

### **ASCIA RELEASE March 9, 2015**

# The First Pollen Allergy Map of Australia and Predicting Shellfish Allergy in Children

A new foundation, which is redressing underinvestment in allergy and immunology research in Australia and New Zealand has announced its first two grants.

Until now there has not been any organisation to specifically fund research into allergy, immunodeficiencies and other immune diseases in Australia and New Zealand. Despite having world class researchers in these fields, funding is very limited. The Allergy and Immunology Foundation of Australasia (AIFA), an initiative of the Australasian Society of Clinical Immunology and Allergy (ASCIA), is trying to fill this gap.

"Allergic rhinitis (commonly known as hay fever) is one of the most common allergic conditions in Australia. It can make asthma worse and is generally under recognised and under treated," says award recipient Dr Janet Davies, Deputy Director of the Lung and Allergy Research Centre at The University of Queensland. "Pollens in the air are what trigger attacks of hay fever and, in many pollen allergic people, asthma. So being able to avoid pollen exposure is important. But while pollen forecasts are seemingly available on a number of websites, they're not based on real data and are inaccurate, in comparison to actual pollen counts produced by our team in Melbourne, Canberra and Sydney.

"Using the grant from AIFA, the Australian Pollen Allergen Partnership (APAP) will work towards establishing the first national standardised pollen monitoring program, spanning all Australian state and territory capital cities and offer readily accessible and reliable local and current pollen count information to patients and doctors through its website. It will also provide patient education material and evidence-based guidelines on pollen allergen exposure risks in different locations.

"Reliable pollen measurements and short term forecasts of allergenic grass pollen counts will be sent to the public via websites, apps and media outlets," says Dr Davies. "We're already publishing pollen forecasts via melbournepollen.com.au and canberrapollen.com.au and an app for Melbourne has generated over 20,000 downloads since the spring of 2013. To do this well, we need a standardized national pollen monitoring network to accurately forecast exposure to grass pollens that cause allergies."

The second AIFA grant is for predicting shellfish allergy in children who are already allergic to the house dust mite. This mite is the allergy culprit in most people with asthma in Australia. The Chief Investigator is Dr Sandip Kamath based at James Cook University in Townsville.

"It might surprise you to know that there are similarities between the bits of the house dust mite that cause allergies and those in shellfish, which means that you can get what we call cross reactivity. This is when the immune system reacts to house dust mite and may rebel against shellfish as well. This can evolve into severe allergic reactions," explains Dr Kamath.

"I aim to develop a way of detecting this immunological cross-reactivity using antibodies called IgE with the hope that this may help to prevent accidental exposure and unexpected allergic reactions to seafood among house dust mite sensitised children and young people."

"One in four people are affected by allergy, immunodeficiencies and other immune diseases in Australia and New Zealand. We're delighted that the Allergy and Immunology Foundation of Australasia (AIFA) has been able to support such important projects, with the potential to positively affect so many people," says Dr Raymond Mullins, Chair of the AIFA Board. "Research into allergy has been under-resourced in Australia and New Zealand and this is the beginning of us redressing the balance."

## Allergy and Immunology Foundation of Australasia (AIFA)

#### **Background**

Allergy, immunodeficiencies and other immune diseases affect the lives of one in four people in Australia and New Zealand, according to recent research. Some experts use the term epidemic to describe this growing health issue. The Allergy and Immunology Foundation of Australasia (AIFA) is dedicated to funding medical research to find out why, and to help develop ways of treating and preventing these diseases.

AIFA was launched in September 2013. The Foundation is an initiative of the Australasian Society of Clinical Immunology and Allergy (ASCIA), the peak professional body of immunology and allergy specialists in the region. ASCIA has grown over the last 25 years and now leads the way in developing e-training courses to educate and raise awareness of allergy, immunodeficiencies and other immune diseases amongst health professionals and the community.

At the forefront of tackling the problem of the increased incidence of allergy, ASCIA recently held the world's first Allergy Summit and is currently developing a National Allergy Strategy for Australia. This strategy will include targeted medical research with a focus on innovation and optimising clinical outcomes to benefit patients with allergic disease.

AIFA provides a vehicle for corporate and personal donors, as well as philanthropic organisations, to contribute to a fund that will enable important future research, identified by experts in the field. Funding for this research is critical.

Information on AIFA grants can be found at <a href="http://www.allergyimmunology.org.au/grants">http://www.allergyimmunology.org.au/grants</a>

#### Patient case studies

#### Annelise Kirkham, mother of two teenagers with multiple allergies - Brisbane

Annelise Kirkham is a mother of two teenagers who have been affected by multiple allergies since they were toddlers. In addition to both suffering from asthma and allergic rhinitis (dust mites, moulds, pollens, grasses, animal dander) her 18 year old daughter, Elly, is at risk of anaphylaxis to peanuts, while her 14 year old son, Jake, is at risk of anaphylaxis to shellfish.

Elly and Jake have suffered from constant runny noses, swelling, and itchy and watery eyes their whole lives. Constant sneezing and allergic reactions leave her children exhausted.

"All any parent wants for their child is to live a happy and fulfilling life. Allergies impact everything related to my children's wellbeing. Simple things often taken for granted – like a sleepover or going to a school camp – require military preparation. As a parent it is very frustrating to witness your child feel constantly terrible and see it affect their school, sleep and relaxation."

"Allergies have a significant financial and emotional toll for individuals and families. As a parent of two children suffering from allergies, I fully support and thank AIFA for their commitment to research into this underfunded area."

#### Mr Malindu Fernando, shellfish & dust mite allergy - Townsville

Malindu, a 24 year old PhD student born in Sri Lanka and currently residing in Townsville, developed his first symptoms of dust allergy when he was around 11 years old.

"My allergies were significantly affecting my health at the time and continue to do so. I had several triggers for my allergies and it was clear that dust was one of the main ones. My symptoms include running and itchy nose, a significant period of heaviness in the head, sneezing and blocked paranasal sinuses, teary eyes and bronchial tightness. I was also diagnosed with asthma around the same period and have been medicated ever since."

Malindu's reactions can be from mild to severe and significantly affects his wellbeing and ability to get on with daily tasks, often leaving him feeling tired. Also a dust-free environment has to be maintained constantly, which is nearly impossible. Malindu manages his allergies by taking antihistamine medication prophylactically, meaning that if he knew if he was doing some cleaning or going to be near dust, he would take anti-histamines beforehand.

"I recently found out by being involved with Dr. Kamath's allergy research that I am also allergic to shellfish which was truly fascinating."

Issued on behalf of the Allergy and Immunology Foundation of Australasia

Media Contacts: Fleur Townley on 0405 278 758 or Maggie Lanham 0412 281 277.