

## Obituary: George Davidson, 1917-1997

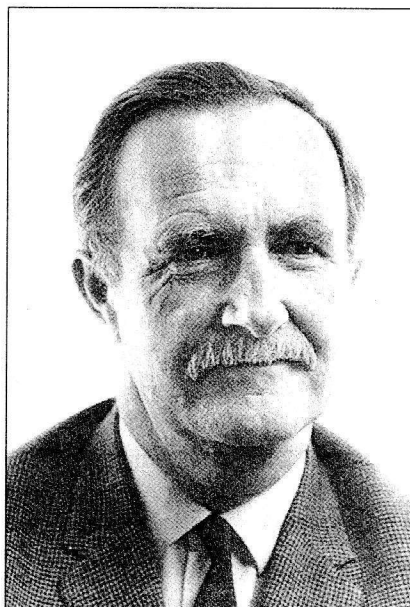
George Davidson, who died on 16th January 1997, had a distinguished career in medical entomology spanning the period from the Second World War to the early 1980s. He graduated with a BSc degree just before the outbreak of war in 1939 and went straight into the Royal Army Medical Corps. He was a member of a Field Malaria Unit in North Africa and subsequently in Italy, which at that time was highly malarious. He used the discoveries of the 1920s and 1930s about 'anophelism without malaria' and the *Anopheles maculipennis* complex to advise on the siting of base camps away from habitats of the dangerous anthropophilic species *A. labranchiae*. This remains one of the few instances where knowledge about species complexes has provided useful predictions to guide malaria prevention, rather than mere explanations after the event. After five years abroad George was evacuated to England with a severe malaria attack.

Immediately after the war he was recruited to the Ross Institute at the London School of Hygiene & Tropical Medicine (LSHTM) by Professor George Macdonald and sent to, what was then, the Belgian Congo to test BHC, one of the new synthetic insecticides, for residual spraying against malaria mosquitoes.

Further work on malaria vector populations, in what was then Tanganyika, with Dr Chris Draper led to a classic, and still frequently cited, paper on the use of the sporozoite rate to assess the mean age of the

mosquitoes and hence their vectorial capacity.

When George returned to the Ross Institute under the Directorship of Professor Macdonald, and later Professors Leonard Bruce Chwatt and David Bradley, he set up laboratory colonies of *Anopheles*



*Professor George Davidson, DSc*

mosquitoes, with which to study, among other things, the first examples of insecticide resistance in these mosquitoes. In this colonization work he was assisted by, among others, Barbara Sawyer who still continues this work in the cellars under Gower Street. The resistance studies led to

recommendations to the World Health Organization on the use of single discriminating dosages as a practical field method of detecting resistance. The work also involved crosses of different populations of what was then thought to be a single species of malaria vector—*A. gambiae*. The repeated failure of certain backcrosses to yield progeny led George to realise that what looked like one species was actually a complex of species, crosses between which yielded sterile male hybrids. This form of sterile male led George to an interest in genetic control of insects, a subject on which he wrote a book.

At an age, when nowadays young scientists expect to be carrying out their PhD projects, George was doing real work, and he remained plain Mr Davidson at many august scientific gatherings. However, in 1966 his publications won him a DSc, in 1972 he was the first recipient of the George Macdonald Medal and in his last years at the LSHTM he became Emeritus Professor of Medical Entomology and Head of the Entomology Department.

Despite the personal tragedy of the loss of his beloved daughter to childhood leukaemia, George's public face was always genial and he will be missed by a wide circle of friends in many countries around the world.

**Appreciation by Chris Curtis  
and Simon Miles**

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### Recent advances in schistosomiasis in Egypt

*S. mansoni* prevalence will be slow and difficult to achieve. Future monitoring will take special note of the prevalence of *S. mansoni* in Upper Egypt and also the fact that *Biomphalaria* species seem capable of invading irrigation systems very quickly.

The SRP also runs a young scientists award programme which funds and trains young Egyptian scientists in advanced research techniques in many different medical and biological fields. Participants then complete a 2-3 years research project and, in the long term, they will enhance the research capabilities in Egypt and go on to work on various

health problems, including schistosomiasis.

In the future the SRP will place emphasis on the characterization of populations for vaccine trials. The MOH programme of large scale chemotherapy accompanied by snail control, health education and improvement of water supplies and sanitation will continue.

**Andrew Davis**

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