manner for want of Christian charity towards them, we have thought it very convenient that they might have an house on purpose for them and people after them and to see that nothing comes in to them, neither meat nor drink but what the Doctor alloweth. We have for that purpose rented Mr. Cogan’s house at two pagodas per month (about Rs. 5 today), which we hope you will so well approve of as to continue it for the future.

This rented house in 1664 became a small hospital (Madras General Hospital), lodging 8–10 sick British soldiers of the garrison. The hospital was initially located in Fort St George and was then moved to its current location in 1772. This is illustrated in the plaque (Fig. 2) which remains near the office of the Dean of Madras Medical College (originally inscribed in 1692 under Elihu Yale, governor of the British East India Company and benefactor of Yale University, USA). In 1827, the hospital was imparting training to Europeans, Eurasians and Indians in western allopathic medicine, although a formal medical school had not been established. What started off as a private medical hall, thanks to Dr William Mortimar (superintendent of the hospital), was

**INTRODUCTION**

The Madras Medical College (MMC), Chennai, has pride of place in the history of medical education in India. It is one of the oldest medical colleges in India, established by the British as early as 1835 (Fig. 1). It is affiliated to the 250-year-old Government General Hospital (GGH), which has 2722 beds, one of Asia’s largest treatment facilities. The many institutions attached to it, such as the Institute of Obstetrics and Gynaecology, Institute of Child Health, Institute of Mental Health and the Regional Institute of Ophthalmology, render it a premier centre for medical education and learning (Table I). The MMC and GGH are spread over an area of 47.5 acres. Among the first in the country to provide postgraduate courses, the MMC currently offers 5 undergraduate degrees, 17 postgraduate diplomas, 25 postgraduate degrees and 14 superspecialty degrees. The MMC has the unique distinction of having educated one of the first lady doctors in the English-speaking world.

**HISTORY**

Although the western system of medicine came to India through the Portuguese in the early 1500s, it was not until the British East India Company constructed a hospital in Madras (presently Chennai) that it was practised formally in an Indian hospital. Surat and Machilipattinam, the first trading posts of the British, were served initially by British surgeons aboard the trading ships. These surgeons tended to the British living in India. It was after the founding of Madras in 1639 and the construction of Fort St George in 1640 that the British considered setting up a permanent medical facility in India. This is illustrated in a letter written by Governor Sir Edward Winter to the East India Company.

The fresh soldiers which came forth this year taking up their habitations in the bleak wind in the hall fell sick in that four of them are dead, and about ten remain at the time being sick and complain not without reason that the wages are not sufficient to supply them with what is necessary at the time of their sickness. So rather than see English men drop away like dogs in that

**TABLE I. Institutions attached to the Madras Medical College**

1. Government General Hospital, Park Town, Chennai
2. Institute of Mental Health, Kilipauk, Chennai
3. Institute of Obstetrics and Gynaecology and Government Hospital for Women and Children (IOG and GHWC), Egmore, Chennai
4. Institute of Child Health and Government Hospital for Children (ICH and HC), Egmore, Chennai
5. Regional Institute of Ophthalmology and Government Ophthalmic Hospital, Chennai (RIOGOH), Egmore, Chennai
6. Government Kasturba Gandhi Hospital for Women and Children (KGH), Chennai
7. Institute of Rehabilitation Medicine, K.K. Nagar, Chennai
8. Institute of Thoracic Medicine and Chest Diseases, Chetpet, Chennai
9. Government Peripheral Hospital, Periyar Nagar, Chennai
10. Communicable Diseases Hospital (CDH), Tondiarpet, Chennai

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regularized into a medical school, the Madras Medical School, in 1835. Founded by the then Governor of Madras, Rt Hon. Sir Frederick Adam, KCB, by a General Order of Government dated 13 February 1835, the school was attached to the GGH. Indians were admitted to the school from 1842. On 1 October 1850, the school council submitted a proposal for it to be accorded the status of a college and the school was christened the Madras Medical College. In 1852, the first batch graduated and these students were awarded the degree of graduate of MMC. The MMC was affiliated to the University of Madras from 1857 to 1988, when the Tamil Nadu Dr M.G.R. Medical University was established. The college is celebrating its 175th anniversary in 2010.

DIVISIONS
The legendary Dr A. Lakshmanaswami Mudaliar, who was the first Indian to be appointed Principal of the MMC in 1939, wrote in the same year:

The Madras General Hospital now presents an inspiring pile of buildings, of which Madras may well be proud and which delights the eye of every professional visitor to this city.

One such building still in existence on the campus is a red building that houses the anatomy hall, where first-year medical students spend about half their learning time. This hall is aptly termed ‘the Red Fort’, for the student who survives the rigors of learning in this fort seems certain to survive the remaining years of medical education (Fig. 3). The year 1934 saw the establishment of the Bradfield surgical block, named in honour of Sir Ernest Bradfield, who was the Professor of Surgery in 1924 and the superintendent of the Bradfield surgical block, named in honour of Sir Ernest Bradfield. The year 1934 saw the establishment of the Bradfield surgical block, named in honour of Sir Ernest Bradfield, who was the Professor of Surgery in 1924 and the superintendent of the GGH. The cardiology block was inaugurated in 1972 and the cornerstone was laid by Helen B. Taussig, one of the founders of the field of paediatric cardiology and the co-developer of the Blalock–Taussig shunt, the first surgical treatment for tetralogy of Fallot. The Dr Achanta Lakshmipathi block for neurology was opened in 1972.

The Regional Institute of Ophthalmology, started in 1819, was the first eye hospital in India and the second oldest in the world, after Moorfield’s Ophthalmology hospital in London (started in 1818). The Institute of Obstetrics and Gynaecology (IOG), the aerial view of which resembles the female pelvis, was the only institution offering postgraduate courses in gynaecology until 1948. The Barnard Institute of Radiology (named after Capt. T. W. Barnard one of the founders of the field of paediatric cardiology) was started on 26 March 1934. The first X-ray outfit was obtained for the general hospital in 1900, only 5 years after Roentgen made his famous discovery. It was the first in Southeast Asia. The department has the distinction of having had the first MRI equipment among government hospitals in the region.

ADMISSIONS
The selection for the MB,BS course is done by a selection committee under a single window system, following the rules of reservation issued by the Director of Medical Education in accordance with the policy announced by the government every year. Of the 165 seats, 15% are reserved for the all-India category. The allotment of seats in the MMC follows the 69% reservation rule of the Tamil Nadu government.

MAJOR ACHIEVEMENTS
Since the first batch of students graduated from the MMC in 1852, a number of talented physicians and surgeons have graduated from this institute. The first ever lady doctor in Madras, Dr Muthulakshmi Reddy (Fig. 4), graduated from the institution in 1912 and was the first woman to be nominated a member of the legislative council in 1926. She was also the founder of the Adyar Cancer Institute. The proposal to open the doors of the MMC to women came from Surgeon-General E. G. Balfour and was sanctioned by the government on 11 January 1875. One of the first 4 women medical students of the world, Mary Scharlieb (Fig. 4) attended the MMC because she was denied permission to study in British medical colleges. A famous anecdote that has done the rounds at the MMC over the years relates to Lt A. M. Branfoot of the Women’s and Children’s hospital in Madras. Lt Branfoot, who was ‘not used’ to female medical students, supposedly told Mary Scharlieb, ‘I cannot prevent you walking round the wards, but I will not teach you.’ Mary Scharlieb graduated from the MMC in 1878 and continued her higher studies at the Royal London School of Medicine, before returning to Madras to set up the Kasturba Gandhi Hospital for Women and Children (earlier known as the Royal Victoria Hospital for Caste and Gosha Women). She also established the Women’s Medical Service in 1916. During the British period, a medical degree from the MMC enabled a doctor to register and practise in Great Britain and her colonies.

An illustrious member of the faculty of the MMC was Charles Donovan. Born in India in 1863, he studied in Trinity College, Dublin and in 1889, became a Professor of Physiology at the MMC. In 1903, while working in the college, he discovered the causative agent of kala-azar—Leishmania donovani. Dr Guruswami

![Image](www.mmc.tn.gov.in)

**Fig 2.** This plaque is currently located near the office of the Dean, Madras Medical College (from www.mmc.tn.gov.in)

![Image](www.mmc.tn.gov.in)

**Fig 3.** Anatomy building: “The Red Fort” (from www.mmc.tn.gov.in)
Mudaliar was the first Indian to be appointed a professor and held the position of Professor of Therapeutics at the MMC. Professor Sam G. P. Moses was instrumental in starting the first diabetic clinic in the country in 1953 at the MMC and GGH (which earned him the title of 'Father of Diabetes'). He was the youngest person to be promoted as Professor of Medicine in 1957 at the MMC. Professor A. Venugopal obtained both his graduate and postgraduate degrees from the MMC and founded the department of Urology at the institution. He was also the honorary director of the postgraduate institute of basic medical sciences of the University of Madras and an executive committee member of the Medical Council of India (1975–83). Dr T. S. Kanaka, the first female neurosurgeon in Asia, trained at the MMC and later became a professor in the college. Her notable achievement was her contribution to the field of stereotactic surgery. She was the first neurosurgeon in India to perform chronic electrode implantation in the brain.

It was in the MMC that the first case of HIV in India was identified and the first cardiothoracic surgeon in the country, Dr A. Sadasivam, was trained. Dr B. Ramamurthy, the renowned neurosurgeon, established the Institute of Neurology, which houses all neuroscience specialties and the first head injury unit in India. Professor N. Rangabashyam, a renowned surgical gastroenterologist, established the first surgical gastroenterology department in India at the MMC and the first ever MCh (surgical gastroenterology) superspecialty training programme in India at the college. Dr V. Shanta, Director of the Cancer Institute, Adyar and winner of the 2005 Ramon Magsaysay Award for Public Service, too, is a graduate of the MMC.

EXAMINATIONS AND AWARDS
Also of note are the numerous examinations conducted by the college for its medical students. These are apart from the university examinations and are a benchmark of academic prestige in the college. Eighty gold medals, a number of which are named after notable graduates, are awarded each year on the basis of these examinations. The prestigious Johnstone Medal for the best performing student is awarded every year since 1848.

HEALTHCARE FACILITIES
The institution continues to offer free healthcare to the general public, and some departments offer cutting-edge treatment and possess state-of-the-art technology which are at par with that of leading private hospitals.

PRESENT PROBLEMS
This medical school has not contributed much to research. Two major reasons for this are lack of funds and commitment on the part of the faculty. Funding for research depends on the long term vision of the administration and policymakers, and the institution has not taken any major strides in this direction. Although some departments do perform clinical research and publish regularly, this is an exception rather than the rule. The decrease in the number of teaching faculty, both in the preclinical and clinical subjects of medicine, has also affected the quality of teaching imparted to medical students. This is partly offset by the large variety of patients who visit the hospital and also the variety of conditions with which they present. The students of the MMC form a students’ council every year, but its role is limited to organizing a college sports day and intra-college and inter-college cultural festivals. The monthly salary of the faculty is lower than that of physicians at Central Government institutions and doctors practising privately. The faculty is allowed to practise privately, and this results in a reduction in the number of hours they dedicate to their work at the hospital. The pay packages of house surgeons and post graduates are a major issue and became the cause of a strike by the hospital staff in July 2009.

The MMC and GGH is Asia’s largest government hospital that provides completely free treatment, including free clinical visits, drugs and complicated surgical procedures. However, alleged corruption at all levels is a nagging problem, though the quality of care has improved a lot and patients have free access to sophisticated modes of treatment in all fields of medicine. The medical record
system of the hospital is antiquated; it is paper-based and does not make for efficiency in the areas of research or audit. With commitment from policy-makers, we hope the college and hospital will see certain improvements.

PLANS FOR THE FUTURE

The MMC and GGH have always been at the forefront of medical education and patient care in the region. The department of surgical endocrinology has recently started the MCh residency programme in endocrine surgery, one of the few centres in India to do so. New paramedical courses started in 2008 include the Bachelor in Medical Records Science (BMRSc) and Medical Record Technician course.

In 2008, the department of orthopaedics set up a bone bank, which can be used for the reconstruction of bone as a part of numerous orthopaedic procedures. In 2009, the department introduced a skills laboratory that would give postgraduates hands-on training on bone models and cadavers. The training is offered in a 3-phase module—basic, advanced and high-end specialized. It includes virtual arthroscopy and computer-navigated surgery. Recently, sanction has been accorded for the provision of a 3.0 Tesla MRI scanner at the Barnard Institute of Radiology. A 64-slice CT scanner is also scheduled to be added in 2010.

An exclusive endoscopic skull base surgery clinic is a recent addition to the department of ear, nose and throat. The outpatient block of the GGH is undergoing a makeover with the construction of a new complex on the land of the erstwhile Central Jail. A blood bank will also be constructed on this land and, once completed, will be the largest in Asia. A project to set up patient simulator systems is under way at the MMC, and there are also plans to set up a department of preventive cardiology and gerontology. Further, there is a proposal to set up immunology laboratories at the GGH. A new website www.mmc.tn.gov.in, which has been inaugurated recently, will be used as a portal for podcasts of lectures and operative procedures at the MMC as a part of a tele-education project to link all 14 government medical colleges in Tamil Nadu. As part of the post-centenary 175th year celebrations, there are plans to renovate the famous ‘Red Fort’ anatomy building and upgrade the library to an e-library.

CONCLUSION

We have tried to trace the history and have highlighted the major achievements of one of the oldest medical colleges in India. We have also focused on the problems that plague the institution and discussed the positive features, besides the plans for the future, in an attempt to provide a fair and balanced view of the current state of the institution. As with any major historic institution, in spite of its erstwhile history and major achievements, there is still room for improvement and change, which we hope will transform the medical college and hospital from being one of the best in India to being one of the best in the world.

REFERENCES