

Ian Magrath*(31 October 1944–14 March 2023)*

**A GLOBAL ONCOLOGY LEADER
WHO CONTRIBUTED TO
SHAPING CANCER TREATMENT
AND RESEARCH IN INDIA**

Dr Ian Trevor Magrath was a charismatic and highly personable physician–scientist, who developed close relationships with almost every cancer centre and its constituent doctors in India. Those relationships and associated research, including

clinical trials, shaped the practice of oncology in India, particularly for aggressive leukaemias and lymphomas.

The seeds for his lifelong passion for Burkitt lymphoma and cancer care in the setting of limited resources were sown during 1971–74 when he was at Makerere University, Uganda. His later career had two distinct phases—the Bethesda/National Cancer Institute (NCI) phase (1974–99) and the Brussels/International Network for Cancer Treatment and Research (INCTR) phase (after 1999).

As a Senior Investigator (and later as Head of Lymphoma Biology and Head of Pediatric Oncology) at the NCI, USA, Ian established successful treatment protocols for Burkitt lymphoma and acute lymphoblastic leukaemia and developed a lymphoma biology research laboratory. His Burkitt lymphoma protocol CODOX-M/IVAC (now, R-CODOX-M/IVAC) or the ‘Magrath protocol’ remains the standard of care. Ian’s Lymphoma Biology research laboratory was a hive for budding and aspiring researchers worldwide. This included many Indian academics who were initiated into lymphoma/leukaemia research and later moved on to develop as independent researchers—the same was true of many researchers from across the developing world. More importantly, during this period, Ian developed his contacts and networks from across the developing world and helped build local capacity.

Ian’s crusade was simple and appealing—every child and adult with aggressive lymphoma/leukaemia deserved a cure, which should be achieved despite resource constraints. Ian partnered with Dr V. Shanta from the Adyar Cancer Institute, Chennai (then Madras), to initiate his efforts in India, and the network soon spread across all the major cancer centres in India. In collaboration with oncologists and researchers in India, he developed treatment protocols for aggressive lymphoid leukaemias and lymphomas explicitly designed for local conditions (MCP-841 and MCP-842) that significantly improved cure rates. These efforts had many other ripple effects. Ian was a stickler for a precise and accurate diagnosis—this led to close ties with pathologists and laboratory-based researchers in these institutions and to developing them as expert haematopathologists and researchers. The collaborations also led to the initiation and shaping of investigators focused on the genomics of haematological malignancies in India. Oncologists from many cancer centres in India who took part in the clinical trials learned the methodologies and rigor of running an investigator-initiated/driven clinical trial. Ian was highly diligent with data accuracy along the entire patient pathway, and nothing less was acceptable in measuring improvements in clinical outcomes. Even more, Ian’s efforts galvanized collaboration between different cancer centres in India,

providing them a collective voice on a global scene.

Dr Magrath built INCTR, an international not-for-profit, non-governmental organization, as its founding president. Based in Brussels, Belgium, the organization attracted institutions and individuals from across the entire world as its members and associates. He developed closer links with international organizations such as the International Agency for Research in Cancer (IARC)/WHO. Importantly, INCTR expanded Ian’s scope of work from leukaemia/lymphomas to all cancers. INCTR’s objectives are of a tall order: (i) to build capacity for cancer treatment and research in countries with limited resources through long-term collaborative projects coupled to training and educational programs; and (ii) to promote international collaboration toward cancer control between technologically advanced countries and countries with limited resources. During the early years, Ian held annual meetings in Brussels that brought together experts from both the developing and developed world to foster these collaborative networks. These meetings were attended by a large contingent from cancer centres in India, propelling cancer research in India. In the later years, Ian and his colleagues held several educational meetings in Europe and later in the developing world to reach a large number of aspiring experts from the developing world. Education programmes have addressed training in clinical oncology, clinical research, epidemiology/cancer registry, foundation-building, pathology and palliative care.

Overall, Dr Ian Magrath served as an extraordinary role model for selfless dedication and leadership on a global scene. He built long-standing relationships with many cancer-related doctors and scientists worldwide through these efforts. India and the collaborations he developed with individuals in cancer centres in India held a special place, exemplified visibly by the image of the *Bhagwad Gita* at his NCI office. In Ian’s death, cancer investigators in India lost a dear friend and mentor.

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THE CREATOR OF MCP-841 AND MCP-842 PROTOCOLS

Dr Ian Magrath was a medical oncologist who in the early 1980s introduced to India the art of doing systematic data collection, multicentric studies in cancer and simultaneously helped improve the outcomes of children with acute lymphoblastic leukaemia (ALL).

A chance meeting with Dr V. Shanta of Adyar Cancer Institute, Madras (now Chennai) in the corridors of National Cancer Institute (NCI), USA, in 1976 introduced Dr Magrath to the plight of children with cancer in India and their poor outcomes. Then and there, he took up the challenge of improving their outcomes. Taking into consideration his experience of developing local resource-specific protocols for cancers in Africa, Dr Magrath developed locally relevant treatment protocols: intensive but without high dose therapies, for children and young adults with both ALL (MCP-841) and Non-Hodgkin lymphoma (MCP-842). These protocols were used in Adyar Cancer Institute, Tata Memorial Hospital (Bombay, now Mumbai), All India Institute of Medical Sciences (New Delhi), Kidwai Memorial Institute of Oncology (Bangalore, now Bengaluru) and Gujarat Cancer Research Institute (Ahmedabad).

At that time, the majority of the medical and paediatric oncologists in India were trained in one of these institutions. Once they went back to their institutes, they also started using these protocols. Thus, MCP-841 and MCP-842 protocols soon became national protocols in India, akin to the BFM protocols in Germany. They definitely helped to improve the outcome of thousands of children and young adults with ALL and NHL in those days and helped many doctors in learning how to treat patients on protocols, and analyse such data.

Dr Magrath was born on the Isle of Man in 1944 and obtained his medicine and later paediatric medicine and oncology degrees at the University of London. He then shifted to USA, joined NCI as an attending physician, and went on to become Head of Paediatric Oncology and Head of Lymphoma Biology sections. Here, he trained not only clinical associates in paediatric oncology, but also researchers in translational research. His main passion and focus was studying the biology and treatment of Burkitt lymphoma. The high-dose, dose-intensive, short-course chemotherapy approach which Dr Magrath developed, resulted in high cure rates of Burkitt lymphoma for the first time in both children and adults. Dr Magrath was also first to identify the activity of ifosfamide in refractory lymphoma.

Two instances changed Dr Magrath's life. First, his posting in Uganda in the early 1970s, where he got to work on Burkitt lymphoma, which served as a model to show how work conducted in developing countries could contribute not only in improving the lot of patients with cancer in countries with limited resources, but also the global cancer knowledge base. The second one was his chance meeting with Dr Shanta in 1976, which made him resolve to improve the outcomes of patients in low- and middle-income countries (LMICs).

With the constant thought of working for patients with cancer in LMICs, Dr Magrath left his stable job with access to state-of-the-art therapies, as well as cutting-edge research opportunities at NCI, and went on to Brussels, Belgium to establish INCTR in 1998, a not-for-profit, non-governmental organization established to address a neglected global health problem—the ever-increasing burden of cancer in developing countries. INCTR helped to build capacity for cancer prevention, treatment (including palliative care) and research, and helped to improve access to the much-needed care in order to lessen the suffering and limit the number of lives lost from cancer in developing countries. Dr Magrath's vision was building capacity for cancer treatment in countries where resources were either poorly provided for or non-existent!

Dr Magrath was a gentle giant, who worked selflessly with one mission in life—to improve the lives and outcomes of patients, especially children, with cancer in LMICs. He took no salaries for his services in INCTR and sometimes even paid personally for his trips to attend meetings. Personally, I had never heard him raise his voice in any meeting. In spite of this, he was firm in his views and placed high value on collaboration and service to others. He was a great teacher and many of his students have served in high positions in various institutions. He was also an excellent writer. The presidential messages that he regularly wrote for the 'Network' publication of INCTR is a proof of this.

Dr Magrath was a true visionary, much ahead of his time:

1. Way back in the 1970s and 1980s he developed protocols

tailored just for developing countries, taking into account the local needs and local infrastructure; ones which could be successfully implemented in developing countries. He also showed that one could do clinical trials in developing countries, when it was not a norm.

2. Again, back in 1984, he developed Protocols MCP-841 and MCP-842, whose eligibility criteria was patients from 1 to 24 years. When the papers were sent for publication, reviewers sent back the papers stating, 'What type of protocol is this? It is neither paediatric nor adult'. However, today it has become standard of care to treat children, adolescents and young adults on paediatric protocols!
3. He established INCTR and started working with developing countries in the late 1990s, international cooperation and especially working in developing countries was not in vogue at that time.
4. Dr Magrath arranged for a meeting of various organizations working in childhood cancers in different parts of the world in the INCTR offices on 4 December 2000 to discuss working together as a 'Global alliance for the cure of childhood cancer'. The aim was to develop an active programme to identify the problems faced in developing countries in dealing with children with cancer, and to develop a coordinated strategy to overcome them. After 18 years, in 2018, WHO has ultimately launched the 'Global alliance for the cure of childhood cancer'!

Dr Magrath wanted to do lot more for the children in India. But as he had written at the start of INCTR that 'ultimately, our success in this venture depends upon the willingness of our friends and colleagues in developing countries to join us in accomplishing our mutual goals, for none are more acutely aware of the needs of patients with cancer in their own countries than they.' Somehow, we were either not ready to accept his help, or the circumstances were not conducive at that time to take full advantage of his help. Therefore, INCTR could not succeed in many of the goals it had set at that time. However, Dr Magrath must have been happy later to know that both his wishes of forming the 'Indian Childhood Leukemia Cooperative Group' and that India should be part of the 'Global Initiative for Childhood Cancer' have been recently fulfilled.

Dr Magrath passed away in Brussels after battling Parkinson disease in the last years of his life. Dr Magrath was ably supported in all his endeavours by his life-partner Ms Melissa Adde, who was a trained clinical trial nurse. She not only helped in formulating various research protocols and data capture forms, but also helped him in running daily activities of INCTR. Sadly, as a true life-partner, Ms Adde also passed away within 3 days of Dr Magrath's death on 17 March 2023 after a short illness at the age of 67 years. We are really indebted to the commitment and services that they both provided for improving the outcomes of children with cancer in India and other parts of the world.

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