

Department of
ORTHOPAEDIC SURGERY
Ganga Hospital, Coimbatore, India.

Activity Report 2019 - 2020



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 2019-20 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.

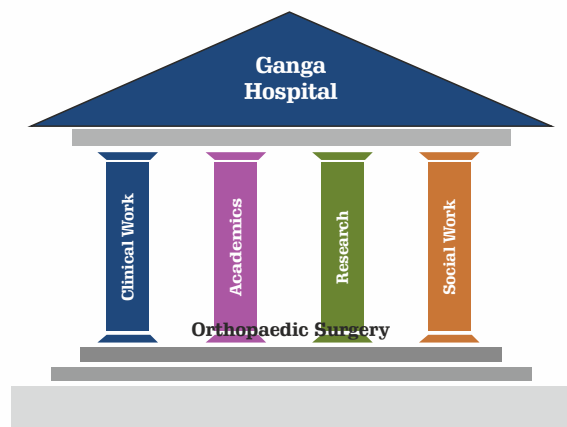
Prof. S. Rajasekaran

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. Recently, we won the North American Spine Society award for basic science research consecutively for the years 2019 and 2020. 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 2020



“ 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
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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	

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:

- NASS Outstanding Paper Award, 2019 & 2020
- Asia Pacific Spine Society Best Clinical Research Award for 2019
- Asia Pacific Spine Journal Award for Best Clinical Paper for 2019
- Asia Pacific Spine Society Basic Science Research Award for 2019
- Asia Pacific Spine Journal Award for Best Basic Science Paper for 2019
- 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:

- ASSI Basic Science Award -2020
- ASSI Publication Award - 2019 & 2020
- ASSI Clinical Research Grant Award 2019
- Lifetime Achievement award 2019 by COS
- 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)



Dr. 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.

Orthopaedic Consultants



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 Tubingen 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 Compedium.

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

Orthopaedic Consultants



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 an 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 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

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.

National Awards:

- ASSI Best Research Award 2009
- Dr VT Ingahlalikar 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

Orthopaedic Consultants



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 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 anesthesiologists, 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 : RAIJ -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 Textbook 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 2016 - 2020

Year	2016	2017	2018	2019	2020 (Upto March)
Spinal Anaesthesia	3216	4600	4546	4388	1482
Spinal and epidural	4137	3588	3748	4093	1578
General Anesthesia	936	3337	3412	3385	1149
Regional Blocks	4811	6049	6251	6982	2926
Others	2229	191	227	324	132
Total	17,329	17,765	18,184	19,172	7,267

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

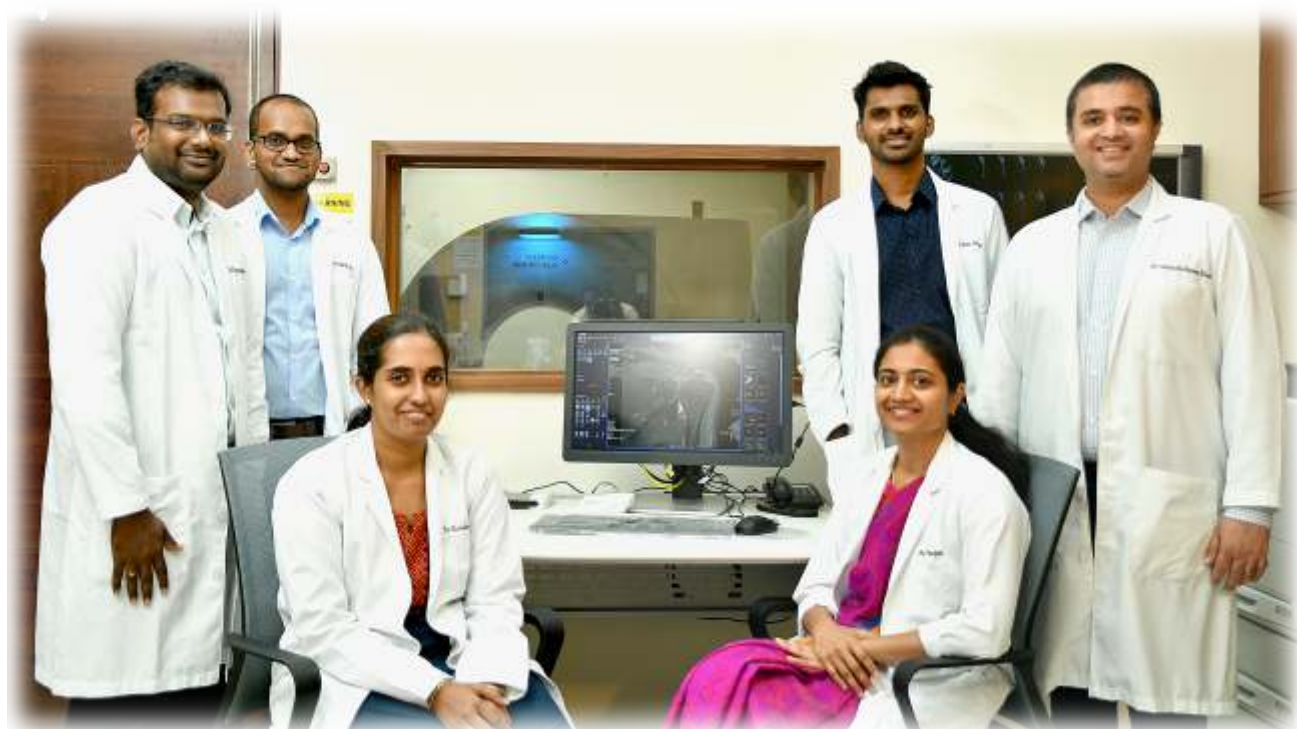


WFSA Ganga Hospital Regional Anaesthesia International Fellowship for anaesthesiologists from Low Resource countries (4 seats per year). Session starts in January/ July every year (6 months fellowship)



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

Department of Orthopaedic Radiology



Sitting (L to R) : Dr. Surabhi Subramanian, Dr. B T Pushpa,
Standing (L to R) : Dr. Rajarama Ravivarma, Dr. Alagiri K, Dr Sabari S Ramesh, Dr Venkata Suman Kuna

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	2015	2016	2017	2018	2019	2020 (Upto March)
MRI	7251	8477	8613	8780	8622	2107
CT	7022	7621	8266	8505	8896	2415
USG	2967	7122	3869	3702	5220	1576
X-ray	1,18,599	1,21,974	1,13,530	1,12,985	1,35,677	79,193



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.

2018 – 2019 Fellows



Dr. Raghu Teja S



Dr. Kavya M

2019 – 2020 Fellows



Dr. R Ravivarma



Dr. Liter Nguri

2020 – 2021 Fellows



Dr. Alagiri K



Dr Sabari S Ramesh



Dr Venkata Suman Kuna

Department of Orthopaedic Radiology



Siemens Lumina 3T MRI



Siemens Digital X-Ray



Siemens Magnetom Symphony 1.5 Tesla MRI



Siemens MDCT

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



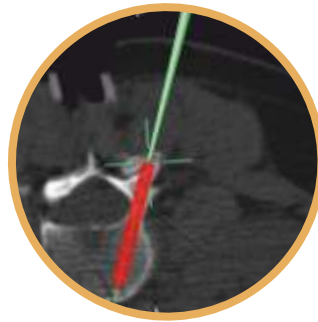
Intra-operative
AIRO CT Navigation
for Safe Spine Surgery



KICK
Computer Navigation
for Perfection in Joint
Replacement Surgery



*AIRO Intra-operative CT navigation
(First unit in Asia-pacific region)*



*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

2016	2017	2018	2019	2020 (Upto March)
2,21,107	2,49,738	2,00,210	2,00,548	66,439

Emergency Casualty Attendance

2016	2017	2018	2019	2020 (Upto March)
18,865	20,540	20,904	21,700	7,456

Major Orthopaedic Surgeries

2016	2017	2018	2019	2020 (Upto March)
16,709	16,450	16,855	17,926	4,043

Orthopaedic Physiotherapy Patients

2016	2017	2018	2019	2020 (Upto March)
47,854	49,445	54,149	54,197	9,416

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



*"Its 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

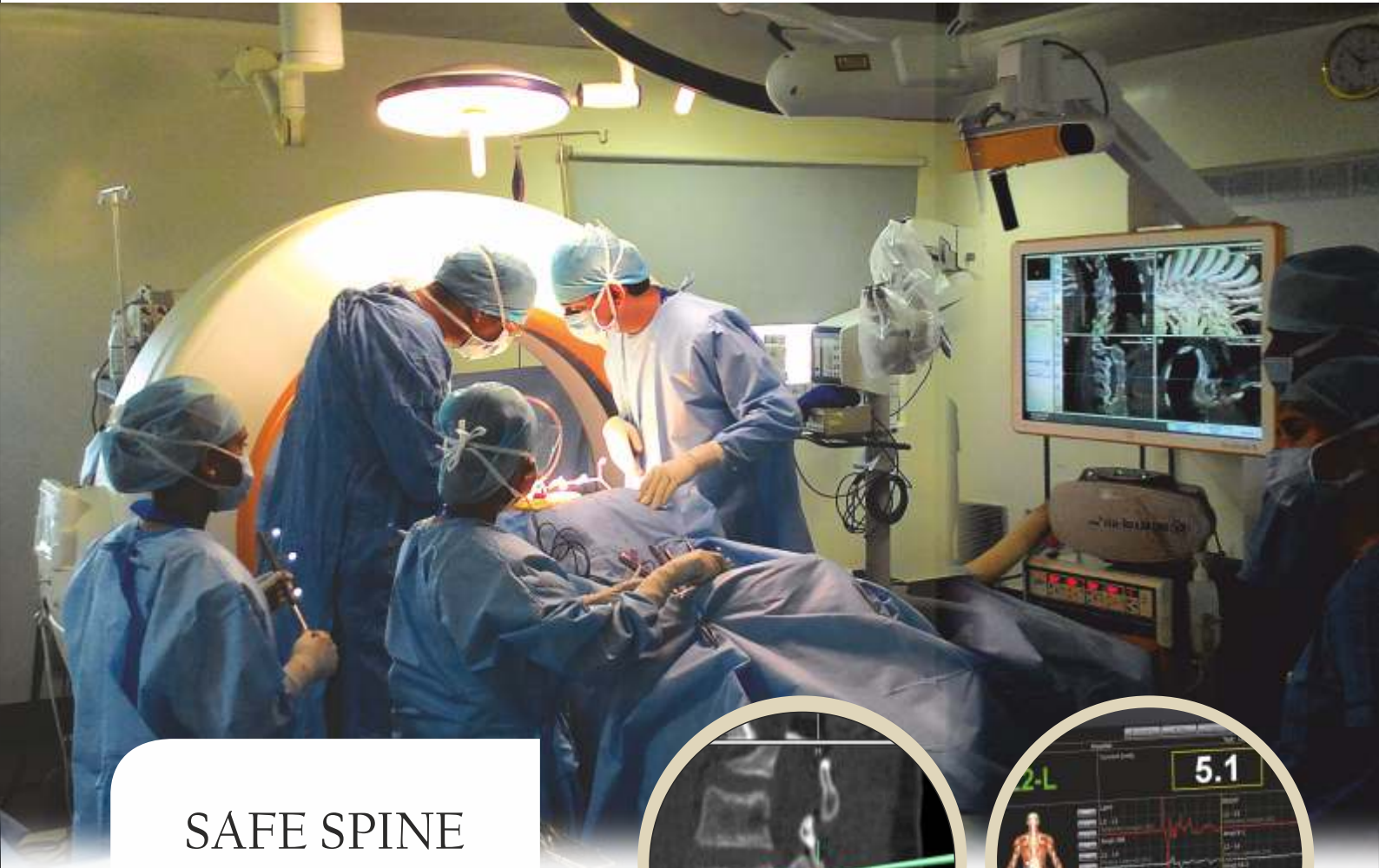
The hospital has a state of the art orthopaedic trauma unit catering to a huge population of the western zone of Tamilnadu, adjoining states and also complex trauma are referred from remote frontiers of India and other neighboring countries like Bangladesh, Nepal, Maldives etc. The trauma team is headed 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	2017	2018	2019	2020 (Upto March)
Acetabular fractures	144	108	89	48
Pelvis fractures	39	21	30	14
Hip fractures	422	401	349	434
Femur fractures - nailing	1433	1489	1722	303
Femur fractures - plating	348	378	446	125
External fixator application	884	900	934	398
Knee joint fractures	147	166	278	67
Tibia fractures - nailing	751	843	901	298
Tibia fractures - plating	676	758	752	285
Ankle joint fractures	403	679	587	186
Foot injuries	289	93	112	79
Miscellaneous procedures	2178	1590	1947	652
Total	7,714	7,426	8,147	2,889

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.

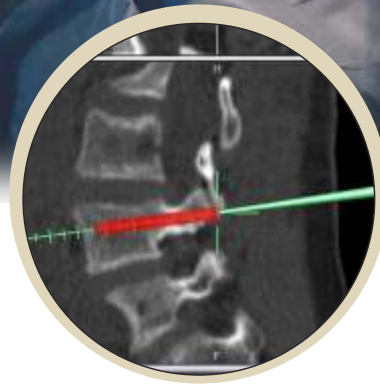
Academic trauma meetings are conducted three times a week and all trauma cases operated are discussed in an open forum to provide the best possible care for patients. For complex fractures, pre-operative treatment plan is formulated during trauma meetings.

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	2017	2018	2019	2020 (Upto March)
Lumbar microdiscectomy	373	361	390	121
Lumbarmicrodecompression	201	195	157	61
Transforaminal Lumbar Fusion	499	473	596	193
Thoracic decompression, fusion	31	68	59	10
Spinal infections – surgery	88	74	44	32
Anterior cervical microsurgery	233	341	263	98
Posterior cervical decompression	170	188	170	52
Spinal fractures – surgery	305	269	287	122
Percutaneous biopsy	87	74	77	32
Scoliosis/kyphosis surgeries	193	166	155	39
Spinal cord surgeries	12	33	49	14
Tumor surgeries	34	17	9	9
Vertebroplasty/ kyphoplasty	21	38	10	19
Spinal injections	350	404	516	175
Miscellaneous	132	164	160	84
Total	2,729	2,865	3,003	1,089

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.

Department of Arthroplasty



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	2016	2017	2018	2019	2020 (Upto March)
Primary TKR	1205	1192	1309	1432	348
Revision TKR	27	116	81	125	22
Primary THR	294	236	300	250	87
Revision THR	52	73	26	77	21
Miscellaneous TKR	-	-	-	51	20
Miscellaneous THR	-	-	-	44	23
Total	1,578	1,617	1,716	1,979	521



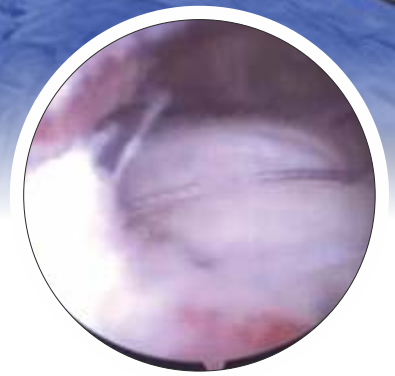
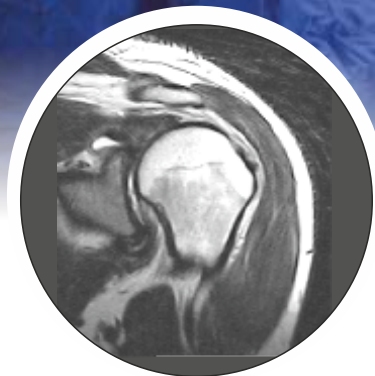
A 75 year old gentleman with severe osteoarthritis of both knee joints treated by total knee replacement.

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.Ramakanth, Dr.S.Rajasekaran, Dr.Sundararajan S.R., Dr.Terrence Derryl

The Arthroscopy and sports medicine unit of Ganga hospital is headed by Dr. SR 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	2017	2018	2019	2020 (Upto March)
ACL reconstruction/ fixation	624	648	624	208
PCL reconstruction/ fixation	42	39	26	15
Multi-ligament reconstruction	38	66	94	24
Meniscal repair or removal	246	162	246	62
Cartilage surgeries	26	27	5	2
Patellar instability	5	14	6	2
Shoulder Arthroscopy	161	247	333	99
Other joints (ankle, elbow, hip)	5	9	6	3
Miscellaneous	59	26	30	15
Total	1,206	1,238	1,370	430

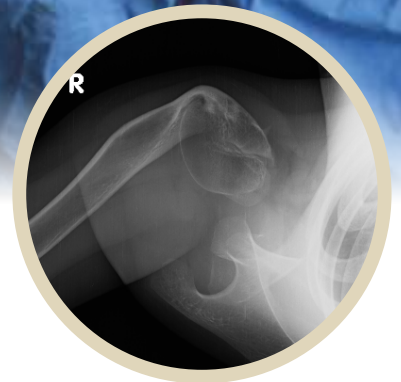
The Unit also conducts international and national level meetings in Sports Medicine and Arthroscopy & Training Courses and Workshops for Physiotherapists. We have three well-equipped operation theatres with experienced theatre staff. All procedures are performed based on current clinical evidence and 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.

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”*



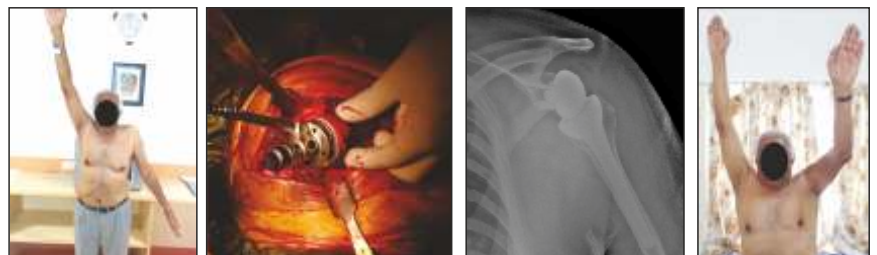
Sitting Left to Right: Dr. Arun Kamal, Dr. Ramesh, Dr. Dheenadhayalan, Prof Rajasekaran, Dr. Devendra, Dr Venkatadass along with the trauma team.

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	2017	2018	2019	2020 (Upto March)
Elbow replacement	5	5	-	2
Shoulder replacement	14	4	-	-
Shoulder reconstruction surgeries	66	92	24	10
Fractures of shoulder joint	307	291	145	35
Shoulder injections/manipulation	79	100	67	43
Humerus fractures	417	370	530	182
Elbow joint fractures	178	330	277	164
Forearm fractures	563	542	528	252
Wrist fractures	462	866	757	278
Total	2,091	2,600	2,346	966



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.

Pediatric Orthopaedics



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.

*"In 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 Gangadaran, 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	2017	2018	2019	2020 (Upto March)
Pediatric trauma	525	530	376	159
CTEV Tenotomy	19	31	81	19
CTEV Surgery	43	36	91	30
Cerebral Palsy	72	65	109	5
Hip Preservation surgery	31	86	52	46
Limb deformities	47	127	79	47
Surgery osteomyelitis	12	32	29	9
Tumors	19	45	21	-
Miscellaneous	226	157	243	70
TOTAL	994	1,109	1,081	385

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 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 MV 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
- FNBSpine Surgery
- FNB Trauma Surgery
- FNBSports Medicine

The Tamil Nadu Dr MGR Medical University, Chennai.

- Ph. Din 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. Din 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



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 2019-2020



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*



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



Dr S Rajasekaran getting the Award during the APSS APOSS 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.

The Team Members of “Best Clinical Research Award”



- 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



The Team Members of “Best Basic Science Paper”

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.



2019 - Outstanding Paper Award Basic Science North American Spine Society

Ganga Hospital Spine Research Team, won the prestigious North American Spine Society Research for the year 2019.

One of the most prestigious and valued award in spine surgery is the award given jointly by the North American Spine Society (NASS) and the internationally renowned The Spine Journal (TSJ) which has one of the highest impact factor for spine speciality international journals. This award is fiercely competed by researchers from all over the world and the award winning paper is published as a lead article in the journal and also invited to be presented in the Annual Meeting of the North American Spine Society conducted in USA. The award carries a cash prize of USD10,000.



The team is a unique and multidisciplinary consisting of spine surgeons (Dr S Rajasekaran, Dr Dilip Chand Raja, Dr Vijay Anand, Dr Ajoy Prasad Shetty, Dr Rishi Mugesh Kanna), Basic Science Specialists (Dr Raveendran Muthurajan, Dr Chitra Tangavel, Ms Sharon Nayagam, Mrs Sunmathi and Ms Steffi)

2019 Award

In 2019, the Ganga research team from India bagged the award for their research work entitled "Inflammaging Determines Health and Disease in Lumbar discs- Evidence from Differing Proteomic Signatures of Healthy, Aging and Degenerating Discs" which analysed at a molecular level the cause for disc degeneration which is the major reason for low back pain. The research looked at the causative factors of disc disease at cellular level and also the possibility of sub-clinical infection as a potential cause for low back pain. This was published in The Spine Journal, USA and the paper was also presented in the Annual Meeting in Chicago, 2019.





2020 - Outstanding Paper Award Basic Science North American Spine Society

2020 Award

The team was awarded the North American Spine Society Outstanding Basic Science Research award for the second consecutive year for their work on “Uncovering Molecular Targets for Regenerative Therapy in Degenerative Disc Disease: Do Small Leucine-Rich Proteoglycans hold the Key?”. The research was a combination of clinical, basic science, radiological and molecular level research on probing the cause for lumbar disc degeneration and low back pain. The work mainly utilised proteomics for analyzing the expression of Small Leucine-Rich Proteoglycans in fetal, healthy adult and degenerated discs, to identify possible molecular targets to halt or reverse the degenerative process. This work has huge importance in trying to prevent and also reverse disc degeneration. The highlight of the study was to compare the molecular level activity in fetus with young and old adults and to identify proteins and molecules which can act as biomarkers for early degeneration.



The team is a unique and multidisciplinary consisting of spine surgeons (Dr S Rajasekaran, Dr Dilip Chand Raja, Dr Vijay Anand, Dr Ajoy Prasad Shetty, Dr Rishi Mughesh Kanna), radiologist (Dr B T Pushpa), Basic Science Specialists (Dr Raveendran Muthurajan, Dr Chitra Tangavel, Ms Sharon Nayagam, Mrs Sunmathi and Ms Steffi)

Significance of the research

Low back pain significantly reduces the quality of life of nearly 70% of the patients worldwide causing a considerable economic and social impact. Degenerative disc disease is the commonest cause of low back pain. Irrespective of the etiology, the terminal inflammation causes disintegration of the extra cellular matrix resulting in altered spinal biomechanics and chronic low back pain. While the previous five decades have mainly concentrated on surgical intervention with advanced instruments, research in regenerative medicine to solve the problem has been limited and mainly restricted to animal studies. We attempted to identify molecular targets for biological repair of discs which could be probed for regenerative interventions in future. While, the use of stem cells is not specific to the cellular phenotype of human intervertebral discs, our current research of comparing human fetal discs which has huge regenerative potential has led to significant clues on molecular targets such as native small leucine rich proteoglycans which could be manipulated by either gene therapy or tissue regeneration is a breakthrough finding which has never been done so far. We found Biglycan to be significantly upregulated in fetal discs and also noted down regulation of Lumican, Decorin, Prolargin and Chondroadherin in the disc degeneration group. These molecular targets have huge potential for biological implications in disc degeneration and regeneration



Ganga Hospital Bags Major Spine Research Awards 2019-2020



ASSI Publication Award 2020
Dr. S. Rajasekaran



ASSI Basic Sciences Award 2020
Dr. S. Rajasekaran
Topic : “Human Intervertebral Discs harbor a unique Microbiome and Dysbiosis determines Health and Disease”



ASSI Young Investigator's Award 2020
Dr. Dinesh Kumarasamy
Topic : “Lumbar Disc Herniation and Modic changes: Influence on the Clinical Outcomes after Microdiscectomy”



Dr. Ketan Khurjekar Memorial Best Paper -
APSS + BSS Mumbai 2020
Dr. Dilip Chand Raja .S
Topic: Preoperative Modic changes and Total End Plate Score are independent risk factor for developing postoperative surgical site infections-
A single center retrospective analysis of 1124 patients



BEST Paper Award, ICS 2019
Dr. Dinesh Kumarasamy
Topic : Clinical and Radiological Phenotypes in Lumbar Disc Herniation and its Implication in Clinical Presentation and outcomes after Microdiscectomy



2020 ISSLS Young Investigator Travel Grant
Dr. Dilip Chand Raja S
Topic : “Disc ‘Dysbiosis’ as a cause of Inflammaging and Lumbar Intervertebral Disc Degeneration – Revelations form Next Generation Sequencing Analysis”



Ganga Hospital Bags Five Awards at TNOACON 2019



TNOA Prof. Vyageshwaradu Gold Medal 2019 *Dr Raja Bhaskara Kanakeshwar*

TOPIC : Is Foot Loading pattern and Hind Foot Alignment Restored in Varus Knees following Total Knee Arthroplasty- Pedobarographic analysis of 121 cases



TNOA Prof. A. Subramaniam Gold Medal 2019 *Dr Sri Vijay Anand K S*

TOPIC : The Proteomic Signatures of Healthy, Ageing and Degenerative Discs-A Focus on Inflammaging in Health and Disease



TNOA Dr David Rajan Sub-specialty medal in Arthroscopy 2019 *Dr Blessin Cherian*

TOPIC : Prospective Randomised Controlled Trial to Compare the Efficacy of Arthroscopic PCL Reconstruction Using Single Bundle Versus Double Bundle Technique



TNOACON Certificate of Appreciation 2019 *Dr Rishi M Kanna*

TOPIC : Diagnostic Accuracy of Whole Spine Magnetic Resonance Imaging in Spinal tuberculosis Validated through Tissue Studies



TNOA Publication Award 2019 *Dr Raja Bhaskara Kanakeshwar*

TOPIC : A Surgical Algorithm for The Management of Recalcitrant Distal Femur Nonunions - Experience From 62 Cases

44th Annual Conference of UP Orthopaedic Association 2020
Lucknow, 15-16 February 2020

Topic: (*Dr K P Srivastava Oration*)
From Individual to an Institution – The Guru Mantra - **Dr S Rajasekaran**,
Chairman, Dept of Orthopedic & Spine Surgery, Ganga Hospital



Dr S Rajasekaran receiving the Dr K P Srivastava Oration Certificate from Dr Atul Srivastava

Celebrating 25 years

Lifetime Achievement Award 2019

On the 25th anniversary of Coimbatore Orthopaedic Society, Dr S Rajasekaran, Founder Secretary of the society was honored with 'Lifetime Achievement Award' for the numerous international recognitions and leadership positions in professional bodies and placing Coimbatore on the World Map of International Orthopaedics.

In particular, the award was given for his below leadership positions

Current Positions:

- Chair, AOSpine International Board (2018-2020)
- President Elect, Asia Pacific Spine Society

Past Positions:

- Chair-AOSpine International Research Commission (2015-17)
- President of SICOT (2016 - 2018)
- President- CSRS-AP (2017-2018)
- President of the Indian Orthopaedic Association (2011-2012)
- President of the Association of Spine Surgeons of India for four years (2008 - 2012)
- President of International Society for the Study of Lumbar Spine, Canada (2011-2012),
- President of the World Orthopaedic Congress, UK (2005-2007).
- Chief National Delegate of Asia Pacific Orthopaedic Association.



Reviewer of the Month

February 2019

Dr. Dilip Chand Raja Soundararajan

Due to your outstanding dedication as a reviewer for European Spine Journal, you have been named Reviewer of the Month. Your commitment to the Journal keeps us a cut above the rest.

Ganga Hospital Bags - Eight Awards at ASSICON 2019



ASSI Publication Award 2019
IASA Research Grant Award 2019
Dr. S. Rajasekaran



ASSI Basic Sciences Award 2019
Dr. Sri Vijay Anand K.S.
Topic : The lumbar intervertebral discs are not sterile in health and disease
- Revelations from NGS analysis



ASSI Young Investigator's Award 2019
Dr. Keerthivasan P
Topic : Does fresh whole blood improve the clinical outcome and serological parameters better than blood components transfusion in major spine surgeries?-a prospective randomized controlled study



VTI Gold Medal 2018
Dr. Anand Behra
Topic : MRI DISEASE: ARE WE CREATING NEW ENTITY How MRI Report Changes Patients Perception of Low Back Pain



ASSI Travelling fellowship Award 2019
Dr. Dilip Chand Raja .S



Best AO spine e-poster Award 2019
Dr. Rajdeep Bagga
Topic : Can unstable hangman's fracture be managed with anterior only surgery : A Comparative analysis



Best Podium presentation Award 2019
Dr. Renjith K R
Topic : Classification and Management Algorithm For Post-Operative Infections Following Transforaminal Lumbar Interbody Fusion



Dr S Rajasekaran of Ganga Hospital awarded the prestigious 'Harold Tscherene Teaching' Award

The award is named in honour of eminent Prof. Harald Tscherene, Germany who contributed immensely by evolving concepts in management of limb injuries. In the last 20 years, the award has been given only to six eminent surgeons from different parts of the world who have contributed by their original and innovative techniques or concepts which has radically changed and improved the treatment of severely injured patients.

Dr S Rajasekaran was awarded this prestigious award for devising 'Ganga Hospital open injury score' which guides surgeons on the crucial decision of salvage in severely injured limbs. He is the first person to be nominated and elected from the whole of Asia Pacific region to this prestigious position. While, all the previous Chairs hail from North America and Europe.



SS Yadav Gold Medal, IOACON 2019, Kolkata Dr. Raja Bhaskara Rajasekaran

Topic: Role of Impaction bone grafting of allografts in the management of benign lesions of the femoral neck



D.P. Baksi Gold Medal, IOACON 2019, Kolkata Dr. Arun Kamal Chandra Mohan

Topic: Outcomes in Burst Olecranon fractures with elbow instability



Dr Robert Bauze Gold medal for Trauma, APOA meeting Bangkok on Sep 21,2019 Dr. Siva Kumar S P

Topic: "Effectiveness of Ganga Hospital Open Injury Score in Predicting Salvage and Amputation in Open Injuries "



K.T. Dholakia Best Paper Award, 18th ROC 2020, Mumbai Dr. Raja Bhaskara Rajasekaran

Topic: Minimal undercorrection gives better outcomes following total knee arthroplasty in severe varus knees - Myth or Reality?- Analysis of 162 knees with varus greater than 15°



Best Poster at POSICON 2019 Dr. Sangeet Gangadharan

Topic: Software for planning precise intra-operative correction of rotational deformity of extremity.



Awards 2019-2020

Dept of Orthopaedics & Spine Surgery,
Ganga Hospital, Coimbatore
Wins Six Major Awards
in 53rd Annual Conference of Tamil Nadu Orthopaedic Association
7th, 8th & 9th February 2020 at Vellore.

Ganga Hospital presented 8 scientific presentations in various medal categories at TNOACON. Six prestigious gold medals were won in all the specialties including Trauma, Foot and Ankle, Arthroscopy, Arthroplasty, Basic science and Spine surgery.

- 1) TNOA JOURNAL 2019 – Best Publication Gold Medal
- 2) TNOACON Subspecialty Medal Papers Foot and Ankle
- 3) TNOA Prof.S.Rajasekaran Medal Spine
- 4) TNOA Prof. A. Subramanian Medal for Basic Research in Orthopaedics
- 5) TNOA Dr. David V Rajan Medal – Arthroscopy and Sports Medicine
- 6) TNOA Dr. Vidhya Shankar Best Arthroplasty Poster Medal



Gold Medal for Best Publication - TNOA JOURNAL 2019
Dr. Arun Kamal C



Dr. David V Rajan Medal for Arthroscopy and Sports Medicine
Dr. Ramakanth R



Prof.S.Rajasekaran Medal for Spine
Dr Rajesh R



Dr Vidhyasagar Arthroplasty for Best Poster Medal
- Dr Soundarrajan D



Subspecialty Medal for Foot and Ankle
- Dr Dharani Kumar P S



Prof.A.Subramanian Medal For Basic Research in Orthopaedics
- Dr Sri Vijayanand K S

Hospital Awards 2019-2020



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



Dr & Mrs JG Shanmuganathan receiving the prestigious IMC Ramkrishna 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.



The Week Neilson Rating

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



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	Ganga Medical Centre & Hospitals	Coimbatore
3	Christian Medical College	Vellore
4	Postgraduate Institute of Medical Education and Research	Chandigarh
5	Apollo Hospitals	Chennai

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

We thank all patients for your confidence in us.



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.

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.



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.

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*

1. Shanmuganathan Rajasekaran, Chitraa Tangavel, Dilip Chand Raja Soundararajan, Sharon Miracle Nayagam, Monica Steffi Matchado, Raveendran Muthurajan, K.S.Sri Vijay Anand, Sunmathi Rajendran, Ajoy Prasad Shetty, Rishi Mugesh Kanna, Dharmalingam Kuppamuthu. Proteomic Signatures of Healthy Intervertebral Discs From Organ Donors: A Comparison With Previous Studies on Discs From Scoliosis, Animals, and Trauma. Accepted for publication. *Neurospine* 2020; Jun 17(2):426-442. <https://doi.org/10.14245/ns.2040056.028>
2. Soundararajan Dilip Chand Raja, S Rajasekaran, Letter to the Editor regarding: "Degenerate-disc Infection Study with Contaminant Control (DISC): A multi-center prospective case-control trial" by Rao et al. Accepted for publication. *The Spine Journal* 2020.
3. Saumyajit Basu, Anil M. Solanki, Abhishek Srivastava, Ajoy Prasad Shetty, S. Rajasekaran, Arvind Jayaswal. Unplanned return to operation room (OR) following growing spinal constructs (GSCs) in early onset scoliosis (EOS)-a multi-centric study. *European Spine Journal* 2020. <https://doi.org/10.1007/s00586-020-06506-4>.
4. Vibhu Krishnan Viswanathan, Ajoy Shetty, Shanmuganathan Rajasekaran. Modic changes - An evidence-based, narrative review on its patho-physiology, clinical significance and role in chronic low back pain. Accepted for publication. *Journal of clinical orthopaedics and trauma* 2020.
5. Gandhi, Sapan; Khanna, Krishn; Harada, Garrett; Louie, Philip; Harrop, James; Mroz, Thomas; Al-Saleh, Khalid; Barbanti Brodano, Giovanni; Chapman, Jens; Fehlings, Michael; Hu, Serena; Kawaguchi, Yoshiharu; Mayer, H. Michael; Menon, Venugopal; Park, Jong-Boem; Rajasekaran, Shanmuganathan; Valacco, Marcelo; Vialle, Luiz; Wang, Jeff; Wiechert, Karsten; Riew, K. Daniel; Samartzis, Dino Factors Impacting the Decision to Initiate Anti-coagulation after Spine Surgery: Findings from the AOSpine Anti-Coagulation Global Survey. *Global Spine Journal* 2020. Accepted for publication
6. S Rajasekaran, Dilip Chand Raja, Chitraa Tangavel, Sharon Miracle Nayagam, Sri Vijay Anand KS, Sunmathi R, Monica Steffi Matchado, M Raveendran, Ajoy Prasad Shetty, Rishi Mugesh Kanna, K Dharmalingam. Uncovering Molecular Targets for Regenerative Therapy in Degenerative Disc Disease: Do Small Leucine-Rich Proteoglycans hold the Key? Accepted for publication. *The Spine Journal* 2020. Apr 25:S1529-9430(20)30146-7. doi: 10.1016/j.spinee.2020.04.011
7. Shanmuganathan Rajasekaran, Dilip Chand Raja Soundararajan, Chitraa Tangavel, Raveendran Muthurajan, K. S. Sri Vijay Anand, Monica Steffi Matchado, Sharon Miracle Nayagam, Ajoy Prasad Shetty, Rishi Mugesh Kanna, K. Dharmalingam. Human intervertebral discs harbour a unique microbiome and dysbiosis determines health and disease. *European Spine Journal* (2020) 29:1621-1640. <https://doi.org/10.1007/s00586-020-06446-z>
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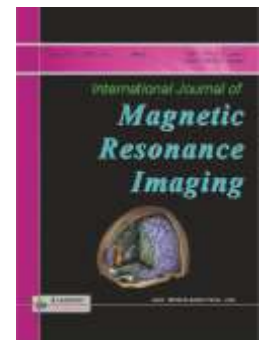
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*Major Courses & Conferences
2019-2020*

Spreading the light of knowledge...





GANGA - Operative Spine Courses 2019



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.

24th to 26th, May, 2019
International Faculty - 4
National Faculty - 16
Delegate - 437





Ganga Operative Arthroplasty Courses 2019



July, 26th to 28th, 2019
International Faculty - 4
National Faculty - 15
Delegate - 871

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.



Major Courses & Conferences 2019-2020



Ganga Operative Arthroscopy Courses



22nd – 24th March, 2019
International Faculty - 4
National Faculty - 31
Delegate - 629

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.



Major Courses & Conferences 2019-2020



26th Annual Conference of the Paediatric Orthopaedic Society of India



January 09 to 12, 2020
International Faculty - 15
National Faculty - 19,
Delegate - 212

The Ganga Paediatric Orthopaedic Symposium 2020 was held from January 9-12, 2020. The conference theme was "Challenges in 2020" which was interesting for each one of us, to share the challenges and look at the possibilities to navigate through the future. We had eminent International and National faculties who shared their wealth of experience and discussed the various challenges faced in our day-to-day practice of paediatric orthopaedics.



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, Diplomat, 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

International Visitors 2019-2020



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



Dr. Prabhakaran Jayaprakasan

(SICOT Ganga Fellowship, LCH Hospital, Abu Dhabi)

Came for the SICOT Ganga fellowship. Am very grateful to Dr.Rajasekaran for providing me the opportunity to observe the excellent work being done in Ganga Hospital. Can confidently say that I have picked up information that can help my patients and more importantly, have the awareness of how to approach complicated cases, this set up required and now have an idea of the strength and limitation of myself and my hospital.



Dr. Ndukwu Chibuzo

(SICOT Fellowship, Lecturer, Nigeria)

I had the rare privilege of observing and occasionally assisting in a wide range of Spine and Arthroplasty cases. The commitment of both the consultants and fellows to patient care is quite commendable. So much emphasis is placed on good outcome and adherence to international best practice in medical care. I remain eternally grateful to Prof.S.Rajasekaran (immediate post President of SICOT) for granting me this fellowship to have this experience. The knowledge acquired will impact my practice positively.



Dr. Chigblo S. Pascal

(SICOT Fellowship, National Teaching Hospital of Cotonou, Benin)

I discovered Ganga Hospital on the website of SICOT and I see that their department of orthopaedics is specialised in trauma. So, I decided to come and do my fellowship. My stay is very useful and was very happy to all to think and see and learn especially the care of non union fractures, bone loss, bone tumour and great deformity. All this will help me to demonstrate my practice.



Dr. M. R. Ahmed Nihaj

(Fernando Place, Anandpass, Colombo - 14, Srilanka)

I did trauma and Arthroscopy. Excellent exposure in trauma. I attended arthroscopy workshop. Must attended workshop. I will come back in future.

APSS Medtronic Spine Clinical Fellowship 2019-2020

Dr. Rommel L Tan

(Spine Consultant, Davao Spine & Scoliosis Centre, Davao City, Philippines)



Ganga hospital is an ideal learning center. It has a huge number of cases of variety which is good.

The work ethics of its people is exemplary. One that I hope I can replicate in our center.

My learning opportunities was fun. Even if I was here during the lockdown there was no dull moment.

Every day is a day that I always look forward to, always of a question,

what can I learn today? What can I write about? I was never asked of a question ...

Is coming over to Ganga worth your while? My answer is DEFINITELY YES! And more.....

Thank you very much for the opportunity.



AO Foundation



Dr. MD Taimur Rahman

(North Dhanmondi, Kalabagan, Dhaka, Bangladesh)

I did my observership on spine. It was good. All teachers are cooperative, academic as well. If I asked any question they gave answers richly. OT environment was good for learning. This fellowship in Ganga Hospital is helpful in my future life. All staff of this hospital were good, cooperative and helpful. I will come back again in this hospital in future for learning purpose.



Dr. A X Rex Premchand

(Yio Chu Kang Road, Singapore)

I came to Ganga Hospital hoping to get a glimpse of the care to patients, teaching sessions. I consider this as an ocean for orthopaedic knowledge. I followed Dr.DD Sir for 6 weeks, able to see a wide of variety of limb reconstruction cases, shoulder and elbow cases. The morning teaching sessions were informative. Thanks to the trauma team and special thanks to Dr.SR sir.



Dr. Abdullah Al Mahmud

(Nobodoy Housing, Mohammadpur, Dhaka, Bangladesh)

I am fortunate to do my fellowship program in Ganga Hospital. Everybody I found very kind and cooperative. I learned a lot from this medical center which upgrade my knowledge and help my daily practise. My all the best wishes, Long live Prof. S.R.Sir, Ajoy sir, and Rishi Sir, Long live Ganga Hospital.



Dr. Anil M Solanki

(Shalby Hospital, Ahmedabad)

It was a matter of pride for me to get AO fellowship at Ganga Hospital, Coimbatore. During one month of my fellowship, I had opportunity to attend large number of surgeries with active participation. The execution in surgical plans with comfort and speed along with perfection are the skills which impressed me. Dr.S.Rajasekaran, Dr.Ajoy, Dr.Rishi all gave me tips for my better understanding of spine. All the fellows and staff supported me well during fellowship period.



Dr. Santosh Paudel

(NAMS, National Trauma Centre, Nepal)

It was a great experience to work with the environment professionals in spine surgery. It was like a dream to see the huge volume of cases with different varieties in a short time of one month in spine surgery. I learned many surgical skills and techniques but the management of overall patients was much to learn than surgical skills. The staff and colleagues were eager to help always.



Dr. Layth Alteeti

(Makassed Hospital, Palestine - Jerasalem)

I had the privilege to be at Ganga Hospital for 2 months observing trauma masters doing their work. I had assisted many cases and pelvis fractures. Really glad and proud to be here. Sir Rajasekaran talked about contribution to world. They are truly changing the world.



Dr. Shah Whaliullah

(King George Medical University, Lucknow)

It is truly unremarkable experience of my life, one of the best spine centre I have ever visited. I got ample exposure to variety of spinal surgeries. All of the three teachers are really good, they are so keen to teach us and clear doubts regarding cases. I have learnt lot of new techniques and I believe they will really change my future practice. I am also thankful to staff, very cooperative.



Bangladesh Orthopaedic Association (BOA) Ganga Fellowship



Dr. Khandaker Abu Sayed

(Bangladesh Orthopaedic Association (BOA) Ganga Fellowship)

I had a wonderful and pleasant experience in BOA-Ganga Fellowship Period. In that time Dr.Sundararajan sir, the man of Arthroscopy had taught me a lot of tips in knee and shoulder arthroscopy. I am also very much grateful to Prof.Rajasekaran Sir to give me the opportunity to join this program. Next time, I want to again come to Ganga Hospital. With thanks.



Dr. Md. Sofikul Islam

(Bangladesh Orthopaedic Association (BOA) Ganga Fellowship)

I am very much grateful to Dr.Rajasekaran for arranging BOA Ganga Fellowship. I have learnt many new things about arthroplasty as well as arthroscopic surgery. All consultants were very much helpful and co-operative during operative procedure. I hope this fellowship programme will be continued for long time. Again I am very much thankful to authority of Ganga Hospital.



Dr. Md. Harun Are Rashid

(Dhaka, Bangladesh Orthopaedic Association (BOA) Ganga Fellowship)

My observationship at Ganga Hospital, Coimbatore is very dynamic, fruitfull and beyond of imagine. I am very much luck enough that I got a chance to observe here. Thanks to Dr.SR sir for his kind support and behave like father and Sir. Thanks to Dr.Sundar sir for his contribution for learning something new. I am grateful to Ganga Hospital and all employees. I will return again If I get a chance again.



Dr. Md Azadur Rahman,

*(Rangpur Medical College, Hospital Bangladesh ,
Bangladesh Orthopaedic Association (BOA) Ganga Fellowship)*

It is a good experience for me as fellowship training in Ganga Hospital. They have a huge work load, but they are managing nicely. All the consultant are well trained and very friendly. I hope I would come again to enrich my knowledge and thought process.



Dr. Mohammad Mahabubur Rahman Khan

(National Institute of Traumatology & Orthopaedic Rehabilitation, Nitur, Dhaka,

This is a great opportunity to be here for a period, special thanks to Prof. S.Rajasekaran sir for allowing me. All mentors were highly co-operative, operation theatre staffs here very much co-operative to me. Officials are also co-operative, all secretaries & Staffs wer highly helpful.

International Visitors 2019-2020



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



Dr Kazuki Fujimoto
(National Center for Global Health and Medicine,
Kohnodai Hospital, , Japan)
Thank you for experiencing great opportunity to my first visit to India.
I have a great experience observing wonderful surgery and outpatient clinic.
South Indian Food is very delicious and thank you all of staff !!.



Dr. Kazuta Tamashita
(Tokushima University, Japan)
Thank you for inviting us as JSSR Traveling Fellowship. We are really
happy to meet all guys and to see wonderful surgery and outpatient clinic.
Moreover, your accommodation and welcoming is awesome! Near future,
I strongly hope to come back again. I can't thank you enough.

National Visitors 2019-2020



Association of Spine Surgeons of India



Dr. Rahul Prakash
(Bombay Hospital, Mumbai)
I am fortunate to witness 1 month of dedicated spine work in Ganga Hospital.
Ganga hospital is doing pioneer work in all aspect of orthopaedic surgery. The work here is
so much organised, planned, smoothly coordinated so that no other hospital can even match
that. I heartily congratulate Dr.SR sir for building and motivating Ganga staff to excel in all
aspects. Dr. Ajoy Shetty is a gem as surgeon and as person too. He takes extreme care of us
as fellows. He taught us fine nuances of spine surgery. It's a bonus for us to be work and
learn from him.



Dr. Zahir Abbas I Merckant
(Bombay Hospital, Mumbai)
It gives me immense pleasure & pride to write about the institution that I had always
dreamt to work under Dr.Rajasekaran. Has created and nurtured an institution that one
can only dream of. He has created a saga of spine. I have been in serendipity to witness
world class work in spine being done at Ganga Hospital. The work at Ganga is fully
coordinated, timely done and everyone is at ease at doing it. No other center has achieved
this feat ever before. Ganga hospital is an imminent institute. With world class facilities
being provided it affordable rates. Dr.Ajoy Shetty sir has been a pedagogue to teach us
the fine skills of spine.



Dr. Ayush Sharma
(Central Railway Hospital, Mumbai)
Engaged my visit of Ganga. It was a fabulous spine experience will love to visit again.



Indian Orthopaedic Association (IOA)



Dr. Gyan Ranjan
(Sudha Hospitals, Darbhaga, Bihar)

I feel honoured that I was said to write in this book. Ganga hospital is an institution which is famous in many countries for the treatment and results they are delivery to the patients. Almost every orthopaedic surgeon in India aspires to come and work in this hospital at least once. I was lucky to get this chance. Dr.SR sir is a charismatic team leader, doctor by profession and teacher at heart. All his teaching about orthopaedic and other part of life is a very inspiring thought. To assist him in a few surgeries is a life time experience. Dr.Ajoy Shetty sir is a wonderful teacher and very helping person. I feel gratified that Dr.SR sir gave me opportunity to be a part of Ganga Hospital. A very disciplined institution with very hard working professionals.



Dr. Arun Kumar Sharma
(SMS Medical College, Jaipur)

I am honoured and privileged to work in Ganga Hospital as Central Zone – IOA Fellow. This is best Institution in India or abroad I have ever visited. The work culture/ high standards of professional excellence are something which I will remember for rest of my life. Dr.S.R.Sir treat every fellow with affection, care and always really to help trainees coming from all over India and abroad. I learned advanced arthroplasty concept and basic training in bone banking under guidance of Dr.NRK sir and Dr.DSR Sir. I am deeply indebted to Ganga Hospital for this wonderful experience. I will look forward to visit this high volume arthroplasty centre and bone bank to further tone my skills.



Dr. Narendran Pushpasekaran
(Medical Trust Hospital, Cochin)

It has been a power packed learning expiring for the entire tenure at the prestigious Ganga Hospital & Research Centre. The excellent faculties are pushing the wonders of excellence and standards of orthopaedic care. I had focused on the areas of research and skill enhancement in the filed of arthroscopy. I thank the director for providing this wonderful opportunity to undertake the IOA-Fellowship at this centre of excellence. .



Dr. Tarun Verma
(Medical College in Baroda, Gujarat)

I had a wonderful experience during my 3 weeks IOA Fellowship at Ganga Hospital. I had heard a lot about this Institutional Prof.S.Rajasekaran. On visiting here, I realised every bit of it to be true. The hospital is very well organised and maintained. The work flow is very smooth. I had opportunity to observe around 120 cases in 3 weeks, which is a huge number. Dr.Sundararajan Sir has been very kind to me and other fellows. After each case he explained us about it and cleared our doubts. It was a very helpful learning experience which is definitely going to help in my field. Last, but not the least, Ganga Guest house is very nice place and well maintained.



Tamilnadu Orthopaedic Association (TNOA)



Dr. Vinoth Kumar G
TNOA Fellowship (Arthroplasty)

I have immense pleasure in being selected and posted at Ganga Hospital in the Department which I have been asked. I was so lucky to have been posted under my senior of Alma mater (Govt. Royapettah Hospital) Dr.Dhanasekara Raja. The most fascinating and wonderful person I have met. The best surgeon and a cool surgeon I have ever met. I look forward for further endeavours of following for 1 year under the same unit in the near future. I thank the team Ganga whole heartedly for this opportunity.



Dr. T.R. Ashok
TNOA Fellowship (Sri Ramachandra Hospital, Porur, Chennai)

It was a good learning and updating of new ideas and concepts on dealing orthopaedic practice. Defining of thoughts on management its outcome visualised.



Dr. Srijay Sashaank S
TNOA Fellowship (Srinivasapuram, Thiruvanmaiur, Chennai)

It was a wonderful experience – associated with a institute like Ganga Medical Centre and Hospital. I would express my gratitude to Dr.DD sir for having me here as TNOA-trauma fellow for 2 weeks. It has been a great learning experience in trauma. I would also like to thank all my co-fellows and stay at GMC & Hospitals for the excellent hospitality extended.



Dr. Naveenkumar K
(Fellowship in Spine surgery, Sree Manakula Vinayagar Medical College,Pondicherry)

It was a great experience to be here in Ganga hospital. The spine surgery department was very unique and the case load is tremendous. I thank Dr.S.Rajasekaran, Dr.Ajoy and Dr.Rishi for their wonderful guidelines.



Dr. V. Vasantharaj
(Fellowship in Spine surgery, Dharmapuri)

*It was good experience in seeing all those different cases in spine.
CT Navigation in spine was different experience.*



Dr. P. Murali
(Fellowship in Arthroplasty, Thanjavur)

I am very much grateful to Dr.SR Sir, Dr.DD sir, Dr.DSR Sir for giving me this opportunity in my life. Many things I learnt from the department and hospital.
Thank you very much for the TNOA



Tamilnadu Orthopaedic Association (TNOA)



Dr. Prabha Ram Kumar R,
(Fellowship in Spine surgery, Coimbatore)

Wonderful experience, Provides a different perspective in Spine Surgeries. Builds up confidence in spine especially in dural tear scenarios. I am very grateful to the teachers Prof.S.Rajasekaran, Dr.Ajoy, Dr.RMK, who provided excellent tips and tricks. I thank TNOA for this golden opportunity.



Dr. Subhramanya Gandhi
(SreeBalaji Hospital, Chennai)

It has been a power packed learning experience for entire tenure at the prestigious Ganga Hospital and research centre. I would express my gratitude to Dr.DD Sir for having me here as TNOA Fellow for 2 weeks. It is great learning experience from all the faculty in trauma department.



Dr. Ram Gautham G
(TNOA Trauma Fellowship, Madurai)

I had a wonderful opportunity to be at Ganga for two weeks under Dr.DD as the TNOA fellow had a wonderful experience with exposure to a wide variety of complex trauma and excellent teaching by Dr.DD himself.



Dr. Santhosh
(TNOA Trauma Fellowship, SBS Hospital, Hosur)

I should thank everyone in orthopaedic trauma department to get to know, understand my basics and surgical principles of surgery. I really thank TNOA and Dr.Dheenadhayalan sir for allowing me as a fellow at Ganga Hospital, Coimbatore.



Dr. Kathiresan R
(TNOA Arthroplasty Fellowship, Govt IRT PMCH, Perundurai, Erode)

I am thanking everyone in Arthroplasty team to help me to clarify my lacunae areas and shape me still further fine in Arthroplasty. My special thanks to Dr.S.Rajasekaran, Dr Dheenadhayalan, Dr.Dhanasekara Raja, for guiding me in my Arthroplasty career.



Dr. K.R. Tarun Prashanth
(TNOA Arthroplasty Fellowship, SRMC, Porur, Chennai)

It's been a privilege to have been at this reputed Institute for two weeks, where patients have been treated at the helm of doctors who are committed only for perfection and are trained herewith the only motto of work life is passion. I can't thank enough Prof.Dheenadhayalan, Dr.Dhanasekara Raja and Dr.N.Rajkumar for teaching me during every case and sharing their experience.



Tamilnadu Orthopaedic Association (TNOA)



Dr. S. Prabhakar
(TNOA Fellow (Spine))

It is very nice to work in spine department, Ganga Hospital, Coimbatore.



Dr. V. Arun, MS (Ortho)
Govt. Dharmapuri Medical College, Dharmapuri, (Arthroplasty)
Ganga OT is a Dreamland for every orthopaedician. It is a treasure house of experience.

Observership / Fellowship 2019-2020



Dr. M. Sathish
(Velayuthampalayam Government Hospital, Karur)

When we are in Ganga, learning goes effectless and as an integral part of everyday routine, happy to be a part of it for a short period.



Dr. Priti Ranjan Sinha
(Saraswati Institute of Medical Sciences, Ghaziabad, Uttarpradesh)

First of all, many thanks to you for giving me an opportunity to visit your hospital for 7 days. It was an extremely delightful, full of learning, knowing many things which was unaware of, knowing the correct approach to surgery and overall management. It is extremely helpful that it will help in my day to day management. Many thanks again Sir.



Dr. Manoj Phalak
(Assistant Professor, Neurosurgery, AIIMS, New Delhi)

I feel delighted to experience the Ganga Spine Speciality for the high volume centre with all kind of cases which are otherwise rare to see, getting managed here with ease.

Dr.S. Rajasekaran is not just a surgeon, but teacher par excellence. This attention to details and a scientific rationale thinking is uncomparable. I learnt a great deal of finer nuances with him, be it operative planning or academics.



Dr. Shriprakash Jha
(Department of Orthopaedics, Max Hospital, Shalimarbagh, Delhi)

It is very good experience to work in Ganga Hospital under Dr.SR sir and Dr.Sundarrajan sir. Number of cases per OT is very good in number. Sundar sir helped me lot. Explaining the procedure during intra operative and tricks of particular surgery. Infrastructure of Ganga Hospital OT is well designed.

Observership / Fellowship 2019-2020



Dr. Suman Dhar

(East Bank of Jagannath Dighi, Udaipur, Gomati District, Tripura)

It is a great privilege to be here at Ganga Hospital, under the guidance of Prof.S.R sir. I got many of my concepts cleared and got a variety of cases with learning in each case. Sir teachers is very care something new which is best part of it. Although such a short time is very less to set in all in the thought process, but this short time period has still given me a lot of education in patient management and health care.



Dr. Rohit Malhotra, MS(Ortho)

(Orthomax Bone & Joint Hospital, Panchkula)

It was a pleasure and a blessing to come to Ganga Hospital, Coimbatore and work under the stalwarts of Arthroscopy & Arthroplasty by observing them and learning from them. I am thankful to Dr.Sundarrajan sir to let me observe and teach me tips and tricks in Arthroscopy surgery of both knee & shoulder.



Dr. Duggineni Maheshkumar

(Ravuri Somaiah Nagar, Tanguturu)

It has been my dream to work in Ganga. I have attended for interview under Dr.MGR Medical University for the years 2018 and 2019. Overall the working environment is good and world class that of art operating rooms are well maintained.



Dr. Rishabh Kumar

(Sahaj Surgery, Tilak Nagar, Kankarbagh, Patna)

It is a great privilege to be here at Ganga Hospital under great guidance of Dr.SR sir. It is a dream come true to spend one month in the best hospital of India. Learned a lot under the guidance of Dr.DD sir and his team. Complex surgeries which is done here is at another level. Dedication of trauma team was fantastic. Great ambience and will have to visit again



Dr. Janki Sharan Bhadani

(IGIMS, Patna, Bihar Orthopaedic Association)

My fellowship in Arthroplasty is really very fruitful. All the faculty and co-fellows are really very nice and we learnt a lot and will come back again.

Thank you, Dr.Rajasekaran, Dr. Dhanasekara Raja and Dr.Rajkumar.



Dr. Manish Kumar

(IGIMS, Patna, Bihar Orthopaedic Association)

It was a very nice experience. Wanted to continue till the completion of the course but due to corona virus problem in the country, we have decided to learn at present.

Corporate Social Responsibilities



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

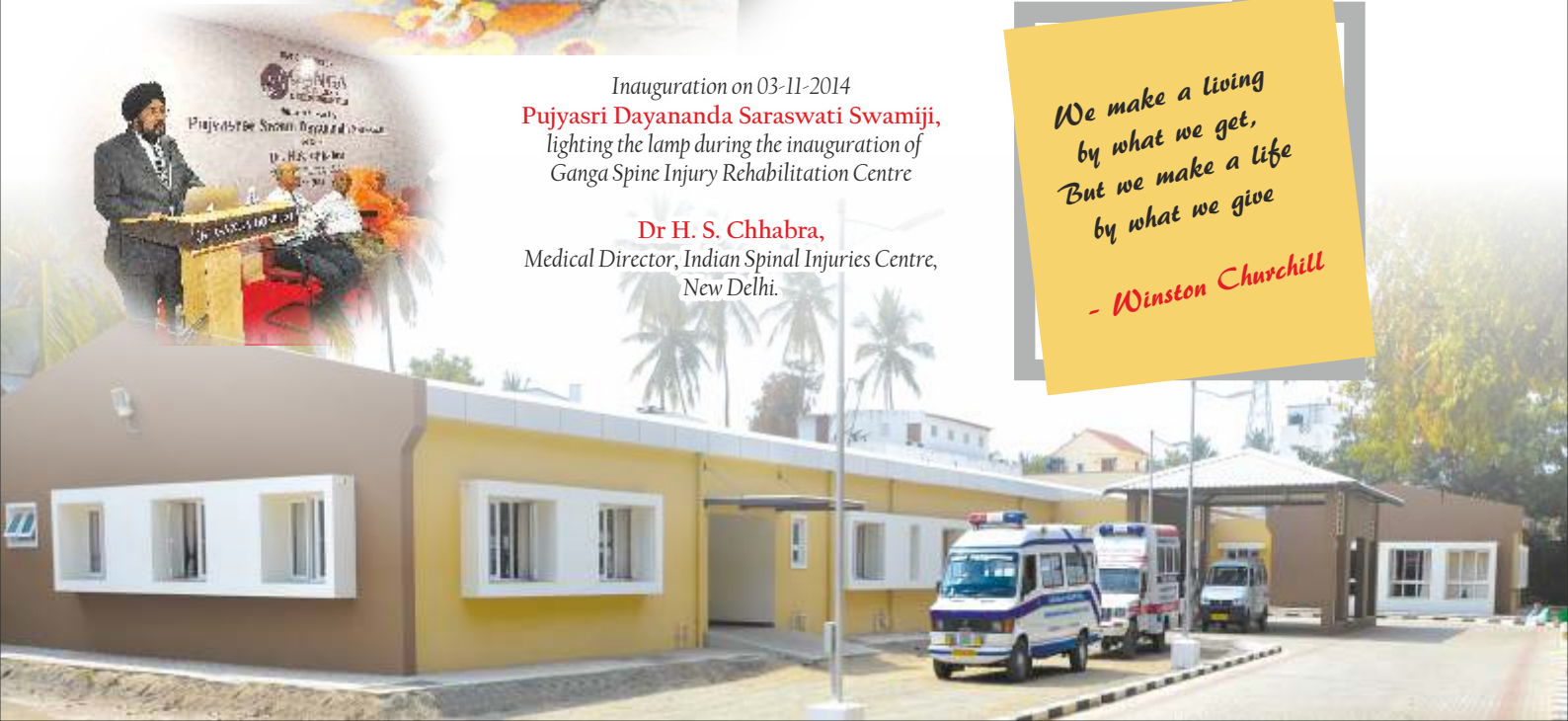


Inauguration on 03-11-2014
Pujyasri Dayananda Saraswati Swamiji,
lighting the lamp during the inauguration of
Ganga Spine Injury Rehabilitation Centre

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 manouvre 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 2017 - 2020

	2017	2018	2019	2020
Total Number	252	283	214	86
Traumatic spine injury	241	253	189	73
Non traumatic	35	30	25	13

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.





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.

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



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 2017 to 2020

	2017	2018	2019	2020
Bone				
Femoral Head	152	123	105	60
Tibial Slices	283	309	291	98
Cervical	84	112	55	38
Fibula	39	37	26	7
Tibia	7	11	3	4
Distal Femur	7	4	3	-
Metatarsal	11	15	9	11
Ulna	2	1	1	1
Radius	-	3	-	2
Total	585	615	493	221



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	2019	2020 (Upto March)
44,096	44,478	47,854	49,445	54,149	54,197	9,416



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.





UYIR trust was formally inaugurated on 27th October 2018 by the Chief Minister of Tamilnadu 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.





YEARS OF
REBUILDING
LIVES

1991 to 2016

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