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(A DEEMED UNIVERSITY)



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RESEARCH SITES



Dr Ramdas Pai
President, Manipal Education & Medical Group

Research is a key ingredient to provide care to patients. We are exploring new frontiers such as stem cell characterization, pharmaco-genomics to help prevent and treat diseases. We have joined hands with Manipal AcuNova to promote conduct of Clinical Research at our hospitals. This exclusive tie-up with Manipal AcuNova would benefit the sponsors to conduct clinical research in a speedy and cost effective manner.



Dr H S Ballal
Vice Chancellor, MAHE

We are engaged in clinical research to develop new drugs, devices and therapies for the past five decades. Our teaching hospitals deliver primary, secondary and tertiary healthcare giving us an insight into diagnosis, treatment and prevention of diseases. Collection of faculty from Medical, Pharmacy, Biotechnology, Biomedical Engineering enables our team to bring in a multidisciplinary approach to medical research. In collaboration with Manipal AcuNova, Clinical Research Centers have been set-up. This would assure that data generated from Manipal system would meet International standards. Manipal AcuNova acts as our interface to the Sponsors. We look forward to conduct innovative research for you.

WORLD OF MANIPAL

Health Care Delivery

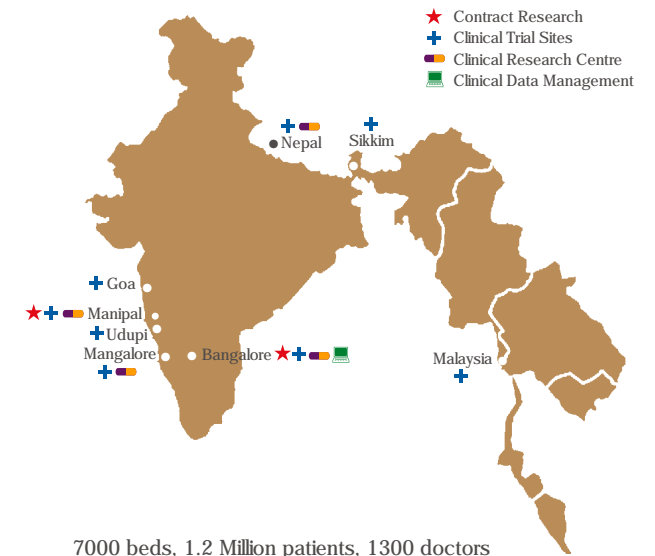
Manipal has been involved with learning & healing since its inception. Over the years, the Manipal group has built healthcare, educational institutions and clinical research, providing hope and inspiration to thousands of people. The Manipal education network began with a single institution in a small seaside town. The Kasturba Medical College (KMC) at Manipal opened its doors to 100 young persons in 1953. Today KMC is among India's top ranked Medical colleges.

Therapeutic Expertise

Manipal Hospital Network delivers primary, secondary and tertiary care and is the largest integrated healthcare system with super specialty hospitals in cancer, cardiac and infectious diseases. Network has secondary care hospitals and 19 primary healthcare centres.

Disease management and Registries

The Manipal Hospital network has established standards of care and unique concepts in disease management in core therapeutic areas. In addition various registries for cancer, diabetes & infectious diseases allow us to recruit patients for clinical trials in a short time with three generations of patients trusting our hospitals and doctors; the network has the ability to conduct epigenetic research in select population segments.



7000 beds, 1.2 Million patients, 1300 doctors

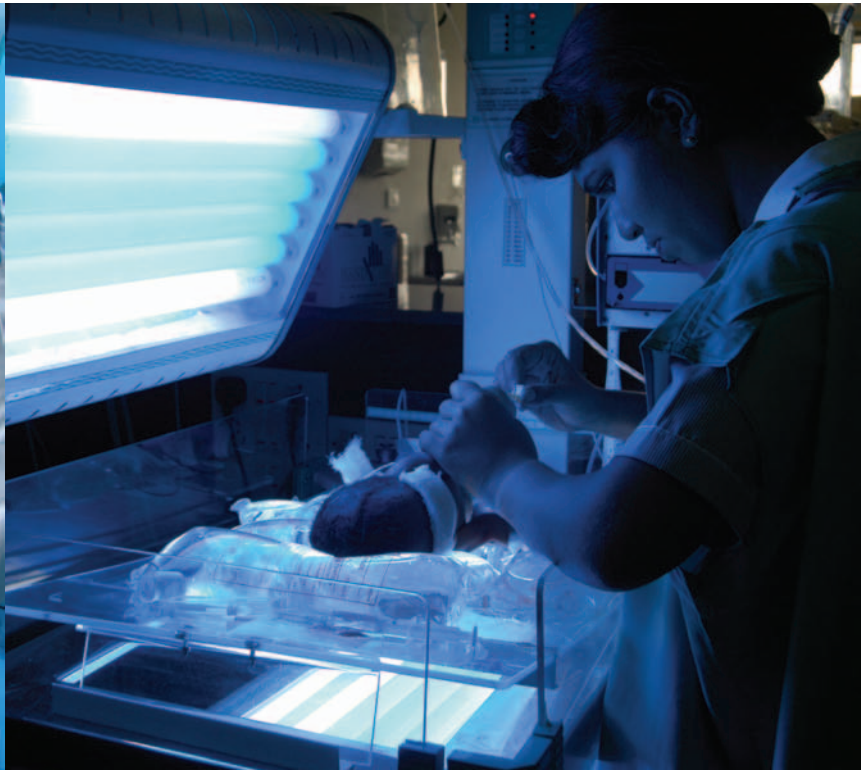
Drug Information and Pharmacovigilance

Department of Pharmacy practice has established Drug Information Centre (DIC) at Manipal. The DIC reports Pharmacovigilance information to WHO database in Sweden. DIC at Nepal is recognized by US Pharmacopia.

Knowledge base

Manipal has invested over five decades of pioneering work in Education and Healthcare and built an international community of skilled professionals with diverse expertise. Today it stands for world-class education and healthcare services that transcend national boundaries. Manipal has a solid foundation, from basic science competency to clinical research expertise in its institutions; health services which include:

- 2 Universities
- 8 campuses across 4 countries
- Medical Schools at Bangalore, Manipal, Mangalore, Sikkim, Nepal and Malaysia
- Medical Biotechnology program amongst top three in India
- Colleges of Dentistry, Allied Health, Nursing, Biomedical Engineering and Medical Software
- Leading Pharmacy College with research thrust
- KMC Life Science Research Centre



Clinical Research Centres

Manipal AcuNova has established state of the art Clinical Research Centres (CRC) at Manipal group's key teaching hospitals. The CRC's facilitate and coordinate the conduct of Phase I to Phase IV trials. Centres are manned by highly qualified Physicians, Pharmacologists, Pharmacists, Biostatisticians and Site coordinators to support drug research. Each centre has modern infrastructure for voice, data and internet communication. The CRC's are located at:

- Kasturba Medical College Hospital, Mangalore
- Kasturba Hospital, Manipal
- Manipal Hospital, Bangalore
- Manipal College of Medical Sciences, Pokhara, Nepal

Each of the CRC's have research space for monitoring, refrigerators and cabinets for drug storage, pharmacists for dispensing Investigational products and trial document archival. The CRC's typically facilitate conduct of research at 4 – 5 hospitals within its vicinity.

Clinical Trials supported by Clinical Research Centres
The key areas where trials have been conducted are:

- Cardiovascular
- Dermatology
- Endocrinology
- Gastroenterology
- HIV/AIDS & infectious diseases
- Medicine
- Neurology
- Orthopedic
- Psychiatry
- Pediatrics
- Radiology
- Oncology
- Rheumatology
- Surgery
- Urology
- Nephrology



MANIPAL HEALTH SYSTEM

Kasturba Hospital, Manipal: 1230 Beds

This Teaching Hospital meets the tertiary care demands of the Western Indian Region comprising of Coastal Karnataka, Goa and northern Kerala. Kasturba Hospital has several super specialties and is recognized for rendering sophisticated quality medical care, at a reasonable cost.

The departments are staffed by experienced physicians and surgeons and equipped with state- of-the-art equipment to deal with any emergency. Services include General Medicine, General Surgery, Obstetrics & Gynecology, Pediatrics, Orthopedics, E.N.T, Ophthalmology, Psychiatry, Pulmonary Tuberculosis & Chest diseases. Super specialty departments include Cardiology, Neurology, Gastroenterology, Neurosurgery, Urology, Plastic Surgery and Pediatric Surgery. Diagnostic facilities include MRI, CT scanner, Ultra sound, Picture Archival & Communication system, Cath Labs, Digital X ray, Lithotripsy, Nuclear Imaging and a well equipped Pathology Lab. Investigators have experience in conducting pivotal global clinical trials in many therapeutic areas.

Shirdi Sai Baba Cancer Hospital, Manipal: 250 Beds

The department of oncology and radiotherapy was established in 1974. It has dedicated departments of Medical Oncology, Surgical Oncology, Radiation Oncology, Nuclear Medicine, Pain and Palliative care unit and Psycho-Oncology. It also organizes camps and creates awareness of cancer in the region. The out patient wing handles around 10,000 patients & around 2000 newly diagnosed cancer patients every year. Treatment facilities include Cobalt therapy, High energy linear accelerator, High dose intra cavity irradiation etc. Investigators have experience in conducting pivotal trials.

TMA Pai Hospital, Udupi: 180 Beds

Dr. TMA Pai Hospital is a secondary care hospital. A team of doctors from this hospital conduct weekly specialist clinics, which provide Maternal & Child care antenatal, post natal and care of children in the Primary Health Centres. Diabetes & Gestational Diabetes Mellitus registry is maintained in this hospital. Investigators have experience in conducting pivotal endocrinology trials.

Dr. TMA Pai Rotary Hospital, Karkala: 100 Beds

This is a Community hospital for maternal health and childcare. This hospital trains interns and postgraduates in Obstetrics & Gynecology, Pediatrics, Anesthesia and Community Medicine. Besides pioneering work in rural community medicine, this hospital has performed innovative work in the field of ophthalmology using the eye care unit fully equipped by Rotary International.

Manipal Goa Cancer and General Hospital, Goa: 40 Beds

The Manipal Goa Hospital started as a Cancer centre, but has now been expanded to include various other specialties.

Government Hospital, Ajjarkad, Udupi: 240 Beds Women and Child Hospital, Udupi: 70 Beds

These hospitals are affiliated to our medical college and support our teaching efforts. It enables the college to treat patients from a different social pool.

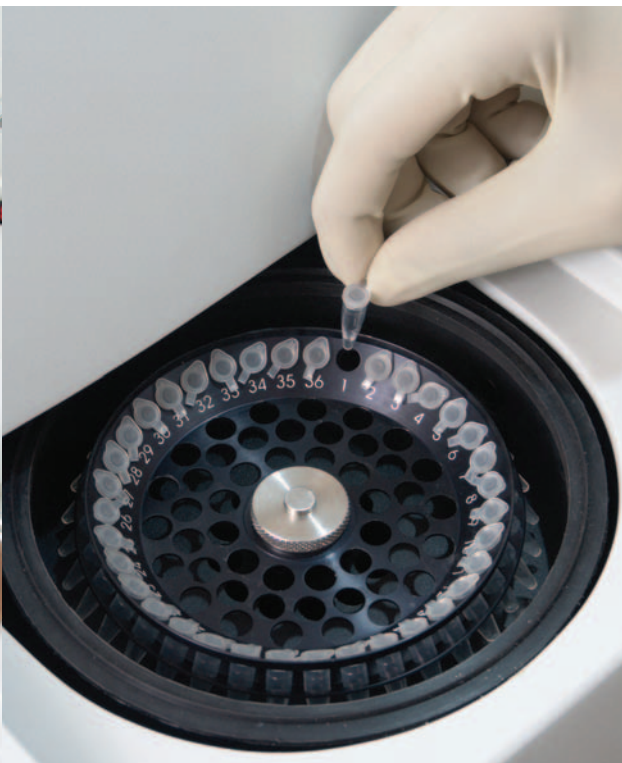
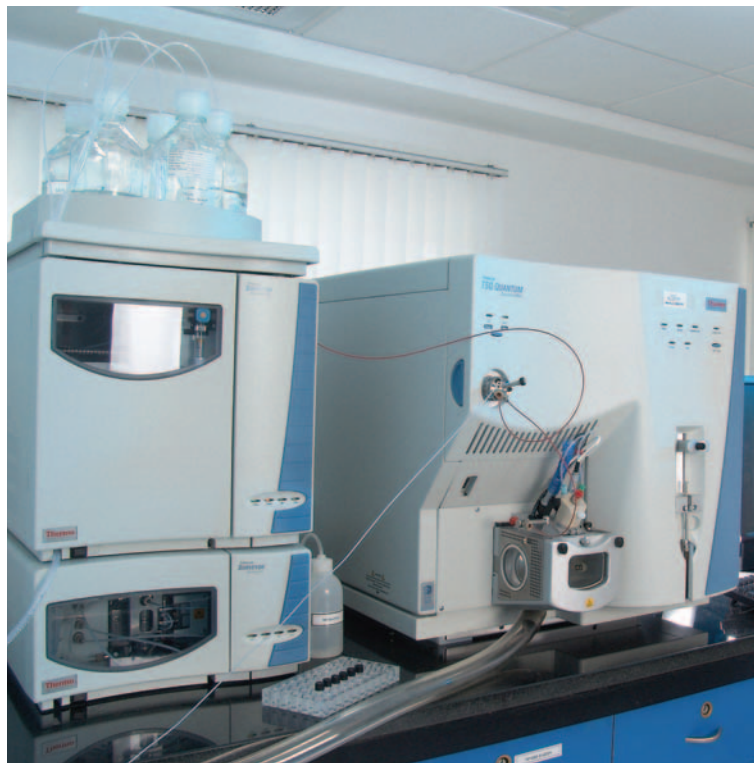
Manipal KMC Life Sciences Centre, Manipal

The Centre has been created to converge Manipal's discovery research, bringing together researchers from Medical School, Medical Biotechnology, Pharmacy School and Basic Scientists. Centre focuses on Cancer, Aging and Infectious disease research.

The Centre has specialty labs and research units in:

- Laser Spectroscopy
- Radiobiology Research Unit
- Cellular & Molecular Research Lab

A National centre of excellence in Pharmacogenomics has been set up with funding from Department of Science and Technology, Govt of India. The Centre also houses facilities for Medical device research and higher education supported by Philips Medical and GE Healthcare.



CLINICAL RESEARCH

Preclinical Studies

Studies are conducted at the toxicology lab and animal house of Manipal College of Pharmaceutical Sciences. The animal house is designed by CCMB, Hyderabad, to international standards and approved and certified by C.S.E.A (Committee for control supervision of experiments on animals) to conduct acute, subacute and chronic toxicity studies and reproductive life time studies in various animal species. Staffed by veterinary pathologists, animal breeders and experts in animal toxicology, capability exists to perform various preclinical animal toxicology studies.

Bioavailability-Bioequivalence (BA/BE)

Recognizing the growing need of generic drug marketing, a 26 bedded BA/BE facility has been developed. Approved by the DCGI, this state of the art lab is equipped with the latest analytical equipment and is staffed by experienced research and analytical chemists. In its library, are various validated and standardized methods for drug testing and in development are more sophisticated methods of analysis for newer drug molecules. The BA/BE facility can undertake both pilot and pivotal studies. It has data management capabilities to ensure an audit trail.

Pharmacokinetics

Manipal College of Pharmaceutical Sciences operational since 1953 has trained many graduates and postgraduates. Experts in pharmacokinetics, pharmacology and analytical chemistry can assist you in your PK studies.

Phase I Studies

A uniquely planned Phase I Clinical Research ward is operational at our Manipal Campus. ICH-GCP trained researchers with adequate experience in Phase I studies and Pharmacokinetic principles will conduct these studies.

Ranbaxy Clinical Centre of Excellence

Kasturba Medical College, Pharmacology department and Ranbaxy Ltd have established a centre with dedicated resources to conduct clinical trials, exclusively for this sponsor.

Manipal AcuNova KH Clinical Research Centre

The Clinical Research Centre is located in the heart of the campus. It facilitates conduct of clinical research at all hospital sites of Manipal Health System.

MANGALORE HEALTH SYSTEM

This teaching hospital system is a network of four hospitals in Mangalore and one in North Kerala. It has the distinction of being one of the oldest and largest healthcare delivery systems for the entire region. The system has been able to attract patients from all over the country due to its experience in treatment of extremely difficult clinical cases.

KMC Hospital, Attavar, Mangalore: 580 beds

The KMC Hospital Attavar is a teaching hospital of KMC, Mangalore. This super specialty hospital has several specialized collaborative ventures like Operation Eyesight Universal in Ophthalmology. This is a recognized centre for renal transplants. It is also a specialized center for Geriatric care besides being an HIV Counseling and testing centre working with Indian AIDS prevention societies. Hospital has 24 hour air conditioned hi-tech ambulance services. Hospital runs an advanced Occupational healthcare center to cater to the needs of the employees of the various Industries in and around Mangalore.

KMC Hospital, Ambedkar Circle, Mangalore: 165 Beds

This is a tertiary care hospital. It has a very well equipped integrated laboratory facility in Pathology, Biochemistry, microbiology and molecular diagnostics (including PCR) with a full fledged blood bank and zonal HIV blood testing centre. It is equipped with digital cardiac catheterization laboratories and Comprehensive renal transplant unit, besides advanced invasive & non-invasive imaging facilities. It has the distinction of performing surgery successfully, separating twins conjoined at the head.

Government Wenlock Hospital, Mangalore: 515 Beds.
Government Lady Goschen Hospital, Mangalore: 170 Beds
Uma Hospital, Kasargod: 40 Beds

These hospitals are affiliated to our medical college and support our teaching efforts. It enables the college to treat patients from a different social pool.

Manipal AcuNova KMC Clinical Research Centre

The Kasturba Medical College Mangalore has been the hub of clinical trials for the past 10 years. Clinical research is a coordinated effort between the departments of Medicine, Clinical Pharmacology and Community Medicine. Various Phase II and Phase III trials have been conducted for both Indian and global sponsors in Infectious Diseases, Cardiovascular Drugs, Antihypertensives, Cholesterol Lowering Agents, Cancer, Gastroenterology, Psychiatry, Rheumatology, Pain Management, Pediatrics also Dentistry.

Registries for various diseases are maintained and frequent outreach camps help in faster recruitments for studies. Clinical trials staff have undergone ICH-GCP training. The centre has nearly 60 principal investigators who are GCP compliant and nearly 15 study coordinators and 6 clinical research associates. The centre has dedicated study nurses and lab technicians who conduct all study related procedures in an organized way. KMC Mangalore is all set to start Phase 1 studies in a state-of-the-art Phase 1 unit. The centre is also conducting collaborative research projects sponsored by University of Minnesota, Harvard University as well as ICMR projects.

BANGALORE HEALTH SYSTEM

Manipal's Health System at Bangalore consists of a 650 bed tertiary care Hospital consistently ranked as the “Best Hospital” by *WEEK – TNS survey of Indian Hospitals*. System has a secondary care hospital and a network of feeder hospitals. It is linked by tele medicine to patients in Delhi and Mauritius. Hospital serves patients from several countries. Reputed Physicians use advanced diagnostics to determine the illness.

The department of Radiology and Imaging at Manipal Hospital is fully equipped with state-of-the-art imaging MR, Spiral CT, Ultra Sound and Mammography. Manipal's clinical laboratory is a NABL certified laboratory. The lab is a combination of quality controlled routine and specialized testing using advanced methods such as flow cytometry, immunohistochemistry & molecular biology. The lab has one of the largest and most modern blood banks in India with facilities for component separation. It is recognized by the State Government as a regional blood transfusion centre.

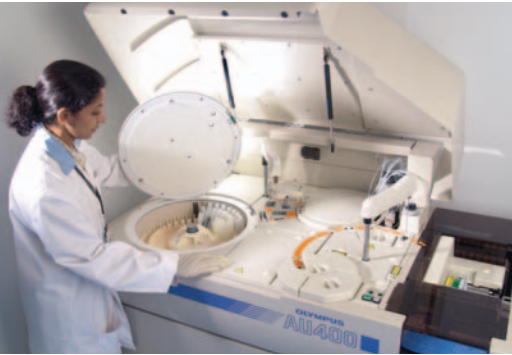
Manipal Hospital, Bangalore: 600 Beds

The Manipal Hospital renders some of the most sophisticated medical services at affordable costs in over 40 specialties. It is a Postgraduate Teaching Hospital in several super specialties. Super specialized Centres of Excellence, include Manipal Heart Foundation, Manipal Institute of Neurological Disorders and Manipal Institute of Nephrology and Urology, Comprehensive Cancer Care Centre, Neonatal Intensive Care Unit. Treatment is carried out in centre of clinical excellence by a group of highly reputed physicians and surgeons. Intensive care, recuperation and rehabilitation services of the highest quality are available.

1. Manipal Heart Foundation: Manipal Heart Foundation is one of the largest and most modern cardiac care centres in Asia-both in size and quality. It comprises 4 dedicated operation theatres with a potential to perform 10 heart surgeries daily and two ultra modern digital catheterization laboratories with a potential to do 30 cardiac procedures daily. Manipal Hospital & Heart Foundation offers excellent testing ground for cardiovascular drugs, drug eluting stents - recombinant proteins and stem cell therapy.
2. Manipal Institute for Neurological Disorders (MIND): This is one of the most well equipped unit of its kind in India providing neurological services delivered by Neurosurgeons and Neurologists of very high eminence. It became the first centre to perform Neuroendoscopy in Karnataka and has remained in the forefront of introducing newer procedures like CT guided Stereotaxy and Deep Brain Stimulation (DBS) for Parkinson's disease.. This centre performs 1000 neurosurgery operations in a year. MIND has experience in conducting research in: Gliomas, Alzheimer's disease and Spinal cord injuries.



3. Manipal Institute of Nephrology and Urology (MINU): MINU has performed over 300-kidney transplants and conducted the first cadaver transplant in Karnataka. MINU has a state-of-the-art dialysis centre and active hemo dialysis unit with ultra modern dialysis machines and carries out 2000 dialysis every month. The department was the first to establish lithotripsy and has good experience in endoscopic treatment of stones and prostate tumors. MINU has experience in conducting research in transplant rejection drugs and biomarkers.
4. Comprehensive Cancer Care: The Oncology Department has comprehensive cancer treatment with medical, surgical and radiation oncology facilities. It uses cutting edge technology like Linear Accelerator with IMRT, Theratron 780, Treatment Planning System and Simulators among others. It has facilities for integrated treatment for cancer including chemotherapy, surgical oncology as well as radiation oncology. Currently the hospital is setting up facilities for bone marrow transplants. Registries for NSCLC, ovarian, breast, colorectal and hematological malignancies are maintained. The department has a well equipped genetics lab.
5. Assisted reproduction, Neonatal and Pediatric care: The Pediatric department at Manipal Hospital was the first to use surfactant therapy for treatment of neonatal respiratory distress syndrome and also the first to organize a neonatal transport system. It is also a referral tertiary centre for pediatric nephrology and renal transplantation. Research in infectious disease, pediatric endocrinology are actively being done. A modern IVF facility offers assisted reproductive therapy. Centre for Advanced Genetics provide testing and counseling to families. A centre for research in Neonatal care is being developed.



Manipal Northside Hospital: 120 Beds

This secondary care hospital is linked to Manipal Hospital, Bangalore and offers specialist treatment to several outlying areas. This hospital besides providing general medicine and general surgical facilities has established a specialization in orthopedics.

Manipal Tumkur Hospital: 25 Beds

This is a 25-bed hospital located in Tumkur focusing on general medicine and cardiology and functions as a feeder hospital to Manipal Hospital, Bangalore. Manipal's Bangalore Health System has several feeder hospitals and clinics.

Stem Cell Research Centre

Manipal Health System has researchers specialized in stem cell work, cellular and molecular biology with rich experience in conducting research for both National and International partners. The increasing ascendancy of bio-technology in drug research can be harnessed in partnership with our researchers who will assist in innovative discovery.

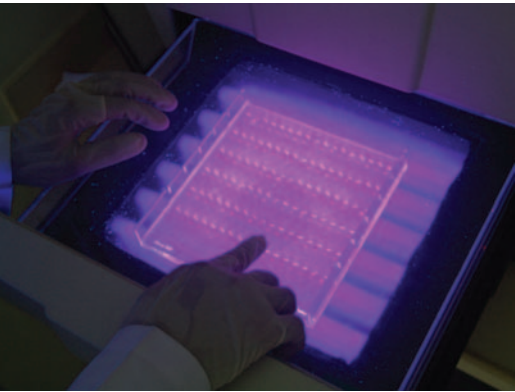
Stem Cell Research centre is a multi-institutional center comprising of investigators from Manipal Academy of Higher Education (Deemed University) and Manipal Hospital, Bangalore. The mission is to develop cell based therapeutics using human adult stem cells or human embryonic stem cells. Stem cell therapy relies on replacing diseased or dysfunctional cells with healthy, functioning ones. Stem Cell Research Center has new cGMP compliant Clinical Cell Processing Facility. Collocated in Manipal Hospital Bangalore, it provides “ Bench to Bedside” approach to cell therapy covering basic research, clinical research and development of Stemcell therapy to patients.

Leveraging its investigators' exceptional track record in stem cell work, for first in the country stem cell clinical trial, is initiated Stemcell research centre has received promoting cutting-edge research which is translating into clinical applications. The Center is building on existing excellence at the affiliated institutions in heart disease, bone marrow transplantation, Vascular Disease, neurodegenerative diseases such as Parkinson's disease and Spinal cord injury.



Manipal AcuNova MHB Clinical Research Centre

Manipal Acunova has set up a meticulously designed and complete state-of-the-art Clinical Research Suite on the 9th floor of Manipal Hospital Bangalore. The CRC houses a well equipped central lab that combines quality controlled routine & specialized testing facility. Sufficient space for proper drug storage, archival of study documentation and monitoring is available. A suitably qualified pharmacist will ensure drug dispensation and accountability. The clinical trials co-ordination area houses Manipal AcuNova's site management team whose core competency is to ensure increased participation of sites in Bangalore in clinical research. Our group endeavor is to build a world class clinical research organization, benefiting patients as well as sponsors.





SIKKIM HEALTH SYSTEM

Sikkim Manipal University is a joint venture between Govt of Sikkim and Manipal. Sikkim Manipal Institute of Medical Sciences is a modern well equipped medical school.

Central Referral Hospital: 500 Beds

This teaching hospital for Sikkim Manipal Institute of Medical Sciences is a fully equipped super specialty hospital serving the areas in India's northeast. The University medical centre serves a large genetically diverse population base in the entire northeast region.

STNM Hospital: 375 Beds

It is a Teaching Hospital affiliated to Sikkim Manipal Institute of Medical Sciences, with facilities for cardiology, orthopaedics, ophthalmology, surgery and other major disciplines. It has 4 feeder district hospitals, 67 primary health centres and primary health sub centres.

NEPAL HEALTH SYSTEM

Manipal College of Medical Sciences located at Pokhara offers MBBS and MD/MS program WHO, Medical Council of Nepal, India and Srilanka. The Nepal Health System has 700 bed tertiary care hospital and an affiliation with 350 bed Western Region Hospital and 75 bed Green Pastures Hospital.

Manipal Teaching Hospital, Pokhara, Nepal: 700 beds

Manipal Teaching Hospital is today is considered one of the best hospitals in Nepal and is emerging as a centre of excellence in cancer care and other therapeutic areas.. Hospital is equipped with medical a well equipped imaging department provide high quality cancer care. Manipal Teaching Hospital has

feeder centres from primary and secondary oncology, surgical oncology and radiation therapy departments. A high energy linear accelerator and healthcare centres. Capability exists to conduct clinical research.

Western Region Hospital: 350 beds

This is a major medical facility in Pokhara and is an affiliated hospital of the Manipal College of Medical Sciences. Services include basic emergency and in-patient facilities.

Green Pastures Leprosy Hospital: 75 beds

Green Pastures Hospital has become known as a centre of excellence for the rehabilitation of leprosy patients with impairment and disability. The hospital offers a comprehensive clinical rehabilitation program as well as tertiary referral facilities for complications.

Manipal AcuNova MTH Clinical Research Centre

This is a collaborative clinical research infrastructure between departments of Pharmacology and Manipal AcuNova to carry out clinical research under guidelines of Nepal Health Research Council and Department of Drug Administration. This is expected to facilitate conduct of clinical trials at MTH and other hospitals under ICH – GCP guidelines.

MALAYSIA HEALTH SYSTEM

Melaka General Hospital: 800 Beds

Muar General Hospital: 400 Beds

Tangkok Hospital: 80 Beds

Manipal is well known in Malaysia with one out of four doctors in Malaysia being Manipal alumni. Malaysian government invited Manipal group in

1997 to setup a medical school at Melaka. Clinical teaching program is conducted at the three hospital mentioned above.

RESEARCH IN MANIPAL GROUP

Discovery and Clinical Research are encouraged by the Manipal group by attracting top investigators and providing excellent scientific and clinical infrastructure and seed research grants. Investigators are required to publish in indexed journals. Our departments compete for peer reviewed grants at national and international level. We attract high quality students for our post graduate, doctoral and post doctoral programs. Manipal group promoted Manipal AcuNova to further boost conduct of research and raise the academic and clinical excellence of its teaching hospitals. Sponsors from India, Europe, US have used our institution to speedily conduct innovative research and bring new therapies, medical devices and drugs for improvement of healthcare.



Clinical Research Infrastructure

All the Institutions and hospitals have locally constituted Ethics Committees/Institutional review boards. The EC/IRB has laid down strict SOP's in line with ICMR guidelines and ICHGCP norms. The EC/IRB meets monthly and take active interest in ensuring safety of the patient and prompt conduct of the study.

The Institutions are networked to facilitate multi country multi-site trials with fully qualified ICH-GCP trained investigators, co-investigators, co-coordinators and research nurses at all locations. Various ethnic populations can be tested at Sikkim, Nepal and Malaysia. Regular camps, registries for various disease segments and pre selections ensure consistent and quick recruitment of patients for trials. Our commitment to healthcare ensures good retention rates.

PARTIAL LIST OF CLIENTS

International Pharmaceutical Companies

Allergan, Aventis, Eli Lilly, GE PAR Pharmaceuticals, Glaxo-SmithKline, Janssen, Novo Nordisk, Novartis, Solvay.

Indian Pharmaceutical Companies

Biocon, Biological E, Dr. Reddy's Laboratories, Panacea Biotech, Ranbaxy, Sami Labs, Shanta Biotech, Wockhardt.

CROs

Clintec, ICON, iGATE , Pharmanet, Pharm-Olam, PPD, Quintiles.

DISEASE MANAGEMENT

1. Cancer
Manipal's six integrated cancer care hospitals offer complete range of treatments including chemotherapy, radiotherapy and surgery. Cancer registries are created in each of the locations. Manipal has been the recipient of National and International peer reviewed grants for conducting clinical research in oncology and radiobiology.
Oncology: Dr. Donald J Fernandes, Dr. Kamalaksh Shenoy, Dr. M.S. Vidyasagar, Dr. Poonam Patil
Radiobiology: Dr. G C Jagetia
2. Diabetes
All Manipal institutions have specialized diabetes and endocrinology treatment centres. These include a registry, follow up program and have facilitated several phase II/III trials. Our registry of diabetes patients (maintained for many years) is the largest in India and offers an excellent opportunity for Clinical Trials and Research.

Endocrinology: Dr. Mohan Y Badgandi, Dr. Arpan Dev Bhattacharya, Dr. Prabha Adhikari, Dr. Sudha Vidyasagar, Dr. Shailaja, Dr Chakrapani
3. Infectious Diseases
Manipal has specialized AIDS wards & units. The experience gained and the patient registry gives Manipal a unique position enabling successful conduct of clinical trials in this area.

HIV/AIDS: Dr. John T. Ramapuram, Dr.Prabha Adhikari
4. Cardiovascular and Lifestyle Disorders
All the teaching hospitals have set up dedicated cardiac centers for preventive and therapeutic cardiology and cardiac surgery.

Cardiology: Dr. K.S.S. Bhat, Dr. Subhash Chandra, Dr.Ramachndra Veerapani
5. Central Nervous System Disorders
Being in the forefront of neurology and neurosurgery, the principal investigators have rich research experience in Gliomas, Alzheimer's disease and Spinal cord injuries.
Neurology/Neurosurgery: Dr. Murali, Dr.Uday Murgod, Dr. N. K. Venkataramana

Psychiatry: Dr. PSVN Sharma, Dr. Keshav Pai, Dr. Murali Raj
6. Kidney Disease
Manipal's Urology and Nephrology Centre in Bangalore is the largest in India with over 2000 dialyses being performed monthly. Several of the hospitals are State recognized centers for renal transplants.

Urology: Dr. S Nagasubramanyam, Dr. K Shashidharan
Nephrology: Dr. Sudarshan Ballal

7. Dentistry and Oral Hygiene
The Dental facilities in all the institutions have over 500 dental chairs for performing the most sophisticated procedures. This speciality works closely with large manufacturers and conduct research on dental materials.

Dentistry: Dr.Dilip Nayak, Dr.Ashita Uppoor, Dr. Ashima Valiathan, Dr. Shobha Tandon
8. Ophthalmology and Eye Care
We have undertaken studies for eye care leaders in the field of Glaucoma and Allergic eye diseases.

Ophthalmology: Dr Anil Vani, Dr Ajantha Chakravarthy, Dr Gurudatt Kamath, Dr Sai Giridhar Kamath
9. Dermatology and Skin Care

Dermatology: Dr.Krupa Shankar, Dr. Balchander, Dr. Shruthi Keerthi
10. Women's Health, Gynecology and Obstetrics

Dr.Jaya Bhat, Dr. Vatsala Kamath, Dr. Urula Srinivasa
11. Pediatrics & Neonatology
We have done Phase III tetraivalent and pentavalent pediatrics vaccine study for two sponsors.

Pediatrics: Dr. N Karthik Nagesh, Dr. Arvind Shenoy, Dr. Damodar Shenoy
12. Gastro Intestinal Disorders

Gastroenterology: Dr. Dinesh Kini K, Dr. Alfred Joseph Augustine, Dr. B.S. Ramesh, Dr. Tantri

DEVICE AND DIAGNOSTICS TRIALS

1. Medical Device
Laser, Imaging, Diagnostic software, Ultrasound, Probes, Stents, ECG, MR Coils, Implants etc.
Dr.B.Y.P. Arya Dr. Uday Patil, Dr.Santosh
2. Diagnostics Agents
Contrast media including Radioactive agents, Diagnostic kits and assays
Dr. Parameshwar, Dr .P.K.Menon

ACCLAIM FOR MANIPAL

Manipal is the ancient Nalanda. I am happy to see Engineering, Medicine and other disciplines taught in the same campus – an ideal environment for research to flourish.
Dr. A P J Abdul kalam

State governments should concentrate on primary education. They need not be burdened with higher education. The achievement of the private sector in higher education is best illustrated by MAHE, which is the Harvard of India.
N.R.Narayana Murthy

When Dr. TMA Pai decided to build a medical college in Manipal, it sounded like an impossible dream. In the space of 50 years, Manipal was transformed into an education capital which is proof enough of a powerful vision.
Azim H Premji

We appreciate the mind set that Manipal has. They have good research capabilities. They want to set themselves up as one of the best in their domain...So do we. So we are very much aligned in the mind set. We are bringing together all those capabilities, to serve the people at the bottom of the pyramid.
Dr. Bob Hoekstra

Manipal group has realized that education as well as clinical care and research are globalized. That is why University of Minnesota which has been looking for partners decided on Manipal, to move together to the future.
Dr. Philip .K Peterson

A truly inspirational visit. The Pai's have had the foresight to build a world class medical conglomerate that stands testimony to the enormous opportunities India has in the area of research and medical care. I feel honoured to be acknowledged by such a great centre of excellence. I wish MAHE continued success in all it aspires for in the future.
Kiran Mazumdar – Shaw

INSPIRED BY LIFE.
ACCLAIMED BY LEADERS
EMPOWERED BY
KNOWLEDGE...