OBITUARY

Jack Pepys
(1914–1996)

It is with great sadness that we record the death of Professor Jack Pepys who was the founder and first Editor of the journal (originally called Clinical Allergy).

He obtained his medical degree in 1935 from the University of Witwatersrand. He was a brilliant student who graduated at the very young age of 21 years and he was not allowed to practice until he was 22. Jack had suffered since infancy from severe atopic eczema and he developed his interest in allergy after acquiring a box of skin test solutions during this enforced waiting period. He was fascinated by the specificity of the responses and the possible mechanisms involved in the reactions he observed. One of his early research projects during his time in South Africa was on allergy to steroid hormones. Significantly he was to maintain an interest in drug allergy for all of his career, even into retirement.

Jack and his family moved to London in 1948. After appointments at the Institute of Laryngology and Otolaryngology and St Mary’s Hospital, Paddington, he became clinical assistant to Professor J. G. Scadding at the Brompton Hospital. During the 1950s he set up an Allergy Clinic at the Brompton Hospital which soon became world-renowned. From this base, and with the considerable energy and enthusiasm for which he was so well known, he established an academic department of clinical immunology with a special interest in allergic diseases; the first of its kind in the UK. He was appointed honorary Consultant in Clinical Immunology at the Brompton Hospital in 1960 and research laboratories were provided at the then Institute of Diseases of the Chest (now the National Heart & Lung Institute). The research group was initially set up with support from the Medical Research Council. He was appointed Reader in 1965 and Professor of Clinical Immunology in 1967. For over two decades young doctors and scientists from home and abroad came to train at the then famous Brompton Allergy Clinic. It was not easy for Jack to build up such a prestigious department and he had a long struggle getting established — as many people do who bring new ideas and new concepts. At first he found it particularly difficult to get colleagues interested in his subject but finally he was to succeed magnificently. During his career he was able to make major scientific advances. These can be summarized as follows. Firstly, he discovered the cause of farmer's lung and other forms of extrinsic allergic alveolitis. Secondly, he documented the clinical features, natural history and immunology of allergic bronchopulmonary aspergillosis. Thirdly, he pioneered allergen challenge tests in the skin and the lung (and in the process put the late-phase asthmatic reaction “on the map”). Fourthly he was able to provoke asthma and allergic alveolitis under controlled conditions in the clinical laboratory and thereby set the experimental standards for many years to come. Finally, he was able to identify numerous causes of occupational asthma which in turn shed considerable light on the mechanisms involved. This led to the recognition of occupational asthma as a compensatable industrial disease.

Jack Pepys’ great gift was to unravel complex mechanisms in specific allergic processes. An association between farmer’s lung and mouldy hay had been known since the 1930s but the specific cause eluded people and there was much debate as to whether the disease was allergic in nature. Jack and co-workers were able to identify a specific cause — hypersensitivity to thermophilic actinomycetes

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(Thermopolyspora polyspora). Using double-diffusion tests and immunoelectrophoresis, patients with farmer’s lung were shown to produce large amounts of precipitating antibody (or precipitins) which were believed to cause an Arthus-type reaction in and around the alveoli. His group then went on to show that the inhalation, by susceptible patients, of various antigens of fungal, micro-organismal, porcine, bovine and avian origin, invariably led to the appearance of large amounts of precipitating antibody, which in turn had the potential to mediate serious pulmonary disease affecting the tissues around bronchi and in the peripheral gas-exchanging tissues. The facility with which man produces precipitating antibody in response to inhaled antigens had not been fully appreciated, and the observations were of considerable clinical and immunological importance.

The discovery that thermophilic actinomycetes of mouldy hay were the major cause of farmer’s lung led to the development of a diagnostic precipitin test for this disease. This opened the way to its recognition and registration as an industrial disease. The use of the precipitin test by the Public Health Laboratory Service became an important part of the supporting evidence. An interesting and further application of the precipitin test against thermophilic actinomycetes was fog-fever in cattle due to mouldy hay.

The ‘Jack Pepys team’ also pioneered the description of bird breeder’s (fancier’s) lung, a farmer’s lung-type disease due to the dust of pigeon and budgerigar droppings. Again they developed diagnostic skin, precipitin and inhalation tests for this newly described disorder and showed that many patients with pulmonary fibrosis were affected by the inhalation of dusts of avian origin. Together with the farmer’s lung work, this contributed to a better understanding of alveolar reactions to inhaled organic dusts. The term extrinsic allergic alveolitis was introduced to describe these and related diseases.

A further example of the use of diagnostic precipitin and skin tests was in patients with diabetes insipidus treated with inhaled pituitary snuff. It was soon recognized that these patients were at risk for the development of farmer’s lung due to their use of pituitary snuff. This eventually led to occupational asthma. Jack Pepys and co-workers also pioneered the study of provoked asthma under controlled conditions in the clinical laboratory. He drew attention to the ‘late-phase asthmatic reaction’ and realized that it had potential not only in understanding the mechanism of chronic asthma but in elucidating the mode of action of anti-asthma drugs. Further landmark contributions were his studies on occupational asthma. He developed a series of simple inhalation tests which enabled a cause and effect relationship to be established between asthma and low molecular weight chemicals and other sensitizing agents in the workplace. His published papers on platinum salts, isocyanates and colophony as occupational sensitizing agents are classics of their time.

Using serological tests he was able to set the scene for subsequent studies on the immunopathology of occupational asthma. This eventually led to occupational asthma being recognized as a compensatable industrial disease.

Another very important clinical scientific contribution that he made, and was justly proud of, was the analysis and application of skin testing in allergy. His classical work in the 1950s on the tuberculin reaction was an important predecessor of the Gell and Coombs classification. His championing of the prick test in atopy, rather than scratch, intradermal or other modalities, has been of immense value and was on a par with his other discoveries.

Jack was justly proud of Clinical Allergy and approved of the change of name to Clinical and Experimental Allergy since this was in line with his commitment to clinical scientific experimentation. The journal has become one of the most popular journals in the field. The early issues contained the classic descriptions on the causes of occupational asthma. Jack Pepys was a prolific and clear writer, publishing over 200 scientific articles in national and international journals.

Jack pursued his avid interest in allergic diseases and his active clinical and research work, without interruption, apart

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from serious illnesses, from the time he retired formally until his death. He continued to be a regular attender at national and international meetings whenever his health allowed. After retirement he initially had an honorary appointment at Guy’s and subsequently was a Visiting Professorial Fellow and Honorary Consultant Physician in the Immunological Medicine Unit, Department of Medicine, Royal Postgraduate Medical School, and was in charge of the Allergy Clinic at Hammersmith Hospital. He set up what was effectively the national referral service for clinical investigation of allergic reactions to drugs used in anaesthesia, and conducted important research establishing the value of prick testing for diagnosis in this serious and sometimes fatal form of hypersensitivity. This work was the subject of his last refereed publication and the last presentation he gave in person at the BSACI. At that time he was almost 80 years old.

Jack Pepys was a founder member and first Treasurer of the British Society for Immunology and President of the British Society for Allergy and Clinical Immunology, and the International Association of Allergology and Clinical Immunology. He had many academic distinctions including the Scientific Achievement Award of the International Association of Allergology and Clinical Immunology, and a Special Presidential Recognition Award from the American Academy of Allergy Asthma and Immunology. He was awarded Honorary Doctorates of Medicine from the University of Clermont-Ferrand (1973) and the University of Ferrara (1991).

Allergy and clinical immunology are now established academic and clinical disciplines within British universities and the National Health System. It has come a very long way since the early 1950s when Jack Pepys was attempting to promote general interest in the subject and struggling to build up his department. It is appropriate, therefore, that he should be referred to as the ‘father of British clinical allergy’ because we all owe so much to his vision and foresight. Jack Pepys will be remembered not only for his outstanding scientific contributions but as a person who was much loved and respected. All of those who worked with him, or were influenced by his teaching and scientific writing, hold him in great affection. Jack was a great raconteur and had an amusing story for virtually every occasion. He loved to travel and his busy schedule took him to almost every part of the globe. He always took a great interest in new places and in meeting new people. On many of these journeys he was accompanied by his dear wife Rhoda. Rhoda, like his daughter Sandra, is a gifted and well-known artist. His son Mark is Professor of Immunological Medicine at the Royal Postgraduate Medical School. Jack, quite rightly, was very proud of his family’s achievements.

Professor Jack Pepys died on 9th September 1996 aged 82.

A.B. Kay