

# Molecular Genetics & Microbiology Graduate Program Newsletter

Summer, 2014 Vol. 7, No. 2



## 📖 2014 Publications

Bailey, J.M., **Delgiorno, K.E.**, and Crawford, H.C. 2014. The secret origins and surprising fates of pancreas tumors. *Carcinogenesis*, in press.

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

**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*, in press.

**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: 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)

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<sup>+</sup> Ly6Chi Ly6G<sup>+</sup> immature myeloid cells recruited in response to *Salmonella enterica* Serovar Typhimurium exhibit protective and immunosuppressive properties. *Infection and Immunity* 82: 2606-2614.

Tam, J.W., **Kullas, A.L.**, Mena, P., Bliska, J.B., and van der Velden, A.W. 2014. CD11b<sup>+</sup> Ly6Chi Ly6G<sup>+</sup> 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 burgdorferi*. *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.

**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

**Gardin, J.M.**, Previti, M.L., Fletcher, 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. 33<sup>rd</sup> 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.

**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. 11<sup>th</sup> International Adenovirus Meeting. July 16-20, San Diego, CA.

## ✦ 2014 Awards

**Minkah, N.** 2014. Graduate Student Organization Distinguished Travel Award to attend the 33<sup>rd</sup> 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 Recipient, \$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 11<sup>th</sup> International Adenovirus Meeting. July 16-20, San Diego, CA. \$1,500.

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

## ✦ Advanced Readings - Fall 2014 and Spring 2015

The next topic for the Advanced Readings course (HBM 695), organized by Carol Carter, Laurie Krug, Erich Mackow and Ando van der Velden, will be pathogen subversion of host and cellular defenses. This journal club-style class is open to all biomedical graduate students who have passed their program's qualifying exam (please help spread the word!) and will be held at 11am on Tuesdays in the Life Sciences second floor conference room.

## ✦ Individual Development Plan Program

Students participating in the new IDP Program met for the first time on March 18<sup>th</sup> to present their IDPs to the group and identify resources needed to achieve short-term and long-term goals. All students working in MGM labs are welcome to join the program. Our next meeting will be on September 23<sup>rd</sup> at 3pm in the Life Sciences second-floor conference room.

## ✦ First-Year Students Join (First-Floor!) Labs

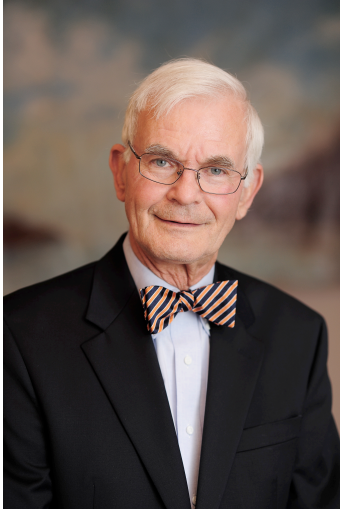
Arielle Bryan - Maurizio Del Poeta's lab  
Eric Burton - Sumita Bhaduri-McIntosh's lab  
Brian Carey - Erich Mackow's lab  
Kaustubh Parashar - Nicholas Carpino's lab  
Nick Van Skike - Laurie Krug's lab

## ✦ Incoming Students, Fall 2014

Natasha Medici, M.S. in Microbiology, Universidade Federal de Rio de Janeiro (Fulbright Scholarship)  
Erika Orner, B.S. in Pathobiology, University of Connecticut Storrs

A welcoming reception will be held on Friday afternoon, August 22<sup>nd</sup> - save the date!

## ✦ Congratulations!



Distinguished Professor and training faculty member Eckard Wimmer has received the 2014 Loeffler-Frosch Medal. This prestigious award is named for Friedrich Loeffler and Paul Frosch, pioneering virologists who discovered the causative agent of foot-and-mouth disease in 1898, and is given to Dr. Wimmer in recognition of his outstanding contributions to the field of virology.

## ✦ New Training Faculty Member

Dr. Bettina Fries, the incoming Chief of Infectious Diseases in the Department of Medicine, has accepted our invitation to join the training faculty of the MGM Program. The research in Dr. Fries' laboratory is in two areas - *Cryptococcus neoformans* pathogenesis and staphylococcal enterotoxin B.

## ✦ Save the Date - MGM Retreat

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

## ✦ 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.