



Professor  
**Fernand Labrie**

Co-Winner of the 2007  
King Faisal International Prize  
for Medicine  
**Prostate Cancer**

Professor Fernand Labrie was born in Quebec in 1937. He graduated with a BA (*magna cum laude*) from the Séminaire de Québec in 1957, received his MD (*magna cum laude*) in 1962 and PhD. (*summa cum laude*) in endocrinology in 1966 from Laval University. Between 1966-1969, he pursued postdoctoral research at Sussex and Cambridge universities in England, and became a Fellow of the Royal College of Physicians of Canada in 1973. He joined the faculty of Laval University in 1966 as an Assistant Professor becoming an Associate Professor in 1969 and a full Professor in 1974. He has founded the Molecular Endocrinology Research Laboratory at Laval, and has been serving since 1972 as Head of the Department of Molecular Endocrinology at the Centre Hospitalier de l'Université Laval (CHUL) and full-time physician in the Department of Medicine, and from 1983 onward as the Research Director of the CHUL Research Center where about 150 senior investigators, 450 graduate students and 600 members of research personnel are currently working under his leadership. He was also Head of the Department of Physiology and Anatomy at Laval University Medical School from 1990-




Professor Labrie founded the Molecular Endocrinology Research Laboratory at Laval University

2002, President of the FRSQ from 1992-1995 and President of the Canadian Society of Endocrinology and Metabolism (1978-1979) and the Canadian Society for Clinical Investigation (1981-1982) and Vice-President of the International Society of Neuroendocrinology (1992-1996).

Professor Labrie is one of the most accomplished scholars in the international scientific community. He has published more than 1100 scientific articles, with a total of over 40,000 citations, which makes him the most cited Canadian scientist in the world. Professor Labrie's most important contribution to prostate cancer research has been the design and clinical application of luteinizing hormone releasing hormone (LHRH) agonists for the treatment of the disease. This ground-breaking treatment strategy, generally referred to as "reversible chemical castration," has replaced the surgical removal of the testes (orchiectomy) and the use of high doses of female hormones (estrogens), which were the standard treatment methods for prostate cancer. With LHRH agonists, both the psychological disadvantage of orchiectomy and the cardiovascular complications of high estrogen doses have been eliminated and the quality of life of prostate cancer patients dramatically improved. Another medically important contribution by Labrie has been the development and clinical application of a new combined hormone<sup>1</sup> therapy (combined androgen blockade)





which can induce a complete cure of localized prostate cancer and extend patient's survival in metastatic cases. Professor Labrie and his group have also pioneered the screening and detection of prostate cancer. They devised the first randomized study on the use of prostate-specific antigen as a pre-screening test that could help, along with other tests, in detecting prostate cancer at an early and curable stage. In short, Professor Labrie and his team have brought a successful paradigm of prostate cancer treatment which is now helping hundreds of thousands of patients worldwide.

Professor Labrie's outstanding contributions to molecular endocrinology and oncology have been recognized by many awards and distinctions. In 1979, he was elected a Fellow of the Royal Society of Canada. In 1981 he was made an Officer of the Order of Canada, being cited as «one of the leading authorities in contemporary endocrinological research». In 1991, he was

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<sup>1</sup> A combination of either LHRH agonists with non-steroidal anti-androgens to induce blockage of androgen production from the testes and blockade of the action of the androgens of adrenal origin.

made an Officer of the National Order of Quebec and in 1999 he was awarded the prestigious Izaak Walton-Killam Memorial Prize of the Canada Council for Arts. He is also the recipient of the Medal of the College de France (1982). Professor Labrie is a member of around 69 professional associations and has been invited on more than 475 occasions to present his work at national and international symposia and Lectureships. He has also served as a member, associate member or corresponding member of the editorial boards of many leading scientific journals in his field of specialization.

Professor Labrie's rich biography not only reflects his extraordinary capabilities as a researcher, educator, administrator and physician but also gives some insight into his personal hobbies, chief among which is apparently skiing. He was the President of the Quebec Ski Federation (1982-1987) and Quebec Water Skiing Association (1987-1989) and Member of the Council of the Canadian Ski Association (1982-1987) and was Chairman of the Committee of Quebec City for the Winter Olympic Games of 2010.