



4TH LATIN AMERICAN CONFERENCE ON LUNG CANCER

BUENOS AIRES, ARGENTINA



Marileila Varella Garcia, Ph.D.
Professor, Medical Oncology

Education: University of Sao Paulo
Sao Paulo, SP, Brazil - 1973

University of Colorado Denver
School of Medicine, Division of Medical Oncology

Bio

Dr. Varella Garcia has been in the Medical Oncology division since 1993 and has research interests on the development and validation of biomarkers for early detection and monitoring of recurrence in human neoplasias and patient stratification for therapy.

Research

Dr. Varella Garcia focuses on translational cancer research using cytogenetics technology. Examples of scientific accomplishments in her laboratory are fluorescence in situ hybridization (FISH)-based assays developed for detection of chromosomal imbalance in interphase cells that detected sub-clinical tumorigenesis in head and neck and lung cancers. Aiming to better support molecular targeted therapies and efficiently identify patients likely to benefit from these therapies, her laboratory investigates genomic imbalances in metabolic pathways important in oncogenesis using FISH technology. Molecules addressed in these studies are HER-2/neu, EGFR and cyclin D1 (CCND1). The gene status and mechanisms controlling expression of these molecules have been investigated in prostate and ovarian adenocarcinomas, glioblastomas, squamous cell esophageal carcinomas, and NSCLC. Ongoing studies also address IGF1R, FGFR, MET, BRAF, and the gene fusions involving TMPRSS2 in prostate and ALK in NSCLC. Recently, her laboratory developed a FISH scoring system (EGFR-FISH) that identifies NSCLC patients more likely or unlikely to benefit from therapy with EGFR tyrosine kinase inhibitors. Dr. Varella Garcia is also the director for the Cancer Center Cytogenetics Core responsible to make standard and advanced cytogenetics technology accessible to Cancer Center investigators and their laboratories and to provide a source of expertise on experimental design, data analyses and interpretation.