Richard T. Israels, Q.C.
Distinguished Lecture Endowment Fund

Richard Israels was a man who lived life to its fullest. He was a great friend, an engaging storyteller, an active sportsman, a devoted family man and one of Vancouver’s leading criminal defense counsel. As well, he was a philanthropist who gave both his time and money to many charities. When he was diagnosed with cancer, Richard started the biggest battle of his life. He believed strongly in the outstanding system of the BC Cancer Agency, which ultimately gave him an extended lease on life. He kept his sense of humour and optimism until the very end, counseling other cancer patients and participating in a video for the BC Cancer Agency.

He passed away in Vancouver on November 14, 1997 at the age of 51, surrounded by those he loved most - his wife of over 30 years and his children. To honour his memory, his family has established the “Richard T. Israels, Q.C. Distinguished Lecture Endowment Fund” with the BC Cancer Foundation. This lectureship annually supports bringing an outstanding lecturer to the BC Cancer Agency Research Centre to provide researchers and clinicians with new and exciting educational and practice information related to cancer research. Richard Israels exemplified excellence, and it is his family’s hope that these lectures will inspire continued excellence at the BC Cancer Agency and Research Centre.

For more information about the Richard T. Israels QC Memorial Lecture, please contact the BC Cancer Agency Research Centre at 604.675.8110.

The BC Cancer Agency works to reduce the incidence of cancer, to reduce the mortality from cancer and to improve the quality of life for those living with cancer.

The BC Cancer Agency provides a comprehensive cancer care program including prevention, early detection, diagnosis and treatment services, community programs, research and education through provincial programs, the BC Cancer Agency Research Centre and regional cancer centres in Vancouver and the north, the Fraser Valley, the Southern Interior and on Vancouver Island.

The BC Cancer Agency Research Centre is the research arm of the BC Cancer Agency. It is an alliance of some of the world’s leaders in cancer research, working together as a team with clinicians, young scientists, research technicians, post-graduate students to solve the mystery of what causes cancer, to improve existing treatment methods and to develop more effective means of controlling and curing cancer. With direct links to the cancer centres, discoveries at the BC Cancer Agency Research Centre are quickly translated into clinical applications.

As an independent charitable organization, the BC Cancer Foundation raises funds exclusively for the BC Cancer Agency that go to supporting innovative cancer research and compassionate enhancements to patient care.

Richard T. Israels QC Memorial Distinguished Lecture presents:
Evolution of the Cancer Genome

with Michael R Stratton FRS
Director, Wellcome Trust Sanger Institute
Joint Head, Cancer Genome Project
Professor of Cancer Genetics
Institute of Cancer Research
Cambridge, England

Monday, November 15th, 2010
12:00 noon to 1:00 pm

BC Cancer Agency Research Centre
Gordon & Leslie Diamond Lecture Theatre
675 West 10th Ave
Vancouver, BC, V5Z 4E6
(video-linked to:
Vancouver Island & Fraser Valley Centres)
Michael R Stratton FRS

Michael Stratton is Director of the Wellcome Trust Sanger Institute, where he is Joint Head of the Cancer Genome Project, and is Professor of Cancer Genetics at the Institute of Cancer Research. He qualified in medicine at Oxford University and Guy’s Hospital, trained as a histopathologist at the Hammersmith and Maudsley Hospitals and obtained a PhD in the molecular biology of cancer at the Institute of Cancer Research, London.

His primary research interests have been in the genetics of cancer. He mapped to chromosome 13 and identified the high risk breast cancer susceptibility gene BRCA2, has subsequently identified moderate risk breast cancer susceptibility genes including CHEK2, ATM, BRIP1 and PALB2 and characterised the histopathological features of breast cancers in individuals carrying susceptibility alleles. He identified the gene for hereditary cylindromatosis, a highly disfiguring predisposition to adnexal skin tumours, as well as other susceptibility genes for testis, colorectal, thyroid, and childhood cancers.

In 2000 he initiated the Cancer Genome Project at the Wellcome Trust Sanger Institute which conducts high throughput, systematic genome-wide searches for somatic mutations in human cancer. The primary aims of this work are to identify new cancer genes, to understand processes of mutagenesis and to reveal the role of genome structure in determining abnormalities of cancer genomes. Through these studies he discovered mutations in the BRAF gene in malignant melanoma, mutations of the ERBB2 gene in lung cancer, and mutations of histone methylases and demethylases in renal and other cancers. He has described the basic patterns of somatic mutation in cancer genomes and used next generation sequencing to generate catalogues of somatic mutations in cancer genomes.

All cancers carry somatically acquired changes in their genomes. Some, termed “driver” mutations, are causally implicated in cancer development. The remainder are “passengers”, and bear the imprints of mutational processes operative during cancer development. Following the advent of second generation sequencing technologies the provision of whole cancer genome sequences has become a reality. These sequences generate comprehensive catalogues of somatic mutations, including point mutations, rearrangements and copy number changes and provide insights into the evolutionary processes underlying the development of individual human cancers including the factors generating variation and the forces of selection. These insights will form the foundation of our understanding of cancer causation, prevention and treatment in the future.