## OBITUARIES

## Robert Greenhill Cochrane, C.M.G., M.D., F.R.C.P., D.Y.M.&H. 1899–1985



With the passing of Dr. Robert Cochrane, the International Leprosy Association and indeed the whole world of leprosy—has lost a unique link with the past.

Present at the Consultation called by the Leonard Wood Leprosy

Foundation in Manila in 1931, Dr. Cochrane became the first Secretary-Treasurer of the International Leprosy Association, which was brought into being then, and, with the invaluable assistance of Dr. W. H. Wade, Dr. Ernest Muir and others, helped to guide and organize the fledgling Association and to establish the academic credentials of its JOURNAL. He attended each International Leprosy Congress up to Bergen (1973), playing an increasingly prominent part in each. At the Havana (1948) Congress, he had been elected Councillor (exofficio).

In the difficult months of the illness and subsequent death of Dr. J. M. M. Fernández, Dr. Cochrane, as the senior active member and a Vice-President of the Association, was invited by the Council to assume the presidency. In that capacity, he presided over the IX International Leprosy Congress in London (1968). On the unanimous election of Dr. J. Convit to succeed him that year, Dr. Cochrane was made President Emeritus in recognition of his unique and outstanding contribution to leprosy. This title he retained until his death.

More than anyone else in his generation, Dr. Cochrane made leprosy "scientifically respectable," bringing the disease into the mainstream of medicine and encouraging clinicians and researchers in many medical disciplines to interest themselves in this fascinating and challenging disease. He was a clinician "to his fingertips" and a most stimulating—if sometimes provocative—teacher and lecturer. With his vast store of accumulated knowledge of leprosy in many lands and his wise counsel, he became a most respected father-figure all over the world. He advised governments and missions; he conducted seminars; he had a fluent pen; he was co-author of a standard text, *Leprosy in Theory and Practice*.

Robert Greenhill Cochrane was born of missionary parents in Pei-Tei-Ho, China, just before the turn of the century. As an infant barely six months old, he and his parents and two brothers were captured by the Boxers and released only after their Chinese helper had pleaded on their behalf. His father, Dr. Thomas Cochrane, was founder of the Peking Union Medical College, with financial help from the Dowager Empress of China herself and the indemnity paid by China to the Great Powers.

The young Cochrane had his first schooling in London, England, at the School of the Sons of Missionaries. He graduated in medicine from the University of Glasgow in 1924, and after spending some months at St. Bartholomew's Hospital in London, he took the Cojoint Diplomas (M.R.C.S., L.R. C.P.) and the London Diploma in Tropical Medicine. The same year, he sailed for India as a medical missionary under the Mission to Lepers (now The Leprosy Mission). His interest in leprosy had been kindled when as a medical student he had a dream that he had found a cure for leprosy. This interest was strengthened as he sat for three months at the feet of the veteran leprologist, Dr. Ernest Muir, Head of the recently created Department of Leprosy at the Calcutta Medical School and Hospital. Dr. Cochrane then worked in Purulia and Bankura in West Bengal, laying the foundations of an unrivaled knowledge of leprosy as seen in India.

On leave in Britain in 1928, he proceeded to the M.D. degree of Glasgow, and was

admitted a Member of the Royal College of Physicians of London. From 1929 to 1935, he was Medical and General Secretary of the British Empire Leprosy Relief Association (BELRA, now LEPRA), traveling extensively in Africa and the West Indies. In 1932, he returned briefly to India to work in Purulia again and at Dichpali.

Realizing that he needed to return to active field work if he was to further the cause of leprosy in a significant way, he was appointed Chief Medical Officer of the Lady Willingdon Leprosy Sanatorium and Advisor in Leprosy to the State of Madras. This institution afterwards became the wellknown Chingleput Leprosy Teaching and Training Centre under the Indian government. In 1944, Dr. Cochrane was invited to the Christian Medical College and Hospital in Vellore, where, as Professor of Medicine and Head of the Department of Dermatology, Director of the Leprosy Campaign for the entire Madras State, and Lecturer in Leprosy in the two medical colleges in Madras itself, he was able to extend his knowledge of leprosy and exert an ever-widening influence on leprosy policy in government and missions.

Dr. Cochrane was the first to use the parent sulfone, DDS or dapsone, after consultation with the chemists in Britain attached to Imperial Chemical Industries, who were using a suspension of diaminodiphenýlsulfone for the treatment of streptococcal mastitis in cows by intramammary injection via the milk ducts. As a result of this work in Madras, Dr. John Lowe and others were encouraged to introduce the oral treatment of leprosy with this compound.

Dr. Cochrane returned to Britain in 1951, having been awarded the Kaiser-i-Hind Medal, First Class, in Gold in recognition of his outstanding service to leprosy sufferers in India. For the next three years, he was (again) Medical Secretary of BELRA, and was appointed (in 1953) Technical Medical Advisor to American Leprosy Missions, Inc., based in England.

During this period, in 1951 to be exact, he founded the Leprosy Research Fund in London, renamed the Leprosy Study Centre in 1965. It exerted a considerable influence during the next 30 years, acting as a histopathological reference and teaching center. Its unrivaled collection of some 16,000 series of stained slides is now housed in the Hospital for Tropical Diseases, London.

Dr. Cochrane not only maintained his interest in leprosy during these years, he extended it by keeping up to date and by encouraging research into new antileprosy compounds, such as Ciba 1906 (afterwards known as thiambutosine) and B663 (Lamprene or clofazimine).

In 1966, Dr. Cochrane returned to India, only to lose his wife shortly after arriving. He then worked at Vadathorasalur in Madras State, but two years later went to Kola Ndoto in Tanzania, under the auspices of the Africa Inland Mission. It was here that he married Dr. Martha Jeane Shaw, who nursed him with the utmost devotion during months of increasing weakness before his death.

In another field, Dr. Cochrane's influence "for good and for God" was widespread and much appreciated. The motive that drove him on and kept him going was his Christian faith. This deep faith shone through everything he did—his attitude to leprosy sufferers, his contacts with government officials and colleagues, and with those of other faiths. It sustained him through long, weary months of inactivity and weakness.

Dr. Cochrane will be remembered with gratitude and affection by thousands in India, and especially by those who attend the Children's Leprosy Clinic named after him. In England, there is the Cochrane Annexe at the Slade Hospital, Headington, near Oxford, and the Robert Cochrane Fund for Leprosy, which is administered by the Royal Society of Tropical Medicine and Hygiene.

The courageous warrior has passed from our midst. He died full of years, leaving behind him on several continents the fragrance of a considerable intellect devoted to the cause of suffering leprosy patients.

He is survived by his second wife and by three children of his first marriage: two are doctors, one of whom is serving leprosy sufferers under the auspices of The Leprosy Mission in Bangladesh.

-S. G. Browne

One of the great privileges of my life has been that of working with Dr. Robert G. Cochrane during my time as Secretary for Southern Asia of the Mission to Lepers (now The Leprosy Mission International) from 1946 to 1961. In him I found an inspiring, reliable friend and colleague, abounding in robust energy and infectious enthusiasm. Unfailingly he gave of his best, however small or great was the matter in hand, generously sharing his knowledge and skill.

This came as no surprise to one who had seen him ministering to each patient under his immediate care. Such a patient was at that moment the most important person in the world for him. Yet never did he become exclusive in his outlook, for his treatment of the individual patient was just one expression of the vision he had of the coming of that day when leprosy, the bearer of distress and sorrow, would no longer be the scourge of mankind. From the bedside of the patient, he could always lift up his eyes to the wider horizons that were ever before him.

Friend, colleague, doctor. But above all he was an outstanding Christian gentleman, whose heart was filled with tender, Christlike compassion and love toward all the human race. Daily—and all through each day he lived in the company of His Lord and Savior, with Whom he constantly commuted in prayer and from Whom he derived the strength, courage, and dedication to press on to the mark of his high calling in Christ Jesus, in both sunshine and shadow. There was nothing of the "sullen" saint about him. His twinkling eyes reflected his cheerful good humor, and his face radiated the joy in his heart. He was the truly Christian counterpart of Geoffrey Chaucer's "verray parfit gentil knight."

In all his manifold activities he was upheld by Ivy, his first wife, and after her death, by Jeanie, his second wife, who so lovingly cared for him during his declining years. But "he, being dead, yet speaketh." For his work lives on in the service of so many all over the world who today are engaged in the campaign against leprosy because they met him.

We thank God for a warm-hearted, lovable man, a fine Christian soldier—our wonderful friend, Bob.

-William Bailey

Shortly after graduating in medicine from the University of Glasgow in 1924, Dr. Cochrane sailed for India as a medical missionary. In carrying out various assignments in India, he learned clinical leprosy thoroughly. At the Christian Medical College and Hospital in Vellore, as Professor of Medicine and Head of the Department of Dermatology, his natural talents as a teacher were developed. His lecturing on leprosy was extended to other colleges. Realizing the need for using histopathology as a tool in the diagnosis of leprosy, he sought help from Professor V. R. Khanolkar, pathologist at the Indian Cancer Research Centre in Bombay. Under Prof. Khanolkar's tutelage in microscopic pathology, Dr. Cochrane developed the interest and skills that later resulted in his establishing the Leprosy Study Centre in London. This provided medical missionaries and others throughout the world with authoritative histopathologic diagnosis of leprosy and a center for studying the histopathology of leprosy. Dr. Cochrane, in turn, stimulated Prof. Khanolkar, the expert in the histopathology of cancer, to study leprosy. Prof. Khanolkar in 1951 demonstrated that *M. leprae* could be found within small dermal nerves in mild lesions without any cellular response characteristic of leprosy; this enabled pathologists with assurance to diagnose indeterminate leprosy. When Prof. Khanolkar visited the U.S. Armed Forces Institute of Pathology (AFIP) and was requested to lecture, he always chose to discuss leprosy rather than cancer.

My first meeting with Dr. Cochrane was in the early 1950s, when he came to Washington, D.C., as Technical Advisor to American Leprosy Missions. I appreciated getting his expert opinion on histopathologic slides of lesions requiring special study. At the AFIP where only a few members of the staff for him to give lectures that were enthusiastically received by the entire staff. When I learned in 1954 that Dr. Cochrane had scheduled a visit to Washington, I informed Dr. Robert Stolar, a dermatologist who had met with him on previous visits. He immediately responded, "I must do something." Through a friend, Congressman John A. Blatnik from Minnesota, Dr. Stolar obtained authorization to use the prestigious private dining room of the Speaker of the House of Representatives for a luncheon honoring Dr. Cochrane. The guests included four medical men then in Congress, the Chairman of the Appropriations Committee of the House, the Chairman of the Foreign Relations Committee of the Senate, and other members of the Congress. Dr. J. D. Doull, Medical Director of the Leonard Wood Memorial, and I were invited. While luncheon was being served, Dr. Cochrane gave a short portrayal of leprosy as a disease and the need for scientific research at the university level. Following the talk, the congressional guests raised many questions, and after lunch many remained to continue discussions.

News of Dr. Cochrane's death reached Washington when scientists were attending the U.S.-Japan meetings at the National Institutes of Health in Bethesda, Maryland, 12–15 August, 1985. On learning that a memorial service for him was scheduled for 17 August, the following telegram signed by 25 scientists attending the U.S.–Japan Leprosy Research Conference was sent to Mrs. Robert G. Cochrane, 606 Swede Street, Norristown, Pennsylvania 19401:

We, members of the International Leprosy Association attending the 20th Joint Conference on Leprosy of the U.S.-Japan Cooperative Medical Science Program at the National Institutes of Health, Bethesda, Maryland, pay tribute to Doctor Cochrane. This conference attended by 73 scientists from many American and Japanese universities and research institutes manifests realization of his life-long dream to bring leprosy research into the mainstream of scientific studies. We present this message to the memorial ceremony August 17.

This telegram was read at the memorial service by Dr. Roy E. Pfaltzgraff.

In the long history of leprosy, Dr. Cochrane, whose devotion to patients caused him to excel as a clinician, pathologist, teacher, and leader in advancing the scientific understanding of this disease, was also a spiritual leader who gave inspiration to his assistants and pupils, and comfort to his patients.

-Chapman H. Binford

I first knew "Uncle Bob" when I arrived, as a new lecturer in surgery, at the Christian Medical College in Vellore, India. This was in 1946, the time when Dr. Cochrane was at the peak of his career. He was Director of the new medical college and also the Principal (Dean of the Faculty) and Professor of Medicine and Professor of Dermatology. He was Director of Rural Medicine, supervising the outreach programs into the villages. At the same time, he was Superintendent of the great leprosy hospital at Chingleput 70 miles away, and also was Director of the Leprosy Campaign of Madras State and taught at the Madras Medical College.

So many responsibilities could not have

been carried by one man if it were not that he had the ability to delegate responsibility and that he had a unique ability to listen once to the account of any problem and then decide on a solution, with no inner conflict about whether it had been the best solution.

It was refreshing to see Uncle Bob burst into a lethargic government office, where bureaucracy was the order of the day, and cut through all official protocol. By the time he had left, only minutes later, there was a fresh sense of direction to the whole leprosy campaign and, as often as not, the officials were smiling or even laughing at Bob's witty comments.

I was teaching orthopedic surgery, and it

was Uncle Bob who challenged me to find a solution to the problems of deformity in leprosy. For me, this involved a train journey to Chingleput every week, followed by a working day in the leprosy hospital, spending the night, and then Uncle Bob would drive me back to Vellore. We would sit up until after midnight talking over problems and ideas, then be up at 4 a.m. to breakfast and drive two hours to Vellore where he had an early lecture to give the students. I loved those drives, starting in the dark and ending in the dawn, while Uncle Bob nonchalantly swerved around goats, pigs, and bullock carts while his mind was on the problems of leprosy control.

Although it always seemed that Bob was sure of himself, and his statements were dogmatic, he also knew that he was a man for that special time and was delighted when others would take over one or more of his multiple responsibilities, and bring to each a more careful and slower approach. Even when such people finally proved some of his earlier dogmatic statements to be inaccurate, he was not embarrassed, but said that he saw his role as being that of a wideranging innovator and stimulator of other people who were specialists. He used his own statements about pathology and treatment as dramatic over-simplifications so that those who knew nothing about leprosy would at least listen and learn something, while those who had more advanced specialized skills would be challenged to apply them to leprosy. "My job," he would say, "is to bring leprosy into the mainstream of medicine. I'm like a gadfly. I like to tease the professors and researchers, and if they can't believe what I say, then I tell them to start finding out the truth." Many of today's leprosy workers trace their first interest in the disease to the sting of that gadfly.

Bob lived his life with zest. He loved his patients. He loved his wife. He was proud of his college and proud of the teachers he had recruited and of the students who graduated. He loved life and loved laughter real belly laughter. Yet for all of Dr. Cochrane's flamboyance and confident self assertion, he was at base a very humble man. This is no contradiction, because his confidence in himself was based on a profound faith that he was on the pathway of God's choosing, and that so long as he committed himself daily to the scrutiny and the guidance of his Lord, so long he was invincible and was sufficient for any task.

-Paul W. Brand

Dr. R. G. Cochrane is no more, but for those who have known him or have been close to him, it is hard to forget him. I picture him in my mind as an extraordinarily active person, wearing a short-sleeve shirt, standing in hot sun examining patients (for he always believed in examining patients in direct sunlight), touching and pointing out leprosy lesions with the limb of his spectacles and biting it while talking. Students and trainee doctors, who reluctantly handled leprosy patients, shuddered at this "unclean" habit of this great leprologist-but nobody dared tell him. Everyone was scared of his quick temper, but all knew that he was childlike at heart. And behind his hard exterior was his most tender feeling for the leprosy patients. Among leprologists, Cochrane remains a legend. He strove tirelessly

to bring solace to thousands of leprosy patients and to heal them in body, mind, and soul.

As a very young doctor just out of medical school, I was immensely inspired by Dr. Cochrane in my work. I recollect his visit to my clinic in Sevagram (Wardha) in 1952. I was greatly excited to know about his visit and was proud to show him my work. It was my habit to prepare the body charts neatly in green ink. I proudly exhibited them and thought he would be impressed. He saw them and remarked, "The charting is very nice . . . ," and then added, ". . . if they are correct!" I certainly had to defend myself that the charts were also correct. He then promised me a camera if I kept up my work but I never had the privilege to have him again in my clinic to find out whether I deserved to collect my camera from him, even though I met him several times at his clinic or at conferences.

Several incidents and dialogues like this one flash through my mind when I think about him. I admired him because he was one of those unique physicians who had the ability to combine a strictly scientific approach with the warmth of human feeling which was of utmost need with leprosy patients, particularly in those days. He was one of the great founders of leprosy work in India, and set up a rich tradition for future generations of leprologists to follow. Apart from his own marvelous work in leprosy, I consider that one of Dr. Cochrane's greatest contributions was to stimulate several scientists, physicians, and surgeons to take up leprosy work, and later to make their own mark in the field of leprosy.

-K. V. Desikan

Dr. Cochrane was one of the pioneer workers in modern leprosy in various countries, including India. He spent about 20 years in India, doing leprosy work in various capacities in addition to leprosy work in Africa and other countries with leprosy problems.

The first full-time center for leprosy research and teaching was established by Rogers and Muir at the School of Tropical Medicine, Calcutta, under the auspices of the newly formed Indian Council of the British Empire Leprosy Relief Association (BEL-RA) in collaboration with the authorities of the Calcutta School of Tropical Medicine. Students from all over India, and some from foreign countries, used to come to the Calcutta center for training in leprosy.

The second such center was founded at Chingleput, in South India, when Dr. Cochrane joined as Superintendent of the Lady Willingdon Leprosy Hospital, now the Central Leprosy Teaching and Research Institute, Chingleput, of the government of India.

The work of the two centers was rather complementary; the Calcutta center serving mostly northern India and the Chingleput center, southern India. Of course, at present there are a very large number of research and training centers in leprosy in various parts of the country.

Dr. Cochrane developed a love for India, which he called the country of his domicile. He used to relish the hot and spicy food of South India.

Dr. Cochrane's activities were not confined to the Lady Willingdon Leprosy Hospital only. He traveled all over southern India, and started leprosy work in various places in the south. A center which needs special mention is the establishment of the Silver Jubilee Leprosy Clinic for children at Saidapet in Madras City, about 40 km from Chingleput, which he used to visit every week. At that clinic, he gathered the courage to start an experiment of keeping nonlepromatous cases without any treatment under observation. The experiment lasted for about 20 years, and Dr. Cochrane was not in Madras when the results were analyzed. The study was rather unique and indicated that cure in leprosy is related more to the specific resistance of the tuberculoid cases rather than to the chemotherapy in such cases.

There was complete cooperation between the two centers—one at Calcutta and the other at Chingleput. I joined the center at the Calcutta School of Tropical Medicine in 1933, soon after Dr. Muir retired and at the time Dr. Lowe was the Head of the Leprosy Department. After working for some time at Calcutta, and picking up sufficient knowledge regarding the clinical features and the treatment then available and other information about leprosy, I paid a visit to Dr. Cochrane in Chingleput, stayed there for some days to study the work he was doing, and came back to Calcutta with a very good impression of his work.

In conclusion, I would like to mention the efforts of Dr. Cochrane to involve scientists of other disciplines in leprosy work so that leprologists might not be ploughing a lonely field. In this connection, special mention must be made of Dr. Cochrane's raising the interest about leprosy in both Dr. Paul Brand, the well-known surgeon, and Professor Khanolkar, the well-known pathologist. These two persons were to be of great help in the field of leprosy. This process of involving non-leprologists has increased tremendously, and at present scientists of various other disciplines—bacteriology, virology, pathology, biochemistry, dermatology, neurology, etc.—are lending their hands in the field of leprosy work with the result that our knowledge about the disease is increasing at a fast pace, though much is still to be done.

-Dharmendra

I should like first of all to record my own personal indebtedness to Dr. Robert Cochrane. In 1962 he befriended me and gave me the opportunity to work with him in the Leprosy Study Centre which he had founded in London ten years before. My previous contact with leprosy had been limited to one term of service in the leprosarium on Hay Ling Chau, Hong Kong, but he generously shared his extensive knowledge and experience with me; for that I shall always be grateful.

Dr. Cochrane was a man dedicated to the cause of leprosy sufferers and to the task of understanding the disease and mitigating its effects. In the few years I spent with him up to his retirement from the directorship of the Centre in 1966, I followed with great interest his single-minded efforts in striving to attain this end. He was constantly at work by day and often into the night. He kept up with the relevant literature, and he was devoted to the study of histopathological material under the microscope. He was always searching for better methods of care and treatment. He was a first-class clinician, and I watched him using the same careful examination technique and sympathetic approach, which he had developed during his years in India, to those patients who at that time were coming into Britain and for whom he was responsible.

He had long recognized the size and complexity of the world-wide leprosy problem, and was always trying to attract new workers through his lectures and writings and the provision of facilities for study. Like many others, I saw and benefitted from the material—case histories, photographs, biopsy sections, drug trials, reports, etc.—which he had collected over the previous 35 years. He was always adding to this collection, which he organized simply but effectively primarily for teaching purposes. Since this material was drawn from many countries, it was of outstanding value in providing a world picture of leprosy and indicating the scarcely appreciated regional differences. The door of the Centre was always open to anyone interested in and wanting to learn about leprosy or to discuss problems, and the Visitors' Book gives a record of the many people from all parts of the world who took advantage of this facility.

I saw, too, his constant care for and interest in colleagues who were working in other countries, often in difficult circumstances. This was apparent not only in the numerous detailed letters he wrote to them and in the biopsy service that he provided to help them, but also in his frequent visits to leprosy institutions abroad, in the seminars he conducted in the field, and in the advice he was always ready to give. There must be many who remember with gratitude and pleasure the arrival of "Uncle Bob" and the friendly help he gave them.

He also rendered a tremendous service to the leprosy world in general through his work in both executive and consultative capacities with the major leprosy organizations and missions.

While I was at the Centre, he and Dr. Frank Davey prepared the second edition of his *Leprosy in Theory and Practice*. This book, which became the standard textbook for all leprosy workers, showed not only his own contributions to the study of the disease but also indicated his flair for discovering workers in other specialties and enlisting their help in bringing their knowledge and expertise to bear upon the unsolved problems posed by leprosy. It was through this cooperative approach that many advances were made in the investigation of the pathology of leprosy, in the search for new drugs, and in the physiotherapeutic, surgical and social care of patients. A pattern was thereby set for subsequent research

I consider it a great honor and privilege to be asked to write a personal note on the life and contributions of Dr. Robert G. Cochrane.

My association with Dr. Cochrane dates back to May 1947, when he was the Principal of the Christian Medical College, Vellore, India. I belong to the first batch of 11 men students admitted to the College. He used to meet with us informally once every month under a mango tree on the campus. During that one hour of fellowship, he inspired us with his life's rich experiences and made us feel a part of the great institution. He refused to be addressed as "Sir," a term of respect which was expected from a student, and insisted that we called him Dr. Cochrane. We were touched by his personal concern for each of us and by the noble ideals that motivated his work. The meetings always started with a ritual. It is well known that hot chillies are typical of good Indian food, and he chewed and consumed one or two hot green chillies which even some of us found it difficult to match. India was his country of adoption, and he wanted to be as much a South Indian as any one of us. Identification with the people he came to serve and finding acceptance among them was part of his greatness.

In the 1930s only a handful of qualified doctors worked among leprosy patients. There was no cure for leprosy and even some of the professionals were frightened. In many leprosy hospitals the workers used gloves and masks. Leprosy was a dreaded disease, as AIDS is now. Dr. Cochrane stood out as a distinct example of one who cared, one who touched them and treated them like patients with any other disease. He set an example for me and for all his students for which we are always grateful. If there was and the new knowledge that has accumulated since. The book is a testimony to one who, in his time, helped to dispel much of the darkness of the leprosy world. He was a great pioneer, and we give thanks for his life and work and the inspiration of his example.

-D. J. Harman

one person who can be singled out for making a significant contribution to reduce the stigma and fear of leprosy among professionals, it was Dr. Cochrane. It is no wonder that he received in abundance the affection and gratitude of thousands of patients all over the world and the respect and esteem of his colleagues and students.

Dr. Cochrane was a very hard-working person. His work day started at 5:00 a.m. and went on into the late hours of the night. I had the privilege of having him in our house on many social occasions. Discussions with him, even during a social evening, would always gradually come down to leprosy and would extend to the early hours of the morning. He worked tirelessly to increase the knowledge of leprosy, to find new methods to treat leprosy patients, to teach as many students as he could find, and to improve the lot of leprosy patients. He inspired and recruited many medical scientists to devote their skills to the study of leprosy. He selflessly gave himself away in the service of leprosy patients. I often wondered how he could accomplish so much in so short a period. Then I realized that the secret of his strength and his success was in his knowledge and wholehearted commitment to his Master, the Lord Jesus Christ. He firmly believed and demonstrated in his life that "All things are possible through Him that strengtheneth me." He was truly a medical missionary who placed his life in the hands of his Master and was used mightily in the service of leprosy patients.

In Dr. Cochrane we have lost a great leprologist. But let us take comfort in that he has inspired and left behind a great many to follow in his footsteps.

-C. K. Job

It was in the hot summer month of May 1943 that I first met my revered guru, Dr. Robert G. Cochrane ("Bob," as he was affectionately called) at the Lady Willingdon Leprosy Sanatorium, Tirumani, India. I was there participating in a two-week leprosy training course for doctors. He appeared quite "tough" and a strict disciplinarian. We found him a most impressive, enthusiastic teacher and a hard taskmaster. Once he took us along, at an unearthly hour, on a surprise visit to a rural leprosy prevention center to check up on the patients' attendance! In those two weeks, he taught enough leprosy to enable us to be on our own and inculcated into us a sense of duty and responsibility to the patient, discipline, and punctuality.

The Silver Jubilee Childrens' Clinic, founded in 1937 at Saidapet, a hyperendemic area for leprosy, was a unique field experiment conceived and executed by Bob for the study of child leprosy in its environment. Here the evolution of untreated leprosy in children was studied over a period of nearly two decades. He established that the majority of child leprosy was innocuous, documented in detail the transformation of unstable forms of leprosy into the serious type, and also identified the "incipient lesions of childhood" as the most potentially malign type in children.

For the control of leprosy in rural areas, Bob started on an experimental basis the "rural leprosy prevention unit" at Polambakkam in 1939. Open cases of leprosy on hydnocarpus therapy from a group of villages were encouraged to sleep in segregation huts at night, thus ensuring the prevention of contact with the family during the night. They left the huts early in the morning for their respective work. Two other villages in which the infectious cases received only oil injections served as controls. The findings of this scheme over a period of five years showed that it was a simple, inexpensive, feasible, and effective method of containing leprosy in the villages.

The early 1940s witnessed the dawning of the sulfone era. In 1945, Bob initiated studies with sulfone derivatives in human leprosy. Later he administered the parent substance itself, as a suspension in oil, by needle, and finally switched to oral dapsone therapy. These clinical trials were well documented. Those were momentous years when the investigator, perforce, had to conduct the trials on human subjects. The trials went on without a hitch. Bob emerged as one of the pathfinders of the modern chemotherapy of leprosy.

The Bacteriological Index (BI), a simple method of assessing the bacteriological status and progress of a multibacillary case under therapy, was another contribution made by Bob to the leprosy world. Those were the days when as many as 16 skin smears were taken from each patient, each time. The assessment was done by comparing the bacterial load of the smears at each site taken at different times, and it was time consuming. Bob overcame this by formulating the BI and communicated it at the Havana Congress.

Bob had the rare gift of inspiring and drawing scientists in other disciplines into the fold of leprosy. He brought in Professor Khanolkar, the eminent cancer pathologist, who contributed so much to our knowledge on the pathology of leprosy and Dr. Paul Brand, who set the pace for reconstructive surgery in leprosy.

His deep interest in clinical leprosy was ever so intense that while at the Mission Hospital, Vadathorasalur, he made frequent visits to CLTRI, Tirumani. In honor of his visit, we had a choice collection of cases of clinical interest each time, and there was a clinical demonstration followed by discussion. At the end of it all, he would turn round and ask: "Gentlemen, have I passed the *viva voce* of the Royal College of Chengalputians?" That was like Bob!

Bob had the honesty and courage to accept his shortcomings and the generosity to acclaim the abilities of his junior colleagues when the occasion arose. To wit, if he was wrong in his clinical judgment and his junior colleague was right, he never hesitated to express it openly and even went to the extent of extolling the skills of his colleague.

He was ever aware of the need for ministering to the spiritual needs of his patients as well. He preached in the leprosy homes he visited. I have attended the services conducted by him and listened to this true servant of the Lord. The good and sagacious Christian that he was, he never discussed or even talked about his religion to me. This only deepened my respect and affection for him and enhanced my love for Christianity. Bob is gone. But his teachings, achieve-

ments, and precepts will live forever.

May his good soul rest in everlasting peace.

-K. Ramanujam

Dr. Robert G. Cochrane was in many ways the doyen of a distinguished generation of British leprologists, who entered the field at a time when dedication and spiritual solace were about all that could be offered to a leprosy patient and who lived to see the introduction of an effective chemotherapeutic agent. Among this generation, Cochrane was one of the first to see that a medically acceptable form of treatment opened the way to making leprosy a fit subject for scientific investigation (and in so doing helping to remove the stigma attached to the disease). With his breadth of interest, conviction, and contagious enthusiasm he was largely instrumental in opening up leprology to workers from other disciplines who would not previously have considered such an undertaking. I count this as one of his major contributions. The study of leprosy became scientifically respectable. Leprosy was brought into medicine.

For my own part, I doubt whether leprosy would have become my main subject of study but for the influence of Cochrane, who was consultant adviser on leprosy at the Hospital for Tropical Diseases at the time I, a beginner in this field of work, joined it. I learned much from him and for many years

sought his opinions. In a different context, he and some of his contemporaries have had an abiding influence on my work through the respect they inspired for their acumen in arriving at the right answers even when understanding, based on the knowledge of the time, was imperfect and the terminology, as it seemed to me, occasionally beyond comprehension. Whenever in research I have needed a working hypothesis, the first one has always been that the old answers, as far as they went, were the right ones. I have seldom had to change my mind. The superbly documented collection of histological and teaching material left by Cochrane and continued by his successors at the Leprosy Study Centre in London is still in good use at the hospital.

Whenever, in traveling in leprosy-endemic countries, a topic of conversation is wanted the name of Bob Cochrane never fails to elicit a fund of good-humored anecdotes. He was widely held in affection and esteem, and he has already since his retirement been sadly missed. He will long be remembered.

-D. S. Ridley

Robert (Uncle Bob) Cochrane had an enormous influence on the work of American Leprosy Missions through his writings, his counsel and reports as Technical Medical Advisor for many years, and his personal impact on key individuals. Dr. Oliver Hasselblad has accurately characterized him as one of the relatively few who were able to "synthesize a warm Evangelical Christian conviction with the highest in scientific medical practice and research." Dr. Cochrane liked to refer to himself as a "gadfly" and he could be critical, but it is as a friend

and counsellor that he is remembered. Dr. Roy Pfaltzgraff writes, "I had just begun devoting my time fully to leprosy work when Dr. Cochrane became Medical Advisor for ALM. I had the opportunity to sit in on several of Dr. Cochrane's teaching sessions. The knowledge gained significantly moulded my policies and procedures in caring for leprosy patients. Very few people ever visited our remote home in Nigeria, so it was a real pleasure to have Uncle Bob visit us several times." Some months ago, one of our staff writers had the opportunity of inPrinciples which Dr. Cochrane laid down and encapsulated in aphorisms more than 30 years ago are still relevant for ALM today. The following quotations are taken from his writings.

On the Role of Missions: "We cannot wholly—meet needs; we can only show how need can be met."

On Suffering: "I feel I must at this point state quite emphatically that without a firm belief in Christ, I would find it difficult to give any kind of answer to the problem of suffering."

On Medicine: "Medicine without the Spirit of Christ is poor medicine."

On Teaching: "Not until the medical student is himself taught by enthusiastic and experienced teachers will there be any hope of finding recruits who are willing to specialize in leprosy."

On Research: "If everyone would avoid publishing the results of treatment for two years, much disappointment would be avoided." On Sensitivity to Patients as People: Dr. Cochrane's comments on a photograph of an advanced case, "The all too frequent termination of advanced lepromatous leprosy-blind and mutilated, a caricature of his former self, but still a man with a living soul."

On Standards: "Today we cannot afford to build up leprosy or general work on anything less than the highest standards and the best trained staff."

Perhaps the secret of Cochrane's influence lies in the fact that the advice he gave was based on his own actual practice. For instance, Dr. Roy Pfaltzgraff remembers that, "Dr. Cochrane repeatedly stressed we will never eradicate the stigma of leprosy until we bring it into the mainstream of medical practice." And, as Professor Jagadisan has reminded us, Dr. Cochrane had "a big Leprosy Department right in the central wing of the General Hospital, Madras, as early as the late 1930's."

Dr. Cochrane was years ahead of his time-his influence will live on.

-W. Felton Ross