DIVISION OF ALLERGOLOGY AND CLINICAL IMMUNOLOGY

Helping South Africans cope with allergies

Professors Paul Potter and Stan Ress Heads of Allergology and Clinical Immunology

Up to 20% of the SA population suffer from allergic diseases – and new allergens are constantly being discovered. Over the past two decades, over 20 new African allergies have been identified by the Allergology and Clinical Immunology Unit of the Department of Medicine.

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Professor Paul Potter and Professor Stan Ress head up the Allergology and Clinical Immunology Unit, with its state-of-the-art laboratory at Groote Schuur Hospital. The laboratory has the unique capacity on the continent to investigate and identify novel African allergens.

"Exciting finds over the past few years have been the discovery of new African allergies to kikuyu grass pollen, buffalo grass pollen, *Eragrostis* pollen, *Acacia* species, Rhodesian flame lily, Abalone (*Haliotis Midae*), mopane worm, marula nuts, African pear, mogwagwa wild fruit, *Locusta Migratoria*, cobra venom (Rinkhals), wildebeest, African penguin and African porcupine allergens," says Professor Potter.

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He adds that the unit has also investigated and published unique African aspects of global allergens such as house dust mite allergy, alien trees (oaks and plane), fungal spore allergens, *Verbena hybrida*, cockroach and Imbuia wood allergy.

"The aerobiology service and its 30-year database and weekly aeroallergen reporting is also unique in the region," he adds, proudly mentioning exciting clinical discoveries on the high prevalence of complement C6 and C5 deficiencies in the Western Cape.

"Our unit has also been able to provide cutting-edge novel treatment to hospital patients with hereditary angioedema through clinical trials we have been involved in at the UCT Lung Institute," says Professor Potter.

The Allergology and Clinical Immunology Unit provides a 24-hour referral service for complex allergic diseases and also provides care for adult patients with primary immunodeficiencies. It has several projects and programmes, including aerobiology research, which involves defining pollen seasons in the Western Cape and identifying changes compatible with global warming.

The identification of more than 40 patients with hereditary angioedema and 80 patients with complement deficiency is also unique in Africa and a highlight of the unit's achievements. "The extended identification of the genetic defects, frequencies and prevalence and prophylaxis, in collaboration with laboratories in Cardiff and UCT's

Dilys Berman, aerobiologist for the Western Cape.

Division of Chemical Pathology is also globally unique and has made us world leaders in this area of primary immunodeficiency," he adds.

Through connections with the Allergy Society and the World Allergy Organisation, the unit has also contributed nationally and globally to the diagnosis and management of allergic diseases such as asthma, allergic rhinitis, chronic urticaria, atopic dermatitis and in the field of sublingual immunotherapy.

Both professors feel that there is an urgent need for the state to provide better normal and emergency treatments for a range of allergic conditions and immune deficiencies. "Considering that allergology is now an accredited medical field, it has become necessary to budget appropriate funds and infrastructure for this field to grow and to offer world class therapies in the future," concludes Professor Potter.