

**MEDIA RELEASE: 17th May 2005**  
**New Allergen Sources Discovered**

Australian scientists have for the first time demonstrated how environmental airborne fungal fragments contribute to personal exposure to fungal allergens.

These fungal fragments, including fungal hyphae and fractured spores, have not previously been considered allergen sources. Their identification challenges traditional thinking about which fungal species exacerbate asthma and allergies.

Until now, interpretation of personal exposure and sensitisation to fungal allergens has been restricted to the inhalation of fungal spores belonging to a select number of species with these species alone thought to contribute to allergic diseases.

The results of the Australian study, released in the latest edition of the leading US asthma research journal *The Journal of Allergy and Clinical Immunology*, was selected as one of the editors choice articles for the volume issue, highlighting the significance of the findings.

Mr Brett Green a member of the research team from Australia's leading respiratory research organisation, the Woolcock Institute of Medical Research said the results of the study are very significant.

Our data shows that not only are there more types of allergenic fungi than previously thought, but the fragments of fungi and their tiny structures, called hyphae, also carry allergens. This is significant, because not only does it challenge traditional thinking but these small fragments are inhaled more easily into the lungs thus causing a reaction".

Mr Green explains the team used its novel immunodiagnostic technique, Halogen Immunoassay, to monitor indoor residential environments over a 21-day period.

"The new technique has provided a way to stain the offending fungi with serum from a person allergic to the fungi, thus identifying which ones they are allergic to. This is very significant progress, as it provides a new way to link exactly what a person is exposed to, allergic to and their symptoms" he said.

It showed not only numerous species carrying allergens that previously were not recognized to do this, but that the number of hyphae exceeded the number of commonly recognized fungal spores.