

First KIA Laureate Fundamental Research



- ◆ **Field:** Medical Sciences
- ◆ **Researcher:** Prof. Fernand Labrie
- ◆ **Nationality:** Canadian
- ◆ **Date of Birth:** June 28, 1937
- ◆ **Position:** Director, Research Center in Molecular Endocrinology, Oncology and Human Genomics, Laval University, Quebec City, Canada
- ◆ **Scientific Affiliation:** Laval University, Quebec City, Canada
- ◆ **Research work title:** Medical Castration with GnRH Agonists in Prostate Cancer – It has Become Standard Therapy Worldwide, Replacing Surgery and High Doses of Estrogens.

Abstract: Following his original preclinical studies, Fernand Labrie discovered in 1980, in the first man treated with an GnRH agonist, that testicular androgens are very efficiently blocked with this compound. GnRH agonists rapidly replaced orchiectomy and high doses of estrogens in men treated for prostate cancer worldwide. Soon afterwards, Professor Labrie realized that the concentration in the prostate of the most potent androgen, namely dihydrotestosterone, was only reduced by 50% to 70% after castration, thus indicating another important source of androgens. He then added a blocker of androgen action (antiandrogen) in combination with castration, thus providing the first and only treatment shown to prolong life in advanced prostate cancer. The same treatment permits long-term control or cure of prostate cancer when applied to localized disease. GnRH agonists are now used worldwide as the standard method of castration and are regarded as probably the most efficient and best tolerated class of drugs ever discovered.

Biography: 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 lauda) in 1962 and PhD (summa cum lauda) in endocrinology in 1966 from Laval University. From 1966-1969, he pursued postdoctoral studies at Sussex and Cambridge universities in England with Professor Frederick Sanger, twice Nobel laureate.

Prof. Labrie's outstanding contributions to molecular endocrinology and oncology have been recognized by many awards and distinctions. Among others, 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 made an Officer of the National Order of Quebec. In 2007, he received the King Faisal Prize in Medicine for his work on prostate cancer. He is a member of around 69 professional associations and has been invited on more than 500 occasions to present his work at national and international Symposia and Plenary Lectureships. www.fernandlabrie.com for additional information.