

# David Marsden 1938-1998



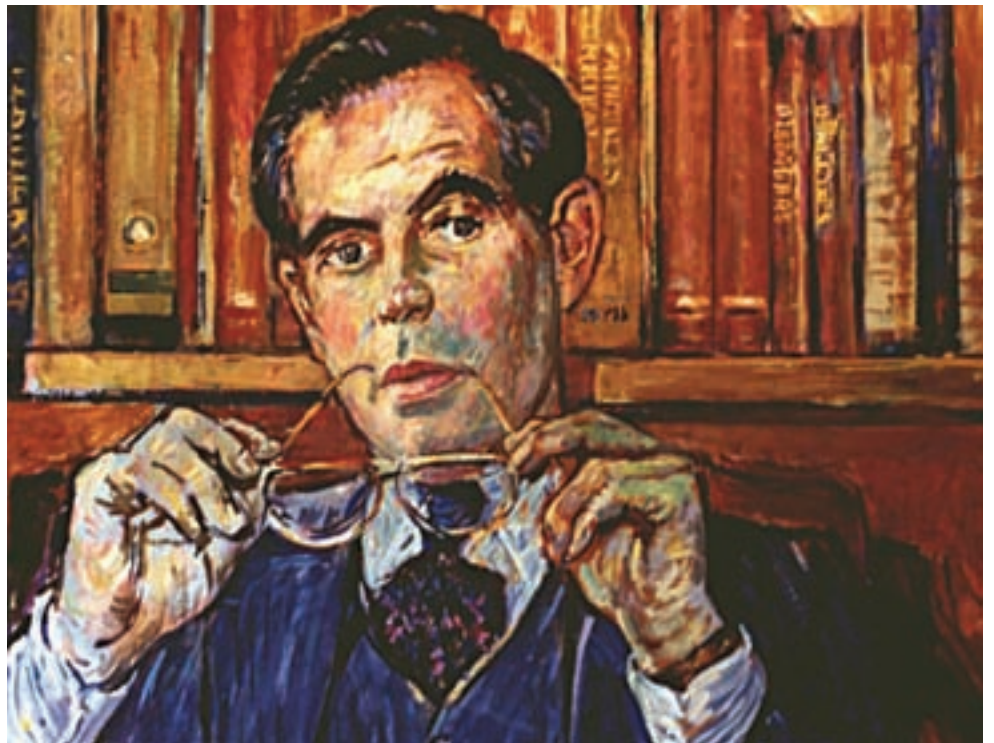
## Prof Niall Quinn

is Emeritus Professor of Neurology at the UCL Institute of Neurology and Honorary Consultant Neurologist at the National Hospital for Neurology and Neurosurgery, Queen Square. He worked with David Marsden first as SHO in 1976, and later continuously for 18 years from 1980 to 1998, and has been secretary of MDS and Chair of MDS-ES.

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The portrait of David Marsden is by David Graham and was commissioned by the Movement Disorder Society and hangs in the Gilliat Lecture theatre in the Institute of Neurology, Queen Square. It is reproduced with the permission of the President of the Movement Disorder Society, Philip Thompson.



(Charles) David Marsden ("CDM") died in Baltimore, USA, in September 1998 at the age of 60, just three weeks into his first ever sabbatical, at NIH. He was arguably the leading academic neurologist and neuroscientist of his generation in the UK and was responsible, together with Stanley Fahn in New York, for putting movement disorders firmly on the map as a distinct and leading subspeciality.

Born in Croydon, he was educated at Cheltenham College (from which he was suspended for smoking, but allowed to sit his A levels). He then went to St Thomas' Hospital in 1956 to read medicine. There, in addition to winning three scholarships, an exhibition, five prizes, and two medals, he also represented the hospital at cricket and rugby (he had earlier captained England Schoolboys as scrum half), and was clearly going places.

After preclinical training he got a first in his intercalated BSc in 1959, and went on to obtain an MSc in 1960 with a thesis on pigmentation in the substantia nigra that established his abiding interest in diseases of the basal ganglia. He qualified in 1963. By 1965, when he became MRCP, he had seven papers to his name, including two in the *Journal of Anatomy*, two in *Nature*, and two on parkinsonian tremor in the *Lancet* with Dr (now Lord) David Owen. He was then lecturer in medicine at St Thomas' for two years, and following this spent two years as senior resident house physician at The National Hospital, Queen Square, where he co-authored papers on spinal muscular atrophy and painful legs and moving toes, and continued to develop his work on human neurophysiology, first with John Meadows, and later as part of the "3M's"

(Marsden, Merton and Morton).

In 1970, only seven years after qualifying, he was appointed Senior Lecturer in Neurology at the Institute of Psychiatry and Honorary Consultant Neurologist to the Maudsley and Bethlem Royal Hospitals and to King's College Hospital. Two years later, aged thirty-four, he was the first appointee to the newly established joint chair of neurology at the Institute of Psychiatry and King's College Hospital Medical School. There he founded and directed the Medical Research Council Human Movement and Balance Unit (HMBU). This was the vehicle for several strands of research – first experimental neuropharmacology, together with Peter Jenner, then human neurophysiology, with John Rothwell and Brian Day, and then the neuropsychology of movement disorders with Richard Brown and later Marjan Jahanshahi. He also co-founded, with Andrew Lees, the UK's first PD Brain Bank.

Marsden's time at Denmark Hill really constituted his golden years of productivity and camaraderie with a host of Fellows and visiting researchers drawn by his growing reputation. The first was Roger Duvoisin (USA), followed by many others including Paul Bedard (Canada), Mark Hallett and Dan Tarsy (USA), Eldad Melamed (Israel), Wolfgang Oertel and Reiner Benecke (Germany), Alfredo Berardelli, Alberto Albanese, Giovanni Abbruzzese and Fabrizio Stocchi (Italy), Tony Lang (Canada), Jose Obeso (Spain) and Philip Thompson (Australia), all since professors and international leaders in the field of movement disorders. He established the UK's first specialist PD clinic with David Parkes, and with David Chadwick

and others explored clinical, physiological and pharmacological aspects of myoclonus. He was one of the pioneers of the clinical application of evoked potentials, and of electrical and magnetic stimulation of the brain and, with Peter Jenner, developed the MPTP marmoset model of PD. Parkinsonian disorders were the main thrust of his work, but he made his most important mark in the field of dystonia, bringing it out of the dark ages when so many cases were thought to be psychiatric, and placing it on a firm organic footing.

CDM's most critical interaction and collaboration, however, was with Stanley Fahn, Houston Merritt Professor of Neurology at the Neurological Institute in Columbia Presbyterian Hospital in New York. Together, in 1986, they founded the Movement Disorders Journal, of which they were both co-editors for its first ten years, and shortly later the Movement Disorder Society (MDS).

In 1987 Roger Gilliatt, the first Chair of Neurology at the Institute of Neurology at Queen Square, was to retire, and David was appointed to succeed him, so Peter Jenner and I organised a Festschrift\* in recognition of his 17 years at Denmark Hill, little realising that another chance would not come.

At Queen Square in the late 1980's specialist clinics still tended to be frowned upon, but they began to thrive under David, and fellows continued to arrive from all corners of the world. The clinical and scientific field of neurogenetics was burgeoning, and we had the enormous good fortune to have Anita Harding, married to PK Thomas, to lead in this area. After eight years holding the Queen Square Chair of Clinical Neurology, David decided to step down and become Dean, and Anita was appointed, but tragically died of bowel cancer aged 42, just weeks before she was due to take up the Chair, which was then occupied by Ian MacDonald.

Anita's death was a terrible blow, particularly to David. He did not really enjoy being Dean, and when his term ended three years later he was looking forward to getting back to research – one of his plans at the time was to further unravel the mysteries of apraxia and to explain it to the world, but he never lived to complete this.

David was exceptional. He was highly intelligent and clearly 'driven' to be extraordinarily productive. One secret of his success was his attention to detail whilst at the same time clearly seeing the bigger picture. He had a rare ability to make complicated matters seem simple, and to share his thought processes with

others. His teaching method was by example. He never acted as if his students should really already know through some osmotic process what he was deigning to teach them. Instead he revelled in taking them on a voyage of discovery. He did this best not in his lectures, which were of course outstanding models of clarity, but particularly in his clinics and ward rounds, and especially in his "book rounds". These weekly gatherings would bring together the junior staff on the firm, the clinical fellows, and the notes of the current inpatients. The SHO or registrar would begin the history and after several sentences David would say "Stop!" and ask one of the fellows what he or she thought of the story so far, and by iterating this process gave insight into the way he would approach the question of differential diagnosis, and imprinted the same analytical and teaching technique on his successors.

David was a complex personality, quite shy and private in some ways, so that few really felt they knew him really well personally. Yet he had an extraordinary ability to motivate people through charm, charisma, cajoling, and example. He could also be forceful in getting what he thought was important, although always relying first on the diplomatic route, but was always scrupulously fair. His long-term lieutenants were mainly from the UK, but almost all of his fellows were from abroad, which made for a cosmopolitan flavour, and has spread his influence around the globe.

David worked hard but also played hard, and had a legendary capacity to party late into the night when away at meetings, only to deliver a brilliant lecture the following morning. Although he gave up smoking for a few years in the 1980's, for most of his life he chain-smoked Malboro cigarettes, and was often to be found enveloped in a cloud of smoke together with Anita and Philip Thompson. His recreation listed in Who's Who was "the human brain", but he also enjoyed sailing, bird-watching and gardening.

In listing his professional achievements it is difficult to know where to start or to finish. His published work is extensive – 740 original papers, plus over 208 chapters, 76 reviews and 100 letters and notes – one publication every twelve days for over 30 years, covering clinical neurology, neuropsychology, neurochemistry, neuropathology, neuropharmacology and neurophysiology. He was Editor of *JNMP* for a decade, on the editorial boards of another 20 journals, member of 12 foreign societies, and held 36 visiting professorships, received 10 major awards, and gave numerous major invit-

ed lectures. He was awarded the MRCPsych in 1978, was elected FRS in 1983 and awarded a DSc from London University in 1984, and was on numerous advisory boards including the councils of the Royal Society, the MRC and the Royal College of Physicians. However, his biggest legacies to world Neurology have been his fellows, his Journal and his Society. ♦

#### Selected further reading

- Meadows JC, Marsden CD, Harriman DG. *Chronic spinal muscular atrophy in adults*. Parts 1 & 2. *J Neurol Sci* 1969;9:527-50 & 551-6.
- Spillane JD, Nathan PW, Kelly RE, Marsden CD. *Painful legs and moving toes*. *Brain* 1971;94:541-56.
- Marsden CD, Merton PA, Morton HB. *Servo action in human voluntary movement*. *Nature* 1972;238:140-3.
- Marsden CD, Harrison MJ. *Idiopathic torsion dystonia (dystonia musculorum deformans)*. A review of forty-two patients. *Brain* 1974;97:793-810.
- Asselman P, Chadwick DW, Marsden CD. *Visual evoked responses in the diagnosis and management of patients suspected of multiple sclerosis*. *Brain* 1975;98:261-82.
- Hallett M, Chadwick D, Marsden CD. *Cortical reflex myoclonus*. *Neurology* 1979;29:1107-25.
- Marsden CD. *The mysterious motor function of the basal ganglia: the Robert Wartenberg Lecture*. *Neurology* 1982;32:514-39.
- Merton PA, Hill DK, Morton HB, Marsden CD. *Scope of a technique for electrical stimulation of human brain, spinal cord, and muscle*. *Lancet* 1982;2:597-600.
- Jenner P, Rupniak NM, Rose S, Kelly E, Kilpatrick G, Lees A, Marsden CD. *1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced parkinsonism in the common marmoset*. *Neurosci Lett* 1984;50:85-90.
- Marsden CD. *Hysteria—a neurologist's view*. *Psychol Med* 1986;16:277-88.
- Quinn NP, Koller WC, Lang AE, Marsden CD. *Painful Parkinson's disease*. *Lancet*. 1986;1:1366-9.
- Benecke R, Rothwell JC, Dick JP, Day BL, Marsden CD. *Disturbance of sequential movements in patients with Parkinson's disease*. *Brain* 1987;110:361-79.
- Day BL, Dressler D, Maertens de Noordhout A, Marsden CD, Nakashima K, Rothwell JC, Thompson PD. *Electric and magnetic stimulation of human motor cortex: surface EMG and single motor unit responses*. *J Physiol* 1989;412:449-73. Erratum in: *J Physiol* 1990;430:617.
- \* Quinn NP & Jenner PJ. *Disorders of Movement. Clinical, pharmacological and physiological aspects*. 1989 London: Academic Press (Marsden Festschrift book, informally known as the Butterfly book because of the Camberwell Beauty chosen to grace the cover).
- Marsden CD, Harding AE, Obeso JA, Lu CS. *Progressive myoclonic ataxia (the Ramsay Hunt syndrome)*. *Arch Neurol* 1990;47:1121-5.
- Lindvall O, Brundin P, Widner H, Rehncrona S, Gustavii B, Frackowiak R, Leenders KL, Sawle G, Rothwell JC, Marsden CD, et al. *Grafts of fetal dopamine neurons survive and improve motor function in Parkinson's disease*. *Science* 1990;247:574-7.
- Brown P, Thompson PD, Rothwell JC, Day BL, Marsden CD. *Axial myoclonus of propriospinal origin*. *Brain* 1991;114:197-214.
- Jahanshahi M, Brown RG, Marsden CD. *Simple and choice reaction time and the use of advance information for motor preparation in Parkinson's disease*. *Brain* 1992;115:539-64.
- Nutt JG, Marsden CD, Thompson PD. *Human walking and higher-level gait disorders, particularly in the elderly*. *Neurology* 1993;43:268-79.
- Bhatia KP, Marsden CD. *The behavioural and motor consequences of focal lesions of the basal ganglia in man*. *Brain* 1994;117:859-76.
- Marsden CD, Obeso JA. *The functions of the basal ganglia and the paradox of stereotaxic surgery in Parkinson's disease*. *Brain* 1994;117:877-97.

*I seem to be the only person here who has never written a paper with David Marsden!*  
(Gerald Stern at CDM's Denmark Hill Festschrift, June 1987)