

College of Veterinary Medicine

Temesgen Samuel *Professor*

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EDUCATION/TRAINING

Institution and Location	Degree	Graduation Year	Major
Addis Ababa University, Ethiopia	DVM	1990	Veterinary Medicine
Hannover School of Veterinary Medicine, Germany	PhD	1998	Cell Mol Biol
Erlangen-Nuremberg University, Germany	Staff-Scientist	1999	Cell Mol Biol, Cancer Research
Burnham Institute for Medical Research, USA	Post- doctoral	2002	Cell Mol Biol, Cancer Research

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-κB signaling and inflammatory 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-κB signaling induced by camptothecin and TNFα to promote cell death 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 Cancer-Associated Fibroblasts. Front Oncol. 2018 Dec 17;8:625. doi: 10.3389/fonc.2018.00625.