Welcome to the XXVI EAACI Congress in Göteborg Sweden  
“Prevention and Treatment of Allergy and Asthma”

Celebrating  
40 years of IgE

News from EAACI Interest Groups and Sections

The Speciality of Allergology

and more...
WE ARE SOON AT THE HIGHLIGHT OF 2007
– the EAACI Congress in Göteborg!
“Prevention and Treatment of Allergy and Asthma” lies close to our hearts, speaking both for clinicians and researchers. The Göteborg Congress has a special focus on the exploration of asthma as an allergic disease along with the basic mechanisms, clinical care and consequences on health economics and the overall quality of life. The event will give you the chance not only to meet with clinicians and scientists outstanding in the field, but also to hear the latest news from innovative pharmaceutical companies in constant search for solutions for the challenging allergic diseases, and finally to meet your friends and colleagues.

In this issue, you will read about the EAACI Sections and Interest Groups and their various activities. Please join these groups during the Congress and support them with your specific experience and knowledge! You can take part in the contribution of guidelines and position papers, helping the standardisation of the diagnosis and treatment of patients on the highest possible evidence-based level. The Sections and the Interest Groups translate the latest research results and clinics into your daily practice. They are all involved in the organisation of educational meetings outside the yearly congress, of which you can find reports in this issue.

It is our aim to always offer you interesting state-of-the-art summaries, such as functional genomics, urticaria or aerobiology. Another topic of interest is the future development of the specialty of allergology. I hope you enjoy this issue of the EAACI Newsletter, and I look forward to meeting you in Göteborg. I wish you an educationally and socially rewarding time at the EAACI 2007 Congress!

Claus Bachert
Editor
Floreat Academia!

In this, my last message to you as EAACI president, I would like to reflect a little on where we have come from, before looking to the future. I became interested in European affairs back in the early 1970s, when I worked as a hospital porter in Hamburg, before starting my medical studies. This was at the time of the oil crisis and the Yom Kippur war in the Middle East, and I still remember how gloomy everyone was about the prospects for the future of Europe. But for me this started a lifelong interest in Europe, and in the redevelo- pment of its central and eastern regions. My involve- ment in EAACI started later, in 1989, just after I visited Berlin with my family for an immunology meeting.

Within a few months, the Berlin Wall would fall and a new era would begin, but at the time it was not at all obvious that things were about to change so dramatically. At that year’s EAACI meeting I was appointed as secretary to the subcommittee on skin test and allergen standardisation, and we started on the process of revising the EAACI posi- tion papers. In 1995 I joined the executive committee, and shortly afterwards I was asked to consider becoming the next secretary-general to succeed Sergio Bonini. Under the leadership of Gun- nar Johansson we set about creating new structures in the academy, including the sections, interest groups and task forces that we still have today. We developed a system of individual membership and started to plan to hold annual congresses, instead of the old system of three-yearly con- gresses with small meetings in between. Little did we realise how things would take off and grow! The introduction of the junior member scheme was an inspired decision, and linked directly to the various summer schools, winter schools and allergy schools that we have run over the past nine years. I have been to many of these, and I remember with particular affection our trip to Bialystok, when we travelled by ferry from Rostock to Helsinki, and then through the Baltic states from Tallinn to Poland by car – a journey that would have been completely impossible ten years previously. A high point was when we all travelled out into the forests to see the wild bison before din- ing al fresco. My children still remember grilling sausages on long sticks on an open fire in the woods. Other summer and winter schools have been marked by a combination of scientific collegiality and a sense of an academic fam- ily. Walking trips in Madeira and skiing in Davos were combined with evenings spent reviewing data and discuss- ing how to make the most of people’s presentations.

As I have moved into my last couple of years in the execu- tive committee, my thoughts have turned towards the future. Our congresses go from strength to strength - we had a splendid congress in Vienna, and I am looking forward to an excellent meet- ing in Göteborg. Attendance is from all around the world and we have an ever-increasing number of abstracts submit- ted to the meeting. This presents us with both oppor- tunities and challenges. More and more Europe is being seen as an open place where you can bring your work and get it seen. We particularly welcome the increased interest in our meetings from doctors and scientists in the Middle East and North Africa, and we will be exploring how to involve them more in EAACI. The increasing prosperity in the eastern and south-eastern parts of Europe has increased both our membership and attendance at congresses, and with this increased inter- est, we need to respond by making sure that everyone who comes to our congresses with an abstract gets a good opportunity for discussion of their work. Changes to the rules governing pharma- ceutical companies will alter the profile of those attend- ing the congress, and should encourage us to develop new programmes for continuing medical education.

In order to serve the new academy and to rise to the challenges of the next few years, we have made some significant changes to the internal organisation of EAACI. We have divided up the responsibilities of the old group of officers and have established a new executive group that will have seven members who will deal with the implementation of policy. This new group (the board of officers) will be accountable to the executive committee, which will serve in much the same way as the board of a public company. It may be that we will need to re- examine the composition of this committee to make sure that it adequately represents the interests of all the various regions within Europe, as well as the clinical and scientific elements that are involved in allergy and clinical immunol- ogy. But that will be for my successors to consider. I have done my bit to move the academy forward. I leave it in good shape, with an excel- lent team of leaders to drive it forward to further success. It has been a great pleasure, and a privilege, to be your president during this exciting period. There will be a small twinge of regret when it is all over, but after nine years as an EAACI officer it is time for me to move on and let other people carry the torch. So in my valedictory message, I would like to thank you for allowing me to be your president for the past two years, and I wish EAACI and all its members every success for the coming years. Floreat academia!

Tony Frew
Celebrating 40 years of IgE

In 1967 a new immunoglobulin class carrying the classical reaginic activity became known. Based on data on the unique physico-chemical structure IgND and unique antigenic determinants of IgND and E, the WHO Immunoglobulin Reference Centre the following year officially announced the fifth, and last, immunoglobulin, IgE.

The discovery of IgE has had significant impact on our understanding of allergy. The immunological mechanisms behind the allergic inflammation responsible for the symptoms of allergy in different organs can now be characterized and analyzed as a part of the clinical diagnosis and follow-up. Classical serological approaches, like those of bacteriology and virology, can be applied. Detecting and quantifying the responsible IgE antibody is now an important routine for diagnosis, monitoring and judgement of the prognosis of disease as well as therapy evaluation.

When commercially available allergen extracts were tested for allergen concentration in an IgE antibody system, it became obvious that characterization like the amount of raw material used for extraction, weight per volume or w/v, or extract nitrogen concentration, PNU/ml, did not correlate well with the allergen content. Variations in allergen concentration of such extracts in the order of 100 to 1000 fold have been published. Potency standardized extracts are now routinely used, although some countries still lag behind.

The next step is to also characterize and standardize the allergen composition of the extract. What was once thought to be a homogenous preparation, e.g. extracts of timothy grass pollen, house dust mite D. pteronyssinus or latex, has now been shown to be a mixture of 10-30 different, non-cross reacting allergenic proteins. Some of these might be similar between species like pollens, fruits and latex, and IgE-sensitization to those are clinically important to recognize.

Hyposensitization, or allergen specific immunotherapy, ASIT, as we prefer to call it now, was introduced some 100 years ago based on an incorrect understanding. ASIT does not prevent an immunologic sensitization, like vaccination with viral antigens, but neutralizes the IgE antibody in vivo by stimulating protective immune reactions such as allergen specific IgG4 antibodies and Th1-related lymphocytes. Although ASIT is still used in old-fashioned way in some countries (injection of mixtures of non-standardized allergen extracts selected on the basis of clinically irrelevant in-vivo tests like intradermal skin testing, which has been reported to give up to 70% false positives), new approaches are in the pipeline. Thus, ASIT using immunopotent but non-allergenic preparations of recombinant allergens is an interesting development currently undergoing testing.

Or why not treat the IgE-mediated allergy with an antibody to IgE? By radically reducing circulating IgE, you also down-regulate the number of IgE-receptors on the basophilis and mast cells and thus reduce or even eliminate any IgE-mediated allergy disregarding what allergen is causing the symptoms. This treatment is today available only for severe, persistent allergic asthma. More data is needed on the selection of treatment responders and therapy monitoring before it can be more generally applied.

As our knowledge about allergy increased and more clinicians became involved it became obvious that during the past decades different countries and different clinical specialties have used different terms to describe the same phenomenon. A global revision of allergy nomenclature was, not painlessly, performed and published by EAACI and WAO. The new nomenclature is based on the principle of an umbrella term describing the clinical disease, e.g. asthma, and subgroups are then defined based on what is known of the mechanism behind the disease. Thus, allergic asthma is the subgroup initiated by immunological inflammation, mostly IgE-mediated, and non-allergic asthma the one due to other mechanisms, e.g. aspirin hypersensitivity.

The new nomenclature has been positively accepted, possibly with one exception, the area of allergic reactions in the skin. Some allergists and dermatologists still use the mid 20th century term atopic dermatitis and thus ignore many studies showing the clinical and prospective importance of differentiating patients as being of the atopic constitution or not. Only children with an atopic eczema have an increased risk of developing allergic asthma. When people are using the term atopic dermatitis, they hopefully know if they are referring to “atopic dermatitis”, “non-atopic atopic dermatitis” or both. My suggestion is to use the terms eczema and atopic eczema until we have better alternatives.

In conclusion, IgE has provided the possibility to quantify the IgE-sensitization mediating the allergic inflammation for diagnosis and follow-up, to characterize and standardize allergen preparations, to be the basis for immunomodulating treatments and to increase our understanding of allergy and to help us communicate with colleagues, patients, authorities and the press. These improvements are important since we have to tackle the problems of an increasing prevalence of allergy. Please join the IgE bandwagon for future glory.

S.G.O. Johansson
Department of Medicine, Clinical Immunology and Allergy Unit, Karolinska Institute and Department of Clinical Immunology and Transfusion Medicine, Karolinska University Hospital, Stockholm, Sweden
GlaxoSmithKline has a long history of developing innovative products for allergic rhinitis, asthma, and chronic obstructive pulmonary disease (COPD). The company first marketed Ventolin in the 1960s, Becosane & Becotide in the 1970s, Flonase, Flutotide, Serentiv & Seretide/Xiani and innovative devices such as the Accuhaler/Diskus in the 1990s. The latest in this long line of GSK products is the enhanced-affinity topical glucocorticoid fluticasone furoate. Information about it is presented for the first time at the EAACI Congress 2007 in Göteborg.

AR has a significant impact on the lives of patients. This includes fatigue and daytime somnolence,1 daily activity impairment,2 reduced work productivity,3 disturbed cognitive function, reduced learning abilities,4 and adverse effects on adolescent behaviour. Recently, Dr Walker and colleagues reported that patients with AR had one grade lower results in examinations taken during the UK grass pollen season compared with students without rhinitis.5

Despite the availability of current treatments, patients continue to suffer from the symptoms of AR and are not able to control the symptoms for 24 hours.6 It is possible that optimal control of the symptoms of AR is not achieved because doctors underestimate the impact that AR has on patients. For example, the prevalence of ocular symptoms is often underestimated by physicians.7 It is vital to ensure improved communication between physicians and patients and hence improved control of rhinitis symptoms.8 The implications of such as the Asthma Control Test9,10 could play an important part in the treatment of rhinitis.

Revolutionary steps have been taken in the history of the development of allergy treatments. For example, the introduction of the first antihistamine, the first intranasal steroid, and the first immunotherapy had significant impact on the treatment of AR. There have also been important evolutionary steps. These include the introduction of non-sedating anti-histamines to overcome many of the adverse events experienced with previous antihistamines, the enhanced-affinity glucocorticoid with effects on ocular as well as nasal symptoms, and sublingual immunotherapy, which may improve safety and patient acceptability compared with subcutaneous immunotherapy.

There is increased understanding of the mechanisms involved in the allergic response. It may be possible to aid patient responses to immunotherapy by using novel adjuvants such as Th1 deviating agents, for example bacterial cell wall lipopolysaccharides derivatives (monophosphoryl lipid A11) and bacterial DNA CpG-containing oligonucleotides12. The use of short fragments of allergen peptides13 may reduce the risk of anaphylaxis, and recombinant allergens could well permit increased production of allergens with more consensual composition14.

It was an exciting time to be involved in the field of allergy. The next decade could involve ground-breaking treatment to help patients suffering from allergies to improve the quality of their lives. This new data is due to be discussed for the first time at the upcoming EAACI meetings. The EAACI 2007 symposium sponsored by GlaxoSmithKline (Sunday 10 June, 10:30-12:00 hours) features new data on fluticasone furoate, the enhanced-affinity glucocorticoid. Demonstrations will attest to its efficacy against both the nasal and ocular symptoms of rhinitis15.16. All interested are cordially invited to experience its ergonomically designed delivery system. We very much look forward to seeing you there.

Novartis – Continuing its Support for EAACI

Founder-sponsor Novartis is delighted to continue its support for EAACI and to partner EAACI at this year’s annual conference. We look forward to the participation of our EAACI members in the convention.

This year, 2007, marks the 40th anniversary of the discovery of IgE. The highly relevant plenary symposium celebrating this landmark discovery, "IgE: 40 years" is scheduled for Monday 11th June, 2007, at 8.30-10.00 hours at TBC, and is sponsored by Novartis through an unrestricted educational grant. It is chaired by Gunnar Johansson, EAACI Past President, and one of the scientists who discovered IgE. The symposium will comprise three main talks: "Structure and function of IgE", "IgE and cell signalling", and "Clinical aspects of IgE".

Novartis is also pleased to support the Immune Tolerance World Allergy Forum for invited members of the World Allergy Organisation. It takes place in Room K2-K3 on Tuesday 12th June at 8.30-10.00 hours, and is chaired by Michael Kaliner and Tony Few. This event will also comprise three talks: "Concepts of tolerance induction", "AR modulation of IgE-related diseases in children" and "Can omalizumab synergise immunotherapy?".

Many scientific posters and oral presentations relating to omalizumab, the anti-IgE antibody indicated for the treatment of severe allergic IgE-mediated asthma, are to be presented, including:

• The results of a study examining the treatment effectiveness of omalizumab in patients with co-existing seasonal allergic asthma and seasonal allergic rhinoconjunctivitis will be presented by I. Kopp and colleagues;
• G. Hanf and colleagues will present data showing that omalizumab decreases histamine release and the allergen threshold sensitivity of basophils; and
• O. Noga and colleagues provide evidence of whether or not airway resistance is a useful parameter for monitoring the efficacy of omalizumab treatment in patients with allergic asthma.

You are most welcome to visit the new Novartis booth, located in the exhibition hall. Make sure to schedule the time to find out more information about omalizumab, our enhanced-affinity glucocorticoid. You will have the opportunity to talk to the Novartis representatives.

We wish EAACI every success with the congress and look forward to meeting up with as many members as possible in Göteborg – at what we hope will be a memorable conference.

References
20. Lenny et al. JACI Vol 119: 1: Jan 2007; S235 abstract 902
23. Forth et al. JACI Vol 119: 1: Jan 2007; S231 abstract 908
25. Bennett et al. JACI Vol 119: 1: Jan 2007; S231 abstract 911

About Novartis

Novartis AG is a world leader in the provision of medicines that protect health, cure disease, and improve well-being. Our goal is to discover, develop, and bring innovative products to treat patients, ease their suffering, and enhance their quality of life. Our medicine-based portfolio is focused on strategic growth platforms in innovation-driven pharmaceuticals, high-quality and low-cost generics, human vaccines, and leading self-medication over-the-counter brands. Novartis is the only pharmaceutical company that commands leadership positions in these areas. The Novartis Group, headquartered in Basel, Switzerland, employs approximately 101,000 associates and operates in more than 140 countries. For more information, please take the time to visit www.novartis.com.
Nitric oxide is a colourless, odourless gas. One of its functions involves performing as a final mediator of inflammation. The measurement of nitric oxide in the airways has become possible by using chemiluminescence and electrochemical sensor technology. This article describes the applications of such measurements.

Exhaled NO is clinically useful
NO exhaled from the lungs usually measures at a low level of <20ppb unless some form of inflammation is present in that area. Studies have shown that patients with eosinophilic asthma have higher exhaled NO levels than normal. Their levels are also much higher than for other patients with asthma\(^1\,2\). Since allergic rhinitis is a major risk factor for asthma\(^3\,4\) and a third or more rhinitis sufferers also has asthma, the ARIA\(^5\) (Allergic Rhinitis and its Impact on Asthma) document recommends that the lower airways of patients with rhinitis are regularly assessed. Measuring exhaled NO takes only a few minutes in the clinic.

Exhaled NO in diagnosis
Using measurements of exhaled NO in diagnosis derives its advantage from the high sensitivity and specificity of the measurements. Malmberg et al\(^7\) used 10ppb as a cut-off point, giving sensitivity and specificity of 86% and 92%, respectively, in order to diagnose asthma correctly in children. Smith et al\(^8\) showed that using measurements of exhaled NO had a higher degree of diagnostic accuracy than lung function tests with a sensitivity of 88% at 20ppb in adults for correct asthma diagnosis. Most importantly, from a clinical perspective, measuring exhaled NO, in comparison to bronchial provocation and sputum collection, is a non-invasive process that is quick and easy to perform.

Measuring exhaled NO also aids in diagnosing the cause of chronic cough. Accurately diagnosing patients with chronic cough is essential if the underlying disease is to be treated correctly. In more than 90% of cases, symptoms are a result of rhinosinusitis (see paragraph headed Nasal NO), smoking, postnasal drip, gastroesophageal reflux disease, asthma, or chronic obstructive pulmonary disease. Using 30ppb (45 ml/s) as the cut-off point for exhaled NO gives sensitivity and specificity of 75% and 87%, respectively, for a correct asthma diagnosis\(^9\).

Exhaled NO in management
The advantages of using the measurements of exhaled NO in management are numerous. The primary advantage is being able to establish a patient’s inflammatory status. High measurements of exhaled NO are a manifestation of lack of inflammatory control, which theoretically could lead to airway remodelling. If the exhaled NO value increases, the patient is at risk of an exacerbation and augmented treatment could be required. Normal levels of exhaled NO indicate
Nasal NO

Defining levels of nasal NO is more complex, as these derive not only from the nasal lining in response to inflammatory stimuli, but also from the para-nasal sinuses, where high levels of nitric oxide (20-25ppm) are produced constantly. Nitric oxide is toxic to bacteria, viruses, fungi, and tumour cells and most likely forms a major defence mechanism in the respiratory tract.

Levels of nasal NO can also be measured by chemiluminescence, for which guidelines have been published18. Levels are typically higher in cases of uncomplicated allergic rhinitis, but decrease higher in cases of uncomplicated chronic rhinosinusitis by medical or oedema complex is decreased by polyps sinus patency at the ostiomeatal

Defining levels of nasal NO is higher the dose needed to normalize this.

Exhaled NO (ppb)     Nasal NO (ppb)
Adults Eosinophils Children Adults/Children Clinical Relevance
5-25 Normal — 5-20 Normal <100 Very low Consider PCD
25-50 Intermediate Present Mild 20-35 Intermediate <45 Low Possible sinus obstruction
>50 High Significant >35 High 450-900 Normal range Nasal disease may still be present
650-900 Nasal inflammation Sinuses most likely patent

17. ATS/ERS. Am J Respir Crit Care Med. 2005 Apr 171(8):912-30

References

EAACI 2007 symposium

A symposium entitled “Inflammometry – an easy, non-invasive guide to allergic asthma management” will be held on 10th June, 2007 at 17:30-19:00 hours to provide more information about exhaled nitric oxide. The moderators are Professor Jan Lötvall and Associate Professor Anna Carin Olin. The speakers and their topics are Professor Kjell Alving on “Exhaled NO a marker of atopy or inflammation?”, Professor Lieven Dupont on “Technical aspects of exhaled NO measurements”; Dr Andrew Smith on “Clinical applications in adults”; and Professor Chris Sorkness on “Clinical applications in children”.

Glenis Scadding

Clinical application

As measuring NO becomes a routine feature of asthma detection and management, it will be advantageous to refer to a guide on how to interpret the values in a clinical setting. Table 1 shows values for exhaled NO as described by Taylor et al12 (flow rate: 50 ml/s) and nasal NO based on those used in my department (Dept. of Allergy & Rhinology, Royal National Throat Nose & Ear Hospital, London, UK) using a Logan Sinclair analyser (flow rate: 250 ml/s). Table 1. Exhaled nitric oxide is an important endogenous inflammatory marker used more routinely within the clinical setting. Historically, exhaled NO has been used primarily by pulmonologists. However, with the advent of the new hand-held exhaled NO device NIOX MINO®, more specialists, including paediatricians and allergists, and oto/rhinologists, have the opportunity to utilise this quick, non-invasive, and easily used technique to gauge levels of lower airway inflammation. Nasal NO measurements are also of value to these clinicians, although these are not yet as established in diagnosis as measurements of exhaled NO. Since the upper (nose and sinuses) and lower airways integrate both structure and function, measuring levels of NO at both sites is advisable.

EAACI 2007 newsletter
Ambitious tasks and new members
The new ideas and activities triggered at the EAACI meeting in Vienna have fuelled the work of the Interest Group on Allergy Diagnosis (IGAD). Many experts from research laboratories, industry, and allergy clinics contributed to the IGAD business meeting in 2006 (www.eaaci.net/site/content.php?artid=1071). The most important change for IGAD is its broader scope. It will supervise laboratory diagnostics including serological and functional in vitro assays, such as IgE detection and functional ex vivo tests involving basophils and other cellular components, as well as all aspects of in vivo diagnosis, namely, skin tests and challenge tests.

EAACI website improves communication
The IG intends to establish a dynamic platform for all scientists and clinicians that design, investigate, and apply diagnostic in vitro and in vivo allergy tests. This will cover research, regulatory and clinical issues, the promotion of the exchange of scientific knowledge, independent information and standards for clinicians, as well as discussion on unresolved issues. To keep the IGAD EAACI website active and alive, the members in charge welcome all creative input and ideas from other EAACI members.

Carving position statements for EAACI
In collaboration with the Interest Group on Food Allergy, an EAACI position statement on the utility of IgG4 for diagnostic purposes has been drafted by Steven Stapel, Amsterdam, the Netherlands. The text, titled "Testing for IgG(4) against Foods is not Recommended as a Diagnostic Tool", is currently under review by the ExCom of the EAACI and awaiting approval. The document highlights controversial aspects in the field, provides background information, and gives suggestions on managing these issues.

New congress on molecular allergology supported by EAACI
After the success of the meeting in Rome in 2006, IGAD was given scientific and financial support by EAACI for the 2nd International Symposium on Molecular Allergology (ISMA 07). The cross-specialty interest in the topic resulted in the creation of a scientific committee with the co-operation of EAACI Sections and IGs to suggest topics and speakers. Adriano Mari and his team from the Centre of Clinical and Experimental Allergology, imbedded in the IDI-IRCCS in Rome, provided excellent organisation and support. The 2nd ISMA was also sponsored by the Italian Society of Allergology and Clinical Immunology, and supported by Allergy Data Focus on allergy Diagnosis – EAACI Interest Group Targets New Horizons

Chairing couple in control: Breiteneder & Russo.

Jörg Kleine-Tebbe: "Molecular allergology combines basic and clinical research".
Laboratories, a non-profit organisation managing the web-based Allergome platform (www.allergome.org). Generous support was received from companies in the fields of both diagnostic and therapeutic allergy: ALK-Abelló, Allergopharma, Anallergo, GlaxoSmithKline, HAL, Indoor Biotechnologies, Novartis, Phadia, Schering-Plough, Siemens, Stallergenes, UCB, and VBC-Genomics.

Molecular allergology 2007: Hot topics and intense discussion
Almost 300 participants from all over the world joined the 2nd ISMA 2007 in Rome from 22nd-24th April. Invited experts, including EAACI President Professor Anthony Frew and Secretary-General Professor Jan Lötvall, gave presentations and chaired the sessions (www.allergome.org/meetings/rome2007/ScientificProgram.html). Each session included one main lecture on immune mechanisms and allergic diseases, three talks on molecular allergology, and one oral presentation selected from 76 submitted abstracts for poster presentation, which were discussed during a vibrant 90-minute poster session. Christian Radauer, Vienna, Austria (1st Prize), Kristzina Szalai, Vienna, Austria (shared 2nd Prize), and Laurian Zuidmeer, Amsterdam, the Netherlands (shared 2nd Prize) received awards for their excellent work.

ISMA 07: Great success paves way for future projects
Nonparallel sessions prompted basic researchers and clinicians to share perspectives in discussing the topics. Hardcore molecular biology, biochemistry and structural biology, backed up by genomics and proteomics, provided new information, effectively bundled by appropriate bioinformatic strategies and displayed in novel databases (AllFam: www.meduniwien.ac.at/allergens/allfam/AllergenOnline: allergenonline.com/). Clinical issues involving allergen exposure, allergic sensitisations, and the evolution of allergic diseases in the context of molecular allergology were discussed, in addition to novel therapeutic approaches based on allergenic molecules.

Overall, this second meeting on molecular allergology was a great success. The almost summery weather and the attractions of Rome did not stop participants from following the entire programme with great interest, discussing science, making new friends, and interacting with colleagues and peers. Now is the time to think ahead – the third meeting is already in the planning stages for 2008. Interested members are invited to join this new field. A significant amount of research remains to be done by basic scientists as well as clinicians. Success will depend on improved sharing of information and knowledge.

The OAIG endorses the STADCA project from the Institut der Ruhr-Universität Bochum for aimed at standardization of occupational type 1-allergy and the Task Force on “Prevention of occupational asthma” which has been proposed to the ERS. Within the OAIG, several groups are currently working on hot topics of occupational allergy, e.g. latex allergy, baker’s asthma, isocyanate-induced asthma, enzyme allergy and hairdressers’ asthma. Details can be found in the EAACI website.

During the past EAACI Congresses, the OAIG has organised major and minor symposia and developed workshops on Occupational Allergy. The following sessions have been accepted in the Scientific Programme of the EAACI 2007 Congress to be held in Goteborg: a Postgraduate course on Assessment of Occupational Allergy (Saturday, June 9), an Oral Abstract Session on New Agents for Allergic Occupational Respiratory Diseases (Monday, June 11), a Symposium on New Developments in Occupational Allergy (Tuesday, June 12).

Future initiatives of the OAIG include the collection of data about the organisation of occupational services in Europe and an epidemiological survey on occupational rhinitis.

Gianna Moscato,
M.D., Secretary of the IG on Occupational Allergy
One of the EAACI Immunology Section’s main responsibilities is to try to improve communication between the areas of basic immunology and the many allergy disciplines. The section strongly supports the training of young scientists and physicians in basic immunology and the dissemination of the most current data regarding progress made in immunological research.

In line with these goals, the section has organised a series of meetings, initiated in Davos, Switzerland, which are supported by GA²LEN — hence called EAACI-GA²LEN Davos meetings. The 5th EAACI-GA²LEN Davos Meeting featuring the theme “Basic Immunology Research in Allergy and Asthma” took place at the Sunstar Hotel in Davos in February 2007. It focussed on the education and interaction of junior researchers with well-known experts in the fields of allergy and immunology. A total 76 doctoral and postdoctoral scientists from 15 countries attended the meeting, organised by the EAACI Immunology Section, the EAACI Asthma Section, and the Swiss Institute of Allergy and Asthma Research (SIAF).

The conference comprised five main symposia on innate immunity, adaptive immunity, and regulation in allergic inflammation and asthma. Each symposium was opened by a keynote lecture given by notable scientists, followed by presentations by participants as selected from their abstracts. The keynote speakers in 2007 included: Fred Finkelman, Cincinnati, U.S.; Tsuneyasu Kaisho, Kanagawa, Japan; Barry Kay, London, UK; Kenneth Murphy, St. Louis, U.S.; Marsha Wills-Karp, Cincinnati, U.S.; and Federica Gallusso, Bellinzona, Switzerland. As in previous years, the selection of participants was based on the scientific quality of their submitted abstracts.

The stimulating atmosphere at the convention resulted in productive debate and discussions between young scientists and members of the faculty as well as scientists with excellent international reputations. After the morning sessions, participants enjoyed the beautiful weather and winter sports. After the evening lectures and excellent dinners, the younger participants had enough time and enthusiasm to discuss their data with keynote speakers and faculty members during the poster sessions. The goal of the meeting, namely to create an engaging scientific environment in which allergy- and asthma-related immunological concepts could be discussed by both younger and established scientists, was successfully achieved.

Keynote lectures have been webcasted by EAACI web administrators for access on the EAACI website. The meeting ended with excellent news from Anthony Frew, President of EAACI, who announced that EAACI and GA²LEN will continue to support the Davos meetings. The EAACI Immunology Section invites all young scientists to join the 6th EAACI-GA²LEN Davos Meeting from 31st January to 3rd February 2008, which will take place in beautiful Pichl/Schladming in the Austrian Alps.

The Immunology Section has been involved in organising several other meetings, including the first World Immune Regulatory Meeting (WIRM) in Davos on 11-15th April, 2007, bringing together distinguished experts from all over the world in Switzerland, and the 2nd International Symposium on Molecular Allergology in Rome on 22nd-24th April, 2007. For the EAACI meeting in Göteborg, the EAACI Immunology Section plans a postgraduate course themed “How to Evaluate Basic Mechanisms of Immune Responses” on 9th June, 2007. This hands-on course will help participants to directly learn and be involved in specific laboratory techniques such as FACS analysis, cell sorting, RNA isolation and analysis, multiplex immunoassays, protein interaction arrays, and gene knock-in, knock-out, and knock-down animals.

Finally, on 26-29th September, 2007, a joint meeting with the Immunology Section of the German Society of Allergy and Clinical Immunology (DGAKI) takes place in Lübeck, Germany.

As you can tell from this report, the activities of the Immunology Section are strenuous, fun, and also mean a lot of extra work. If you share our vision about the future of immunology and are interested in getting involved with our work, do come and join our section. You can meet us at the annual business meeting, which will be held during the annual meeting in Göteborg. The details of the time and location will be given in the final programme.

Thilo Jakob
Barbara Boble
Mübecel Akdis
Eckard Hamelmann
Hans-Uwe Simon
Marianne von Hage
Macin Kurousky

EAACI Immunology Section Activities
Multicentre Study by Drug Hypersensitivity IG – New Insights in Contrast Media Hypersensitivity

The working group of the Drug Hypersensitivity Interest Group (IG), still formally known as ENDA, constitutes a group of experts on drug allergy that aims to broaden the understanding of the complex issue of drug allergy. The IG has produced protocols to collect clinical data and how to perform allergologic tests2, 3 that can be used in working with drug allergy.

The IG organised a taskforce on radio contrast media (RCM) hypersensitivity involving ENDA members that have contributed substantially to research in this field in recent years. A review of the current available data on RCM hypersensitivity was also published4. A research agenda was composed following the review of the current management of RCM hypersensitivity, when it became clear that many questions remained unanswered. The available literature confirmed that no single centre would be able to answer open questions, since the number of patients at each centre was insufficient to ensure the production of valid results.

The taskforce initiated the first, large, multicentre study on cow milk (CM) hypersensitivity. It aimed to create a standardised skin test protocol and to investigate the frequency of positive reactions in CM hypersensitivity. The evaluation would determine the efficacy of skin testing in the diagnosis of this disorder. The large group of patients taking part in the investigation would also help determine the positive and negative predictive values of skin testing.

The taskforce worked steadily to determine the varying approaches to performing skin tests observed at many centres, and held a practical session to ensure that the same skin test practice was carried out at every centre. The drug hypersensitivity questionnaire was edited to become a RCM hypersensitivity questionnaire containing all relevant data, and a data sheet was constructed for data collation. All the group members input the history and the test results on documents that were collected and analysed by the secretary of the RCM taskforce, Cath Christiansen.

The taskforce efforts have resulted in success after 18 months of data collection. More than 200 patients with typical features of RCM hypersensitivity have been tested by the members of the group, producing similar results from different centres. In results still to be published, it was surprising that more patients with immediate reactions and fewer patients with non-immediate reactions to RCM showed positive skin tests. Skin test procedures and concentrations proved to be reasonable, demonstrated by a lack of irritative reactions in more than 40 controls and positive reactions in many patients. It would appear that the timing of allergologic testing after the reaction is crucial for the outcome of the skin test.

The results of the first part of the RCM multicentre hypersensitivity study will be published in the near future. The study continues with analysis of patients in laboratory and genetic tests. The validity of skin tests will be evaluated by provocation tests for non-immediate reactions and pre-medication protocols will be investigated.

The multicentre study on CM hypersensitivity is an encouraging example of the professional responses to challenges in this field that result from teamwork by members of the Drug Hypersensitivity IG. Although this work requires hard work and enthusiasm, it may be the only way to gain a profound shared understanding of the complex field of drug allergy and bridge the discrete categorisations determined by different test procedures, interpretations, and assumptions.

Knut Brockow

References
1. Demoly et al. Allergy 1999; 54:999
2. Brockow et al. Allergy 2002; 57:40-51
The Specialty of Allergology

Doctor Luis Delgado, from the University of Porto in Portugal, opened the session with an historical account of all the scientists that have made contributions to the development of allergology as a distinct research field. Richet and Portier were the first to introduce the concept of anaphylaxis in 1902, Dunbar demonstrated skin and end organ sensitivity to pollen extracts one year later. Piquet defined the term allergy a little over a century ago in 1906, Noon developed a subcutaneous vaccine with pollen extract for hay fever, while Prausnitz and Kunstner described a factor capable of transferring allergen skin sensitivity to another non-allergic individual (IgE). Van Leeuven described allergy to mould spores, Johansson and Bennich described IgE and the methods to measure it, Bovet discovered antihistamines, Altonyan discovered cromolyn sodium and developed dry powder inhalers, Samuelsson characterized leukotrienes, and Cookson discovered the first genetic region linked to atopy in 1989.

Delgado also traced the evolution of allergology as a specialty in Europe since 1956, the founding year of EAACI. To date, a total 40 national societies and approximately 3,000 scientists are involved in work with allergy throughout Europe. The need for allergists continues to grow, as allergy has acquired the form of an epidemic. Indeed, one in three children in Europe is allergic. By the year 2015, one in every two Europeans is predicted to present with an allergy. The annual cost of childhood asthma in European Union countries exceeds €3,000 million.

Of the total 22 European countries surveyed by questionnaire, eight constitute allergology as a full specialty, five categorise it as a subspecialty, and three classify it as either a specialty or a subspecialty. The duration required for a full specialty is five or six years, and two to three years for a subspecialty. However, most allergic patients are seen by practitioners with other specialties. In terms of the number of specialists in allergology, 4,233 trained specialists (2,276 trained in allergology only and 1,957 trained in a shared subspecialty) were accredited in 17 European countries. The U.S. reported similar levels of specialty, with a total 4,245 allergist-immunologists in practice. Delgado pointed out that the low ratios of allergologists to served population even in fully developed regions underlines continuing deficiencies in allergy care in several European countries.

Professor del Giacco spoke about the curriculum of the specialty of allergology. He stressed that the latter is a clinical specialty, requiring distinct knowledge of basic immunology, training in internal medicine and/or paediatrics, as well as experience in other disciplines such as dermatology, ENT, pneumology, and immunology lab. Since training in allergology for both medical and postgraduate students remains quite diverse in Europe, there is a need for a unified curriculum. Moreover, very few departments are dedicated to allergology or allergology and clinical immunology. Generally, units of allergology form part of other divisions dedicated to lung, skin or ENT, paediatrics or internal medicine. Clinical immunology units are generally related to internal medicine, rheumatology, or laboratory. The professor detailed the requirements that each level of theoretical and practical knowledge should offer trainees.

Professor Photini Saxoni-Papageorgiou, from the University of Athens in Greece, continued the session with a talk about the needs of the patient and the healthcare system. The professor pointed out that allergic diseases are chronic recurrent disorders, which may incur permanent damage to the organs afflicted, and are often accompanied by acute life-threatening events. Although allergic diseases are not usually curable, they are manageable to the point of normal or almost normal quality of life if time is allocated for adequate education and guidance. However, a number of barriers result in a failure to cover the needs of the...
Urticaria

The main symposium on urticaria, organised by the EAACI Dermatology Section and held at the EAACI 2006 Congress in Vienna, was very well attended with clinicians representing 90% of the participating audience.

The first speaker, Professor Peter Valent from Austria, gave a talk on mast cells in health and disease. He started with an overview of the history of mast cell study and mentioned several scientists from the 19th century to the present time, placing significant emphasis on the work done by Paul Erlich. Valent analysed the complicated process of mast cell differentiation and the impact of various co-factors on mast cell maturation in bone marrow, vessels, and tissues. Since mast cell morphology is of great educational importance, the professor presented detailed criteria (morphological, ultrastructure-based, biochemical, histochemical, immunophenotypic, and functional) for identifying cells as mast cells. In addition, he presented several smear examples of atypical mast cells – Type I in mastocytosis, atypical mast cells – Type II (promastocytes), and metaphasic blasts.

Valent analysed mast cell markers detected in tissue sections by immunohistochemistry and on the cellular surface detected by flow cytometry. He focussed on the role of different mast cell-derived repair molecules, including tryptase and chymase, in biological processes including thrombosis, fibrinolysis, and angiogenesis. The survival molecules (KIT, pSTAT3, BCL2, MCL1, HSP32, and others) of mast cells were also discussed, as mast cells can survive for years, even after degranulation, in contrast to basophil granulocytes. The professor also gave examples of the downregulation of MCL1 by antisense oligonucleotides in order to decrease the viability of neoplastic mast cells. Finally, he showed the clinical concept of mast cell targeting in diseases such as mastocytosis, allergy, auto-immune diseases, and thrombo-embolic disease.

Professor Torsten Zuberbier from Germany presented details of the prevalence of adverse reactions to nutrients from the epidemiological study (PANE) performed in Berlin from 1999 to 2000. Questionnaires were supplied to a total 13,300 people, which supplied a response rate of 4,093. This study showed that the cumulative prevalence of urticaria was 8.8%, compared to studies in Germany of 7.8%; in Norway of 9%; and in the U.S. of 13.7%. In addition, the professor presented details of another study from his department on cholinergic urticaria, giving an overall prevalence of 11%. This study showed a high number of patients (89%) with cholinergic urticaria presenting with mild to moderate symptoms, whereas only around 15% of patients with cholinergic urticaria requested medical help. Overall, Zuberbier concluded that urticaria is frequent, that mild cases are usually underdiagnosed, and that proper treatment is prescribed only by specialists.

Professor Clive Grattan gave an overview of the common and rare clinical pictures of urticaria. He presented ordinary and physical urticaria and stated its features and frequency. The most striking part of his talk was his account of auto-inflammatory syndromes. The professor outlined the classification of these diseases and presented the largest sera of patients with Muckle-Wells Syndrome, giving unique data on genetic abnormalities, clinical features, and some promising new therapeutic approaches such as Anakinra – cytokine (IL-1) antagonist. These data resulted in huge interest and a lively discussion with the audience.

The treatment of urticaria was covered by Professor Carsten Bindslev-Jensen, who presented the latest treatment strategies. He outlined the most important points of the recent consensus on urticaria treatment (see also Zuberbier T et al, Allergy 2006). In addition, the professor showed the results of a microdialysis study in cold urticaria, a rare form of urticaria that is difficult to treat as its mechanism has yet to be clarified. In the study presented, the skin levels of histamine were analysed prior to and following cold desensitisation, showing a normal histamine response to codeine at the site of cold desensitisation. Bindslev-Jensen concluded that cold desensitisation influences cell sensitivity rather than histamine depletion, as was previously thought.

In summary, this symposium presented the latest highlights of investigation into mast cell biology and one of the most frequent skin diseases: urticaria. It is crucial that this disease receives a correct diagnosis, but this often presents a dilemma for the practitioner. Proper treatment is necessary, especially for the chronic form of urticaria that has a major impact on the quality of life.

In conclusion, this symposium provided a valuable addition to the diagnostic and treatment guidelines performed by the Dermatology Section within our academy, and was highly appreciated by all participants.

Elena Borzova, MD
EAACI JMA Dermatology Section representative

Ulrike Raap, MD
EAACI JMA Charterperson, Dermatology Section member

Chrysanthis Skevaki
The Clinical Impact of Functional Genomics and Proteomics

New techniques allow genome-wide analysis of disease-associated changes on the levels of DNA, RNA and protein. The symposium described the techniques and discussed their limitations as well as their possible clinical implications. DNA microarrays are miniature slides with thousands of short DNA sequences. These slides are used to analyse gene polymorphisms or RNA expression. Microarrays also exist that profile protein expression.

Young-Ae Lee from the University Children’s Hospital in Berlin summarised the results that gene hunting has achieved for allergic diseases, and emphasised that genome-wide approaches recently resulted in the identification of novel disease genes and pathways that will advance our understanding of the molecular basis of allergic disease. Two analytical approaches have been presented: a linkage study in which the inheritance pattern of a disease is compared with the inheritance pattern of chromosomal regions, and an association study where the frequency of an allele is compared in cases versus controls. To date, genome-wide investigations have been limited to linkage studies, even though Neil Risch and Kathleen Merikangas demonstrated a decade ago (Science 1996) that association analysis improves the detection of disease genes of modest effect, which are most likely to play a role in allergic disorders.

Very recently, the technological constraints that limited association studies to selected candidate genes were overcome, making genome-wide association studies feasible: Genome-wide marker maps are available, the HapMap Project has provided information on allele frequencies and linkage disequilibrium patterns for different ethnic groups, and genotyping technology has advanced to allow the genome-wide typing of millions of SNPs at reasonable cost. However, the problems associated with genetic approaches to complex diseases have not diminished with the advent of novel technology: The problem of multiple testing and the difficulty of investigating gene-gene and gene-environment interactions require careful study design and the development of novel analytical tools. Nonetheless, the power of genome-wide association analysis will accelerate gene identification. Several such studies are currently being conducted for allergic disorders and their associated phenotypes. We can predict that a multitude of novel genes will emerge in the near future as a result of these investigations.

Tim Myers of the National Institute of Allergy and Infectious Diseases, Washington, U.S., gave a talk about DNA microarray probe design, fabrication, and data analysis guidelines. As genome sequence information is being constantly improved by more data and better gene modelling algorithms, the nucleotide probes designed to measure gene expression products can become obsolete. Newer probe sets can capture the new information, and data sets generated from old arrays can be re-interpreted. A number of microarray manufacturers offers custom microarrays that are created using customer-supplied probe sequences. These have paved the way for many alternative uses, such as ChIP-chip, array CGH, and the capacity to inexpensively evaluate newly sequenced libraries. The evaluation of data from transcript profiling experiments has been aided by the development of statistical methods tailored to microarray data sets, relatable functional genomics databases, and by the relatively recent availability of knowledge-bases that summarise the published literature to aid data mining and to save countless hours in the library.

Dr Reinhard Hiller of the Centre for Proteomic & Genomic Research (Cape Town, South Africa) explained how microarray technology can also be used for large-scale protein analysis. Protein microarrays are multiplex solid-phase immunoassays in a miniaturised form, representing a promising development in Proteomics (see Dufva & Christensen, Expert Rev Proteomics, 2005 for a recent review of the field). In principle, protein biochips are the counterparts of DNA biochip technology. They create spatially separated and individually addressable microspots of antibodies (e.g., Ivanov Mol Cell Proteomic, 2004), proteins (e.g., Hiller et al., FASEB J, 2002), small molecules (e.g., Winsinger et al., PNAS 2002) or cell extracts (Liotta et al., Science 2003) in a microarrayed fashion to monitor protein abundance (e.g., specific antibody binding) in a sample of interest or to investigate protein function (e.g., enzyme-substrate reactivity). In studying protein function and/or interaction on a broad scale, microarray technology offers the benefit of analysing large numbers of proteins in parallel combination with very low sample consumption (e.g., µl volumes of human serum).

One of the major goals that researchers in this field have is to create microarrays representing complete repertoires of proteins or antibodies to facilitate the study of entire protein networks in the context of a cell, a tissue, or in association with a disease. One of the most promising applications in the area of protein microarray technology is the miniaturised parallel determination of antigen-specific antibody reactivities for diagnostic purposes, e.g., on allergen microarrays. In contrast to state-of-the-art platforms, biochip-based applications usually detect specific antibody-binding to a few or several hundred purified natural or recombinant proteins (e.g., allergens) rather than using crude extracts from different biological sources, such as animal tissue or plant cells.

Using purified antigens in a protein microarray format is a solution to achieving a maximum sensitivity in a miniaturised application, while it concurrently introduces the problem of a potentially insufficient epitope repertoire represented on a “component-based” microarray format. Among others, protein biochips, such as allergen microarrays, can be used to monitor specific antibody binding against a large number of antigens in parallel. When conducted on a large number of patients, microarray-based testing of antibody reactivities generates large data-
sets that can be used to identify reactivity patterns with population-, region- or disease-related significance. The discovery of diagnostic signatures underlying complex diseases is facilitated by the application of advanced statistical methodologies widespread in the DNA microarray community, e.g., k-means clustering and neuronal networks. While the generation and validation of data generated by computer-based analysis poses one challenge to scientists working in this field, the conversion of protein microarray-derived results into practical diagnostic recommendations is a goal that requires the careful assessment of analytical biomarker patterns in the clinical context.

Mikael Benson, Queen Silvia Children’s Hospital, Gothenburg, Sweden, discussed the clinical implications. While microarray technology presents considerable potential for discovering new disease genes and markers, there are several practical, methodological, and theoretical concerns. One solution may be to search for groups of functionally related genes rather than individual, disease-associated genes. Identifying such genes can be done by searching for genes in which expression levels change in a co-ordinated way during disease, for example by cluster analysis. Recently, a similar study led to the identification of a small group of genes that predicted sensitivity to glucocorticoids in asthmatic patients (Hakonarson et al., PNAS 2005).

A clinical implication of these studies could be markers to individualise treatment for allergic patients. One problem with cluster analysis is that it is difficult to functionally interpret the results. Network-based analysis may provide a solution to this problem (Barabasi et al., Nature 2004). Differentially expressed genes are organised in networks that are dissected to find pathways and individual genes with possible key regulatory roles. Recently, network-based analysis was applied to a DNA microarray study of allergen-challenged skin (Benson et al., JACI 2006). This resulted in the identification of three main pathways, one of which was further analysed and validated experimentally. From a clinical perspective it was noteworthy that several interacting pathways were identified.

The clinical implications of this may indicate that it may be difficult to find targets for specific therapeutic blockade. On the other hand, the protein markers of the pathways could have potential as diagnostic markers, for example to individualise medication. A quick show of hands in the auditorium showed that some 30% of those in attendance was either involved in or planned to start microarray studies. It is more than possible that such research could have clinical implications in the near future.

Mikael Benson, Reinhard Hiller, Young-Ae Lee, Tim Myers
Who Needs Aerobiology Anyway?

Clinical allergists often wonder if aerobiological data are meaningful and can be used in daily practice. Indeed, do we need all the sophisticated information that today’s aerobiologists are able and ready to provide? To provide some answers to these questions, we started a collaborative study about 20 years ago with botanists at Tel Aviv University. Aerobiologists provided complete pollen and mold counts as well as forecasts for the area in which we work and where our patients live. We use these data in our daily practice as well as in research.

This experience has taught us, and the results clearly prove that the allergists do use this information in daily practice. Allergies in Israel affect 15-34% of the population, with 12-15% of this total being allergic to pollen. Thus, precise knowledge of the presence of airborne pollen allergens is basic for the practising allergist. The continuous monitoring of airborne pollen and spores, together with forecasts of when an allergenic plant will release pollen, had a major impact on clinical work, enabling clinicians to:

1) Inform patients and travellers of the schedule when preventive medication must be administered in preparation for a pollen season;
2) Establish appropriate immunotherapy schedules; and
3) Conduct research projects including the following:
   A) The identification of new pollen allergens for ferns², various olive cultivars³, and Pistacia⁴.
   B) The assessment of the load of allergens and the incidence of allergies in different regions of the country. For example, we recently reported data from the Dead Sea region of Israel, which shows that although the area is extremely dry and saline, airborne flora is considerable and significant in regard to allergies. This airborne flora comprises some 50 species of plants, with various dominant species of the Chenopodiaceae, Amaranthaceae, Cupressaceae, Poaceae, and Asteraceae. The latter are the main allergens to which allergic patients are sensitive⁵.
   C) The assessment of the prevalence and symptoms of respiratory allergy as correlated with pollen counts and threshold levels of potent Mediterranean allergens⁶.
   D) The study of the sensitisation of different Israeli populations to the dominant airborne allergens (e.g., to olive). Some people are the descendents of groups that have lived in the same region for thousands of years, such as the Druse, whereas others have immigrated to Israel during the last 80 years from all areas of the world⁷.

Therefore, our reply to the question posed at the beginning of this article, “who needs aerobiology anyway?” is that all allergists, as well as family clinicians, need aerobiology to be able to offer improved good medical practices and advance allergy research.

Geller-Bernstein C., Pediatric Allergy, Kaplan Medical Center
Waisel Y., Botany Dept., Tel-Aviv University, Israel

References

Favourite Spots in Göteborg

Feskekörkan fish market hall
A must for fish lovers. Market hall for fresh fish and shellfish which opened in 1874. The building is similar to a church and has therefore been christened ‘Feskekörkan’. Buy yourself some fresh prawns and enjoy them by the harbour or edge of the canal – or try the restaurant Gabriel on the first floor. Those of you who feel lively in the morning should instead visit Sweden’s largest fish auction in the fishing harbour. The auction is held Tuesdays to Thursdays at 7.00am and on Fridays at 6.30am.

The archipelago
The sea is only a tram ride away from the city centre. Passenger boats go from Saltholmen to islands like Wrångö, Styrsö and Brännö. On Wrångö you can bathe from the cliffs and the sandy beach. Styrsö and Brännö have first-rate bathing and guest houses. During the summer excursion boats go to places such as the fortress Efforgas Fästning in the entrance to the harbour, Vinga nature reserve, with its first-rate bathing and a small Evert Taube museum, and to the dancing on Brännö Brygga on Thursdays.

Rosenkaféet rose café
In the middle of Trädgårdföreningen – the Horticultural Society’s cultivated park – is the café Rosenkaféet, surrounded by beautiful greenery. This café has an old-fashioned, cosmopolitan atmosphere which makes people want to go there when the sun is out, particularly in July and August when thousands of roses flower in the rose garden, fantastic, with a view over the harbour entrance. You can also see the red stone that gave the area its name.
When Asthma Reveals its Human Face...

The Global Alliance against Chronic Respiratory Diseases (GARD), part of the World Health Organization (WHO), is conducting a project to combat chronic respiratory diseases (CRD). As WHO statistics show that deaths caused by asthma and COPD are projected to increase in volume by 30% in the coming decade, the work done by this project is extremely urgent. The title of the project, “Faces of Chronic Respiratory Diseases”, reflects the concept of the importance of putting a human face to disorders such as asthma and chronic obstructive pulmonary disease (COPD). The initiative aims to improve the efficacy of websites, leaflets, newsletters, and other types of communication by producing a series of case studies of people with CRD in order to increase the public’s familiarity with some of the people who suffer from these disorders.

GARD is an alliance of organizations, institutions, and agencies that aims to prevent and control chronic respiratory diseases worldwide. WHO initiated the work in March 2006 in Beijing, China with the vision of making the world a place in which “all people breathe freely”. Since highly industrialised economies in North America and Europe recently conducted wide-ranging initiatives to prevent and properly treat CRD, GARD will focus on low- and middle-income regions in Asia, Africa, and Latin America, and other vulnerable populations across the globe. GARD aims to increase awareness of CRD by making it a public health priority as part of a comprehensive approach to limiting and eliminating it.

The alliance will develop a standard system of obtaining relevant data on CRD risk factors and encourage regions to implement health promotion and CRD prevention policies. The international initiative plans to recommend strategies for the management of CRD. To date, regional GARD centres have been set up in Argentina (August 2006) and Brazil (October 2006). GARD also held a meeting during the African Congress on Tobacco or Health in December 2006 in Casablanca, Morocco.

The main object of the “Faces of Chronic Respiratory Diseases” project is to create a large database with communication materials concerning asthma and COPD. The collected images and stories of people with CRD will represent diversity in age, race, and gender from all parts of the world. All contributors participating in this initiative are asked to accumulate stories and pictures from their patients. The asthma case study questionnaire contains illustrative questions such as asking the patient about themselves, their history of asthma, their therapy, and how they describe the impact asthma has had and continues to have on their lives. These stories and the images of these people will combine to provide such strong impact that it will heighten public awareness of the significant threat posed by asthma and COPD to so many people in all regions.

Communication material prepared in the "Faces of Chronic Respiratory Diseases" project will be presented during the upcoming World Asthma Day on 1st May, 2007. GARD asks all contributors for assistance in collecting stories and pictures of patients with asthma. As allergologists, we all know that every case of asthma has got a human face.

Maciej Chalubinski,
mchalubinski@poczta.onet.pl

GARD’s website: www.who.int/respiratory/garden/index.html
Meeting reports

Davos World Immune Regulation Meeting
11–15th April 2007

Organisers: Swiss Institute of Allergy and Asthma Research (SIAF) and GA‘LEN
Chaired by Professor Cesmi Akdis

About 800 scientists from many countries gathered to hear lectures given by 50 experts on immune regulation, in the fields of basic and clinical immunology, that focussed particularly on T regulatory cells. Most speakers concentrated more on the regulation of the immune response and the control of a complex course of inflammation and less on immune effector mechanisms. They debated current theories in immunology and took a novel, critical look at the idea of the work of the immune system.

Many stipulated that only asking fundamental scientific questions such as “Does the immune system respond to antigens by discriminating between self/non-self or danger/not-danger signals?” and “How does the immune system know what kind of response to make?” can produce answers that build a new understanding of the way the immune system protects the host against pathogens. Speakers also addressed the issue of applying the correct terminology and accurate naming of immune processes to keep researchers from reaching the wrong conclusions. They added that the complexity of the immune system makes it difficult to analyse holistic theories.

A majority of the speakers focussed on the role of T regulatory cells (T regs) in immune responses. Much research in the last decade has centred on the Th1/Th2 balance as well as cytokines such as IL-4, IL-5, IL-12, and IFN-gamma. Currently, the significance of Fox p3 positive CD4CD25 cells, IL-10, and TGF-beta is under analysis in European and other research centres.

The results of complicated in vitro studies and mouse models of allergy, tumours, and autoimmunity, involving large groups of people and modern techniques, suggest that T regs may be a key element of immune response regulation. In short: the low activity of T regs observed in allergy and autoimmunity and their high activity in tumours have been considered a contributory cause in the development of such conditions. Speakers underlined that no researcher should be under the impression that T regs are the only important cells in immune system regulation. Others include dendritic cells, effector T-cells, B-cells, other cytokines, genes, and a kind of pathogens. Others discussed the question of the scientific accuracy of drawing far-reaching conclusions based mainly on in vitro studies and mouse models of immune disorders.

The scientific programme and the invited speakers at the Davos World Immune Regulation Meeting were outstanding. The event filled the gap observed between programmes at immunologist and allergist meetings and inspired participants to consider the field of immunology in an innovative way.

Maciej Chalubinski, mchalubinski@poczta.onet.pl

ALLERGIC DISEASES: Minor Irritation or Major Aggravation?
Report on European Summit on Public Health

The European Summit on Public Health was held in February 2007 at the European Parliament in Brussels, Belgium, with the participation of EAACI in the session titled “Allergic diseases: minor irritation or major aggravation?”. The summit was attended by members of the European Parliament (MEPs), public policy advisors, medical professionals, patient group representatives, and the media.

Four core topics were scheduled to highlight discussion of the European prevalence of allergic diseases, the trend towards polysensitised and polysymptomatic patients, and the public health threat that this presents in the 21st century. The topics comprised “Living with allergies. The impact on an individual’s life”; “Scale of allergic diseases in Europe”; “Allergic diseases: emerging threats and policy responses in Europe”; and “Clinical considerations of treating allergic diseases”. These were presented by visiting speakers from the European Federation of Allergy and Airways Diseases Patients’ Associations (EFA), the European Commission for Public Health, the World Health Organization (WHO), and by Professor Ulrich Wahn from EAACI.

A total more than 80 audience members participated in the lively Q&A sessions that followed each presentation.

The WHO outlined its work in relation to increased pollen allergenicity as a result of climate change, covering topics such as early exposure to allergenic environments and the development of atopic conditions, and anthropogenic climate change as a plausible contributor to the rise in asthma.

The EFA launched a report at the event to provide policy-makers with information about the socioeconomic impact of allergic diseases on patients. This European Charter for Action on Allergy calls for appropriate funding at European Member State level to facilitate epidemiological research into allergic diseases. It also aims to enable healthcare professionals to provide appropriate and effective disease screening and treatment for individuals with allergies.

The European Charter for Action on Allergy calls on national health authorities to:
- Recognise allergic diseases as a public health priority:
- Conduct epidemiological research into allergic disease prevalence and trends;
- Ensure healthcare systems are fully equipped and resourced to provide professional healthcare education, access to reimbursed medication, and patient disease information;
Thomas B Casale – the new President of the AAAAI

Thomas B. Casale, M.D. was named the new President of the American Academy of Allergy, Asthma, and Immunology at the annual business meeting in San Diego, California, on February 26th, 2007. He succeeds Dr. Tom Platts-Mills. Dr. Casale was born in Chicago, attended University of Illinois and Chicago Medical School and then did his residency in internal medicine at Baylor College of Medicine, Houston, Texas, after which he spent four years, from 1980-1984, in allergy and immunology and in research at the NIH. He became a professor and directed the Division of Allergy and Immunology at the University of Iowa. In 2000, he moved to Creighton University Medical Center, Omaha, Nebraska. At Creighton, he is Professor and Vice-Chair of Medicine and directs the Division of Allergy and Immunology. The Division consists of 5 faculty members, 4 fellows-in-training, and numerous research and support personnel.

During his year as President of the AAAAI, a primary goal is to promote the expertise of allergists/immunologists to participate in the administration of various immunomodulators, not only for allergic diseases, but for a number of other disorders. Tom believes that allergists/immunologists should be the experts as to how these medications are used and administered and how to manage adverse events. Another initiative is to develop the program, “Asthma IQ”, a web-based program to promote the new guidelines for asthma which will promote maintenance of certification, pay for performance, and quality improvement in the care of asthmatics. Tom would also like to involve the Academy in more international initiatives, in particular, with the World Allergy Organization (WAO) and the European Academy of Allergy and Clinical Immunology (EAACI) and also aspires to increase the association of the Academy with various lay organizations, particularly, the American Lung Association.

A major problem facing allergy/immunology in North America is to economically maintain training programs in the specialty and, in particular, to train new academic leaders. Tom feels that the changes in the AAAAI Asthma, Allergy, and Immunology Research Trust (ART) will become a significant factor in rectifying the financial needs of training programs throughout the United States.

His hobbies consist of fishing at his new lake home in Omaha; spending time with family; and cooking with his wife, particularly pizza. He learned to cook at his father’s pizzeria in Chicago. Tom’s favorite book that he recently read is “Honeymoon With My Brother”.

Best of luck during your presidency!
Richard. F. Lockey, M.D.
Does rhinitis lead to asthma?

New GA²LEN Campaign

SNEEZING and WHEEZING

Patients with allergic rhinitis should be evaluated for the presence of asthma. Patients with asthma should be evaluated for the presence of rhinitis.

New brochures, developed jointly with EFA (Patients Associations), are now available for Primary Care Physicians and for Patients.

For more info, please visit the website: www.ga2len.net • Info at: AWComm@ga2len.net