



## Michael Hayden, MD PhD

In 1841, medical student Charles Oscar Waters described a condition called “magrums,” which medical historians now believe is our first description of Huntington’s disease (HD). One hundred and seventy five years later, still widespread globally and afflicting children as well as adults, HD remains incurable. One of the greatest hopes for effective treatment is the work of Killam Professor of Medical Genetics at the University of British Columbia and Canada Research Chair in Human Genetics and Molecular Medicine, Michael Hayden, who has profoundly advanced our understanding of the genetic basis of the disease and the pathways involved.

Dr. Hayden moved to British Columbia from Harvard Medical School in 1983 to join the medical faculty of UBC. He currently serves as President of Global R&D and Chief Scientific Officer for TEVA Pharmaceuticals headquartered in Israel. Dr. Hayden is the most cited author in the world for HD and has written more than 840 peer-reviewed publications and invited submissions. His research into the mechanisms of HD have produced reliable predictive tests and new opportunities for prevention and treatment.

His related research into mutations of the protein ABCA1 may hold promising applications for the understanding and treatment of diabetes and atherosclerosis. Dr. Hayden has declared, “No diseases are hopeless anymore. The way I see them is that their secrets have just not yet been identified.” His work in deciphering vast and complex genomic and cellular data is helping to unveil secrets of intractable disease.

Dr. Hayden’s genetic research has also generated new approaches to the problem of adverse drug reactions (ADR). The Canadian Pharmacogenomics Network for Drug Safety (CPNDS), co-founded by Dr. Hayden, focuses on the development of genetic biomarkers for drug safety, addressing one of the great challenges in modern health care. Recent results of this work include development of personalized dosing recommendations and cautionary labeling to reduce ADR.

Much honoured and widely admired by his professional colleagues, Dr. Hayden’s research, medical networks, drug development, and pioneering work in multiple fields testify to the continuing bounty of genetic research for improving human health in Canada and worldwide.

*W.L.Hoth*