First Laureate
Fundamental Research

- *Name:* *Prof. Willy J. Malaisse*
- *Nationality:* *Belgian*
- *Date of Birth:* *1936*
- *Position:* *Professor (Brussels Free University Medical School)*
- *Scientific Affiliation:* *Laboratory of Experimental Hormonology, Brussels Free University, Belgium*

Project Title: Lipotoxic aspects of pancreatic islet cell biochemical, biophysical and functional alterations in rats depleted in long-chain polyunsaturated w3 fatty acids, an animal model of the metabolic syndrome

Abstract:

Second generation rats depleted in long-chain polyunsaturated w3 fatty acids are currently used as an animal model for the insufficient dietary supply of w3 acids presently often prevailing in Western populations. They display several features of the metabolic syndrome, including visceral obesity, liver steatosis, insulin resistance, and hypertension with cardiac hypertrophy. Over recent years, several perturbations were identified in pancreatic islets obtained from such rats. The present project aims at exploring the participation of a lipotoxicity process in the alteration of pancreatic islet defects.

Biography:

Willy J. Malaisse, Professor at the Laboratory of Experimental Hormonology, Brussels Free University, accumulates many scientific distinctions including the Minkowski Prize, Berson Lecturer, Morgagni Medal, Premio Endocrinologiá , Davis Award, J.M. Kinney International Award, International Journal of Molecular Medicine Award and Claude Bernard Lecturer. He has attracted to his laboratory about 90 young investigators, more than half of whom were foreign fellows from the five continents.

Prof. Malaisse is the author and co-author of more than 1400 articles among them 1182 original articles and 219 review articles or chapters. These publications deal with clinical and basic research in endocrinology and metabolism, with emphasis on the biochemistry and biophysics of insulin secretion by isolated pancreatic islets, the perturbation of these processes in spontaneous or experimental diabetes and the correction of such defects by antidiabetic agents. He was listed among the 20 most prolific researchers between 1981 and 1990. He is a member of leading scientific societies such as American Diabetes Association, European Association for the Study of Diabetes and Endocrine Society. He was also elected Member of the Académie Royale de Médecine de Belgique.