Professor XUE, Hong

Dr. Xue obtained her M.D. from the Shanghai Second Military Medical University in 1983, Ph.D. from the Institute of medical Sciences, University of Toronto in 1992, and carried out postdoctoral studies at the Department of Genetics, University of Glasgow before joining the Department of Biochemistry, Hong Kong University of Science and Technology in 1995. She is currently a full professor of Division of Life Science at the Hong Kong University of Science and Technology. Dr. Xue and her team discovered the association between schizophrenia and a segment of the *GABRB2* gene encoding the β2-subunit of $GABA_A$ receptors, the positive selection of genotypes and haplotypes in this segment, determinant role of this segment in the alternate splicing of the β2 subunit protein, and the differential modulation of the GABA-induced membrane current by the long and short forms. These discoveries represent therefore the first instance where a schizophrenia-susceptibility gene has been linked to protein processing and further to electrophysiological response of neurons, thereby opening the door toward understanding the mechanism of schizophrenia etiology leading from gene to neuronal phenotype. Dr. Xue and co-workers also discovered two novel short forms of the β2-subunit of $GABA_A$ receptors, delineated the ligand binding residues of the β2-subunit, uncovered partial agonists from *Scutellaria baicalensis* that reduce anxiety without brining on side effects commonly encountered with main stream anxiolytics._