

Welcome to NAAC TEAM



DEPT OF ORTHOPAEDICS

RAJA RAJESWARI MEDICAL
COLLEGE & HOSPITAL



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DEPT OF ORTHOPAEDICS



Established in 2004



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MISSION



The Department of Orthopaedic Surgery aims to provides a comprehensive and integrated Program for Patients, Orthopaedic students, Residents, and Fellows.

OBJECTIVES

**Excellence in Patient care,
Excellence in Research, and
Excellence in Education
is the overall goal of the
Department of Orthopaedics
at RRMCH.**

Department is part of Part of Raja Rajeswari Medical College



Names of programs offered

- MBBS
- MS Orthopaedics

Examination System:

- MBBS – Semester System
- MS Orthopaedics – Annual System

Number of teaching posts sanctioned, filled and actual

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	3	3	3
Associate Professor	2	2	2
Assistant Professor	2	2	2
Lecturer	-	-	-
Tutor / Clinical Instructor	-	-	-
Senior Resident	5	5	5

Faculty profile

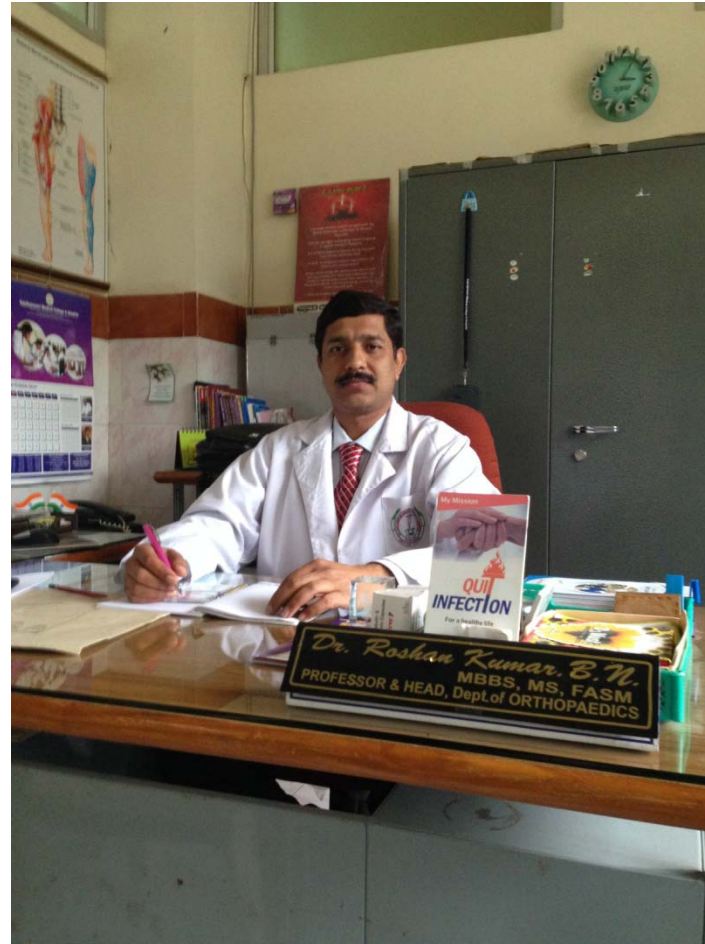
Name	Qualification	Designation	Specialization	No. of Years of Experience
Dr.Rajagopalan.N	MS. ORTH, D.ORTH.	Professor	Orthopaedics	38
Dr.Govindaraj	MS. ORTH,	Professor	Orthopaedics	19
Dr.Roshan Kumar.B.N.	MS. ORTH,	Professor	Orthopaedics	18
Dr. K.M.Gopinath	MS. ORTH,	Associate Professor	Orthopaedics	9
Dr. Kiran K.C.	MS. ORTH,	Associate Professor	Orthopaedics	6
Dr.Prashanth.G.S.	D.ORTH,DNB.ORTH .	Assistant Professor	Orthopaedics	4
Dr.Mahesh Kumar.N.B.	D.ORTH,DNB.ORTH	Assistant Professor	Orthopaedics	2
Dr.Nandakumar Bhairi	D.ORTH,DNB.ORTH .	Senior Resident	Orthopaedics	2
Dr.Gururaja M.	MS. ORTH,	Senior Resident	Orthopaedics	1
Dr.Ramesh.K.V.	D.ORTH.	Senior Resident	Orthopaedics	
Dr.Syeduddddin Kutbe	DNB. ORTH,	Senior Resident	Orthopaedics	1
Dr.Venkat Deep	MBBS	Senior Resident	Orthopaedics	



Dr. Rajagopalan.N., Professor & Head of the Department



Dr.Roshan Kumar.B.N.
Professor & Additional Head of the department



Dr.Gopinath.K.M.
Associate Professor
Co-ordinator Administration



Dr.Kiran.K.C.
Associate Professor
Co-ordinator Academics



Dr. Prashanth
Assistant Professor
Co-ordinator Examinations



Dr. Mahesh Kumar
Assistant Professor
Co-ordinator HR



Dr. Nanda Kumar

Senior Resident



Dr. Gururaj

Senior Resident



Dr.Ramesh

Senior Resident



Dr.Syeduddin

Senior Resident



Dr.Venkat Deep

Senior Resident

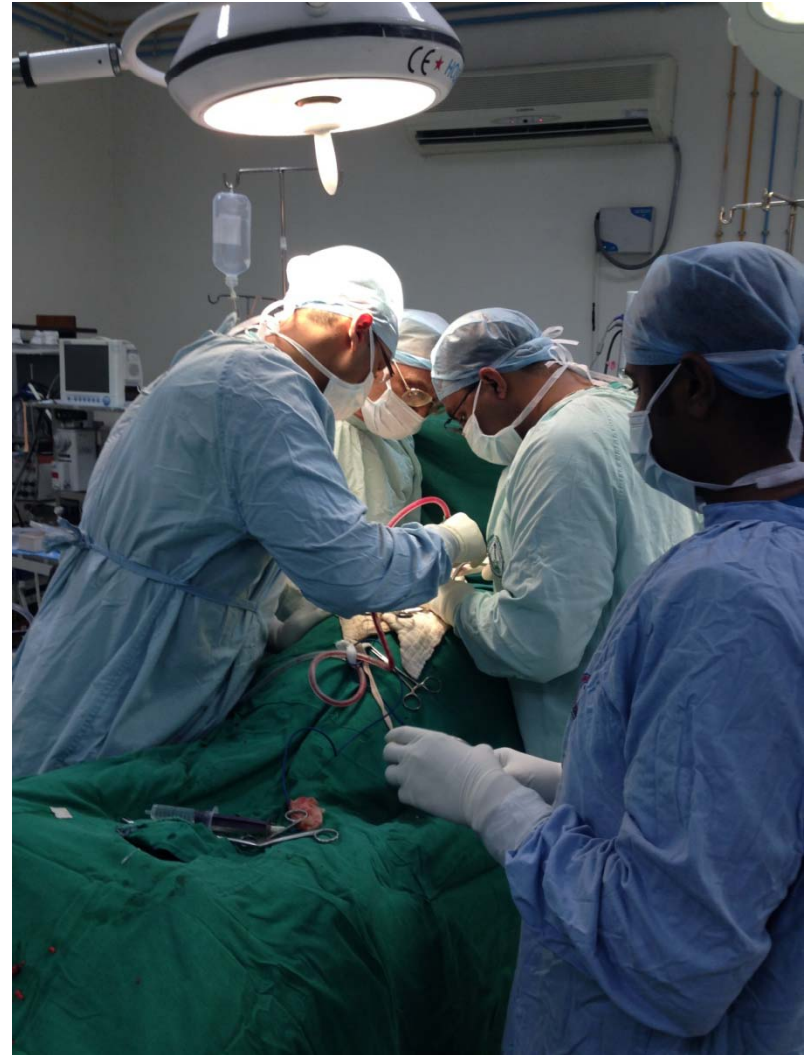


Postgraduate students



Program-wise Student Teacher Ratio

- MBBS- 150:10
- MS – 2:6



Support staff

- Number of academic support staff (technical) and administrative staff:
- Sanctioned – 3
- Filled - 3
- Actual – 3



Research thrust areas

- Osteoporosis
- Osteoarthritis
- Vit D deficiency
- Rheumatoid Arthritis
- Deep Vein Thrombosis
- Trauma



Ongoing projects

- ICMR has granted approval for a study Project titled “ Incidence of Vit D deficiency in males of age 30 to 60, attending OPD with low back pain”.
- Grant amount Rs. **65,57,250**

The only Orthopaedic department in
the Karnataka state to have an ICMR
GRANT



ONGOING RESEARCH PROJECTS

- Dr.Sai Kiran and Dr.Roshan Kumar -Efficacy of Arthroscopic Lavage in Osteoarthritis of Knee
- Dr.Arun Kumar and Dr.Roshan Kumar – Evaluation of management of diaphyseal fractures of long bones in children by Flexible Nailing
- Dr.Raghu and Dr.Roshan Kumar – Comparative study of closed reduction and plaster casting vs closed reduction and K wiring in extra articular fractures of the lower end of radius.
- Dr.Valliappan and Dr.Rajagopalan - Comparative study of long vs short Proximal Femoral Nail in unstable trochanteric fractures

ONGOING RESEARCH PROJECTS (FACULTY)

Name	Designation	Title of the study	Progress
Dr.Rajagopalan.N	Professor	Incidence of Low Backache in Medical Students in a single medical institution	Proforma has been made Applied for approval from Institutional Ethical Committee
Dr.Roshan Kumar.B.N.	Professor	A comparative study of spinal surgery under spinal anaesthesia vs general anaesthesia - a retrospective study	Proforma has been made Applied for approval from Institutional Ethical Committee Database of patients being done
Dr. K.M.Gopinath	Associate Professor	Incidence of Low n Students in a single noBackache in-medical institution	Proforma has been made Applied for approval from Institutional Ethical Committee
Dr. Kiran K.C.	Associate Professor	Incidence of Anterior Knee pain in patients with diaphyseal fractures of the tibia, treated with Interlocking Nailing – a retrospective study	Proforma has been made Applied for approval from Institutional Ethical Committee Database of patients being done
Dr.Prashanth.G.S.	Assistant Professor	Arthroscopic Evaluation of Foot Print of ACL in South Indian population	Proforma has been made Applied for approval from Institutional Ethical Committee Database of patients being done

ONGOING RESEARCH PROJECTS (FACULTY)

Name	Designation	Title of the study	Progress
Dr.Mahesh Kumar.N.B.	Assistant Professor	A clinical and radiological study of shoulder joint and acromioclavicular joint in malunited fractures of clavicle – a retrospective study	Proforma has been made Applied for approval from Institutional Ethical Committee Database of patients being done
Dr.Nandakumar Bhairi	Senior Resident	Incidence of articular hypermobility syndrome in patients attending orthopaedic outpatient at RRMCH	Proforma has been made Applied for approval from Institutional Ethical Committee
Dr.Gururaja M.	Senior Resident	Incidence of DVT with out Thromboprophylaxis in Intramedullary Nailing of lower limb fractures	Proforma has been made Applied for approval from Institutional Ethical Committee Database of patients being done
Dr.Syeduddin Kutbe	Senior Resident	Serum Alkaline Phosphatase levels in fracture healing – a prospective study	Proforma has been made Applied for approval from Institutional Ethical Committee

Research facility

- CENTRAL RESEARCH LABORATORY

Publications:

- Number of papers published in peer reviewed journals (national / international) – 21
- Chapters in Books - 1
- Books edited - **1**

Publications of Dr.Rajagopalan.N., Professor and HOD.

- A rare case of Hand Injury – a case report, American Journal of Hand January 1975.
- Benign Fibrous Histiocytoma of the distal radius with congenital dislocation of radial head – a case report. The Journal of Orthopaedic Surgery, Hong Kong, April 2005.
- The use of qualitative cultures for detecting infection in open tibial fractures. Journal of Orthopaedic Surgery 2008;16(2):175-8.
- Thiocolchicoside in the treatment of Acute low backpain. Asian Journal of Orthopedics and Rheumatology. Vol 5.No.2, July-September 2008; 21-27.
- The use of qualitative cultures for detecting infection in open tibial fractures. Journal of Orthopaedic Surgery 2008;16(2):175.
- **Impact of associated injuries in the Floating knee: A retrospective study;** *BMC Musculoskeletal Disorders*, Volume 10, issue 1 (2009), p. 7.ISSN: 1471-2474 DOI: 10.1186/1471-2474-10-

National publication:

Publications of Dr.Rajagopalan.N., Professor and HOD.

- Aneurysmal Bone cyst involving multiple bones – a case report – Indian Journal of Cancer
- Surgical Prophylaxis - Karnataka Orthopedic Association Newsletter 1978
- Anatomical Considerations of the Pedicles of Lumbar Vertebrae. Indian Journal of Orthopaedics, Vol.34, No.4, October 2000; 256 - 258.
- Dimensions of the lumbar vertebral canal – Indian Journal of Orthopaedics – Vol 37, No.5, July 2003; 186 -188.
- Accessory bones of foot. Anatomica Karnataka, Vol 1, No 4, June 2003; 15 -18.
- The value of serum and urinary n-Telopeptide in the diagnosis of osteoporosis - Indian Journal Of Orthopaedics, Vol 36, No.2, April 2002. 111-114.
- Thromboprophylaxis in Major Orthopedic Surgery, Indian Journal Of Orthopaedics, April 2003.
- Biomaterials and Design considerations in Locking Nail. The Kerala Orthopaedic Journal. Vol.21, No.2, January 2008. 9-11.
- Biomaterials and Design considerations in Locking Nail. Journal of Karnataka Orthopaedic Association. 2009. Vol1, 19-21.

Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad

- Dr.Rajagopalan, Prof and HOD, has been Assessor for National Board of Examinations for hospitals in New Delhi, Kerala, Andhra Pradesh and Karnataka.
- Dr.Rajagopalan, Prof and HOD, had been appointed by MCI for Inspection of Medical Colleges in Karnataka.
- Dr.Rajagopalan, Prof and HOD, had been appointed by Govt of India as part of UGC panel for grant of Deemed University .
- Dr.Roshan Kumar, Professor,

Faculty serving in

- a) National committees -3
- b) International committees - 1
- c) Editorial Boards
- d) any other (specify).
- Dr.Rajagopalan, Member , Advisory Board, Asia Pacific Advisory Board for DVT.
- Dr.Rajagopalan, Chairman , Project Review Committee, ICMR, New Delhi.
- Dr.Roshan Kumar, is a member of the Executive Committee of Karnataka Orthopaedic Association and Geriatric Orthopaedic Society

Awards / recognitions received at the national and international level by Faculty

- Dr.Rajagopalan.N., Professor and HOD is a Visiting Professor, St. John's Research Institute, Bangalore and Visiting Professor, Tamil Nadu Dr. MGR Medical University, Chennai, INDIA.
- Dr.Rajagopalan.N., Professor and HOD is President, Computer Assisted Orthopedic Surgery- India
- Dr.Rajagopalan.N., Professor and HOD, delivered prestigious Prof Sudhakar Shetty Memorial Oration in the Annual Conference of Orthopaedic Association of South Indian States at Pondicherry on August 25, 2013









Code of ethics for research followed by the departments

- ICMR ethical code



Diversity of staff

- **Percentage of faculty who are graduates**
- of the same university - **90%**
- from other universities within the State - nil
- from universities from other States - 10%
- from universities outside the country - nil

Present details of departmental
infrastructural facilities with regard to

- a) Library – DEPARTMENTAL LIBRARY WITH
ADEQUATE BOOKS AVAILABLE

Present details of departmental infrastructural facilities with regard to

- b) Internet facilities for staff and students -
AVAILABLE



Present details of departmental infrastructural facilities with regard to

- c) Total number of class rooms - 5



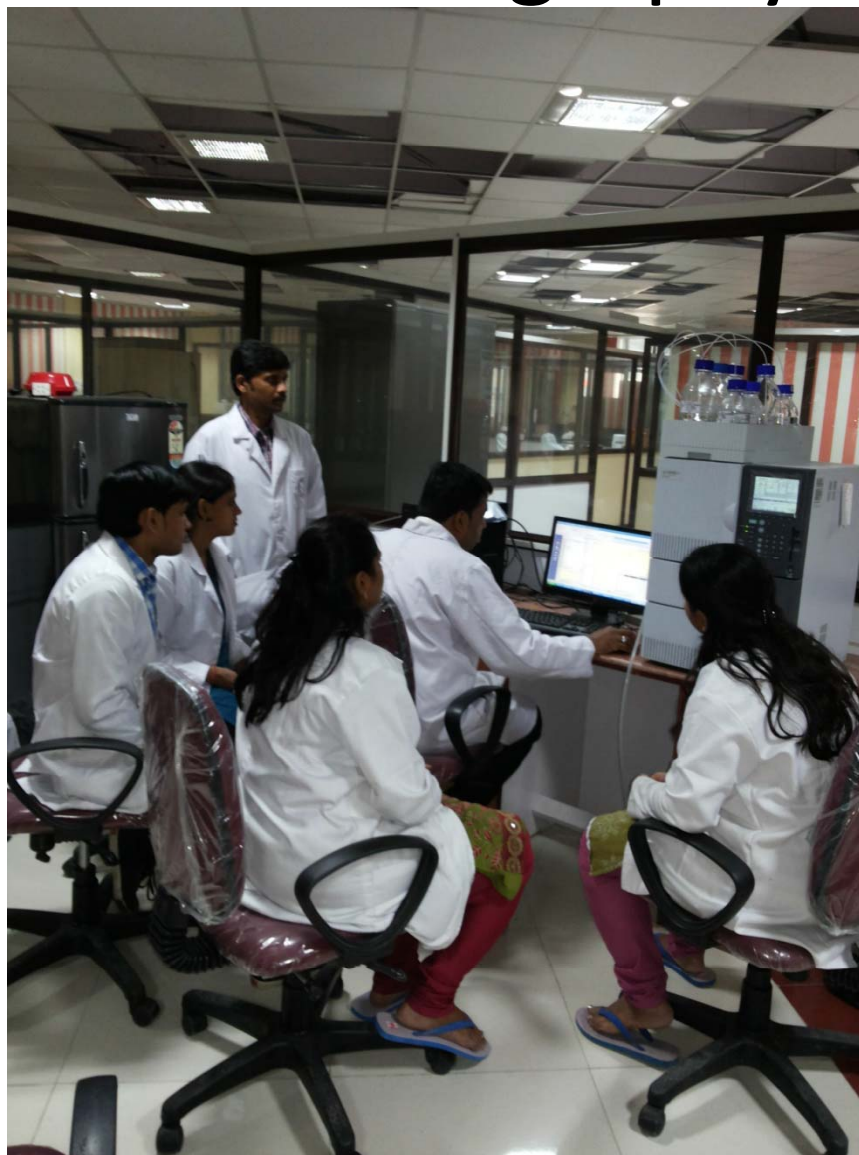
Present details of departmental infrastructural facilities with regard to

- d) Class rooms with ICT facility and 'smart' class rooms –
- Class room in dept with Wifi and LCD projector.

Present details of departmental infrastructural facilities with regard to

- e) Research laboratories – CENTRAL RESEARCH LABORATORY
- Postgraduate students have had a training in the applications of Facilities in Central Lab

High Performance Liquid Chromatography



RT PCR



Cobas e 411 Auto Analyzer



ENMG



SPECTROPHOTOMETER



Fully Automated IHC/ISH instrument



Rotavap



Fluorescent Microscope



Milli Q Water Plant



EEG



Feedback on Curriculum

- Feedbacks are taken from students at the end of the posting.
- Feedback is discussed in department meeting with all the faculty and suggestions are noted for updates.

List the teaching methods adopted by the faculty for different programs including clinical teaching

- Objective Structured Clinical Examination (OSCE),
- Problem Case Discussion and
- Tutorials.



The department ensures that Objectives of the Department are constantly met and learning outcomes are monitored by frequent interactive meetings and feedbacks.

Students and Faculty participate in Extension activities by conducting and participating in rural camps and awareness camps.



Workshop conducted for Factory workers by dept of Anaesthesiology and Orthopaedics

- workshop for Factory workers on :
 - 1.Basic Life support
 - 2.Oxygen administration
 - 3.CPCR
 - 4.Prehospital treatment of Trauma and injuries
- Ten candidates from Amruth distillery participated in the hands on workshop using Mannequins.

Pretest was conducted on -6-01-2014

First aid measures -6-1-2014

Pre-hospital treatment of trauma victims-7-1-2014

BLS – 8-1-2014

ACLS – 9-1-2014

Wound care and first aid measures for Fractures-10-1-2014

Department of Anaesthesia conducted workshop for Factory workers on CPR and other Safety Measures





Health camp at Rotary Muthappa Attavar Memorial Hospital/Urban Health Centre – Channasandra



On 10/5/12, a general health camp was conducted at Rotary Muthappa Attavar Memorial Hospital/Urban Health Centre, Channasandra, Bangalore. Doctors from Orthopaedic dept from RRMCH were involved in the camp.



“beyond syllabus scholarly activities”

- Orthopaedic quiz is conducted for PG students and MBBS students.
- Post-graduates have attended various regional and national programs including cadaveric workshops.
- Dr.Arun Kumar, Postgraduate student, was sent as observer to P.M.R. Dept, C.M.C. Vellore from Sept 7th to October 7th 2013.

Institution is accredited by ISO

Strengths of the Orthopaedic department

- ONLY Orthopaedic department in the Karnataka state to get ICMR project
- Active in patient care
- Excellent and Dedicated Faculty
- Post-graduate students committed to learning
- State of the art Equipments
- Fully equipped Central Research Laboratory
- Excellent patient care
- Keeping abreast with recent trends and new procedures and implementing the same.

Weaknesses of the Orthopaedic department

- Publications can be improved

771 killed in road accidents in 2013

Bangalore traffic police collect Rs. 56.98 crore in fines

Special Correspondent

BANGALORE: In 2013, 771 people were killed and 4,289 injured in 5,230 cases of road accidents.

Though the traffic police claimed there are fewer cases than last year, the number of deaths recorded is more when compared to figures from the previous two years — 760 in 2012 and 762 in 2011, according to the statistics released by the traffic police on Thursday.

54.32 lakh cases

City Police Commissioner Raghavendra H. Auradkar said the city police booked 54.32 lakh cases of traffic violations in 2013, and collected Rs. 56.98 crore in fines.

A total of 8.22 lakh cases were booked against motorcyclists riding without a helmet and 1.28 lakh cases booked for using mobile while driving. Similarly 4.21 lakh cases were booked against those who jumped signals, 85,445 cases for driving without valid documents, 68,365 for rash and negligent driving and 61,709 cases for drunk driving.

Tough on rash drivers

Additional Commissioner of Police (Traffic) B. Dayanand said the traffic police were getting tough on those involved in drag racing and

BANGALORE CITY TRAFFIC IN A NUTSHELL



SOME FACTS ABOUT BANGALORE CITY TRAFFIC

- 11,000 km of roads
- 44,000 intersections
- Over 330 signalised intersection
- 128 one-way roads
- 3,000 traffic police to manage the city traffic
- 52 lakh vehicles including floating vehicles plying in the city every day

PROJECTED GROWTH

CARS	TWO-WHEELERS
16 lakh in 2020	62 lakh in 2020
47 lakh in 2030	162 lakh in 2030

BETWEEN 1995 AND 2010



Compared to other metro cities the growth rate of vehicles is five times higher than the population growth.

SOARING NUMBERS

- 48 lakh registered vehicles in the city with numbers growing at 10 per cent per year
- Roughly 70 per cent of vehicles are two wheelers
- Vehicle to person ratio 1:2 (compared to Delhi 1:4)

ACCIDENT STATISTICS

Year	Accidents	Deaths	Injured
2008	7,772	892	6,150
2009	6,875	761	5,668
2010	6,483	858	5,343
2011	6,024	762	4,976
2012	5,502	755	4,471
2013	5,230	771	4,289

BANGALORE: In 2013, 771 people were killed and 4,289 injured in 5,230 cases of road accidents.

Opportunities

- Unfortunately Road Traffic Accidents are increasing.
- But this creates a need Trauma centers for emergency management of fractures.
- RRMCH is by its location has an opportunity for becoming a Major Trauma center and Orthopaedic Department has opportunity to expand.
- Rapid progress in Biomedical and Bio-Engineering technology.

Challenges for the department

- To improve infrastructure in parallel with progress in technology.

Plan of action of the department for the next five years

	2013-14	2014-15	2015-16	2016-17	2017-18
Courses	MS	MS PhD	MS PhD	MS PhD Fellowships in specialties	MS PhD Fellowships in specialites
TLE	Plan is to change into interactive discussion	Conducting All India post graduate teaching programs Every year	Conducting All India post graduate teaching programs Every year	Conducting All India post graduate teaching programs Every year	Conducting All India post graduate teaching programs Every year
Administration		To increase the number of beds and number of units	To increase the number of beds and number of units	To increase the number of beds and number of units	To increase the number of beds and number of units
Research/ Extension		To make one publication and one presentation from faculty	To make one publication and one presentation from faculty	To make two publications and two presentations from faculty	To make two publications and two presentations from faculty
Infrastructures		Early Total Care for Polytrauma	Designated Theater for Joint Replacements	Computer Aided Surgery	To have facility for stem cell transplant in orthopaedic cases
Innovation				Stem Cell Transplant	Stem Cell Transplant
Collaborations/ Linkages	Visiting International Consultants	PG teaching programs with International Faculty			

THANK YOU