

Molecular Genetics & Microbiology Graduate Program Newsletter

Fall, 2014 Vol. 7, No. 3



📖 2014 Publications

Bailey, J.M., **Delgiorno, K.E.**, and Crawford, H.C. 2014. The secret origins and surprising fates of pancreas tumors. *Carcinogenesis* 35(7): 1451-1460.

Bhagwat, A.S., and Vakoc, C.R. (2014). A new bump in the epigenetic landscape. *Molecular Cell* 53(6): 857-858.

Bryan, A.M., Farnoud, A.M., Mor, V., and Del Poeta, M. 2014. Macrophage cholesterol depletion and its effect on the phagocytosis of *Cryptococcus neoformans*. *JoVE*, in press.

Chung, L.K., Philip, N.H., Schmidt, V.A., Koller, A., Strowig, T., Flavell, R.A., Brodsky, I.E., and Bliska, J.B. 2014. IQGAP1 is important for activation of caspase-1 in macrophages and is targeted by *Yersinia pestis* type III effector YopM. *mBio* 5(4): e01402-14.

DelGiorno, K.E., Hall, J.C., Takeuchi, K.K., Pan, F.C., Halbrook, C.J., Washington, M.K., Olive, K.P., Spence, J., Sipos, B., Wright, C.V., Wells, J.M., and Crawford, H.C. 2014. Identification and manipulation of biliary metaplasia in pancreatic tumors. *Gastroenterology* 146: 233-244.

DelGiorno, K.E., Tam, J.W., Hall, J.C., Thotakura, G., Crawford, H.C., and van der Velden, A.W.M. 2014. Persistent salmonellosis causes pancreatitis in a murine model of infection. *PLoS One* 9(4): e92807.

DelGiorno, K.E., **Tam, J.W.**, Hall, J.C., Thotakura, G., Crawford, H.C., and van der Velden, A.W.M. 2014. Persistent salmonellosis causes pancreatitis in a murine model of infection. *PLoS One* 9(4): e92807.

Doyle, C.R., Pan, J.A., Mena, P., Zong, W.X., and Thanassi, D.G. 2014. TolC-dependent modulation of host cell death by the *Francisella Tularensis* live vaccine strain. *Infection and Immunity* 82(5): 2068-2078.

Ma, Z., Banik, S., Rane, H., Mora, V.T., Rabadi, S.M., **Doyle, C.R.**, Thanassi, D.G., Bakshi, C.S., and Malik, M. 2014. EmrA1 membrane fusion protein of *Francisella tularensis* LVS is required for resistance to oxidative stress, intramacrophage survival and virulence in mice. *Molecular Microbiology* 91(5): 976-995.

Miles, B., Abdel-Ghaffar, K.A., Gamal, A.Y., Baban, B., and Cutler, C.W. 2014. Blood dendritic cells: "canary in the coal mine" to predict chronic inflammatory disease? *Frontiers in Microbiology* 5: 6.

Miles, B., Zakhary, I., El-Awady, A., Scisci, E., Carrion, J., O'Neill, J.C., Rawlings, A., Stern, J.K., Susin, C., and Cutler, C.W. 2014. Secondary lymphoid organ homing phenotype of human myeloid dendritic cells disrupted by an intracellular oral pathogen. *Infection and Immunity* 82(1): 101-111.

Minkah, N., Chavez, K., Shah, P., MacCarthy, T., Chen, H., Landau, N., and Krug, L.T. 2014. Host restriction of murine gammaherpesvirus 68 replication by human APOBEC3 cytidine deaminases but not murine APOBEC3. *Virology* 454:215-226.

✦ 2014 Publications (continued)

Newman, T.N., Liverani, E., **Ivanova, E.**, Russo, G.L., Carpino, N., Ganea, D., Safadi, F., Kunapuli, S.P., and Tsygankov, A.Y. 2014. Members of the novel UBASH3/STS/TULA family of cellular regulators suppress T-cell-driven inflammatory responses in vivo. *Immunology and Cell Biology*, in press.

Sahashi, K., Ling, K.K., Hua, Y., Wildinson, J.E., **Nomakuchi, T.**, Rigo, F., Hung, G., Xu, D., Jiang, Y.P., Lin, R.Z., Ko, C.P., Bennett, C.F., and Krainer, A.R. 2014. Pathological impact of SMN2 mis-splicing in adult SMA mice. *EMBO Molecular Medicine* 5(10): 1586-1601.

Tam, J.W., Kullas, A.L., Mena, P., Bliska, J.B., and van der Velden, A.W. 2014. CD11b⁺ Ly6Chi Ly6G⁻ immature myeloid cells recruited in response to Salmonella enterica Serovar Typhimurium exhibit protective and immunosuppressive properties. *Infection and Immunity* 82(6): 2606-2614.

Tam, J.W., **Kullas, A.L.**, Mena, P., Bliska, J.B., and van der Velden, A.W. 2014. CD11b⁺ Ly6Chi Ly6G⁻ immature myeloid cells recruited in response to Salmonella enterica Serovar Typhimurium exhibit protective and immunosuppressive properties. *Infection and Immunity* 82: 2606-2614.

Toledo, A., **Crowley, J.T.**, Coleman, J.L., LaRocca, T.J., Chiantia, S., London, E., and Benach, J.L. 2014. Selective association of outer surface lipoproteins with the lipid rafts of Borrelia burgdoferi. *Mbio* 5(2): e00899-14.

Ucisik-Akkaya, E., Leatherwood, J.K., and Neiman, A.M. 2014. A genome-wide screen for sporulation-defective mutants in *Schizosaccharomyces pombe*. *G3* 4(6): 1173-1182.

Wang, X., **Parashar, K.**, Sitaram, A., and Bliska, J.B. 2014. The GAP activity of type III effector YopE triggers killing of Yersinia in macrophages. *PLoS Pathogens* 10(8): e1004346.

Zheng, Y., and Hearing, P. 2014. The use of chromatin immunoprecipitation (ChIP) to study the binding of viral proteins to the adenovirus genome *in vivo*. *Methods in Molecular Biology* 1089: 79-87.

✦ 2014 Conferences

Bryan, A.M., Farnoud, A.M., and Del Poeta, M. 2014. Cholesterol depletion from alveolar macrophages affects their infectivity with *Cryptococcus neoformans*. American Society for Microbiology General Meeting. May 17-20, Boston, MA.

Gardin, J.M., Previti, M.L., Fitcher, B., and Seeliger, J.C. 2014. Re-Coding Genes for Live Attenuated *Mycobacterium tuberculosis* Vaccine. World TB Day Symposium: Countdown to 2015, March 24, New York, NY.

Minkah, N., Macaluso, M., Oldenburg, D., McBride, K., and Krug, L.T. 2014. A Role for the Viral Encoded Uracil DNA Glycosylase in Gammaherpesvirus Pathogenesis. 33rd Annual Meeting of the American Society for Virology. June 21-25, Fort Collins, CO.

Patel, H.V., and Seeliger, J. 2014. Towards the Functional Characterization and Inhibition of Hydrolase Enzymes in Mycobacteria. ASBMB Experimental Biology 2014. April 24-30, San Diego, CA.

☒ 2014 Conferences (continued)

Werneburg, G.T., Henderson, N.S., and Thanassi, D.G. 2014. Dissection of Usher-Chaperone-Subunit Interactions During Pilus Biogenesis in *Escherichia coli*. Gordon Research Conference on Bacterial Cell Surfaces. June 22-27, 2014, Mt. Snow, VT.

Werneburg, G.T., Henderson, N.S., and Thanassi, D.G. 2014. Dissection of Usher-Chaperone-Subunit Interactions During Pilus Biogenesis in *Escherichia coli*. American Association for Clinical Investigation/Association of American Pathologists Annual Meeting. April 25-27, Chicago, IL.

Zheng, Y., and Hearing, P. 2014. Both Type I and Type II Interferons Inhibit Human Adenovirus Type 5 Replication by Direct Repression of E1A Transcription in Normal Human Diploid Fibroblasts. 11th International Adenovirus Meeting. July 16-20, San Diego, CA.

☒ 2014 Awards

Bryan, A.M. 2014. Outstanding Poster Award. American Society for Microbiology General Meeting. May 17-20, Boston, MA.

Bryan, A.M. 2014. Travel award from the Medical Mycology Society for the Americas to attend the American Society for Microbiology General Meeting. May 17-20, Boston, MA. \$500.

Minkah, N. 2014. Graduate Student Organization Distinguished Travel Award to attend the 33rd Annual Meeting of the American Society for Virology. June 21-25, Fort Collins, CO. \$1,500.

Werneburg, G. 2014. Travel grant to attend the American Society for Clinical Investigation/Association of American Pathologists National Meeting. April 25-27, Chicago, IL. Directors' Travel Grant Receipt, \$750.

Werneburg, G. 2014. Stony Brook University Graduate School and Graduate Student Organization Distinguished Travel Award to attend the Gordon Research Conference on Bacterial Cell Surfaces. June 22-27, Mt. Snow, VT. \$1,500.

Zheng, Y. 2014. Stony Brook University Graduate School and Graduate Student Organization Distinguished Travel Award to attend the 11th International Adenovirus Meeting. July 16-20, San Diego, CA. \$1,500.

Zheng, Y. 2014. Sigma Xi travel award to attend the 11th International Adenovirus Meeting. July 16-20, San Diego, CA. \$100.

☒ 2014 Graduates

Dr. Christopher Doyle, postdoctoral fellow in the laboratory of Dr. Liise-anne Pirofski at the Albert Einstein College of Medicine.

Dr. Esma Ucisik-Akkaya.

☒ Additional Source of Funding for Conferences

The Graduate Student Employee Union-Stony Brook University provides funding to support graduate student professional development such as registration fees, travel and related expenses for attending a

conference. Check the union website at <http://www.cwa1104gseu.com/stony%20brook/professional-development-fund-pdf-info-and-details> for last years' announcement and consider contacting your representatives for more information.

✦ New Training Faculty Members



Dr. Brian Sheridan will join the Department of Molecular Genetics & Microbiology as an assistant professor in early 2015. The research in Dr. Sheridan's laboratory focuses on the generation and maintenance of effector and memory T cells in intestinal tissues in response to bacterial pathogens acquired by the oral route.

Dr. Bettina Fries, Professor and Chief of the Division of Infectious Diseases in the Department of Medicine, has joined the training faculty of the MGM Program. Dr. Fries' laboratory works on the molecular mechanisms underlying the ability of *Cryptococcus neoformans* to cause chronic infections and the host response to this fungal pathogen as well as the development of novel therapeutic and diagnostic tools for *Klebsiella pneumoniae* and staphylococcal enterotoxin B.



✦ New Communicating Science Courses

The Alan Alda Center for Communicating Science has announced two new courses: Presenting Science Unplugged and Creating a Video Abstract. See <http://www.centerforcommunicatingscience.org/communicating-science-course-schedule-spring-2014/> for more information about courses offered by the Center.

✦ MGM Annual Retreat

The 36th annual retreat of the Department of Molecular Genetics & Microbiology will be held on Friday October 10th at the Port Jefferson Village Center. All graduate students and postdoctoral fellows are encouraged to present a poster at the retreat.