

Veronica Maher, once a co-director of the Carcinogenesis Laboratory with J. Justin McCormick, performed research on the transformations that occur within cells that change them from normal to cancerous. Her fundamental studies on this process informed all areas of research related to what causes cancers. Maher joined the faculty at Michigan State University in 1976 and was awarded the title of University Distinguished Professor in 1992. Her PhD thesis at the University of Wisconsin McArdle Laboratory for Cancer Research showed for the first time that reactive forms of carcinogenic compounds attack DNA and cause mutations. This finding led to the present understanding of how chemical carcinogens and radiation cause cancer. She continued this line of work while at MSU and conducted research studying how defects in ability of human cells to repair DNA damage induced by various chemical carcinogens, ultraviolet radiation, or ionizing radiation leads to permanent changes (mutations) in the primary DNA sequence of genes, including cancer-related genes (oncogenes and suppressor genes). Her research group developed methods for detecting DNA damage and rates of repair at the level of the nucleotide.