

Challenging **Frontiers**  
 Breaking **Barriers**  
 Touching **Lives**



**INSTITUTE OF ORTHOPAEDICS & TRAUMATOLOGY**

Govt. General Hospital & Madras Medical College, Chennai





*Respected Senior Teachers, Beloved Colleagues,  
Dear Friends & Well Wishers,*

# *Greetings*



*T*his Department that I and I am sure that many of you too, hold dear to your heart is marching forward to the next level of excellence.

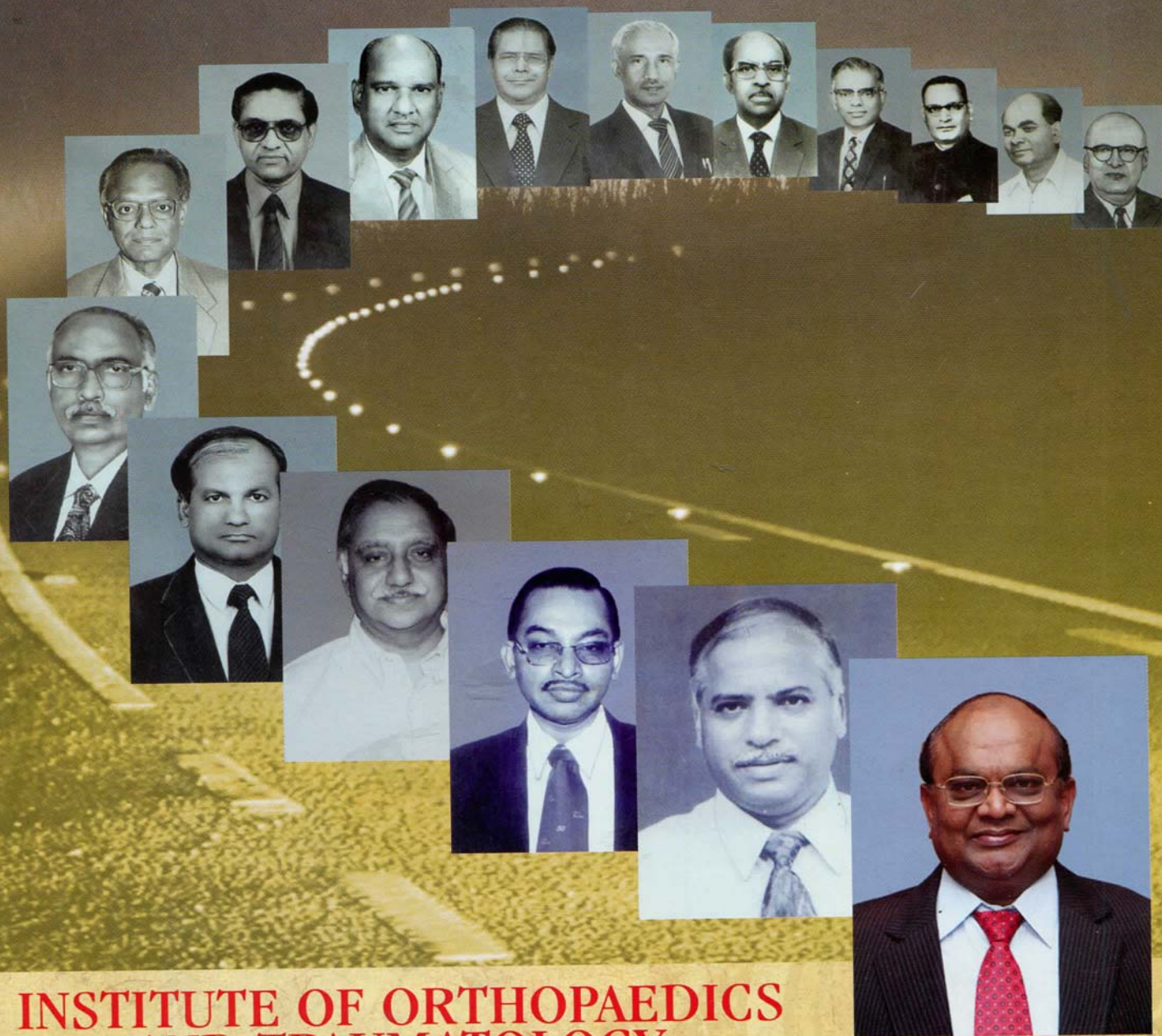
Today we stand at the culmination of what has been a long and fruitful journey. A journey filled with many landmarks and decorated by some of the best minds in Orthopaedic Surgery. The **evolution of the Department** of Orthopaedic Surgery at Government General Hospital, into the much awaited **Institute of Orthopaedic Surgery**.

My heart swells with pride and joy to inform you that from **17<sup>th</sup> August 2009** our Department has been **upgraded** to an **Institute of Orthopaedics and Traumatology**. (G.O No.249 Health and Family Welfare (E<sub>1</sub>) Dept. dated 17<sup>th</sup> August 2009).





# DEPARTMENT OF ORTHOPAEDIC SURGERY



**INSTITUTE OF ORTHOPAEDICS  
AND TRAUMATOLOGY**



At this juncture, it gives me great pleasure to recollect some of the **milestones in the history** of the Department. It was in the beginning of 1929, when the stalwarts of Orthopaedic Surgery **Dr. Narasimha Iyer**, Dr. M.G. Kini, Dr.D.S.Iyer and Dr.Menon, laid the foundation for the Department of Orthopaedics by starting a **separate speciality wing** under General Surgery. Under the able guidance of **Lt.Col.V.R. Thayumanaswamy**, the dream of an **independent Department** of Orthopaedics became a reality in 1949 and he became the first Professor of Orthopaedic Surgery at this prestigious Institution. It marked the beginning of a successful and rewarding voyage.

In 1957 my academic and genetic father **Prof.M.Natarajan** took over as the Head of the Department. The Department grew leaps and bounds with the addition of beds, introduction of post graduate courses and opening of allied specialities. His passion for serving the orthopaedically disabled was so immense, that it culminated in the establishment of the Government Institute for Rehabilitation Medicine at K.K.Nagar, Chennai. He was the First Principal





and Head of the Department of Orthopaedic Surgery of Madras Medical College and retired after **19 years** at the helm of affairs.

His worthy and esteemed successor **Prof. T.K.Shanmugasundaram** continued to build the Department for a decade. The Madras Study of TB Spine (Med. Research Council, U.K.) and the Paraplegia Project (PL 480 US aided) integration into the Department as a Spinal Injury Unit made this department known the world over. I will be failing in my duty if I do not acknowledge the efforts put in by **my Teachers and past Heads** of this prestigious Department - Prof. S. Soundarapandian, Prof.S.Rajagopal, Prof. T.S. Xavier, Prof. K. Sriram, Prof. C.T. Alagappan, Prof. K. Annamalai, Prof.M.Subramaniam, Prof. K.Chandran, Prof.S.N.Mothilal, Prof. R.Dhanapal. Their contributions have enriched the lives of many and made this Department what it is today, the **Mecca of Orthopaedic and Trauma Services** in our State.





**My stint** in continuing this rich legacy began in the year 2005 when I took over as the **Head of the Department**. Currently, it is my **5th year** at the helm and the only way I have seen this department grow is in the path of success. Every year has been a truly inspirational one. My motivation stems from the enthusiasm of my students and colleagues and the trust of the patients.



I wish to take this opportunity to appreciate and commend the efforts of my esteemed colleagues.

**Dr. R.H.Govardhan** has been a close friend and colleague throughout my career. He is well known as a master at deformity corrections, paediatric orthopaedics and pelvi acetabular fractures. He is also an exponent of the Ilizarov technique.

**Dr.V.Thulasiraman** is a master at spine surgery and has spearheaded the Department's work in stem cell replacement for spinal injuries.

**Dr.S.Subbiah** is an excellent hand surgeon and his vast work in hand surgery has added another facet in the specialities that my department offers.

The past five years have witnessed **major strides** made by the Department all of which have culminated in its elevation as an Institute.







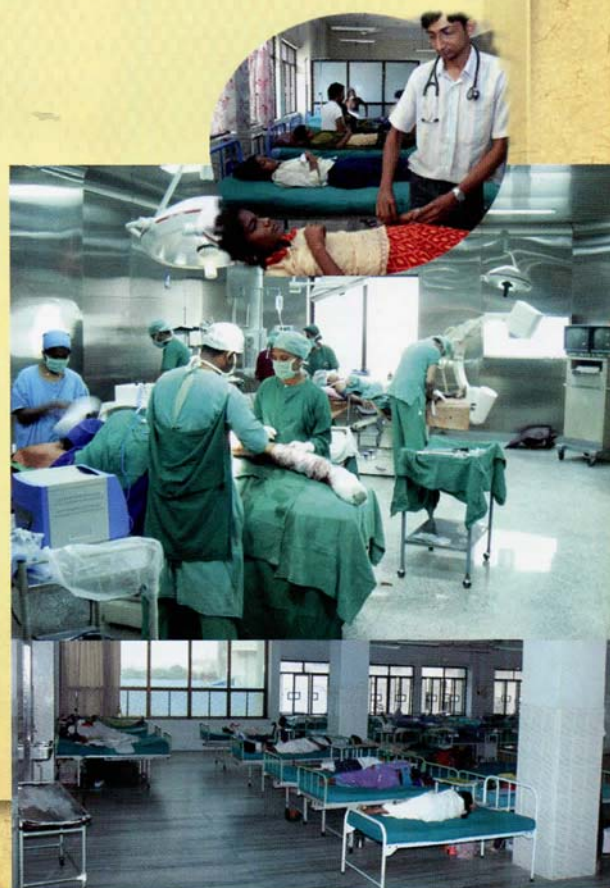
## Bed Strength from 139 to 308

The **Twin Tower inauguration** at Government General Hospital with about 1000 beds on 1st July 2005 was a Red Letter Day in the History of this Department. Due to my Herculean efforts, the Government was convinced about the high quality of Orthopaedic services being

rendered by the Department and the growing census of orthopaedic patients. They sanctioned an **additional 169 beds** to the then existing bed strength of 131 (G.O. No. 1555 dt. 25-09-85), and 8 beds (Paraplegia Project G.O. 1406 dt. 22-7-87) to make a total of 308 beds making it the **largest Orthopaedic Department** in a Public Hospital in the whole of India.

## Modern Infrastructure Facilities

Emergency Orthopaedic care is extended round the clock, with Intensive Trauma Care facilities and Trauma theatres. Well equipped general male and female wards, paediatric, septic, spinal injury and post operative wards enabled us to deliver our motto **'We Care'**. State-of-the-art **Operation Theatres** with laminar air flow and fully stainless steel plated walls which are equipped to perform the latest surgeries such as arthroplasties, trauma, spinal and tumour surgeries. The sanctioning of the **State Illness Fund** and the **Chief Minister's Insurance scheme** for life saving treatment made it possible to perform expensive high tech surgeries for the common man, free of cost.



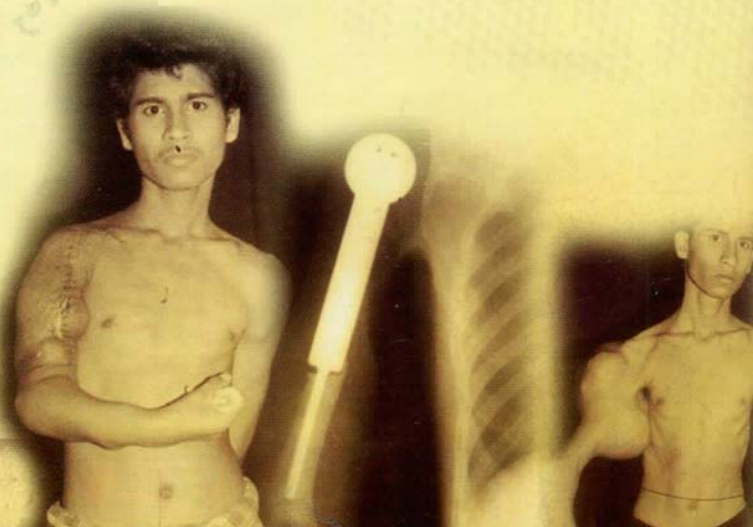




## LIMB SALVAGE USING CUSTOM MEGA PROSTHESIS

**Orthopaedic Oncology** has grown leaps and bounds since 1980 and has been established as a **separate subspeciality** in Orthopaedic surgery. Limb salvage has now been accepted as the rule rather than an exception in Bone Tumour Surgery. I am proud to state that my career in Govt. General Hospital since 1981 has mirrored the evolution of **indigenously developed** Custom Mega Prosthesis for limb salvage surgery for bone tumours in India.

By **self design** and indigenous manufacturing, I have made the Custom Mega Prosthesis **affordable** to patients,





**applicable** to the society and the concept **attainable** in our country. By avoiding amputation in **1562 bone tumour patients** in a **21 years** period (since 1988), and by internationally equivalent long term successful results of the patented prosthesis, I have made Limb Salvage Surgery and **Custom Mega Prosthesis** acceptable to my Orthopaedic colleagues all over India.

Limb salvage surgery will continue to evolve better surgical principles, more options of biological reconstruction and finally an improvement in prosthetic design and manufacturing will all enable our patients to continue leading **quality productive lives**.

Currently **16 states** in India are following this methodology of treatment. By continuing to train and providing the prosthesis to my colleagues, it will be my endeavour to see that **no patient in any State** of India will have to lose his limb due to bone tumour by the **end of the next decade**.








# Bone Bank

The Bone Bank was established in Department of Orthopaedic Surgery, and was the **first** such facility in a **Government Hospital**. (G.O. (Ms) No. 65 dt. 28-3-03) Till date this vital cog in **Limb Salvage Surgery** has benefitted the lives of many Bone Tumour patients.







# Spinal Injury Units

Our Department of Orthopaedics has always been a **centre** for the **treatment of Spinal Injuries**. The PL 480 Paraplegia Project (US aided) on completion was absorbed into the Department as the Spinal Injury Unit in 1987. In order to give due importance to the growth of sub-specialities in Orthopaedics in the future, a proposal was submitted to the Government to upgrade the existing Spinal Injury Unit into a

separate Spinal Surgery Unit within the Orthopaedic Department. The Government approved this proposal as per G.O.(Ms) No. 255 dt. 17-10-06, H & FW Dept. and **2 new Spinal Surgery Units** were created in Nov. 2006. **Two posts of Readers** in Spinal Surgery have been created as per G.O. (D) No. 762 dt. 25-6-07 and G.O. (D) No.1187 dt. 18-9-07, and **Dr. R. Subbiah** and **Dr. Nalli R. Uvaraj** have posted as Unit Chiefs.







# Disaster Preparedness


## Disaster Preparedness :

During my tenure as Head of the Department, I had the pleasure of being elected as the **President of Indian Orthopaedic Association** (2006), the largest academic body in India with about 7000 members. Tertiary Care Hospitals in India are at present not adequately prepared for managing mass casualties following disasters which may be due to natural causes or man made causes. Following the Tsunami disaster in Dec. 2004, a Pilot Project was prepared on **"Hospital Protocol for Management of Major Disaster and Mass Casualties"** and presented to Central Health Minister, **Govt. of India**, at the 53rd Annual IOACON 2006 at New Delhi on 7th Nov. 2006. This was presented to the State Health Minister and Local Administration Minister, **Govt. of Tamilnadu** for implementation at the State Level on 13th Nov. 2006.



## Disaster Management Guidelines :

I was nominated as a **Core Group Member**, Medical Preparedness and Mass Casualties Management Program of the National Disaster Management Authority, Government of India. I was involved in the preparation of the Disaster Management Guidelines by the Core Group. **The National Disaster Management Guidelines Manual** was released by the Union Health Minister on 14-7-07 at New Delhi, for implementation by the various States.







## Disaster Block at GGH :

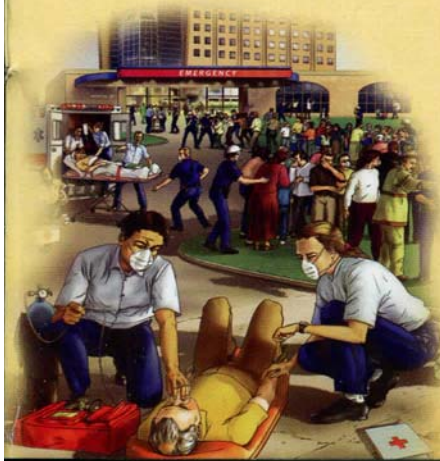
A proposal for a separate 100 bedded **Disaster Mini Tower Block** within the Govt. General Hospital campus was presented to the **Hon. Chief Minister, Govt. of Tamilnadu** on 17th March 2008, which was accepted in Principle and announced in the **Budget Speech** by the Finance Minister to the Legislative Assembly in **March 2008**.



“

My vision is to ensure that every citizen is given critical care within the golden hour, thereby saving lives and reducing the magnitude of tragedy.

”





## Golden Day Trauma Care



As an extension of the Golden Hour concept, The **Golden Day Trauma Care Programme** was started in July 2008. This initiative provides definitive orthopaedic surgical care for patients admitted with closed fractures within 24 hours, as is being done in private and corporate hospitals.

“

Today my department caters to all strata of the society, providing quality, ethical and modern Orthopaedic care free of cost.

”





# Ortho Skills Lab

A state of the art Ortho Skills Lab has been established in February 2009. This is the product of the first ever **MOU** signing under the **Public Private Partnership** between the Department of Orthopaedics and **Depuy Johnson & Johnson Ltd** (Govt. Lt. No. 34206 / E1/ 2008 dt. 19-8-08). This lab provides all facilities to hone the skills of postgraduates and practicing junior Orthopaedic Surgeons alike.

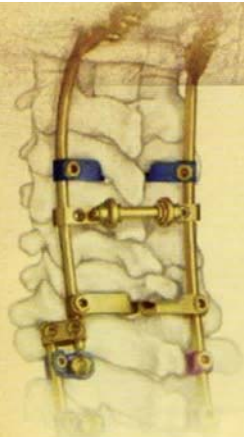
“

The ultimate beneficiaries of this public private partnership are our patients, who will be cared for by compassionate & competent surgeons.

”







## Implant Bank

An Implant Bank (G.O. (Ms) No.100 dt. 18-3-09 H&FW Dept) has been established in order to supplement the efforts of the Government and provide a **channel for philanthropic contributions** towards the procurement of implants. This will help us to provide services to aid timely recovery of trauma patients.



### ABSTRACT

Establishment of Orthopaedic Implant Bank in the Department of Orthopaedic Surgery, Government General Hospital, Chennai – Orders – Issued.

By order of the Government, The Head of the Department of Orthopaedic Surgery is permitted to open an Orthopaedic Implant Bank in the Department of Orthopaedic Surgery Government General Hospital.








## Research

The Tamilnadu Dr. M.G.R. Medical University has acknowledged the Department as a **centre for conducting research** leading to the award of the **Ph.D. degree** (V. C. Proc. No. AC-1 (1) 34609/2007 dt. 4-8-08). In another feather in the cap, the Department has also won approval as a centre for conducting path breaking research in Autologous Adult **Stem Cell Therapy for Spinal Cord Damage**.



## TRIO

Recognising the pivotal role of Orthopaedic Department, and to increase the scope of services, the Government has asked us to further expand by taking over one of the Government Peripheral Hospitals and converting it into a Centre of Excellence **"The Orthopaedic Speciality Hospital"**. The K.K.Nagar Peripheral Hospital (with 100 beds) has been selected to establish this Speciality Centre called **TRIO - "Tamilnadu Regional Institute of Orthopaedics"** (**Government General Hospital Annexe**). This will have additional 2 units with staff as per MCI regulations. This will enable the sub specialities in Orthopaedic Surgery to expand and grow in the future in the lines of Institute of Ophthalmology, Institute of Child Health etc.



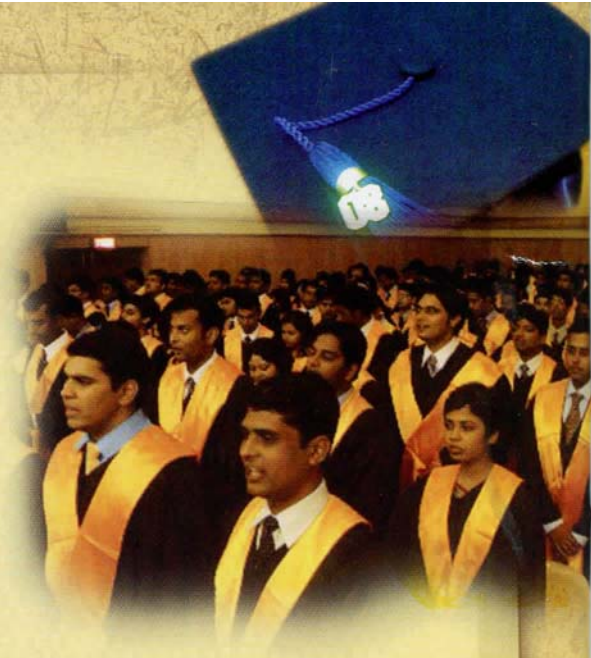


## Post Graduate seats

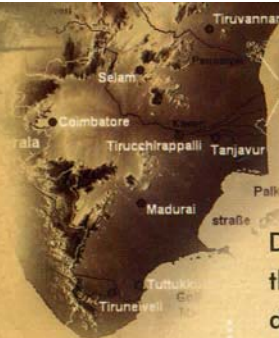
A proposal which has been submitted to increase the number of post graduates M.S. Orth. seats from **6 to 10 per year** is being favourably considered by the Government. This is in keeping with the Department's commitment towards excellence in education and being in sync with demands of the society.

## Trauma Unit

A proposal has been submitted (June 2009) to the Government for creation of post of Associate Professor in Orthopaedic Trauma in our Department. This is similar to the Accident & Emergency Consultant in U.K., to improve the quality of the **24x7 Fracture Services** rendered to the Public.







Our state is at the forefront of Orthopaedics in India and the Department of Orthopaedics, Madras Medical College has constantly been the **pioneer of Orthopaedic education and care in the State**. It is my desire to keep this flame of innovation and achievement burning bright, to ignite many more Orthopaedic minds and spread happiness amongst our patients.

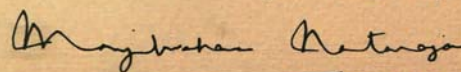
**"Persist, Persevere-you will succeed"**. This was a lesson I had learnt from my Father. As the Institute of Orthopaedics looks into the future, it will continue its growth at a pace much faster than it is today and will bring many more laurels to this esteemed Institution. I will work closely in tandem with all those involved, to build a **magnificent edifice** that will be envied and appreciated by the giants in Orthopaedics throughout the world, serving as a trend setter for generations to come. The Institute will grow with blessings and inspiration from the **Past**, the perseverance and prudence of its **Present** guided by the vision and passion to become The Centre of Excellence world over in the **Future**.

As a parting note, I may be permitted to add that I have taken over as the Director-in-charge of the Institute of Orthopaedics and Traumatology from 24<sup>th</sup> August 2009. I will become the **Director**, when the Government promotes me to this newly created post in the near future.

I am indebted to my **Parents** in Heaven who have made it possible for me to reach this position in the world today. I thank the **Lord my God**, for having Blessed me with his Benevolence. I Pray to the **God Almighty** to shower his Blessings to **one and all**.

**" In the name of Orthopaedics, I remain."**

yours sincerely,



09-09-09







*Celebrating 175 years of Post Centenary Platinum Jubilee of MMC*



No matter who you are,  
No matter what you do,  
**One Life** | **Challenge it.**

*Padma Laureate*

**Prof. Mayil Vahanan Natarajan**

M.S.Orth. (Ma's) M.Ch.Trauma (L'pool) Ph.D.(Orth.Onco.)  
D.Sc. (Onco.Surg.) D.Sc. (Hon.)<sup>3</sup> F.A.M.S. F.R.C.S. (Eng.)

**Director (I/C)**

**INSTITUTE OF ORTHOPAEDICS & TRAUMATOLOGY**

Govt. General Hospital & Madras Medical College

Chennai, India

