John Bernard Lloyd (Jack) Howell

Transformed medical education and the treatment of asthma

John Bernard Lloyd (Jack) Howell (b 1926; q University of London 1950; CBE), died from pneumonia on 1 January 2015.

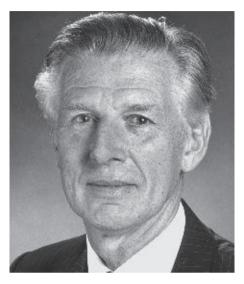
Jack Howell, who has died at the age of 88, will be remembered for changing two entire disciplines while contributing to many more over the course of his career.

To many, Howell will primarily be associated with his work in the late 1960s on the asthma drug sodium cromoglicate (Intal). He led the first clinical trials on the newly discovered inhaled drug, which had a major role in asthma care in the years before inhaled corticosteroids became widely adopted.¹ In later years, he was devastated when meta-analyses were published that seemed to show that the drug worked no better than placebo for paediatric asthma. He worked to refute what he saw as a flawed analysis of his work, right up to his last published paper in 2007.² Coauthor Alan Edwards says of that paper that "our arguments are sound and have remained so."

Sodium cromoglicate and breathlessness

Howell's work on sodium cromoglicate came about almost by chance, as a result of his friendship with the doctor and researcher Roger Altounyan, at a time when they worked in neighbouring hospitals in Manchester. Howell was senior lecturer in Douglas Black's department of medicine at Manchester Royal Infirmary from 1960 to 1969. He later spoke of how Altounyan persuaded Howell to inject him with cromoglicate, somewhat against his better judgement. "I told Roger jokingly, that my main concern was what I was going to say to his wife, Hella-and he embellished this to 'Hella, I'm afraid I have killed Roger-with some of his own medicine," he said.³ Both men survived the experiment and went on to see the drug adopted all over the world for the treatment of asthma and other allergic conditions.

Howell qualified in medicine at the Middlesex Hospital, University of London, in 1950. It was while working at the Middlesex that he won a Medical Research Council research fellowship at Johns Hopkins Medical School in Baltimore, USA. Around that time he developed his interest in the physiology of the respiratory system, in particular breathlessness. "Breathlessness was his big thing. He took several different approaches and invented all sorts of experimental methods to understand it," said Stephen Holgate, a professor at South-



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ampton University Medical School, who later became his colleague. The methods included the Campbell and Howell technique for estimating arterial carbon dioxide, developed with Moran Campbell of McMaster Medical School in Canada, new methods for assessing diaphragmatic strength, and some of the earliest studies on hyperventilation syndrome.

A new curriculum

His friendship with Campbell had another groundbreaking outcome. In the early 1970s, Howell helped to establish the new medical school at Southampton University, with a revolutionary new medical curriculum strongly influenced by the ideas that Campbell had introduced at McMaster. These included integrated system course teaching, early clinical contact for students, an opportunity to study topics in depth, and clinical attachments to hospitals and general practices for fifth year students.

Howell's innovations were later adopted by the General Medical Council as standard practice in UK medical schools. Holgate, who worked with him at Southampton in these early years, said: "All the students were very enthusiastic because everything was new. They were being evaluated every 15 minutes—everybody was watching very carefully because it was quite revolutionary, but it came out very well and stood the test of time." Howell, said Holgate, had no time for "topdown professor stuff" but allowed people liberty to explore their ideas for research as well as education. "He enabled people to flourish within their own environment," he said. This was reflected in the world class pulmonary research group he established at Southampton, which included Graham Stirling, Richard Godfrey, and Anne Tattersfield, as well as Holgate. Howell's students and colleagues at Southampton affectionately called him "Whispering Jack" because of his husky voice, a legacy perhaps of having smoked as a young man.

Public and private life

Howell continued to be involved in public life. His wide array of positions included that of dean of medicine at Southampton University (1978-83), chairman of Southampton District Health Authority (1983-98), president of the BMA (1989-90), and president of the British Thoracic Society (1998-99). According to Holgate, he was a public spirited man, who was able to "stand back" from a situation and oversee reorganisation.

His busy public life necessarily left little time for home life, as his son, David, acknowledged. "His public work was very close to his heart, but it can be an immensely frustrating, and difficult world to be in. He had such a busy life, but when he retired we spent much more time with him." David said that science was his father's abiding passion, driven by a great interest in the philosophy of science and decision making. "He read quite widely and was very keen on [Karl] Popper. We debated Popper endlessly round the dinner table," he said.

Yet he said his father "never forgot" that he was a practising clinician and his work reflected that. "Although there was the science side, the other side was his humanity, and people were hugely important to him. He was a very kind man." He said that the nursing staff at the home where he spent the last two years of his life often remarked on his politeness and interest in them, even though he had quite severe dementia. "After his death, when we told the staff they all burst into tears. He retained his humanity and interest in people," he said.

Howell leaves his wife, Heather; two sons; and a daughter.

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