

## CURRICULUM VITAE



**Name:** John DiGiovanni  
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### **Current Positions:**

Professor and Coulter R. Sublett Endowed Chair, Division of Pharmacology & Toxicology  
Associate Director of Basic Science Research, LiveSTRONG Cancer Institutes, Dell Medical School  
Director, Center for Molecular Carcinogenesis and Toxicology

### **Institution:**

The University of Texas at Austin

### **Location:**

Austin, TX, USA

### **Education:**

B.S. in Pharmacy, The university of Washington, Seattle, WA.  
Ph.D. in Pharmacology, the University of Washington, Seattle, WA.  
Postdoctoral Fellowship, the McArdle Laboratory for cancer Research, University of Wisconsin

### **Specialty & Present Interest:**

Research interests in my laboratory focus on several major areas: i) identifying critical targets and mechanisms involved in the initiation and promotion stages of chemical as well as UV skin carcinogenesis; ii) identification of genetic determinants of susceptibility to cancer; iii) exploring novel prevention strategies for cancer including exploring the chemopreventive activity of novel pentacyclic triterpenes found in *P. frutescens*; iv) development of new mouse models for cancer, including models for skin, prostate and head and neck cancers for cancer prevention and treatment studies; v) understanding the mechanisms of dietary energy balance, including both the effects of calorie restriction and obesity, on development and progression of prostate cancer and other cancers; and finally vi) exploring novel treatment strategies for several cancers. In this latter area, we are currently evaluating a human enzymes that deplete amino acids (e.g., cysteine and methionine) as a therapeutic approach for treating prostate cancer (PCa) and other cancers.

### **Representative papers (up to 5):**

Rho, O., Cho, J., Srivastava, J., and DiGiovanni, J. Overexpression of PRAS40T246A in the Proliferative Compartment Suppresses mTORC1 Signaling, Keratinocyte Migration and Skin Tumor Development. *J Invest Dermatol.*, 136:2070-2079, 2016 PMID: 27349859

Cramer, S. Saha, A., Tadi S., Tiziani, S., Yan, W., Triplett, K., Lamb. C., Alters, S., Johnson, D., Zhang, Y., DiGiovanni, J. Georgiou, G. and Stone, E. Systemic depletion of serum L-Cysteine with an Engineered Human Enzyme Mediates Potent Induction of ROS and Cancer Ablation. *Nat. Med.*, 23:120-127, 2017. PMID: 27869804

Lee, H., Kim, M., Baek, M., Morales, L., Jang, I.-S., Slaga, T.J., DiGiovanni, J. and Kim, D.J. Targeted disruption of TC-PTP/PTPN2 in mouse epidermis enhances chemically-induced skin carcinogenesis. *Sci Rep.* 2017 Mar 21;7:45077. doi: 10.1038/srep45077. PMID: 28322331

Saha, A, Blando, J., Ahn S., Su, F., Kolonin, M. and DiGiovanni, J. CXCL12/CXCR4 signaling axis and obesity-induced prostate cancer progression in HiMyc mice. *Cancer Res.*, 77: 5158-5168, 2017

Lodi, A., Saha, A., Lu, X., Wang, B., Sentandreu, E., DiGiovanni, J., and Tiziani, S. Combinatorial treatment with natural compounds inhibits prostate tumor growth and leads to key modulations of cancer cell metabolism. *npj Precision Oncology.*, doi:10.1038/s41698-017-0024-z, 2017