Nicolas (Nick) Bruce Myant, DM, FRCP, who died on January 17, 2015 aged 97, was widely acknowledged as one of the leading European researchers into lipid metabolism, whose pioneering studies of whole body cholesterol turnover in human subjects made a major contribution to our current understanding of hypercholesterolaemia (Fig. 1).

Nick Myant was born in Cardiff, Wales in 1917, the son of a Belgian father and English mother. He went to school at Blundell’s in the West of England and claimed that the austere regime of boarding at an English public school in the 1920s was good preparation for all the future hardships that life could throw at you. He then read medicine at Balliol College, Oxford, and University College Hospital (UCH), London. In 1940, he became house physician to Sir Thomas Lewis at UCH. It was there that he met his future wife, Audrey, also a doctor, and they married in 1943. Between 1944 and 1946, he served in India in the army. After demobilisation, he became house physician to Professor John McMichael at Hammersmith Hospital, London. In 1948 he was recruited by Eric Pochin at UCH to evaluate the use of radioiodine to investigate the pathophysiology of the thyroid gland. His expertise in the use of radioisotopes led him, in 1953, to join the Medical Research Council (MRC) Experimental Radiopathology Research Unit (ERRU) at the Hammersmith, directed by George Popják. One of Popják’s major interests was the enzymology of cholesterol metabolism and it was this exposure which kick-started Nick’s life-long interest in cholesterol. Popják resigned from the MRC in 1962 to establish a fruitful research partnership with John Cornforth (the group became known as the “Popcorns”) at the Laboratory of Molecular Enzymology, founded by Shell. This work contributed to the award of the Nobel Prize for Chemistry to Cornforth in 1975. After Popják’s departure, Nick became a member of the External Scientific Staff of the MRC at Hammersmith, where he was joined by Barry Lewis. In 1963 they set up the first lipid clinic in Britain and conducted a series of radio-labeled cholesterol turnover studies in patients with familial hypercholesterolaemia (FH).

Nick’s interest in FH dated from 1963 when a 7-year-old Iraqi homozygote was referred to him with a cholesterol level of 930 mg/100 ml and extensive cutaneous xanthomas. Nick performed a turnover study which demonstrated a markedly increased rate of cholesterol synthesis. Her hypercholesterolaemia was resistant to diet and drugs, so he and Barry undertook manual plasmapheresis on four consecutive occasions, which lowered her cholesterol, but only temporarily, and led Nick to comment “This line of treatment was obviously useless.” Unfortunately his comment was equally applicable to the ileal bypass which she underwent subsequently and she died from myocardial ischaemia a few months later, aged 10.

Analysis of the results from the whole-body cholesterol turnover studies in normal and FH subjects led Nick to conclude in 1970 that over-synthesis, rather than defective removal of cholesterol, was the underlying abnormality in FH. However, this conclusion remained controversial and the issues surrounding this topic were addressed at an international conference organized by Nick and Gil Thompson at the Hammersmith in 1975, attended by virtually all the world leaders in the field (Fig. 2). George Popják, who by then had moved to the University of California, Los Angeles, took Nick’s original view that overproduction
of cholesterol (resulting from dysregulation of HMG-CoA reductase) was the primary defect in FH, rather than defective removal, an alternative theory held by others. This disagreement prompted a heated discussion between Popják and Michael Brown on the floor of the lecture theater. After minutely examining and weighing the evidence for the competing hypotheses, Nick became convinced that the "excess production" theory was wrong and he fully embraced the "defective removal" theory, which was based on the discovery of the LDL receptor the previous year by Michael Brown and Joseph Goldstein. It followed, therefore, that the excessive production of cholesterol was a secondary phenomenon caused by defective cellular uptake of cholesterol and the resulting lack of feedback control. The rest is history. Nick greatly admired the Dallas duo and their Nobel Prize-winning research. This admiration was reciprocated, and after Nick’s death Michael Brown wrote: “When we entered the field, we found him to be one of a very small number of linear thinkers. The rest were running around in circles. We held him in the highest regard.”

Increasing interest in the potential role of cholesterol in cardiovascular disease encouraged the MRC to establish the Lipid Metabolism Unit (LMU) at Hammersmith Hospital in 1969 with Nick as director. The Unit quickly expanded in terms of space and personnel. During this period Nick inspired his colleagues, encouraging them to...
pursue their own particular interests within the cholesterol field, and he gained the respect and affection of all those who worked with him. These people included Kostas Mitropoulos, Geoff Gibbons, Brian Knight, Gil Thompson, Anne Soutar, Drago Reichl, and Leon Simons, together with various workers from overseas, postgraduate students, and support staff. By the time Nick retired in 1983, his Unit had made significant contributions toward a better understanding of the metabolic basis, genetic diagnosis, and management of FH, especially homozygotes, including the introduction of therapeutic plasma exchange, the forerunner of lipoprotein apheresis.

But Nick did not really retire in 1983. Relieved of administrative responsibilities, which he never relished, he was free to pursue his own interests. From 1984 to 1987 he co-edited *Atherosclerosis* and then embarked on a second career, this time in molecular biology, the techniques for which he learned from Carol Shoulders in Tito Baralle’s laboratory at the Dunn School of Pathology at the University of Oxford, where they cloned the cDNA for human apoB. He then found a home in Anne Soutar and Brian Knight’s laboratory in the MRC lipoprotein group at the Hammersmith, where he was loved and respected by all the scientists he encountered, young and old. There he and his research assistant, John Gallagher, focussed on various aspects of familial defective apoB (FDB), publishing more than a dozen papers on this topic between 1991 and 1997. One outstanding contribution that was typical of Nick’s enthusiasm for evolution and genetics was his estimate that the apoB R3500Q mutation occurred in the human apoB gene approximately 6,000–7,000 years previously in middle Europe, about 270 generations ago, based on painstaking collection and genotyping of samples from FDB families far and wide. Indeed, his life-long interest in evolution lead to his final research paper, a review on the role of reelin and the apoE receptor 2 in the brain, published in the *Proceedings of the Royal Society* in 2010. That paper also contained Nick’s data on when the additional exon in the gene for the apoER2 receptor first appeared. The laboratory freezer always contained samples of unusual species that he had persuaded the London Zoo to donate on their demise!

Nick presided over a period in the 1970s during which the role of cholesterol in cardiovascular disease remained highly controversial. This is difficult to believe nowadays, when hardly a week goes by without some national newspaper somewhere in the world proclaiming cholesterol as the gravest threat to public health since the Black Death. Many influential scientists and clinicians remained skeptical in the 1970s and it was through work led by people like Nick that the basis was laid for our current understanding of the metabolic and genetic links between cholesterol and cardiovascular disease. It was this insight that eventually led to the development of the statin class of drugs.

Not that Nick ever trumpeted his major contribution to this work, that simply wasn’t his style. He firmly believed that truth in science would be revealed only by rigorous application of scientific methodology in a dispassionate and purely objective manner. In his view, there was no room for evangelism in the pursuit of a particular theory. His hero was Charles Darwin, the greatest biologist in the history of science, who, like Nick, was keen to exclude anything other than a dispassionate interpretation of the scientific data in formulating and testing his ideas. Nick’s admiration for Darwin was reflected at his funeral by a reading, delivered by one of Nick’s grandsons, of a passage from Darwin’s *Descent of Man*, a first edition that was presented to Nick by members of the Unit on his retirement. In the preface to his magnum opus, *The Biology of Cholesterol and Related Steroids* (1), Nick wrote, “It seems to me that those engaged in the current (cholesterol) controversy should try to emulate Darwin. … he kept a special notebook for facts which went against his theory.” It was this philosophy of science which forced Nick to change his views on the primary cause of FH (see above).

Nick had some amusingly eccentric traits. In the early days of the Unit, he would often hover in the doorway to one of the laboratories and ask “I don’t suppose anyone has a spare cigarette?” These were the days long before “Risk Assessments” and smoking in the lab was not considered a Health and Safety issue. It turned out that not having cigarettes readily available was part of Nick’s strategy for quitting the habit. Nick was also an avid horologist and collector of antique clocks. He had so many clocks in his study at home that he used his office at the Unit as an “overflow” clock park. As he did not precisely synchronize the clocks on a daily basis, it was quite an amusing experience to be with him at the stroke of mid-day, at which the first chime heralded the start of an un-orchestrated cacophony which lasted several minutes. Discussion was suspended during this period.

Nick was a committed Socialist, a political philosophy which he claimed was nurtured by his undergraduate days at Balliol College, Oxford in the 1930s. He always considered that one of his most onerous tasks as head of the LMU was to escort the right-wing conservative politician Margaret Thatcher, then Secretary of State for Education (later Prime Minister and bosom pal of Ronald Reagan) around the Unit when she showed up on a “fact-finding mission.” Fortunately, she was a scientist, so at least they had something in common.

During his long career, Nick published three textbooks and 253 scientific papers spanning a period of 70 years between 1940 and 2010. He published his first paper as a 25-year-old undergraduate in the *Journal of Physiology* (2), and as mentioned above, his last paper, published in 2010, described the role of reelin and the apoE receptor 2 during development of the brain (3).

Nick’s preeminent role in lipid research in Britain is commemorated by the Myant Lecture, which was inaugurated at the British Hyperlipidaemia Association’s scientific meeting in Oxford in 1989 and given annually thereafter. Many renowned lipidologists have been Myant Lecturers, including Dan Steinberg, Joe Goldstein, Dick Havel, and others. This eponymous lecture is a fitting tribute to a British clinical scientist who ranks alongside those American pioneers of 20th century lipid research. It also perpetuates the memory of a unique colleague, a friendly, charming, and unassuming man with wide interests, including art,
horology, and gardening, whose formidable intelligence was enlivened by a quirky sense of humour.

It has been said that there are two types of ambitious people. There are people who want to “do” something and there are people who want to “be” somebody. Nick was very much a scientist of the first type. He was a man of great integrity and scientific creativity whose ideas inspired many scientists around the world; ideas which were pivotal in our understanding of diseases caused by abnormalities of cholesterol metabolism and their impact on human health. He is survived by his widow and their three children, together with eight grandchildren and seven great grandchildren.

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