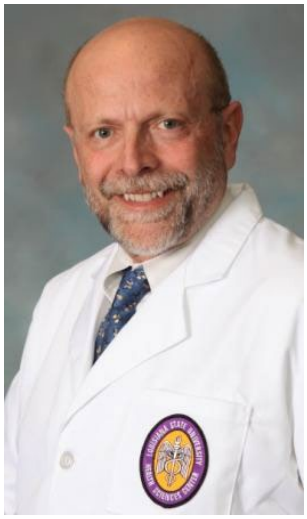
Dr. Lucio Miele, M.D., Ph.D.
Director, LSU LCMC Health Cancer Center
Professor and Head, Department of Genetics
Senior Associate Dean of Research
LSU Health Sciences Center School of Medicine
Cancer Crusaders Endowed Professor in Cancer
Research Lucio Miele (researchgate.net)

Education

University of Naples	M.D	1976 – 1982	Medicine
University of Naples	Ph.D	1983 – 1987	Biochemistry



Dr. Lucio Miele was named Director of the LSU LCMC Health Cancer Center in December 2024. He completed his medical training in Italy and his graduate training at the Max-Planck Institute for Molecular Genetics in Berlin. He then completed a fellowship in Human Genetics at the NIH (NICHD). There, he developed: 1) pharmacologically active peptides from human uteroglobin/CC10; 2) novel expression vectors to produce native, clinical-grade disulfide-bonded human proteins and 3) an early version of PCR-ELISA to quantify normal and mutant DNA in patient blood. In 1994, he moved to FDA/CBER as a senior investigator in the Division of Monoclonal Antibodies and member of the Division of Clinical Trials Design and Analysis. He was eventually promoted to Acting Chief, Laboratory of Cell Biology. Dr. Miele co-authored the 1997 Points to Consider in the Manufacture and Testing of Monoclonal Antibody Products. At CBER, in 1994, he began working on the discovered human Notch genes. Notch pathway genes control cell fate determination during normal development and adult life and have major roles in tumor biology, angiogenesis and the immune system.

In 1998, Dr. Miele moved to Loyola University's Cardinal Bernardin Cancer Center, where he discovered the anti-apoptotic activity of Notch1 in leukemia cells. At the same time, he created and oversaw a Molecular Pathology Core. In 2001, Dr. Miele moved to the University of Illinois at Chicago, as Program Director in the Cancer Center and Associate Professor of Biopharmaceutical Sciences. At UIC, Dr. Miele determined that Notch1 is necessary for Ras-induced transformation of human cells and is expressed in breast cancer. In 2005, he returned to Loyola as a full Professor, Breast Cancer Program Director and eventually, Associate Cancer Center Director for Translational Sciences.

In 2009, Dr. Miele was named Director of the UMMC Cancer Institute and Ergon Professor of Medicine. He held that post until his move to LSU Health New Orleans.

Dr. Miele's work is devoted to 1) studies of cancer stem cell-regulatory genes such as Notch, and identification of genetic circuitry mediating Notch signals in human tumors; 2) Correlation

between GWAS data and transcriptome for cancer-associated genes; 3) Data science research, including biomedical informatics studies focusing on cancer health disparities and COVID-19; 4) Mechanism-based early clinical trials using genomic biomarkers as correlative endpoints and/or stratification variables. Dr. Miele has authored 270 peer-reviewed publications in biomedical journals to date. He has served or serves on numerous grant review panels for NIH, NCI, NCATS, the DOD and foreign research funding agencies from Canada, the UK, Spain, Italy, The Netherlands and Singapore. He serves as Editor or Associate Editor of several biomedical journals and has served as an advisor to several pharmaceutical and biotechnology companies.

Clinical Interests
Precision medicine, breast and endometrial cancer, COVID-19

Research Interests
Precision medicine, cancer health disparities, cancer genomics and immunology, biomedical informatics, COVID-19