



## Guest Editor

### Mark I Greene



Dr Mark Greene received his MD and PhD (Immunology/Immunochemistry) degrees from the University of Manitoba, Canada. He also became a Fellow of the Royal College (FRCP). Dr Greene studied at Harvard Medical School in the Benacerraf laboratory and then joined the faculty of Harvard Medical School and served as an Associate Professor at both Harvard University and Harvard Medical School. In 1986 Dr Greene assumed the position of Head of Immunology Research and Professor of Pathology and Laboratory Medicine at the University of Pennsylvania. In 1991 Dr Greene was selected as a Guggenheim Fellow and studied X-ray crystallography at the Institute Pasteur in Paris. Mark Greene is currently the John Eckman Professor of Medical Science at the University of Pennsylvania and a senior investigator of the Abramson Family Cancer Research Institute.

Dr Mark Greene has contributed extensively to our understanding of the role of erbB gene family in mammalian cell growth and neoplasia. His contributions include the delineation of mechanisms associated with oligomerization and diversification processes of the erbB family of proteins and signal transduction pathways mediated by this family of receptors. His other contributions include the development of monoclonal antibodies specific for the ectodomain of p185 and demonstration of their utility in cancer therapy. His laboratory was the first to develop organic synthetic antibody like forms that are effective in models of human breast cancer and may be amenable to oral delivery. Recent efforts from Greene's laboratory have been to link the pathways relevant to heritable breast cancer formation with those that are active in the genesis of sporadic breast tumors. His group and Richard Fishel's laboratory have linked MSH2 dependent repair of damaged DNA with BRCA1 activities. This set of studies and his efforts in elucidating erbB determined processes have supported the principle of biochemical linkage of certain shared heritable and sporadic processes involved in breast cancer development.