Obituary Notice

THOMAS HUGH MILROY, 1870-1950

Thomas Hugh Milroy, physiologist and biochemist, died on 20 March 1950 in his 81st year at his home in North Berwick. His death has robbed many people of a friend. Milroy's qualities were not of the sort that lead to dramatic achievements, neither was his character of a kind that seeks publicity; his life was that of a scholar, marked by no events of journalistic news value, but rich in the sober satisfactions that the pursuit of knowledge can give.

Milroy was the eldest son of John Milroy of Kirkcowan, Wigtownshire. He and his younger brother John Alexander were educated at the local academy and subsequently at the University of Edinburgh where both took medical qualifications. From Edinburgh, where he also took a science degree, Thomas Milroy went to study in Berlin and Marburg, returning to Edinburgh as assistant to the Professor of Physiology, Prof. Sharpey-Schäfer. He was already the author of several papers published in Germany and in this country, and the diversity of their titles show, too, the catholic nature of his interests. One interest which never left him was in the nature and function of nucleic acid and nucleoproteins. Several papers published between 1896 and 1905 bear witness to his belief that these substances were of fundamental importance in the cell structure, a belief which received its justification some 40 years later. In the first decade of the present century, he interested himself in a variety of topics from the responses of the embryonic retina to light, to the staining properties of the central nervous system, and the effect of fatigue upon reaction times. A piece of work in which he was engaged in 1903 was the study of purine metabolism in birds, and one colleague of those days still remembers with joy the geese that paraded the Department with rubber bags attached in a manner suitable for the study of uric acid excretion. As a teacher he found time to publish in collaboration with his brother a *Textbook of Practical Physiological Chemistry* of which the 3rd edition appeared in 1921. Milroy was appointed to the Chair of Physiology at Queen's University, Belfast in 1902 and he was joined almost immediately by his brother as lecturer

(later Professor) in Biochemistry. A group of papers published in 1912-15 on respiratory exchanges, apnoea, and the effective stimuli of the respiratory centre led not unnaturally to an interest in the pH of blood as affected by ventilation, and the papers published during the period 1914-23 contained a majority bearing on this theme. At this time the subject of diabetes was attracting great attention, and it is possible that some work he did on this subject deflected his interest to the nature of the chemical processes entailed in muscular contraction, an interest with which his name came to be strongly associated during the next decade. Certainly in 1924 the subject of the chemistry of muscular contraction was in that chaotic state which often precedes a period of advance, with contributions coming in at a great rate from the schools of Meyerhof and Embden; Milroy's contributions on the acid-base equilibrium in voluntary muscle, the relation of phosphate to carbohydrate changes in muscle, the nature of the relevant enzyme systems, and the events constituting the recovery process in muscle, all had their influence upon the theory of muscle biochemistry which was slowly evolving. Yet it is characteristic of Milroy's modesty that his review of the subject (*Physiological Reviews*, 11, 515), published in 1931, contains reference to only one of his own papers.

Even so retiring an individual as T. H. Milroy could not altogether avoid the collecting of honours. He received an honorary D.Sc. of Belfast and an honorary M.D. of Dublin together with similar honours from the National University of Ireland and from the University of Edinburgh.

It was to Edinburgh that Milroy returned after his retirement in 1935, and for some years after his was a familiar figure in the University's Physiology Department, sitting in the Library engaged on bibliographical research.

Those of his younger colleagues who had the good fortune to consult him there invariably carried away an impression of an alert, wise and friendly mind.

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