

Biomedical Sciences Interdisciplinary PhD Program

Full List of Student Publications

Baker, S. M., J. B. McLachlan and L. A. Morici (2020). "Immunological considerations in the development of *Pseudomonas aeruginosa* vaccines." Hum Vaccin Immunother **16**(2): 412-418.

Chang, T. C., **M. D. Matossian**, S. Elliott, H. E. Burks, **R. A. Sabol**, D. A. Ucar, H. Wathieu, J. Zabaleta, L. Valle, S. Gill, E. Martin, A. I. Riker, L. Miele, B. A. Bunnell, M. E. Burow and B. M. Collins-Burow (2020). "Evaluation of deacetylase inhibition in metaplastic breast carcinoma using multiple derivations of preclinical models of a new patient-derived tumor." PLoS One **15**(10): e0226464.

Coskun, F. S., S. Srivastava, P. Raj, I. Dozmorov, S. Belkaya, S. Mehra, N. A. Golden, **A. N. Bucsan**, M. L. Chapagain, E. K. Wakeland, D. Kaushal, T. Gumbo and N. S. C. van Oers (2020). "sncRNA-1 Is a Small Noncoding RNA Produced by *Mycobacterium tuberculosis* in Infected Cells That Positively Regulates Genes Coupled to Oleic Acid Biosynthesis." Front Microbiol **11**: 1631.

Fears, A. C., W. B. Klimstra, P. Duprex, A. Hartman, S. C. Weaver, K. C. Plante, D. Mirchandani, J. A. Plante, P. V. Aguilar, D. Fernández, A. Nalca, A. Tutura, D. Dyer, B. Kearney, M. Lackemeyer, J. K. Bohannon, R. Johnson, R. F. Garry, D. S. Reed and C. J. Roy (2020). "Comparative dynamic aerosol efficiencies of three emergent coronaviruses and the unusual persistence of SARS-CoV-2 in aerosol suspensions." medRxiv.

Foreman, T. W., **A. N. Bucşan**, S. Mehra, C. Peloquin, L. A. Doyle, K. Russell-Lodrigue, N. R. Gandhi, J. Altman, C. L. Day, J. D. Ernst, H. M. Blumberg, J. Rengarajan and D. Kaushal (2020). "Isoniazid and Rifapentine Treatment Eradicates Persistent *Mycobacterium tuberculosis* in Macaques." Am J Respir Crit Care Med **201**(4): 469-477.

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

Ganatra, S. R., **A. N. Bucşan**, X. Alvarez, S. Kumar, A. Chatterjee, M. Quezada, A. Fish, D. K. Singh, B. Singh, R. Sharan, T. H. Lee, U. Shanmugasundaram, V. Velu, S. A. Khader, S. Mehra, J. Rengarajan and D. Kaushal (2020). "Antiretroviral therapy does not reduce tuberculosis reactivation in a tuberculosis-HIV coinfection model." J Clin Invest **130**(10): 5171-5179.

Hebert, K. D., N. McLaughlin, **M. Galeas-Pena**, **Z. Zhang**, T. Eddens, A. Govero, J. M. Pilewski, J. K. Kolls and D. A. Pociask (2020). "Targeting the IL-22/IL-22BP axis enhances tight junctions and reduces inflammation during influenza infection." Mucosal Immunol **13**(1): 64-74.

Higashi, Y., S. Sukhanov, S. Y. Shai, S. Danchuk, **P. Snarski**, Z. Li, X. Hou, M. H. Hamblin, T. C. Woods, M. Wang, D. Wang, H. Yu, R. J. Korthuis, T. Yoshida and P. Delafontaine (2020). "Endothelial deficiency of insulin-like growth factor-1 receptor reduces endothelial barrier function and promotes atherosclerosis in Apoe-deficient mice." Am J Physiol Heart Circ Physiol **319**(4): H730-h743.

Hoang, V. T., **M. D. Matossian**, D. A. Ucar, S. Elliott, J. La, M. K. Wright, H. E. Burks, A. Perles, F. Hossain, C. T. King, V. E. Browning, J. Bursavich, F. Fang, L. Del Valle, A. B. Bhatt, J. E. Cavanaugh, P. T. Flaherty, M. Anbalagan, B. G. Rowan, M. R. Bratton, K. P. Nephew, L. Miele, B. M. Collins-Burow, E. C. Martin and M. E. Burow (2020). "ERK5 Is Required for Tumor Growth and Maintenance Through Regulation of the Extracellular Matrix in Triple Negative Breast Cancer." Front Oncol **10**: 1164.

Hodel, K. P., M. J. S. Sun, **N. Ungerleider**, **V. S. Park**, L. G. Williams, **D. L. Bauer**, V. E. Immethun, J. Wang, Z. Suo, H. Lu, J. B. McLachlan and Z. F. Pursell (2020). "POLE Mutation Spectra Are Shaped by the Mutant Allele Identity, Its Abundance, and Mismatch Repair Status." Mol Cell **78**(6): 1166-1177.e1166.

Hoffmann, A. R., **S. Guha**, **E. Wu**, **J. Ghimire**, **Y. Wang**, J. He, R. F. Garry and W. C. Wimley (2020). "Broad-Spectrum Antiviral Entry Inhibition by Interfacially-Active Peptides." J Virol.

Ibrahim, A. M., M. A. Moss, Z. Gray, **M. D. Rojo**, **C. M. Burke**, K. L. Schwertfeger, C. O. Dos Santos and H. L. Machado (2020). "Diverse Macrophage Populations Contribute to the Inflammatory Microenvironment in Premalignant Lesions During Localized Invasion." Front Oncol **10**: 569985.

Jackson-Weaver, O., N. Ungvijanpunya, Y. Yuan, J. Qian, Y. Gou, J. Wu, H. Shen, **Y. Chen**, M. Li, S. Richard, Y. Chai, H. M. Sucov and J. Xu (2020). "PRMT1-p53 Pathway Controls Epicaldial EMT and Invasion." Cell Rep **31**(10): 107739.

Jevitt, A., **D. Chatterjee**, G. Xie, X. F. Wang, T. Otwell, Y. C. Huang and W. M. Deng (2020). "A single-cell atlas of adult Drosophila ovary identifies transcriptional programs and somatic cell lineage regulating oogenesis." PLoS Biol **18**(4): e3000538.

Kaul, T., M. E. Morales, A. O. Sartor, V. P. Belancio and P. Deininger (2020). "Comparative analysis on the expression of L1 loci using various RNA-Seq preparations." Mob DNA **11**: 2.

Kiefer, M. C., **N. I. Motyka**, J. D. Clements and J. P. Bitoun (2020). "Enterotoxigenic Escherichia coli Heat-Stable Toxin Increases the Rate of Zinc Release from Metallothionein and Is a Zinc- and Iron-Binding Peptide." mSphere **5**(2).

Kurtz, J. R., W. Nieves, **D. L. Bauer**, K. E. Israel, H. E. Adcox, J. S. Gunn, L. A. Morici and J. B. McLachlan (2020). "Salmonella Persistence and Host Immunity Are Dictated by the Anatomical Microenvironment." Infect Immun **88**(8).

Matossian, M. D., H. E. Burks, S. Elliott, V. T. Hoang, W. J. Zuercher, C. Wells, D. H. Drewry, N. Kapadia, T. Chang, T. Yan, G. O. Windsor, K. Nguyen, F. Fang, K. P. Nephew, A. Buechlein, D. B. Rusch, **R. A. Sabol**, D. A. Ucar, J. Zabaleta, L. Miele, B. A. Bunnell, B. M. Collins-Burow and M. E. Burow (2020). "A novel screening approach comparing kinase activity of small molecule inhibitors with similar molecular structures and distinct biologic effects in triple-negative breast cancer to identify targetable signaling pathways." Anticancer Drugs **31**(8): 759-775.

Hartman AL, Nambulli S, McMillen CM, White AG, Tilston-Lunel NL, Albe JR, Cottle E, Dunn MD, Frye LJ, Gilliland TH, **Olsen EL**, O'Malley KJ, Schwarz MM, Tomko JA, Walker RC, Xia M, Hartman MS, Klein E, Scanga CA, Flynn JL, Klimstra WB, McElroy AK, Reed DS, Duprex WP. SARS-CoV-2 infection of African green monkeys results in mild respiratory disease discernible by PET/CT imaging and shedding of infectious virus from both respiratory and gastrointestinal tracts. PLoS Pathog. 16(9):e1008903. 2020

Pashos, N. C., D. M. Graham, B. J. Burkett, B. O'Donnell, **R. A. Sabol**, J. Helm, E. C. Martin, A. C. Bowles, W. M. Heim, V. C. Caronna, K. S. Miller, B. Grasperge, S. Sullivan, A. E. Chaffin and B. A. Bunnell (2020). "Acellular Biologic Nipple-Areolar Complex Graft: In Vivo Murine and Nonhuman Primate Host Response Evaluation." Tissue Eng Part A **26**(15-16): 872-885.

Reverte, V., V. R. Gogulamudi, C. B. Rosales, D. C. Musial, S. R. Gonzalez, A. J. Parra-Vitela, **M. Galeas-Pena, V. N. Sure**, B. Visniauskas, S. H. Lindsey, P. V. G. Katakam and M. C. Prieto (2020). "Urinary angiotensinogen increases in the absence of overt renal injury in high fat diet-induced type 2 diabetic mice." J Diabetes Complications **34**(2): 107448.

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Sabol, R. A., V. A. Villela, A. Denys, **B. T. Freeman, A. B. Hartono**, R. M. Wise, M. A. A. Harrison, M. B. Sandler, F. Hossain, L. Miele and B. A. Bunnell (2020). "Obesity-Altered Adipose Stem Cells Promote Radiation Resistance of Estrogen Receptor Positive Breast Cancer through Paracrine Signaling." Int J Mol Sci **21**(8).

Scott, N. R., R. V. Swanson, N. Al-Hammadi, R. Domingo-Gonzalez, J. Rangel-Moreno, B. A. Kriel, **A. N. Bucsan**, S. Das, M. Ahmed, S. Mehra, P. Treerat, A. Cruz-Lagunas, L. Jimenez-Alvarez, M. Muñoz-Torrico, K. Bobadilla-Lozoya, T. Vogl, G. Walzl, N. du Plessis, D. Kaushal, T. J. Scriba, J. Zúñiga and S. A. Khader (2020). "S100A8/A9 regulates CD11b expression and neutrophil recruitment during chronic tuberculosis." J Clin Invest **130**(6): 3098-3112.

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Matossian, M. D., H. E. Burks, S. Elliott, V. T. Hoang, A. C. Bowles, **R. A. Sabol**, B. Wahba, M. Anbalagan, B. Rowan, M. E. Abazeed, B. A. Bunnell, K. Moroz, L. Miele, L. V. Rhodes, S. D. Jones, E. C. Martin, B. M. Collins-Burow and M. E. Burow (2019). "Drug resistance profiling of a new triple negative breast cancer patient-derived xenograft model." *BMC Cancer* **19**(1): 205.

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