

TEACHING

Molecular Biology, Microbiology; Diagnostic Methods; Disease Mechanisms and Molecular Pathogenesis

RESEARCH INTERESTS

Enhancing the efficacy of anti-cancer therapy through a) understanding of the molecular responses in cells exposed to clinically-used targeted or broad-acting therapeutic agents, b) designing rational combination strategies that will improve the therapeutic index of clinically used drugs, c) strategies using nanomaterial- or biomimetic vehicles for drug delivery.

RELEVANT RECENT PUBLICATIONS

- Samuel, T., Shaddox, SH, Bass D., Bedi D., Datta P. Topoisomerase-I inhibitors induce the expression of clinically relevant immunomodulators in colon cancer cells. *The Journal of Immunology*, May 1, 2020, 204 (1 Supplement) 241.4.
- Apalangya VA, Rangari, VK, Tiimob, BJ, Jeelani S, and Samuel, T. Eggshell Based Nano-Engineered Hydroxyapatite and Poly(lactic) Acid Electrospun Fibers as Potential Tissue Scaffold. *International Journal of Biomaterials*, Vol. 2019, Article ID 6762575.
- Bedi D, Henderson HJ, Manne U, Samuel T. Camptothecin Induces PD-L1 and Immunomodulatory Cytokines in Colon Cancer Cells. *Medicines (Basel)*. 2019 Apr 24;6(2) PubMed PMID: 31022845.
- Sonni-Ali Miller, Jason A. White, Rupak Chowdhury, Dominique N. Gales, Berhanu Tameru, Amit K. Tiwari and Temesgen Samuel. Effects of consumption of whole grape powder on basal NF-cytokine secretion in a mouse model of inflammation. *JNIM*, vol. 11, pp 1-8, 2018
- Chowdhury, R., Gales, D., Paloma, V., Miller, S., Yehualaeshet, T., Manne, U., Francia G. and Samuel, T. Bromoethylindole (BEI-9) redirects NF-cytokine secretion in colon cancer cells. *Apoptosis*, 22(12), 1553-1563, 2018. DOI: 10.1007/s10495-017-1427-6.
- Jones KM, Karanam B, Jones-Triche J, Sandey M, Henderson HJ, Samant RS, Temesgen Samuel, Yates C, Bedi D. Phage Ligands for Identification of Mesenchymal-Like Breast Cancer Cells and Their Association with Cancer-Associated Fibroblasts. *Cancer Associated Fibroblasts* 4(ito)-68e01.53 reW*