

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 cancer as well as provide a more comprehensive mechanistic understanding of how progesterone offers protection against the development of ovarian and endometrial tumor at the cellular and molecular level.

Selected Publications

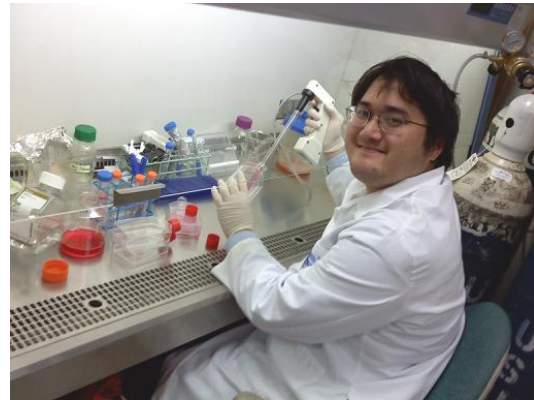
1. Nguyen H, Ivanova VS, Kavandi L, Rodriguez GC , Maxwell GL, **Syed V** (2011). Progesterone and 1,25-Dihydroxyvitamin D₃ Inhibit Endometrial Cancer Cell Growth by Upregulating Semaphorin 3B and Semaphorin 3F. *Mol. Cancer Research* 9:1479-92.
2. Nguyen H, **Syed V** (2011). Progesterone inhibits growth and induces apoptosis in cancer cells through modulation of reactive oxygen species. *Gynecol Endocrinol* 27:830-6.
3. Joseph D, 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.
4. 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.* 110:447-56.
5. Mak P, Jaggi M, **Syed V**, Chauhan SC, Hassan S, Biswas H, Balaji KC (2008). Protein kinase D1 (PKD1) influences androgen receptor (AR) function in prostate cancer cells. *Biochem. Biophys. Res. Commun.* 373:618-23.
6. **Syed V**, Mak P, Du C, Balaji KC (2008). Beta-catenin mediates alteration in cell proliferation, motility and invasion of prostate cancer cells by differential expression of E-cadherin and protein kinase D1. *J. Cell Biochem.* 104:82-95.
7. **Syed V**, Mukherjee K, Godoy-Tundidor S, Ho SM (2007). Progesterone induces apoptosis in TRAIL-resistant ovarian cancer cells by circumventing FLIPL overexpression. *J. Cell Biochem.* 102:442-52.
8. **Syed V**, Zhang X, Lau KM, Cheng C, Mukherjee K, Ho SM (2005). Profiling estrogen-related gene expression changes in normal and malignant human ovarian surface epithelial cells. *Oncogene* 24:8128-43.
9. Mukherjee K, **Syed V**, Ho SM (2005). Estrogen-induced loss of progesterone receptor expression in normal and malignant ovarian surface epithelial cells. *Oncogene* 24:4388-400.

10. **Syed V**, Mukherjee K, Lyons-Weiler J, Lau KM, Mashima T, Tsuruo T, Ho SM (2005). Identification of ATF-3, caveolin-1, DLC-1, and NM23-H2 as putative antitumorigenic, progesterone-regulated genes for ovarian cancer cells by gene profiling. *Oncogene* 24:1774-87.
11. **Syed V**, Ho SM (2003). Progesterone-induced apoptosis in immortalized normal and malignant human ovarian surface epithelial cells involves enhanced expression of FasL. *Oncogene* 22:6883-90.
12. Ho SM, Lau KM, Mok SC, **Syed V** (2003). Profiling follicle stimulating hormone-induced gene expression changes in normal and malignant human ovarian surface epithelial cells. *Oncogene* 22:4243-56.
13. **Syed V**, Ulinski G, Mok SC, Ho SM (2002). Reproductive hormone-induced, STAT3-mediated interleukin 6 action in normal and malignant human ovarian surface epithelial cells. *J. Natl Cancer Inst.* 94:617-29.
14. **Syed V**, Ulinski G, Mok SC, Yiu GK, Ho SM (2001). Expression of gonadotropin receptor and growth responses to key reproductive hormones in normal and malignant human ovarian surface epithelial cells. *Cancer Res.* 61:6768-76.

Lab Members



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Collaborators

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

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

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