

Publications – June 1st—September 1st, 2020

Selected Recent Publications from our Faculty and their Teams



Zhang, Z., Suner, S.S., **Blake, D.A.**, Ayyala, R.S., and Sahiner, N. (2020) Antimicrobial activity and biocompatibility of slow-release hyaluronic acid-antibiotic conjugated particles. *International Journal of Pharmaceutics* (Amsterdam, Netherlands) (2020), 576, 119024.

Panchal, A., Rahman, N., Konnova, S., Fakhrullin, R., Zhang, D., **Blake, D.A.**, John, V., Ivanov, E., and Lvov, Y. (2020) Clay Nanotube Liquid Marbles Enhanced with Inner Biofilm Formation for the Encapsulation and Storage of Bacteria at Room Temperature. *ACS Applied Nano Materials* (2020), 3(2), 1263-1271.

Farinmade, A., Ojo, O.F., Trout, J., He, J., John, V., **Blake, D.A.**, Lvov, Y.M., Zhang, D., Nguyen, D., and Bose, A. (2020) Targeted and Stimulus-Responsive Delivery of Surfactant to the Oil-Water Interface for Applications in Oil Spill Remediation. *ACS Applied Materials & Interfaces* (2020), 12(1), 1840-1849.

Liu, J., Wan, M., Lyon, C.J., and **Hu, T.Y.** (2020) Nanomedicine therapies modulating Macrophage Dysfunction: a potential strategy to attenuate Cytokine Storms in severe infections. *Theranostics*. 2020 Jul 25;10(21):9591-9600.doi: 10.7150/thno.47982. eCollection 2020.

Huang, Z., Tian, D., Liu, Y., Lin, Z., Lyon, C.J., Lai, W., Fusco, D., Drouin, A., Yin, X., **Hu, T.Y.**, and Ning, B. (2020) Ultra-sensitive and high-throughput CRISPR-powered COVID-19 diagnosis. *Biosens Bioelectron*. 2020 Sep 15;164:112316.doi: 10.1016/j.bios.2020.112316. Epub 2020 May 23.



Publications – June 1st—September 1st, 2020 (continued)

Selected Recent Publications from our Faculty and their Teams

Niu, A., McDougal, A., Ning, B., Safa, F., Luk, A., Muschatt, D.M., Nachabe, A., Zwezdaryk, K.J., Robinson, J., Peterson, T., Socola, F., Sarah, H., **Hu, T.Y.**, and Saba, N.S. (2020) COVID-19 in allogeneic stem cell transplant: high false-negative probability and role of CRISPR and convalescent plasma. *Bone Marrow Transplant*. 2020 Jun 15;1-3. doi: 10.1038/s41409-020-0972-8. Online ahead of print.

Sun, D., Yang, L., Lyon, C.J., and **Hu, T.Y.** (2020) Simulation-directed amplifiable nanoparticle enhanced quantitative scattering assay under low magnification dark field microscopy. *J Mater Chem B*. 2020 Jul 1;8(25):5416-5419.doi: 10.1039/d0tb00350f.

Hu, X., Liao, S., Bai, H., Gupta, S., Zhou, Y., Zhou, J., Jiao, L., Wu, L., Wang, M., Chen, X., Zhou, Y., Lu, X., **Hu, T.Y.**, Zhang, Z., and Binwu Ying, B. (2020) Long Noncoding RNA and Predictive Model To Improve Diagnosis of Clinically Diagnosed Pulmonary Tuberculosis. *J Clin Microbiol*. 2020 Jun 24;58(7):e01973-19. doi: 10.1128/JCM.01973-19. Print 2020 Jun 24.

Zhang, F., Lyon, C.J., Walls, R.J., Ning, B., **Fan, J.**, and **Hu, T.Y.** (2020) Cathepsin B Dependent Cleavage Product of Serum Amyloid A1 Identifies Patients with Chemotherapy-Related Cardiotoxicity. *ACS Pharmacol Transl Sci*. 2019 Aug 12;2(5):333-341. doi: 10.1021/acspctsci.9b00035. eCollection 2019 Oct 11.

Galati, M.A., Hodel, K.P., Gams, M.S., Sudhaman, S., Bridge, T., Zahurancik, W.J., Ungerleider, N.A., Park, V.S., Ercan, A.B., Joksimovic, L., Siddiqui, I., Siddaway, R., Edwards, M., de Borja, R., Elshaher, D., Chung, J., Forster, V.J., Nunes, N.M., Aronson, M., Wang, X., Ramdas, J., Seeley, A., Sarosiek, T., Dunn, G.P., Byrd, J.N., Mordechai, O., Durno, C., Martin, A., Sylien, A., Bouffet, E., Suo, Z., **Jackson, J.G.**, Hawkins, C., Guidos, C.J., **Purcell, Z.F.**, and Tabori, U. (2020) Cancers from novel Pole mutant mouse models provide insights into polymerase-mediated hypermutagenesis and immune checkpoint blockade. *Cancer Research*. Accepted.

Hodel, K.P., Sun, M.J.S., Ungerleider, N., Park, V.S., Williams, L.G., Bauer, D.L., Immethun, V.E., Wang, J., Suo, Z., **Lu, H.**, McLachlan, J.B., and **Purcell, Z.F.** (2020) POLE Mutation Spectra Are Shaped by the Mutant Allele Identity, Its Abundance, and Mismatch Repair Status. *Mol Cell*. 2020 Jun 18;78(6):1166-1177.e6. doi: 10.1016/j.molcel.2020.05.012. Epub 2020 Jun 3.

Publications – June 1st—September 1st, 2020 (continued)

Selected Recent Publications from our Faculty and their Teams



Jiang, L., Huang, S., Wang, J., Zhang, Y., Xiong, Y., Zeng, S.X., and **Lu, H.** (2020) Inactivating p53 is essential for nerve growth factor receptor to promote melanoma-initiating cell-stemmed tumorigenesis. *Cell Death Dis.* 2020 Jul 20;11(7):550. doi: 10.1038/s41419-020-02758-6.

Jung, J.H., Lee, H., Zeng, S.X., and **Lu, H.** (2020) RBM10, a New Regulator of p53. *Cells.* 2020 Sep 16;9(9):E2107. doi: 10.3390/cells9092107. PMID: 32947864

Free article. Review.

Liang, H., Wang, Q., Wang, D., Zheng, H., Kalvakolanu, D.V., **Lu, H.**, Wen, N., Chen, X., Xu, L., Ren, J., Guo, B., and Zhang, L. (2020) RGFP966, a histone deacetylase 3 inhibitor, promotes glioma stem cell differentiation by blocking TGF-β signaling via SMAD7. *Biochem Pharmacol.* 2020 Jun 23;180:114118. doi: 10.1016/j.bcp.2020.114118. Online ahead of print. PMID: 32585142

Roy, K.R., Uddin, M.B., Roy, S.C., Hill, R.A., Marshall, J., Li, Y.T., Chamcheu, J.C., **Lu, H.**, and Liu, Y.Y. (2020) Gb3-cSrc complex in glycosphingolipid-enriched microdomains attributes to the expression of p53 mutant protein and cancer drug resistance via beta-catenin activated RNA-methylation. *FASEB BioAdvances.* In press.

Ying Wang, Y., Chaffee, T.S., LaRue, R.S., Huggins, D.N., Witschen, P.M., Ibrahim, A.M., Nelson, A.C., **Machado, H.L.**, and Schwertfeger, K.L. (2020) Tissue-resident macrophages promote extracellular matrix homeostasis in the mammary gland stroma of nulliparous mice. *eLife.* 2020 Jun 1;9:e57438. doi: 10.7554/eLife.57438.

Wimley, W.C. (2020) How We Came to Understand the "Tumultuous Chemical Heterogeneity" of the Lipid Bilayer Membrane. *J Membr Biol.* 2020 Jun;253(3):185-190. doi: 10.1007/s00232-020-00126-1.

Wu, E., Jenschke, R.M., Hristova, K., and **Wimley, W.C.** (2020) Rational Modulation of pH-triggered Macromolecular Poration by Peptide Acylation and Dimerization. *J Phys Chem B.* 2020 Sep 7. doi: 10.1021/acs.jpcb.0c05363. Online ahead of print.



Publications – June 1st – September 1st, 2020 (continued)

Selected Recent Publications from our Faculty and their Teams

Hoffmann, A.R., Guha, S., Wu, E., Grimier, J., Wang, Y., He, J., R.F., and **Wimley, W.C.** (2020) Broad-Spectrum Antiviral Entry Inhibition by Interracially-Active Peptides. *J Virol.* 2020 Sep 9;JVI.01682-20. doi: 10.1128/JVI.01682-20. Online ahead of print.