

ARCHIVES OF DISEASE IN CHILDHOOD

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JAMES SPENCE MEDALLIST 1994

Professor Edward Osmund Royle Reynolds

The James Spence Medal was presented to Professor 'Os' Reynolds on 14 April 1994. Professor Sir David Hull, President of the British Paediatric Association, gave the following citation.

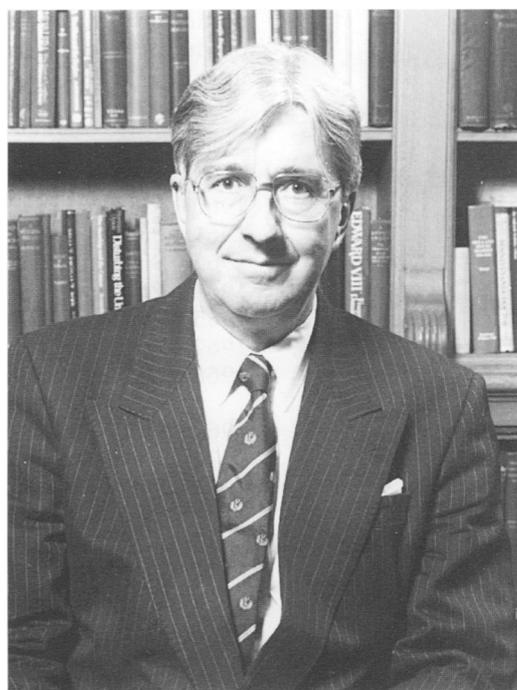
The James Spence Medal is awarded at the recommendation of the Council of the British Paediatric Association for outstanding contributions to the advancement of paediatric knowledge. It is my pleasure this year to present it to Edward Osmund Royle Reynolds.

Professor Reynolds has spent a lifetime steeped in fetal and neonatal physiology and has applied his considerable abilities as a scientist and clinician to the care of the preterm and ill newborn infant.

He interrupted his medical studies at St Thomas' Hospital to study science under Professor Henry Barcroft and Dr Maureen Young when, he tells me, he spent much of his time fencing. Others have told me of his successes at an international level. He qualified in medicine in 1958. Despite his skill with the blade his only surgical experience was as a casualty officer at St Thomas'. For three years in the medical unit led by Professor Sharpey Schafer and in the paediatric wards of St Thomas' he enjoyed the challenge of putting clinical science into medical care. More practically he learnt to take arterial samples and measure blood gases. This led to three single author papers in the *BMJ* and *Journal of Pediatrics* in 1963 on arterial blood gas tensions in bronchiolitis.

In 1962 he went to Children's Hospital Medical Center in Boston and the Harvard Medical School as a research fellow with Dr Dav Cook. There he met many others who were leading the world in respiratory physiology and neonatal care and he was introduced to the fetal and newborn lamb. He went to the US intending to study lung function in bronchiolitis in infants, but instead elected to investigate the pathogenesis of hyaline membrane disease in lambs.

After a brief period at Yale University, Professor Reynolds returned to the UK in



1964 to help Professor Leonard Strang at University College Hospital in London establish a unit to study the fetal and neonatal lung. Thus began a most successful programme which led to an outstanding series of reports on the pathophysiology of the developing lung and the remarkable adjustments which occur at birth. Many of the heads of university departments of paediatrics in the UK were at one time part of this impressive team.

Professor Reynolds was appointed lecturer in paediatrics in 1965, when he was not a member of a Royal College and had only six months of formal clinical experience in paediatric medicine. In 1966 he gained membership and was appointed senior lecturer and honorary consultant in 1969. I record this so that those who have influence on the new arrangements for training may take note.

In 1965, neonatal medicine was in its infancy, artificial ventilation had yet to be

introduced successfully and to be shown to be helpful. It was inevitable, given his background, that Professor Reynolds would become involved in the introduction and evaluation of new techniques aimed at improving the survival of the newborn infant and particularly those supporting infants with respiratory failure. So he played his part in establishing a leading neonatal service and one which was to be seen as a gold standard in the country. He was appointed professor of neonatal medicine in 1976.

For the sick newborn infant survival is only the first step. Survival without injury especially to the brain is the desired objective. Professor Reynolds and his colleagues followed up all the infants under their care and reported the outcome. At the same time they began a series of investigations using recently developed imaging systems to see if there was anything further that might be done to protect the developing brain. This led to a series of papers with his colleagues in several departments, particularly the medical physics department, on the value of techniques such as ultrasound imaging, nuclear magnetic resonance spectro-

scopy, and near infrared spectroscopy in determining the development and response to injury of the infant brain after birth. Professor Reynolds has the ability not given to every scientist or clinician to work with colleagues in other disciplines, by collaborating with others he has brought their skills and ingenuity as well as his own to the benefit of fragile newborn infants.

Many have sought his expert advice, for example, he acted as specialist adviser to the House of Commons Health Select Committee, many have invited him to lecture in the UK and abroad, and his colleagues and friends in neonatal physiology and medicine elected him President of the Neonatal Society. He is a Fellow of the Royal Society, a rare distinction for a paediatrician.

Professor Reynolds has been and still is concerned to do what he can to ensure the intact survival of vulnerable infants who are potentially normal at birth and to respond sensitively to those who have been seriously and irreversibly damaged. By his research, writings, and example he has enabled all of us to advance our service for newborn infants.

James Spence Medallists

1960	Professor A A Moncrieff	1978	Professor S D M Court
1961	Professor R A McCance	1979	Professor K W Cross
1963	Sir F Macfarlane Burnet	1980	Professor J M Tanner
1964	Professor L S Penrose	1981	Dr Elsie M Widdowson
1965	Dr Cicely D Williams	1982	Dr D MacCarthy
1967	Professor R R A Coombs	1983	Professor J O Forfar
1968	Dr Mary Sheridan	1984	Dr J W B Douglas
	Dr D W Winnicott	1985	Dr N S Gordon
1969	Dr G S Dawes	1986	Sir Peter Tizard
1970	Professor D V Hubble	1987	Professor J L Emery
1971	Dr W W Payne		Dr F J Miller
1972	Dr R C MacKeith	1988	Professor O H Wolff
1973	Professor C A Clarke	1989	Professor D C Morley
1974	Dr J Bowlby	1990	Professor L B Strang
1976	Dr D M T Gairdner	1991	Professor John A Davis
1977	Professor R S Illingworth	1992	Professor Richard W Smithells
		1993	Professor Dame June Lloyd