

History of the World Allergy Organization: Time to Change!

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History of the World Allergy Organization: In 1951, the leaders in allergy from all over the world came together to form the International Association of Allergology and Clinical Immunology (IAACI). For the next 60 years, the allergy world converged at the IAACI triennial meetings, which became biennial in 2003. The international meetings, originally named the International Congress of Allergology and Clinical Immunology (ICACI), are now the World Allergy Congress (WAC) hosted by the World Allergy Organization (WAO). Everyone who has aspired to have worldwide recognition has played a part in IAACI-WAO. The History of the World Allergy Organization traces the global arc of the allergy field over the past 60 years. The current officers of WAO elected to focus on this rich history, inviting prominent leaders who are interested in being part of this history project to write about their time with IAACI-WAO. This series will be presented in Cancún, México, as part of the XXII World Allergy Congress (December 4-8, 2011). Leading up to the Congress in Cancún, the World Allergy Organization Journal is presenting segments of the History as part of the "Notes of Allergy Watchers Series." Please enjoy.

—Michael A. Kaliner, MD
Historian and Past President (2006–2007)
World Allergy Organization

My own golden anniversary of 50 years in allergy coincides with the World Allergy Organization's (WAO's) anniversary of 60 years of service to the specialty, and my good fortune of being in the right place at the right time eventually led to the honor of being elected President of the organization!

A NEW IMMUNOGLOBULIN ISOTYPE

In 1961, after 3 years at medical school, I had a holiday job at the Department of Clinical Chemistry at the University Hospital in Uppsala working as a laboratory technician. Uppsala has a very good tradition in the field of separation

and characterization of serum components, and I was asked to establish immunoelectrophoresis for characterization of immunoglobulins and to study sera from patients with suspected immunological diseases. A research group was then formed with the aim to isolate and characterize human immunoglobulins. My colleague Hans Bennich was interested in the isolation and characterization of human immunoglobulins, which included fragmentation with reduction/alkylation and digestion by proteolytic enzymes. I raised antisera in rabbits to identify the various fragments but also to set up immunoassays to characterize and quantitate the 3 known immunoglobulin classes and their constituents, to support clinical investigations of patients with suspected disturbances in this area, for example, immune deficiencies and multiple myeloma.

In June of 1965, I found a myeloma protein where I could not identify the isotype. It was an immunoglobulin with lambda light chains, unique antigens on the Fc fragment, and a molecular weight in the order of 200,000 daltons, indicating that it represented a new immunoglobulin isotype, which we provisionally called IgX. A hemagglutination technique for diagnosis of pregnancy was developed for IgX, and in January 1967, IgX was detected in serum of healthy individuals, thus fulfilling all the criteria for a new immunoglobulin isotype. We provisionally designated this isotype by the initials of the individual from which it was derived, IgND. As a result, the finding of increased levels of IgND in allergic asthma and the development with Leif Wide of the test for IgND antibodies to common allergens, RAST, were finalized and published. Interestingly, these 2 approaches to describe serological events in allergy are still the basis of in vitro diagnosis of IgE-mediated allergy.

During 1966, much effort was invested in understanding IgX. A collaboration was started with Dennis Stanworth from Birmingham, United Kingdom, who had spent a lot of time characterizing reaginic activity to horse dander allergen by the Prausnitz-Küstner test. We aimed to test if IgX could block the P-K reaction, which was indeed the case, and later to characterize the structure responsible for this activity, which was found to be the Fc fragment.

From the fall of 1966, we had close contacts with D. S. Rowe, then at the World Health Organization International Reference Centre for Immunoglobulins in Lausanne. We sent him purified IgND immunoglobulin, fragments of IgND, and antisera specific for the 2 antigenic epitopes we had found on the Fc fragment, and he was able to confirm our findings.

In 1966–1967, Kimishige Ishizaka and Teruko Ishizaka, then in Denver, had published their findings on γ E, reporting that their anti- γ E could block the P-K reaction with ragweed allergen and that when injected in the skin, it gave an erythema,

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hence the “E.” Early in 1967, we sent a mail informing them of our finding of IgND and invited them to a comparison with their γ E. When it was found, and confirmed, that their anti- γ E reacted with isolated IgND and that anti-IgND inhibited the reaginic activity of their γ E-containing fractions, contacts with the World Health Organization were intensified. In February 1968, a workshop was held at the Reference Centre in Lausanne with Kimishige Ishizaka representing the γ E leg and Hans Bennich and I the IgND leg of what was then, for the first time, officially accepted as a new class of human immunoglobulins, designated IgE.¹

NEW EXPERIENCES IN NATIONAL AND REGIONAL ALLERGY SOCIETIES

Because our initial findings on IgND were published in the *Lancet*, the message spread quickly (Fig. 1). In 1968, I participated in my first congress of the European Academy of Allergology and Clinical Immunology (EAACI) in Florence, Italy. In 1969, we presented our data at the Royal Society of Medicine in London invited by J. L. Turk, and the same year we visited for the first, of many times, Kimishige Ishizaka and Teruko Ishizaka in Denver. In 1972, Sheldon C. Siegel invited me to my first annual meeting of the American Academy of Allergy and Immunology, nowadays the American Academy of Allergy Asthma and Immunology (AAAAI), held in San Francisco in 1972, to present our findings. At the meeting, the Academy kindly nominated me as International Fellow, the first appreciation I had the pleasure of receiving from an allergy society!

During the 1970s, I spent time with I. Leonard Bernstein at the University of Cincinnati as visiting professor,



FIGURE 1. Gunnar Johansson and Hans Bennich in a laboratory demonstrating the washing of particles in a centrifuge, circa. 1967. Reprinted from Johansson² with permission from Elsevier.

and I was invited several times to the United States, where I enjoyed visiting many of the very best scientists and research centers in the field of allergy and immunology—K. Frank Austen and Albert L. Sheffer in Boston; Philip S. Norman and Lawrence Lichtenstein in Baltimore; John A. Anderson in Detroit; Roy Patterson in Chicago and Gerald J. Gleich at the Mayo Clinic. Interestingly, all except one of those notable individuals became President of AAAAI.

In the late 1970s, I was approached by Bengt Samuelsson, then Rector of the Karolinska Institute, and invited to apply for a position as Professor of Clinical Immunology, at the Karolinska Institute, combined with being Head of the Department of Clinical Immunology, at the Karolinska Hospital. I accepted, of course, and started my work in the summer of 1980. Since this was a new discipline at Karolinska I had to build up the organization from scratch. It is not so easy to handle people, equipment, money, and politicians when your experience is based on immunizing rabbits and performing immunochemical laboratory bench work. In addition to building up a Department of Clinical Immunology, I was also involved in administration within the Karolinska Hospital. During 1984–1989, and as one of the Chief Physicians, I was responsible for the hospital's obligations to all clinical research. That was an interesting time that gave me a lot of experience, as were the 6 years in the scientific committee of the H.R.H. Queen Silvia of Sweden Foundation for Research on Children's Handicap.

I had the pleasure of working as President of the Swedish Association of Allergology (SFFA), and when I was elected a member of the Executive Committee of the European Academy of Allergy and Immunology (EAACI) and in 1992 became President of EAACI, this experience was very useful. We updated the infrastructure of EAACI, engaged a professional executive office, introduced individual memberships, made a deal with the publishers of *Allergy* to make it the official journal of EAACI, and negotiated a long-term sponsor agreement with a group of companies, the so-called Founder Sponsors. When my 10 years as Editor-in-Chief of *Allergy* expired in 2002, it was a pleasure to hand over the responsibility to Jean Bousquet of Montpellier.

A NEW GLOBAL STRATEGY FOR AN INTERNATIONAL ALLERGY ORGANIZATION

As my term of office in EAACI ended in 1997, I had the pleasure of being nominated President of the International Association of Allergology and Clinical Immunology (IAACI). Again, it was time for an update. We held a strategic planning session in Saltsjöbaden near Stockholm, where I worked for the first time with Karen Henley Davies, the newly appointed Global Projects Director for WAO, who from then on provided essential Europe-based support for my presidency. During a premeeting discussion with Rick Iber, IAACI Executive Director, in the kitchen of the hotel, our first major idea was to recommend a change of the name of the organization to make it stand out among the many similar organizations relating to allergy and clinical immunology. We needed a name to reflect the new overarching role that the organization needed to take on if it was to survive in the global environment and to

take responsibility for communication within the world of allergy. Karen and I came up with the name World Allergy Organization (WAO), which was proposed to the Executive Committee, meeting with great enthusiasm from some and with great caution by others! There was some questioning to start with whether it was too close to World Health Organization, I didn't think so. And it fit very well with our ideas to save the IAACI and move in a different direction by determining what really was needed in our specialty at a global level. There are so many allergy societies, and we needed to take on a clear and necessary role to justify our existence. Much discussion ensued on whether the name should be World Allergology Organization but doubters were persuaded that World Allergy Organization would enable us to cover many more issues relating to allergic disease that those relating purely to the clinical practice of the specialty. It was also agreed, although with reservations, that Clinical Immunology could be omitted from the new name.

At that time, IAACI was rather small, built on personal contacts and friends, not really taking responsibility for anything like education, communication, or political issues. The idea with WAO was to be the opposite, to really have representation from all over the world, and to make sure that the various national societies did join so that we had the possibility of communicating with them. I still think that this is very very important for allergy as a specialty because there remains a big risk that it will be pushed into a corner by respiratory physicians, laboratory doctors, dermatologists, pediatricians and so forth—all of whom think that allergy is a little part of their business, but all of whom really worry about everything else but allergy. At that time, the international members were there for geographical balance, but it didn't mean that one was working actively on some kind of communication or collaboration with, for example, the Japanese Society of Allergology or the AAAAI. The old Europeans were in charge and did what they wished to do, and while that might have been great in the beginning, changes were vital for the future of the organization. We brought in many new young people who were really prepared to work hard for the organization instead of using it as a personal career step.

I was pleased to have the opportunity of introducing new programs, such as the educational program, Global Resources in Allergy (GLORIA). This started as collaboration with EAACI to disseminate their new guidelines on the management of allergic rhinitis and then expanded to incorporate all aspects of allergic disease. GLORIA is now a comprehensive series of 14 lectures on major topics in allergy that can be downloaded from the WAO Web site (www.worldallergy.org). The program was originally sponsored by a group of industry supporters enabling lectures to be given around the world, and local faculties were trained to present the lectures to educate the primary care doctors in their countries.

This mirrored the new kind of sponsorship, the "Founder Sponsors" group, which I had introduced for the EAACI. Before this arrangement, the individual in charge of the congress, the local chair, was able to run the congress as a private business and to make special deals with

individual companies. I thought that was unfair. If companies sponsor the congress, then the society behind the congress should have access to any money left over after the congress and to make it available for educational projects or grants for young people or whatever other local needs had been identified. After the 1995 meeting, I sat down with Ulf Säther at Pharmacia Diagnostics and convinced them that this was a good idea, and then we tried to recruit other companies that were prepared to be involved and to sponsor 3 congresses in a row at a given amount of money. For that commitment, they would have clearly defined sponsorship benefits to look forward to like a seminar, advertisements, and a hospitality room. To start with, this was a very difficult discussion because they hadn't all heard about it and they didn't all like it; they thought they should be allowed to handle this individually, but after several meetings, the idea was accepted and liked and became a successful long-term commitment. Adopting a similar policy for GLORIA ensured that no one company dominated and no conflict of interest would exist.

We also initiated the WAO Web site (www.worldallergy.org). This was originally trademarked as GAIN—the Global Allergy Information Network, with the aim to create links between all the reputable Web sites on allergy and to provide original information and education where it was not already available from other sites. This attracted development funding from Aventis, with the personal support of Keith Allan, who has continued to support the site as he has moved within the pharmaceutical industry over the years!

A NEW CENTURY WITH INCREASED ALLERGY PREVALENCE

At "my congress," organized magnificently by Connie Katelaris, in Sydney in 2000, I became past president (Fig. 2). I continued to work with numerous WAO projects, most notably coediting, with Tari Haahtela, the *Prevention of Allergy and Allergic Asthma* book that had started as a collaboration with World Health Organization but then became a WAO standalone project after a number of changes in WHO policy relating to their relationships with not-for-profit organizations.³ I was then invited to form the WAO Nomenclature Committee to agree a revised nomenclature for allergy, endorsed by EAACI and WAO and its 70 member societies. You can't communicate with people unless you have one and the same language. If someone is talking about atopy as clinical symptoms, and someone else is using atopy as a definition of the genetic familiar tendency to become IgE sensitized, of course they have problems understanding each other. Considerable work ensued in promoting the new nomenclature to encourage its uptake, including translations and publications in WAO Member Society journals, and hopefully, we now better understand each other, and our field of expertise can continue to flourish and develop.⁴

WAO is doing fine and is living up to our expectations, thanks to preceding presidents like Terumasa Miyamoto of Tokyo and Alberto Oehling of Pamplona, and I am

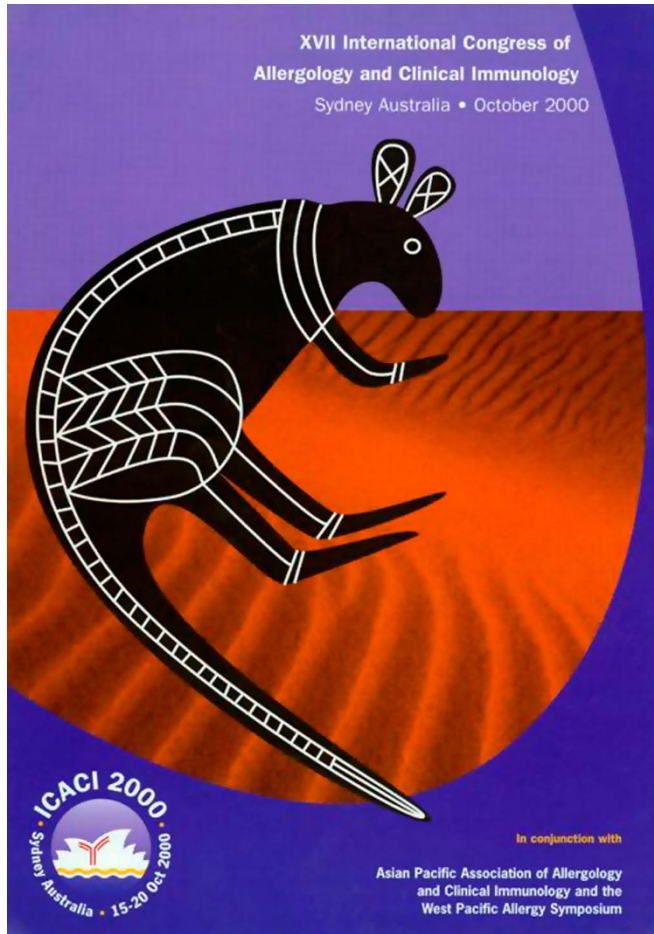


FIGURE 2. Cover of the final program of the XVII International Congress of Allergology and Clinical Immunology in Sydney, Australia, in 2000.

delighted at the way the organization has continued to grow under the direction of my presidential successors. The organization has managed to establish positive relationships with many important national allergy societies, but there is still a lot to do. There are still aspects of allergy that need to be further investigated at a scientific level. Allergy is very important because it is part of many many clinical specialties and because it is a special kind of disorder with special mechanisms requiring special approaches to treatment and diagnosis. The major problem is that the prevalence of allergic disease is so high and in many areas of the world is increasing. There are so many millions of patients who need access to a physician with some knowledge about allergy so that they can be referred to the right kind of specialist, and this remains one of our major challenges.

Much has happened in the past 60 years, but there is still much to do!

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