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Martin Rowan started his haematological career at the Edinburgh Royal Infirmary in 1963, followed by an appointment as consultant haematologist at the Glasgow Royal Infirmary in 1969, and in 1977 he was appointed as head of the haematology department at the Glasgow Western Infirmary and senior lecturer in haematology at the University of Glasgow, until his retirement in 1996, after which he continued to devote himself to research and authorship until his final illness.

Martin was a good clinician, but from the start he became interested in laboratory practice, the clinical utility of laboratory investigations and the importance of integrating clinical and laboratory aspects of haematology[1)-3)], and his early publications included studies on treatment of leukaemia, myeloma etc[4),5)]. But he was being drawn increasingly into the field of laboratory haematology. Thus, at the Royal Infirmary he began his research into laboratory instrumentation, especially the potential developments in automated analysers which were just beginning to appear, and he realised their future role in the organization of modern laboratory practice. This was to be his life study and he made major contributions to these important topics; under his direction his department gained international reputation as a centre of excellence for the evaluation, standardization and quality control of laboratory instruments, the clinical utility of laboratory tests and the importance of ensuring their reliability.

Martin became distinguished as a lecturer, taking part in many scientific symposia in the United Kingdom and other countries. He was a scholarly writer, and he published numerous scientific papers as well as contributing to text books, including a chapter on The blood and Bone marrow in the classic Muir's Textbook of Pathology.

One of his skills was his ability to identify developments, the implications of which would become apparent only later to the general practitioners. These included an introduction to the newer parameters[6)-8)] and his first monograph on blood cell volume analysis[9)]. His subsequent publications were on various aspects of laboratory practice; forty-four are listed on Medline, and others are indexed on the websites of the organizations with which he was associated, and which will be described below. In recent years he published extensively in the Sysmex Journal. His last major work was as co-editor of Advanced Laboratory Methods in Haematology[10)] which will be a significant reference book for some years to come.

Martin was best known for his association with UK and international medical authorities where he provided professional and technical expertise and also demonstrated his talent as an outstanding organizer, administrator and committee-man. In his committees he also had an important role to reconcile contradictory views, often strongly held, by the protagonists, for he was able to defuse and resolve the heated arguments that might arise during committee discussions by a sympathetic, gentle but firm manner, his sense of humour and his soft-spoken voice with its hint of a slight Scottish accent.

In the UK he was invited by the British Society of Haematology to become a member of

the British Committee for Standards in Haematology (BCSH); in 1990 he became Secretary and shortly thereafter Chairman of the General Haematology Task Force,
In this role he was co-author of a number of Guideline documents that have been adopted as standard methods for laboratory practice in the UK and beyond. These were, in general, published in haematology journals, and some important ones in the series Standard Haematology Practice, published by Blackwell Science [11),12)]. This activity brought him in contact with the Medical devices Agency (now Medicines and Health care Regulatory Agency), and he was a astute critic of their evaluation studies on various laboratory instruments. One such evaluation on the first generation reticulocyte counters (Sysmex R-1000) aroused his interest in the potential clinical value of this parameter; he foresaw its increasing utility as an important diagnostic tool, he encouraged workshops on the topic and provided a concise review in one of his last published papers in collaboration with D'Onofrio and Zini[13)].

Martin was the obvious choice when the UK NEQAS required experts to serve on the steering committee for haematology to advise the scheme organizer on the design and operation of the scheme. He served on this committee from 1987 until 1994, and was also a member of the National Quality Assurance Advisory Panel which is responsible for the maintenance of satisfactory standards of laboratory performance in the UK - and none more appropriate than he for this task. Another venture which, in collaboration with me, he helped create were the International Laboratory Haematology Workshops. These were an annual five-day event with lectures, demonstrations and discussions on recent advances in laboratory practice with special emphasis on standards and quality assurance. The faculty consisted of five or six experts from the EU, the thirty participants on each workshop came from all countries, and were a mixture of laboratory professionals, manufacturers and government administrators. Martin thoroughly enjoyed this venture, but we regretted that it was discontinued after several years, as costs increased and registration fees (intentionally, we did not have a trade exhibition) had become unrealistically high.

Turning to Martin's international activities, his name is intimately associated with the International Council for Standardization in Haematology (ICSH). He had attended meetings of the Board on behalf of the British Society of Haematology and he was invited to become a member of the Secretariat in 1986. In 1992, when RW Verwilghen retired he was invited to be his successor as executive Secretary, a post he then held until last year. At the same time, he served on the Cytometry Panel, holding office as Secretary and Chairman at various times. He made major contributions to
ICSH standards development, guidelines documents and state-of-the-art Broadsheets.

ICSH has had a close relationship with WHO for many years. This has consisted of a formal recognition of ICSH as a non-government organization and also a working relationship, especially with Blood Safety Division, subsequently renamed Essential Health Technology. Martin soon became part of this activity, and was co-author of a number of WHO recommended methods, largely based on the ICSH documents, but mainly directed to laboratories with limited facilities (see *www.who.org* > WHO sites: Essemtial health technology). These included: Recommended methods for determination of white blood cell counts by centrifugation (WHO/DIL/00.2), Recommended methods for the visual determination of white blood cell count and platelet count (WHO/DIL/00.3; Calibration and control of basic blood cell counters (WHO/LAB/97.2); Calibration and Maintenance of semi-automated haematology equipment

(WHO/LBS/92.8). Two manuals for which Martin had the major responsibility were Safety in Health-Care laboratories (WHO/LAB/97.1) and Laboratory services for primary health care: requirements for essential clinical Laboratory tests (WHO/LAB/98.1). Both these documents are significant references for laboratory practice.

This brief review indicates only some of Martin's professional activities, specifically in the national and international organizations where he and I worked together. And it does not take account of my personal relationship with him. To me, the major advantage of our joint work was the opportunities for us to be together, at home and abroad, at BCSH and ICSH secretariat meetings, cytometry panel meetings, workshops, congresses. He was both an inspiring colleague and a kind and trusted friend who has left me with many happy memories from hotel breakfasts where he insisted on our always ending the meal with a "sticky bun", to late night relaxation when he taught me the correct method of inhaling malt whiskey, never, never gulping it down.

References

1) *Winchester JF, et al.: Interpretation of the nitroblue-tetrazolium test in regularly dialysed patients. Journal of Clinical Pathology, 26:52-6, 1973.*
2) *Gordon AM, et al.: Routine application of the nitroblue tetrazolium test in the clinical laboratory. Lancet, 2: 292-3, 1973.*
3) *Shenkin A, Citrin DL, Rowan RM: An assessment of the clinical usefulness of plasma ribonuclease assays. Clinica Chimica Acta, 72:223-31, 1976.*
4) *Smith AG, et al.: Acute myelogenous leukaemia following cytotoxic therapy: five cases and a review. Quarterly Journal of Medicine, 51:227-40, 1982.*
5) *Rowan RM: Multiple myeloma: some recent developments. Clinical and Laboratory Haematology, l4: 211-30, 1982.*
6) *Rowan RM, Fraser C, Gray JH: New parameters in routine haematology. British Journal of Haematology, 43: 4907, 1979.*
7) *Rowan RM, et al.: The Coulter Counter Model S Plus: the shape of things to come. Clinical and Laboratory Haematology, 1: 29-40, 1979.*
8) *Rowan RM, Fraser C: Platelet size distribution analysis. In Advances in Haematological Methods: The blood count (ed. OW van Assenfdelft & JM England). CRC Press, Boca Raton, 1982.*
9) *Rowan RM: Blood cell volume analysis - a new screening technology for the haematologist. Abbot Clark, London, 1983.*
10) *Rowan RM, van Assendelft OW, Preston FE: Advances Laboratory Methods in Haematology. Arnold, London. 2002.*
11) *SM Lewis, RM Rowan: Assessment of the need for blood film examination with blood counts by aperture-impedance systems. Standard Haematology Practice, 1: 34-42, Blackwell Science, Oxford, 1991.*
12) *RM Rowan, NK Shinton (Eds): Haematology Laboratory Management and Practice, prepared by the BCSH General Haematology Task Force. Standard Haematology Practice, 2:1-70, Blackwell Science, Oxford, 1994.*
13) *D'Onofrio G, Zini G, Rowan RM: Reticulocyte counting methods and clinical applications. In Advanced Laboratory Methods in Haematology (Ed RM Rowan, OW van Assendelft, FE Preston), 78-126. Arnold, London, 2002.*