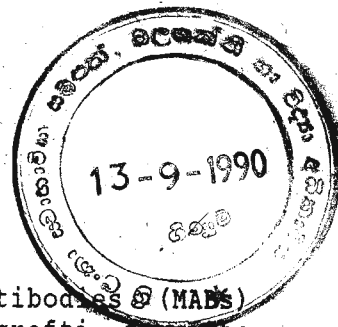


## Abstract



This project on the production of monoclonal antibodies (MABs) against the larval stages of Wuchereria bancrofti for the characterisation of filarial antigens (somatic) and development of immunodiagnostic techniques was in progress since 1987.

As hybridoma technology was not established at that time in this institution, this technology was introduced here with the initiation of this project. Therefore, preliminary preparations on the organisation of the laboratory as well as preparations for MAB production itself, had to be done initially, prior to actually beginning the scientific work on the project.

Infra-structures already available were made use of, to collect parasite material for the project from the field. Mosquito colonies available were expanded to obtain L3 larvae. A Filariasis Clinic was initiated at the Out Patients' Dept of the Colomb General Hospital in order to obtain characterised sera for the project. Several personnel were recruited on the project and several employees of the University were recruited to do work on a part time basis.

During the past three years we have been successful in obtaining a panel of anti-mf MABs which are stage specific for microfilariae (mf) of W.bancrofti. Their usefulness in designing diagnostic assays, finding isolate differences within the species of W.bancrofti in Sri Lanka, characterisation of important filarial antigens and in transmission blocking immunity has been investigated upto an extent and is described in more detail. Work is being further pursued on these lines.

The second panel of anti-mf MABs seem to react against somatic components of mf of W.bancrofti and their usefulness is being evaluated.

As regards the anti-L3 MABs, though several MABs were obtained, they do not seem to be specific for L3s of W.bancrofti and cross reacts with other filarial antigens. Therefore, their usefulness in studies on bancroftian filariasis for diagnosis or any other procedure is limited.

During this project, research training opportunities were provided for several personnel, including Research Assistants and Technical Assistants. Most of them have gained valuable experiences which will help them in their future careers. One Research Assistant is in fact completing his M. Phil. on the work done on this project.