

Department of  
**ORTHOPAEDIC SURGERY**  
**Ganga Hospital**, Coimbatore, India.

*Activity Report 2015-2018*





## Founders



Mrs. Kanakavalli Shanmuganathan & Dr. J. G. Shanmuganathan

### Vision

- To showcase to the world the best in patient care, surgical expertise, academics, medical ethics and state-of-the art technology.
- To be a center which will be a pride of our country.

### Mission

- To provide quality treatment at affordable cost so that the expertise will be available to every citizen of our country.



From L to R: Mrs. Rama Rajasekaran, Dr. S. Rajasekaran, Mrs Kanakavalli Shanmuganathan, Dr J.G.Shanmuganathan, Mrs Nirmala Rajasabapathy Dr. S. Raja Sabapathy  
Board of Directors



*“Small Aim is a Crime”*

*- Shri APJ Abdul Kalam*



The years of 2015-18 were eventful and progressive and it also saw us crossing the **25th year of establishing Ganga Hospital** as a specialty centre for orthopaedics and plastic surgery. We registered meaningful progress on all four pillars of Ganga Hospital – Clinical excellence, Academics, Research and Social service. Nationally, we were continuously voted as the Best Orthopaedic centre in India amongst private hospitals by Nielson survey conducted by the popular magazine ‘The Week’. We were also proud of the recognition of the CNBC TV Award, IMC Ramkrishna Bajaj Award for Quality Excellence, Best Energy conserving Hospital, AHPI Healthcare Excellence Award for patient-friendly hospital and outstanding teaching Hospital. Such honors help us to rededicate ourselves to our mission with greater passion and enthusiasm.

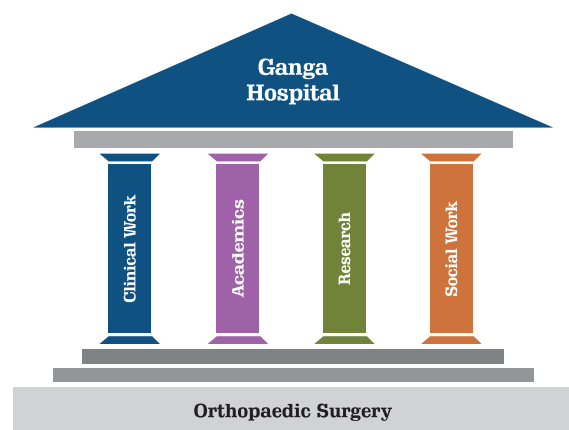
**Prof. S. Rajasekaran**

M.S., DNB., F.R.C.S.(Ed), M.Ch(Liv), FACS., F.R.C.S.(Eng), Ph.D  
Chairman, Dept of Orthopaedics, Trauma & Spine Surgery.

The infrastructure expansion has taken a giant leap with an entirely new and advanced block being inaugurated in early 2020. With 710 beds, 32 operating theatres and dedicated outpatient and physiotherapy facilities, we are proud to become one of the largest centres in orthopaedic surgery in the whole of Asia. The principle of having 'patient's interest as the only interest' and total focus on high quality care at affordable cost will continue to be our main focus and hopefully we will progress at the same pace in future too for our society.

Academically and in research, we received the prestigious ISSLS award for the fourth time in 2017 and also the Hari Om Ashram Alembic Research award of the Indian Medical Council given by the President of India. In the Asia Pacific Spine Society meeting in Korea 2019, we bagged four of the five international awards. All through the growth, we have been also particular to carry the benefits of modern surgery to the un-affordable and we were recognized by the Scoliosis Research Society, USA with the Walter Blount Humanitarian Award for performing complex spine surgeries at a very low cost. The Ganga Spine Injury Rehabilitation Centre and active award winning participation in the BPL scheme are few other ways that we have reached out to the society.

No growth happens spontaneously. I record our gratitude to all our referring physicians for their support, our patients for their trust and the God Almighty for his continued and abundant blessings. We are committed to pay back His Blessings by constantly improving and dedicating ourselves back to our society.





*The journey of a thousand miles begins with one step*  
- Lao Tzu

## Ganga Hospital - The Journey



**1978 - 1991**

The hospital is named after  
Shri. J. S. Gangadharan,  
father of the founder of the hospital,  
Dr. J. G. Shanmuganathan.

- 17 beds
- Two Operating Rooms



**1991 - 1996**

**The First Expansion**

Specialty centre for  
Orthopaedic Surgery  
and Plastic Surgery

- 42 beds
- Four Operating Rooms



**1996 - 2007**

**The Second Expansion**

Sub-specialty niche areas -  
Spine, Arthroplasty,  
Pediatric Orthopaedics,  
Sports medicine,  
Brachial plexus injury, etc.

- 135 beds
- Six Operating Rooms



**2010**

**Ganga Institute of Health Sciences**

- 10 Courses
- 32 Class rooms
- 13 labs
- 2 "State of the Art" Auditoriums
- In Campus Hostel Facility
- Comprehensive Infrastructure





2007 - 2019

### The Third Expansion

Cutting edge technology for “safe surgery”  
Intra-operative CT navigation (AIRO)  
Navigation assisted Spine & Arthroplasty

- 500 beds
- 24 Operating Rooms
- Intensive Trauma Care Unit
- Regional Blood Bank
- Bone & Tissue Bank
- In-house radiology department with 1.5 T MRI and 16 slice CT Scan
- In-house Conference facility with 425 seated Auditorium



2014

### Ganga Spine Injury & Rehabilitation Centre

- 38 Inpatient beds
- 6 Private Rooms
- 4 Semi Private rooms
- 2 General Wards
- Total Area 1.67 Acres. Building Area 16000 sq ft.
- 7000 sq ft Basketball Ground
- Free Vocational Training  
Units to learn tailoring, embroidery and umbrella making are available to in-patients and their caretakers



2020...

### The Fourth Expansion

- Total of 650 Beds & 34 Operating Rooms
- Addition of 3 T MRI and 16 slice CT Scan



2015

### Ganga Research Centre (GRC)

The basic science research wing of GOREF to seek solutions for musculoskeletal diseases at molecular level through OMICS approach



## *Team 2019*



“ If you want to walk fast, walk alone - If you want to walk far, walk together ”  
- African Proverb



Sitting (L to R) : Dr. SR Sundararajan, Dr. J Dheenadhayalan, Prof. S. Rajasekaran, Dr. T Ajoy Prasad Shetty, Dr. P Dhanasekara Raja, Dr. N. Rajkumar,  
Standing 1st Row (L to R) : Dr Mohammed Zackariya, Dr. Devendra A, Dr. Ramesh Perumal, Dr. N. Rajkumar, Dr. K. Venkatadass, Dr. Arun Kamal C, Dr. Velmurugesan P

## Clinical Division

### Prof. S. Rajasekaran Chairman

#### Consultants

Dr. J Dheenadhayalan Complex Trauma Reconstruction Upper Limb Surgery	Dr. T Ajoy Prasad Shetty Spine Surgery	Dr. SR Sundararajan Arthroscopy & Sports Medicine	Dr. P Dhanasekara Raja Arthroplasty
Dr. N. Rajkumar Arthroplasty	Dr. K. Venkatadass Paediatric Orthopaedics	Dr. P. Rishi Kanna Spine Surgery	Dr. Devendra A Trauma Surgery
	Dr. Ramesh Perumal Trauma Surgery	Dr Arun Kamal C Trauma Surgery	

#### Associate Consultants

Dr Mohammed Zackariya Trauma Surgery	Dr. Velmurugesan P Trauma Surgery
---	--------------------------------------

#### Senior Registrars

Dr. R. Ramakanth Arthroscopy & Sports Medicine	Dr. Roy Wilson Armstrong Trauma Surgery	Dr. S. P. Sivakumar Trauma Surgery
Dr. Sri Vijay Anand K.S Spine Surgery	Dr. Dilip Chand Raja Spine Surgery	Dr. Soundararajan Arthroplasty
Dr. Muthukumar Paediatric Orthopaedics	Dr. Rajabhaskara Kanakeshwar Arthroplasty	Dr. Sangeeth Gangadaran Paediatric Orthopaedics

#### Department Secretaries

Mr V Mohana Krishnan, Mr G Prabhu, Mr Bala Krishnan, Mrs R Radha



## *Chairman & Head of the Department*



### **Prof. S. Rajasekaran**

**M.S, DNB, F.R.C.S.(Ed), M.Ch(Liv), F.A.C.S, F.R.C.S.(Eng), Ph.D,  
Chairman, Dept of Orthopaedic, Trauma & Spine Surgery.**

Dr Rajasekaran has been instrumental in building and shaping the orthopaedic department into a very busy clinical unit with strong academic and research components. He had a brilliant academic career and was the 'Best outgoing student' of Coimbatore Medical College and stood first in the University of Madras in the orthopaedic post-graduate examinations. He was awarded the Khazenifer Gold Medal and Norman Roberts Medal for best performance during his M.Ch exams in Liverpool, UK. He completed his Ph.D in 2000.

He has special interest in spine surgery, arthroplasty and clinical research in major trauma. He has led the unit's basic science research in spinal deformities, disc nutrition and biology and genetics of disc degeneration which have been recognised with numerous awards and published in international journals. He was also instrumental in the evolution of 'Ganga Hospital Open Injury Severity Score' which guides critical decisions in saving and reconstructing severely injured limbs.

He has also been passionate about road safety and preventing unnecessary loss of lives on roads with the successful PIL in the Supreme Court and also being the Managing Trustee of UYIR, an NGO for road safety in Coimbatore city.

### **Academic**

- Chairman, Dept of Orthopaedic & Spine Surgery
- Adjunct Professor, The Tamilnadu Dr MGR Medical University.
- Hunterian Professor, Royal College of Surgeons of England, 2011 - 12

### **Leadership in Professional Bodies**

#### **Current Positions**

- Chair, AOSpine International Board
- President Elect, Asia Pacific Spine Society

#### **Past Positions**

- President - SICOT 2016 - 2018
- President- Cervical Spine Research Society-AP, 2017-2018
- Chair, International Research Commission- AOSpine, 2015 - 2017
- President - Indian Orthopaedic Association 2011-2012
- President - International Society for the Study of Lumbar Spine, Canada, 2011 - 2012
- President - Association of Spine Surgeons of India, 2008 - 2012
- President - Tamilnadu Orthopaedic Association, 2012

### **International Awards**

- ISSLS Spine Research Award 2017, 2012, 2010, 2004
- Hunterian Professorship of the Royal College of Surgeons of England 2012
- Walter P. Blount Humanitarian Award, Scoliosis Research Society, USA -2015
- EuroSpine Open Paper Award 2008
- Honorary Fellowship, Royal College of Surgeons of England, 2010
- ISSLS Macnab La Rocca Award 2005, 2014
- ISSLS Sofamer Danek Award 1996, 2002, 2006
- Harvard Medical International Award, 2007

### **National Awards**

- Hari Om Ashram Alembic Research 2017
- KREST Oration 2016, Hyderabad
- Golden Jubilee Research Award IOA 2010
- MCI Silver Jubilee Research Award 2002
- Tamilnadu Government Scientist Award 2000
- ASSI Research Awards 2005,06,07,08,09,10,14
- ASSI Publication Award 2013 to 2016, 2018
- Hari Om Ashram Alembic Research Award 2004

### **Textbooks**

- Chief Editor, ASSI Textbook of Spinal Infections & Trauma
- Chief Editor, Video Atlas of Spine Surgery
- Editor, Textbook of The Spine, Medical & Surgical Management

### **Journals**

- European Spine Journal - Editorial Board Member.
- Spine - Deputy Editor.
- JBJS - Deputy Editor.
- Journal of Orthopaedic Surgery, Hong Kong.
- Journal of Orthopaedic Science, Japan.

### Academic

- Chairman, Dept of Plastic, Hand and Microsurgery, Burns and Aesthetic Surgery
- Hon Consultant, Armed Forces Medical Services of India
- Sushruta –Guha Professor of Plastic Surgery and Wound Healing, Royal College of Surgeons of Edinburgh - 2016

### Leadership in Professional Bodies

#### Current Positions

- President Elect, Asian Pacific Federation of Societies for Surgery of the Hand
- Secretary General Elect, International Federation of Societies for Surgery of the Hand
- EC Member, Diabetic Foot Society of India.

#### Past Positions

- President, Association of Plastic Surgeons of India
- President, Indian Society for Surgery of the Hand
- President, Indian Society for Reconstructive Microsurgery
- President, Brachial Plexus Surgery Group of India
- President, International Trauma Care (Indian Section)

#### International Awards

- Douglas Lamb Lecturer of the British Society for Surgery of the Hand
- AC Boonzaire Lecturer of the South African Society for Hand Surgery
- Shivas Medal of Central Traumatology Institute, Moscow
- Global Alumni Award for Service to Humanity, Rotary Foundation
- Bangladesh Society for Surgery of the Hand Award
- Honorary Memberships of the Royal College of Surgeons of Glasgow, British Society for Surgery of the Hand, South African Society for Hand Surgery, Serbian Microsurgery Society
- Visiting Professor at the Mayo Clinic, Yale, Washington University
- Invited International Member of the American Association of Plastic Surgery

#### National Awards

- Silver Jubilee Oration Award of AIIMS, 2015
- Gilles Oration, 2013, Mukerjee Oration 2008, Peet Prize 1993, 2002, NH Antia Prize, 2006, 2008, 2019, RN Sinha Award 2003 of APSI
- Tamilnadu Scientist Award 2007
- Conferred Doctor of Science (Honoris Causa) of Dr MGR Educational & Research Institute
- Delivered 30 Eponymous Orations in Professional Associations

#### Textbooks

- Co Author- Microsurgery Practice Manual
- Editor, Text book of Plastic Surgery, Hand Section
- Authored 47 book chapters

#### Journals

- Editor, Indian Journal of Plastic Surgery (1994-99)
- Regional Editor, Plastic and Reconstructive Surgery Global Editorial Board
- Dy Editor, Hand Surgery, Asia Pacific Volume
- Guest Editor, in international journals, Seminars in Plastic Surgery, Hand Clinics and Injury

#### Editorial Board Member

- Hand (American Association of Hand Surgery)
- Techniques in Hand and Upper Extremity Surgery
- Hand Surgery (Springer)



### Prof. S. Raja Sabapathy

M.S. (Gen), M.Ch. (Plastic), DNB (Plastic), FRCS (Edin.),  
Hon FRCS (Glas), FAMS, D.Sc (Hon)

**Chairman, Division of Plastic Surgery, Hand Surgery,  
Reconstructive Microsurgery and Burns**

Dr Raja Sabapathy, Chairman, Department of Plastic, Hand and Reconstructive Microsurgery and Burns graduated as the Best Outgoing Student of Stanley Medical College, standing first in Medicine and Surgery in the Madras University.

His chief interests are Hand Surgery, Microsurgery and complex reconstruction following trauma, cancer and burns.

2024 Surgeons from 68 countries have visited the Plastic Surgery department to observe the surgical procedures and system of care.. Organizations like Resurge Africa, B First, Medecins San Frontiers (MSF) IMET 2000, CoRSU Uganda, Rotary International have partnered with the unit for capacity building across the world. Recognizing his Leadership qualities in putting India in the World map of Reconstructive Surgery, the Association of Plastic Surgeons of India has instituted the APSI – Raja Sabapathy Leadership Award to recognize future leaders in the field.

He is passionate to provide free reconstruction for burn survivors through the project, 'Hope after Fire', an initiative with Rotary Club of Coimbatore Metropolis.





**Dr. J. Dheenadhayalan**

M.B.B.S, D.Ortho, DNB Ortho.,  
Senior Consultant & Director of Trauma Services  
Chief of Shoulder & Elbow Surgery

**Leadership in Professional Bodies:**

President -  
Tamilnadu Orthopedic Association 2019

**Dr. J. Dheenadhayalan** joined the department in 1992 after basic training at Mysore Medical College. He had his advanced training at Nuffield Orthopaedic Center and Milton Keynes General Hospital UK and fellowship training in joint replacement at Tübingen and Regensburg, Germany. He is a Founder member of the APOA trauma section. He holds member position in AO Trauma and was a council member of South Zone Region of India. He is a life member of Shoulder Society of India. He was the editor of Tamil Nadu Orthopaedic Journal and Assistant Editor to Indian Journal of Orthopaedics. His field of interests are shoulder surgery and surgery in complex trauma situations. Currently, he is the President of Tamil Nadu Orthopaedic Association.

**International Awards:**

- "SICOT Best Paper Award" SICOT Meeting, San Diego, USA. Aug, 2002
- "ISSLS - Sofamer Danek Award", Best Clinical Research Paper, Singapore, 1996

**National Awards:**

- P. Dhanarajan Gold Medal for Innovation in Trauma, TNOA, 2011, Madurai
- Best Paper Award AO Trauma India, Chennai April 8, 2012
- Prof P. Dhanarajan Gold Medal - TNOA 2013, 2017
- Professional Achievement Award Spot Hospital 2014

**Dr. Ajoy Prasad Shetty** joined the department in 1994 and became a consultant in 2000. Initially trained in Orthopaedics at Bangalore Medical College, he had advanced training in Spine Surgery at The Queen Elizabeth Hospital, Adelaide, Australia. He is involved in the research activities of the Spine Unit and co-ordinator of the DNB Orthopaedics and FNB Spine Surgery Courses. He is actively involved in teaching activities and is a regular faculty at the Ganga Spine Microsurgery courses. He was the Organising Secretary for the APOA Operative Spine Course in 2007 and Organising Secretary for the Ganga Operative Spine Courses which is conducted once in every two years.

**International Awards:**

- ISSLS-Sofamer Danek Award - 1996, 2002, 2006
- ISSLS Prize for Lumbar Spine Research Spine Research Award 2004, 2010.
- Brit-Spine Award Best Basic Science Research Presentation Award, 2004.
- Macnab LaRocca Research Award for the year 2005 (ISSLS) Canada.
- ISSLS International Fellowship Award 2007, ISSLS, Hong Kong 2007.
- Eurospine Open Paper Award: 2008

**National Awards:**

- Prof. T K Shanmugasundaram Gold Medal for best paper in TNOA, 1996
- RC Rallan Gold Medal for Basic Science, IOA 2011.
- Prof Ramanathan Consultant Medal, TNOA 2011



**Dr. Ajoy Prasad Shetty**

M.B.B.S, D.Ortho, DNB Ortho.,  
Senior Consultant & Spine Surgeon,

**Leadership in Professional Bodies:**

Secretary & Treasurer - ASSI  
(Association of Spine Surgeons of India)  
Director - IASA (Indo -American Spine Alliance)  
Board Member - APSS (Asia Pacific Spine Society)  
Member - AO Spine India Council  
Member - NASS, SICOT, WOC, IGOF



### **Dr. S. R. Sundararajan**

M.B.B.S, M.S (Orth),  
Senior Consultant, Arthroscopy and  
Sports Medicine

#### **Leadership in professional bodies:**

President-Indian Association of Sports Medicine  
President-Elect Tamilnadu Arthroscopy Society  
Past President - Indian Foot and Ankle Society  
Joint Secretary - Indian Arthroscopy Society

**Dr. S.R. Sundararajan** joined the department in 1997 and working as a Senior Consultant in Arthroscopy, Sports Medicine and Foot & Ankle Surgery. After finishing his post graduation training, he had advanced training in Flinders Medical Centre in Australia and also short-term training at Arthroscopic Centres in France and Cape Town, South Africa. He had won the Best Paper Awards in Indian Arthroscopy meetings of 2008 and 2013 and medals in 2013, 2014 & 2017 of TNOA. He is conducting Ganga Arthroscopy course and rehabilitation course every alternate years with attendance of 500 delegates. He finishes his presidential post in the Indian foot and ankle society and Currently, he is the President of Indian Association of Sports Medicine, Joint Secretary in Indian Arthroscopy Society and executive member of Tamilnadu Orthopaedic Association.

#### **National Awards:**

- Best Publication Award - Indian Arthroscopy Society 2017, Jaipur
- Best Publication Award - Indian Arthroscopy Society, 2016, Kolkotta
- Foot and Ankle Subspecialty Medal - Tamil Nadu Orthopaedic Association, 2018
- Best paper award - Indian Arthroscopy Society, 2013, Mumbai
- Prof Ramanathan consultant Gold medal - TNOA 2013, Tanjore
- Prof Ramanathan consultant Gold medal - TNOA 2014, Chennai
- Best paper award - Indian Arthroscopy Society 2008, Goa

**Dr. P. Dhanasekara Raja** joined the department in 2002 and is a Consultant Joint replacement surgeon. After his basic training in orthopaedics he has completed Fellowships in Arthroplasty at Adelaide & Sydney, Australia, Hospital for Special Surgery, Newyork, USA, APOA Travelling Clinical Arthroplasty Fellowship in 2010 and Diploma in Tissue banking from the National University of Singapore with distinction. His area of expertise includes primary & revision total knee and hip replacements, trauma surgery and tissue banking. His surgical skills and clinical research in arthroplasty is well recognised & has received many accolades.

#### **International Awards:**

- Distinction in NUS/IAEA "Diploma in Tissue Banking" exam, 2008, Singapore
- Best paper award, Asia Pacific Arthroplasty Society Meeting, 2018, Bangkok.

#### **National Awards:**

- Best paper award - Ranawat Orthopaedic Conference 2012
- Indian Society of Hip & Knee Surgeons Meeting 2017.
- Indian Orthopaedic Association Annual Conference, IOACON 2018.
- Indian Arthroplasty Association Annual Conference, IAACON 2004 & 2013.
- TNOA - Annual Conference, 2003, 2009, 2010, 2012
- Indo German Orthopaedic Foundation Meeting, IGOF 2005.

#### **Text book Chapters:**

- Text book of Orthopaedic Surgery, Kulkarni.
- APAS Delta Compendium.

#### **Journals:**

- Reviewer, Journal of Orthopaedic Surgery, Hong Kong.



### **Dr. P. Dhanasekara Raja**

M.B.B.S, D.Ortho, DNB Ortho.,  
Senior Consultant & Arthroplasty Surgeon

#### **Leadership in Professional Bodies:**

Executive council member  
Indian Arthroplasty Association (2013-14).  
Secretary -  
Coimbatore Orthopaedic Society  
(2019-2021)  
Member - IOA, TNOA, APOA, APAS, ISHKS, IAA





### **Dr. N. Rajkumar**

M.B.B.S, M.S (Orth),

Senior Consultant & Arthroplasty Surgeon

#### **Leadership in Professional Bodies**

Membership Chair -

Indian Society of Hip & Knee Surgeons (ISHKS)

Executive Committee Board Member -

Indian Arthroplasty Association (IAA)

Indian Orthopaedic Association (IOA)

Life Member -

IOA, TNOA, APOA, APAS, ISHKS, IAA, AAHKS

**Dr. N. Rajkumar** is a Consultant in Joint Replacement surgery. He is a specialist in Hip & Knee replacements, both primary and complex revision procedures and Partial knee replacements. He underwent his advanced training in Arthroplasty and Traumatology at Flinders Medical Centre, Adelaide and Prince Charles Hospital, Brisbane, Australia and Hip & Knee Revision surgery fellowship in Belgium. Has won Best Paper awards in national level ISHKS meetings and Traveling Fellowship Award of Japanese Orthopaedic Association. He is a regular faculty in national & international meetings of arthroplasty and has published many research articles in indexed journals and chapters in reputed journals.

#### **International awards:**

- Travelling Fellowship award, Japan Orthopaedic Association 2008
- Podium Presentation in SICOT meeting, Montreal, Canada 2018

#### **National Awards**

- Best Research Paper Award, ISHKS 2015, Mumbai
- First Prize in the CTLS Course, International Trauma & Critical Care Society Meeting 2007

#### **Author in Text Books :**

Asia Pacific Arthroplasty society Delta Compendium

#### **Reviewer in Indexed Journal :**

The Journal of Arthroplasty

The Journal of International Medical research

**Dr. Venkatadass K** is the head of the Paediatric Orthopaedic division of the Department of Orthopaedics and Spine Surgery at Ganga Hospital. After completing his basic Orthopaedic training at KMC, Mangalore he had further specialized training in Paediatric Orthopaedics and Limb reconstruction. He had his Hip Preservation Fellowship at Rady Childrens Hospital, San Diego, USA. He was part of the research team that won Eurospine Award in 2008. He got the IOA Young Ambassador Award in 2016 and won the IOA Silver Jubilee Oration in 2018. He has won Gold Medals in many National Conferences and is a invited faculty in paediatric orthopaedic meetings across the country. He has many international publications and has authored three book chapters. His main area of interests are Paediatric Hip Disorders and Hip Preservation Surgery.

#### **International awards:**

- Eurospine Openpaper Award 2008
- Best Publication Award, ISSICON 2009
- IOA Young Ambassador Award 2016

#### **National Awards**

- IOA Silver Jubilee Award, 2018
- Dr SS Yadav Gold Medal, IOACON 2017
- Dr Joy Patankar Gold Medal, IOACON 2014
- P. Dhanarajan Gold Medal for Innovation in Trauma, TNOA, 2009, 2018
- Best Paper Award, POSICON 2011

#### **Journals:**

- Reviewer, Indian Journal of Orthopaedics.



### **Dr. Venkatadass K**

M.B.B.S, M.S (Orth),

Consultant, Trauma and  
Paediatric Surgery.

#### **Professional Memberships:**

Life Member :

Indian Orthopaedic Association  
Paediatric orthopaedic Society of India  
Tamilnadu Orthopaedic Association  
Indian Arthroscopy Society



**Dr. Rishi Mugesh Kanna**

M.B.B.S, MS Ortho, MRCS, FNB Spine  
Consultant & Spine Surgeon,

**Leadership in Professional Bodies:**

Associate Member -  
AO Spine Knowledge Forum.  
Committee member - ASSI.  
Editorial Board member - ESJ.  
Reviewer -  
ESJ, ASJ, GSJ, IJO, BMC, ISJ.

**Dr. Rishi Kanna** finished his graduation from the Madurai Medical College in 2002, where he was the best outgoing student with four gold medals. He pursued his post graduation from Post graduate Institute at Chandigarh. He was elected as a member of Royal College of Surgeons of Edinburgh in 2007. He completed the fellowship training in spine surgery at Ganga Hospital and advanced spine surgical fellowship at Nottingham, England. He delivered the Silver Jubilee Oration of Indian Orthopedic Association at Hyderabad in 2014. His clinical interests include back pain, spondylosis, spinal infections, trauma and deformities. His research focus includes genetics of disc disease, cervical spine imaging and spinal trauma techniques.

**International Awards:**

- Best Podium Presentation - British Association of Spine Surgeons, 2011
- IOA Hong Kong - Young Ambassador Award 2013

**National Awards:**

- ASSI Best Research Award 2009
- Dr VT Ingalthalikar Gold medal 2009
- Prof A Subramanian Best Research Paper Award 2009
- ASSI Best Clinical Research Award 2010
- ASSI Best Basic Science Research Award 2011
- Dr RC Rallan - IOA Best basic science research award 2012
- IOACON SILVER JUBILEE ORATION 2014
- TNOACON Basic Science Research Award 2015
- TNOACON Best published paper award 2015 & 2018

**Dr Ramesh Perumal** had his basic orthopaedic training at Kilpauk Medical College, Chennai in 2004 and completed his Diplomate National Board in Orthopaedics from Ganga hospital in 2006. He joined the unit as a registrar in 2007 and became a senior registrar in 2009 and promoted as Associate consultant in 2013. He completed pelvi-acetabular and geriatric trauma fellowship in the University of Johannes-Gutenberg, Mainz, Germany and Medical University of Innsbruck, Austria in 2014. He is a invited faculty for pelvi-acetabular workshop and delivered many lectures including live surgical demonstrations. He has presented more than 100 presentations in the field of trauma surgery and pelvi-acetabular fractures. Currently working as Associate Consultant in Trauma surgery.

**National Awards:**

- PG quiz in 2005 state conference
- Clinical commitment award as the best outgoing student in DNB training period.
- He received the Prof M. Natarajan gold medal in TNOACON 2010
- RC Rallan Gold Medal for basic science research in IOACON 2013 and 2015.
- Innovative Award, work on posterior wall fractures of the acetabulum AOPAS 2018



**Dr Ramesh Perumal**

M.B.B.S, D.Ortho, DNB Ortho.,  
Consultant & Trauma Surgeon

**Professional Memberships:**

Life Member :  
Indian Orthopaedic Association  
Tamilnadu Orthopaedic Association  
AO Trauma Membership  
Pelvi-Acetabular Surgeons of India





### **Dr. A. Devendra**

**M.B.B.S, DNB Ortho.,  
Consultant, Trauma Surgery.**

#### **Professional Memberships:**

Life Member :  
Indian Orthopaedic Association  
Tamilnadu Orthopaedic Association  
AO Trauma Membership

**Dr. A. Devendra** has completed orthopaedic training in the department of Orthopaedics and Trauma, Ganga hospital and is currently working as Associate Consultant. His special interest is in treating major open injuries, long bone defects and Nonunions. He is the scientific and processing manager of Ganga hospital Tissue bank since 2008. He has completed trauma fellowship in the University of Innsbruck in 2011 and is involved in training of trauma fellows and post graduates.

#### **National Awards:**

- Prof M. Natarajan Gold medal for trauma in 2008.
- Best student of the Year 2006.
- Prof M V Daniel Gold medal 2009.
- Prof A A Mehta Gold medal for Trauma 2015.
- Prof Bakshi Gold medal 2017.

**Dr. C. Arun Kamal** completed his M.B.B.S., and M.S. Ortho from Govt. Kilpauk Medical College, Chennai in 2002 and 2008 respectively. He has joined Department of Orthopaedics at Ganga hospital in 2009 and completed Diplomate National board in Orthopaedics in 2010. He was promoted as Associate Consultant in Trauma surgery in 2014. He has completed AO Master's course on Pelvi-acetabular trauma in 2017 at Bangalore. He has presented more than 15 papers at various state and national level conferences. He has worked as scientific committee member in Ganga Trauma conferences in 2016 and 2018. He has three international publications and co-authored one chapter in latest edition of Rockwood and Green Textbook for Adults Trauma.

#### **National Award:**

- Prof M. Natarajan Gold medal for trauma in 2008.



### **Dr. C. Arun Kamal**

**M.B.B.S, M.S Ortho, DNB Ortho,  
Consultant & Trauma Surgeon**

#### **Professional Memberships:**

Life Member :  
Indian Orthopaedic Association  
Tamilnadu Orthopaedic Association

*Department of Plastic and Reconstructive Surgery,  
Hand and Microsurgery, Burns and Maxillofacial Surgery.*



*Sitting (L to R) : Dr. Raja Shanmuga Krishnan S, Dr. Hari Venkataramani, Dr.Senthil Kumaran M, Dr. S.Raja Sabapathy,  
Dr. Ravindra Bharathi R, Dr.Sanjai Ramkumar and Dr.Madhu Periyasamy,  
Standing (L to R) : Dr.Sunilkumar T, Dr. Praveen Bhardwaj, Dr. Vimalambika Ramasamy, Dr. Kannan Balaraman and Dr.Keerthana Bhat*

Dr S Raja Sabapathy heads this department which has a committed, skillful workforce which aims to provide the best possible outcome in everything they do. The team introduced Reconstructive Microsurgery to this region in 1991, and revolutionized trauma care. The unit continues to be a leader in trauma reconstructive surgery with maximum number of procedures done in the country. This is made possible by the availability of senior level input 24 x 7 x 365 for a patient in need. The department justifiably takes pride in providing this quality care.

Hand Surgery and limb salvage continues to be the core strength of the unit. Over a period of time the same skills and attitude has helped the unit to push the frontiers in the growth of subspecialties like Birth defects of the Hand, Brachial plexus surgery, Wrist surgery, Peripheral nerve reconstruction and surgery for paralytic disorders including Cerebral palsy. One of the department which has taken wings recently is the special Diabetic Foot care unit. The unit has a busy programme in the management of Cleft lip and Palate patients partnering with Smile Train.

The facial trauma unit is well experienced and has the benefit of having renowned and skilled Maxillo facial surgeons in the team. The collaborative effort ensures good outcome in jaw bone fractures and jaw and facial deformity correction.

The team has a special interest in burns management and has achieved remarkable results in the correction of post burn deformities. Though the quantum of work in reconstructive surgery overshadows the aesthetic surgery work, the unit continues to do high quality aesthetic surgery.

The work of the department has won international recognition. It is a preferred centre for training and over 100 surgeons visit the unit every year to observe the work done in the department. Currently it is the only centre in the country recognized by the National Board of Examinations offering post doctoral training in Hand and Microsurgery. The microsurgery lab of the department has trained more than 650 surgeons from 49 countries.



# Department of Anaesthesia

The Department of Anaesthesia is well equipped for safe perioperative care. The department has on its rolls 28 full time anesthesiologists and 12 trainee anaesthesiologists, who offer round the clock services. They serve as perioperative physicians and offer comprehensive perioperative care. The focus is on Acute pain Service which aids in early rehabilitation and well being of the surgical patients. The department specialises in advanced Regional Anaesthesia, Anaesthetic solutions to major reconstructive spine surgeries and Arthroplasties, Geriatric Anaesthesia, Paediatric Anaesthesia and anaesthesia for major polytrauma victims. The department offers postgraduate training in Anaesthesia, Fellowships in Nerve block and pain management, Regional Anaesthesia and Trauma Anaesthesia.

**Aesculap Academy Guidance Centre for Regional Anaesthesia, Germany** has collaborated with the Department for providing short term training in Regional Anaesthesia. The programme was started in 2005 and so far 644 anesthesiologists from various parts of India and 44 Overseas Trainees from Nigeria, Srilanka, Pakistan, Qatar, Oman, Afghanistan, Philippines & Saudi Arabia, Egypt, Rwanda, Tanzania and Kenya have benefited from this programme. This is the only centre in the country which teaches peripheral nerve blocks under this programme.

## Clinical Research

The department participated in a multicentric trial the ASSIST SURVEY aimed at deciphering postoperative analgesia in surgical patients. This trial included 16 centres from India, Srilanka and Bangladesh.

## Ultrasound Guided Nerve Block



## On-Arrival Nerve Block



## Senior Consultants

Dr. C Sekar  
M.B.B.S, MD (Anaes).,  
Senior Consultant &  
Head Dept. of Anaesthesia.

Dr J Balavenkatasubramanian  
M.B.B.S, MD (Anaes).,  
Senior Consultant & Academic Director  
Dept. of Anaesthesia.

## Consultants

Dr P Gurumoorthi

Dr Maheshwari S Kumar

Dr V Satheesh Kumar

Dr N Vivek Anand

## Junior Consultant

Dr Kartik B. sonawane

Dr Vipin Kumar Goel

Dr Senthilkumar B

Dr Santhosh Kumar .D

## Department of Anaesthesia Team 2019





**Dr. C Sekar**

M.B.B.S, MD (Anaes).,

Senior Consultant & Head Dept. of Anaesthesia.

**Leadership in Professional Bodies:**

Organising Chairman :

ISACON Tamil Nadu 2018-State Conference

President :

ISA City Branch 2011 & 2017.

Organising Co-Chairman :

CASCO 2012, ISA South Zone.

Advisory Committee Member :

Coimbatore anaesthesia Programme 2013

**Dr. C Sekar** joined the institution as a Consultant in 1995. His special interest is in anaesthesia for spine surgery and Ultrasound-guided nerve blocks. He has been an invited faculty for the Oman Medical University Conference for the past two years. He materialized the training initiative at our hospital for the anaesthesia Students from Oman in collaboration with The Oman Medical Specialty Board. He has delivered 6 lectures nationally and 2 lectures internationally and has been a faculty in 8 live workshops. Currently he is Head-Department of Anaesthesia.

**Publications:**

- 1) "Preemptive Analgesia for Postoperative Pain Relief in Lumbosacral Spine Surgeries: A Randomized Controlled Trial"  
The Spine Journal 2004; 4(3): 261-64.
- 2) "Transient Paraplegia Due to Accidental Intrathecal Bupivacaine Infiltration Following Pre-emptive Analgesia in a Patient with Missed Sacral Dural Ectasia.
- 3) Ultrasound guided subclavian perivascular block: The modified parasagittal approach, Saudi Journal of Anesthesia, July, September 2019.
- 4) Supra-axillary Block: A Novel Ultrasound-Guided Supplement to Brachial Plexus Block for Surgery Around Elbow. 2018 Anesthesia: Essays and Researches | Published by Wolters Kluwer - Medknow

**Dr J Balavenkatasubramanian** joined the institution in the year 1995. He currently serves as the Senior Consultant & Academic Director of the Department of Anaesthesia and Perioperative Care. He currently serves as the President of Asian Oceanic Society of Regional Anaesthesia, Associate Editor of Regional Anaesthesia and Pain Medicine the official Journal of American Society of Regional Anaesthesia, National Chairman of Academy of Regional Anaesthesia of India, an organisation for which he was the founder President, Core Scientific Committee member for the World Congress of Anaesthesia 2020 at Prague, Chairman of the Regional Anaesthesia Track for the World Congress of Anaesthesia 2020, National Governing Council Member of Indian Society of Anaesthesia and Research Society of Anaesthesia and Clinical Pharmacology, Section Editor for the Regional Anaesthesia section of Indian Journal of Anaesthesia. He also serves as the Program Head for the World Federation of Society of Anaesthesiologists-Ganga Hospital Regional Anaesthesia Fellowship and the Course Director for the Aesculap Academy Regional Anaesthesia Guidance Course. Has so far delivered 11 Orations, 527 Lectures nationally, 32 lectures Internationally and conducted 43 hands on workshop in Regional Anaesthesia. He was the Organising Chair for the 9th Annual National Conference of Academy of Regional Anaesthesia of India 2019 conducted at Coimbatore.

**Awards:**

- Academic Excellence Award 2017 IMA, Chennai
- Global Alumni Award Zone 6 2013 and 2014, Rotary International, USA
- Best Doctor Award 2016, Coimbatore IMA
- Vocational Excellence Award, Rotary Club of Coimbatore Millennium, 2010



**Dr J Balavenkatasubramanian**

M.B.B.S, MD (Anaes).,

Senior Consultant & Academic Director  
Dept. of Anaesthesia.

**Leadership in Professional Bodies:**

President: AOSRA(2019-21)

Scientific Committee Member: WCA2020

National Chairman: ARA -India

Associate Editor : JRA& PM

Governing Council Member : ISA

Section Editor : RAI J-Anaesthesia



## Department of Anaesthesia



### Dr. Maheshwari S Kumar

M.B.B.S, DA, DNB (Anaes).,

Joined the Department of Anaesthesia in 2000 as Registrar. Completed her DNB in Anaesthesia at Ganga Hospital in 2011. Currently, works as Consultant. She has been an invited faculty in PG CME's and Regional Anaesthesia Conferences, Teaching faculty for Hands on Training Regional Anaesthesia Workshops. Her DNB Thesis was presented in the American Society of Anaesthesia (ASA) Conference.



### Dr. P Gurumoorthy

M.B.B.S, MD, DA (Anaes).,

Joined the Department of Anaesthesia in 2008. His areas of interests are anaesthesia for patients with cardio vascular diseases, polytrauma and paediatric regional anaesthesia. His recent publications are low volume blocks for clavicle and shoulder surgeries, role of adductor canal blocks for knee and below knee surgeries and technique to minimize failed spinal.



### Dr. Vivekanandan N

M.B.B.S, MD (Anaes).,

Joined the Department of Anaesthesia in 2007 as Registrar. Currently works as Junior Consultant. He has been a Teaching faculty in various National level Hands on Training Regional Anaesthesia workshops. Co-authored the chapter 'Supraclavicular Block' in Text book of Musculoskeletal Ultrasound of Regional Anaesthesia and Pain Medicine.



### Dr. Sateesh Kumar

M.B.B.S, DA (Anaes).,

Joined the Department of Anaesthesia in 2007 as Registrar. Completed MBBS in 2000 from Bangalore University, Sri Siddhartha Medical, Tumkur, Karnataka, Diploma in Anaesthesia from Annamalai University, Raja Muthiah Medical College from 2002 to 2004.

### The Various Anaesthesia Techniques Performed 2015-18

Year	2014	2015	2016	2017	2018
Spinal Anaesthesia	8093	3873	3216	4600	4546
Spinal and epidural	1495	4249	4137	3588	3748
General Anesthesia	2595	3208	2936	3337	3412
Regional Blocks	4643	3485	4811	6049	6251
Others	621	2008	2229	191	227
<b>Total</b>	<b>17447</b>	<b>15113</b>	<b>17329</b>	<b>17765</b>	<b>18184</b>

## Anaesthesia Courses Offered



Diplomate of National Board in Anesthesia (8 seats per year) Session starts in January.



Post Doctoral Fellowship in Nerve block and Pain management  
Affiliated to Dr MGR medical University (2 seats per year) Session starts in January .



Ganga Hospital Fellowship in Regional Anaesthesia & Trauma(6 months) Session starts in January/ July



WFSA Ganga Hospital Regional Anaesthesia International Fellowship for anaesthesiologists from Low Resource countries (4 seats per year). Session starts in January/ July every year (6 months fellowship)



Aesculap Academy, Germany and Ganga Hospital AAGC Training Programme (6 days)

## *Dr Ravindra Bhat Oration*

Dr Ravindra Bhat headed the Department of Anaesthesia of Ganga Hospital from 1993-2012 and laid the foundation for trauma care in the hospital. His dedication and involvement in the care of severely injured left an everlasting impression to all those who have met him. He did pioneering work in the initial management of polytrauma victims, regional anaesthesia and nerve block and was a source of inspiration for the numerous fellows and trainees from all over the world.

To perpetuate his memory, 'Ganga Hospital – Dr Ravindra Bhat Memorial Oration' has been initiated and is being delivered annually by an eminent personnel.



**Dr Ravindra Bhat**  
1993-2012

He immensely contributed in setting up protocols for Trauma Resuscitation and On-arrival Nerve block to multiply injured patients which made them pain free instantly. His yeoman service to mankind came to an end due to his untimely demise in 2012.

As suggested by Dr TVS Gopal the Academic Director of AORA, AORA named the AORA Oration in Dr Bhat's memory.

**These Orations were delivered by the doyens of Regional Anaesthesia from across the globe.**

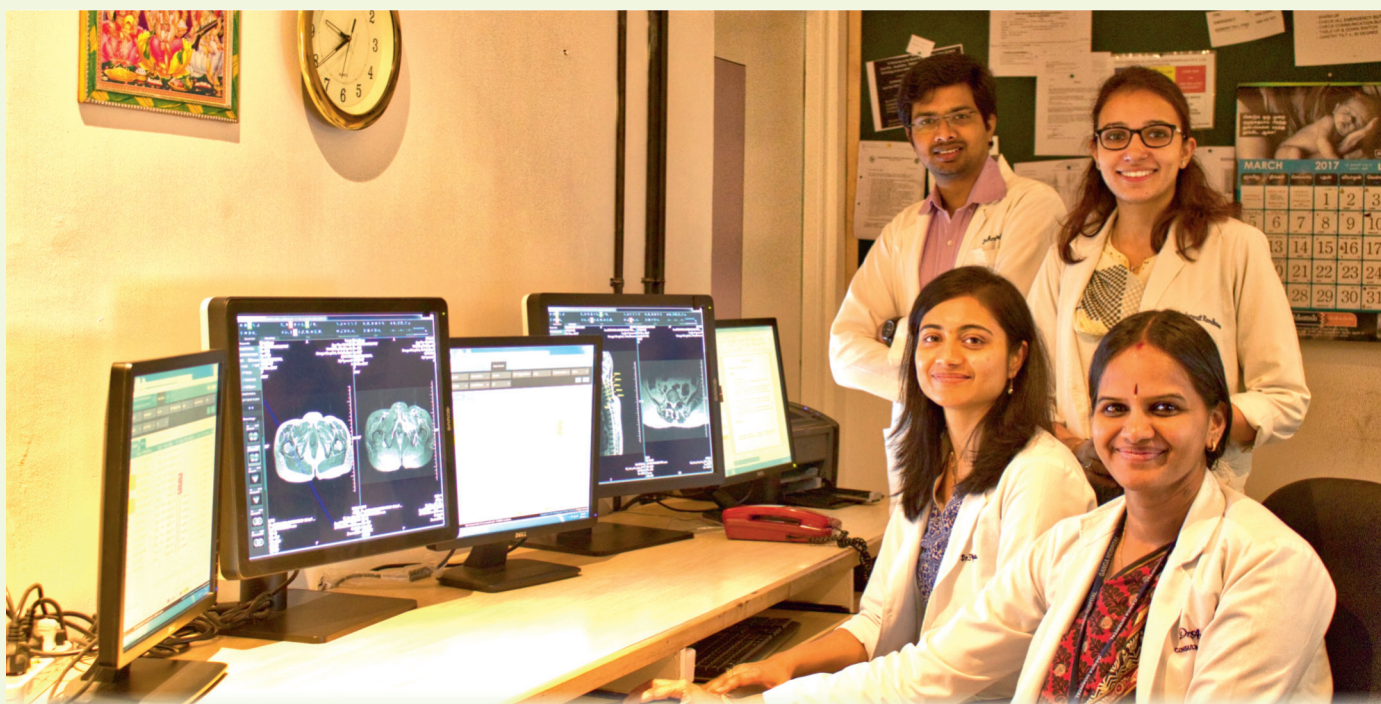
- 2013: Dr S Ganapathy, Canada
- 2014: Dr Vincent Chan, Canada
- 2015: Dr Manoj Karmakar, Hongkong
- 2016: Dr Prithivi Raj, USA
- 2017: Dr Sanjay Sinha, USA
- 2018: Dr Philip Mcaire, Vietnam
- 2019: Dr William Harroop Griffiths, UK

Ganga Hospital Dr V Ravindra Bhat Oration was established in the year 2015 and every year during the Annual Ganga Anaesthesia Refresher Course this Oration would be delivered. The distinguished Orators so far are as follows:

- 2015: Dr Kunal Sarkar, Past President of Association of Cardiothoracic Surgeons of India, Kolkatta
- 2016: Shri Mahtria Ra, Infinethism, Chennai
- 2017: Dr BK Krishnaraj Vanavarayar, Chairman, Bharathiya Vidya Bhavan, Coimbatore Kendra
- 2018: DR Bhavani S Kodali, Associate Professor of Anaesthesia, Harvard Medical School, USA,

*To live in the hearts of those who love you is never to die...*

## Department of Radiology



Sitting (L to R) : Dr. B T Pushpa, Dr. Anupama M. Standing (L to R) : Dr. Muhil K, Dr. Shubreet Randhawa Sidhu

The Department of Radiology is equipped with state of art equipments, which are the most sophisticated and technologically advanced available for medical imaging. The department provides “round the clock” services with a wide range of investigations – X-ray, Ultrasound, CT and MRI. It is a very busy department with a quick turn round time and approximately 400 X-rays, 35 CT and MRI scans are performed everyday.

The Department has two full time consultants, one registrar and two fellows running the Department. The unit is highly specialised in Musculoskeletal Imaging and has a Fellowship programme in Musculoskeletal Imaging which is accredited by the Tamilnadu Dr MGR Medical University. The radiologists work closely with the clinicians which eases the decision making process for the patient. The unit is also actively involved in the research activities of the hospital which helps to bring novel concepts in the field of Musculoskeletal Radiology.

Annual Statistics						
Year	2013	2014	2015	2016	2017	2018
MRI	6154	6520	7251	8477	8613	8780
CT	5421	6534	7022	7621	8266	8505
USG	2513	4692	2967	7122	3869	3702
X-ray	114384	101396	118599	121974	113530	112985



### Tamilnadu Dr MGR Medical University - Fellowship

Fellowship in Clinical Musculoskeletal (MSK) Radiology was started in July 2016, for Radiologists aspiring to sub-specialize in MSK radiology. The course offers adequate exposure, free reporting opportunity of high volume radiological investigations. It also provides hands on experience in joint injections, arthrograms, selective nerve root block, image guided biopsies and vertebroplasty.

#### 2016 – 2017 Fellows



Dr. Muhil K



Dr. Shubreet RS

#### 2018 – 2019 Fellows



Dr. Raghu Teja S



Dr. Kavya M

#### 2019 – 2020 Fellows



Dr. R Ravivarma



Dr. Liter Nguri





The Radiology department is well equipped with high-end equipments in all the modalities for both diagnostic and therapeutic purposes. The unit serves as one of the centers specialised in Musculoskeletal Imaging providing high quality diagnostic and interventional services to the patients.

### List of Diagnostic Equipments:

#### MRI: 2

- Siemens Lumina 3T MRI
- Siemens Magnetom Symphony 1.5 Tesla MRI

#### CT Scan: 2

- Siemens MDCT (Somatom 128 slice)
- Siemens Multi-Slice CT (Somatom Emotion)

#### Ultrasound Machines: 4

- Esoate (Mylab 5) - 1
- Philips Affinity 70 - 1
- Siemens Acuson 500 - 1
- Wipro GE Logiq S7 - 1

#### X-Ray Machines: 14

- Siemens Digital X-Ray - 7
- Digital X-Ray - 4
- Siemens Mobile X-Ray - 3

Wipro GE DEXA Scan - 1

OPG (Myray) Hyperion - 1

Hologic 3D Digital Mammogram - 1

### List of Therapeutic Equipments:

#### CT scan:

AIRO - intra-operative CT navigation - 1

#### Image Intensifiers (C - Arm) - 10

Siemens - 9

GE - 1

#### Ultra-sound machines - 9

(for Image guided procedures)

Sonosite - 7

Mindray - 1



*Intra-operative  
AIRO CT Navigation  
for Safe Spine Surgery*



**KICK**  
*Computer Navigation  
for Perfection in Joint  
Replacement Surgery*



## *Clinical Work*

*‘We Treat, but God Heals’*



**Wherever the art of medicine is loved, there is also a love of humanity**  
- Hippocrates

With more than 200,000 new out-patients and 20,000 major surgeries every year, the unit stands as a leader in the field of orthopaedic surgery in this part of the world. Nearly 60 major orthopaedic surgeries are performed every day with a similar number in Plastic and Hand surgery department. High quality trauma care is ensured by a healthy symbiosis and collaboration between the orthopaedic, plastic, anaesthetic, neuro and facio-maxillary surgery departments. The clinical work is periodically audited to make sure that high standards are maintained at all stages of treatment.

The high clinical load is well supported by excellent infrastructure facilities with 480 beds, 20 operating theatres, state-of-the art radiology department with in-house MRI and CT scan facilities. The operating theatres have AIRO CT guided computer navigation surgery platform, sophisticated C-arms, high end operative microscopes and state-of-the-art operative equipments all of which help to ensure the best possible results to the patients. Excellent recovery of patients is aided by well equipped department of physiotherapy and rehabilitation.

#### Out-Patient Registrations

2014	2015	2016	2017	2018
1,89,529	2,05,625	2,21,107	2,49,738	2,00,210

#### Emergency Casualty Attendance

2014	2015	2016	2017	2018
19094	20494	18865	20540	20904

#### Major Orthopaedic Surgeries

2014	2015	2016	2017	2018
16457	16182	16709	16450	16855

#### Orthopaedic Physiotherapy Patients

2014	2015	2016	2017	2018
44,096	44,478	47,854	49,445	54,149



# Trauma Surgery



## Trauma Surgery Setting High Standards

- Polytrauma team to enable optimal care of critically injured patients with systemic injuries and multiple fractures
- State-of-the-art Trauma Intensive Care Unit
- Round the clock trauma and emergency services
- Dedicated and experienced team of trauma surgeons
- On arrival anaesthesia ("nerve blocks") to provide immediate pain relief
- Thorough preoperative planning and a definitive treatment plan for all complex fractures
- In-house availability of supportive services like Radiology, Neurosurgery, Blood bank & Bone bank



*"It's all about  
saving lives.."*





Sitting (L to R) : Dr.Velmurugesan P, Dr.Mohammed Zackariya, Dr.Ramesh Perumal, Dr.S.Rajasekaran, Dr.J.Dheenadhayalan, Dr.K.Venkatadass, Dr.A.Devendra, Dr.Arunkamal C H  
 Standing 1st Row (L to R) : Dr.Uddhav Shelke, Dr.Ramesh Mada, Dr.Gupta Nishith, Dr.Sriresh Ravi, Dr.BRW. Armstrong, Dr.Sivakumar S.P., Dr.S.Muthukumar, Dr.Girinivasan, Dr.Harendranatha Singh  
 Standing 2nd Row (L to R) : Dr.Sudipta Kumar Patra, Dr.Akash Hostla, Dr.Shanmukha Babu, Dr.Durgaprasad, Dr.Naveen B, Dr.Rajkumar Rangabashiyam, Dr.Prashanth Shibu

The hospital has a state of the art orthopaedic trauma unit catering to a huge population of the western zone of Tamilnadu, adjoining states and also complex trauma are referred from remote frontiers of India and other neighboring countries like Bangladesh, Nepal, Maldives etc. The trauma team is headed by Dr. J. Dheenadhayalan, four Consultants: Dr. Venkatadass K, Dr. Ramesh Perumal, Dr Devendra Agraharam and Dr. Arunkamal and two Associate trauma consultants : Dr Mohammed Zackariya, Dr. Velmurugesan P, 11 registrars, 6 fellows and 10 post graduate students, who provide round-the-clock trauma and emergency cover.

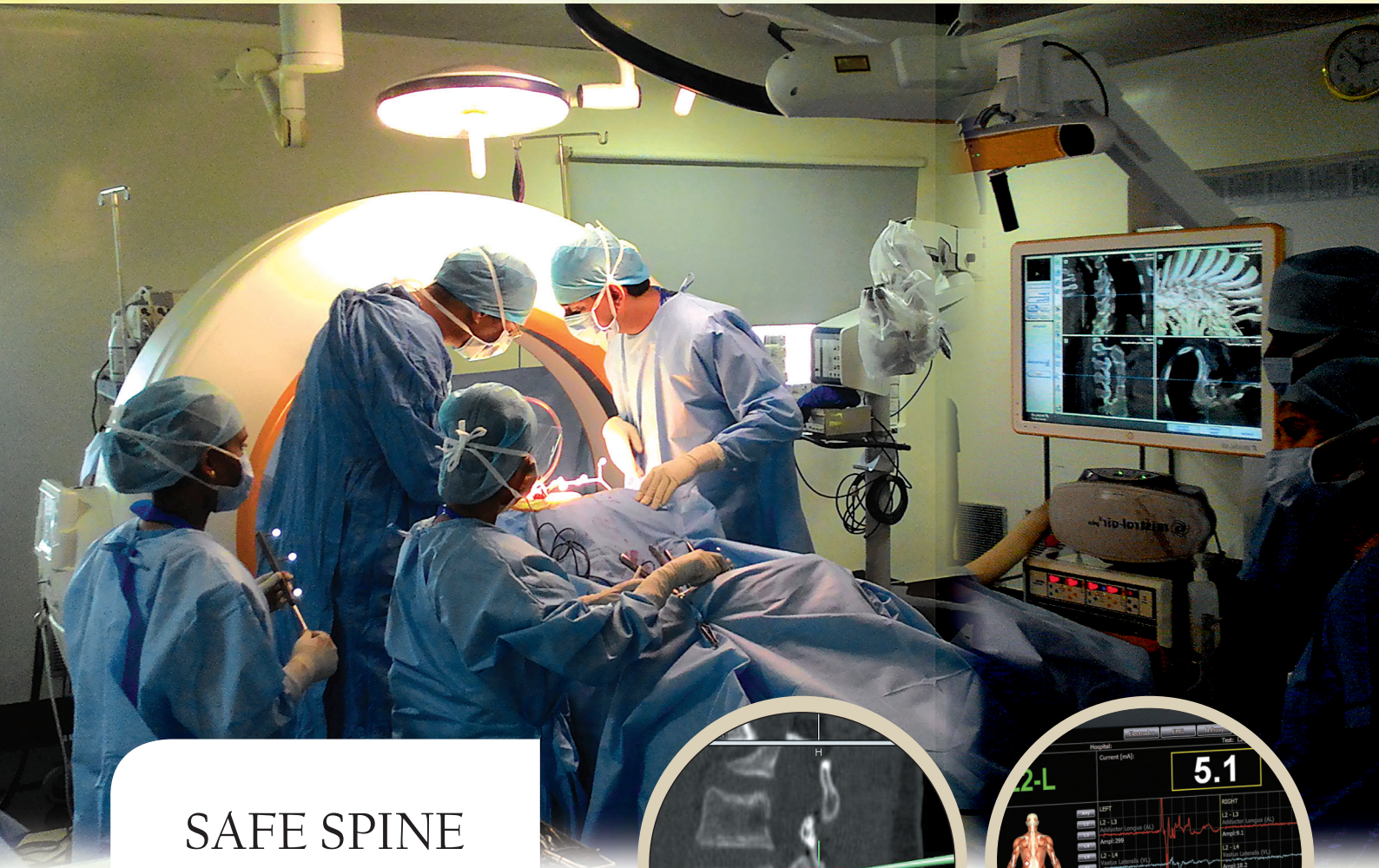
Year	2015	2016	2017	2018
Acetabular fractures	95	112	144	108
Pelvis fractures	93	66	39	21
Hip fractures	441	424	422	401
Femur fractures - nailing	1180	1404	1433	1489
Femur fractures - plating	436	393	348	378
External fixator application	864	913	884	900
Knee joint fractures	303	187	147	166
Tibia fractures - nailing	717	876	751	843
Tibia fractures - plating	649	697	676	758
Ankle joint fractures	567	651	403	679
Foot injuries	24	55	289	93
Miscellaneous procedures	2274	1652	2178	1590
<b>Total</b>	<b>7643</b>	<b>7430</b>	<b>7714</b>	<b>7426</b>

The unit has 5 dedicated operation theatres for trauma surgeries. Additionally 3 operation theaters are available for emergency surgeries and open injury management. The 24 x 7 availability of trauma anaesthetist, plastic surgery consultant and orthopaedic consultant enables the unit to provide resuscitation and appropriate management for all major injuries at any time of the day. The consultant level input right at the arrival of the patient makes a huge difference in decision making and ensures the right management for these complex injuries. Many lives are saved during the “golden hour” after the accident by expert resuscitation and early damage control surgical care.

Academic trauma meetings are conducted three times a week and all trauma cases operated are discussed in an open forum to provide the best possible care for patients. For complex fractures, pre-operative treatment plan is formulated during trauma meetings.

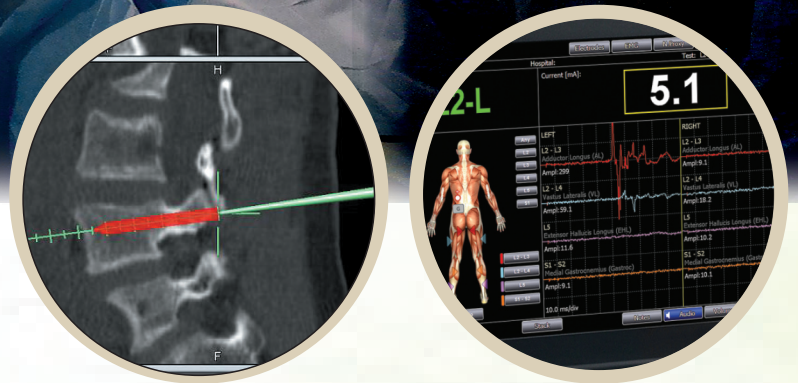


# Spine Surgery



## SAFE SPINE SURGERY – A REALITY

- Ganga hospital is the first unit in the Asia Pacific region to install the BrainLab CT AIRO navigation services for computer aided spine surgery. This ensures safety and precision.
- Intra-operative neuromonitoring enables performance of complex spinal cord surgery without risking injury to the spinal cord.
- Cell Saver machines enable long and complex surgeries maintaining patients' safety.
- The availability of the latest spinal implants allow safety and precision in surgery.
- High resolution 1.5 Tesla MRI scanner, Siemens Symphony CT scanner and digital radiographs provide the best imaging support to accurately diagnose diseases.



*"You are only as  
strong as  
your back is"*





1st Row (L to R) : Dr.Rishi M. Kanna, Dr.S.Rajasekaran, Dr.Ajoy Prasad Shetty

2nd Row(L to R) : Dr.Sri Vijayanand, Dr.Dilip Chand Raja, Dr.Vibhukrishnan

3rd Row(L to R) : Dr.Sridhar Jakkepally, Dr.Chandan, Dr.Amit Kumar, Dr.Naresh Kumar Eamani,Dr.Neerav Anand Singh, Dr.Jyotheeswara Reddy, Dr.Swapnil Hajare

Over the last 25 years, the Spine Surgery unit of Ganga has provided comprehensive services in alleviating the pain and improving the functional ability of patients. The unit is one of the largest tertiary care referral centres in India and so far, more than 12000 spine surgeries have been performed.

The unit is headed by Prof S Rajasekaran, and comprises of two Consultants Dr Ajoy Prasad Shetty and Dr Rishi M Kanna. The clinical team includes eleven Spine Fellows, ably supported by three physician assistants and spinal physiotherapists to provide specialised care to all patients with spinal pathologies.

Year	2015	2016	2017	2018
Lumbar microdiscectomy	435	291	373	361
Lumbarmicrodecompression	196	212	201	195
Transforaminal Lumbar Fusion	464	564	499	473
Thoracic decompression, fusion	6	39	31	68
Spinal infections – surgery	114	110	88	74
Anterior cervical microsurgery	244	235	233	341
Posterior cervical decompression	149	179	170	188
Spinal fractures – surgery	316	238	305	269
Percutaneous biopsy	93	78	87	74
Scoliosis/kyphosis surgeries	168	199	193	166
Spinal cord surgeries	31	28	12	33
Tumor surgeries	55	23	34	17
Vertebroplasty/ kyphoplasty	8	26	21	38
Spinal injections	234	348	350	404
Miscellaneous	108	92	132	164
<b>Total</b>	<b>2621</b>	<b>2662</b>	<b>2729</b>	<b>2865</b>

On the clinical side, the unit aims to provide safe spine surgery through expertise and experience. Bolstered by periodic technological advancements, the unit currently has one Intra-operative computer navigation system, two 3D navigation image intensifiers, intra-operative spinal cord monitoring systems and advanced cell saver technology, the only centre in the country to have all under one roof. The unit is well known internationally for its path breaking research works in the field of disc biology. It has been the proud recipient of many international awards such as ISSLS award in 2004, 2010, 2012 and 2016, EuroSpine Open Paper Award in 2008, Sofamer Danek award in 1996 and 2002, Silver Jubilee Research Award in 2004, and ASSI Research Awards from 2000-2014. The unit has also more than 200 journal publications in spine surgery and many chapters in international textbooks.

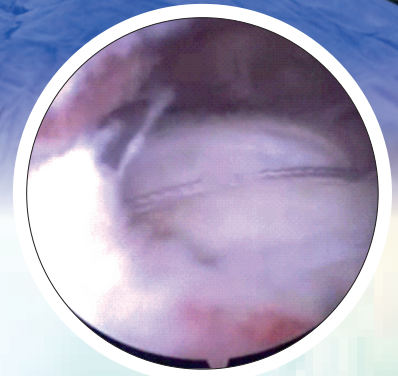
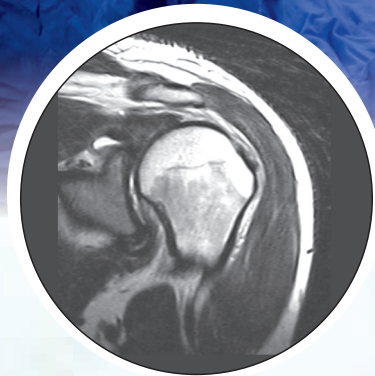


# Arthroscopy and Sports Medicine



## KEY HOLE SURGERIES - HIGHLIGHTS

- Competent Arthroscopic surgical team with more than 15 years experience.
- Two Fully furnished operation theatre with a dedicated team of surgeons, nurses, and anesthetists.
- State of the art Advanced arthroscopic equipment.
- Specialized Musculoskeletal radiologists and physiotherapists to ensure the best outcomes for the patients.
- Key hole surgeries are performed for knee, shoulder, ankle, hip and wrist joints.



*Key Hole  
Surgery  
.....Where Big is  
Achieved through  
Small..*



Left to Right Dr.Terrence Derryl, Dr.S.Rajasekaran, Dr.Sundararajan S.R.  
1st Row : Left to right : Dr.Azeem Jabar, Dr.Harsha Vardhan Goud, Dr.Ramakanth

The Arthroscopy and sports medicine unit of Ganga hospital is headed by **Dr. S R Sundararajan**. The unit is efficient in performing several complex surgeries of knee, shoulder, hip, ankle, wrist and elbow joint. Our centre has an intake of yearly one FNB (national board of examinations) and two Tamilnadu Dr MGR University Post doctoral fellow students. It is one of the two centres in India to have FNB course in sports medicine. The unit has several research publications in national and international indexed journals. The unit recently won the best publication award at the National Arthroscopy Association meeting.

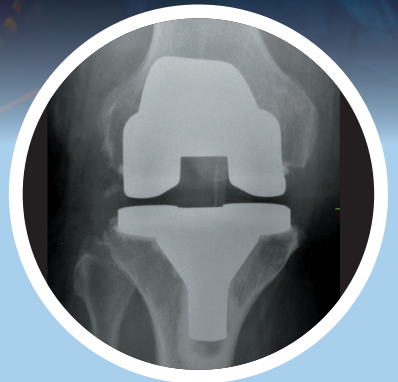
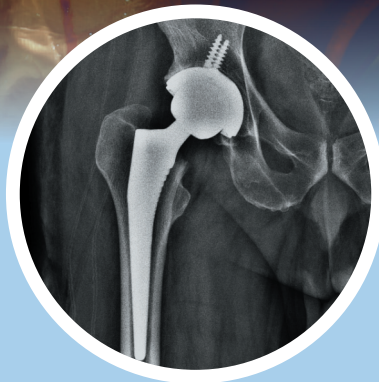
Year	2015	2016	2017	2018
ACL reconstruction/ fixation	246	393	624	648
PCL reconstruction/ fixation	31	22	42	39
Multi-ligament reconstruction	13	21	38	66
Meniscal repair or removal	507	178	246	162
Cartilage surgeries	-	9	26	27
Patellar instability	10	2	5	14
Shoulder Arthroscopy	104	204	161	247
Other joints (ankle, elbow, hip)	3	4	5	9
Miscellaneous	3	26	59	26
Total	917	1092	1206	1238

The Unit also conducts international and national level meetings in Sports Medicine and Arthroscopy & Training Courses and Workshops for Physiotherapists. We have three well-equipped operation theatres with experienced theatre staff. All procedures are performed based on current clinical evidence and implants used are of best quality available on par with international standards at a very affordable cost. Apart from good surgical results, post-operative rehabilitation is provided through experienced physiotherapists to get patients back to normal activities. Comprehensive post operative rehabilitation for all Sports and Ligament injuries are guided by an exclusive team comprising of 19 trained physio-therapists.



## JOINTS FOR LIFE

- Ultra clean, spacious operating rooms, coupled with strict aseptic techniques and highly trained professionals enable results on par with international standards.
- Computer navigated joint replacement surgery is routinely performed for both difficult primary and revision surgeries to obtain perfect alignment consistently.
- Specialized anesthesia techniques ("nerve blocks") ensure that the post-operative periods are less painful and comfortable for elderly patients and enable early mobilization
- Digital alignment Xrays for specific planning & templating for the most suitable sized artificial joints for each patient
- Latest and time tested high performance bearing implants are used



*"Life is Mobility  
and  
Mobility is Life"*



Standing 1st row L-R: Dr. N Rajkumar, Dr. S Rajasekaran, Dr. P Dhanasekara Raja

Standing 2nd row L-R: Dr. Raja Bhaskar K, Dr. Mohammed Bhasheer, Dr. Chanthan, Dr. Soundarajan, Dr. Shyam Sasank Kasa, Dr. Chaitanya Kishore

Arthritis of the joints is rising in incidence thanks to our longevity. Arthritis affects the people from having normal mobility. The Joint replacement (Arthroplasty) unit of Ganga hospital helps in alleviating the pain and disability due to advanced arthritis through joint replacement surgeries. The excellent results afforded to the patients have made it possible for us to provide 'Ganga Joint for Life' Assurance Program - an insurance coverage for our joint replacement patients.

The Unit has three consultants Prof S Rajasekaran, Dr P Dhanasekara Raja and Dr N Rajkumar and six fellows, dedicated physician assistants and physiotherapists. The unit also collaborates with three other major South Indian Arthroplasty centres (South Indian Arthroplasty Association) to facilitate exchange of knowledge, periodic academic and educational purposes.

The unit has grown rapidly and has performed 1716 surgeries 2018. The unit has adopted most recent advances to give the best functional results to the patients. Joints with newer bearing surfaces like ceramic on ceramic, modular hips with larger heads, augments for acetabular defects, rotating platforms for knee, metaphyseal sleeves for bone defects are all performed routinely in appropriate patients to achieve the best functional results in both primary joint replacements and revision arthroplasty.

Our extensive experience enables us to treat complex arthritic conditions with safety and low infection rates. This facilitates the patients to heal and recover faster with fewer post-operative complications.

Year	2014	2015	2016	2017	2018
Primary TKR	1130	1071	1205	1192	1309
Revision TKR	67	18	27	116	81
Primary THR	255	261	294	236	300
Revision THR	35	19	52	73	26
Total	1487	1369	1578	1617	1716



A 75 year old gentleman with severe osteoarthritis of both knee joints treated by total knee replacement.

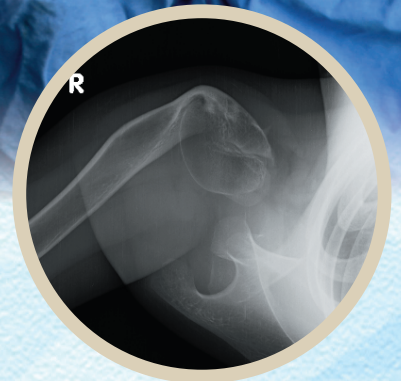


# Shoulder and Upper Limb



## SHOULDER AND UPPER LIMB

- Shoulder and upper limb clinics operate twice a week in collaboration with the plastic surgery and hand department, especially in the management of brachial plexus injuries.
- Treatment is focused on conservative measures and restorative techniques through Minimally invasive surgeries, including arthroscopy.
- Surgical options are comprehensive and matched, based on patient needs.
- Joint replacement is employed selectively, when required.
- All surgeries and outcomes are analyzed to improve quality of care and develop new techniques for future applications.



*"Our Shoulders  
are unique due  
to its mobility  
and stability"*





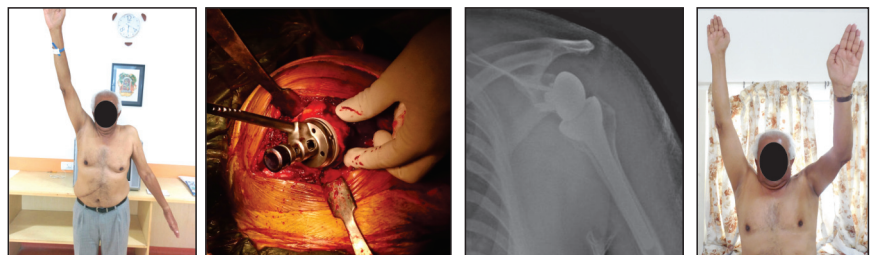
*Sitting Left to Right: Dr. Arun Kamal, Dr. Ramesh, Dr. Dheenadhayalan, Prof. Rajasekaran, Dr. Devendra, Dr. Venkatadass along with the trauma team.*

The unit led by Dr. Dheenadhayalan, manages all shoulder pathologies including trauma and arthritis. The team includes 3 associate consultants and two fellows. The entire team focuses on adhering strictly to principles of evidence-based medicine and offers their patients the most current, proven techniques of management in shoulder and limb reconstruction.

Advanced surgical techniques are employed to improve comfort and outcome of the patients. Of the 600 and more shoulder surgeries done annually, Shoulder arthroscopy, open repairs, shoulder joint replacements-including reverse shoulder arthroplasty are routinely performed in improving patient's quality of life. The unit is ably backed by well equipped radiology department and a dedicated physiotherapy section with advanced pre and post operative rehabilitation protocols.

Diagnostic and therapeutic arthroscopic procedures for the shoulder are performed by the Sports Medicine team headed by Dr. SR Sundararajan.

Year	2015	2016	2017	2018
Elbow replacement	2	18	5	5
Shoulder replacement	7	18	14	4
Shoulder reconstruction surgeries	137	105	66	92
Fractures of shoulder joint	254	318	307	291
Shoulder injections/manipulation	206	106	79	100
Humerus fractures	316	353	417	370
Elbow joint fractures	233	203	178	330
Forearm fractures	687	1080	563	542
Wrist fractures	503	497	462	866
Shoulder Arthroscopy	104	204	161	247
<b>Total</b>	<b>2449</b>	<b>2902</b>	<b>2252</b>	<b>2847</b>



*A 77 year old patient was unable to lift his arm due to massive cuff tear and subsequent arthritis. . Within days of undergoing Total Reverse shoulder arthroplasty, the patient is able to reach near normal range of overhead movements.*





## CHILDREN'S ORTHOPAEDICS

- Trained pediatric orthopaedic specialist to provide optimal care to children.
- Weekly group meetings and scientific deliberations are conducted to facilitate the most appropriate care.
- Exclusive club foot clinics to provide Ponseti method of correction for clubfoot.
- 24 x 7 pediatric trauma care services enabling appropriate treatment for each child with trauma.
- Special clinics for children with neuromuscular disorders and disability such as cerebral palsy, muscle dystrophy and poliomyelitis.

*"On all this world,  
there is nothing more  
beautiful than a  
happy child"*  
-Frank Baum



1st Row (L to R): Dr.K.Venkatadass, Dr.S.Rajasekaran

2st Row (L to R): Left to Right : Dr.Sangeet Gangadharan, Dr.Sai Suchitra, , Dr.Durgaprasad, Dr.Muthukumar

The Paediatric Orthopaedic division of Orthopaedic surgery provides dedicated care to the musculoskeletal problems of children. Dr Venkatadass K is the Lead Consultant of the unit and along with a team of doctors, physiotherapists and physician assistants work together to provide optimal care to all the children admitted in the unit. A child is not a 'small adult'; the tender musculoskeletal system behaves different from that of an adult. Moreover, they have growth potential which needs to be preserved for them to become mature adults. All these make children so special and thus the need for trained specialists to make sure that they get the best possible care.

Year	2015	2016	2017	2018
Pediatric trauma	624	723	525	530
CTEV Tenotomy	52	50	19	31
CTEV Surgery	41	37	43	36
Cerebral Palsy	89	68	72	65
Hip Preservation surgery	60	57	31	86
Limb deformities	126	116	47	127
Surgery osteomyelitis	23	46	12	32
Tumors	45	46	19	45
Miscellaneous	144	106	226	157
<b>TOTAL</b>	<b>1204</b>	<b>1249</b>	<b>994</b>	<b>1109</b>

Any musculoskeletal problem, be it a congenital deformity (birth defect), a fracture involving the growth plate or an infection can cause alteration in growth and deformity. Timely identification of the problem and right intervention will go a long way in preventing long-term disability. Specialised services of paediatric orthopaedics include pediatric trauma care and hip preservation. Hip Preservation Surgery is a specialty developed to preserve the native hip to its maximum function and postpone arthritis. Femoroacetabular impingement (FAI) and Hip Dysplasia are two leading causes of early arthritis and there are advanced surgeries available now to restore the normal anatomy and biomechanics of hip and thereby preserve its function.



# Academics



## ACADEMICS HIGH STANDARDS

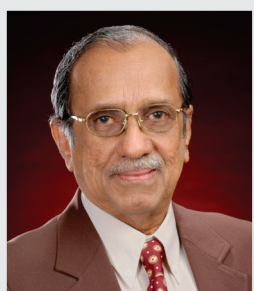
- Recognized for orthopaedic post graduate training by the National Board since 1997.
- First in the country for super speciality training in spine surgery, trauma, sports medicine.
- Recognised for PhD in Orthopaedic surgery under two universities (Madras University and Tamilnadu Dr MGR Medical University).
- Fellowships in all sub-specialities of orthopaedics (Trauma, sports medicine, spine surgery, pediatric orthopaedics, arthroplasty).
- Robust training programme with daily morning clinical case discussions, case reviews, audits and weekly general clinics.



Dr Joydeep Mallik receiving the  
Prof M V Daniel Gold Medal

*"Education is not the  
learning of facts,  
but the training of the  
mind to think"  
- Albert Einstein*





Prof M V Daniel  
Academic Director



Prof S Rajasekaran  
Clinical Director



Dr Ajoy P Shetty  
DNB Co-ordinator



Dr Venkatadass K  
DNB Co-ordinator

### DNB (Diploma in National Board)

#### DNB 2015 – 2018 (Primary)

Dr. Shanmukha Babu  
Dr. Manas Maji  
Dr. Parsana Chirag Jagdishbai  
Dr. Sudipta Kumar Patra

#### DNB 2016 – 2019 (Primary)

Dr. Harendranath Singh  
Dr. Sathyamoorthy  
Dr. Abhishek Gupta  
Dr. Anil Kumar Sharada  
Dr. Ranga Chetna  
Dr. Yogin Patel

#### DNB 2017 – 2020 (Primary)

Dr. A. Imran  
Dr. Balagurunathan D  
Dr. Ankit Kumar Garg  
Dr. Dharanikumar P.S.  
Dr. Kamal Krishna Parida  
Dr. Ashok Sri Perambuduri

#### DNB 2018 – 2021 (Primary)

Dr. Harsh Jalan  
Dr. Chintan Bhagchandani  
Dr. Dhanil Charly  
Dr. Rahul Sutariya  
Dr. Jomon De Joseph

#### DNB 2015 – 2017 (Secondary)

Dr. S. Arunraj  
Dr. Mohammed Sameer  
Dr. Abhishek M  
Dr. Vimalkumar K.H.

#### DNB 2016 – 2018 (Secondary)

Dr. Jishanth B James  
Dr. Aravindh S  
Dr. Arun D  
Dr. Velmurugan T

#### DNB 2017 – 2019 (Secondary)

Dr. Ashish Anand  
Dr. Naveen B  
Dr. Parrot Prasannan L  
Dr. Felix Emerson M.J

#### DNB 2018 – 2020 (Secondary)

Dr. Inamdar Anupam Pradip  
Dr. Rathika K  
Dr. Deepak A  
Dr. Arul Prakash N  
Dr. Karthikeyan  
Dr. Sarfaraz

The unit is very popular for its academic excellence and is a sought after center for training in orthopaedics and its sub-specialities. Teaching and training young surgeons has been a tradition of the unit. The academic activities are supervised by the Academic Director Prof M V Daniel, and guided by Dr S Rajasekaran. Dr Ajoy Prasad Shetty and Dr Venkatadass are the course co-ordinators for the academic training program. More than 200 orthopaedic surgeons have been trained from the institution so far. The unit is also supported by a 24 hours open library that provides an excellent ambience for studying, infrastructure for presentations, and a wide range of books to read. Contributions of books from Prof TK Shanmugasundaram, Chennai and Prof Chitranjan Ranawat, in addition to basic and advanced books on orthopaedics provide the students an excellent opportunity to learn. The students also have access to more than 10 online orthopaedic journals for constantly updating the changes in the field of orthopaedics.

### Courses

#### National Board of Examinations, New Delhi

- DNB Orthopaedic Surgery
- FNB Spine Surgery
- FNB Trauma Surgery
- FNB Sports Medicine

#### The Tamil Nadu Dr MGR Medical University, Chennai.

- Ph.D in Orthopaedic Surgery
- Fellowship in Arthroplasty
- Fellowship in Spine Surgery
- Fellowship in Limb Reconstruction Surgery
- Fellowship in Arthroscopy
- Fellowship in Pediatric Orthopaedics
- Fellowship in Regional Anaesthesia
- Fellowship in Musculoskeletal Radiology

#### University of Madras, Chennai

- Ph.D in Biotechnology and Biochemistry

#### Ganga Institute of Health Sciences

- Diploma in Nursing & Midwifery
- B.Sc., Nursing
- Post Basic B.Sc., Nursing
- B.Sc., Physician Assistant (Emergency and Trauma Management)
- B.Sc., Operation Theatre Technology
- B.Sc., Critical Care Technology
- B.Sc., Accident & Emergency Care Technology
- B.Sc., Radiology & Imaging Technology





## Fellows

### Dr. MGR University Fellows 2015

Dr. Vinothkumar (Spine)  
Dr. Younis Kamal (Spine)  
Dr. Raviraj Tandry (Limb Reconstructive Surgery)  
Dr. Azhar Lakhani (Limb Reconstructive Surgery)  
Dr. RufusVasanth Raj (Joint Replacement)  
Dr. Varun Krishna (Joint Replacement)  
Dr. Jayavardhan (Arthroscopy)  
Dr. Nagaraja H.S. (Arthroscopy)

### SIAA (6 Months Fellowship)

Dr. Chunchesh  
Dr. Soundararajan

### Dr. MGR University Fellows 2016

Dr. Sachlang Debbarma (Spine)  
Dr. Sivaraj (Spine)  
Dr. Nilesh Hirekhan (Arthroscopy)  
Dr. Abdul Azeem (Arthroscopy)  
Dr. Melvin George (Joint Replacement)  
Dr. Kanav Padha (Joint Replacement)  
Dr. Prashanth Chalasani (Limb Reconstructive Surgery)  
Dr. Saikrishna (Paediatrics Orthopaedics)

### SIAA (6 Months Fellowship)

Dr. Anjan K Venkatraman  
Dr. Nandakumar Natarajan

### Dr. MGR University Fellows 2017

Dr. Keerthivasan (Spine)  
Dr. Vyom Sharma (Spine)  
Dr. Sumit Chawla (Joint Replacement)  
Dr. Subhranshu Nayak (Joint Replacement)  
Dr. Blessin Sebastian Cherian (Arthroscopy)  
Dr. AbhishekGumaste (Arthroscopy)  
Dr. Aniruddha SinhaSarkar (Limb Reconstructive surgery)  
Dr. Udit Kumar Biswal (Limb Reconstructive surgery)  
Dr. Deny Mathew (PaediatricsOrthopaedics)

### SIAA (6 Months Fellowship)

Dr. Manoj Tej  
Dr. Mithun Manohar

### Dr. MGR University Fellows 2018

Dr. Sridhar Jakkepally (Spine)  
Dr. Amit Kumar (Spine)  
Dr. G. SaiSuchitra (Paediatrics)  
Dr. SyedGhouse Ahmed Peer (Limb Reconstructive Surgery)  
Dr. NihalRai (Limb Reconstructive surgery)  
Dr. Antony Roy (Arthroscopy)  
Dr. Shreerem Venkatachalam (Arthroscopy)  
Dr. Vishal Huggi (Joint Replacement)  
Dr. Nisar Ahmad Shah (Joint Replacement)  
Dr. LiterNguri (Musculoskeletal Radiology)  
Dr. Rajarama Ravivarma (Musculoskeletal Radiology)

### SIAA (6 Months Fellowship)

Dr. Vignesh Karthik  
Dr. Mohammed Sagy

### Ganga - Trauma Fellows 2015

Dr. Kashik  
Dr. Anoop Ramakrishna  
Dr. Kartheek T.S.V.  
Dr. Dinesh

### Ganga - Arthroplasty Fellows 2015

Dr. Ramakrishna  
Dr. A. R. Pradeep

### ASSI Spine Fellowship 2015

Dr. Ajith Kumar

### Ganga - Trauma Fellows 2016

Dr. Vijaya Shankar  
Dr. Ganesh Kumar  
Dr. Rakeshkiran Yalavarthi

### Ganga - Arthroplasty Fellows 2016

Dr. Mahendra Kumar Gupta

### ASSI Spine Fellowship 2016

Dr. Srivijayanand

### Ganga - Trauma Fellows 2017

Dr. Abhishek Mannem

### Ganga - Arthroplasty Fellows 2017

Dr. Mahendra Kumar Gupta

### ASSI Spine Fellowship 2017

Dr. Rajdeep Bagga

### Ganga - Trauma Fellows 2018

Dr. Shanmukha Babu  
Dr. Sudiptakumar Patra

### Ganga - Arthroplasty Fellows 2018

Dr. Raja Anurag Gautam  
Dr. Pratik Agrawal

### ASSI Spine Fellowship 2018



### DNB (Primary)

#### 2015 – 2018 (Primary)

Dr. Shanmukha Babu  
Dr. Manas Maji  
Dr. Parsana Chirag Jagdishbai  
Dr. Sudipta Kumar Patra

#### 2016 – 2019 (Primary)

Dr. Harendranath Singh  
Dr. Sathyamoorthy  
Dr. Abhishek Gupta  
Dr. Anil Kumar Sharada  
Dr. Ranga Chetna  
Dr. Yogin Patel

#### 2017 – 2020 (Primary)

Dr. A. Imran  
Dr. Balagurunathan D  
Dr. Ankit Kumar Garg  
Dr. Dharanikumar P.S.  
Dr. Kamal Krishna Parida  
Dr. Ashok Sri Perambuduri

#### 2018 – 2021 (Primary)

Dr. HarshJalan  
Dr. ChintanBhagchandani  
Dr. DhanilCharly  
Dr. RahulSutariya  
Dr. Jomon De Joseph  
Dr. MahshookIrfan

### DNB (Secondary)

#### 2015 – 2017 (Secondary)

Dr. S. Arunraj  
Dr. Mohammed Sameer  
Dr. Abhishek M  
Dr. Vimalkumar K.H.

#### 2016 – 2018 (Secondary)

Dr. Jishanth B James  
Dr. Aravindh S  
Dr. Arun D  
Dr. Velmurugan T

#### 2017 – 2019 (Secondary)

Dr. AshishAnand  
Dr. Naveen B  
Dr. ParrotPrasannan L  
Dr. Felix Emerson M.J

#### 2018 – 2020 (Secondary)

Dr. InamdarAnupamPradip  
Dr. Rathika K  
Dr. Deepak A  
Dr. ArulPrakash N  
Dr. Karthikeyan  
Dr. Sarfaraz



Prof Dr M V Daniel

### *Prof Dr M V Daniel Gold Medal*

Our Academic Director Prof Dr M V Daniel has always been passionate and particular about clinical commitment in the trainees. To foster and promote patient care and compassion, a Gold Medal has been instituted in his name from ..... Every year all the consultants select and vote for the best post graduate who had shown excellence in clinical care and commitment for whom the medal is awarded.

The year 2009 - Dr. Devendra A  
The year 2010 - Dr. Srikanth K P  
The year 2011 - Dr. Ravichandra V  
The year 2012 - Dr Ram Mohan Rao  
The year 2013 - Dr. Sudhir G  
The year 2014 - Dr. Joydeep Mallik  
The year 2015 - Dr Jishanth James B  
The year 2016 - Dr Ankit Soni  
The year 2017 - Dr E Sathyamoorthy  
The year 2018 - Dr Parsana Chirag Jagdishbai



# Ganga Institute of Health Sciences

The Ganga Institute of Health Sciences was set up in the year 2006 as an educational arm of Ganga Hospital in the field of paramedical sciences and has now grown into one of the largest and most popular educational institutions in the state.



**Mrs. Rama Rajasekaran**  
Managing Trustee, GIHS

GIHS academic block is a spacious about 54,000 sq.ft structure encompassing class rooms, pre-clinical labs, library and auditorium. As GIHS swifts in its 10th incessant ascending year, it offers courses namely Diploma in Nursing, B.Sc. (N), P.B.B.Sc Nursing, Allied Health Science encompasses 7 courses namely B. Sc., Operation theatre & Anaesthesia Technology, Physician Assistant, Critical Care Technology, Accident & Emergency Care Technology, Radiography and Imaging Technology, B.Sc Medical Laboratory and M.Sc. Clinical Nutrition. The institution is featuring uniqueness in the grounds of Affordable Fees, Learner Friendly Environment, Teaching Excellence and Exposure with hands on experience and strong placement outcomes.

Apart from inculcating the highest educational standards to its students, the institution aims at an overall development by engaging them in sports, cultural and social responsible activities. The students have been enthusiastic participants of social activities like UYIR (a People's movement to improve road safety awareness); U & I program (an innovative program to educate abandoned children) and 'Kurai Ondrum Illai' (a CSR project which helps rehabilitation of disabled by offering free reconstructive surgeries). The college also celebrates Independence and Republic days with great pomp and preparation to inculcate patriotism and national feeling amongst its students.

GIHS is committed to producing competent caring and compassionate nurses and paramedical health workers who will make a positive difference in the lives of patients.



Flag off - UYIR CLUB - by Mrs Rama Rajasekaran and team

## Nursing Courses :

1. Diploma in General Nursing and Midwifery
2. B.Sc Nursing
3. Post Basic B.Sc Nursing

## Allied Health Science Courses :

1. B.Sc. Physician Assistant
2. B.Sc Operation Theatre & Anaesthesia Technology
3. B.Sc Critical Care Technology
4. B.Sc Radiology & Imaging Technology
5. B.Sc Accident & Emergency Technology
6. B.Sc Medical Laboratory Technology
7. M.Sc Clinical Nutrition

## Graduation Day Celebration





## Awards

1. Educational Excellence award by Indo Global Education Summit, Hyderabad.
2. Best Service award by Indian Red Cross Society, Tamilnadu.
3. Best Performance Award by Indian Red Cross Society.
4. Best Professional Service award by Indian Medical Association, Coimbatore.
5. Top 10 most Promising Nursing colleges for the year of 2019 at National Level by Silicone India Magazine.
6. Top 10 most Educational Institutions for the year of 2019 at Tamilnadu by Higher Education Review Magazine.
7. Best Performance award by Society of Radiographers, Coimbatore.
8. Nursing Excellence award by Kongunadu Arakattalai, Coimbatore.
9. Best Service award by Indian Red Cross Society, Coimbatore.



Fundamentals of Nursing Lab



Obstetrics and Gynecology Lab



Paediatric Lab



Anatomy Lab



Simulation Lab



Community Lab



Mental Health Nursing Lab



Computer Lab



Nutrition Lab



Library



Transport



Hostel





# Ganga Research Centre



Ganga Research Centre (GRC) was founded in 2015 as the basic science research wing of GOREF to seek solutions for musculoskeletal diseases at molecular level through OMICS approach. It has excellent infrastructure and human resource for performing the basic science component of the research through proteomics and genomics with high quality bioinformatics support.



## **Prof. Dr. S. Rajasekaran**

Principal investigator & Director ( Clinician )

## **Dr. Chitra Tangavel**

Co-Principal investigator & Research Coordinator ( Biotechnology )

## **Prof M Raveendran**

Tamil Nadu Agricultural University

## **Dr Ajoy Prasad Shetty**

Senior Consultant & Spine Surgeon ( Clinician )

## **Dr Rishi Mugesh Kanna**

Consultant & Spine Surgeon ( Clinician )

## **Dr. K. S. Sri Vijay Anand**

Senior Research Fellow ( Clinician )

## **Dr. S. Dilip Chand Raja**

Senior Research Fellow ( Clinician )

## **Ms. Sharon Miracle Nayagam**

Junior Research Fellow ( Biotechnology )

## **Ms. Monica Steffi Matchado**

Junior Research Fellow ( Bioinformatics )

## **Infrastructure**

### **Proteomics**

Proteomics Laboratory is equipped with the impedimentum necessary for sample quantification (Varioskan Lux), sample pre-fractionation device (MiniVE, BioRad), isoelectric focusing (IEF) units (Ettan™ IPGphor III, GE), Two-dimensional gel separation units (Ettan™ DALTsix, GE), SpeedVac™ Concentrator, Chemi-Doc It for imaging gels. This state-of-the-art equipment allows us to conduct and provide various proteomics analysis such as separation, identification, characterization and quantification of proteins expressed in biological samples. LC-MS/MS services are outsourced from the national DBT facilities. The Proteomics Laboratory is also equipped with various devices for downstream validation study (ELISA, Western blot and immunohistochemistry).

### **Genomics**

Our recent findings of bacterial presence and host defence response has urged us to probe deeper into the question of whether sub clinical infection by commensal organisms can be the main initiating factor for disc disease. The research centre has facilities for isolating DNA using LN2 and quantifying the DNA with Nanodrop which will be subjected to metagenomics using Nextgen Sequencing (NGS) and shot gun technology which will be outsourced.

### **Bioinformatics**

For big data analysis obtained from OMICS, the research centre is equipped with a high end server Power Edge™ R740 with Intel® Xeon® Silver 4114 2.2G, with appropriate 128GB LRDIMM memory capacity and RAM expandable up to 3TB. All open source Metagenomic softwares like QIIME, Mothur, Alignment tools(Bowtie, MetaVelvet, BWA) & Proteomics software such as Proteome Discoverer (version2.2), Cytoscape (Version 3.6.1), STRING (Version 10.5), MAXQuant allows us to apply rapid, objective and reliable statistical analyses using STATISTICA assist us in identifying molecules of interest involved in normal and altered disc biology under any given conditions.



## National Advisory Board



**Prof. K Dharmalingam**  
Director of proteomics research,  
Aravind Eye Care System, Madurai



**Prof. Raveendran Muthuraj**  
Head of Genomics and Proteomics research,  
Tamilnadu Agricultural University, Coimbatore



**Prof. Kumaravel Somasundaram**  
Head of Microbiology and  
Cell Biology research,  
Indian Institute of Science, Bangalore



**Prof. Kumarasamy Thangaraj**  
Group Leader, Centre for Cellular &  
Molecular Biology, Hyderabad



**Prof. Rajesh Malhotra**  
Professor & Head,  
Department of Orthopaedics, AIIMS, Delhi



**Dr Chellapa G**  
Director,  
Genomatics, Coimbatore

## International Advisory Board



**Prof. Kenneth Cheung**  
Chair Professor and Head, The Department of Orthopaedics  
and Traumatology, Queen Mary Hospital, Hong Kong



**Prof. Cody Bunker**  
Department of Orthopaedics, Aarhus University Hospital,  
Aarhus, Denmark



**Prof. Bjorn Rydevik**  
Department of orthopaedic  
surgery at Göteborg University and Sahlgrenska University,  
Gothenburg, Sweden

## Research Collaborations & Support



Department of Biotechnology  
Government of India  
Diffusion tensor imaging  
of the spinal cord and its  
clinical applications



Department of genomics and  
proteomics, TNAU- Coimbatore  
Molecular Biology Analysis -  
Isolation of DNA from blood  
samples and proteomic analysis  
of disc specimens



Department of Biochemistry,  
University of Delhi  
Biochemical analysis for  
apoptosis and pro-inflammatory  
cytokines in Disc Degenerative  
Disease.



Department of Biochemistry and  
Biotechnology,  
Central Leather Research Institute,  
Adyar, Chennai. Biochemical and  
collagen alterations in scoliotic  
discs subjected to abnormal  
mechanical forces.



Siemens India  
Diffusion Tensor Imaging  
studies of Spinal cord,  
Functional MRI studies and  
Disc diffusion Analysis.



The University of  
Hong Kong  
Selective Nucleotide  
Polymorphism  
analysis for genetic study



Rush University, Chicago  
Functional Element Model  
Analysis of Post Tubercular  
Deformity



Cotrel Foundation, Paris  
Role of Mechanical stress on  
the causation of disc  
degeneration - scoliotic disc  
study



AO Spine - Effectiveness and  
Safety of Batroxobin, Tranexamic  
Acid and a Combination in  
Reduction of Blood Loss in  
Lumbar Spinal Fusion Surgery.  
The role of Preemptive analgesia  
in spine surgery



Department of  
Biotechnology,  
CMC, Vellore  
Electron microscopic analysis



Department of Biotechnology  
Government of India  
Diffusion tensor imaging  
of the spinal cord and its  
clinical applications



Department of Biotechnology  
Government of India  
Diffusion tensor imaging  
of the spinal cord and its  
clinical applications



## Awards 2015-2018



### AWARDS AIMING HIGH

- Recognitions and rewards make us run faster and stronger.
- Winning awards in recognition of service to the people, meritorious academic work and original research works has been the tradition at Ganga Hospital.
- The institute has got more than 15 international awards of excellence and 100 national awards in various scientific and social forums in the last 25 years.
- During the years 2015-18, six international awards and 53 national awards were garnered including the Best Orthopaedic Hospital award 2016 by CNBC network & IMC RBNQ Performance Excellence trophy.

*Excellence is doing  
ordinary things  
extraordinarily well  
- John Gardner*





*Dr S Rajasekaran receiving the award from  
Hi Excellency, Shri Pranab Mukherjee*

### **“Hari Om Ashram Alembic Research Award “ - Dr. S. Rajasekaran**

The Hari Om Ashram Award is a premium award for the best medical research in the country and is given for an original Research work done in India that has a great impact in the practice of medicine. The award was given to Dr Rajasekaran for his research in lumbar disc biology, probing into oxygen and nutritional transport into the disc. Reduction of nutritional pathways to the disc is considered to be the most important cause for low back pain, the most serious musculoskeletal disorder in the world. Dr S Rajasekaran and his team also documented for the first time in world literature the possibility to improve nutritional transport pharmacologically by the use of calcium channel blocking drugs. This has tremendous potential for improving the health and function of the disc and to reduce the incidence of back pain.

The President of India, Shri Pranab Mukerjee in a grand function held in the Rashtrapathi Bhavan in New Delhi on 28th March, 2017 awarded the prestigious Hari Om Ashram Alembic Research Award. This is the second time that Dr S Rajasekaran and his team are getting this prestigious award.

### **“ Walter P. Blount Humanitarian Award 2015 ” - Dr. S. Rajasekaran**

The Walter Blount Award is an international humanitarian award given by the Scoliosis Research Society, USA to an individual who has provided outstanding service for those with spinal deformities, through their generous actions out of a sense of service to larger social and professional goals.

Dr S Rajasekaran received the award during the Golden Jubilee Annual Meeting held at Minnesota, USA. Dr Rajasekaran was honoured for creating a low cost high quality spine surgery model which has benefited more than 7000 poor patients. This model was created by a combination of the entire medical team operating free for underprivileged patients, development and use of low cost indigenous implants (that cost one tenth of the cost of imported implants), a heavy subsidy from hospital and techniques like low density implant fixation. This model has been appreciated by the International body as the most suited not only for developing nations but also for many advanced countries as adoption of these principles will bring the cost tremendously.



*Dr S Rajasekaran along with Dr Ajoy Prasad Shetty receiving  
the award from Prof John P Dormans, President of the  
Scoliosis Research Society, USA and  
Prof Hani H Mahidli, Chairman, Global Committee.*



## Awards 2015-2018

### *Dr S Rajasekaran Orations and Plenary Lectures 2015-2018*



#### **“Presidential Guest Lecture on - Road Safety” 63rd Annual Conference of The Indian Orthopaedic Association, Coimbatore**

Dr S Rajasekaran, Chairman of Dept of Orthopaedics & Spine Surgery delivered the prestigious "Presidential Guest Lecture" on - 'Road Safety - IOA's role in legal and social advocacy' in the 63rd Annual Conference of the Indian Orthopaedic Association which was held at Coimbatore from November 27 - December 1, 2018.



*Dr. S. Rajasekaran receiving the plaque from  
IOA president Dr Mandeep Dhillon and  
IOA Secretary Dr Atul Srivastava*



*Prof. Dr. S. Rajasekaran receiving the KREST oration  
on the 6th of March 2016 at Hyderabad*

#### **Prof. Kalkarao oration : Kakarla Subbarao Radiological Educational Sciences Trust & Imaging (KREST), 2016, Hyderabad**

Prof. S. Rajasekaran, delivered the prestigious KREST oration on 'Clinical radiology and its future. 'A clinician's perspective' at Hyderabad, on 6th March 2016. The oration was delivered in honour of Prof. Kakarla Subba Rao, a renowned radiologist from Hyderabad.

#### **“Dr. Sudhakar Shetty Memorial Oration 2016” Mangalore**

Prof. Dr. S. Rajasekaran delivered the Dr. Sudhakar Shetty Memorial Oration on Sunday, 21.02.2016 at the Mangalore Orthopaedic Course held on 20.01.2016. He was honoured by Prof. Shantaram Shetty, Prof. Sharath Rao and Dr. K. Raghuveer Adiga. This oration was started by the Canara Orthopaedic Society in fond remembrance of late Prof. M. Sudhakar Shetty who was a passionate teacher and who started the popular post-graduate teaching course named 'Mangalore Orthopaedic Course'.



*Prof. S. Rajasekaran receiving the plaque  
from Dr. K. Raghuveer Adiga.*

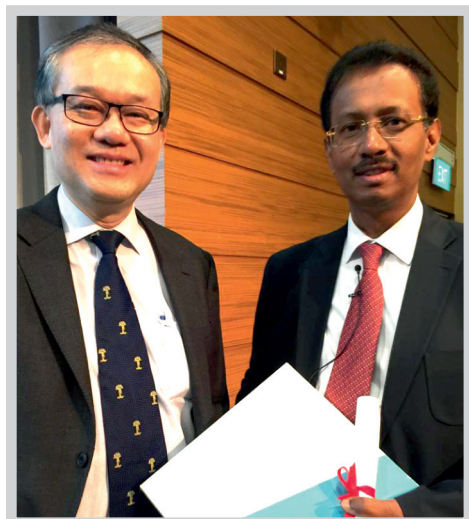
*Dr S Rajasekaran Orations and Plenary Lectures 2015-2018*



Platinum Jubilee Oration 2018,  
KEM Hospital, Mumbai



Dr Verghese Chacko Oration 2015  
Karnataka Orthopaedic Association



Dr S Rajasekaran felicitated for delivering  
the Pesi B Chacha Oration at Singapore

- 1) KM Yusuf Memorial Oration : CAPSON (Coimbatore Association of Pediatric Surgeons) 2019, PSG IMS&R, Coimbatore  
Topic : Spinal Deformities in Children
- 2) Bombay Hospital Oration : 7th Annual Bombay Orthopaedic Course (BOSC 2019), Bombay Hospital, Mumbai  
Topic : Problem of Kyphosis in tuberculosis
- 3) Prof. S.S.K. Marthandam Endowment 9th Oration : SCORE 2019, Sri Ramachandra Institute of Higher Education & Research, 2019, Chennai  
Topic : Achieving Professional Excellence
- 4) Prof Duthie oration : Oxford Meeting – Duthie Day, 2018, Oxford, UK.  
Topic : Is low resources a barrier to high quality care - Ganga Experience
- 5) Platinum Jubilee Oration : Platinum Jubilee Oration 2018, Department of Orthopaedics Seth G. S. Medical College and KEM Hospital, Mumbai, 2018  
Topic : Progress in Academics and Research - For Whose Benefit
- 6) Pesi B Chacha Oration: University Orthopaedics, Hand and Reconstructive Microsurgery Cluster, Singapore, 2017  
Topic : Publish to Flourish - Are we corrupting science?
- 7) Lister Oration: 31st Edinburgh International Trauma Symposium & Instructional Trauma Course, 2017, Edinburgh, UK  
Topic : Challenges in Establishing a Low Cost High Quality Trauma Unit- The Ganga Experience"
- 8) Plenary Oration : 38th SICOT Orthopaedic World Congress 2017, Cape Town, South Africa  
Topic : Ethics in Medical Research
- 9) Guest Lecture : 62nd Annual Conference of Indian Orthopaedic Association, December, 2017  
Topic : Beyond Salvage - Application of Ganga Hospital Open Injury Score in Reconstruction Decisions
- 10) Dr A Devadoss Oration : Vellamal Medical College and Hospital Research Institute, Madurai, 2016  
Topic : Professional excellence
- 11) Plenary Lecture : 19th APOA Melbourne Congress, 2016.  
Topic : Challenges in setting up a Trauma Unit in a Developing Country
- 12) Dr Verghese Chacko Oration : 39th Annual Conference of the Karnataka Orthopaedic Association, 2015. Mysore  
Topic : Work life balance for the young surgeons
- 13) Guest lecture : 48th Annual Conference of the Tamilnadu Orthopaedic Association, 2015. Salem  
Topic : Work Life Balance for Young Surgeons



## Awards 2015-2018



### Spine Surgery Unit, Ganga Hospital, Coimbatore Wins Five Major Awards in Asia Pacific Meeting in Seoul, Korea

Asia Pacific Spine Society meeting is the most prestigious meeting of all the countries of the Asia Pacific region where all prominent and pioneering spine surgeons from the countries of Japan, Korea, China, India, Singapore, Malaysia, Pakistan, Bangladesh and Australia participate and deliberate on scientific advances in the field of spine surgery. This year the annual meeting was held in Seoul, Korea from 4-6th April 2019 where more than 600 leading spine surgeons participated. The scientific research work presented from Ganga Hospital was awarded the four major awards.



Dr S Rajasekaran getting the Award during the  
APSS APOSS meeting in Seoul, Korea

#### The Team Members of “ Best Clinical Research Award ”



The Team Members of “ Best Basic Science Paper ”

- 1) Asia Pacific Spine Society Best Clinical Research Award
- 2) Asian Spine Journal Award for Best Clinical Paper
- 3) Asia Pacific Spine Society Basic Science Research Award
- 4) Asian Spine Journal Award For Best Basic Science Paper
- 5) APSS – SICOT Exchange Travelling Fellowship 2019

Ganga Hospital presented 9 oral podium presentations and six scientific poster presentations. The award was for the work done for novel treatment of complex fractures of the neck which were treated with computer navigation surgery and also basic science proteomics work which analysed the proteome of fetal spine.

The research aims to find solutions at molecular levels for regeneration of lumbar disc and reversing degenerative disc disease.



#### “ ISSLS Award 2017 “ at Athens, Greece (International Society for the Study of the Lumbar Spine)

Research by a team of spine surgeons and basic scientists from Ganga Hospital and Ganga Research Centre bagged the prestigious ISSLS Award for 2017 for the research work titled “ Is Infection the initiator of disc degeneration? Results from proteomic study ”



### Best paper award at 19th Asia Pacific Arthroplasty Society Meeting (APAS), 2018 Bangkok, Thailand

Dr P Dhanasekara Raja, Consultant Arthroplasty Surgeon was awarded the best paper award for the paper titled "Influence of metaphyseal tibia vara on component placement, surgical technique and outcome in TKA in varus knees as compared to isolated intra articular deformity" at the 19th Annual Scientific Meeting of Asia Pacific Arthroplasty Society, Bangkok, 6th - 8th September, 2018



### "IOA - Silver Jubilee Oration 2018" 63rd Annual Conference of The Indian Orthopaedic Association, Coimbatore

Dr Venkatadass K, Consultant Paediatric Orthopaedic Surgeon delivered the prestigious "Silver Jubilee Oration" which he won for his original work on "Lessons learnt from over 100 slips" in the 63rd Annual Conference of the Indian Orthopaedic Association which was held at Coimbatore from November 27 - December 1, 2018. He won this oration for his research paper on Slipped Capital Femoral epiphysis which is a condition affecting the hip joint of children and adolescents.



*Dr K Venkatadass receiving the plaque from  
IOA president Dr Mandeep Dhillon and  
IOA Secretary Dr Atul Srivastava*



*Dr J Balavenkasubramaniam receiving the plaque from  
Kerala president Dr*

### Dr Surendran Memorial Oration 2015

Dr Balavenkat, Consultant Anesthesiologist, delivered the Dr Surendran Memorial Oration for the year 2016 in the Kerala State Anaesthesia Conference in October 2016.

### Nashik City Branch Oration 2016

Dr Balavenkat, Consultant Anesthesiologist, delivered the Nashik City Branch Oration in the ISA State conference of Maharashtra, MISACON at Aurangabad, October 2016



### IOA Young Ambassador Award 2016 61st Annual Conference of The Indian Orthopaedic Association Kerala

Dr Venkatadass K, Consultant Paediatric Orthopaedic Surgeon, won the IOA Young Ambassador Award for the year 2016 and was invited to attend the Hong Kong Orthopaedic Association Annual Meeting, held at Hong Kong. He presented two research papers in this conference.

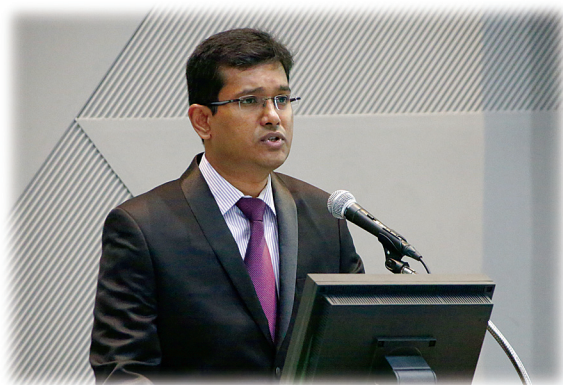
- Modified Dunn Osteotomy - is it a safe bet for severe slips?
- Percutaneous CT navigation assisted excision of Osteoid Osteomas



*Dr K Venkatadass receiving the plaque from  
HKOA president Dr Bobby Kw Ng*



## Awards 2015-2018



### Best reviewer of the month award 2016

Dr Rishi Kanna, Consultant Spine Surgeon won the Best reviewer of the month award from the European Spine Journal for the month of September 2016. Dr Kanna is a reviewer and member of Advisory member board of European Spine Journal and every month, the journal awards a reviewer for the best review of scientific articles submitted in the journal, based on timely reviews, quality and number of reviews completed.



### Best Publication Awards 2017 Indian Arthroscopy Society (IAS) Annual Meeting, Jaipur

Dr Sundarajan S R - Consultant in Arthroscopy - Was awarded the Best Publication Award which included a Prize money of 1 lakh in the Indian Arthroscopy Society (IAS) annual meeting at Jaipur for the Paper titled 'Medial Open wedge HTO for Malunited Proximal Tibia fractures'.



*Dr SR Sundararajan receiving the award from  
Dr Sanjai Desai*



### ASSI Association of Spine Surgeons of India ASSI Young Investigator Award 2016

Dr Siddarth Aiyer, Senior Registrar in Spine Surgery won the Association of Spine Surgeons of India (ASSI) Young Investigator Award held at the Spine Week – Singapore 2016 for the work on “Reduction versus in-situ fixation for High grade spondylolisthesis.” The work involved a comparative study in the surgical management of patients with high grade spondylolisthesis, treated either with in-situ fixation or by complete reduction and fusion.



### “Scholarship Award - SICOT” AAOS Annual Meeting. SICOT World Orthopedic Congress 2018, Conducted at MONTREAL 2018, Canada

Dr. S. Dilip Chand Raja won the SICOT/ AAOS annual meeting scholarship award for the best poster entitled “Minimally Invasive Motion and Function Preserving CT navigated Primary Osteosynthesis of Isolated Unstable Atlas Fracture”- A Case Series of 5 Patients, at SICOT world orthopedic congress 2018 conducted at MONTREAL 2018, Canada





**“Dholakia Best Paper Award 2018”  
63rd Annual Conference of  
The Indian Orthopaedic Association,  
Coimbatore**

Dr P Dhanasekara Raja got the Gold medal for the paper titled “Factors deciding outcome in two stage revision in infected total knee replacements” at 63rd Annual Conference of the Indian Orthopaedic Association, IOACON 2018, Coimbatore.



*Dr P Dhanasekara Raja receiving the medal from  
IOA president Dr Rajesh Malhotra*



**Best Clinical Research Award,  
ASSICON 2018, Chennai**

Dr. S. Dilip Chand Raja was awarded the best clinical research award for the paper entitled “The effect of halo gravity traction in rigid deformities” - a prospective analysis of 26 patients with severe spinal deformities

**“ DP Bakshi Gold Medal ”  
63rd Annual Conference of The Indian  
Orthopaedic Association, Coimbatore**

Dr Devendra Agraharam, Consultant Trauma Surgeon received the prestigious “DP Bakshi Gold Medal” in the 63rd Annual Conference of the Indian Orthopaedic Association which was held at Coimbatore from November 27 - December 1, 2018.



*Dr A Devendra receiving the medal from  
IOA president Dr Mandeep Dhillon*



*Dr Pradeep Kumar & Dr Dhanasekara Raja  
seen with Prof Ranawat*

**“The Late Dholakia best paper award”  
Ranawat Orthopaedic Conference,  
4 th – 6th, Jan, 2018, Mumbai.**

“Influence of metaphyseal tibia vara on component placement, surgical technique and outcome in TKA in varus knees as compared to isolated intra articular deformity”



## Awards 2015-2018



*Dr SR Sundararajan receiving the award from  
Dr Sanjai Desai*

### Best Publication Award 2016

**Dr S Sundararajan**, Consultant Arthroscopy Surgeon, won the Best publication award by the Indian Arthroscopy Association during the meeting held at IASCON 2016, KOLKOTTA. The award was given for his research work on "Is height the best predictor for adequacy of semitendinosus alone ACLR? A study of hamstring graft dimensions and anthropometric measurement", published in International Orthopaedics.

### Best Publication Awards 2017 Indian Arthroscopy Society (IAS) Annual Meeting At Jaipur

Dr SUNDARAJAN S R - Consultant in Arthroscopy - Was awarded the BEST PUBLICATION Award which included a Prize money of 1 lakh in the Indian Arthroscopy Society (IAS) annual meeting at Jaipur for the Paper titled 'Medial Open wedge HTO for Malunited Proximal Tibia fractures'.



*Dr SR Sundararajan receiving the award from  
Dr Sanjai Desai*



*Dr SR Sundararajan receiving the award from  
Dr. S. Ramesh Babu*

### Best paper award at the ISHKS Annual Meeting at Delhi, April, 2017

"Influence of tibia vara on femoral component rotation, surgical technique and outcome in TKA in varus knees"

### 51st Annual Conference of Tamilnadu Orthopaedic Association -2018, Nagercoil

Foot and Ankle Sub specialty Medal -  
Dr S R Sundararajan



*Dr Melvin George receiving the award from  
Prof Ranawat*



### ISSICON 2018 Gold Medal in Oral Presentation - Rajdeep Bagga

"Prognostic Utility Of Magnetic Resonance Imaging (MRI) In Predicting Neurological Outcomes In Patients With Acute Thoracolumbar Spinal Cord Injury"

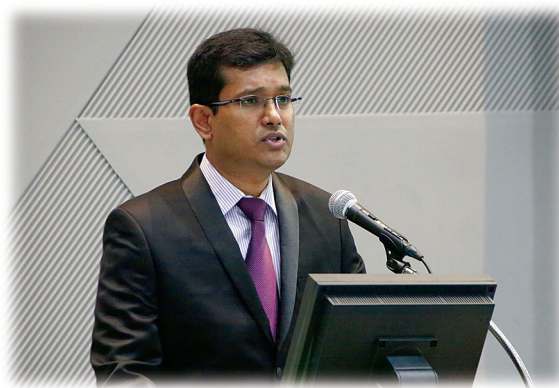


### **ASSI – Best Publication Award 2016**

Dr S Rajasekaran won the Association of Spine Surgeons of India (ASSI )– Best Publication Award 2016. This was awarded for the published work on Genetic susceptibility of lumbar degenerative disc in young adults, which was published in European Spine Journal, one of the highest rated journals in the field of spine surgery. The paper highlighted important genetic susceptibility factors involved in early disc degeneration.

### **TNOACON Best Publication Award 2016**

Dr Rishi Kanna, Associate Consultant Pediatric Orthopaedics, won the TNOACON best publication award for the work on “Modic Vertebral Endplate Changes - Prevalence, Pattern and Genetic Association in 809 Indian patients”. The award is given at the Annual meeting of Tamilnadu Orthopaedic Association (TNOA) held at Ooty, February 2016.



### **Best Research Paper Award in ISHKS 2015**

Dr N Rajkumar, Consultant Joint Replacement surgeon, won the Best Research Paper Award in ISHKS Indian Society of Hip and Knee Surgeons - National Arthroplasty Meeting held in April 2015 at Mumbai. He presented his research work on “Incidence of Deep Vein Thrombosis (DVT) in Hip & knee Replacement patients treated by only Aspirin & Mechanical device - A prospective study of 825 patients.”

### **Innovative award for Young surgeon's forum in AOPAS 2018**

Dr. Ramesh Perumal won the 2nd prize for his innovative technique in posterior wall fractures of the acetabulum in 2nd annual conference of Association of Pelvic- Acetabular surgeons held at Bengaluru in March 2018.



### **Prof. R. C. Rallan Gold medal for Best scientific research in IOACON 2015**

Dr. Ramesh Perumal was awarded with Prof. RC Rallan Gold Medal for his basic research in fracture healing pattern in head injury at the Annual Indian Orthopaedic Association Conference held at Jaipur in December 2015.

*Dr Ramesh Perumal receiving the medal from IOA president Dr Sudhir Kapoor*



## Awards 2015-2018



*Dr Venkatadass K receiving the medal from IOA president Dr Ram Praboo*

### Prof SS Yadav Gold Medal IOACON 2016

Dr Venkatadass, Associate Consultant, Paediatric Orthopaedics, won the best paper award in orthopaedic oncology session (Prof SS Yadav Gold Medal) at the Indian Orthopaedic Association meeting IOACON 2016, held at Cochin, Kerala. He presented his research work on Intra-operative CT navigation guided excision of osteoid osteomas.

### TNOACON Prof Subramaniam Basic Science Research Award 2015

Dr Rishi Kanna, Associate Consultant Spine Surgeon, won the Tamilnadu Orthopaedic Association Prof A Subramaniam basic science research award, held at the Annual meeting of TNOA, held at Salem, February 2015. He presented the research project conducted among 809 patients regarding the MRI features of Modic Vertebral Endplate Changes - Prevalence, Patterns and Genetic Association analysis to identify possible candidate genes.



*Dr SP Sivakumar receiving the medal from IOA president Dr Sudhir Kapoor*

### Dr. A. A. Mehta Gold Medal IOACON 2015

Dr. SivaKumar. S.P., Senior Registrar, Trauma, won the Dr.A.A.Mehta Gold Medal at the Indian Orthopaedic Association meeting, held at IOACON 2015, Jaipur. He presented his research work on "Successful reimplantation of extruded long bone segments in open fractures of lower limb". The work noted the safe outcomes of patients with open injuries where the extruded broken bones were successfully implanted back during surgery.

### Dr. A. A. Mehta Gold Medal IOACON 2016

Dr. Rajabhaskar Kanakeshwar, Senior Registrar, won the Dr. A. A. Mehta Gold medal at the Indian Orthopaedic Association meeting held at Kochi, Kerala 2016. The research work involved "Reconstruction of post-traumatic long segment bone defects of the lower end of the femur by free vascularized fibula combined with allograft (Modified Capanna's technique)".



*Dr R Rajabhaskar receiving the medal from IOA president Dr Ram Praboo*



### Gold Medal in Poster Presentation - ISSICON 2018 (The International Spine and Spine Injuries Conference) - Vyom Sharma

Minimal Access Fixation of Unstable Sacral Fractures;  
When To Go For Spino - Pelvic Stabilization?



**50th Annual Conference of  
Tamil Nadu Orthopaedic Association 2017**  
10th -12 th, Feb, 2017, Coimbatore

**Ganga Hospital bags 7 Gold Medals**



*Dr S Rajasekaran with the winners Dr J Dheenadhayalan, Dr. Rishi Kanna, Dr Velmurugesan, Dr Sai prasanth,  
Dr Avinash, Dr Arun Raj, Dr Siddarth Aiyer,*

**Prof P Dhanarajan Gold Medal for Innovation in Trauma**

**Dr J Dheenadhayalan**

*"Hyper-extension Tibial Plateau Fractures - Innovative technique of reduction"*

**Prof A Subramaniam Gold Medal for Basic Science**

**Dr Rishi M Khanna**

*"Is infection the possible initiator of disc degeneration? - Am insight from Proteomic Analysis"*

**Prof Xavier Gold Medal for Hand**

**Dr Vel Murugesan P**

*"Prof.Xavier medal for hand surgery"*

**Prof M Natarajan Gold Medal for Trauma**

**Dr Sai Prasanth**

*"Use of Ganga Hospital Open Injury Severity Scoring System for determination of salvage vs amputation in open type IIIB injuries of lower limbs in children - An analysis of 52 type IIIB open fractures "*

**Prof G Vyageshwarudu Gold Medal for Orthopaedics**

**Dr Siddharth Aiyer**

*"A novel classification for Kyphotic spinal deformities based on column flexibility and deficiency"*

**Prof KR Venkateshwar Memorial PG Award - Travelling Fellowship**

**Dr Avinash Mahender**

**PG Quiz - Second Place**

**Dr Avinash Mahender, Dr Arun Raj**





## Awards 2015-2018



### 51st Annual Conference of Tamil Nadu Orthopaedic Association 2018 10th -12 th, Feb, 2018, Nagercoil

#### “ Prof M Natarajan Medal - TNOA ” 51st Annual Conference of Tamilnadu Orthopaedic Association -2018, Nagercoil

Prof M Natarajan Medal - Dr Raja Bhaskar.  
Titled on "A Surgical Algorithm for The Management of Recalcitrant  
Distal Femur Nonunions – Experience From 62 Cases"



#### “ Prof M Natarajan Medal - TNOA ” 51st Annual Conference of Tamilnadu Orthopaedic Association -2018, Nagercoil

Prof P Dhanarajan Medal - Dr Venkatadass  
Titled on : "Lateral wall augmentation using a modified DCP for unstable  
trochanteric fractures – A novel innovative technique"

#### “ Certificate of Appreciation - TNOA ” 51st Annual Conference of Tamil Nadu Orthopaedic Association TNOA-2018, Nagercoil

Dr Rishi Kanna for TNOA Publication.  
Titled on : "Modified anterior only reduction technique for  
cervical facet dislocations"



#### “ Prof R Ramakrishnan Gold Medal PG ” 51st Annual Conference of Tamil Nadu Orthopaedic Association TNOA-2018, Nagercoil

Dr Jishanth

#### “ PG Quiz ” 51st Annual Conference of Tamil Nadu Orthopaedic Association TNOA-2018, Nagercoil

Dr Jishanth and Dr Shanmuk Babu



# Hospital Awards 2015-2018



The Hospital Bagged The Prestigious IMC RBNQ Performance Excellence Trophy 2018 in the Health Care Category



*Dr & Mrs JG Shanmuganathan receiving the prestigious IMC Ramakrishna Bajaj Performance Excellence Trophy*

Started in 1995, the IMC Ramkrishna Bajaj National Quality Award enjoys the stature of being one of India's most prestigious quality awards. The eponymous award symbolizes the values of the man who ardently promoted the importance of quality and ethics in our economic and social development. The award was instituted with the objectives of:

- Promoting quality awareness and practices in Indian business and asserting its importance in global competitiveness.
- Recognizing the achievements of Indian companies in the field of quality
- Publicizing successful quality strategies and programs.



*Best Hospital Award being presented by  
Mr. Devendra Fadnavis, Chief Minister of Maharashtra*



**CNBC-TV18**  
**Best Hospital Award 2016**

In an endeavor to honour the meritorious performance of healthcare providers, CNBC-TV18, along with ICICI Lombard presented the most coveted India Healthcare Awards in the presence of stalwarts of the Indian healthcare industry to GANGA HOSPITAL in a function held at Mumbai recently. Among all orthopedic institutions of the country, Ganga Hospital stood first based on the number of surgeries performed and quality health care to the patients.



## Hospital Awards 2015-2018



### Pride of Coimbatore Award 2015

Rotary Club of Coimbatore honoured Ganga Hospital with the 'Pride of Coimbatore' award at a function held here on Friday.

The Club president Rtn. G. Karthikeyan and lyricist Vairamuthu presented the award to its founders J.G. Shanmuganathan and Kanakavalli Shanmuganathan, doctors S. Raja Sabapathy and S. Rajasekaran,

### Association of Healthcare Providers of India - 'Patient Friendly'

The annual award by AHPI recognizes and celebrates the excellence achieved by the healthcare organizations in various fields. GANGA MEDICAL CENTER & HOSPITALS are the proud recipient of AHPI Healthcare Excellence Award 2019 for Patient Friendly Category



### Best Energy Conservation - Teca -2019 Tamilnadu Electricity Consumers Association

The annual award by AHPI recognizes and celebrates the excellence achieved by the healthcare organizations in various fields. GANGA MEDICAL CENTER & HOSPITALS are the proud recipient of AHPI Healthcare Excellence Award 2019 for Patient Friendly Category

### QCFI Gold Prize

#### 5S Implementation Quality Circle Forum of India

QCFI is a nodal body for approving implementation of Quality Circle and other related concepts in organizations. The 5S Method is a standardized process that when properly implemented creates and maintains an organized, safe, clean and efficient workplace. The hospital has implemented 5S in clinical departments and has achieved Tangible and non tangible benefits.



### National Accreditation Board For Laboratories

The Government of India has authorized NABL as the sole accreditation body for testing and calibration laboratories. Accreditation to a laboratory is given on the basis of its capability to perform tests and provide accurate and reliable results. Ganga Laboratory is accredited to NABL in the year 2019.



A symbol of Perfect Team Work  
2135 people but one aim  
“Patient Care and Safety”

## The Week Neilson Rating

The Week has rated Ganga Hospital has the BEST PRIVATE HOSPITAL FOR ORTHOPAEDICS for the fourth time in a row

# GANGA

India's Best Hospitals 2019

First in All Private Hospitals in India

Fourth Time in A Row ...

## Orthopaedics

Rank	Hospitals	City
1	All India Institutes of Medical Sciences	Delhi
2	<b>Ganga Medical Centre &amp; Hospitals</b>	<b>Coimbatore</b>
3	Christian Medical College	Vellore
4	Postgraduate Institute of Medical Education and Research	Chandigarh
5	Apollo Hospitals	Chennai

*We thank all patients for your confidence in us.*



## Center For Quality Promotion

QCFI is a nodal body for approving implementation of Quality Circle and other related concepts in organizations. The 5S Method is a standardized process that when properly implemented creates and maintains an organized, safe, clean and efficient workplace.

## Best Hospital Providing Care Under TNCMCHIS (Chief Minister's Comprehensive Health Insurance Scheme.)-2019

Ganga Hospital was conferred with Appreciation Award from Government of Tamil Nadu for high performance under Chief Minister's Comprehensive Health Insurance Scheme. No of Patients Under CM Scheme 2018-518.





# *Ganga Hospital Founder's Oration*

Living meaningfully.. leading gracefully...



*Founders Mrs. Kanakavalli Shanmuganathan & Dr. J. G. Shanmuganathan*

Ganga Hospital had its beginning in 1978 to establish a hospital that would provide every patient the best treatment at affordable cost. The journey was never easy but their relentless spirit, determination and hard work made their dream come true. They preached integrity, ethics, professional and family values by example, which brought in trust and confidence to the team and to the patients.

Today, Ganga Hospital stands tall amongst medical institutions for its professional and academic excellence. It has placed Coimbatore in the World Map of Orthopaedics and Plastic and Microsurgery by excellence in clinical work, academics and research. All made possible because of their dream. To celebrate the journey of our Founders who inspired and set an example for us, we instituted the Founder's Oration in 2013.

Every year, an eminent person who stands as high example of success achieved through hard work, honesty, ingenuity, social commitment and passion in what they do will deliver the Oration. We are sure that their presence and words will inspire people to dream and create institutions of excellence for the benefit of our society.



*Hon. Justice Shri P Sathasivam  
handing over the orator's plaque to  
Dr Devi Shetty.  
Shri DR Kaarthikeyan,  
Shri K Venkataraman and  
the founders  
Dr JG Shanmuganathan  
and Mrs Kanakavalli  
Shanmuganathan are also seen along  
with Dr S Rajasabapathy,  
Mrs Nirmala Rajasabapathy,  
Dr S Rajasekaran &  
Mrs Rama Rajasekaran*



**1st Ganga Hospital Founder's Oration**

Friday 14th June, 2013

**Dr. Devi Shetty,**

Chairman, Narayana Group of Hospitals, Bengaluru delivered the first Founder's Oration on

**'Affordable Health Care'.**

**2nd Ganga Hospital Founder's Oration**

Saturday 1st November, 2014

**Mr. N. Gopalswami,**

IAS(Retd), Former Chief Election Commissioner of India, delivered the second Founder's Oration on

**"Governance and the Governed".**



**3rd Ganga Hospital Founder's Oration**

31st October 2015

**Mr. N. Gopalakrishnan,**

Director of Tata Group Promoter holding company delivered the third Founder's Oration on

**"Achieving Excellence: an attitude or a goal".**

**4th Ganga Hospital Founder's Oration**

October 22nd, 2016

**Mr Venu Srinivasan,**

chairman of the Sundaram Clayton Group, (TVS Motor Company) delivered the fourth Founder's Oration on

**"Values that build Institutions".**



**5th Ganga Hospital Founder's Oration**

10th of June 2017

**Mr. Subroto Bagchi,**

Chairman, Skill Development Authority and Co-founder of Mindtree delivered the fifth Founder's Oration on

**"Platform Vs Purpose".**

**6th Ganga Hospital Founder's Oration**

27th October 2018

**Mr. B. Muthuraman,**

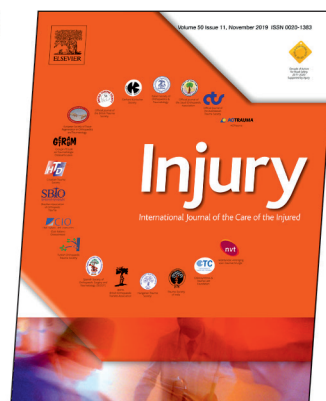
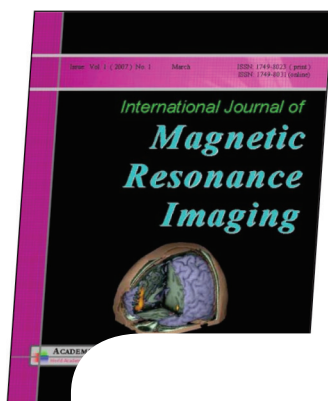
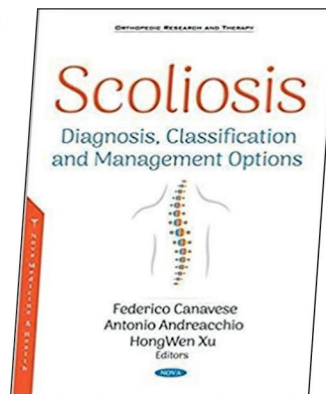
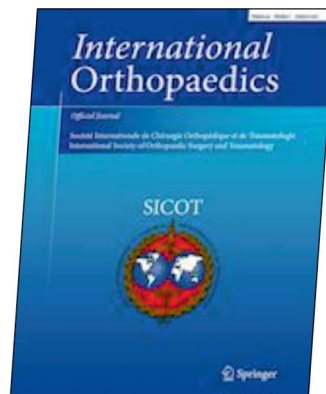
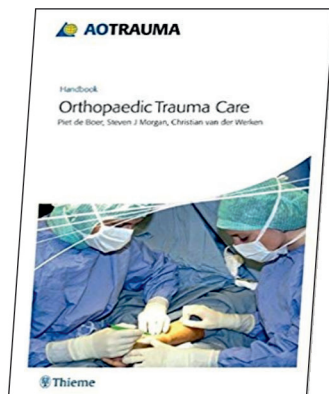
Chairman of Tata International Ltd and Vice-chairman of Tata Steel Limited delivered the sixth Founder's Oration on

**"Institutional Transformation".**





# Publications & Chapters



## PUBLICATIONS SPEAKS ITSELF

- Publications of scientific research in scientific journals is an important method to identify a country's scientific progress.
- In our institute, scientific research is critically analysed and published in international peer reviewed journals and also presented in international podiums.
- These publications and presentations helps us showcase to the scientific community our contribution to the betterment of the society.
- So far, the department has 170 publications in international and 35 national peer reviewed journals, 95 textbook chapters and more than 1000 podium presentations.

*Publish to flourish  
and present  
thy to ascent*



**ISSLS PRIZE IN CLINICAL SCIENCE 2017:  
Is infection the possible initiator of disc disease?  
An insight from proteomic analysis.**

**European Spine Journal, 2017**

*Rajasekaran, S., Tangavel, C., Aiyer, S. N., Nayagam, S. M., Raveendran, M.,  
Demonte, N. L., & Dharmalingam, K.*

European Spine Journal, 2017, 1-17.



**A Prospective Randomized Study to Analyze the Efficacy  
of Balanced Preemptive Analgesia in Spine Surgery.**

**The Spine Journal 2018. Spine J. 2019 Apr;19(4):569-577.**

*Dilip Chand Raja Soundararajan, Ajoy Prasad Shetty, Balavenkat Subramanian,  
Rishi Mugesh Kanna and Rajasekaran Shanmuganathan.*

doi: 10.1016/j.spinee.2018.10.010. Epub 2018 Oct 22.

**Unilateral sacroiliitis: differentiating infective and  
inflammatory etiology by magnetic resonance imaging and tissue studies.**

**European Spine Journal 2018**

*Rishi Mugesh Kanna, Aju Bosco, Ajoy Prasad Shetty, S. Rajasekaran.*

<https://doi.org/10.1007/s00586-018-5800-0>



**The Global Spine Care Initiative: public health and prevention interventions  
for common spine disorders in low and middle-income Communities.**

**European Spine Journal. Published Online: 11 Aug 2018.**

*Bart N Green, Claire D Johnson, Scott Haldeman, Edward J Kane, Michael B Clay,  
Erin A Griffith, Juan M Castellote, Matthew Smuk, Shanmuganathan Rajasekaran,  
Eric L Hurwitz, Margareta Nordin, Kristi Randhawa, Hainan Yu.*

<https://doi.org/10.1007/s00586-018-5635-8>

**The Global Spine Care Initiative: methodology, contributors, and disclosures.**

**Eur Spine J. 2018 Aug 27.**

*Johnson CD, Haldeman S, Nordin M, Chou R, Côté P, Hurwitz EL, Green BN, Kopansky-Giles D, Randhawa K, Cedraschi C,  
Ameis A, Acarolu E, Aartun E, Adjei-Kwayisi A, Ayhan S, Aziz A, Bas T, Blyth F, Borenstein D, Brady O, Brooks P,  
Camilleri C, Castellote JM, Clay MB, Davatchi F, Dudler J, Dunn R, Eberspaecher S, Emmerich J, Farcy JP, Fisher-Jeffes N,  
Goertz C, Grevitt M, Griffith EA, Hajjaj-Hassouni N, Hartvigsen J, Hondras M, Kane EJ, Laplante J, Lemeunier N, Mayer J,  
Mior S, Mmopelwa T, Modic M, Moss J, Mullerpatan R, Muteti E, Mwaniki L, Ngandeu-Singwe M, Outerbridge G,  
Rajasekaran S, Shearer H, Smuck M, Sönmez E, Tavares P, Taylor-Vaisey A, Torres C, Torres P, van der Horst A, Verville L,  
Vialle E, Kumar GV, Vlok A, Watters W 3rd, Wong CC, Wong JJ, Yu H, Yüksel S.*

doi: 10.1007/s00586-018-5723-9.





Use of Ganga Hospital Open Injury Severity Scoring for determination of salvage versus amputation in open type IIIB injuries of lower limbs in children —An analysis of 52 type IIIB open fractures.

**Global Spine Journal 2018. Jun;8(4):321-322.**

*K. Venkatadass, Tarani Sai Prasanth Grandhi, S. Rajasekaran.*

---

Injury, Int. J. Care Injured 48 (2017) 2509–2514

---



Percutaneous excision of difficult osteoid osteomas using intraoperative AIRO CT navigation: a preliminary report .

**Journal of Pediatric Orthopaedics B 2017**

*Venkatadass Krishnamoorthy and Shanmuganathan Rajasekaran.*

---

DOI: 10.1097/BPB.0000000000000505

---

Individualised distal femoral cut improves femoral component placement and limb alignment during total knee replacement in knees with moderate and severe varus deformity.

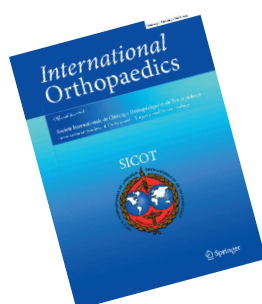
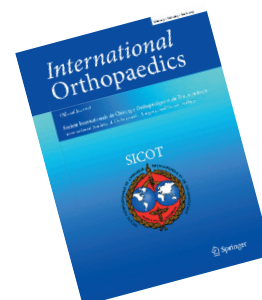
**International Orthopaedics (SICOT)**

*Dhanasekararaja Palanisami, Geethan Iyyampillai, Sivaraj Shanmugam, Rajkumar Natesan, S Rajasekaran.*

---

DOI 10.1007/s00264-016-3123-5, 2016.

---



Is height the best predictor for adequacy of semitendinosus alone ACLR? A study of hamstring graft dimensions and anthropometric measurement.

**International Orthopaedics 40(5) , july 2015,**

*Sundararajan S.R, Ramakanth, Rajasekaran S.*

---

DOI: 10.1007/s00264-015-2882-2, source:PubMed

---

Comparison of KD3-M and KD3 - I Multiligamentous Knee Injuries and Analysis of Predictive Factors That Influence the Outcomes of Single - Stage Reconstruction in KD3 Injuries 4

**The Orthopaedic Journal of Sports Medicine 6(9), 2325967118794367**

*Silvampatti Ramasamy Sundararajan, Balaji Sambandam, Ramakanth Rajagopalakrishnan, Shanmuganathan Rajasekaran,*

---

DOI: 10.1177/2325967118794367

---



Clinical and radiological factors related to the presence of motor deficit in lumbar disc prolapse: a prospective analysis of 70 consecutive cases with neurological deficit.

**European Spine Journal, 27(4), 918-920.**

*Krishnan, V., Rajasekaran S, Aiyer, S. N., Kanna, R., & Shetty, A. P.*

DOI 10.1007/s00586-018-5473-8

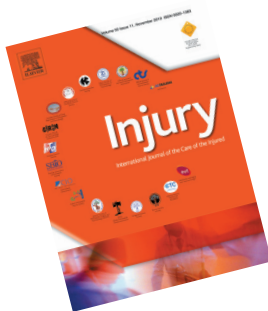


A classification for kyphosis based on column deficiency, curve magnitude and osteotomy requirement.

**J Bone Joint Surg Am. 2018. Vol. 100, No. 13, July 5, 2018, 1147-56.**

*S Rajasekaran, Sreekanth Reddy Rajoli, Siddharth N Aiyer, Rishi Kanna, Ajoy Prasad Shetty.*

<http://dx.doi.org/10.2106/JBJS.17.01127>



Management of resistant distal femur non-unions with allograft strut and autografts combined with osteosynthesis in a series of 22 patients.

**Injury. 2017 Aug ; 48 Suppl 2:S14-S17.**

*Kanakeshwar RB, Jayaramaraju D, Agraharam D, Rajasekaran S.*

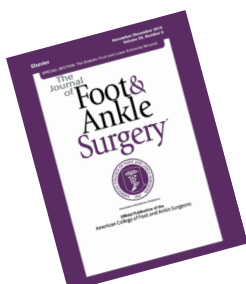
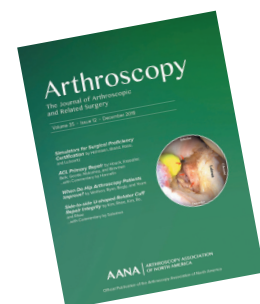
DOI : 10.1016/S0020-1383(17)30488-6.

Medial open wedge high tibial osteotomy for varus malunited tibial plateau fractures:

**The Journal Of Arthroscopic and Related Surgery, Published online: November 19, 2016, In press,**

*Sundararajan SR, HS Nagaraja, S. Rajasekaran.*

DOI: <http://dx.doi.org/10.1016/j.arthro.20162016.08.027>



Midfoot charcot arthropathy: Overview and surgical management:

**The Journal Of Foot And Ankle Surgery (Asia- Pacific) July-December 2016; 3(2) 97-106,**

*Sundararajan SR, HS Nagaraja, S Rajasekaran.*

DOI: 10.5005/jp-journals-10040-1056



**Precision Spine Care: A New Era of Discovery, Innovation, and Global Impact.**

**Global Spine Journal 2018. Jun;8(4):321-322.**

Jaro Karppinen, S Rajasekaran, Luiz Vialle, Jeffrey C Wang, Marinus de Kleuver, Dino Samartzis, Mauro Alini, Howard S An.

doi: 10.1177/2192568218774044. Epub 2018 Jun 15.



**Predictors of Successful Outcomes of Selective Nerve Root Blocks for Acute Lumbar Disc Herniation**

**Global Spine Journal 1-7.2018.**

Rishi M. Kanna, Ajoy P. Shetty, and S. Rajasekaran

<https://doi.org/10.1177/2192568218800050>

**Structural vertebral endplate nomenclature and etiology: a study by the ISSLS Spinal Phenotype Focus Group.**

**Eur Spine J. 2018 Jan;27(1):2-12.**

Uruj Zehra, Cora Bow, Jeffrey C. Lotz, Frances M. K. Williams, S. Rajasekaran, Jaro Karppinen, Keith D. K. Luk, Michele C. Battiè, et al.

doi: 10.1007/s00586-017-5292-3. Epub 2017 Sep 12.



**Radiological factors affecting post-operative global coronal balance in Lenke 5 C scoliosis.**

**Journal of Spine Surgery**

Ajoy Prasad Shetty, Subramani Suresh, Siddharth N. Aiyer, Rishi Kanna, Shanmuganathan Rajasekaran.

J Spine Surg 2017;3(4):541-547

**Effectiveness and Safety of Batroxobin, Tranexamic Acid and a Combination in Reduction of Blood Loss in Lumbar Spinal Fusion Surgery.**

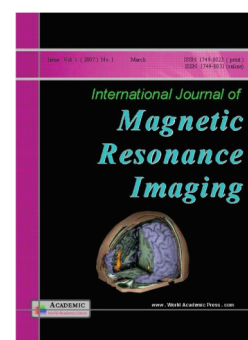
**SPINE Journal, 2017**

Roopa MN, Ajoy P. Shetty, MS, Srikanth R. Dumpa, MS, Balavenkat Subarmaniam, Rishi M. Kanna, MS, and Rajasekaran Shanmuganathan.

SPINE Journal, 2017 Volume 42, Number 00, pp 000-000

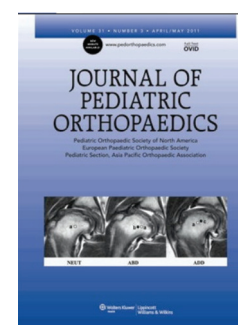


25. Silvampatty R, Sundararajan, Kanchana P, Srikanth, Handenahally S, Nagaraja, ShanmuganathanRajasekaran. Effectiveness of Hindfoot Arthrodesis by Stable Internal Fixation in Various Eichenholtz Stages of Neuropathic Ankle Arthropathy The Journal of Foot & Ankle Surgery. 1. The Journal of Foot & Ankle Surgery 56 (2017) 282–286
26. Johnson CD, Haldeman S, Chou R, Nordin M, Green BN, Côté P, Hurwitz EL, Kopansky-Giles D, Acarolu E, Cedraschi C, Ameis A, Randhawa K, Aartun E, Adjei-Kwayisi A, Ayhan S, Aziz A, Bas T, Blyth F, Borenstein D, Brady O, Brooks P, Camilleri C, Castellote JM, Clay MB, Davatchi F, Dudler J, Dunn R, Eberspaecher S, Emmerich J, Farcy JP, Fisher-Jeffes N, Goertz C, Grevitt M, Griffith EA, Hajjaj-Hassouni N, Hartvigsen J, Hondras M, Kane EJ, Laplante J, Lemeunier N, Mayer J, Mior S, Mmopelwa T, Modic M, Moss J, Mullerpatan R, Muteti E, Mwaniki L, Ngandeu-Singwe M, Outerbridge G, Rajasekaran S, Shearer H, Smuck M, Sönmez E, Tavares P, Taylor-Vaisey A, Torres C, Torres P, van der Horst A, Verville L, Vialle E, Kumar GV, Vlok A, Watters W 3rd, Wong CC, Wong JJ, Yu H, Yüksel S. The Global Spine Care Initiative: model of care and implementation. Eur Spine J. 2018 Aug 27. doi: 10.1007/s00586-018-5720-z. [Epub ahead of print]
27. Siddharth N. Aiyer, Ajit Kumar, Ajoy Prasad Shetty, Rishi Kanna, S. Rajasekaran. Factors Influencing Postoperative Urinary Retention Following Elective Posterior Lumbar Spine Surgery: A Prospective Study. Asian Spine J 2018;12(6):1-6  
<https://doi.org/10.31616/asj.2018.12.6.1>
28. Aju Bosco , Prakash Venugopal , Ajoy Prasad Shety , Rajasekaran Shanmuganathan, Rishi Mugesh Kanna. Morphometric Evaluation of Occipital Condyles: Defning Optimal Trajectories and Safe Screw Lengths for Occipital Condyle-Based Occipitocervical Fixation in Indian Population. Asian Spine J 2018;12(2):214-223.  
<https://doi.org/10.4184/asj.2018.12.2.214>
29. Dilip Chand Raja Soundararajan, Shanmuganathan Rajasekaran, Ajoy Prasad Shetty and Rishi Mugesh Kanna. Spinal Tuberculosis: Current Concepts, Global Spine Journal 2018. Accepted for publication
30. Dumpa SR, Shetty AP, Aiyer SN, Kanna RM, Rajasekaran S. [Reciprocal Changes in Sagittal Alignment in Adolescent Idiopathic Scoliosis Patients Following Strategic Pedicle Screw Fixation. Asian Spine J. 2018 Apr;12\(2\):300-308. doi: 10.4184/asj.2018.12.2.300. Epub 2018 Apr 16.](https://doi.org/10.4184/asj.2018.12.2.300)
31. Chhabra H, Sachdeva, Kovindha, Hossain, Hasnan, Thapa, Rajasekaran S, Yusniza Sybil Shah, Pinto Groves, Kammuang-lue, Ahmad Fauzi, Aiyer, Ahmad Kasah, Niroshanie. International Spinal Cord Society (ISCOs) Database: Asian Spinal Cord Network (ASCoN) Pilot Project [IDAPP]. Spinal Cord Series & Cases 2018. Accepted for publication.
32. Dilip Chand Raja Soundararajan, Rishi Mugesh Kanna, Ajoy Prasad Shetty and Rajasekaran Shanmuganathan. Lumbar Intraspinal Osteolipoma presenting as Cauda Equina Syndrome- A case report and Review of Literature. Case Reports in Orthopedics. Volume 2018, Article ID 1945149, 5 pages. <https://doi.org/10.1155/2018/1945149>

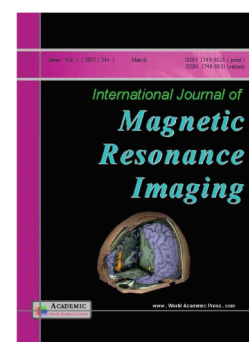
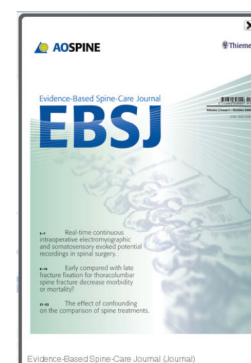




33. Haldeman S, Nordin M, Chou R, Côté P, Hurwitz EL, Johnson CD, Randhawa K, Green BN, Kopansky-Giles D, Acaroğlu E, Ameis A, Cedraschi C, Aartun E, Adjei-Kwayisi A, Ayhan S, Aziz A, Bas T, Blyth F, Borenstein D, Brady O, Brooks P, Camilleri C, Castellote JM, Clay MB, Davatchi F, Dudler J, Dunn R, Eberspacher S, Emmerich J, Farcy JP, Fisher-Jeffes N, Goertz C, Grevitt M, Griffith EA, Hajjaj-Hassouni N, Hartvigsen J, Hondras M, Kane EJ, Laplante J, Lemeunier N, Mayer J, Mior S, Mmopelwa T, Modic M, Moss J, Mullerpatan R, Muteti E, Mwaniki L, Ngandeu-Singwe M, Outerbridge G, Rajasekaran S, Shearer H, Smuck M, Sönmez E, Tavares P, Taylor-Vaisey A, Torres C, Torres P, van der Horst A, Verville L, Vialle E, Kumar GV, Vlok A, Watters W 3rd, Wong CC, Wong JJ, Yu H, Yüksel S. [The Global Spine Care Initiative: World Spine Care executive summary on reducing spine-related disability in low- and middle-income communities. Eur Spine J. 2018 Aug 27. doi: 10.1007/s00586-018-5722-x. \[Epub ahead of print\]](https://doi.org/10.1007/s00586-018-5722-x)
34. Bart N Green, Claire D Johnson, Scott Haldeman, Erin Griffith, Michael B Clay, Edward J Kane, Juan M Castellote, Shanmuganathan Rajasekaran, Matthew Smuk, Eric L Hurwitz, Kristi Randhawa, Hainan Yu, Margareta Nordin. A scoping review of biopsychosocial risk factors and co-morbidities for common spinal disorders. PLOS One. Published: June 1, 2018. <https://doi.org/10.1371/journal.pone.0197987>.
35. Dilip Chand Raja Soundararajan, Ajoy Prasad Shetty, Rishi Mugesh Kanna Rajasekaran.S. The Effective Role of Noninvasive Positive Pressure Ventilation in Subarachnoid Pleural Fistula- Neurospine 2018. A Case Report and Review of Literature
36. S. Rajasekaran, Manindra Bhushan, Siddharth Aiyer, Rishi Kanna, Ajoy Prasad Shetty. Accuracy of pedicle screw insertion by AIRO<sup>®</sup> intraoperative CT in complex spinal deformity assessed by a new classification based on technical complexity of screw insertion. Published online, 9 January 2018. European Spine Journal 2018. <https://doi.org/10.1007/s00586-017-5453-4>
37. S. Rajasekaran, Gurudip Das, Siddharth Narasimhan Aiyer, Rishi Mugesh Kanna, Ajoy Prasad Shetty. Analysis of Spinopelvic Parameters with L5 as the New Sacrum after Fusion in High-Grade Spondylolisthesis: A Possible Explanation for Satisfactory Results with In-Situ Fusion. Asian Spine Journal, 2018; 12(1): 1-9
38. [B.T.Pushpa, Siddharth N.Aiyer, Muhil Kannan, Anupama Maheswaran, S.Rajasekaran. Oppenheimer's Ossicles in the lumbar spine- a rare cause of lumbar canal stenosis. Journal of Orthopaedics, Vol 15, Issue 2, June 2018, Pages 343-344](https://doi.org/10.1007/s00586-017-5453-4)  
Devendra Agraharam, Avinash Mahender, Dinesh Chidambaram, Dheenadhayalan Jayaramaraju and S Rajasekaran. Vascular injuries due to cerclage passer: Relevant anatomy and note of caution. Journal of Orthopaedic Surgery. 29 Jan 2018
39. Raja Bhaskara Rajasekaran, Dheenadhayalan Jayaramaraju, Dhanasekara Raja Palanisami, Ramesh Perumal, and Rajasekaran Shanmuganathan. Ipsilateral Acetabular Fracture with Displaced Femoral Head and Femoral Shaft Fracture: A Complex Floating Hip Injury (Case Report). Case Reports in Orthopedics. Volume 2018, Article ID 4937472, 5 pages. <https://doi.org/10.1155/2018/4937472>
40. Ajoy Prasad Shetty, Aju Bosco, Ramesh Perumal, Jeyaramaraju Dheenadhayalan Shanmuganathan Rajasekaran. Midterm radiologic and functional outcomes of minimally-invasive fixation of unstable pelvic fractures using anterior internal fixator (INFIX) and percutaneous iliosacral screws. Journal of Clinical Orthopaedics and Trauma 8, 2017, 241-248.



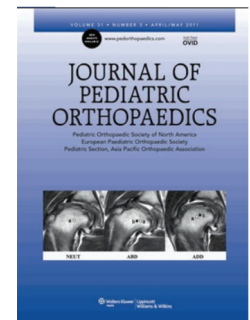
41. Silvampatti Ramaswamy Sundararajan, Ramakanth Rajagopalakrishnan, S.Rajasekaran. Ruptured Pseudoaneurysm of the Lateral Plantar Artery After Tibiotalocalcaneal Fusion With Retrograde Nail—A Rare Complication. *The Journal of Foot & Ankle Surgery* 57 (2018) 393–395
42. S Rajasekaran, Rishi Kanna, Manindra Bhushan, Ajoy Prasad Shetty, Anupama Maheswaran, Siddharth N Aiyer. Coronal vertebral dislocation due to congenital absence of multiple thoracic and lumbar pedicles: report of three cases, review of literature and role of intra-operative CT navigation. *Spine Deform.* 2018 Sep - Oct;6(5):621-626. doi: 10.1016/j.jspd.2018.01.011. Review. PMID:30122400
43. Vibhu Krishnan Viswanathan, S Rajasekaran, Siddharth N Aiyer, Rishi Kanna, Ajoy Prasad Shetty. Factors affecting early and one-year motor recovery following lumbar microdiscectomy in patients with lumbar disc herniation: A prospective cohort review. *Asian Spine J.* 2019 Feb;13(1):135-145. doi: 10.31616/asj.2018.0111. Epub 2018 Oct 24. PMID:30347525
44. Reddy S, Kanna RM, Aiyer S, Shetty AP, Rajasekaran S. Circumferential fusion through all-posterior approach in Andersson lesion. *Asian Spine Journal*, 2017, 11(3), 444-453..
45. Srikanth Reddy Dumpa, Siddharth N Aiyer, Sreekanth Reddy Rajoli, Ajoy Prasad Shetty, S Rajasekaran. Delayed Chance Fracture Pattern Injury in a case of Skeletal Fluorosis. *European Spine Journal* 2017. DOI: 10.1007/s00586-017-5117-4. Published online 08 May 2017.
46. Ramesh Perumal, Vijay Shankar, Rizwan Basha, Dheenadayalan Jayaramaraju, Shanmuganathan Rajasekaran, Is nail dynamization beneficial after twelve weeks – An analysis of 37 Cases. *Journal of Clinical Orthopaedics and Trauma* 2017. *J Clin Orthop Trauma.* 2018 Oct-Dec;9(4):322-326. doi: 10.1016/j.jcot.2017.12.007. Epub 2017 Dec 22.
47. Avinash, M., Rajasekaran, S, & Aiyer, S. N..Unplanned 90-day readmissions in a specialty orthopaedic unit—A prospective analysis of consecutive 12729 admissions. *Journal of orthopaedics*, 14(2), 2017, 236-240
48. Rishi M. Kanna, Ajoy P. Shetty, S. Rajasekaran, Modified anterior-only reduction and fixation for traumatic cervical facet dislocation (AO type C injuries). *European Spine Journal*, <https://doi.org/10.1007/s00586-017-5430-y>. Published online: 26 Dec 2017
49. Suresh Subramani, Ajoy Prasad Shetty, Rishi Mugesh Kanna, Rajeskar Shanmuganathan. Ossified ligamentum flavum causing neurological deficit above the level of post-tuberculous kyphotic deformity. *Journal of Clinical Orthopaedics and Trauma* 8, 2017, 174-177
50. Ramesh Perumal, Santhosh Ram Gaddam, J Vasudeva, J Dheenadhayalan, S Rajasekaran. Bipolar Hemiarthroplasty in a Patient with above-knee Amputation: Surgical Technique. *Journal of Orthopaedic Case Reports* 2017 Jan-Feb: 7(1):54-57
51. Rajasekaran S, Kanna R, Chittode VS, Maheswaran A, Aiyer SN, Shetty AP. Efficacy of Diffusion Tensor Imaging Indices in Assessing Postoperative Neural Recovery in Cervical Spondylotic Myelopathy. *SPINE* 2017, 42(1), 8-13



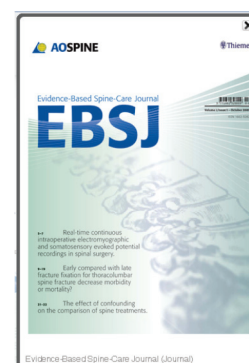


## Publications

52. Venkatadass K, Avinash M, Rajasekaran S. Bilateral Avascular necrosis of femoral head following asynchronous postictal femoral neck fractures: A case report and review of literature. *J Pediatr Orthop B*. 2017 Mar 31. doi: 10.1097/BPB.0000000000000460. [Epub ahead of print]
53. Ajoy Prasad Shetty, Vibhu Krishnan Viswanathan, Rishi Mukesh Kanna, Rajasekaran Shanmuganathan. Tubercular spondylodiscitis in elderly is a more severe disease: a report of 66 consecutive patients. *Eur Spine J*. DOI 10.1007/s00586-017-5157-9. Published online. 07 June 2017
54. Rodrigues-Pinto R, Kurd MF, Schroeder GD, Kepler CK, Krieg JC, Holstein JH, Bellabarba C, Firoozabadi R, Oner FC, Kandziora F, Dvorak MF, Kleweno CP, Vialle LR, Rajasekaran S, Schnake KJ, Vaccaro AR. Sacral Fractures and Associated Injuries. *Global Spine J*. 2017 Vol. 7(7), :609-616. Review Article.
55. Kanna RM, Rajasekaran S. Diffusion tensor imaging in spinal pathology: A robust investigative tool in clinical practice. *Neurol India*. 2017 Sep-Oct;65(5):964-965. doi: 10.4103/neuroindia.NI\_735\_17.
56. Rajasekaran S, Kanna RM, Schnake KJ, Vaccaro AR, Schroeder GD, Sadiqi S, Oner C. Osteoporotic Thoracolumbar Fractures-How Are They Different?-Classification and Treatment Algorithm. *J Orthop Trauma*. 2017 Sep;31 Suppl4:S49-S56. doi: 10.1097/BOT.0000000000000949.
57. Oner C, Rajasekaran S, Chapman JR, Fehlings MG, Vaccaro AR, Schroeder GD, Sadiqi S, Harrop J. Spine Trauma-What Are the Current Controversies? *J Orthop Trauma*. 2017 Sep;31 Suppl4:S1-S6. doi: 10.1097/BOT.0000000000000950.
58. Rajasekaran S, Kanna RM, Schroeder GD, Oner FC, Vialle L, Chapman J, Dvorak M, Fehlings M, Shetty AP, Schnake K, Kandziora F, Vaccaro AR. Does the Spine Surgeon's Experience Affect Fracture Classification, Assessment of Stability, and Treatment Plan in Thoracolumbar Injuries? *Global Spine J*. 2017 Jun;7(4):309-316. doi: 10.1177/2192568217699209. Epub 2017 Apr 20.
59. Kanna RM, Kamal Y, Mahesh A, Venugopal P, Shetty AP, Rajasekaran S. The impact of routine whole spine MRI screening in the evaluation of spinal degenerative diseases. *Eur Spine J*. 2017 Published online 21 Jan 2017. DOI 10.1007/s00586-017-4944-7.
60. Rajasekaran S, Kanna RM, Reddy RR, Natesan S, Raveendran M, Cheung KM, Chan D, Kao PY, Yee A, Shetty AP. How reliable are the Reported Genetic Associations in Disc Degeneration? The Influence of Phenotypes, Age, Population Size and Inclusion Sequence in 809 Patients. *Spine (Phila Pa 1976)*. 2016 Nov 1;41(21):1649-1660.
61. Sundararajan S.R, Ramakanth, Rajasekaran S. Irreducible Dislocation of Great Toe Interphalangeal Joint by an Accessory Sesamoid Bone: A Case Report and Review of Literature-JFAS(AP)The Journal of Foot And Ankle Surgery (Asia-Pacific) January – June 2016, 3(1):56-58DOI:10.5005/jp-journals-10040-1049,
62. Raja Bhaskara Rajasekaran and Rajasekaran Shanmuganathan. Schwannoma of the Posterior Tibial Nerve Presenting as Tarsal Tunnel Syndrome: A Case Report with Emphasis on the Role of Microscope during Surgery. *Case Reports in Orthopedics*. Volume 2018, Article ID 4704362, 4 pages. <https://doi.org/10.1155/2018/4704362>



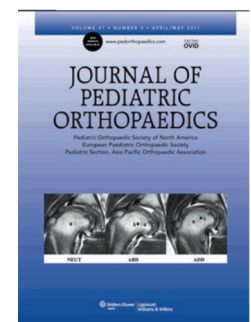
63. Kanna RM, Falavigna A, da Silva PG, Quadros FW, Merlin LH, Radaelli L, Guyot JP, Dozza D, Riew DK, Martins D, Yoshiharu K. Trends in scientific publications of Indian spine surgeons over 14 years (2000-2013). *Indian J Orthop.* 2016 May-Jun;50(3):322-6. doi: 10.4103/0019-5413.181797
64. Rajasekaran S, Aiyer SN, Shetty AP, Kanna R, Maheswaran A. Aneurysmal bone cyst of C2 treated with novel anterior reconstruction and stabilization. *Eur Spine J.* 2016 Mar 23. [Epub ahead of print]
65. Aiyer SN, Shetty AP, Kanna R, Maheswaran A, Rajasekaran S. Spinal cord herniation following cervical meningioma excision: a rare clinical entity and review of literature. *Eur Spine J.* 2016 May;25 Suppl 1:216-9. doi: 10.1007/s00586-016-4412-9. Epub 2016 Feb 4.
66. Sadiqi S, Verlaan JJ, Lehr AM, Chapman JR, Dvorak MF, Kandziora F, Rajasekaran S, Schnake KJ, Vaccaro AR, Oner FC. Measurement of kyphosis and vertebral body height loss in traumatic spine fractures: an international study. *Eur Spine J.* 2016 Aug 6. [Epub ahead of print].
67. Samartzis D, Cheung JP, Rajasekaran S, Kawaguchi Y, Acharya S, Kawakami M, Satoh S, Chen WJ, Park CK, Lee CS, Foocharoen T, Nagashima H, Kuh S, Zheng Z, Condor R, Ito M, Iwasaki M, Jeong JH, Luk KD, Prijambodo B, Rege A, Jahng TA, Luo Z, Tassanawipasa W, Acharya N, Pokharel R, Shen Y, Ito T, Zhang Z, Aithala P J, Kumar GV, Jabir RA, Basu S, Li B, Moudgil V, Goss B, Sham P, Williams R. Critical Values of Facet Joint Angulation and Tropism in the Development of Lumbar Degenerative Spondylolisthesis: An International, Large-Scale Multicenter Study by the AOSpine Asia Pacific Research Collaboration Consortium. *Global Spine J.* 2016 Aug;6(5):414-21. doi: 10.1055/s-0035-1564417. Epub 2015 Oct 26.
68. Samartzis D, Cheung JP, Rajasekaran S, Kawaguchi Y, Acharya S, Kawakami M, Satoh S, Chen WJ, Park CK, Lee CS, Foocharoen T, Nagashima H, Kuh S, Zheng Z, Condor R, Ito M, Iwasaki M, Jeong JH, Luk KD, Prijambodo B, Rege A, Jahng TA, Luo Z, Tassanawipasa WA, Acharya N, Pokharel R, Shen Y, Ito T, Zhang Z, Aithala P J, Kumar GV, Jabir RA, Basu S, Li B, Moudgil V, Goss B, Sham P, Williams R. Is lumbar facet joint tropism developmental or secondary to degeneration? An international, large-scale multicenter study by the AOSpine Asia Pacific Research Collaboration Consortium. *Scoliosis Spinal Disord.* 2016 Feb 9;11:9. doi: 10.1186/s13013-016-0062-2. eCollection 2016.
69. Rajasekaran S, Ravi S, Aiyer SN. Incidence and preventability of adverse events in an orthopaedic unit: a prospective analysis of four thousand, nine hundred and six admissions. [Int Orthop.](#) 2016 Nov;40(11):2233-2238. [Epub 2016 Sep 1.](#)
70. Kepler CK, Vaccaro AR, Schroeder GD, Koerner JD, Vialle LR, Aarabi B, Rajasekaran S, Bellabarba C, Chapman JR, Kandziora F, Schnake KJ, Dvorak MF, Reinhold M, Oner FC. The Thoracolumbar AOSpine Injury Score. *Global Spine J.* 2016 Jun;6(4):329-34.
71. Sundararajan SR, Pradeep V, Rajasekaran S. Neglected stress fracture Navicular and review of literature- The Journal of Foot And Ankle Surgery (Asia-Pacific) January – June 20152(1):38-40, DOI:10.5005/jp-journals-10040-1026



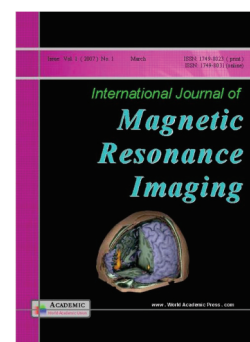
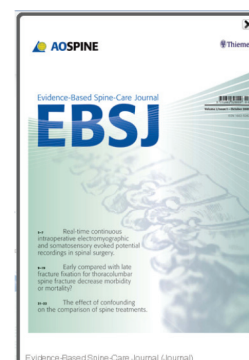


## Publications

72. Sadiqi S, Verlaan JJ, Lehr AM, Dvorak MF, Kandziora F, Rajasekaran S, Schnake KJ, Vaccaro AR, Oner FC. Surgeon Reported Outcome Measure for Spine Trauma an International Expert Survey Identifying Parameters Relevant for The Outcome of Subaxial Cervical Spine Injuries. *Spine (Phila Pa 1976)*. 2016 May 11. [Epub ahead of print].
73. Gupta N, Rajasekaran S., Balamurali G, Shetty A. Vertebral and Intraspinal Anomalies in Indian Population with Congenital Scoliosis: A Study of 119 Consecutive Patients. *Asian Spine J*. 2016 Apr;10(2):276-81. doi: 10.4184/asj.2016.10.2.276. Epub 2016 Apr 15.
74. Sadiqi S, Lehr AM, Post MW, Jacobs WC, Aarabi B, Chapman JR, Dunn RN, Dvorak MF, Fehlings MG, Rajasekaran S, Vialle LR, Vaccaro AR, Oner FC. The selection of core International Classification of Functioning, Disability, and Health (ICF) categories for patient-reported outcome measurement in spine trauma patients-results of an international consensus process. *Spine J*. 2016 Aug;16(8):962-70. doi: 10.1016/j.spinee.2016.03.050. Epub 2016 Apr 4.
75. Rajasekaran S, Maheswaran A, Aiyer SN, Kanna R, Dumpa SR, Shetty AP. Prediction of posterior ligamentous complex injury in thoracolumbar fractures using non-MRI imaging techniques. *Int Orthop*. 2016 Jun;40(6):1075-81. doi: 10.1007/s00264-016-3151-1. Epub 2016 Mar 17.
76. Williams R, Cheung JP, Goss B, Rajasekaran S, Kawaguchi Y, Acharya S, Kawakami M, Satoh S, Chen WJ, Park CK, Lee CS, Foocharoen T, Nagashima H, Kuh S, Zheng Z, Condor R, Ito M, Iwasaki M, Jeong JH, Luk KD, Prijambodo B, Rege A, Jahng TA, Luo Z, Tassanawipas W, Acharya N, Pokharel R, Shen Y, Ito T, Zhang Z, Aithala P J, Kumar GV, Jabir RA, Basu S, Li B, Moudgil V, Sham P, Samartzis D. An International Multicenter Study Assessing the Role of Ethnicity on Variation of Lumbar Facet Joint Orientation and the Occurrence of Degenerative Spondylolisthesis in Asia Pacific: A Study from the AOSpine Asia Pacific Research Collaboration Consortium. *Global Spine J*. 2016 Feb;6(1):35-45. doi: 10.1055/s-0035-1555655. Epub 2015 Jul 16.
77. Shetty AP, Aiyer SN, Kanna RM, Maheswaran A, Rajasekaran S. Pyogenic lumbar spondylodiscitis treated with transforaminal lumbar interbody fusion: safety and outcomes. *Int Orthop*. 2016 Jun;40(6):1163-70. doi: 10.1007/s00264-015-3063-5.
78. Gaike CV, Kanna RM, Shetty AP, Rajasekaran S. A rare cause of recalcitrant coccydynia: benign dermoid cyst masquerading as coccygeal pain. *Eur Spine J*. 2016 May;25 Suppl 1:194-7. doi: 10.1007/s00586-015-4354-7.
79. Rajasekaran S, Aiyer SN, Shetty AP, Kanna RM, Maheswaran A, Shetty JY. Effectiveness of Riluzole as a pharmacotherapeutic treatment option for early cervical myelopathy: a double-blinded, placebo-controlled randomised controlled trial. *Eur Spine J*. 2016 Jun;25(6):1830-5. doi: 10.1007/s00586-015-4323-1.
80. Venkatadass K, Balachander G, Rajasekaran S. Is prone position ideal for manipulation & pinning of displaced pediatric extension type supracondylar fractures of humerus? - A randomized control trial, *J Pediatr Orthop* 2015, Oct-Nov;35(7):672-6.



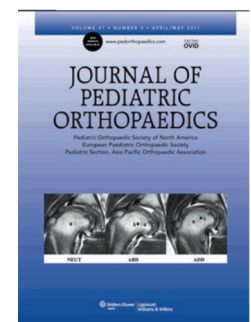
81. Oner FC, Jacobs WC, Lehr AM, Sadiqi S, Post MW, Aarabi B, Chapman JR, Dvorak MF, Fehlings MG, Kandziora F, Rajasekaran S, Vaccaro AR. Toward the Development of a Universal Outcome Instrument for Spine Trauma: A Systematic Review and Content Comparison of Outcome Measures Used in Spine Trauma Research Using the ICF as Reference. *Spine (Phila Pa 1976)*. 2016 Feb;41(4):358-67.
82. Kanna RM, Gaike CV, Mahesh A, Shetty AP, Rajasekaran S. Multilevel non-contiguous spinal injuries: incidence and patterns based on whole spine MRI. *Eur Spine J*. 2016 Apr;25(4):1163-9. doi: 10.1007/s00586-015-4209-2.
83. Vaccaro AR, Koerner JD, Radcliff KE, Oner FC, Reinhold M, Schnake KJ, Kandziora F, Fehlings MG, Dvorak MF, Aarabi B, Rajasekaran S, Schroeder GD, Kepler CK, Vialle LR. AOSpine subaxial cervical spine injury classification system. *Eur Spine J*. 2016 Jul;25(7):2173-84. doi: 10.1007/s00586-015-3831-33.
84. Kepler CK, Vaccaro AR, Koerner JD, Dvorak MF, Kandziora F, Rajasekaran S, Aarabi B, Vialle LR, Fehlings MG, Schroeder GD, Reinhold M, Schnake KJ, Bellabarba C, Cumhur Öner F. Reliability analysis of the AOSpine thoracolumbar spine injury classification system by a worldwide group of naïve spinal surgeons. *Eur Spine J*. 2016 Apr;25(4):1082-6. doi: 10.1007/s00586-015-3765-9.
85. Aiyer S, Shetty AP, Rajasekaran S. Isolated dorsal column dysfunction due to an intraspinal Osteolipoma- case report and review of literature. *J Clin Orthop Trauma*. 2016 Oct-Dec;7(Suppl 1):2-4. doi: 10.1016/j.jcot.2016.11.007. Epub 2016 Nov 29.
86. Kanna RM, Shetty AP, Rajasekaran S. Surgical Management of Pott's spine induced kyphosis in elderly children and adults. Accepted in *Current Orthopaedics* (Proof attached).
87. Aiyer S., Shetty A., Kanna R., Rajasekaran S., Dumpa S. "Enterococcus faecalis Causing Delayed Spondylodiscitis in a Case with Retained Intraspinal Bullet"( IN press with *Journal of Spine Surgery*-Manuscript ID: JSS-16-145
88. S. Rajasekaran, Said Sadiqi, Jorrit-Jan Verlaan, A. Mechteld Lehr, Marcel F. Dvorak, Frank Kandziora, Klaus J. Schnake, Alexander R. Vaccaro, F. Cumhur Oner. Universal disease-specific outcome instruments for spine trauma:a global perspective on relevant parameters to evaluate clinical and functional outcomes of thoracic and lumbar spine trauma patients. *Eur Spine J*, DOI 10.1007/s00586-016-4596-z, 2016.
89. S. Rajasekaran, Alexander R. Vaccaro, Rishi Mugesh Kanna, Gregory D. Schroeder, Frank Cumhur Oner, Luiz Vialle, Jens Chapman, Marcel Dvorak, Michael Fehlings, Ajay Prasad Shetty, Klaus Schnake, Anupama Maheshwaran, Frank Kandziora. The value of CT and MRI in the classification and surgical decision-making among spine surgeons in thoracolumbar spinal injuries. *Eur Spine J*, DOI 10.1007/s00586-016-4623-0, 2016.
90. S. Rajasekaran, Ajay Prasad Shetty, Rishi Mugesh Kannal Siddharth N. Aiyer, Anupama Maheswaran, Janardhan Yerram Shetty. Effectiveness of Riluzole as a pharmacotherapeutic treatment option for early cervical myelopathy: a double-blinded, placebo-controlled randomised controlled trial. *Eur Spine J*, DOI 10.1007/s00586-015-4323-1, 2015.
91. Venkatadass K. Pink Pulseless hand – Evaluation and Decision making: Is there a Consensus?, *International Journal of Paediatric Orthopaedics* 2015 July-Sep;1(1):19-22.





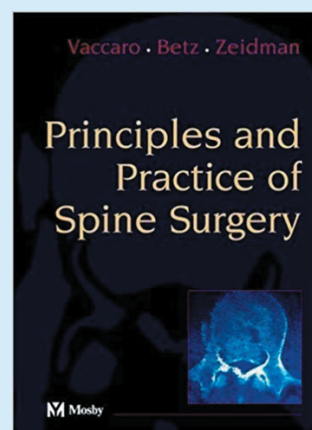
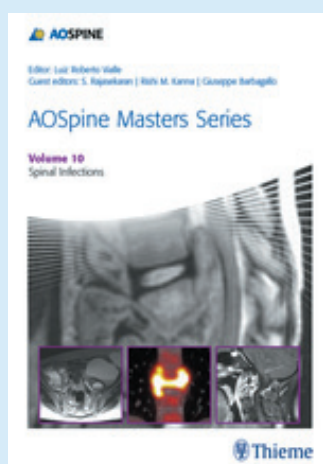
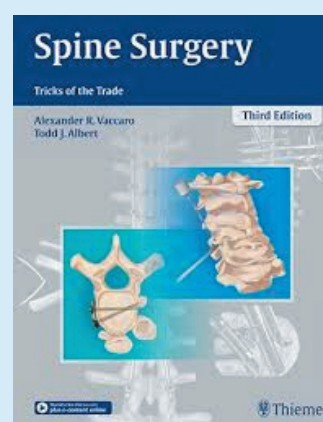
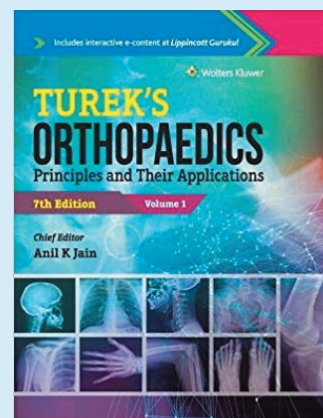
## Publications

92. S Rajasekaran, Gregory D. Schroeder, Christopher K. Kepler, John D. Koerner, F. Cumhur Oner, Michael G. Fehlings, Bizhan Aarabi, Klaus J. Schnake, Frank Kandziora, Luiz R. Vialle, Alexander R. Vaccaro. Can a Thoracolumbar Injury Severity Score Be Uniformly Applied from T1 to L5 or Are Modifications Necessary? *Global Spine J* 2015;5:339–345.
93. Vibhu Krishnan Viswanathan, Rishi Mugesh Kanna, Ajoy Prasad Shetty S Rajasekaran,. Acute fl accid paraparesis (cauda equina syndrome) in a patient with Bardet–Biedl syndrome: An illustrative case and literature review. *IJOrtho*\_478\_15R8.
94. Alexander R. Vaccaro, John D. Koerner, Kris E. Radcliff, F. Cumhur Oner, Maximilian Reinhold, Klaus J. Schnake, Frank Kandziora, Michael G. Fehlings, Marcel F. Dvorak, Bizhan Aarabi, S.Rajasekaran, Gregory D. Schroeder, Christopher K. Kepler, Luiz R. Vialle. AOSpine subaxial cervical spine injury classification system. *Eur Spine J*, DOI: 10.1007/s00586-015-3831-3, 2015.
95. F. Cumhur Oner, Said Sadiqi A, Mechteld Lehr, Bizhan Aarabi, Robert N. Dunn, Marcel F. Dvorak, Michael G. Fehlings, Frank Kandziora, Marcel W. Post, S. Rajasekaran, Luiz Vialle, Alexander R. Vaccaro. Toward developing a Specific Outcome Instrument for Spine Trauma, An Empirical Cross-sectional Multicenter ICF-Based study by AOSpine Knowledge Forum Trauma. *SPINE* Vol 40, Number 17, pp 1371-1379, 2015.
96. S Rajasekaran , Rishi Mugesh Kanna, Natesan Senthil, Muthuraja Raveendran, Veera Ranjani, Kenneth MC Cheung, Danny Chan. Genetic susceptibility of lumbar degenerative disc disease in young Indian adults. *ESJ* 2015,, Vol 24, No.9. DOI 10.1007/s00586-014-3687-y
97. Gregory D. Schroeder, MD, Christopher K. Kepler, MD, MBA, John D. Koerner, MD, Jens R. Chapman, MD, Carlo Bellabarba, MD, F. Cumhur Oner, MD, PhD, Max Reinhold, MD, Marcel Dvorak, MD, Bizhan Aarabi, MD, Luiz Vialle, MD, PhD, Michael G. Fehlings, MD, PhD, S.Rajasekaran, MD, Frank Kandziora, MD, PhD, Klaus J. Schnake, MD, and Alexander R. Vaccaro, MD, PhD. Is there a regional difference in morphology interpretation of A3/A4 fractures among different cultures?. *Journal of Neurosurgery: SPINE*, DOI: 10.3171/2015.4.SPINE1584, 2015.
98. F. Cumhur Oner, Said Sadiqi A, Mechteld Lehr, Marcel F. Dvorak, Bizhan Aarabi, Jens R Chapman, Michael G Fehlings, Frank Kandziora, S. Rajasekaran, Alexander R. Vaccaro. Towards the development of an outcome instrument for spinal trauma, *SPINE* Vol 40, Number 2, pp E91-E96, 2015.
99. S Rajasekaran, AP Shetty, TB Spine – Current Aspects on Clinical Presentation, Diagnosis and Management Option, *Seminars in Spine Surgery*, UNDER PRINT
100. S Rajasekaran, Arun Kamal, Chandra Mohan, Devendra Agraharam, Ramesh Perumal, Dheenadhayalan Jeyaramulu. Successful Re-implantation of Extruded Long bone Segments in Open fractures of Lower limb - Report of 3 cases, [Injury. 2015 Jul;46\(7\):1389-92. doi: 10.1016/j.injury.2015.04.006. Epub 2015 Apr 20.](#)



# Textbook Chapters

1. S Rajasekaran, Neurological Deficit after spinal osteotomy, Pg 253-260 - Spinal Osteotomy by Yan Wang, Oheneba Boachie, Lawrence Lenke, 2015
2. S Rajasekaran, Rishi Mugesh Kanna, Ajoy Prasad Shetty. Evidence Based Medicine. AO Spine textbook on Research, Thieme publishers, 2015.
3. Rishi M Kanna, S Rajasekaran, Ajoy Prasad Shetty. The Cervical Spine – Turek's Textbook of Orthopaedics, Wolters Kluwer publishers. 2016.
4. S Rajasekaran, Rishi M Kanna, Ajoy Prasad Shetty. Thoracolumbar Sacral Fractures. Textbook on Musculoskeletal Trauma in the Elderly. 1st Edition, Taylor and Francis publishers, 2016.
5. Rishi M Kanna, S Rajasekaran, Ajoy Prasad Shetty. Back pain in Spinal infections – AO Spine Master Series on Spinal Infections, Thieme publishers, 2016.
6. S Rajasekaran, Rishi M Kanna, Ajoy Prasad Shetty. Pediatric Spinal infections. The Growing Spine – 2nd Edition. Springer 2016.
7. S Rajasekaran, Rishi M Kanna, Ajoy Prasad Shetty. Granulomatous infections of the Spine. Chapman's text of Orthopaedic surgery. Jaypee Publications 2016.
8. S Rajasekaran, Rishi M Kanna, Ajoy Prasad Shetty. Spinal tuberculosis. Textbook of Spine Surgery. Ed: Brian Su. Jaypee Publications 2016.
9. S Rajasekaran, Rishi Mugesh Kanna, Ajoy Prasad Shetty. Geriatric Thoracolumbar and Sacral Fractures. Musculoskeletal Trauma in the Elderly, 1st edition, CRC Press, 2016.
10. Venkatadass K & Taral Nagda. Angular and torsional deformities in children, Algorithms in Paediatrics (Jaypee),
11. Venktadass K & Harish Hosalkar. Perthes disease, Textbook of Paediatrics for Post-graduates, 2nd edn. Authors –Section editor – Dr Harish Hosalkar, Editor-in-chief – Dr Piyush Gupta.
12. Venktadass K & Harish Hosalkar. DDH, Textbook of Paediatrics for Post-graduates, 2nd edn. Authors –Section editor – Dr Harish Hosalkar, Editor-in-chief – Dr Piyush Gupta.
13. Rajasekaran S, Rishi M Kanna, Ajoy Prasad Shetty. Pediatric Spinal Infections. AOSpine Master Series, Volume 10: Thieme, New York, 2018, pp 101-111
14. Rishi M Kanna, Ajoy Prasad Shetty. Rajasekaran S. Spinal Tuberculosis : Pathogenesis, Clinical Features, and Investigations. AOSpine Master Series, Volume 10: Thieme, New York, 2018, pp 63-74
15. Ajoy Prasad Shetty., Rishi M Kanna, Rajasekaran S. Surgical Management of Spinal Tuberculosis. AOSpine Master Series, Volume 10: Thieme, New York, 2018, pp 88-100
16. Ajoy Shetty, Rajasekaran S, Rishi Mugesh Kanna. Spinal Tuberculosis. The Spine. Principles & Practice. 2018 Vol Two. Update Publisher.
17. S Rajasekaran, Siddharth Aiyyer, Rishi Mugesh Kanna, Ajoy Prasad Shetty. High grade Spondylolisthesis: Pediatric and Adult. ISSLS Textbook of Spine Surgery, 2018. Ed. Hart R, Luk K, Gunzberg R. Under print.
18. Ajoy Prasad Shetty, S Rajasekaran. Spinal Navigation. ISSLS Textbook of Spine Surgery, 2018. Ed. Hart R, Luk K, Gunzberg R. Under print.
19. S Rajasekaran. Setting up a spine care teaching institute in Coimbatore. ISSLS Textbook of Spine Surgery, 2018. Ed. Hart R, Luk K, Gunzberg R. Under print.
20. Rishi Mugesh Kanna, Ajoy Prasad Shetty, S Rajasekaran. Tuberculosis Spondylitis. ISSLS Textbook of Spine Surgery 2018. Ed. Hart R, Luk K, Gunzberg R. Under print.





*Major Courses & Conferences  
2015-2018*

*Spreading the light of knowledge...*





## *Major Courses & Conferences 2015-2018*

The unit is very vibrant in organizing academic activities and conducts many courses regularly in orthopaedics, anaesthesiology and radiology. The scientific content of these meetings are meticulously planned with eminent International and National speakers along with hands-on workshops. As a result, these meetings have very high standards on par with International and national conferences and attracts delegates from not only all over the country, but also from neighboring countries. All the residents and fellows in training in various departments are registered for these courses by default and hence benefit immensely from these meetings.

The sixth floor of the hospital has a dedicated area of about 20,000 square feet which is exclusively used for conducting conferences and workshops. The entire area is air-conditioned and there are three Halls which can accommodate about 1000 delegates. The operating rooms are wired to the auditorium which facilitates seamless live transmission of surgeries from the operating room to all the halls.

Year	Number of Meetings	Total Number of Delegates
2015	6	1327
2016	5	1105
2017	6	1405
2018	5	1805



Workshop - 1



Workshop - 2



Hall - A Live Surgery



Hall - C Live Surgery



## Major Courses & Conferences 2015-2018



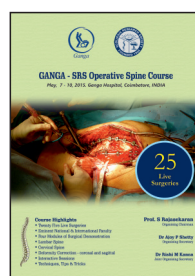
### GANGA - Operative Spine Courses

The Ganga Operative Spine Course is held once in two years and is globally popular for its specific focus on live demonstration of spine surgeries, ranging from the simple to the most complex. Experts in the field share their wealth of experience and practical skills with the delegates, taking them through the various steps of surgery in detail. The Course thus offers the unique possibility for the delegates to not only witness the surgical procedures live but also to interact with the expert and clarify their doubts.



#### GANGA - SRS Operative Spine Course 2017

May, April 7th to 9th 2017  
International Faculty - 10  
National Faculty - 16  
Delegate - 387



#### GANGA - SRS Operative Spine Course 2015

May, 7 - 10, 2015.  
International Faculty - 7  
National Faculty - 15  
Delegate - 358







### Ganga Operative Arthroplasty Courses

The Ganga Operative Arthroplasty Course is held every alternate year focussing on recent advances and newer techniques in the field of Arthroplasty. International and National experts are invited to deliver lectures and demonstrate surgical procedures. The course is very popular among Arthroplasty enthusiasts as it provides a good opportunity to learn the practical tips & tricks. The programme and cases are planned in way to include the entire spectrum of arthroplasty surgeries right from the basic straight forward joint replacement surgeries to arthroplasty in complex deformities and complex revision procedures.



**Ganga Operative Arthroplasty Course 2017**  
 July, 28th to 30th, 2017  
 International Faculty - 6  
 National Faculty - 10  
 Delegate - 829



**Ganga Operative Arthroplasty Course 2015**  
 July, 09th to 12th, 2015  
 International Faculty - 4  
 National Faculty - 15  
 Delegate - 649





## Major Courses & Conferences 2015-2018



### Ganga Operative Arthroscopy Courses

The Ganga Operative Arthroscopy Course is held every alternate year focussing on recent advances and newer techniques in the field of Arthroscopy and Sports Medicine. International and National experts are invited to deliver lectures and demonstrate surgical procedures. The course is very popular among arthroscopy enthusiasts as it provides a good opportunity to learn the practical tips & tricks. As a part of this event, a rehabilitation course is conducted exclusively for the physiotherapists. This attracts a lot of sports therapists to learn the current trends in treating sports injuries and also the recent recommendations for rehabilitating the sports personnel with injuries.



#### Ganga Operative Arthroscopy Course 2017

24th – 26th March, 2017

International Faculty - 4

National Faculty - 20

Delegate - 271



#### Ganga Operative Arthroscopy Course 2015

March 6-8, 2015

International Faculty - 4

National Faculty - 18

Delegate - 303







### *Ganga Operative Trauma Courses*

The Ganga Operative Trauma Course which is held every alternate year is one of the most popular courses in this part of the world. The demand for this course is so high that the registrations usually gets filled up in 6 month before the course dates. The highlight of this course is the live surgical demonstrations of trauma surgeries starting from very simple to very complex peri-articular fractures. This provides opportunity for learning right from the orthopaedic resident to any practising orthopaedic surgeon in any phase of his career. The interactive case discussions of complex and failed trauma is yet another attraction of this course which again provides all the delegates to learn from others mistakes.



**Ganga Operative Trauma Course 2018**  
June 22th to 24th 2018  
International Faculty - 3,  
National Faculty - 10,  
Delegate - 884



**Ganga Operative Trauma Course 2016**  
June 24th to 26th 2016  
International Faculty - 4,  
National Faculty - 13,  
Delegate - 707







### *Ganga Paediatric Orthopaedic Symposium 2016*



The Ganga Paediatric Orthopaedic Symposium 2016 was held from September 2nd to September 4th, 2016. The theme of the meeting was Neuromuscular Problems and deformities. There were three International faculty and 12 National faculties. The plenary lecture by Prof Benjamin Joseph about his lifetime work on Perthes disease was the highlight of the meeting. Along with this there were 20 live surgical demonstrations of various commonly done paediatric orthopaedic procedures.

### *IFICS Operative Symposium 2018*

International Fracture in Children Symposium (IFICS) was started in 2014 and conducted annually to spread knowledge about management of paediatric fractures. For the first time, IFICS was conducted as an Operative Symposium from Aug 17 to Aug 19th, 2018. There were 3 International faculty and 15 National faculties. The meeting was attended by 150 delegates. The IFICS oration was delivered by Dr Alvin Crawford on Pelvic Fracture in Children. There were live demonstrations of non-operative and operative treatment of common children's fractures which was well appreciated by the delegates.







### Ganga Update on Musculoskeletal Radiology

The Ganga Operative Trauma Course which is held every alternate year is one of the most popular courses in this part of the world. The demand for this course is so high that the registrations usually gets filled up in 6 month before the course dates. The highlight of this course is the live surgical demonstrations of trauma surgeries starting from very simple to very complex peri-articular fractures. This provides opportunity for learning right from the orthopaedic resident to any practising orthopaedic surgeon in any phase of his career. The interactive case discussions of complex and failed trauma is yet another attraction of this course which again provides all the delegates to learn from others mistakes.



### Ganga Musculoskeletal Education in Radiology 2018

July 20 to 22, 2018.  
National Faculty - 12,  
Delegate - 222

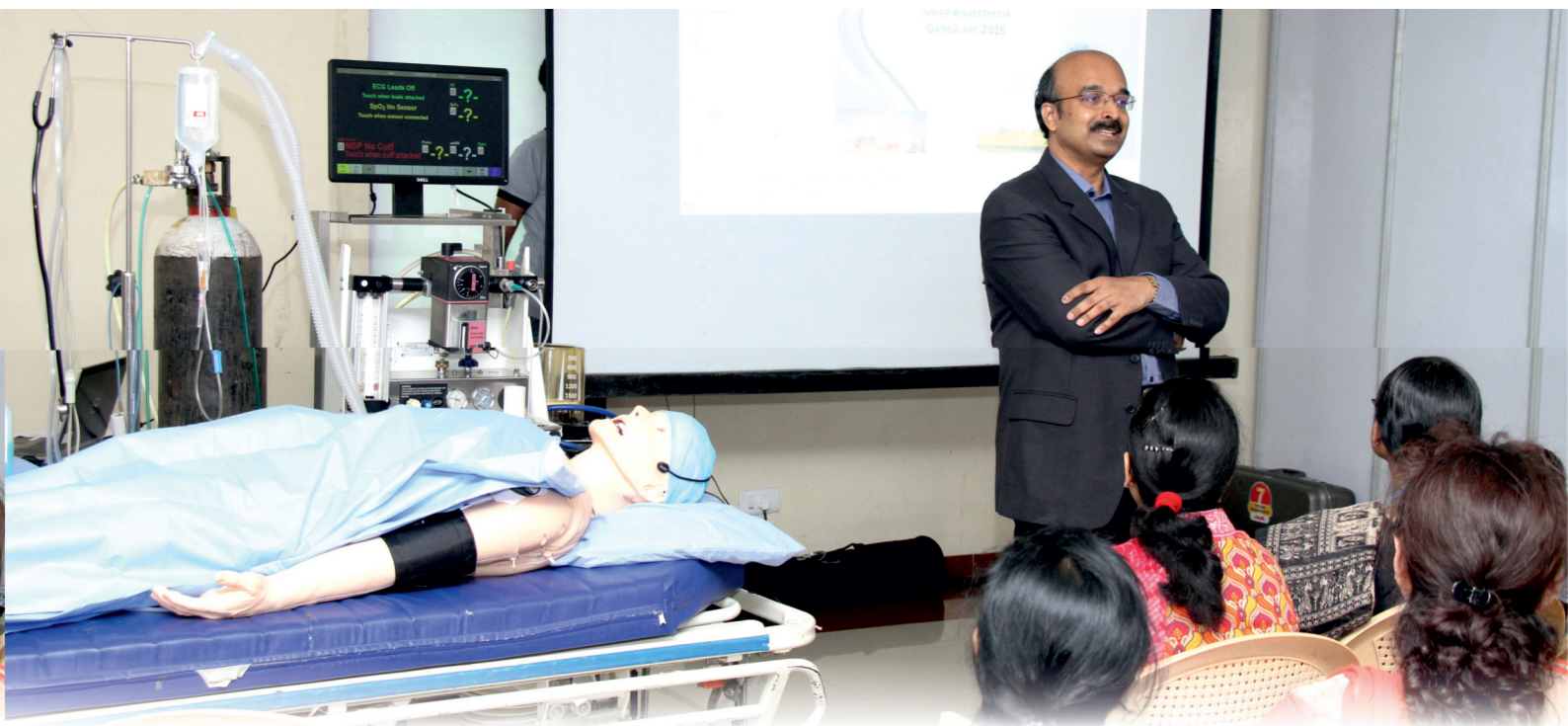


### Ganga Update on Musculoskeletal Radiology 2016

Jan 9th - 10th, 2016  
National Faculty - 17,  
Delegate - 214







## Ganga Anaesthesia Refresher Courses

Ganga Anaesthesia Refresher Course. The theme of this course is Perioperative Care. We are earnestly working hard to present the most important and interesting scientific updates on the Perioperative care of our patients. This course would also add certain very valuable inputs to our thoughts, that would enrich us in communication skills, leadership, health and wealth management. We shall strive hard to give a rich blend of academics and life skills, with the aim to make an Anaesthesiologist a complete person. A galaxy of National and International experts would share their thoughts and experience with us.



**Ganga Anaesthesia Refresher Course 2015**  
June, 26 - 28, 2015. Ganga Hospital  
Faculty - 5, Delegate - 272



**Ganga Anaesthesia Refresher Course 2016**  
16th-19th June 2016 Ganga Hospital  
Faculty - 5, Delegate - 300



**Ganga Anaesthesia Refresher Course 2017**  
June 22nd to 25th 2017. Ganga Hospital  
Faculty - 5, Delegate - 369

**Ganga Anaesthesia Refresher Course 2018**  
June, 28, 29, 30 & July 1, 2018. Ganga Hospital  
Faculty - 5, Delegate - 392



*Ganga Arthroscopy Course 2015 - Faculty*



**Dr Marten Vander List**  
Netherlands  
Orthopedic surgeon,  
Meander MedicalCenter in Amersfoort,  
Shoulder surgeon,  
Movement Care Clinic in Naarden.  
He is also medical director of  
Bergman Clinics - Movement Care.



**Dr Mark Ferguson**  
South Africa  
Orthopaedic surgeon and  
Principal surgeon at the  
Centre for Sports Medicine  
& Orthopaedics in Rosebank,  
South Africa.



**Dr Uwe Pietzner**  
Germany  
Specialist for Orthopedics,  
Specialist for Orthopedics and  
Trauma Surgery in Altentreptow



**Dr EBS Ramanathan**  
Oman  
Specialization in the treatment of  
SPORTS INJURIES.  
Senior Consultant Orthopedics and  
Head of Arthroscopy &  
Sports Injuries unit in Khoula Hospital

*Ganga Operative Arthroplasty Course 2015 - Faculty*



**Dr. Lawrence S Crossett**  
USA  
Dr. Crossett, MD is a practicing  
Orthopedic Surgeon in Pittsburgh,  
PA. Dr. Crossett graduated from  
Temple University Lewis Katz School  
of Medicine



**Dr David Barrett**  
UK  
Consultant Orthopaedic  
Surgeon, Southampton  
University Hospitals  
NHS Trust.



**Dr Wolfgang Klauser**  
Head Physician, Department of  
Orthopaedics, HELIOS Ostseeklinik  
Damp, Germany,  
was a visiting professor in the  
Joint Replacement unit in the  
Department of Orthopaedics  
Surgery at Ganga Hospital.



**Dr. Harish Hosalkar**  
USA  
Board Certified Orthopedic Surgeon  
(Adult and Pediatric Orthopedist)  
Center for Hip Preservation and  
Reconstruction, Deformity Correction,  
Limb Reconstruction &  
Limb Lengthening

*GANGA - SRS Operative Spine Course 2015 - Faculty*



**Dr. Sigurd Berven**  
USA  
MIS & Spinal Deformity Correction  
UCSF, San Francisco



**Prof. Munish Gupta**  
Washington University Orthopedics  
USA  
Mildred B. Simon Distinguished  
Professor of Orthopaedic Surgery  
Professor of Neurological Surgery  
Co-director of Pediatric and Adult  
Spinal Deformity Service.



**Prof. David W Polly**  
USA  
A pediatric spine surgeon at the  
University of Minnesota Department  
of Orthopaedics in Minneapolis,  
Minnesota, and at Shriners Healthcare  
for Children — Twin Cities.  
He is board certified by the American  
Board of Orthopaedic Surgery.



**Prof. Mike Grevitt**  
UK  
Consultant Orthopaedic  
Spinal Surgeon - spine at Spire  
Nottingham Hospital

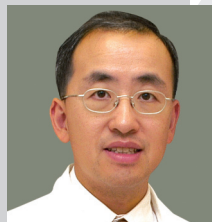


*GANGA - SRS Operative Spine Course 2015 - Faculty*



**Prof. Hossein Mehdiان**  
UK

Consultant Spine Surgeon  
Queen's Medical Centre  
Nottingham



**Prof. Kenneth MC Cheung**  
Hong Kong

Past President, SRS  
Professor of Spine Surgery  
University of Hong Kong



**Prof. Marinus de Kleuver**  
Netherlands

Professor of Spine Surgery  
Radboud University,  
Nijmegen



**Dr. Ferran Pellisé**  
Spain

Director of Spine Surgery  
Quirónsalud hospital,  
Barcelona

*ISKSAA GANGA 2015 - Faculty*



**Prof. Jegan Krishnan**  
Australia

Arthroplasty & Arthroscopy  
Flinders University,  
Adelaide



**Dr. Janak Mehta**  
Australia

Sports Medicine

*4th Ganga Operative Trauma Course 2016 - Faculty*



**Prof Hans-Christoph Pape**  
Germany

Head of Department of Trauma  
University Hospital,  
Hannover



**Dr Frankie Leung**  
Hong Kong

Professor, Upper Limb &  
Trauma Surgery  
University of Hong Kong



**Dr Peter Giannoudis**  
UK

Professor,  
Department of Trauma  
University of Leeds



**Dr Cyril Mauffrey**  
USA

Director of Service of the  
Department of Orthopedics,  
Rehabilitation and Physical therapy  
at Denver Health Medical Center  
Colorado

*Ganga Paediatric Orthopaedic Symposium 2016 - Faculty*



**Dr. Sanjeev Madan**  
UK

consultant Orthopaedic Surgeon  
at Sheffield Children's Hospital,  
and Doncaster Teaching Hospitals



**Dr. Prasad V Gourineni**  
USA

Pediatric Orthopedic Surgery  
Pediatric & Young Adult Orthopedics  
Mid America Orthopedics, SC

*Ganga Operative Arthroscopy Course 2017*



**Dr. Jurgen Barthofer**  
Austria

Trauma surgeon, sports traumatologist Wahlarzt u. Private Austrian Olympic Committee, delegation to the 2018 Winter Olympics in South Korea.



**Dr. Gerhard J Greeff**  
South Africa

Shoulder Surgeon



**Dr. Eiji Itoi**  
Japan

Professor and Chair,  
Department of Orthopaedic Surgery,  
Tohoku University  
School of Medicine



**Dr. Duncan Tennent**  
UK

Orthopaedics -  
elbow and shoulder  
at Spire St Anthony's Hospital

*Ganga Operative Arthroplasty Course 2017- Faculty*



**Dato Dr K S Sivananthan**  
Malaysia

Senior Consultant  
Orthopaedic Surgeon at  
Hospital Fatimah, Ipoh.



**Dr Ivan Brenkel**  
UK

Consultant Orthopaedic Surgeon  
at NHS Trust  
Kirkcaldy, United Kingdom



**Dr Jith Balakumar**  
Australia

Paediatric &  
Adult Orthopaedic Surgeon  
Melbourne Orthopaedic Group



**Dr. Michael O Sullivan**  
Australia

Michael O'Sullivan performs  
hip and knee surgery.  
Interest in primary and revision hip  
and knee replacement as  
well as hip arthroscopy surgery.



**Dr. Matt Lyons**  
Australia

hip and knee surgeon  
with particular expertise in  
primary and revision arthroplasty.  
North Sydney Orthopaedic and  
Sports Medicine Centre



**Dr. M Chandramohan**  
UK

Consultant MSK Radiologist  
and Sports Imaging Specialist

**IFICS 2018 Operative Symposium - Faculty**  
**(International Fractures in Children Symposium)**



**Dr Shital Parikh**  
USA

Orthopedic Surgery /  
General Orthopedic Surgery,  
Hip & Knee Reconstructive Surgery,  
Orthopedic Sports Medicine,  
Pediatric Orthopedics



**Dr James Hui**  
Singapore

Department of Orthopaedic Surgery  
Yong Loo Lin School of Medicine  
National University of Singapore





### 30th Annual Meeting of the Indian Foot & Ankle Society IFASCON 2017



**Dr Selene Parekh**  
USA

Associate Professor of Surgery  
Division of Orthopaedic Surgery  
Adjunct Faculty,  
Fuqua Business School  
Duke University



**Dr. Christian Ortiz**  
Chile

Dr. Cristián Ortiz, a traumatologist  
at the Ankle and Foot Center of the  
Universidad de los Andes Clinic,  
is a member of the  
Foot and Ankle Education Taskforce.



**Dr Ashok Acharya**  
UK

Consultant Orthopaedic Surgeon  
who specialises in  
Foot and Ankle surgery



**Dr Jean Brilhaut**  
France

Foot & Ankle Orthopaedic Surgeon  
Department of Orthopedic Surgery  
and Traumatology.  
Trousseau University  
Hospital of Tours



**Dr. Vinod Panchbavi**  
USA

Ankle Arthroscopy and Replacement  
Foot and Ankle Sports Injuries,  
Ligament Sprains and Fractures  
Bunion and Toe Deformity Correction  
Lower Limb Deformity Correction



**Dr. Kartik Hariharan**  
UK

Consultant Trauma and  
Foot and Ankle Surgeon  
Royal Gwent Hospital



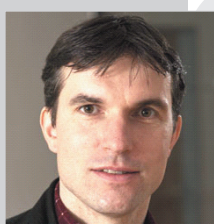
**Dr. Ashish Shah**  
USA

Consultant Trauma and  
Foot and Ankle Surgeon



**Dr. Michael Swords**  
USA

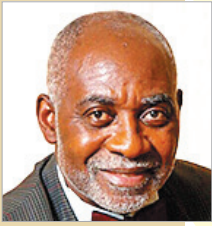
Consultant Trauma and  
Foot and Ankle Surgeon



**Dr. Stefan Rammelt**  
Germany

Consultant Trauma and  
Foot and Ankle Surgeon

*GANGA - SRS Operative Spine Course 2017- Faculty*



**Prof. Oheneba Boachie**  
Ghana

orthopaedic surgeon. He specializes in spinal reconstruction and the treatment of kyphosis and scoliosis.



**Prof. Claudio Lamartina**  
Italy

Employed in IRCCS Galeazzi Orthopedic Institute of Milan  
Director of GSpine4 Department of Spine Surgery IRCCS



**Prof. Munish Gupta**  
USA

Mildred B. Simon Distinguished Professor of Orthopaedic Surgery  
Professor of Neurological Surgery  
Co-director of Pediatric and Adult Spinal Deformity Service



**Prof. Roger Hartl**  
USA

He specializes in neurosurgery, neurological spine surgery,



**Prof. Marinus De Kleuver**  
Netherlands

Professor Marinus de Kleuver is head of the department of orthopedic surgery.



**Prof. Ahmet Alanay**  
Turkey

Pediatric and Adult Spine Surgeon



**Prof. Wong Chung Chek**  
Malaysia

Consultant Orthopaedic and Traumatology  
Sheikh Fazilatunnesa Mujib Memorial KPJ Specialized Hospital & Nursing College

*5th Ganga Operative Trauma Course 2018 - Faculty*



**Dr. Chris Finkemeier**  
USA

Orthopedic surgeon in Carmichael, California and is affiliated with multiple hospitals in the area, including Mercy San Juan Medical Center and Sutter Roseville Medical Center.



**Dr. Paulo Barbosa**  
Basel

Paulo Roberto Barbosa  
Dept of Orthopaedics and Traumatology  
University of Basel  
Switzerland



**Dr. Peter Bates**  
UK

Consultant Polytrauma Surgeon  
The Royal London Hospital  
UK



## Visiting Professors



*Prof Jegan Krishnan receiving the Visiting Professor plaque from Dr JG Shanmuganathan*



*Dr Alvin Crawford receiving the Visiting Professor plaque from Dr S Rajasekaran*

## THE MASTER'S STROKES

- Visiting professorship is a regular event in Ganga hospital since 2008.
- The institution invites visiting professors every year which is of great benefit to the entire team.
- Pioneers and stalwarts in various specialties of orthopaedics are invited to deliver lectures, conduct ward rounds and to perform surgeries in their areas of specialization.
- This gives a wonderful opportunity for all the staff members of the team from the trainee to the senior consultant to update themselves and learn the tips and tricks.
- Often the programme has a day long CME with the visiting professors where delegates around the state are invited to learn from the masters.

*Learn from  
the masters -  
The tips, tricks  
and  
taste of the trade*

## Visiting Professors



*Marc F Swiontkowski, Professor, Department of Orthopaedics, University of Minnesota, USA was the distinguished Visiting Professor for the year 2008.*

**Prof. Marc F Swiontkowski, USA**  
Visiting Professor 2008



*Prof Jegan Krishnan, Chair in Orthopaedic Surgery, Flinders University, Adelaide, Australia was a distinguished Visiting Professor for the year 2009.*

**Prof. Jegan Krishnan, Australia**  
Visiting Professor 2009



*Dr Boachie, Professor of Orthopaedic Surgery, Weill Cornell Medical College and Chief of the Scoliosis Service, Hospital for Special Surgery was the distinguished Visiting Professor for the year 2010.*

**Dr. Oheneba Boachie, USA**  
Visiting Professor 2010



*Prof K Daniel Riew, Mildred B. Simon Distinguished Professor of Orthopedic Surgery. Chief of Cervical Spine Surgery, Washington University was the distinguished Visiting Professor for 2012.*

**Prof. K. Daniel Riew, USA**  
Visiting Professor 2012



*Prof Steve Glassmann, Prof of Orthopaedic Surgery, University of Louisville, USA was the distinguished Visiting Professor for the year 2013.*

**Dr. Steve Glassman, USA**  
Visiting Professor 2013



*Dr Harish Hosalkar, Diplomate, American Board of Orthopedic Surgery, Director, Center for Hip Preservation and Children's Orthopedics, California, USA was a distinguished Visiting Professor for the year 2014*

**Dr. Harish S Hosalkar, USA**  
Visiting Professor 2014



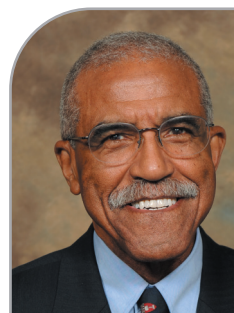
*Prof Jeffrey O Anglen, Prof, Dep of Orthopaedic Surgery, Indiana University School of Medicine, Indianapolis, USA was the distinguished Visiting Professor for the year 2014*

**Dr. Jeffrey O. Anglen, USA**  
Visiting Professor 2015



*Senior consultant qualified in Adult Reconstruction and Foot and Ankle Surgery, Deputy Medical Director of world renowned Helios-Endo Klinik in Hamburg, Germany. Head of Foot and Ankle Dept and Knee Surgery*

**Dr. Wolfgang Klausner, Germany**  
Visiting Professor 2016



*Dr. Crawford, Professor Emeritus has more than 35 years of clinical experience pediatric orthopaedics. He is the founding director of the Crawford Spine Center at Cincinnati Children's Hospital*

**Dr Alvin Howell Crawford, USA**  
Visiting Professor 2018





*SICOT (International Society of Orthopaedic Surgery  
and Traumatology) - Fellows*



**Dr. Marco Cavallo**  
(SICOT Travelling Fellowship, Italy)  
Outstanding overall experience.  
Excellent and awesome team work.  
Extremely efficient research team.  
Great work culture with lots of traditions.



**Dr. Valentine Ogochukwu**  
(SICOT Fellowship, Nigeria)  
It has always been my dream to visit here and improve on my clinical training in orthopaedic surgery.



**Dr. Benjamin Mukulu Ndeleva**  
(SICOT Fellowship, Nairobi)  
The members of the spine team were all so welcoming and hospitable. Fantastic set-up.



**Dr. Moses Agunda**  
(SICOT Fellowship, Kenya)  
This fellowship forms a very strong foundation for me, to progressively build and nurture the skills acquired towards becoming a safe and skillful spine surgeon.



**Dr. Zehrabanu Zulfikar Hussein**  
(SICOT Fellow in Spine Fellowship, Tanzania, East Africa)  
This training will help me a lot in terms of management in out patients' level, clinical skills and decision making. All the consultants and fellows are very much co-operative.



**Dr. Ilyas Abdiladif Sh Yosuf**  
(SICOT/Ganga Fellowship, Somalia)  
I have really highly benefited from my six weeks. I have been here especially trauma department, where I have witnessed nearly all fracture varieties and then management



**Dr. Chaitanya Krishna**  
(ISKSA SICOT Ganga Fellowship, Haryana)  
Wonderful place and good people to work with. A great visionary Prof. Dr.S.Rajasekaran making India proud. who tolerated me on daily basis and try to mould me as an orthopaedic surgeon.



**Dr. Sidhant Goyal**  
(SICOT-GANGA Fellowship, Mumbai)  
I thank SICOT India and Ganga Hospital to start this new fellowship program for young budding surgeon like me. It is an excellent centre for me to learn and Ganga teaches us a lot.



**Dr. Prasad Soraganui**  
(SICOT-GANGA Fellowship, AP)  
Trauma course was very helpful in updating our knowledge in field of trauma and it was a great learning experience by watching experienced surgery operating and giving tips and tricks.



**Dr Mohit Sharma**  
(SICOT-GANGA Fellowship, New Delhi)  
It was a great academic learning experience. One can learn how to manage high volume patient load with excellent patient care and quality being maintained.



**Dr. Mohammed Saleh Al Saifi**  
(AO Trauma Fellowship, Yemen)  
I am surprised about the system of the hospital and have been among interesting operations that I have never seen it before.



**Dr. Mohammad Kamruzzaman**  
(AO Trauma Fellowship, Bangladesh)  
I have learned many valuable clinical tips and pearls of wisdom here I have observed some complex trauma neglected / non-union / failure cases, also deformity correction.



**Dr. Subhas B Shah**  
(AO Trauma Fellowship, Nepal)  
The opportunity to scrub in cases of my interest in theatre and enlightening me with wisdom in OPD and in trauma review was great. I will love to come to this centre again in future.



**Dr. Abdelmanem Muhammed**  
(AO Trauma Fellowship, Saudi Arabia)  
Good and very specialised hospital with very kind, highly educated and helpful surgeons.



**Dr. Kazutaka Igarashi**  
(AO Spine Fellow, Japan)  
Prof. Rajasekaran is very spectacular detailed techniques and knowledge are redeemed. For first time, in South India is meal can be very surprisingly meaningful.



**Dr. Kazunori Hayashi**  
(AO Spine Fellowship)  
Thanks for all Ganga staff for kindness. I spend quite variable time in India. I saw over 300 cases of operation and also attend 30 cases. Ooty is a nice place to visit. I will back 5 years later for JSSR fellow.



**Dr. Sharif Ahmed Jonayed**  
(AO Spine Asia Pacific Fellowship, Bangladesh)  
This training will help me a lot in terms of management in out patients' level, clinical skin skills and decision making. All the consultants and fellows are very much co-operative.



**Dr. Boston Munthali**  
(Ganga AO Alliance Fellowship, Malawi)  
The experience I have acquired is very invaluable and will in the long term benefit the nation of Malawi as far as spine surgeons are concerned. The organisation of this institution has taught to me beyond doubt that everything is possible really work.



**Dr. Dhiraj Vithal Sonawane**  
(AO Spine Fellowship, Mumbai)  
It was wonderful experience to assist for surgeries and discuss my problems, queries and to get right answer.



**Dr. Himanshu Prasad**  
(AO Spine Fellowship, Hyderabad)  
It was a dream comes true to visit Ganga Hospital. I would call it Temple of learning. They are understandably best at work.



**Dr. M. B Sathik Babu**  
(AO National Fellowship, Chennai)  
with their great team have deeply inspired in to pursue clinical research and surgical skills on par, which helps in building a strong career puts ahead



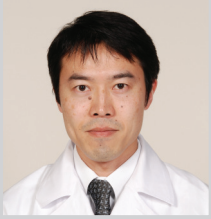
**Dr. Saurabh Saxena**  
(AO Trauma Fellow, Kanpur)  
Best experience of my life. This is the best centre to learn all aspects of trauma. Dr. Dheenadhayalan sir is an excellent teacher, surgeon and very passionate about orthopaedic and humble to the care.



## International Visitors



### Japanese Society for Spine Surgery and Related Research (JSSR) - Travelling Fellows



**Dr. Hiroshi Uei**  
(JSSR - Travelling Fellowship, Japan)  
I was very happy to stay and see spine surgery in Ganga Hospital.  
Thank you for everything.



**Dr. Testuo Hayashi**  
(JSSR - Travelling Fellowship, Japan)  
It's my pleasure to visit here and learn a lot of interesting cases.



**Dr. Sumihisa Orita**  
(JSSR Fellowship 2017, Japan)  
JSSR Travelling fellow gave us great experience at Ganga Hospital.



**Dr. Tetsuro Hida**  
(JSSR Fellowship 2017, Japan)  
Great thanks for all staff!



**Dr. Kentaro Yamada**  
(JSSR Fellow, Japan)  
Thanks for all your kindness.  
It was big impact for me to all your passion for patient treatment.



**Dr. Hiroyuki Inose**  
(JSSR Fellow, Japan)  
I was amazed by beautiful operations.  
Thank you.



**Dr. Kenichiro Kakutani**  
(JSSR Travelling Fellowship, Japan)  
I am really appreciated you kind hospitality.  
I am deeply impressed perfect surgery and basic science.



**Dr. Narihito Nagoshi**  
(JSSR Travelling Fellowship, Japan)  
I am really moved and touched for the hospitality here.  
Hope I will come back here!!.



### British Orthopaedic Association - Travelling Fellows



**Dr. Kar Hao Teoh**  
(BOA Travelling Fellow, UK)  
The management of complex trauma and open injuries is second to none in the world and I highly appreciate the trauma surgeons for imparting me helpful tips and tricks in trauma management.



**Dr. Mas Mike Rodger Rane**  
(BOA Travelling Fellowship, England)  
Ganga Hospital is world leading in the quality & volume of major trauma. I have learnt a lot from my visit and seen cases that I am unlikely to see in England. I have been very impressed by the standard of care and the organisation of the institution.



**Dr. Shakil Patel**  
(BOA Travelling Fellowship, UK)  
The knowledge of surgical skill at this institution as well as the dedication to patient care is greatly uplifting. I am very grateful for this opportunity and am sure I will continue to learn from this department in my future career.



**Dr. Chrishan Thakar**  
(BOA Fellowship, UK)  
Your unit is an inspiration to all. I have been mightily impressed by your work and have found my short experience with you invaluable.

## International Observership



**Dr. Maximilian Reinhold**  
(Traveling Fellowship 2017, Germany)  
To me Ganga has just the right taste', created by the perfect blend of good clinical work, academics, research and social work. Want it all? Come to Ganga Spine surgery unit and have a sip yourself.



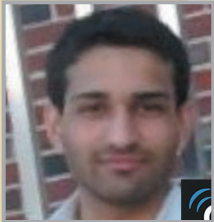
**Dr Tolosa Kristopher Exito**  
(Observership, Filipinos)  
I would like to express my deepest gratitude for giving me an opportunity to learn and be trained in arthroplasty. I never thought that I would have this much experience.



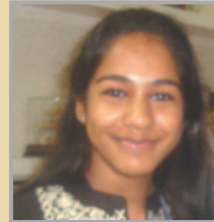
**Dr. Nzekwe Kenneth Chukwudi**  
(Observer (Spine & Arthroplasty, Nigeria)  
I was amazed by the humane attitudes of the great surgeons. I encountered during my training ranging from Arthroplasty, Spine & trauma.



**Dr. Kamalanathan Palanidy**  
(Spine Observership 2017)  
Indeed a wonderful experience being exposed to a wide gamut of spinal procedures over a short period of time. The opportunity to assist where easible was an added bonus which will definitely increase my confidence in spinal surgery further.



**Dr. Krishn Khanna**  
(Observership, USA )  
I was so touched by the grace, openness & humility I saw from everyone here. Especially Dr.Rajasekaran. He truly is a remarkable man and a mentor I hope to stay connected with during my whole career.



**Dr. Shaka Ramanathan**  
(Obsevership, USA)  
As a rising junior in high school, never bad I expected such an opportunity to be presented to me especially one across the globe. I have seen more fractures than I can count. I have been able to try things I have never done before.



## Asia Pacific Spine Society (APSS)



**Dr. Simon Toffgand Skov**  
(APSS Fellows, Denmark)  
It has been a great experience right from the beginning in Ganga Hospital. Highly skilled colleagues with much experience in complex spine surgery.



**Dr. Bishnu Babu Thapa**  
(APSS Travelling Fellows, Nepal)  
It is really helpful in my career by the stay in this hospital. I got opportunity to learn many new things from Prof. Rajasekaran & his team.



**Dr. Sanjoy Biswas**  
(APSS Ganga Fellowship)  
Ganga is the temple of learning. I am very thankful to Dr Rajasekaran, Dr.APS, Dr.RMK and all staff for their support and every moment I felt at home. Wonderful guest house and special thanks to the staff.



**Dr Sharif Ahmed Jonayed**  
(APSS Fellows, Bangladesh)  
It was really a nice experience for me to be here. I observed so many cases Prof. Rajasekaran and all the consultants are very much cooperative. Best place for learning spine surgery.



**Dr Kai Cao**  
(APSS Fellows, China)  
It's very nice experience of observing in Ganga Hospital. Let me learn a lots and know each other better.





*Asia Pacific Orthopaedic Association*



**Dr. Muhammed Shiofi Abubakar**  
(APOA-SIAA Fellowship, Indonesia)  
Ganga hospital is a high quality hospital with high standards services, teaching and research. learn many about service, Research and surgery in Arthroplasty.



**Dr. Mohammed Harris B**  
(APOA-SIAA Fellowship, Malaysia)  
Thank you so much for the great hospitality. Had a wonderful training and gain new knowledge.



**Dr. Bushu Harna**  
(APOA-SIAA arthroplasty Fellowship, New Delhi)  
Had great interactive sessions with him. Highly academic and great skilled arthroplasty surgeon. Learnt his few tricks. Thanks for impairing knowledge and skill.



**Dr. Haridikkumar R. Kapopara**  
(APOA-SIAA Fellowship, Gujarat)  
I am fortunate that I had an opportunity to do my travelling fellowship at one of the best hospital of India. I learned so many things from here apart of arthroplasty.



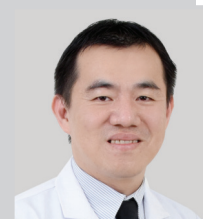
**Dr. Venkatesan Sampath Kumar**  
(APOA Travelling Fellow)  
Very nice experience and warm hospitality. Learning valuable points at Trauma and plastic theatres.



**Dr. Hatam Sultan Assin**  
(APOA Travelling Fellow)  
Amazing experience for me. It will add for me a new experience in my career later on it was great chance to join you.



**Dr. Nishit Palo**  
(APOA Travelling Fellow, Delhi)  
A very organised and intellectual experience, got an opportunity to learn tips and trials from the best. This was a very well planned fellowship.



**Dr. Chan Chee Ken**  
(APOA Travelling Fellow, -----)  
Very excellent experience. Able to learn a lot. Tutors / surgeons are very friendly and knowledgable. Thank you very much.



**Dr. Md Sazzad Hossain**  
(APOA Travelling Fellow, Bangladesh)  
Its a very rich and new experience to me and their hospitality is very good. I learned lots of technique and tricks for trauma and operation.



**Dr. Meiley Fredianto**  
(APOA Travelling Fellow, -----)  
Very very nice experience. That's most be enrich my skill. Thank you very much. Hope come again.



**Dr. Nasser M Ahmedi**  
(Ass. Consultant Ortho, Aden University, Yemen POSI Observership)  
Thanks to Sir Rajasekaran & I am happy to get brother like Dr.Venkatadass. Good experience good help.

*Paediatric Orthopaedics  
Observership*

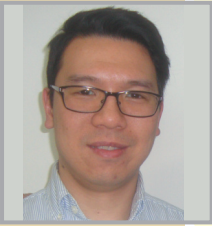
## *International & National Visitors*



**Dr. Imran. A Ali**  
(Visiting Fellow, United Kingdom )  
Thank you for the opportunity and provision of access to variety of service provided. Its immense experience I gained its knowledge thoroughly and India precious.



**Dr. Amit Kotecha**  
I was very impressed with the hard work, commitment and work ethics of all the staff.



**Dr. Lewis PK Chan**  
(Hong Kong)  
Great arthroplasty and orthopaedic team. Excellent hospitality and world class surgical skills and top most efficient management. cks in trauma management.



**Prof Guido Hausharter**  
(Visiting Professor, Austria)  
It was a phenomenal and enriching experience to visit Ganga Hospital.



**Dr. Haider Khalil Al. Azzawi**  
Arthroplasty & Arthroscopy, Iraq)  
Thanks for all Indian people in general for their generosity and helpful spirit and special thanks for Ganga Hospital family.



**Dr. Chiu Ming Yu**  
(Hong Kong)  
Extra-ordinary and excellent orthopaedic centre.  
Nice and passionate staff in good atmosphere.



**Dr. Laween Omer Musa**  
Arthroplasty & Arthroscopy, Iraq)  
Thanks for all Indian people in general for their generosity and helpful spirit and special thanks for Ganga Hospital family.



**Dr. Vikas Varma**  
(Ghaziabad National Fellowship, UP)  
It was a wonderful experience as everyone in the hospital was very cooperative. I got a chance to attend as well assist in deformity correction, disc surgeries as well as trauma surgeries.



**Dr. Naveen Vijayasingham**  
(Spine Training, Malaysia)  
I would like to thank Ganga Hospital for giving me this opportunity to learn in the field of Orthopaedics & Spine. The knowledge is endless here.



**Dr Ankur Sharma**  
(Fellow, Delhi )  
clearing my doubts on the topics of Arthroscopy and Arthroplasty respectively. I have learned many things on this fellowship which I would definitely like to incorporate in my clinical practice.



**Dr. Jonathan Bull**  
(Visitor, UK)  
A much impressive hospital with an organisation of which you can be very proud and I am highly impressed.



**Dr Nijith O Govindan**  
(Arthroscopy Fellow, Kochi)  
My experience in this 3 weeks of fellowship is worth and I definitely will be able to better in arthroscopy after this / joining the department of Arthroscopy in Ganga Hospital in simply the best I have ever seen.





## Indian Orthopaedic Association (IOA)



**Dr. Deepak Kumar**  
(IOA-WOC Fellowship, UP)  
It was a great experience, we saw different work-culture, hard working hospital staff and dedicated team of consultants, who are keen to not only perform surgeries but also to teach.



**Dr. Chandra Prakash Pal**  
(IOA-WOC Fellowship, Uttar Pradesh)  
Most wonderful experience.



**Dr. Abhishek Vaish**  
(IOACON Travelling Inland Fellowship, New Delhi)  
I had always heard about the quality work, ethics and academics especially Ganga teaching courses. Thanks to the whole Ganga team for wonderful experience.



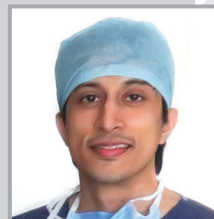
**Dr. Deepesh Mittal**  
(IOA Fellowship, Rajasthan)  
I consider myself lucky to get exposure in such a nice institute. Very much impressed with Dr.S.Rajasekaran sir



## Association of Spine Surgeons of India



**Dr. Vijayaraghavan**  
(ASSI Travelling Fellow, New Delhi)  
It was a great learning experience. All the faculties were cooperative and had very useful interactive sessions. We were able to get exposed to wide spectrum of cases within a short period. Thanks a lot to all the faculties, residents & staff.



**Dr. Shumayou Dutta**  
(ASSI Travelling Fellow, Kolkata)  
High quality affordable, fast work lead by a team of dedicated, fully invested doctors. It was an eye opening experience for the both in identifying my lacunar and improving surgical skill but more than that on how to be a good doctor & to inspire.



**Dr. Kunal Shah, Mumbai**  
(ASSI - Spine Fellowship, Mumbai)  
The vision and the management to thrive for excellence was seen in each and every aspect of hospital. It was great seeing variety of cases and surgeons were very kind to teach us intrinsic aspects of cases.



**Dr. Chandrashekhar Vijay Gaike**  
(ASSI - Spine Fellowship, Maharashtra)  
These 7 days were very much worth and had opportunity to see and assist varieties of cases



**Dr. Manish Kothari**  
(ASSI Travelling fellowship, Mumbai)  
Although 1 week is a very short time to spend, I was able to appreciate the wide variety of work at the first levels being done here including some of the most complex cases being managed.



**Dr. Rajat Mahajan**  
(ASSI Fellowship, Bangalore)  
It was a pleasure to work here. I will cherish these memories for life time.



**Dr. Shashidhar BK**  
(ASSI Fellowship, Bangalore)  
Fortunate to see my role model in action. Thanks for the opportunity and looking forward for more.



**Dr. Ankit Subhash Patel**  
(ASSI Travelling fellowship, Mumbai)  
Spine surgery department is the most advanced with optioned use of best available technology and practices to provide a healthy spine. Rounds and morning academic sessions are truly n learning event..



## Tamilnadu Orthopaedic Association (TNOA)



**Dr M S Mugundhan**  
(TNOA Inland Fellowship, CBE)  
A great opportunity to be in a world class teaching institution. I am one among the fans of the metallic voice of Prof. SR and the excellent teacher Dr.DD. Had an excellent time to be with them.



**Dr Jayakumar**  
(TNOA Inland Fellowship, Madurai)  
It was a wonderful learning experience and was a DREAM COME TRUE for me to spend time with Prof Dr. SR and team. They were very helpful in clearing my doubts during the surgery and am very happy that they permitted me assist them during the surgeries.



**Dr. S. R. Venkateswaran**  
(TNOA Travelling Fellow, Thoothukudi)  
It was creative to visualise all latest technology and the case of operating beneficial were very happy in explaining us the procedures in detail, helping us to orient ourselves to newer techniques.



**Dr. N. Tamilselvam**  
(TNOA Travelling Fellow, Dharmapuri)  
I had a nice and wonderful experience in Ganga hospital regarding surgical techniques in various complex polytrauma cases and in ortho cases and planning of surgery which was nicely explained by doctors.

## Observership & Travelling Fellowship



**Dr. Atil Kumar Lal**  
(UPOA-GN Fellowship, Lucknow)  
I was here for Arthroplasty observership and had a great chance to observe and learn various aspect of Arthroplasty. It will help me a lot in my future specially patient management and surgical techniques.



**Dr. Kunal Aneja**  
(Arthroscopy Fellowship, New Delhi)  
There are very few experience which transform one's outlook towards life the past three weeks at Ganga Hospital have been phenomenally life changing one, which have left a deep impression in my mind.



**Dr. Ravi Chauhan**  
(Gangaram Hospital, New Delhi)  
I am very grateful to Dr.S.Rajasekaran, Dr.K.Venkatadass who has given me an opportunity. I extend my gratitude to Dr.Venkatadass sir under whom I have learnt a lot about paediatric orthopaedics.



**Dr. Yashwardhan Jaiswal**  
(UPOA-GN Fellowship, Lucknow)  
I had a wonderful experience here at Ganga Hospital. I could witness the latest equipments in the field of spine and Arthroplasty.



**Dr. Avinash K S**  
(Observer, Karnataka)  
They cleared my some of concepts spine surgery and taught me surgical techniques. I was exposed to large number of trauma, degenerative and deformity cases. Spine fellow and supporting staff at officer were very cooperative & guided when needed.



**Dr. Abhishek Jain**  
(Ganga Deputy Synthes fellowship)  
Trauma department every moment was a learning experience. Everyone the department was very helpful and supportive, always ready to answer queries and erase doubts. Learned new surgeries and cleared concepts of old ones.



**Dr Chintan Doshi**  
(POSI Travelling Fellow, Mumbai)  
I am obliged to have seen the work by Dr.Rajasekaran and his team to flawlessly manage the hospital. Dr.Venkatadass, my mentor for paediatric orthopaedic here is an excellent surgeon and a very humble person.



**Dr Hussain Bohra**  
(AO Spine Course, Mumbai)  
Saw variety of cases, OT has a superb infrastructure with superbly skilled staff. Also humbled by the amount of charity work done here including the rehab centre Ganga hospital deserves to be the best.



# Corporate Social Responsibilities



1166 patients  
rehabilitated  
with a cost subsidy of  
Rs. 6.9 crores



Inauguration on 03-11-2014

**Pujyasri Dayananda Saraswati Swamiji,**  
lighting the lamp during the inauguration of  
Ganga Spine Injury Rehabilitation Centre

**Dr H. S. Chhabra,**  
Medical Director, Indian Spinal Injuries Centre,  
New Delhi.

*We make a living  
by what we get,  
But we make a life  
by what we give*

*- Winston Churchill*







## Ganga Spine Injury and Rehabilitation Centre



Ganga Spine Injury and Rehabilitation Centre is a corporate social initiative by the Ganga Hospital, to provide state of the art rehabilitation services to spinal cord injured patients at an affordable cost. The centre has 33 beds with modern infrastructure for physiotherapy services with trained personnel for physiotherapy, occupational training, vocational service and medical care. The rehabilitation services aim to provide training in assisted walking, independent transfers to the wheel chair, vocational training, occupational support, psychological counselling, urological care, diet advice and social support services.

The Vocational rehabilitation team at Ganga Hospital provides free vocational training to both the beneficiary as well their family members. The skills provided include computer skills, motor winding, Worli art, handicrafts, tailoring, flower bouquet making etc. This training is given to make them financially independent after the rehabilitation is complete. Enabling the family members with skills ensures sustainability of the training thus equipping them to re-join the community and perform most professional tasks.

### Facilities

33 Inpatient Capacity  
3 Private Rooms  
3 Semi Private Rooms  
2 General Wards

Free Vocational Training Units to learn tailoring, embroidery and umbrella making are available to in - patients and their caretakers.

Indoor Therapy area encompassing 5000 sq. ft of imported physiotherapy equipments for muscle strengthening, enhancing mobility, balancing and learning daily activities.

Outdoor Wheelchair training area allows patients to manoeuvre different terrains and levels to adapt easily to moving around in public areas.

Recreation Space (for indoor and outdoor games with a specially designed basket ball court).



### WHAT GSIRC OFFERS?

- Physiotherapy
- Occupational Therapy
- Vocational Training
- Counselling & Teaching Sessions
- Social Welfare Programs
- Wheel Chair Assessment & Training
- Orthotics and prosthetics
- Urology service
- Nursing specialists
- Community Based Rehabilitation
- Recreational Therapy

Rehabilitation (including physiotherapy, occupational therapy and wheel chair) worth many lakhs of rupees is provided at a highly subsidised cost or completely free by generous donations from Ganga Orthopaedic Research & Education Foundation and benevolent donors.

This center has been generously supported by two Global Grants Project of Rotary International



Rotary Club of Coimbatore Central  
Global Grant No - 1744399



Rotary Club of Coimbatore Saicity  
Global Grant No - 1864494



## Corporate Social Responsibilities

### Wheelchair rally – On World Disability Day

GSIRC observed the World Disability day with a wheelchair rally which was held on 03.12.2016. More than 50 patients participated in the rally. The wheelchair rally was flagged off by Ms.Ramya Bharathi IPS Superintendent of police for



### Annual Rehabilitation meet 2015 & 2016

Ganga Spine injury rehabilitation centre organized an annual meeting in 2015 and 2016 for victims of spinal cord injury. The participants included patients previously treated at Ganga Hospital and paraplegics and quadriplegics residing in and around Coimbatore. This meeting had annual free consultation with Spine surgeons, Urologist and Plastic surgeons for assessment of neurological recovery, bladder function and any complications relating to pressure sores. The participants also had free annual ultrasound of the abdomen done. There were interactive lectures organized with rehabilitation nurses and peer counseling session with other participants.



### Vocational training centre inauguration

Ganga spine injury center has always aimed at a comprehensive rehabilitation program for patients with spinal cord injury. Rehabilitation services were extended beyond physical rehabilitation with the inauguration of the vocational training center by Sindhanai kavignar Dr. Kavidasan.Ph,D, Director Roots Industries, Coimbatore.

The vocational centre was built with the facility of teaching and training of paraplegics on the basic functioning of a printing press. The aim was to train paraplegics in this vocation so that they may be able to secure a vocational rehabilitation following the spinal cord injury.



### Sci Statistics for 2013-2016

	2015	2016	2017	2018
Total Number	210	221	252	283
Traumatic spine injury	185	199	241	253
Non traumatic	25	22	35	30



## *Cerebral Palsy Day Celebration*



*Dr. Kezevino Aram, Director of Shanthi Ashram with one of the winning child*



*Dr S Rajasekaran lighting the lamp with one of the differently abled child*

*In India there are about 25 lakh children suffering from cerebral palsy.*

### *Painting competition for Spastic Children*

To mark the National Cerebral Palsy day, Ganga Hospital conducted a painting competition for spastic children affected by Cerebral Palsy. About 40 differently abled children participated in this event. Former patients and inmates of Aashirvad School run by the Coimbatore Spastic Trust and AMRIT School for Special needs participated.

There were three categories of events – collage, coloring and painting. The winners were given prizes by the chief guest Dr. Vinu Aram, Director of Shanthi Ashram, Coimbatore. Dr. Aram gave an inspiring speech to the parents and children on 'Winning disability'. The event also included an awareness talk on cerebral palsy for the parents of these children. They were also trained and motivated to appreciate the differences and celebrate the different ability of their children.







UYIR trust was formally inaugurated on 27th October 2018 by the Chief Minister of Tamil Nadu Thiru Edappadi Palaniswamy in presence of the Rural Administration Minister Thiru S P Velumani and UYIR trustee members.

### About Uyir

UYIR is the result of culmination of corporate industries, service Industries and likeminded people of Coimbatore for creating a safe and better quality of life for the citizens of Coimbatore.

### What Is Uyir?

Understanding the fact that the Road Safety is not only the shared concern but also the shared responsibility of the Government and a range of civil society stakeholders including Industries Media, NGOs and every common man in the society.

“Uyir” is a Non-Governmental Organization, Registered under Trust Act on 7th Day of March 2018, with the mission of making Coimbatore an accident free Society and formed by the Industrialists and well known like-minded people of Coimbatore.

### What we do?

Uyir initiates the following programs to meet its core objectives:

- To undertake any and all type of activities that will promote road safety amongst the citizens of Coimbatore specifically and whole of India in the course of time.
- To promote and involve the culture of road safety amongst students studying in all educational Institutions and make them young and active ambassadors of road safety
- To spearhead a people's movement for Road Safety in the whole country where every citizen will be a champion for preventing road accident deaths and disability.
- To create awareness amongst riders and pedestrians so that roads will no longer be killing fields
- To work with and assist Government departments especially the Police and road transport departments to achieve these goals
- To enrol and work with like-minded organizations in this laudable project.





### Kutty Cop - School

'Kutty Cops', a program targeting school children of grade 3 to 8 which will aim to inculcate the importance of road safety awareness in young, impressionable minds.

This program will be spread out over a 12-hour period during the academic year. Uyir will provide an orientation for the teachers and implementation plan along with materials and worksheets for use.



### Uyir Club - College

'Uyir Club' will be a dynamic group of young volunteers from various colleges in the city of Coimbatore who will reach out to the public to spread awareness on road safety.

As the youth brigade of the city, the students, through myriad activities such as marathons and drives, will help render the city of Coimbatore a 'zero-accident city' and inspire commuters from other cities of Tamil Nadu to conduct themselves more responsibly on the road.

### Uyir Club - Citizen

The Following programmes activities been carried out after the formal launch,

- On Road Awareness campaign at Avinashi Road and MTP Road- College Vertical
- Mini Marathon on Road Safety- Health Care vertical
- Installation and Activation of electro and mechanical items ( NPR Cameras , CCTV, Barricades, Markings etc.)- Worth of Rs.4.5 Crores @ 10 main Roads and 40 Junctions – Industry Vertical
- The salient features of these Cameras, Capturing and Recognition of number plates, Night vision light, Capturing the road rules violators and Controlling the speed also.

### 'Kutty Cops' engage parents, family members in road safety awareness

The school level drawing and slogan writing competitions were held for students of 40 schools in Coimbatore who are part of the 'Kutty Cops' from November 12th to 21st 2019. Around 800 drawing and posters carrying slogans on road safety were displayed at the auditorium which were selected from a school-level competition held recently.

The competitions were held for two categories, classes III to V and classes VI to VIII, with Coimbatore and road safety as the theme. Five best posters and drawings from each category found entry to the exhibition, adding to a total of around 800 selected works. More than 1200 parents and family members came to witness the creative works of students.

Police Commissioner Mr. Sumit Sharan distributed the prizes and Dr. Claude Martin jr, Managing Director of AO Alliance Switzerland, lauded the 'Kutty Cops' initiative. Students also performed dance, mimes and skits at the exhibitions for visitors.





# Ganga Spine Microsurgery Course



## International Trainees



**Malaysia**

Dr Lim Phaik Gan,  
Dr Abdul Halim Yusof  
Dr Khoo Eng Hooi  
Dr Ahmed Tajuddin Abdullah  
Dr Ramachandran Arumugham



**Indonesia**

Dr. Benny Lay  
Dr. Igin Ginting  
Dr Harjanto Effendi



**Bangladesh**

Dr Abu Baker,  
Dr. Shahid Akon



**Nigeria**

Dr Akinniyi Oluwatoba Taiwo  
Dr Shedul Lohman



**Kenya**

Dr David Kilonzo



**Oman**

Dr Kishore Kumar M



**Philippines**

Dr Paul M. Atienza



**Singapore**

Dr Shree Kumar Dinesh



**Srilanka**

Dr. Devaka Rathnapala,  
Dr. Kandeepan Kanagarathna  
Dr. Priyance Bandujeewa Piyasena



**Iraq**

Dr Ali Saadun Al Khaykany  
Dr. Hazim Moojid Abbas  
Dr. Ardam Jamal Ahmed



**Nepal**

Dr. Pramod Baral  
Dr. Bigyan Bhandari



**Egypt**

Dr Hatem Handy,  
Dr. Muhammad Salman Zakzou



**Netherlands**

Dr Coen Jaspers,



**UK**

Dr Anukul Kumar Deb Goswami,



**Dubai**

Dr Tushar Dholakia



**Germany**

Dr. Nazeeh Abu-Dayyah

## Trainees in the past ten years . . .

To transfer the knowledge and experience of the unit, the spine department of Ganga Hospital in collaboration with Carl Zeiss started a unique microsurgical training centre equipped with a permanent wet lab utilizing the latest Zeiss operating microscopes and high quality surgical instruments.

The purpose of the course is to establish and strengthen the foundation of microsurgical skills in spine surgery. The course has two modules. In the clinical training module, the trainee spends two days in the operating theatre assisting and observing spinal microsurgeries. In the lab module, the trainee is given hands-on training in the wet lab. The course is designed to benefit practising orthopaedic surgeons, spine surgeons and neurosurgeons.



*National Trainees*

Dr Abdul Jaleel T K, Kerala  
Dr Ajay Krishnan, Surat  
Dr Akshay Jain, Indore  
Dr Antony Joseph Thoppil, Kerala  
Dr Arul Durai Arasu, Dindigul  
Dr Ashok D, Trivandrum  
Dr Ashok M Ghodke, Mumbai  
Dr B V R N Varma, Vizag  
Dr Bangari Swamy, Karimnagar  
Dr Bikram Kar, Cuttack, Orissa  
Dr Chandrappa M, Bangalore  
Dr Gautam Prasad, Mumbai  
Dr Gowrishankar Swamy LG, Bangalore  
Dr I Satish Raju, Vizag  
Dr Jay Deep Ghosh, Kolkatta  
Dr Jim F Vellara, Thrissur  
Dr K Sambasiva Rao, Tenali  
Dr K. Shanmugasundaram, Pollachi  
Dr Karthikeyan R, Coimbatore  
Dr M Narayana Reddy, Chennai  
Dr Madan Temker D, Bangalore  
Dr Mallikarjuna Reddy, Karnataka  
Dr Mathew P Daniel, Kerala  
Dr Muthuraj, Nagercoil  
Dr N.Dheen Mohamed Ismail, Chennai  
Dr Natarajan S, Erode  
Dr Natesh J, Bangalore  
Dr P Gnanaprakash, Coimbatore  
Dr P P Sunil, Thrissur  
Dr Pankaj G Gujar, Maharashtra  
Dr Pankaj Kandwal, Mumbai  
Dr Rahul Singh, Saharanpur  
Dr Rajeev Naik, Bangalore  
Dr Rajendra U Mehta, Rajkot  
Dr Rajesh Khanna G, Chennai  
Dr Rajiv Shah, Vadodara  
Dr Ramanand Mishra, Gorakhpur  
Dr Rashid A S, Kerala  
Dr Ravi K, Kerala  
Dr Renjit Kumar J, Kerala  
Dr S Jagadeesh Babu, Hyderabad  
Dr Sachithanandam V, Erode  
Dr Saheel Maajid, J & K  
Dr Sandeep Surana, Ahmednagar  
Dr Saurabh Chaudhary, Salem

Dr Shameer Ali.T.P, Kerala  
Dr Shanmugasundaram P, Chennai  
Dr Sudheer U, Kerala  
Dr Sundararajan N D, Gopi  
Dr Sunil Kumar H, Bangalore  
Dr Thiraviam T, Nagercoil  
Dr Tushar J Deore, Pune  
Dr V.Surya Prakash Rao, Hyderabad  
Dr Venugopal S, Bangalore  
Dr Veushj Sharma, Punjab  
Dr Vignesh Jayabalan S, Chennai  
Dr Vishal Prakash Thakur, Mumbai  
Dr Dangeti Ram Kishore, Rajahmundry  
Dr Shantanu Anil Gunjotikar, Solapur  
Dr Prabhakaran Jayaprakasan, Thrissur  
Dr Chetan V Mudaliar, Bilaspur  
Dr Hitesh L Kukadya, Surat  
Dr V Ravi, Chennai  
Dr C Ranganath, Bangalore  
Dr Saurabh Kapoor, Delhi  
Dr Palavali Maheswara Reddy,  
Dr Deepu Sebastian, Kannur  
Dr A Venkateshwar Rao, Secunderabad  
Dr Ajay V Randive, Mumbai  
Dr Bharath Kumar R, Trichy  
Dr Ambarish Mathesul, Pune  
Dr. Ashish Tomar, Haryana  
Dr. Backiaraj Devaraj, Thanjavur  
Dr. Ajaykumar Ajanavi, Trivandrum  
Dr. Parthiban K.  
Dr. Suhahish Roy, Kolkatta  
Dr. Anindya Basu, Kolkatta  
Dr. Srikanth Nara, Hyderabad  
Dr. Daya Thirumala R, Vishakapatnam  
Dr. Pawan Kumar Sharma, Rajasthan  
Dr. Gaurav Sawhney, Chandigarh  
Dr. Prakash Sitoula, Nepal  
Dr. Ranjith Shaw, West Bengal  
Dr. Moses Agunda, Nigeria  
Dr. Subodh Borle, Burhanpur  
Dr. Amarendranath Roy, Kolkatta  
Dr. Venkatesan P, Thanjavur  
Dr. Suresh Kumar M, Pondicherry  
Dr. Suresh Cheekatla, Hyderabad

Dr. Navneet Kumar, Kolkatta  
Dr. Md.Mohtashemul Haque, Bihar  
Dr. Siddharth Sanjay Shah, Mumbai  
Dr. Raghuraj Kundangar, Manipal  
Dr. Ratanlal Rajesh Agarwal, Chennai  
Dr. S. Karthikeyan, Palani  
Dr. Sareesh Kumar, Kottayam  
Dr. Mahendra Kolikonda, Telengana  
Dr. Ramkinkar Jha, Gurgaon  
Dr. Malayanathan, Pondicherry  
Dr. Raminder Singh, Patiala  
Dr. Naved Farid, Mumbai  
Dr. Ashwinkumar Khandge, Pune  
Dr. Nitin Ashok Bhalerao, Maharashtra  
Dr. Rajesh Bahadur Singh, Varanasi  
Dr. Vaibhao Narayan Gorde, Maharashtra  
Dr. Vijay Kagane, Maharashtra  
Dr. Tushar Ubale, Chembur  
Dr. Bhukya Gopilal, Telengana  
Dr. Deepak Datrange, Ahmednagar  
Dr. Deepak Singh, Rajasthan  
Dr. Pankaj Arora, Haryana  
Dr. Vivek Vincent, Thrissur  
Dr. V.I.Simon, Thrissur  
Dr. Karthik Malepathi, Bangalore  
Dr. M.Manoj Deepak, Theni  
Dr. Harshad G Argekar, Mumbai  
Dr. Abhijit Kale, Maharashtra  
Dr. Nilay Chhastia, Surat  
Dr. Mohammed Ashraf Pasha, Andhrapradesh  
Dr. Ameer Theruvath, Kerala  
Dr. Rajesh, Vishakapatnam  
Dr. Sudeep Kumar, Madurai  
Dr. Vinoth T, Madurai  
Dr. Kulbhushan Kamboj, Delhi  
Dr. Mantu Jain, Bhubaneswar  
Dr. Vijay Anand, Maraimalainagar  
Dr. Birendra Kumar, Jharkhand  
Dr. Shivakumar H.C., Shimoga  
Dr. Sekar, Tirunelveli  
Dr. Chanda Srinivasa Rao, Telangana  
Dr. Srinivas, Karimnagar  
Dr. Moulidharan, Hosur  
Dr. Pramod Sudarshan, Bangalore





# Ganga Hospital Tissue Bank

There is a huge demand for bone graft at our hospital due to the enormous number of polytrauma and tumor patients who need complex reconstructive procedures. The Tissue Bank at the Department of Orthopaedics, Ganga Hospital was launched in 2008. Located within the hospital premises, it is a self-funded, non-profit tissue bank aimed at providing high class tissue banking services. It is only the third tissue bank in India to use Gamma irradiation as a method of sterilization. The bank follows International Atomic Energy Agency (IAEA) standards followed by other tissue banks in the world.

The bank is currently using well processed and gamma irradiated cortico cancellous bone allografts from tibial slices and femoral heads, long bones from amputated stumps in various clinical conditions like comminuted fractures and non-unions with bone loss of both upper & lower limbs, revision joint replacement surgeries, tumor and spinal fusion surgeries. The grafts are screened for HIV, HCV, HBV and syphilis to eliminate risk of disease transmission.

Dr. P. Dhanasekara Raja, Tissue Bank manager has received the Degree of Diploma in Tissue banking from National University of Singapore. Dr. Devendra is the Scientific Officer in charge of preparation, processing, storage and transportation of the allografts. He has received training in the Tata Memorial Bone Bank in Mumbai and has also undergone training in the National University, Singapore.



Dr. P. Dhanasekara Raja receiving the Diploma in Tissue Banking Certificate from Prof Aziz Nather, Director of Tissue Bank, National University of Singapore.



Dr. A. Devendra receiving the Tissue Banking Certificate from Prof Aziz Nather, Director of Tissue Bank, National University of Singapore.

## Total no of Allografts utilized from 2015 to 2018

	2015	2016	2017	2018
Bone				
Femoral Head	162	166	152	126
Tibial Slices	240	234	280	313
Cervical	72	73	88	121
Fibula	34	35	39	37
Tibia	1	7	7	10
Metatarsal	13	8	10	15
Distal Femur	9	7	5	4
Radius	2	1	-	3
Ulna	0	4	2	1
<b>Total</b>	<b>533</b>	<b>556</b>	<b>583</b>	<b>630</b>



This patient, who suffered a 13cm bone loss in a traumatic supracondylar fracture of the femur was treated successfully with Gamma irradiated Structural Allograft





# Department of Physiotherapy

## “Train Ability within Disability”

The Department of Physiotherapy at Ganga Medical Center and Hospital strives to provide quality patient-centered care that focuses on optimizing functional ability and independence of patients according to the highest standards of care. Our services involve timely, effective and efficient physiotherapy techniques as well as education of patients by a team of well informed, dedicated and committed physiotherapists.

Our physiotherapy team is an integral part of the clinical body and forms a part of the support team for the orthopedic consultants (that enables us to use the latest research and evidence based methods of treatment in clinical practice). Our therapists have regular opportunities to discuss cases with consultants for both in-patients being treated in conjunction with a surgeon and for patients receiving day care treatment.

Currently we have 34 physiotherapists, 3 physiotherapy assistants providing physiotherapy services and 95 Trainees and Students.

Home Therapy – We also home physiotherapy at the patient's place of residence specifically for patients who have undergone surgical treatment at our hospital and who further need long term physiotherapeutic rehabilitation services. The majority of patients who benefit from home physiotherapy services include senior citizens, pediatric patients with developmental disabilities and other conditions, and patients with poly trauma injury. The Physiotherapy Department is proactive in both Education and Research.



## Orthopaedic Physiotherapy Patients

2014	2015	2016	2017	2018
44,096	44,478	47,854	49,445	54,149





# Staff

## Administrative Officer

Dr Ishwar Balaji has 12 years in clinical experience as a dental surgeon before moving on to hospital administration. He has successfully implemented the practice of core values of the institution at all levels of staff members and have been responsible for maintaining high quality of service as per the NABH guidelines.



Dr Ishwar Balaji



## Theater Staffs & Technicians

The hospital has 20 operating theatres which are staffed with 223 highly skilled theatre nurses, Anaesthesia technicians and theatre technicians. The theatre personnel are trained well in basic surgical nursing, theatre ethics, etiquette, scrubbing techniques, principles of sterility and orthopaedic surgical principles before inducting them in clinical care. They are responsible for the maintenance of NABH standards in the theatres and are closely involved in the academic and operative courses of the department.

## Department Secretaries

Mr Mohana Krishnan, Mr G Prabhu, Mr Balakrishnan & Mrs Radha, support the department in all its academic, research and clinical activities. They are involved in maintaining database for conferences and courses, documentation of patient information, preparing brochures and activity reports periodically, academic programmes for DNB and FNB courses, patient related queries, inter-disciplinary communications and other educational activities.



Mr G Prabhu, Mr Mohana Krishnan,  
Mrs Radha & Mr Balakrishnan



## Physician Assistants

The research department has fifteen physician assistants who are actively involved in the collection of data and clinical evaluation. The team of physician assistants have completed a four year basic bachelor course and form an integral part of the research work and clinical activities including out-patient clinical assistance and theatre support.

## Out-patient department Staff

The out-patient department has a good and expansive infrastructure to examine patients effectively and efficiently. Consultants are available on all the six days in the clinic and the clinic is backed by 56 support nursing staff. The clinics run from morning 8 AM to 6 PM on all six days of the week. The availability of multi-slice CT and 1.5 Tesla MRI and six radiological DXR units in-house allow for all required investigations to be on the same day of consultation without waiting periods.









1991 to 2016

**Ganga Hospital**

313, Mettupalayam Road, Coimbatore, Tamilnadu, India.

Phone : +91 422 2485000, Fax : +91 422 2451444

Email : [admissionganga@gmail.com](mailto:admissionganga@gmail.com), [sr@gnagahospital.com](mailto:sr@gnagahospital.com)

Website: [www.gangahospital.com](http://www.gangahospital.com)