



James Till, PhD

In collaboration, Dr. James Till and Dr. Ernest McCulloch stunned the scientific world with their discovery of transplantable stem cells. Their ground breaking study of the radiation sensitivity of normal mouse bone marrow cells in 1961 established, for the first time, a quantitative method to study individual stem cells in adult bone marrow. In collaboration with Dr. Lou Siminovitch, a trailblazer for molecular biology in Canada, they went on to prove that marrow cells were capable of self-renewal.

Dr. Till completed his BSc and MSc in physics at the University of Saskatchewan, undertaking some of his early work with Dr. Harold Johns. His postdoctoral fellowship brought him to the University of Toronto where he was recruited by Dr. Johns to work with the Ontario Cancer Institute at Princess Margaret Hospital. An important partnership was formed when Dr. Till combined his experience in biophysics with Dr. Ernest McCulloch's medical background in hematology. Together, they made many contributions to the understanding of normal and abnormal blood cell development as stem cells revolutionized the treatment of cancer and laid the foundations for regenerative medicine. Their work fuelled the emergence of the biomedical industry in Canada and in the world.

Since the 1980s, Dr. Till's sphere of research expanded to include quality of life research, clinical and epidemiological studies, research ethics, decision making behaviours of cancer patients and those at high risk of cancer, and the influence of the Internet as a source for information, support and advocacy.

Dr. Till has served on many national and international committees and in numerous leadership positions, including at the University of Toronto and the National Cancer Institute of Canada. In 1969, he was awarded the Gairdner Foundation International Award (with Dr. McCulloch) and in 1994 he became an Officer of the Order of Canada. He is a Fellow of the Royal Society of Canada and the Royal Society of London.

Dr. Till and Dr. Ernest McCulloch were jointly nominated and inducted into the Canadian Medical Hall of Fame.