



[Update Your Profile](#)

Antonino Passaniti, PhD

Academic Title:

Professor

Primary Appointment:

Pathology

Secondary Appointment(s):

BioChemistry&Molecular Biology

Email:

tpassaniti@som.umaryland.edu

Location:

655 W Baltimore Street

Phone (Primary):

410-328-5470

Fax:

410-328-6559

[Download CV](#)

Education and Training

Dr. Passaniti received his Ph.D. from the University of Virginia, Biochemistry Department, at the School of Medicine. His work with Dr. Clive Bradbeer was on vitamin transport in bacteria. His post-doctoral work was at the University of Maryland, Baltimore County in the area of coated vesicles with Dr. Tom Roth and at the Johns Hopkins University in the area of tumor biology with Dr. Jerry Hart. While at Hopkins his work on the role of cell surface glycosylation in tumor metastasis led to a subsequent staff position at the NIH (National Institute on Aging) where he focused on tumor angiogenesis. He holds academic appointments at the University of Maryland in the Department of Pathology, the Department of Biochemistry & Molecular Biology, and the Program in Oncology at the Marlene and Stewart Greenebaum Comprehensive Cancer Center. In addition to his research programs in angiogenesis and breast cancer biology he also directs the Advanced Cancer Biology course in the Molecular Medicine program and

participates in clinical conferences for medical students in Cell and Molecular Biology.

Research/Clinical Keywords

Breast cancer, angiogenesis, transcriptional regulation, cell signaling

Highlighted Publications

D' Souza, DR, Salib, M, Bennett, J, Mochin-Peters, M, Asrani, K, Goldblum, SE, Renoud, KJ, and Passaniti, A (2009) Hyperglycemia regulates RUNX2 activation through the aldose reductase polyol pathway. *J Biol Chem*, 284: 17947-17955. PMID: 19383984

Zhang, Y., Ali, T.Z., Zhou, H., D' Souza, D.R., Lu, Y., Jaffe, J., Liu, Z., Passaniti, A., and Hamburger, A.W. (2010) ErbB3 binding protein 1 represses metastasis-promoting gene anterior gradient protein 2 in prostate cancer. *Cancer Res.* 70:240-8. PMID:20048076

D' Souza, DR, Girnun, G., Pierce, A., and Passaniti, A. (2010) Glucose metabolism, transcriptional regulation, and angiogenesis. *Curr. Topics Biochem. Res.* 11(2): 41-55.

Pierce, AD, Anglin, IE, Vitolo, MI, Mochin, MT, Underwood, KF, Goldblum, SE, Kommineni, S, and Passaniti, A. (2012) Glucose-activated RUNX2 phosphorylation promotes endothelial cell proliferation and an angiogenic phenotype. *J. Cell. Biochem.* 113(1):282-92 PMID: 21913213

Underwood, K.F., D' Souza, D.R., Pierce, A.D., Mochin, M.T., Kommineni, S., Bennett, J., Choe, M., Gnatt, A., Habtemariam, B., MacKerell, and Passaniti, A. (2012) Regulation of RUNX2 transcription factor-DNA interactions and cell proliferation by Vitamin D3 (cholecalciferol) prohormone activity. *J. Bone Min. Res.* 27(4):913-25, PMID:22189971

Mochin, M.T., Underwood, K.F., Pierce, A.D., Cooper, B., McLenithan, J.C., Nalvarte, C., MacKerell, A.D., Arbiser, J., Karlsson, A.I., Moise, R.A., A.D., Moskovitz, J., and Passaniti, A. (2015) A Role for Methionine Sulfoxide Reductase-A in Redox Regulation of RUNX2 DNA-binding Activity. *Microvascular Res*, 97:55 - 64 PMID: 25283348

Choe, M, Chumsri, S, Bhandary, Brusgard, JL, L, Zhao, XF, Lu, S, Goloubeva, OG, Polster, BM, Fiskum, GM, Girnun, GD, Kim, MS and Passaniti, A (2015) The RUNX2 transcription factor negatively regulates SIRT6 expression to alter glucose metabolism in breast cancer cells. *J Cell Biochem.* 116(10):2210-26 PMID: 25808624

Brusgard, J.L., Choe, M., Chumsri, S., Renoud, K., MacKerell, A.D., Sudol, M., and Passaniti, A. (2015) RUNX2 and TAZ-dependent signaling pathways regulate soluble E-Cadherin levels and tumorsphere formation in breast cancer cells. *Oncotarget*, 6(29):28132-50 PMID: 26320173

Brusgard, J.L. and Passaniti, A. (2013) RUNX2 transcriptional regulation in development and disease in "Nuclear Signaling Pathways and Targeting Transcription in Cancer"; Series Title: "Cancer Drug Discovery and Development"; edited by Rakesh Kumar; Springer, New York/Heidelberg.

Li, Z., Yang, Z., Passaniti, A., Lapidus, R., Liu, X., Cullen, K., and Dan, H.C. (2016) A positive feedback loop involving EGFR/Akt/mTORC1 and IKK/NF- κ B regulates head and neck squamous cell carcinoma proliferation. *Oncotarget* Feb 17. doi:10.18632/oncotarget.7441; PMID: 26895469

Jeffrey Twum-Ampofo, Dexue Fu, Antonino Passaniti, Arif Hussain, and M. Minhaj Siddiqui (2016) Metabolic Targets for Potential Prostate Cancer Therapeutics. *Curr Opin in Oncology*, 28(3):241-7. PMID: 26907571

Passaniti, A., Brusgard, J.L., Qiao, Y., Sudol, M., and Finch-Edmondson, M. (2017) Roles of RUNX in Hippo Pathway Signaling. *Adv Exp Med Biol* 962:435-448. PMID 28299672

 [Update Your Profile](#)