It offers quality diagnostic services in the following sections:

### Services

| Hematology | Clinical pathology | Cytopathology | Histopathology | Immunohistochemistry



# Velammal Medical College Hospital & Research Institute



## DEPARTMENTS

### DEPARTMENT OF ANATOMY

#### About the Department

The Anatomy Department of VMCH & RI makes every effort to create a center of excellence for learning anatomy in a very interesting and innovative way and to inculcate in our students a sense to respect the cadaver. There are normal and clinically relevant Radiographs and CT scans for regular small group discussions with students. The well-equipped research facility is utilized for routine Histological and Cytogenetics research.

#### Goals

To provide our students with clinically relevant knowledge of the structure of the human body using interactive teaching-learning methods.

To conduct high-quality research in clinical anatomy, neuroanatomy, and genetics.

To provide efficient and effective embalming services

#### Facilities and Services

The Museum has an amazing collection of more than 230 dissected wet specimens, plastinated specimens, dry models, embryology models, charts and bone sets.

The Dissection Hall has the capacity to accommodate 150 students and has a cold storage facility to preserve 20 cadavers. A separate embalming room and storage tanks for the cadavers also exist.

Histology practical hall can accommodate 90 students at a time and each student is provided with a microscope for effective self-learning.

Research Lab fully equipped with Tissue processing and slide preparation unit enables the department to replenish the Histology Lab with newer slides.

The genetic lab is fully functional and operational.

With the establishment of a plastination lab, we intend to make learning anatomy easier and interesting.



## Faculties

S. No	Name of the Faculty	Designation
1	Dr. R. Sumana	Professor
2	Dr. S. Rajasankar	Professor
3	Dr. Parineeta Suman	Associate Professor
4	Mr. A. David Ebenezer	Assistant Professor
5	Dr. P. Veenalakshmi	Assistant Professor
6	Mr. M. Ramkumar	Tutor

## Teaching Lab



## Museum



## DEPARTMENT OF BIOCHEMISTRY

### About the Department

#### “Passion to spot the trouble”

The department of Biochemistry of VMCH&RI handles three core areas – teaching, hospital laboratory services, and research. To support these practices there are convenient classrooms to accommodate sufficient students for different types of learning. There is a separate research lab with adequate infrastructure and equipment for postgraduate students, Ph.D. scholars, and faculties. Department provides nesting for IVD equipment validation and Research collaborations.

Clinical biochemistry laboratory in VMCH&RI, is a part central hospital Laboratory Services, is situated on the first floor of the hospital building, where service is provided 24hours a day. It is armed with state-of-the-art equipment and handles more than 3500 tests per day. It provides an extensive range of testing services for the hospital services and also provides testing for research. The laboratory provides testing in routine Biochemistry investigations, special investigations like hormones, drugs and metabolites. Faculties are posted round the clock to monitor the quality control, validate and release the reports. The laboratory also participates in the external quality control program. The lab provides in-house lab investigations services as well as at the community level.

Thrust areas for research in the department are obesity, diabetes mellitus, thyroid disorders, therapeutic drug monitoring, chronic renal failure, and medical education.

Department of the biochemistry of VMCH&RI department strives hard to produce well informed, innovative, inquisitive, intuitive, ethical, socially committed, self-disciplined, hardworking health care providers with adequate knowledge of all medical sciences in biochemistry which is the study of the fundamental chemical that makeup of the human body in the health and earliest chemical changes at the micro and macro level in diseases which precede all other types of manifestations. Also, to inculcate and instil scientific wisdom and research acumen in the young minds on the needs of the patient and the public. To promote an evidence-based holistic approach to health care

## Objectives

To create a learning environment to impart knowledge of biochemistry to medical students at UG & PG level.

To provide ample scope and opportunity for the student of biochemistry to develop an understanding of the subject at both basic and applied level.

To integrate the knowledge of biochemistry with appropriate skills to develop the student's professionalism.

To develop infrastructure for the facilitation of interdisciplinary and collaborative research in biochemistry both independent and their disciplinary in health care.

To provide laboratory support services to clinical departments for patient care and conducting research.

To deliver an accessible state of the art laboratory health services to all in need of health care with compassion.

To promote and facilitate industry-academia research development projects.

To educate students to be innovators to help the people in need of health services and to spread the knowledge of biochemistry in public and professional interest.

## Faculties

S.No	Name of the Faculty	Designation
1	Dr. P. K. Mohanty	Professor
2	Dr. K. Suganthi	Professor
3	Dr. M. Jeyakumar	Assistant Professor
4	Dr. Mamtha T. Shenoy	Assistant Professor
5	Dr. A. Hariharan	Assistant Professor
6	Dr.M.Viveka	Assistant Professor
7	Dr.Asothai Raju	Assistant Professor

## Teaching Lab



## Research Lab



## DEPARTMENT OF COMMUNITY MEDICINE

### About the Department

The community medicine department of VMCH&RI gives special importance to creating a supporting and collaborative learning environment for students. The department has successfully incorporated student-centric learning strategies like problem-based learning (PBL), team-based learning (TBL), flipped classroom, e-learning and blended learning to facilitate higher learning skills among MBBS students. The department has also designed and developed a flexible and convenient E-learning platform to teach new topics and improve the teaching outcomes.

### Vision

To produce skilled, knowledgeable, morally responsive and empathetic doctors, capable of providing need-based services to the community. The students shall also be a good researcher, an excellent communicators and lifelong learner who are ethically responsive to the community.

### Mission

The department emphasis teaching medical students the issues beyond clinical illness, especially biopsychosocial aspects, communication, epidemiology, the natural history of diseases, health systems and the role of support mechanism, the knowledge of which is crucial in providing comprehensive care to the patient. Students are also trained to identify the socioeconomic inequalities as determinants of health and suggest interventions based on moral values at individual, family and community levels. The faculty in the department is practicing pioneering teaching-learning methodologies to achieve the same. Instructional methods adopted are learner-centered; invoke critical thinking, promote self-directed learning and motivate them to become lifelong learners.

The community medicine department of VMCH & RI gives special importance to creating a supporting and collaborative learning environment for students. The department has successfully incorporated student-centric learning strategies like problem-based learning (PBL), team-based learning (TBL), flipped classroom, e-learning and blended learning to facilitate higher learning skills among MBBS students. The department has also designed and developed a flexible and convenient E-learning platform to teach new topics and improve the teaching outcomes.



## Faculties

S.No	Name of the Faculty	Designation
1	Dr. Samir Deorao Bele	Professor
2	Dr. Trupti Bodhare	Professor
3	Dr. B. T. Sudhir Ben Nelson	Associate Professor
4	Dr. N. Munish	Assistant Professor
5	Dr. B. Sudharsan	Assistant Professor
6	Dr. V. Sriandaal	Assistant Professor
7	Dr.S.Vasumathi	Assistant Professor
8	Dr.Omar Faizal	Assistant Professor
9	Dr. B. Rita	Assistant Professor
10	Dr. R. Malarvani	Medical Officer
11	Mr. J. Vijay Anto	Statistician

## Museum



## Research Lab



## DEPARTMENT OF FORENSIC MEDICINE

### About the Department

**“Education to support law and order”**

Forensic Medicine is a branch of medicine that involves the study and application of knowledge of Medicine in the administration of Justice. The forensic medicine department of VMCH & RI teaches budding professionals the ethics of Medical practice. The department understands that it is uncommon for the Judiciary to pronounce their verdicts based on the evidence given by medical professionals, who play an important role as an expert while furnishing their valuable opinions in medico-legal cases involving Medical negligence, Unethical practices, violence against human body and mind and so on. Their expertise is of great value in the management of cases of Poisoning. The medical professional's opinion decides whether the death was natural or Unnatural. Often they are required to appear before the court of law to testify their findings.



## Goal

The goal of teaching Forensic Medicine to undergraduate students in VMCH & RI is to help them learn the legal procedures involved in the practice of the medical profession. They are imparted with the knowledge of the procedures of the issue of different types of certificates and be competent enough to apply his / her medical knowledge while submitting scientifically acceptable evidence in a court of law which enables execution of justice. Further, the teaching will also help the students to know of medical ethics and etiquette to be followed during the practice of medicine.

## Objectives

At the end of the course, after doing a proper evaluation, experts of VMCH & RI will be able to scientifically describe the medico-legal aspects in medico-legal cases like poisoning, victims of Trauma, sexual assaults, alleged accused of a sex crime, unnatural deaths, etc., for the cause of justice.

The students will be able to appear in a court of law as a Registered Medical Practitioner and give evidence in cases of Suicide, Homicide, Assault, Sexual offenses, Alcoholic intoxication, Drug dependence and other cases requiring medical opinion.

The students will be able to distinguish between ethical and unethical conduct of the medical practitioners and practice medicine in the society following medical ethics and etiquette as prescribed by the Indian Medical Council.

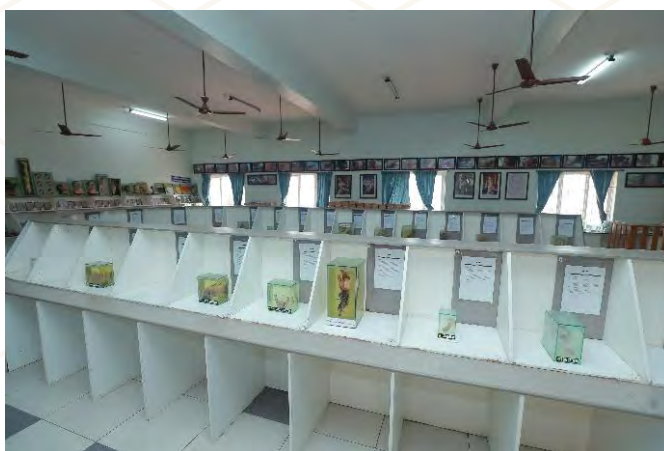
## Faculties

S.No	Name of the Faculty	Designation
1	Dr. B. G. Mahesh Krishna	Professor
2	Dr. C. Yogesh	Associate Professor
3	Dr. Surangama Chakraborty	Assistant Professor
4	Dr. S. Rajan	Assistant Professor
5	Dr.A.Janani	Assistant Professor

## Teaching Lab



## Museum



## DEPARTMENT OF MICROBIOLOGY

### About the Department

#### “Studying the Invisibles”

The Department of Microbiology of VMCH & RI is well equipped to diagnose most of the infectious diseases prevalent in our society. The microbiology lab of Velammal Medical College Hospital was started in 2011. It started with basic serological and microbial culture tests. But now it performs a wide array of tests for detecting bacteria, viruses, fungi, and parasites with varied advanced and automated techniques. The scope of services has extended greatly thus providing round the clock microbiological support for the betterment of patient care.

The lab is managed by an efficient and dedicated team of medical microbiologists who regularly participate in academic teaching, research activities and continuing medical education to update their knowledge along with their routine diagnostic work. There is a team of well trained and dedicated microbiology technicians who perform proficient bench work. A computer-based hospital information system is used for managing patient samples from the stage of receiving and acknowledging the sample to reporting. All the lab reports are issued adhering to prescribed turn-around time. Critical reports are informed immediately to the concerned departments.

The Microbiology lab regularly participates in external quality assurance schemes run by reputed institutions/organizations (Bacteriology & Serology – CMC, Vellore; Mycology – PGI, Chandigarh) and has always fared exceptionally well in them (more than 90% scoring rate). It also has well monitored internal quality control measures to ensure high quality reliable diagnostic services. The lab also contributes significantly to hospital infection control activities on a regular basis. With very supportive management, the lab is growing day by day and improving its array of services.

### Faculties

S.No	Name of the Faculty	Designation
1	Dr. Jhansi Charles	Professor
2	Dr. T. Rajendran	Associate Professor
3	Dr. G. Vithiya	Assistant Professor
4	Dr. A. S .Sathesini Priya	Assistant Professor

### Teaching Lab



### Museum



## DEPARTMENT OF PATHOLOGY

### About the Department

**“Where every experiment matters”**

Quality, accurate and fast results, patient service with care and compassion and bringing value to the diagnostic needs of the society form our life at Velammal central Path lab services. Velammal central Path Labs, the 24 hours open fully automated standalone laboratory in Madurai. It has successfully developed itself into a center of excellence in the field of laboratory medicine by adopting latest techniques, inducting highly skilled professionals and introducing latest state of the art analyzers from Germany, France, and Japan.

### Faculties

S.No	Name of the Faculty	Designation
1	Dr. K. Yegumuthu	Professor
2	Dr. R. Lavanya	Associate Professor
3	Dr.C. Jagan	Associate Professor
4	Dr. K. R. Vijayabaskar Mithun	Assistant Professor
5	Dr.S.Radhika	Assistant Professor
6	Dr. Eniya	Assistant Professor
7	Dr. Satiya devi	Assistant Professor

### Teaching Lab



### Research Lab





## DEPARTMENT OF PHARMACOLOGY

### About the Department

**“Learn to care with ethical medications”**

The Department of Pharmacology of VMCH & RI enriches the students with the knowledge of drugs and their usage for the benefit of the patients. The department conducts undergraduate courses for Medicine, Nursing and Allied health sciences in both theoretical and practical aspects of pharmacology. All of the animal experiments have been replaced by clinical pharmacology exercises and also by Computer Assisted Learning (CAL) modules. The pharmacology department of VMCH & RI strives hard to prepare exceptional students for productive and successful careers as clinicians, in society, in academia, in research, and the pharmaceutical industry. Besides delivering quality education in pharmacology and pharmacotherapeutics that effectively integrates critical thinking, problem-solving and leadership skills. The department works with the prime focus on inculcating in medical students the habit of practicing rational use of drugs and the culture of observing and reporting adverse drug reactions.

### Faculties

S.No	Name of the Faculty	Designation
1	Dr. Rajkishore Mahato	Professor
2	Dr. S. Sindhu	Assistant Professor
3	Dr.Muthu Meera	Assistant Professor

### Teaching Lab



### Teaching Lab





## DEPARTMENT OF PHYSIOLOGY

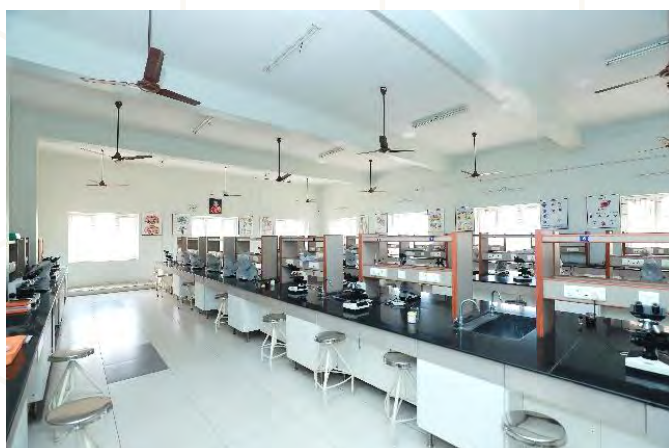
### About the Department

The Department of Physiology of VMCH & RI imparts training in the field of Medical Physiology as a foundation course for perception and practice in the art and science of Medicine. The other primary function of this department includes research and research-oriented activities. The physiology department of VMCH & RI aims to educate, inculcate and inspire in students, the importance of research and research methodologies in basic medical sciences and its clinical applications and interpretations. It is our aim to train students to integrate and collate their acquired basic medical science knowledge in their future clinical acumen and practice.

### Faculties

S.No	Name of the Faculty	Designation
1	Dr. S. Anu	Professor
2	Dr. M. Shanthi	Professor
3	Dr. John Rajpathy	Professor
4	Dr. M. Saravanan	Associate Professor
5	Dr. K. Rekha	Assistant Professor

### Teaching Lab



### Research Lab



## Awards



## PUBLICATIONS 2021 – 2022

S.No	Publication Title	Author Name	Journal Name	Year
1	Left bundle branch block induced cardiomyopathy: Insights from left bundle branch pacing	Ponnusamy SS, Vijayaraman P	JACC. Clinical electrophysiology	2021
2	Template Beat: A novel marker for left bundle branch capture during physiological pacing	Ponnusamy SS, Ganesan V, Syed T, Balasubramanian S, Vijayaraman P	Circulation. Arrhythmia and electrophysiology	2021
3	Mid-term Feasibility, safety and outcomes of left bundle branch pacing – single center experience	Ponnusamy SS, Muthu G, Kumar M, Bopanna D, Anand V, Kumar S.	Journal of interventional cardiac electrophysiology: an international journal of arrhythmias and pacing	2021
4	Cardiac troponin release following left bundle branch pacing	Ponnusamy SS, Patel NR, Naperkowski A, Subzposh FA, Vijayaraman P.	Journal of cardiovascular electrophysiology	2021
5	Feasibility, safety and outcomes of left bundle branch pacing in octogenarians	Ponnusamy SS, Bopanna D, Syed T, Muthu G, Kumar S.	Indian heart journal	2021
6	Left bundle branch area pacing for cardiac resynchronization therapy: Results from international LBBAP collaborative study group	Pugazhendhi Vijayaraman, ShunmugaSundaram Ponnusamy, Óscar Cano, Parikshit S. Sharma, Angela Naperkowski, Faiz A. Subzposh, Pawel Moskal, Agnieszka Bednarek, Alexander R. Dal Forno, Wilson Young, Sudip Nanda, Dominik Beer, Bengt Herweg, Marek Jastrzebski	JACC: Clinical Electrophysiology	2021
7	Left bundle branch optimized cardiac resynchronization therapy: results from an international LBBAP collaborative study group	Jastrzebski M, Moskal P, Huybrechts W, Curila K, Sreekumar P, Rademakers LM, Ponnusamy SS, Herweg B, Sharma PS, Bednarek A, Rajzer M, Vijayaraman P	Heart Rhythm	2021
8	Bundle branch re-entrant ventricular tachycardia during left bundle branch pacing	Ponnusamy SS, Vijayaraman P	JACC: Clinical Electrophysiology	2021
9	Unmasking of left bundle branch potential in left bundle branch block during physiological pacing	Ponnusamy SS, Vijayaraman P	Journal of interventional cardiac electrophysiology: an international journal of arrhythmias and pacing	2021
10	Late dislodgement of left bundle branch pacing lead and successful extraction	Ponnusamy SS, Vijayaraman P	Journal of cardiovascular electrophysiology	2021
11	Segmental fascicular block during physiological pacing	Ponnusamy SS, Vijayaraman P	Journal of interventional cardiac electrophysiology: an international journal of arrhythmias and pacing	2021



12	Left Posterior Fascicular Pacing	Ponnusamy SS, Syed T, Kumar S	The Journal of innovations in cardiac rhythm management	2021
13	Unmasking of pathological Q waves by left bundle branch pacing	Ponnusamy SS, Vijayaraman P	Journal of interventional cardiac electrophysiology: an international journal of arrhythmias and pacing	2021
14	Concealed left bundle branch potential during physiological pacing	Ponnusamy SS, Vijayaraman P	Journal of interventional cardiac electrophysiology: an international journal of arrhythmias and pacing	2021
15	Predictive accuracy of procalcitonin in diagnosing bacteremia in adult patients in a Tertiary hospital	Virgin Joena	Journal of Evidence Based Medical Health	2021
16	Excellent outcome of a patient with acute back pain and osteoporotic fracture- A case report	Subramanian Nallasivan, Raja S Vignesh, Arunkumar Govindarajan	IP International Journal of Orthopaedic Rheumatology	2021
17	Spectrum of febrile thrombocytopenia among children in a tropical country – a hospital based observational study in south India	Karthikraj T., Jenish Rajma J., Jeyabalaji R. V., Shivani Kuttuva	International Journal of Contemporary Paediatrics	2021
18	Spectrum of febrile thrombocytopenia among children in a tropical country – a hospital based observational study in south India	Karthikraj T., Jenish Rajma J., Jeyabalaji R. V., Shivani Kuttuva	International Journal of Contemporary Paediatrics	2021
19	Safety of Percutaneous vs Open Tracheostomy on Intubated Patients in ICU Setting: Which One is Better?	S. Maheshwaran, Sara V. Thomas, Gopala Krishnan Raman & S. Pookamala	Indian Journal of Otolaryngology and Head & Neck Surgery	2021
20	Association between MRI Findings and Histopathological Examination in Carcinoma Cervix: A Retrospective Study	Yogaraj, Kumaran	International Journal of Anatomy, Radiology and Surgery.	2021
21	Profile of Road Traffic Accident Injuries in a Tertiary Care Teaching Hospital – An Institution Based Cross Sectional Observational Study in Velammal Medical College Hospital and Research Institute, Tamil Nadu	Kumaran R, Yogaraj S	Journal of Evidence Based Medicine and Healthcare	2021
22	A Road to Physiological pacing.	Ponnusamy SS	Indian Journal of Clinical Cardiology	2021
23	Determinants of health-related quality of life in south indian patients with rheumatoid arthritis: A structural equation modeling approach	Trupti Bodhare, Samir Bele, Subramanian Nallsivan, J. Vijay Anto	Indian Journal of Rheumatology	2022

24	The Prevalence of Reproductive Tract Infections Based on the Syndromic Management Approach Among Ever-Married Rural Women in Kancheepuram District, Tamil Nadu: A Community-Based Cross-Sectional Study	Balakrishnan S, Carolin A, B Sudharsan, R Shivasakthimani	Cureus	2022
25	Opioid-free anaesthesia for laparoscopic surgeries - A prospective non-randomised study in a tertiary care hospital	Ragupathy R, Prabhu SCG, Thiyagarajan D, Anto V	Indian Journal of Anaesthesia	2022
26	Determinants of health-related quality of life in south indian patients with rheumatoid arthritis: A structural equation modeling approach	Trupti Bodhare, Samir Bele, Subramanian Nallasivan, Vijay Anto J	Indian Journal of Rheumatology Assotiation	2022
27	Clinical features, severity and outcome of acute pancreatitis in systemic lupus erythematosus	Muhammed H, Jain A, Irfan M, Charles S, Dwivedi P, Chavan PP, Khubchandani R, Sharma A, Phatak S, Shukla AN, Shah R, Subramanian N, Pandya SC, Singh YP, Chengappa KG, Thabab M, Rajasekhar L, Shobha V, Negi VS, Dhir V, Sharma A, Misra R, Aggarwal A; SLE-SIG of IRA	Rheumatology International	2022
28	Prospective study of patients with inflammatory back pain, clinical characteristics and treatment response in ankylosing spondylitis in two centers of rheumatology in South India	Subramanian Nallasivan, Dhivya Thiyagrajan, Abirami Manivannan	Indian Journal of Rheumatology	2022
29	Masked right bundle branch conduction delay pattern during left bundle branch pacing	Vijayaraman P, Ponnusamy SS	Heart rhythm	2022
30	Evaluation of Criteria for Left Bundle Branch Capture	Ponnusamy SS, Vijayaraman P	Cardiac electrophysiology clinics	2022
31	M-beat-A novel marker for selective left bundle branch capture	Ponnusamy SS, Basil W, Vijayaraman P	Journal of cardiovascular electrophysiology	2022
32	Rescue left bundle branch area pacing in coronary venous lead failure or nonresponse to biventricular pacing: Results from International LBBAP Collaborative Study Group.	Vijayaraman P, Herweg B, Verma A, Sharma PS, Batul SA, Ponnusamy SS, Schaller RD, Cano O, Molina-Lerma M, Curila K, Huybrechts W, Wilson DR, Rademakers LM, Sreekumar P, Upadhyay G, Vernoooy K, Subzposh FA, Huang W, Jastrzebski M, Ellenbogen KA	Heart rhythm	2022
33	Left Bundle Branch Optimized Cardiac Resynchronization Therapy in Mesocardia with Bilateral Superior Vena Cava	Ponnusamy SS, Syed T, Basil W	JACC: Clinical Electrophysiology	2022

34	Response of functional mitral regurgitation in nonischemic cardiomyopathy to left bundle branch pacing	Ponnusamy SS, Syed T, Vijayaraman P	Heart rhythm	2022
35	Electrophysiological characteristics of septal perforation during left bundle branch pacing	Ponnusamy SS, Basil W, Vijayaraman P.	Heart rhythm	2022
36	Double transition sign-a marker of left bundle branch capture during physiological pacing	Ponnusamy SS	Journal of interventional cardiac electrophysiology: an international journal of arrhythmias and pacing	2022
37	Axis deviation in nonischemic cardiomyopathy with left bundle branch block: Insights from left bundle branch pacing.	Ponnusamy SS, Vijayaraman P	Journal of cardiovascular electrophysiology	2022
38	Left bundle branch-optimized cardiac resynchronization therapy (LOT-CRT): Results from an international LBBAP collaborative study group	Jastrzębski M, Moskal P, Huybrechts W, Curila K, Sreekumar P, Rademakers LM, Ponnusamy SS, Herweg B, Sharma PS, Bednarek A, Rajzer M, Vijayaraman P	Heart rhythm	2022
39	The Impact of COVID-19 on Auditory and Visual Choice Reaction Time of Non-hospitalized Patients: An Observational Study.	Seetharam Kausikan, Sengottaiyan Anu, Mohanraj Saravanan , Thulasiraman Devisri, Kanagamuthu Rekha, Rajpathy John	International Journal of Scientific Research in Dental and Medical Sciences	2022
40	Effect of Mint-flavoured Chewing Gum in Observing Changes in Cognitive Function while assessing Test Performance	S Anu, K Jeyashree, SN Vishnuvarthini, N Prasanna Venkatesh, J Vijay Anto	Journal of Clinical and Diagnostic Research	2022
41	Utility of biochemical markers in predicting severe Covid-19: experience from a tertiary hospital in south India.	Mamatha T. Shenoy, Pradipta Kumar Mohanty, K. Suganthy, Jeya Kumar Manavalan, Hariharan Alexander	The journal of the International Federation of clinical chemistry and laboratory medicine	2022
42	Evaluation Of Association Of Serum Leptin With Chronic Complications Of Diabetes And Glycemic Control	Hariharan A, Sumathi S and Asmathulla S	Journal of Cardiovascular Disease Research	2022
43	Evaluation of Haematological Findings in Tuberculosis Patient of Madurai- An Cross Sectional Study	Niranjan Prabhakar, C. Ramesh, Sriandaal Venkateshvaran	International Journal of Medical Science and Current Research	2022
44	Clinico-radiological profile of bronchiectasis patients an observational study	Niranjan Prabhakar, V.Sriandaal, Basanth Harazika	International Journal of Scientific Development and Research	2022
45	Effect of Mint Flavoured Chewing Gum in Observing Changes in Cognitive Function while Assessing Test Performance- An Interventional Study	S Anu, K Jeyashree, SN Vishnuvarthini, N Prasanna Venkatesh, J Vijay Anto	Journal of Clinical and Diagnostic Research	2022







*We strive to make the lives of others better and to leave the world a better place than how we found it. It is our goal to provide affordable treatment at world class quality.*

**Shri. M.V. Muthuramalingam**

*Founder & Chairman,  
Velammal Educational Trust*



**VELAMMAL MEDICAL COLLEGE HOSPITAL & RESEARCH INSTITUTE**

**"Velammal Village", Madurai-Tuticorin Ring Road, Anuppanadi, Madurai - 625 009.**

**E-Mail : Web : [www.velammalmedicalcollege.edu.in](http://www.velammalmedicalcollege.edu.in)**

**Ph: 0452-711 3333    Mobile : 98044 73333**