

## Publications<sup>1</sup> for the Period 10/01/06 - 09/30/07

The Carcinogenesis and Chemoprevention Program produced a total of 74 cancer-related publications from October 1, 2006 through September 30, 2007. Of these, 29 (39%) were inter-programmatic or inter- and intra-programmatic publications; 14 (19%) were intra-programmatic or inter- and intra-programmatic publications.

### 2006

- \* **Agarwal C (CC)**, Tyagi A, **Agarwal R (HRM,CC)**. Gallic acid causes inactivating phosphorylation of cdc25A/cdc25C-cdc2 via ATM-Chk2 activation, leading to cell cycle arrest, and induces apoptosis in human prostate carcinoma DU145 cells. *Mol Cancer Ther* 5(12):3294-3302, 2006.
- \* **Agarwal R (HRM,CC)**, **Agarwal C (CC)**, Ichikawa H, Singh RP, Aggarwal BB. Anticancer potential of silymarin: from bench to bed side. *Anticancer Res* 26(6B):4457-4498, 2006.  
  
Chen J, Cheng X, Merched-Sauvage M, Caulin C, **Roop DR (CC)**, Koch PJ. An unexpected role for keratin 10 end domains in susceptibility to skin cancer. *J Cell Sci* 119(Pt 24):5067-5076, 2006.
- \* Christiani DC, Pao W, **DeMartini JC (TOP)**, Linnoila RI, **Malkinson AM (CC,TOP)**, Onn A, Politi KA, Shap M, Wong KK. BAC Consensus Conference, November 4-6, 2004: Epidemiology, pathogenesis, and preclinical models. *J Thorac Oncol* 1(9 Suppl):S2-S7, 2006.
- \* Ding M, Newman F, **Kavanagh BD (DT)**, Stuhr K, **Johnson TK (CC)**, **Gaspar LE (TRM)**. Comparative dosimetric study of three-dimensional conformal, dynamic conformal arc, and intensity-modulated radiotherapy for brain tumor treatment using the Novalis system. *Int J Radiat Oncol Biol Phys* 66(4 Suppl 1):S82-S86, 2006.  
  
Fang L, Battisti RF, Cheng H, Reigan P, Xin Y, Shen J, **Ross D (CC,DT)**, Chan KK, Martin EW Jr, Wang PG, Sun D. Enzyme specific activation of benzoquinone ansamycin prodrugs using HuCC49DeltaCH2-beta-galactosidase conjugates. *J Med Chem* 49(21):6290-6297, 2006.  
  
Francis SO, Mahlberg MJ, Johnson KR, Ming ME, **Dellavalle RP (CC)**. Melanoma chemoprevention. *J Am Acad Dermatol* 55(5):849-861, 2006.  
  
Freeman SR, Drake AL, Heilig LF, Graber M, McNealy K, Schilling LM, **Dellavalle RP (CC)**. Statins, fibrates, and melanoma risk: a systematic review and meta-analysis. *J Natl Cancer Inst* 98(21):1538-1546, 2006.
- \*+ Guo W, Reigan P, **Siegel D (CC)**, Zirrolli J, **Gustafson D (DT)**, **Ross D (CC,DT)**. The bioreduction of a series of benzoquinone ansamycins by NAD(P)H:quinone oxidoreductase 1 (NQO1) to more potent heat shock protein 90 (Hsp90) inhibitors, the hydroquinone ansamycins. *Mol Pharmacol* 70(4):1194-1203, 2006.

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<sup>1</sup> \* = Inter-programmatic publication; + = intra-programmatic publication

Member names are highlighted and their respective programs are indicated in parentheses.

Program abbreviations: CB = Cell Biology; CC = Carcinogenesis and Chemoprevention; PC = AMC Cancer Prevention and Control; DT = Developmental Therapeutics; HRM = Hormone Related Malignancies; II = Immunology & Immunotherapy; MOP = Molecular Oncology Program; TOP = Thoracic Oncology Program

- Hail N Jr (CC)**, Kim HJ, Lotan R. Mechanisms of fenretinide-induced apoptosis. *Apoptosis* 11(10): 1677-1694, 2006.
- \* **Helfrich BA, Raben D (TOP,DT), Varella-Garcia M (TOP), Gustafson D (DT), Chan DC (DT,TOP), Bemis L (CC), Coldren C (TOP), Baron A (DT), Zeng C, Franklin W (TOP), Hirsch FR (TOP,DT), Gazdar A, Minna J, Bunn PA Jr (TOP)**. Antitumor activity of the epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor gefitinib (ZD1839, Iressa) in non-small cell lung cancer cell lines correlates with gene copy number and EGFR mutations but not EGFR protein levels. *Clin Cancer Res* 12(23):7117-7125, 2006.
- + **Kaur M, Singh RP, Gu M, Agarwal R (HRM,CC), Agarwal C (CC)**. Grape seed extract inhibits *in vitro* and *in vivo* growth of human colorectal carcinoma cells. *Clin Cancer Res* 12(20 Pt 1):6194-6202, 2006.
- Kaur M, Agarwal R (HRM,CC)**. Silymarin and epithelial cancer chemoprevention: How close we are to bedside? *Toxicol Appl Pharmacol* 224(3):350-359, 2006.
- \*+ **Siddiqui F, Ehrhart EJ, Charles B, Chubb L, Li CY (CC), Zhang X, LaRue SM (DT), Avery PR, Dewhirst MW, Ullrich RL (CC)**. Anti-angiogenic effects of interleukin-12 delivered by a novel hyperthermia induced gene construct. *Int J Hyperthermia* 22(7):587-606, 2006.
- Thompson HJ (CC)**. Oxidative DNA damage and cancer risk assessment. *J Nutr* 136(10):2693S-2694S, 2006.
- Thompson HJ (CC)**. Pre-clinical investigations of physical activity and cancer: a brief review and analysis. *Carcinogenesis* 27(10):1946-1949, 2006.
- + **Tyagi A, Singh RP, Agarwal C (CC), Agarwal R (HRM,CC)**. Silibinin activates p53-caspase 2 pathway and causes caspase-mediated cleavage of Cip1/p21 in apoptosis induction in bladder transitional-cell papilloma RT4 cells: evidence for a regulatory loop between p53 and caspase 2. *Carcinogenesis* 27(11):2269-2280, 2006.
- \* **Zafar LS, Inayat-Hussain SH, Siegel D (CC), Bao A, Shieh B, Ross D (CC,DT)**. Overexpression of NQO1 protects human SK-N-MC neuroblastoma cells against dopamine-induced cell death. *Toxicol Lett* 166(3):261-267, 2006.

## 2007

- \*+ **Agarwal C (CC)**, Veluri R, Kaur M, Chou SC, **Thompson JA (CC), Agarwal R (HRM,CC)**. Fractionation of high molecular weight tannins in grape seed extract and identification of procyanidin B2-3,3'-di-O-gallate as a major active constituent causing growth inhibition and apoptotic death of DU145 human prostate carcinoma cells. *Carcinogenesis* 28(7):1478-1484, 2007.
- \* **Agarwal C (CC)**, Tyagi A, Kaur M, **Agarwal R (HRM,CC)**. Silibinin inhibits constitutive activation of Stat3, and causes caspase activation and apoptotic death of human prostate carcinoma DU145 cells. *Carcinogenesis* 28(7):1463-1470, 2007.
- \*+ **Avery P, Li CY (CC), La Rue S (DT), Dewhirst MW, Ullrich R (CC)**. Induction of human heat shock promoter hsp70b by nutritional stress: Implications for cancer gene therapy. *Cancer Invest*, in press, 2007.

- Bailey SM (CC)**, Cornforth MN. Telomeres and DNA double-strand breaks: ever the twain shall meet? *Cell Mol Life Sci*, in press, 2007.
- \* **Bemis LT (CC), Robinson WA (DT)**, McFarlane R, Buyers E, **Kelly K (TOP)**, **Varella-Garcia M (TOP)**, **Mitchell JD (TOP)**, **Franklin WA (TOP)**. EGFR-mutant lung adenocarcinoma in a patient with Li-Fraumeni syndrome. *Lancet Oncol* 8(6):559-560, 2007.
- Buitrago W, **Roop DR (CC)**. Oct-4: the almighty POUripotent regulator? *J Invest Dermatol* 127(2):260-262, 2007.
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- Cao Y, Sonveaux P, Liu S, Zhao Y, Mi J, Clary BM, **Li CY (CC)**, Kontos CD, Dewhirst MW. Systemic overexpression of angiopoietin-2 promotes tumor microvessel regression and inhibits angiogenesis and tumor growth. *Cancer Res* 67(8):3835-3844, 2007.
- + Carsten RE, Bachand A, **Bailey SM (CC)**, **Ullrich RL (CC)**. Resveratrol reduces radiation-induced chromosome aberration frequency in mouse bone marrow cells. *Radiat Res*, in press, 2007.
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- Collier AP, Francis SO, Mahlberg MJ, McLaughlin JA, **Dellavalle RP (CC)**. Chemoprevention: A role in melanoma? *Exp Rev Dermatol* 251-58, 2007.
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- Estey T, Cantore M, Weston PA, Carpenter JF, Petrash JM, **Vasiliou V (CC)**. Mechanisms involved in the protection of UV-induced protein inactivation by the corneal crystallin ALDH3A1. *J Biol Chem* 282(7):4382-4392, 2007.
- \* **Flaig TW (DT)**, Su LJ, **Harrison G (CB)**, **Agarwal R (HRM,CC)**, **Glode LM (HRM)**. Silibinin synergizes with mitoxantrone to inhibit cell growth and induce apoptosis in human prostate cancer cells. *Int J Cancer* 120(9):2028-2033, 2007.
- \* **Flaig TW (DT)**, **Gustafson DL (DT)**, Su LJ, Zirrolli JA, Crighton F, **Harrison GS (CB)**, Pierson AS, **Agarwal R (HRM,CC)**, **Glode LM (HRM)**. A phase I and pharmacokinetic study of silybin-phytosome in prostate cancer patients. *Invest New Drugs* 25(2):139-146, 2007.
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- \* Redente EF, **Orlicky DJ (HRM)**, Bouchard RJ, **Malkinson AM (CC,TOP)**. Tumor signaling to the bone marrow changes the phenotype of monocytes and pulmonary macrophages during urethane-induced primary lung tumorigenesis in A/J mice. *Am J Pathol* 170(2):693-708, 2007.
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