

# REPORT-BACK FROM THE AAAAI 60<sup>TH</sup> ANNUAL MEETING INTERNATIONAL ASSEMBLY SESSION ON GLOBAL ISSUES IN ALLERGY

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The American Academy Of Allergy, Asthma & Immunology (AAAAI) 60<sup>th</sup> Annual Meeting took place in San Francisco in March 2004. The AAAAI has over 6 000 members and produces the *Journal of Allergy and Clinical Immunology*, the most frequently cited journal covering allergic disease.

The Meeting's Program Committee was headed by an ex-South African, Dr David H Broide, who put together a program of over 400 educational sessions over a 5-day period. The mission of the Annual Meeting was to provide AAAAI members and delegates with superior educational experiences in the fields of allergy/immunology and asthma. This aim was certainly accomplished.

San Francisco is one of America's more beautiful cities. Its steep hills and avant-garde reputation hide the fact that it is at the forefront of scientific research and commercial pharmaceutical development. The meeting program reflected this progress with many sessions on Proteomics and Genomics, as well as novel strategies in allergen vaccine development. The Postgraduate Syllabus covered new developments in asthma, allergy, atopic dermatitis and allergic rhinitis.

## GLOBAL ISSUES IN ALLERGY

The highlight of the conference, for me, occurred on the first day. The International Assembly of the AAAAI presented the session entitled *Global Issues in Allergy*. The International Assembly has recently been resuscitated by the leadership of the AAAAI so as to reach out to the international community on issues regarding allergy, asthma and immunology.

Prof. Carlos Baena-Cagnani presented ISAAC 2004 data from around the world with specific reference to South America. The International Study of Asthma and Allergies in Children (ISAAC) is a video-based initiative to accurately determine the prevalence and severity of asthma, rhinitis and eczema in children and adolescents on a global basis. ISAAC Phase 1 has been completed in 156 collaborative centres in 56 countries involving 721 600 children worldwide. The cumulative prevalence of asthma in children 13-14 years in Africa is 10.4% compared with 16.5% for North America and 13.45% for Latin America. Emphasis was placed on results from ISAAC Phase 3 studies in Argentina. Phase 3 essentially aims at measuring prevalence 5 years after Phase 1. Results from the Cordoba/Rosario show prevalence in Phase 1 of 11% (asthma) and 16.6% (exercise-induced asthma), rising to 13.6% and 18.8% respectively in Phase 3. There was however no increase in the prevalence of symptoms of rhinitis. These results are very pertinent when compared with the Cape Town Phase 3 results being presented at the Kidz 'n All 2004 Conference.

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*Hilly San Francisco – the daily trek from hotel to convention centre.*

Dr Menachem Rottem who chairs the Africa/Mideast section of the International Assembly presented a paper entitled *Atopy and Asthma in Migrants*. This paper included data of migrants to Australia, Canada, Europe and Israel. He concluded that immigration to allergy-prevalent countries causes more allergies and asthma in immigrants when compared with the prevalence of atopy in their countries of origin. The increase in allergy and asthma is independent of ethnicity, but genetic factors may play an important role. Western lifestyle and environment facilitate development of atopy and asthma, and the effect is time-dependent and influenced by age at the time of immigration.

Christoph Gruber from Berlin presented a fascinating paper *Childhood Immunisation as a Modulator of the Atopic March*. As a paediatrician, I found this of particular interest and hope to present more of his work at the Kidz 'n All 2004 Conference. He discussed the role of vaccines in promoting IgE formation. The possible effects of 'missing out' on infections were discussed, as well as the studies showing a lower prevalence of atopy among children with lower vaccine coverage.

IgE to diphtheria and tetanus toxoid is detectable in the serum of vaccinated children, both atopic and non-atopic, but is more exaggerated among atopics. Specific IgG levels are no different in atopics compared with non-atopics. The IgE response thus seems a regular immune response, not associated with more frequent side-effects. This is confirmed by one of his studies showing a reduced risk of atopic dermatitis in a group of children receiving 4-6 doses of diph/tetanus versus those with incomplete (0-2 doses) coverage.

The pertussis toxin is a recognised IgE adjuvant. Whole-cell vaccines induce a TH1-type response, but acellular vaccines induce a mixed TH1/TH2 type immune response.

Allergic sensitisation to environmental allergens is not however promoted by whole cell or acellular pertussis vaccine.

Although exposure to *Mycobacterium* results in preferential secretion of TH1-type cytokines, the effect of



*Golden Gate Bridge.*

BCG is not clear; conflicting results are reported from studies worldwide.

Dr Gruber completed his presentation with a salient comment 'effective protection against potentially life-threatening or disabling infectious diseases should be offered to every child – atopic or not.'

Erika Isolauri from Finland added to the proceedings with a talk entitled *Alimentary Atopy Prevention in Infancy*. She touched on the new paradigms promoting the tolerance-inducing effects of dogs and the changing patterns of allergic sensitisation. Early sensitisation

is seen early in infancy, during the breastfeeding period, and characterised by GIT symptoms of dysmotility, oesophageal reflux, colic and constipation, as well as sleep disturbance. An active approach to atopy prevention involves the modification of intestinal microbiota with probiotics. She presented studies that showed distinct patterns of neonatal gut microflora in infants in whom atopy was and was not developing.

A stimulating talk by Adnan Custovic (North West Lung Centre, Manchester) was possibly the most controversial. He digressed from his prepared presentation and passionately presented work on lung functions in non-asthmatic atopic children. Unfortunately it is not possible to recall all the references. Dr Custovic referred to studies that are showing a reduction in lung function in children with atopy who show neither signs nor symptoms of asthma.

All in all it was a well-presented tour of allergy and asthma from around the world and confirmation that whether you are in Paris, Texas or Paris, France or Parys, South Africa, issues are relevant to all.

*The AAAAI through the work of the International Assembly recognises the currency disparities in certain countries and now offers electronic membership at very reduced rates. This membership is comprehensive but excludes subscription to the journal (JACI). Membership in different categories is available to doctors with specialist training, doctors with a recognised interest, scientists and allied health workers.*

*The author can be contacted for further details.*