

CSCC Award for Outstanding Contribution to Clinical Chemistry
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Andrew R. MacRae



For over 30 years, Dr. Andrew MacRae has made significant contributions to service and research in Clinical Chemistry in Canada. The CSCC is pleased to recognize these outstanding achievements by honouring him with this year's award for Outstanding Contribution to Clinical Chemistry.

Dr. MacRae received his B.Sc. from the University of Toronto in 1968. This was followed by a M.Sc. in Nutrition from the University of Guelph in 1971. His doctorate was obtained from the University of London in the UK in the field of Nutritional Biochemistry in 1974. His external examiner was the famous biochemist, Professor Sir Hans Krebs. Dr. MacRae then returned to Canada and completed the Toronto Post-doctoral Training Program in Clinical Chemistry in 1976.

Dr. MacRae started his career as Assistant Director in the Department of Biochemistry, St. Boniface General Hospital in Winnipeg in 1977. In 1982, he moved to the Oshawa General Hospital (now the Lakeridge Health Corporation) in Ontario as the Clinical Director, Section of Biochemistry. While in Oshawa, Dr. MacRae founded the Research Institute at Lakeridge Health Inc. and he served as its Director and CEO. The Research Institute was unique in that it was situated in a community hospital setting. This was indeed an outstanding achievement by Dr. MacRae to build a Research Institute focused on Clinical Chemistry and its role in health services and population health. Over the years, he was able to secure a number of grants from the Canadian Institutes of Health Research and other peer review funding. He demonstrated that it was possible that a Research Institute based in a community hospital can be successful in this highly competitive process.

Dr. MacRae was instrumental in establishing the provincial Maternal Serum Screening (MSS) program. He chaired many meetings that brought together Clinical Chemists with other health professionals and representatives from the Ministry of Health in Ontario to develop and adopt a model of prenatal screening program that is envied throughout North America. He also participated in the development of software for the calculation and interpretation of Maternal Serum Screen tests. This was initially developed to be used in Oshawa but presently is used by more than 200 labs world-wide.

Recently, he has collaborated on the SAFER Study, a carefully constructed trial funded by the CIHR on the implementation of new serum screening markers into clinical practice in Canada. He has educated a whole generation of Clinical Chemists on MSS by presenting many workshops, roundtables and symposia at both national and international meetings. In addition to his leading work on prenatal screening strategies, Dr. MacRae has been involved in other areas of Clinical Chemistry, in particular his many recent studies on multiple markers as predictors of cardiac disease, in collaboration with Dr. Peter Kavsak. His research has resulted in a large number of peer reviewed publications and abstracts.

At the professional society level, Dr. MacRae has contributed his time and efforts to both the CSCC and CACB. He was President of the Manitoba Society of Clinical Chemists from 1978-1980 and the Ontario

Society of Clinical Chemists from 1987-1989. He was very active with the provincial government in efforts to establish a College for Clinical Chemists in Ontario. He received the Ontario Society of Clinical Chemists Annual Lectureship Award for Outstanding Contributions in 1997. He was the CSCC Newsletter Editor from 1995-98. In 1990, he prepared a history of the profession of Clinical Biochemistry for the Chief Herald to secure the grant of arms for the newly formed Canadian Academy of Clinical Biochemistry (see CSCC News, September 2011) and is a Founding Fellow of the Academy..

This short article does not do justice to Andrew's many contributions and achievements. His collegiality and teamwork has earned him the respect of many peers both nationally and internationally. He continues to contribute to Clinical Chemistry from his present position as Consulting Clinical Biochemist in the Cadham Provincial Laboratory in Winnipeg, Manitoba and Associate Professor, Department of Biochemistry and Medical Genetics, University of Manitoba.