

MD Anderson Ovarian SPORE publications – 2011

1. Ahmed AA, Goldsmith J, Fokt I, Le XF, Krzysko KA, Lesyng B, Bast RC Jr, Priebe W. **A genistein derivative, ITB-301, induces microtubule depolymerization and mitotic arrest in multidrug-resistant ovarian cancer.** Cancer Chemother Pharmacol 68(4):1033-44, 2011. PMID: 21340606; PMCID: PMC3180612.
2. Ahmed AA, Wang X, Lu Z, Goldsmith J, Le XF, Grandjean G, Bartholomeusz G, Broom B, Bast RC Jr. **Modulating microtubule stability enhances the cytotoxic response of cancer cells to Paclitaxel.** Cancer Res 71(17):5806-17, 2011. PMID: 21775522; PMCID: PMC3679477.
3. Bast RC Jr. **Molecular approaches to personalizing management of ovarian cancer.** Ann Oncol 22 Suppl 8:viii5-viii15, 2011. PMID: 22180401; PMCID: PMC3280619.
4. Bast RC Jr, Spriggs DR. **More than a biomarker: CA125 may contribute to ovarian cancer pathogenesis.** Gynecol Oncol 121(3):429-30, 2011. PMID: 21601106.
5. Carroll AR, Coleman RL, Sood AK. **Therapeutic advances in women's cancers.** Front Biosci (Schol Ed) 3:82-97, 2011. PMID: 21196359; PMCID: PMC3199127.
6. Chakravarty D, Roy SS, Babu CR, Dandamudi R, Curiel TJ, Vivas-Mejia P, Lopez-Berestein G, Sood AK, Vadlamudi RK. **Therapeutic targeting of PELP1 prevents ovarian cancer growth and metastasis.** Clin Cancer Res 17(8):2250-9, 2011. PMID: 21421858; PMCID: PMC3731129.
7. Chen MY, Liao WS, Lu Z, Bornmann WG, Hennessey V, Washington MN, Rosner GL, Yu Y, Ahmed AA, Bast RC Jr. **Decitabine and suberoylanilide hydroxamic acid (SAHA) inhibit growth of ovarian cancer cell lines and xenografts while inducing expression of imprinted tumor suppressor genes, apoptosis, G2/M arrest, and autophagy.** Cancer 117(19):4424-38, 2011. PMID: 21491416; PMCID: PMC3137708.
8. Cheong JH, Park ES, Liang J, Dennison JB, Tsavachidou D, Nguyen-Charles C, Wa Cheng K, Hall H, Zhang D, Lu Y, Ravoori M, Kundra V, Ajani J, Lee JS, Ki Hong W, Mills GB. **Dual inhibition of tumor energy pathway by 2-deoxyglucose and metformin is effective against a broad spectrum of preclinical cancer models.** Mol Cancer Ther 10(12):2350-62, 2011. PMID: 21992792; PMCID: PMC3237863.
9. Clarke CH, Yip C, Badgwell D, Fung ET, Coombes KR, Zhang Z, Lu KH, Bast RC Jr. **Proteomic biomarkers apolipoprotein A1, truncated transthyretin and connective tissue activating protein III enhance the sensitivity of CA125 for detecting early stage epithelial ovarian cancer.** Gynecol Oncol 122(3):548-53, 2011. PMID: 21708402; PMCID: PMC3152646.
10. Coleman RL, Duska LR, Ramirez PT, Heymach JV, Kamat AA, Modesitt SC, Schmeler KM, Iyer RB, Garcia ME, Miller DL, Jackson EF, Ng CS, Kundra V, Jaffe R, Sood AK. **Phase 1-2 study of docetaxel plus afibbercept in patients with recurrent ovarian, primary peritoneal, or fallopian tube cancer.** Lancet Oncol 12(12):1109-17, 2011. PMID: 21992853; PMCID: PMC3444811.
11. Collisson EA, Sadanandam A, Olson P, Gibb WJ, Truitt M, Gu S, Cooc J, Weinkle J, Kim GE, Jakkula L, Feiler HS, Ko AH, Olshen AB, Danenberg KL, Tempero MA, Spellman PT, Hanahan D, Gray JW. **Subtypes of pancreatic ductal adenocarcinoma and their differing responses to therapy.** Nat Med 17(4):500-3, 2011. PMID: 21460848; PMCID: PMC3755490.
12. Cortez MA, Bueso-Ramos C, Ferdin J, Lopez-Berestein G, Sood AK, Calin GA. **MicroRNAs in body fluids--the mix of hormones and biomarkers.** Nat Rev Clin Oncol 8(8):467-77, 2011. PMID: 21647195; PMCID: PMC3423224.

13. Cramer DW, Bast RC Jr, Berg CD, Diamandis EP, Godwin AK, Hartge P, Lokshin AE, Lu KH, McIntosh MW, Mor G, Patriotis C, Pinsky PF, Thornquist MD, Scholler N, Skates SJ, Sluss PM, Srivastava S, Ward DC, Zhang Z, Zhu CS, Urban N. **Ovarian cancer biomarker performance in prostate, lung, colorectal, and ovarian cancer screening trial specimens.** Cancer Prev Res (Phila) 4(3):365-74, 2011. PMID: 21372036; PMCID: PMC3085251.
14. Diao L, Clarke CH, Coombes KR, Hamilton SR, Roth J, Mao L, Czerniak B, Baggerly KA, Morris JS, Fung ET, Bast RC Jr. **Reproducibility of SELDI Spectra Across Time and Laboratories.** Cancer Inform 10:45-64, 2011. PMID: 21552492; PMCID: PMC3085423.
15. Fu S, Hu W, Iyer R, Kavanagh JJ, Coleman RL, Levenback CF, Sood AK, Wolf JK, Gershenson DM, Markman M, Hennessy BT, Kurzrock R, Bast RC Jr. **Phase 1b-2a study to reverse platinum resistance through use of a hypomethylating agent, azacitidine, in patients with platinum-resistant or platinum-refractory epithelial ovarian cancer.** Cancer 117(8):1661-9, 2011. PMID: 21472713; PMCID: PMC3062960.
16. Gao Z, Xu X, McClane B, Zeng Q, Litkouhi B, Welch WR, Berkowitz RS, Mok SC, Garner EI. **C terminus of Clostridium perfringens enterotoxin downregulates CLDN4 and sensitizes ovarian cancer cells to Taxol and Carboplatin.** Clin Cancer Res 17(5):1065-74, 2011. PMID: 21123456; PMCID: PMC3075966.
17. Guo X, Liu G, Schauer IG, Yang G, Mercado-Uribe I, Yang F, Zhang S, He Y, Liu J. **Overexpression of the beta subunit of human chorionic gonadotropin promotes the transformation of human ovarian epithelial cells and ovarian tumorigenesis.** Am J Pathol 179(3):1385-93, 2011. PMID: 21763678; PMCID: PMC3157261.
18. Han CH, Huang YJ, Lu KH, Liu Z, Mills GB, Wei Q, Wang LE. **Polymorphisms in the SULF1 gene are associated with early age of onset and survival of ovarian cancer.** J Exp Clin Cancer Res 30:5, 2011. PMID: 21214932; PMCID: PMC3025876.
19. Han HD, Mora EM, Roh JW, Nishimura M, Lee SJ, Stone RL, Bar-Eli M, Lopez-Berestein G, Sood AK. **Chitosan hydrogel for localized gene silencing.** Cancer Biol Ther 11(9):839-45, 2011. PMID: 21358280; PMCID: PMC3100632.
20. Hu W, Lu C, Dong HH, Huang J, Shen DY, Stone RL, Nick AM, Shahzad MM, Mora E, Jennings NB, Lee SJ, Roh JW, Matsuo K, Nishimura M, Goodman BW, Jaffe RB, Langley RR, Deavers MT, Lopez-Berestein G, Coleman RL, Sood AK. **Biological roles of the Delta family Notch ligand DLL4 in tumor and endothelial cells in ovarian cancer.** Cancer Res 71(18):6030-9, 2011. PMID: 21795478; PMCID: PMC3174342.
21. Huang L, Schauer IG, Zhang J, Mercado-Uribe I, Deavers MT, Huang J, Liu J. **The oncogenic gene fusion TMPRSS2: ERG is not a diagnostic or prognostic marker for ovarian cancer.** Int J Clin Exp Pathol 4(7):644-50, 2011. PMID: 22076164; PMCID: PMC3209604.
22. Jackson DB, Sood AK. **Personalized cancer medicine--advances and socio-economic challenges.** Nat Rev Clin Oncol 8(12):735-41, 2011. PMID: 21989071; PMCID: PMC3435438.
23. Kim HS, Han HD, Armaiz-Pena GN, Stone RL, Nam EJ, Lee JW, Shahzad MM, Nick AM, Lee SJ, Roh JW, Nishimura M, Mangala LS, Bottsford-Miller J, Gallick GE, Lopez-Berestein G, Sood AK. **Functional roles of Src and Fgr in ovarian carcinoma.** Clin Cancer Res 17(7):1713-21, 2011. PMID: 21300758; PMCID: PMC3077122.
24. King ER, Tung CS, Tsang YT, Zu Z, Lok GT, Deavers MT, Malpica A, Wolf JK, Lu KH, Birrer MJ, Mok SC, Gershenson DM, Wong KK. **The anterior gradient homolog 3 (AGR3) gene is associated with differentiation and survival in ovarian cancer.** Am J Surg Pathol 35(6):904-12, 2011. PMID: 21451362; PMCID: PMC3095702.

25. King ER, Zu Z, Tsang YT, Deavers MT, Malpica A, Mok SC, Gershenson DM, Wong KK. **The insulin-like growth factor 1 pathway is a potential therapeutic target for low-grade serous ovarian carcinoma.** Gynecol Oncol 123(1):13-8, 2011. PMID: 21726895; PMCID: PMC3171566.
26. Klopp AH, Gupta A, Spaeth E, Andreeff M, Marini F, 3rd. **Concise review: Dissecting a discrepancy in the literature: do mesenchymal stem cells support or suppress tumor growth?** Stem Cells 29(1):11-9, 2011. PMID: 21280155; PMCID: PMC3059412.
27. Le XF, Bast RC Jr. **Src family kinases and paclitaxel sensitivity.** Cancer Biol Ther 12(4):260-9, 2011. PMID: 21646863; PMCID: PMC3173729.
28. Le XF, Mao W, He G, Claret FX, Xia W, Ahmed AA, Hung MC, Siddik ZH, Bast RC Jr. **The role of p27(Kip1) in dasatinib-enhanced paclitaxel cytotoxicity in human ovarian cancer cells.** J Natl Cancer Inst 103(18):1403-22, 2011. PMID: 21813412; PMCID: PMC3176777.
29. Liggett TE, Melnikov A, Yi Q, Replogle C, Hu W, Rotmensch J, Kamat A, Sood AK, Levenson V. **Distinctive DNA methylation patterns of cell-free plasma DNA in women with malignant ovarian tumors.** Gynecol Oncol 120(1):113-20, 2011. PMID: 21056906; PMCID: PMC3004216.
30. Lu Y, Muller M, Smith D, Dutta B, Komurov K, Iadevaia S, Ruths D, Tseng JT, Yu S, Yu Q, Nakhleh L, Balazsi G, Donnelly J, Schurdak M, Morgan-Lappe S, Fesik S, Ram PT, Mills GB. **Kinome siRNA-phosphoproteomic screen identifies networks regulating AKT signaling.** Oncogene 30(45):4567-77, 2011. PMID: 21666717; PMCID: PMC3175328.
31. Lutgendorf SK, DeGeest K, Dahmoush L, Farley D, Penedo F, Bender D, Goodheart M, Buekers TE, Mendez L, Krueger G, Clevenger L, Lubaroff DM, Sood AK, Cole SW. **Social isolation is associated with elevated tumor norepinephrine in ovarian carcinoma patients.** Brain Behav Immun 25(2):250-5, 2011. PMID: 20955777; PMCID: PMC3103818.
32. Lutgendorf SK, Sood AK. **Biobehavioral factors and cancer progression: physiological pathways and mechanisms.** Psychosom Med 73(9):724-30, 2011. PMID: 22021459; PMCID: PMC3319047.
33. Mandal PK, Gao F, Lu Z, Ren Z, Ramesh R, Birtwistle JS, Kaluarachchi KK, Chen X, Bast RC Jr, Liao WS, McMurray JS. **Potent and selective phosphopeptide mimetic prodrugs targeted to the Src homology 2 (SH2) domain of signal transducer and activator of transcription 3.** J Med Chem 54(10):3549-63, 2011. PMID: 21486047; PMCID: PMC3319156.
34. Matsuo K, Eno ML, Ahn EH, Shahzad MM, Im DD, Rosenshein NB, Sood AK. **Multidrug resistance gene (MDR-1) and risk of brain metastasis in epithelial ovarian, fallopian tube, and peritoneal cancer.** Am J Clin Oncol 34(5):488-93, 2011. PMID: 20921883; PMCID: PMC3183315.
35. Matsuo K, Nishimura M, Bottsford-Miller JN, Huang J, Komurov K, Armaiz-Pena GN, Shahzad MM, Stone RL, Roh JW, Sanguino AM, Lu C, Im DD, Rosenshien NB, Sakakibara A, Nagano T, Yamasaki M, Enomoto T, Kimura T, Ram PT, Schmeler KM, Gallick GE, Wong KK, Frumovitz M, Sood AK. **Targeting SRC in mucinous ovarian carcinoma.** Clin Cancer Res 17(16):5367-78, 2011. PMID: 21737505; PMCID: PMC4028171.
36. Moreno-Smith M, Lu C, Shahzad MM, Pena GN, Allen JK, Stone RL, Mangala LS, Han HD, Kim HS, Farley D, Berestein GL, Cole SW, Lutgendorf SK, Sood AK. **Dopamine blocks stress-mediated ovarian carcinoma growth.** Clin Cancer Res 17(11):3649-59, 2011. PMID: 21531818; PMCID: PMC3107884.
37. Mullany LK, Fan HY, Liu Z, White LD, Marshall A, Gunaratne P, Anderson ML, Creighton CJ, Xin L, Deavers M, Wong KK, Richards JS. **Molecular and functional characteristics of ovarian surface epithelial cells transformed by KrasG12D and loss of Pten in a mouse model in vivo.** Oncogene 30(32):3522-36, 2011. PMID: 21423204; PMCID: PMC3139785.

38. Nick AM, Stone RL, Armaiz-Pena G, Ozpolat B, Tekedereli I, Graybill WS, Landen CN, Villares G, Vivas-Mejia P, Bottsford-Miller J, Kim HS, Lee JS, Kim SM, Baggerly KA, Ram PT, Deavers MT, Coleman RL, Lopez-Berestein G, Sood AK. **Silencing of p130cas in ovarian carcinoma: a novel mechanism for tumor cell death.** *J Natl Cancer Inst* 103(21):1596-612, 2011. PMID: 21957230; PMCID: PMC3206039.
39. Pecot CV, Bischoff FZ, Mayer JA, Wong KL, Pham T, Bottsford-Miller J, Stone RL, Lin YG, Jaladurgam P, Roh JW, Goodman BW, Merritt WM, Pircher TJ, Mikolajczyk SD, Nick AM, Celestino J, Eng C, Ellis LM, Deavers MT, Sood AK. **A novel platform for detection of CK+ and CK- CTCs.** *Cancer Discov* 1(7):580-6, 2011. PMID: 22180853; PMCID: PMC3237635.
40. Pecot CV, Calin GA, Coleman RL, Lopez-Berestein G, Sood AK. **RNA interference in the clinic: challenges and future directions.** *Nat Rev Cancer* 11(1):59-67, 2011. PMID: 21160526; PMCID: PMC3199132.
41. Rupaimoole R, Han HD, Lopez-Berestein G, Sood AK. **MicroRNA therapeutics: principles, expectations, and challenges.** *Chin J Cancer* 30(6):368-70, 2011. PMID: 21627858; PMCID: PMC4013410.
42. Schauer IG, Sood AK, Mok S, Liu J. **Cancer-associated fibroblasts and their putative role in potentiating the initiation and development of epithelial ovarian cancer.** *Neoplasia* 13(5):393-405, 2011. PMID: 21532880; PMCID: PMC3084616.
43. Schlumbercht MP, Xie SS, Shipley GL, Urbauer DL, Broaddus RR. **Molecular clustering based on ERalpha and EIG121 predicts survival in high-grade serous carcinoma of the ovary/peritoneum.** *Mod Pathol* 24(3):453-62, 2011. PMID: 21102415; PMCID: PMC3058634.
44. Shahzad MM, Mangala LS, Han HD, Lu C, Bottsford-Miller J, Nishimura M, Mora EM, Lee JW, Stone RL, Pecot CV, Thanapprapasr D, Roh JW, Gaur P, Nair MP, Park YY, Sabnis N, Deavers MT, Lee JS, Ellis LM, Lopez-Berestein G, McConathy WJ, Prokai L, Lacko AG, Sood AK. **Targeted delivery of small interfering RNA using reconstituted high-density lipoprotein nanoparticles.** *Neoplasia* 13(4):309-19, 2011. PMID: 21472135; PMCID: PMC3071079.
45. Sood AK, Lutgendorf SK. **Stress influences on anoikis.** *Cancer Prev Res (Phila)* 4(4):481-5, 2011. PMID: 21464029; PMCID: PMC3074235.
46. Sood AK, Wilson MT, Herzog TJ. **Supporting gynecologic cancer research: the last 20 years and beyond.** *Gynecol Oncol* 120(3):319-20, 2011. PMID: 21320669.
47. Spaeth EL, Marini FC. **Dissecting mesenchymal stem cell movement: migration assays for tracing and deducing cell migration.** *Methods Mol Biol* 750:241-59, 2011. PMID: 21618096.
48. Stany MP, Vathipadiekal V, Ozbun L, Stone RL, Mok SC, Xue H, Kagami T, Wang Y, McAlpine JN, Bowtell D, Gout PW, Miller DM, Gilks CB, Huntsman DG, Ellard SL, Wang YZ, Vivas-Mejia P, Lopez-Berestein G, Sood AK, Birrer MJ. **Identification of novel therapeutic targets in microdissected clear cell ovarian cancers.** *PLoS One* 6(7):e21121, 2011. PMID: 21754983; PMCID: PMC3130734.
49. Steg AD, Katre AA, Goodman B, Han HD, Nick AM, Stone RL, Coleman RL, Alvarez RD, Lopez-Berestein G, Sood AK, Landen CN. **Targeting the notch ligand JAGGED1 in both tumor cells and stroma in ovarian cancer.** *Clin Cancer Res* 17(17):5674-85, 2011. PMID: 21753153; PMCID: PMC3166981.
50. Su JL, Cheng X, Yamaguchi H, Chang YW, Hou CF, Lee DF, Ko HW, Hua KT, Wang YN, Hsiao M, Chen PB, Hsu JM, Bast RC Jr, Hortobagyi GN, Hung MC. **FOXO3a-Dependent Mechanism of E1A-Induced Chemosensitization.** *Cancer Res* 71(21):6878-87, 2011. PMID: 21911455; PMCID: PMC3242367.

51. Vaughan S, Coward JI, Bast RC Jr, Berchuck A, Berek JS, Brenton JD, Coukos G, Crum CC, Drapkin R, Etemadmoghadam D, Friedlander M, Gabra H, Kaye SB, Lord CJ, Lengyel E, Levine DA, McNeish IA, Menon U, Mills GB, Nephew KP, Oza AM, Sood AK, Stronach EA, Walczak H, Bowtell DD, Balkwill FR. **Rethinking ovarian cancer: recommendations for improving outcomes.** Nat Rev Cancer 11(10):719-25, 2011. PMID: 21941283; PMCID: PMC3380637.
52. Vivas-Mejia PE, Rodriguez-Aguayo C, Han HD, Shahzad MM, Valiyeva F, Shibayama M, Chavez-Reyes A, Sood AK, Lopez-Berestein G. **Silencing survivin splice variant 2B leads to antitumor activity in taxane--resistant ovarian cancer.** Clin Cancer Res 17(11):3716-26, 2011. PMID: 21512144; PMCID: PMC3108184.
53. Wang E, Bhattacharyya S, Szabolcs A, Rodriguez-Aguayo C, Jennings NB, Lopez-Berestein G, Mukherjee P, Sood AK, Bhattacharya R. **Enhancing chemotherapy response with Bmi-1 silencing in ovarian cancer.** PLoS One 6(3):e17918, 2011. PMID: 21445297; PMCID: PMC3061867.
54. Yang D, Khan S, Sun Y, Hess K, Shmulevich I, Sood AK, Zhang W. **Association of BRCA1 and BRCA2 mutations with survival, chemotherapy sensitivity, and gene mutator phenotype in patients with ovarian cancer.** Jama 306(14):1557-65, 2011. PMID: 21990299.
55. Yang F, Guo X, Yang G, Rosen DG, Liu J. **AURKA and BRCA2 expression highly correlate with prognosis of endometrioid ovarian carcinoma.** Mod Pathol 24(6):836-45, 2011. PMID: 21441901; PMCID: PMC3152794.
56. Yang G, Xiao X, Rosen DG, Cheng X, Wu X, Chang B, Liu G, Xue F, Mercado-Uribe I, Chiao P, Du X, Liu J. **The biphasic role of NF-kappaB in progression and chemoresistance of ovarian cancer.** Clin Cancer Res 17(8):2181-94, 2011. PMID: 21339307; PMCID: PMC3152795.
57. Zhu CS, Pinsky PF, Cramer DW, Ransohoff DF, Hartge P, Pfeiffer RM, Urban N, Mor G, Bast RC Jr, Moore LE, Lokshin AE, McIntosh MW, Skates SJ, Vitonis A, Zhang Z, Ward DC, Symanowski JT, Lomakin A, Fung ET, Sluss PM, Scholler N, Lu KH, Marrangoni AM, Patriotis C, Srivastava S, Buys SS, Berg CD. **A framework for evaluating biomarkers for early detection: validation of biomarker panels for ovarian cancer.** Cancer Prev Res (Phila) 4(3):375-83, 2011. PMID: 21372037; PMCID: PMC3057372.
58. Zou CF, Jia L, Jin H, Yao M, Zhao N, Huan J, Lu Z, Bast RC Jr, Feng Y, Yu Y. **Re-expression of ARHI (DIRAS3) induces autophagy in breast cancer cells and enhances the inhibitory effect of paclitaxel.** BMC Cancer 11:22, 2011. PMID: 21244707; PMCID: PMC3032751.