

**Present Title & Affiliation**

Primary Appointment Associate Professor, Director of Neuro-oncology and Molecular Genetics, Department of Neurosurgery, New York Medical College/Westchester Medical Center, Valhalla, New York, 10595.

Adjunct Appointment Visiting Professor; Department of Neuroscience. Institute of Experimental Medicine, Center for Excellence designated by European Union. Academy of Sciences of the Czech Republic, Vídeňská1083, Prague, Czech Republic

Bio Statement Dr. Jhanwar-Uniyal started exploring brain at her very early exposure to science. Her brush with discovering started when she was working at the Physiology department at BHU, as a MS student, where she first demonstrated that hypothalamic neurotransmitter such as GABAergic system plays an important role in stress. Second discovery, Dr. Jhanwar-Uniyal was her Ph.D. work –where she demonstrated the role of Hippocampus in Memory and Learning Process as it pertains to Serotonin Neurotransmitter. These findings secured her Post-doc position at The Rockefeller University, New York, where she establish first biochemical analysis of the distribution of brain catecholaminergic receptors ( $\alpha$ 1 and  $\alpha$ 2;  $\beta$ ; and DA 1 and DA2) in the microdissected brain tissue samples and demonstrated a close link and rapid interaction between a circulating hormone (corticosterone) and brain neurotransmitter activity ( $\alpha$ 2-noradrenergic receptors controlling behavior. Following a short post-doctoral training, she join the faculty and rose to the rank of independent investigator at the Rockefeller University. Dr. Jhanwar-Uniyal then joined to Cornell Medical College in Biochemistry/Medicine. She had identified the sequence specific promoter/enhancer region of BRCA1 gene in Human Breast Cancer and also showed the role of tumor suppressor gene p53 and its interaction with PLK3 during cell cycle regulation. At New York Medical College, Dr. Jhanwar-Uniyal's laboratory has establish the PI3K/Akt/mTOR/ pathway in treatment of Glioblastoma. Her recent work is on genetic aspects of medulloblastoma and its correlation with metastases. Her group has also established the understanding cancer Stem cells of to use as therapeutic target. Dr. Jhanwar-Uniyal's laboratory is establishing the use of stem cell therapy in treatment of spinal cord injury. Dr. Jhanwar-Uniyal has published papers in reputed journals and invited speaker in various national and international meetings. She feels most rewarding to work closely with Neurosurgery residents, medical students, undergraduate and high school students. Many of her mentees have received various fellowship and awards.