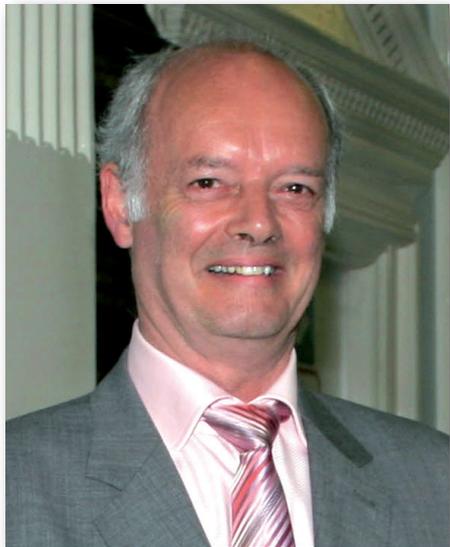


Professor John B. Clark BSc PhD DSc (1941–2013)



John Clark was a gentleman scientist in every sense and a true pioneer in the field of neurochemistry and brain energy metabolism. He was born in Essex, attended Southend High School for Boys and studied Biochemistry at University College London (UCL). Upon completing his bachelor's degree in 1962, he remained at UCL for his PhD. John was clearly an exceptional student as demonstrated by *Biochemical Journal*¹ and *Nature*² publications emanating from his work on the synthesis of nicotinamide adenine dinucleotides. Moving away from UCL, for a transition period of 25 years, John was appointed to the Biochemistry Department of St Bartholomew's Hospital (Barts). While at Barts, John was awarded a Medical Research Council travelling fellowship (1969–1970) that enabled him to work with the likes of Bill Nicklas and Britton Chance at the Johnson Foundation in Philadelphia. It was here that John formulated his interest into mitochondrial function and energy metabolism, a passion that he brought back to the UK. John's enthusiasm for the subject enabled him to establish highly productive research groups with a clear focus on mitochondrial metabolism in health and disease.

In the 1970s, the area of inherited mitochondrial diseases was in its infancy. Such diseases were considered, at that time, to be exceptionally rare. Despite this misconception, John established strong links with the National Hospital, Queen Square, London, and began working with John Morgan-Hughes and

John Land to investigate and characterize patients with mitochondrial disorders. This interaction, coupled with the growing awareness of the importance of inherited and acquired mitochondrial disorders, led to John returning to UCL. In 1990, he was appointed as Chairman of the Department of Neurochemistry, Institute of Neurology, Queen Square. From this point, until his retirement in 2006, John presided over many successful projects that he developed, in a truly collaborative style, with his students and postdoctoral scientists. These projects included the role of oxidative/nitrosative stress as culprits for the mitochondrial dysfunction associated with neurodegeneration, the characterization of glial and neuronal energy metabolism, and the trafficking of antioxidants between the two cell types. In addition, John nurtured links with his clinical colleagues at the National Hospital, which introduced a translation research element to his department. With the appointment of John Land in 1992, a dedicated diagnostic facility (Neurometabolic Unit) was established at the National Hospital. This unit now provides a nationally commissioned (NHS) service for the biochemical investigation of patients with suspected mitochondrial disorders.

John hosted an extremely successful department at UCL that enjoyed an international reputation, healthy publication record and a grant income that would satisfy institute directors. Importantly, John also fostered an element of fun in his department. This combination resulted in numerous national and international requests to come and work with him and was a pivotal factor as to why so many of his PhD students and postdocs have remained and succeeded in science. John also embraced and enjoyed the success of others and would open up his office for appropriate celebration at the end of a working day. Such celebrations were not just reserved for the award of a major grant, but would extend to PhD students who had 'survived' their first poster presentation. If John had to leave such proceedings early, he would entrust his team to clear up and remove all evidence of the party. On the very rare occasion that there was a failure in this task, the next day the group would be met with a smile, a slightly raised eyebrow and the very calm suggestion that we might wish to consider reviewing our procedures for the next time.

John's James Bond (of whom he was a fan)-like coolness was also a defining characteristic and a significant attribute. Consequently, this combination of calmness and intellect meant that he was recruited to high-level committees as well as also being asked to arbitrate and resolve difficult situations. His list of membership was impressive, and included Editorial Boards of the *Biochemical Journal* (Editor and Deputy Chairman 1975–1982), *Journal of Neurochemistry* (1985–1994), *Brain* (Deputy Editor 1990–1997) and Chair of Portland Press at the Biochemical Society (2004–2010). He also sat on the MRC board for Neuroscience and Mental Health (1984–1993), plus many other medical charity scientific advisory boards. He worked hard for the International Society of Neurochemistry as Council member and secretary (1997–2010), and for the European Society of Neurochemistry as Council member (2000–2004).

John's passing has left a void in the world of neuroscience. He will be greatly missed by our community. However, he has left us a legacy in the vast array of scientists and clinicians he inspired and trained. We have lost a true pioneer and a neurochemistry hero, who was not influenced by the latest fads and trends and who always remained devoted to his science. Today, his work, which spans more than 50 years, is still influencing mitochondrial biology and medicine.

Away from his science, John particularly enjoyed travel and long walks. He was also very much a family man. John was immensely proud of his children and grandchildren and the partnership he had with his wife, Joan. It is to them that we offer our deepest sympathy. ■

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References

1. Clark, J.B., Greenbaum, A.L., McLean, P. and Reid, E. (1964) *Nature* **201**, 1131–1132
2. Clark, J.B. and Pinder, S. (1966) *Nature* **210**, 631–632

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