3. SCOPE AND PLAN OF THE STUDY

Cryptococcosis is currently being recognised with much greater frequency and in fact it has been listed among the emerging diseases of patients with AIDS. In the present days, the disease generated more interest following its increased incidence worldwide especially in patients with AIDS. Literature on the epidemiology of cryptococcosis and the characterisation of the isolates of *C. neoformans* from clinical and environmental sources are limited in India. Therefore, the present study was undertaken with the following broad objectives.

**Clinical Isolates**

1. To study the prevalence and the clinical characteristics of cryptococcosis in AIDS patients admitted in the hospitals at Chennai (Madras), India.

2. To assess the immunological status of the culture positive cryptococcosis cases with AIDS by skin test using cryptococccocin.

3. Preparation of In-House Co-agglutination (Co-A) test reagent and application of Co-A test for the diagnosis of cryptococcosis in AIDS patients.
To assess the in vitro susceptibility pattern of clinical isolates of C. neoformans to a panel of commonly used antifungal agents for the therapeutic use.

Collection of clinical isolates of C. neoformans from different places in India and analyse the available clinical data retrospectively.

Environmental Isolates

To study the occurrence rate of C. neoformans in environmental sources of different geographical regions.

Characterisation

To determine the biotype, varietal type and serotype of the isolates of C. neoformans from clinical and environmental sources.

To examine the mating ability of the isolates of C. neoformans from clinical and environmental sources.

To analyse the Random amplification of polymorphic DNA (RAPD) pattern of the isolates of C. neoformans from clinical and environmental sources.