

# London Celebrates Fifty Years of Cobalt-60 Radiotherapy

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On October 27, 2001, the London Regional Cancer Centre celebrated the 50<sup>th</sup> anniversary of the world's first treatment of a cancer patient using Cobalt-60 radiation.

This first treatment took place at the Ontario Institute of Radiotherapy then located on the Victoria Hospital campus of the London Health Sciences Centre as it is known today. Dr. Ivan Smith (right foreground) was the physician that led the medical team and Mr. Roy Errington (behind Smith) was the entrepreneurial geophysicist who championed the production of commercial Cobalt machines and is the founder of MDS Nordion. The detailed account of the "Ontario-Saskatchewan" race to implement Cobalt-60 radiotherapy has already been capably described in a series of excellent articles (*Interactions*, 1999, Munro et al). Clearly there were significant contributions from both sides of our nation: nuclear industry, national dose calibration standards, and rapid medical adoption in Ontario and innovative medical physics and strong government interest from Saskatchewan.

The Golden Anniversary week of celebration started with a "50's Saturday Night Dance" organized and dominated in dancing skills by our radiation therapists. In the week that followed, a historical lecture was presented by Dr. Cyril Danjoux, the *de facto* historian for the Canadian Association of Radiation Oncologists (CARO). The end of the week was punctuated by an international scientific symposium and the unveiling of the commemorative plaque. The scientific symposium sponsored by MDS-Nordion featured excellent presentations to a full house on the evolution of Cobalt machines, through to the current innovations in tomotherapy presented by the Madison and Kingston research groups. The symposium concluded with the prospects of exploiting molecular biology to improve the selection and effectiveness of future radiotherapy strategies. The official unveiling of the Parks Canada plaque took place on Saturday, October 27<sup>th</sup>, sponsored by Atomic Energy of Canada. Coincidentally, the first treatment of a cancer patient was also done on a Saturday, October 27, 1951. The concluding event was "first-

class" with dignitaries from the federal, provincial, and municipal governments, Cancer Care Ontario and the University of Western Ontario. Keynote addresses included two of our medical physics pioneers. Dr. John C.F. MacDonald and Dr. Jack Cunningham maintained equilibrium in their anecdotal accounts of the historical events that took place in London and Saskatoon, respectively. Indeed, John not only participated in the first cobalt treatment given in London but, he represented himself as a 7 year survivor of cobalt-60 treatments using a technique that he developed back in the 1960s. The audience included the Smith and Errington family members who were invited to the podium to unveil an interior replica of the historical plaque which is now stationed at the entrance to our cancer centre. In addition, Joyce Lawson and Elaine Marshall, who assisted Dr. Ivan Smith during the first Cobalt treatments, were present and warmly applauded by an appreciative, and at times emotional, audience. The University announced the inauguration of the Smith-Errington Chair to be awarded to a scientist or physician in radiation medicine who provides leadership in cancer treatment research. This week of celebration was marked by significant coverage by the Ontario media, and the entire proceedings have been archived on video for future generations. In his closing remarks, Dr. Greg Cairncross, CEO of the London Regional Cancer Centre, proudly announced that a tomotherapy machine would be delivered to London early in the Year 2002, in synchrony with a similar delivery to the Cross Cancer Institute in Edmonton. Canada, once again, will be catapulted into developing and evaluating forefront radiation treatment technology.



Dr. John MacDonald (center) celebrates Cobalt's 50th anniversary in London (October 27, 2001), re-uniting with his former colleagues. Ms. Joyce Lawson (left) was the radiation therapist (radiographer at the time) and Ms. Elaine Marshall (right) was the registered nurse who assisted Dr. Ivan Smith with the first patient to be treated with Cobalt. Mr. Jack Brown and Dr. Roger Inch (not shown) were the other clinical physicists involved in the Cobalt commissioning in London. Dr. MacDonald replaced Mr. Brown who became acutely ill with tuberculosis before the inaugural treatment took place. Dr. MacDonald has had a long productive career in clinical physics and he is credited with leading the formation of the CCPM. He is retired and often spotted in Victoria, BC when not traveling the world. (Photo courtesy of London Regional Cancer Centre).