Ernest McCulloch, MD

Together with his colleague, Dr. James Till, Dr. Ernest McCulloch created the first quantitative, clonal method to identify stem cells and used this technique for pioneering studies on stem cells. In addition to providing detailed information about blood cell development, they established the concept of stem cells and set the framework in which stem cells are studied today. Their work gains a new freshness with the current interest in harnessing the developmental program of stem cells for therapeutic purposes.

McCulloch received his MD from The University of Toronto in 1948. Upon graduation, he began his education in research at the Lister Institute in London, England. In 1957 he joined the newly formed Ontario Cancer Institute where the majority of his research focused on normal blood-formation and leukemia.

In addition to his research career, McCulloch worked tirelessly on numerous provincial, national and international advisory committees and provided leadership for the research division at the Ontario Cancer Institute, the Institute of Medical Science at the University of Toronto and as President of the National Academy of Science of the Royal Society of Canada. He is a Fellow of the Royal Society of Canada and the Royal Society of London. In 1969 he was awarded the Gairdner Foundation International Award (with J.E. Till) and in 1988 he became an Officer of the Order of Canada.

Dr. McCulloch and Dr. James Till were jointly nominated and inducted into the Canadian Medical Hall of Fame. Visit the Canadian Stem Cell Foundation website for more about Canada's contribution to stem cell science.