



Dr. Syed received her Ph.D degree from the Karolinska Institute, Stockholm, Sweden. She did her postdoctoral training at the Max Planck Clinical Research Unit for Reproductive Medicine, Münster, Germany and at the University of Rennes, France. She has published over 45 articles in various peer-reviewed journals including the Journal of the National Cancer Institute, Cancer Research, Oncogene, Molecular Cancer Research, and Molecular Therapeutics. Dr. Syed has been an active member in several scientific review panels, including the Cancer Prevention Research Study Section of the National Cancer Institute and the Department of Defense Ovarian and Prostate Cancer Research Programs. Syed's research focuses on novel therapeutics for ovarian and endometrial cancer prevention. State-of-the-art techniques of cell culture, molecular biology, gene profiling, proteomics and animal models are used to determine the mechanisms through which the steroid hormones, estrogen and progesterone affect tumor growth and regulate tumor suppressor genes such as NM23, semaphorin-3B and semaphorin-3F. The

research program assures to provide new molecular insight into progesterone's role in the prevention of ovarian and endometrial tumors as well as provide a more comprehensive mechanistic understanding of how progesterone offers protection against the development of gynecological tumors at the cellular and molecular level.

Recent Publications

1. Bokhari AA, Lee LR, Raboteau D, Hamilton CA, Maxwell GL, Rodriguez GC, **Syed V** (2014). Progesterone inhibits endometrial cancer invasiveness by inhibiting the TGF- β pathway. *Cancer Prev Res (Phila)*. 7: 1045–55.
2. Kavandi L, Lee LR, Bokhari AA, Pirog JE, Jiang Y, Ahmad KA, **Syed V**, The Chinese Herbs Scutellaria baicalensis and Fritillaria cirrhosa target NF κ B to inhibit proliferation of ovarian and endometrial cancer cells. *Molecular Carcinogenesis* [Epub ahead of print]
3. Lee L, Teng PN, Nguyen H, Hood BL, Kavandi K, Wang G, Turbov JM, Thaete LG, Hamilton CA, Maxwell GL, Rodriguez GC, Conrads TP, **Syed V** (2013). Progesterone enhances calcitriol antitumor activity by upregulating vitamin d receptor expression and promoting apoptosis in endometrial cancer cells. *Cancer Prev. Res.* 6: 731–43.
4. Kavandi L, Collier MA, Nguyen H, **Syed V** (2012). Progesterone and Calcitriol Attenuate Inflammatory cytokines CXCL1 and 2 in endometrial and ovarian cancer cells. *J. Cell. Biochem.* 113:3143-3152
5. Al-Hassan NN, Behzadian A, Caldwell R, Ivanova VS, **Syed V**, Motamed K, Said NA (2012). Differential roles of uPAR in peritoneal ovarian carcinomatosis. *Neoplasia*. 14:259-270
6. Nguyen N, Ivanova VS, Kavandi L, Rodriguez GC, Maxwell GL, **Syed V** (2011). Progesterone and 1,25-Dihydroxyvitamin D₃ inhibit endometrial cancer cell growth by upregulating Semaphorin 3B and Semaphorin 3F. *Mol. Cancer Research*. 9:1479-1492
7. Nguyen H, **Syed V** (2011). Progesterone inhibits growth and induces apoptosis in cancer cells through modulation of reactive oxygen species. *Gynecol. Endocrinol.* 27:830-836
8. Joseph D, Saydmohammed M, Ho, SM, **Syed V** (2010). Hormonal Regulation and Distinct Functions of Semaphorin-3B and Semaphorin-3F in Ovarian Cancer. *Mol. Cancer Therapeutics*. 9:499–509

9. Saydmohammed M, Joseph D, **Syed V** (2010). Curcumin Suppresses Constitutive Activation of STAT-3 by Up-Regulating Protein Inhibitor of Activated STAT-3 (PIAS-3) in Ovarian and Endometrial Cancer Cells. *J. Cell. Biochem.* 110: 447-456

Collaborators

Dr. Larry G. Maxwell (<http://gyndisease.whirc.org/>)

Dr. Gustavo C. Rodriguez (<http://www.northshore.org/research/investigators/rodriguez-gustavo-cmd/>)

Dr. Thomas Conrads (<http://gyndisease.whirc.org/>)