



## Dr A W (Bill) Frankland

Dr Bill Frankland's distinguished career in allergy began after World War 2 when he returned to work at St Mary's Hospital, London, as a survivor of an infamous Japanese prisoner of war camp. Over 60 years later, Bill's enthusiasm for clinical allergy appears undiminished, and his mental acuity and fitness are remarkable for anyone of his age, let alone one who has survived not only the prison camp but recent serious illness. He has received many honours, including having the St Mary's Hospital Allergy Unit named after him, and also the BSACI's award for clinical excellence in allergy – The William Frankland Award.

The magnitude of Bill's contribution is apparent in the many patients, students and colleagues who remember him as a valued physician, teacher and friend. His activity, in contrast to that of his own teacher at St Mary's in the 1930s, Sir Alexander Fleming, has been mainly in the clinic rather than in the laboratory. (Later, Bill was to have a minor disagreement with his famous colleague on the subject of penicillin allergy).

Bill's career spans a time of great advances in the understanding of the mechanisms of allergy, (IgE was not yet discovered when he started and in its treatment (nonsedating antihistamines and steroids were still to be introduced). His prodigious memory for details of instructive cases makes him an unparalleled source of advice on the 'difficult patient'. His curiosity about other fields such as botany (pollens), entomology (insect bite allergy) and human behaviour is as sharp as ever. Like all good allergists, he knows the importance of listening to the patient and of clear explanation of the facts. Unsurprisingly he is still much sought after as a medico-legal expert witness in allergy.

In the 1940's for lack of other effective remedies, specific allergen desensitisation or immunotherapy was a mainstay in the treatment of respiratory allergies in patients unable to avoid the allergens responsible. Although introduced some 40 years previously, this method of treatment, exemplified by grass pollen immunotherapy for seasonal rhinoconjunctivitis and asthma had never been evaluated in a properly controlled clinical trial until Bill's landmark study, published in 1954. A similar trial, very likely to the dismay of some of his senior colleagues, clearly demonstrated the lack of efficacy of bacterial vaccines in asthma treatment. In the inoculation department at St Mary's in 1945 working with Dr Freeman allergen vaccines were produced and used in treatment. The scale of operation was prodigious by present day standards. It was a major source of revenue for the Department, who prepared the vaccines both allergen and bacterial, and paid medical students to perform skin tests, and subsequently taught the patients, some as young as 15, to give their own injections. One year, over 6,000 patients were given pre-seasonal pollen vaccine. Dr Freeman had a pollen farm to produce raw material for vaccine. The principle of allergen immunisation had been extended to animal dander and to mould spores, and it is now known that the source of the momentous contamination of a Petri dish in Alexander Fleming's laboratory, back in the 1920s, was one of the moulds being studied in the inoculation Department, which was situated immediately beneath Professor Fleming's laboratory.

In 1947 Vera Walker, an eye specialist from Oxford who was interested in allergy, wrote to Dr Freeman about starting an allergy society, the first meeting of which took place at St Mary's in 1948, the two speakers being Sir Henry Dale (a distinguished pharmacologist, later head of Wellcome Research) and Dr Freeman. Bill was appointed the new society's first secretary, and over 30 members joined, mostly physicians, but a few bacteriologists. As now, asthma was the principal allergic condition of interest. The British Allergy Society thus began in 1948, but did not have a constitution written until 1951, at which time there were 40-50 members. In parallel, a Royal Society of Medicine section of Clinical Immunology and Allergy was started up in 1965, by which time the British Allergy Society had 150 members. The Antibody club was incorporated too, bringing the immunologists into the picture. These were the roots of the BSACI.

By 1951 Bill was organising pollen counts at St Mary's Hospital and made weekly counts available to members of the society and to the press (on a daily basis). These counts were based on a pollen trap set up on the Nurses' Home roof at St Mary's. Miss Muriel Hay applied for the job of botanist and, perhaps partly because of her appropriate name, was appointed.

Bill's friendship with another 'elder statesman' of the BSACI, Harry Morrow Brown, dates back to 1959. Like Bill, Harry was a clinician and a practical researcher, who made important discoveries pertinent to allergic disease, such as the role of eosinophils in allergy, and, subsequently, the demonstration of efficacy of inhaled steroids in asthma in 1972. The well-attended Charles Blackley symposia at Nottingham were the brain child of Harry. Another towering figure in British Allergy, with whom Bill was involved to the extent of giving him his first allergy job in the UK, was the late Jack Pepys.

Bill at this time was performing studies to show the efficacy of antihistamines, demonstrating, incidentally, their lack of effect in asthma. By the 1960s, the Society was meeting regularly, often away from London, in Liverpool, York and Nottingham. In 1955 Bill used himself for an experiment on inducing allergy to a biting insect, *Rhodnius Prolixus*, which, unlike most biting insects, can induce anaphylaxis. Repeated self-inflicted bites led not only to increasing local reactions, but to a severe anaphylactic reaction. This episode, in the great tradition of self-experimentation, would be difficult to do nowadays in the era of protocols and ethics committee approval.

The pollen farm near Woking produced kilogramme quantities of pollen for the production of test solutions and the pollen vaccines, and a film dealing with this was made in 1951, a copy of which is in the National Institutes of Health museum in the USA.

Early prominent figures in the history of the Allergy Society were Vera Walker, the Oxford ophthalmologist, Dr D A Williams, a Cardiff physician who had started pollen and mould spore counts as early as 1943, Rupert Bruce Pearson, a King's College Hospital physician interested in asthma and allergy, and Blair Macaulay, a Liverpool chest physician, all of who held high office in the society.

Bill started a second phase of his allergy career when, on reaching retirement age and retiring from St Mary's, he was invited by Maurice Lessof, Professor of Medicine at Guy's Hospital, to take part in the allergy clinic and in the weekly meetings of the Department. Insect venom immunotherapy at Guy's was starting up at this time, using purified bee and wasp venoms, which had recently been shown to be effective, unlike the 'whole-body' insect extracts previously used for skin testing and

immunotherapy. The department was active in trying to find out how immunotherapy worked and how to evaluate its efficacy. Most patients were evaluated at the hospital and started on venom, pollen or mite immunotherapy, which was then continued by their GPs, but in 1986 this approach was stopped because of safety concerns. The Committee for Safety in Medicines recommended restricting immunotherapy to hospital clinics with resuscitation facilities and making patients wait for two hours under supervision after each injection. This was a big problem for patients, and the BSACI sent a deputation, including Bill, to the CSM, to persuade them to relax the conditions, specifically the two hour wait rule. Bill, who had long experience of this field, made no secret of his opinion that the CSM had overreacted, provoking an irascible response from the chairman. It was agreed that if we wanted to change the rules, we should produce evidence for this.

Bill continued to do his weekly clinics, contributing to the academic and clinical life of the Department for 20 years, covering the retirement of Professor Lessof and the appointment of Professor Tak Lee.

Rarely can a single figure have been so influential in the institution and the fostering of a clinical discipline to the extent that Bill Frankland has. He is a legend in his own lifetime and many allergists of several generations have benefitted greatly from his wisdom and experience, not to mention his admirers from all over the world, including patients and colleagues. In 2014 Bill was in Singapore and later in Copenhagen for the European Academy of Allergy & Clinical Immunology and since the age of 100 he has published four academic articles.