



**Leena HILAKIVI-CLARKE, PhD**  
Department of Oncology, Lombardi Cancer Center  
Georgetown University  
Washington, DC, USA

Dr. Hilakivi-Clarke received PhD in Experimental Psychology and Physiology in 1987 from University of Helsinki, Finland, where she studied the effects of early life exposures to antidepressant drugs on early brain development and affective behaviors using animal models.

Next, during a Fogarty postdoctoral fellowship (1987-1990) at the National Institute of Alcohol Abuse and Alcoholism in Bethesda, Maryland, she studied the role of specific dietary components, including alcohol and amino acids, in affecting neurotransmitter pathways and affective behaviors in mice.

In 1991, she joined the Lombardi Comprehensive Cancer Center (LCCC) and was appointed as a Research Associate Professor of Psychiatry at Georgetown University, Washington DC. Her research focus shifted from diet and behavioural neurosciences towards exploring diet and breast cancer prevention.

Between 2003 and 2010, she was a program director for NCI funded U54 program project entitled “*Timing of dietary exposures and breast cancer risk*” to investigate nutritional modulation of genetic pathways leading to cancer, and from 2010 onwards she has been a project leader in another NCI funded U54 program about “*Systems Biology in Cancer.*”

Dr. Hilakivi-Clarke is currently tenured Professor of Oncology, and co-director of Shared Animal Resource, and director of Tumor Biology Master’s program at Georgetown University. She is studying the mechanisms that mediate the effects of maternal dietary exposures during pregnancy on mother’s and her daughter’s mammary cancer risk and the risk of recurrence of this disease, mostly using pre-clinical models. These mechanisms include changes in mammary gland morphology and gene signaling, also through epigenetic modifications. In addition, one of the key questions her laboratory is focusing is to determine whether soy food intake during childhood influences how soy foods in adult life affect mammary cancer risk and survival. Although most of these studies have been done using animal models, over the past 10 years Dr. Hilakivi-Clarke has been collaborating with epidemiologist to study the role of diet in affecting cancer risk in women. Her publication record consists of over 140 scientific papers and reviews.