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# First All India Congress of Medical Microbiologists

LADY HARDINGE MEDICAL COLLEGE  
NEW DELHI

*Presidential Address :*

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## PRESIDENTIAL ADDRESS BY PROF. S. C. AGARWAL

Distinguished guests, Principal Smt. Chawla, Members of the Association, Staff of Lady Hardinge Medical College and Distinguished Scientists.

Today is a great occasion when the members of Indian Association of Medical Microbiologists are meeting together at this august Institution, Lady Hardinge Medical College, New Delhi to hold their first meeting. We are extremely grateful to this College, for hosting our First Conference. I feel doubly glad because one of the early and eminent Principals of this College, Col. Amir Chand was my great friend and trustee. This close friendship may seem surprising because of great age difference between us. It was, however, because of the similarity in ideas and moral values that we became very good friends. Today I am very happy that this Conference is being held in the dearest College of one of the greatest individuals who spent all his life and money for the cause of medical research in this country. I am, therefore, paying this Association's most devoted homage to Col. Amir Chand.

Today, we are very fortunate to have our most beloved and respected Scientist and teacher, Dr. C.G. Pandit with us. This Association is greatly proud of him. To us, he is like a Father of Medical Microbiology in India. We look at him with the same affection and love. I am reminded of a time when Indian Council of Medical Research did not exist. The only body which existed was Indian Research Fund Association. It was the great efforts of Dr. C. G. Pandit which made the young men aware of Medical Research in India. He remained the Director General of Indian Council of Medical Research for  $17\frac{1}{2}$  years. The beauty of our affectionate C.G. was that he knew the smallest and the youngest Research worker in the country. I met him for the first time in 1955 when I was Assistant Director at Central Research Institute, Kasauli and it will surprise some of you to know that both Dr. N. Jungalwalla, the then Deputy Director General of Health Services and Dr. C. G. Pandit talked to me for one and a half hours on the problems of medical Research in India. When they were leaving, their words were "Agarwal, if there is ever any difficulty you come to us." Such

were the parting words of two eminent Scientists to a young research worker in those days. It was Dr. C.G. Pandit who organised the first course of Virology in Poona in which young scientists from different parts of the country came to attend. The country really became aware of the Arbovirus infections. I had great privilege to be with persons like Dr. J.B. Srivastava, I. G. K. Menon, N. P. Gupta, Dr. (Mrs.) S. Bhatia. From then onwards, the country became aware of the existence of viruses and some virus laboratories were opened in different states. I cannot fail to pay tributes to Col. M.L. Ahuja, my first chief in Kasauli and the first Indian Director to take over from Colonel Mulligan. Those were the days we used to hear the names of Ahuja, Taylor, Pandit, Goel and D. L. Shrivastav amongst the great Microbiologists who were devoting all their time and energy to the elucidation of the problems of Cholera and Typhoid. Central Research Institute, Kasauli was at that time the home of great bacteriological activity. Col. Jaswant Singh was another stalwart in malariology. Little or no bacteriological work of fundamental importance was being carried out in the Universities and the Medical Colleges. There were hardly a post of Lecturer in Bacteriology in most of the undergraduate Medical Colleges and the poor Bacteriologist was delegated to work in a small room. He would do the isolation of Staphylococci, Streptococci and the routine Widal and Wasserman tests. This was the year 1953 when I took postgraduation in Pathology and Bacteriology.

In those days, the Science of Medical Microbiology was not advanced. Only a little Bacteriology and Clinical Serology was done. I am greatly indebted to the Nuffield Foundation of England and especially to Dr. D.S. Kothari, formerly Chairman, University Grants Commission, that I was selected as a Nuffield Fellow to work at the Write Flemming Institute of Microbiology in London. I had the great opportunity there to see how the different departments of Microbiology were being built up and how the great science of Microbiology was developing. Microbiology was not Bacteriology restricted to Staphylococci and Streptococci but it was Virology, Immunology, Parasitology and Mycology as well. My thoughts on the organisation of Microbiology were greatly crystallized not only by working under Prof. Robert Cruickshank and Prof. Albert Neuberger, F.R.S., but also by coming in association with Prof. C.L. Ookley, Prof. Pryce, Prof. Van Heyningen Prof. Payling Wright and Prof. Scarff. It was Prof. D. N. Wadia, F.R.S., Geological Advisor to Government of India and the first President of National Institute of Sciences, now known as National Academy and who had gone to

attend the centenary meeting of the Royal Society of London, who forced me to come back and advised me to organise Microbiology in our country. It is with this situation that I returned to India in 1959. It will not delve with all that has happened during these last seventeen years in Microbiology but simply state that today, the whole country is simmering with aptitude for Research in infectious diseases. Especially our young men are greatly enthusiastic and it is our duty as the senior microbiologists of this country to help them.

Though the thought of forming an association of Medical Microbiologists in India was there for quite some time, it was only last year in December at Manipal that a final decision was taken to form the Association. Every Medical Microbiologist who had come to Manipal agreed that we should have an Indian Association of Medical Microbiologists. This was necessary because of the great growth of Microbiology in this country. So, this association was therefore formed last year at Manipal. Initially, the aims were to encourage and foster the academic activities of Medical Microbiology in India. We have now done quite a bit of rethinking and we feel that this association should concern itself with (1) the standardization of methods of teaching in Microbiology with stress on Clinical Microbiology, (2) Uniformity of Laboratory procedures in identification of infectious diseases, (3) Preparation and supply of standard antigens and antisera, (4) Formation of Reference Centres, (5) Creation of a national zonal and rural health laboratory services, (6) Surveillance of infectious diseases all over the country, (7) Creation of good teachers in Microbiology, good clinical laboratory workers and affording them employment opportunities, (8) Reintroduction of M.Sc. Microbiology and (9) Greater need for Ph.D. in applied Microbiology, (10) Isolation of foci of antibiotic resistance and a constant surveillance of spread of hospital infections.

There is great evidence of research activity amongst the Microbiologists all over the country. Significant contributions have been made by the Microbiologists of this country in different fields of infectious diseases. A large amount of work has been done in poliomyelitis, leprosy, filariasis, malaria, amoebiasis, toxoplasmosis and rabies. Great institutions like Virus Research Centre, Poona, Tropical School of Medicine, Calcutta, National Institute of Communicable Diseases, Delhi, Postgraduate Institute of Medical Education & Research, Chandigarh & Pondicherry, All India Institute of Medical Sciences, New Delhi, K G. Medical College, Lucknow, Pasteur Institute, Coonoor, Central Research Institute, Kasauli and

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Haffkine Institute, Bombay have all their share to contribute towards the science of Microbiology. Haemorrhagic fever of viral aetiology have been discovered. Significant contributions have been the discovery of KFD virus, prevalence of dengue and chicken-gunya viruses and Japanese B encephalitis, mosquito tissue culture cell lines. Attempts have been made to develop a vaccine against chicken pox. Considerable amount of work has been done against cell mediated immunity in rabies virus, dengue virus and Coxsackie B3 myocarditis. The efficacy of Salk's polio vaccine has been determined and the importance of breast milk feeding in oral polio vaccination programmes has been established. Rota virus has been found to be prevalent in India. New L-phase lysate vaccine and Ribonucleic acid vaccines against *V. cholerae* have been developed. Ribonucleic acid fractions producing cell-mediated immunity against cholera and mycetoma have been discovered. Considerable progress have been made towards the prevalence of Australia antigens in different populations of the country.

