

MOLECULAR GENETICS AND MICROBIOLOGY

GRADUATE DIRECTOR: JANET HEARING
DEPARTMENT CHAIR: JORGE BENACH

❖ Grants, Fellowships, And Awards

Shin, Ha Youn. (2009) Milstein Travel Award, \$250. *Society for Leukocyte Biology*, International Cytokine Society and International Society for Interferon and Cytokine Research, Lisbon, Portugal.

Zeituni, Amir. (2009) Ruth L. Kirschstein National Research Service Individual Predoctoral Fellowship (F31), \$83,952. *National Institute of Dental and Craniofacial Research*, Bethesda, MD.

❖ Jointly Authored Publications/Research Reports/Reviews

Noah, C.E., Malik, M., **Bublitz, D.C.**, Camenares, D., Sellati, T.J., Benach, J.L., and Furie, M.B. (2010) GroEL and lipopolysaccharide from *Francisella tularensis* live vaccine strain synergistically activate human macrophages. *Infection and Immunity* 78: 1797-1806.

Platz, G.J., **Bublitz, D.C.**, Mena, P., Benach, J.L., Furie, M.B., and Thanassi, D.G. (2010) A tolC mutant of *Francisella tularensis* is hypercytotoxic and elicits increased proinflammatory responses from host cells. *Infection and Immunity* 78: 1022-1031.

Mueller, S., **Coleman, J.R.**, and Wimmer, E. (2009) Putting synthesis into biology: a viral view of genetic engineering through de novo gene and genome synthesis. *Chemical Biology* 16: 337-347.

Czura, C.J., Schultz, A., Kaipel, M., Khadem, A., Huston, J.M., Pavlov, V.A., Redl, H., and Tracey, K.J. (In Press) Vagus nerve stimulation regulates hemostasis in swine. *Shock*.

Bombardelli, L., Carpenter, E.S., Wu, A.P., Alston, N., **Delgiorno, K.E.**, and Crawford, H.C. (In Press) Pancreas-specific ablation of $\beta 1$ integrin induces tissue degeneration by disrupting acinar cell polarity. *Gastroenterology*.

Feres, K.J., and Hayman, M.J. (2010) RON-expressing MCF-10A breast epithelial cells exhibit alterations of hyaluronan expression, promoting RON-mediated early adhesion events. *Biochemical and Biophysical Research Communications* 391: 1604-1609.

Quigley, B.R., **Hatkoff, M.**, Thanassi, D.G., Ouattara, M., Eichenbaum, Z. and Scott, J.R. (2010) A foreign protein incorporated on the tip of T3 pili in *Lactococcus lactis* elicits systemic and mucosal immunity. *Infection and Immunity* 78: 1294-1303.

Quigley, B.R., Zähler, D., **Hatkoff, M.**, Thanassi, D.G., and Scott, J.R. (2009) Linkage of T3 and Cpa pilins in the *Streptococcus pyogenes* M3 pilus. *Molecular Microbiology* 72: 1379-1394.

Li, Q., Ng, T.W., Dodson, K.W., Shu Kin So, S., Bayle, K.M., Pinkner, J.S., Scarlata, S., Hultgren, S.J., and Thanassi, D.G. (In Press) The differential ability of the usher for chaperone-subunit complexes is required for assembly of complete pili. *Molecular Microbiology*.

Lucs, A.V., Muller, W.J., and Muthuswamy, S.K. (2010) Shc is required for ErbB2-induced inhibition of apoptosis but is dispensable for cell proliferation and disruption of cell polarity. *Oncogene* 29: 174-187.

Mulligan, E.A., Hatchwell, E., McCorkle, S.R., and Dunn, J.J. (2010) Differential binding of *Escherichia coli* McrA protein to DNA sequences that contain the dinucleotide m5CpG. *Nucleic Acids Research* 38: 1997-2005.

- Navin, N.**, and Hicks, J. (In Press) Tracing the tumor lineage. *Molecular Oncology*.
- Navin, N.**, Krasnitz, A., Rodgers, L., Cook, K., Meth, J., Kendall, J., Riggs, M., Eberling, Y., Troge, J., Grubor, V., Levy, D., Lundin, P., Månér, S., Zetterberg, Z., Hicks, J., and Wigler, M. (2010) Inferring tumor progression from genomic heterogeneity. *Genome Research* 20: 68-80.
- Li, Q.**, Ng, Tony W., Dodson, K.W., Shu Kin So, S., Bayle, K.M., Pinkner, J.S., Scarlata, S., Hultgren, S.J., and Thanassi, D.G. (In Press) The differential ability of the usher for chaperone-subunit complexes is required for assembly of complete pili. *Molecular Microbiology*.
- Li, Q., Ng, T.W.,** Dodson, K.W., Shu Kin So, S., Bayle, K.M., Pinkner, J.S., Scarlata, S., Hultgren, S.J., and Thanassi, D.G. (In Press) The differential ability of the usher for chaperone-subunit complexes is required for assembly of complete pili. *Molecular Microbiology*.
- Noel, B.L., **Lilo, S.**, Capurso, D., Hill, J, and Bliska, J. (2009) Yersinia pestis can bypass protective antibodies to LcrV and activation with IFN γ to survive and induce apoptosis in murine macrophages. *Clinical Vaccine and Immunology* 16: 1457-1467.
- Noel, B.L.**, Lilo, S., Capurso, D., Hill, J, and Bliska, J. (2009) Yersinia pestis can bypass protective antibodies to LcrV and activation with IFN γ to survive and induce apoptosis in murine macrophages. *Clinical Vaccine and Immunology* 16: 1457-1467.
- Di Talia, S., Wang, H., Skotheim, J.M., **Rosebrock, A.P.**, Futcher, B., and Cross, F.R. (2009) Daughter-specific transcription factors regulate cell size control in budding yeast. *PLoS Biology* 7: e1000221.
- Li, Q., Ng, T. W., Dodson, K.W., **Shu Kin So, S.**, Bayle, K.M., Pinkner, J.S., Scarlata, S., Hultgren, S.J., and Thanassi, D.G. (In Press) The differential ability of the usher for chaperone-subunit complexes is required for assembly of complete pili. *Molecular Microbiology*.
- Zeituni, A.E.**, Jotwani, R., Carrion, J., and Cutler, C.W. (2009) Targeting of DC-SIGN on human dendritic cells by minor fimbriated Porphyromonas gingivalis strains elicits a distinct effector T cell response. *Journal of Immunology* 183: 5694-5704.

❖ **Abstracts, Conferences/Colloquia, Presentations, Symposiums, Workshops**

- Bublitz, DeAnna**, Benach, J., and Furie, M. (2009) Francisella tularensis Suppresses the Proinflammatory Response of Endothelial Cells via the Endothelial Protein C Receptor. *International Tularemia Conference*. Berlin, Germany.
- Kullas, Amy L.**, McClelland, M., Andrews-Polymenis, H.L. and van der Velden, A.W.M. (2009) Inhibition of T Cells by Salmonella enterica serovar Typhimurium. *Third American Society for Microbiology Conference on Salmonella: Biology, Pathogenesis, and Prevention*. Aix-en-Provence, France.
- Zheng, Y., **Lilo, Sarit**, Brodsky, I., and Bliska, J. (2009) An Isoform of the YopJ in Yersinia pestis Stimulates Inflammatory Apoptosis in Macrophages Through a Process that Involves Inhibition of IKK β and Activation of an ASC/NALP3/Caspase-1 Inflammasome. *Gordon Research Conference for Microbial Adhesion and Signal Transduction*. Newport, RI.
- Navin, Nicholas**, Kendall, J., Cook, K., Troge, J., Stepansky, A., Esposito, D., Hicks, J., and Wigler, M. (2010) Tumor Progression Revealed by Sequencing 100 Single Cells in a Heterogeneous Breast Carcinoma. *James Watson Symposium on Cancer*. Suzhou, China.
- Navin, Nicholas**, Krasnitz, A., Rodgers, L., Cook, K., Meth, J., Kendall, J., Riggs, M., Eberling, Y., Troge, J., Grubor, V., Levy, D., Lundin, P., Månér, S., Zetterberg, A., Hicks, J., and Wigler, M. (2009) Inferences of Tumor Progression from Genomic Subpopulations. *Genome Informatics*. Cold Spring Harbor, NY.

Molecular Genetics and Microbiology

- Navin, Nicholas**, Rodgers, L., Cook, K., Meth, J., Kendall, J., Riggs, M., Eberling, Y., Troge, J., Grubor, V., Levy, D., Lundin, P., Maner, S., Zetterberg, A., Hicks, J., and Wigler, M. (2009) Multiple Genomic Subpopulations in Solid Breast Tumors. *AARC Advances in Breast Cancer Research Conference*. San Diego, CA.
- Shin, Ha Youn**, Iyer, J., and Reich, N. (2009) STAT5a Nuclear Trafficking. *Tri-Society Annual Conference: Society for Leukocyte Biology, International Cytokine Society, and International Society for Interferon and Cytokine Research*. Lisbon, Portugal.
- Zeituni, Amir E.**, Jotwani, R., and Cutler, C.W. (2009) Role for DC-SIGN (CD209), Minor Fimbriae in Entry of Oral Pathogen Porphyromonas gingivalis into Human Dendritic Cells (DC), Leading to Immunosuppressive DC Phenotype. *109th General Meeting of the American Society for Microbiology*. Philadelphia, PA.
- Zeituni, Amir E.**, McCaig, W., Scisci, E., Carrion, J.A., Thanassi, D.G., and Cutler, C.W. (2010) Native 67 kDa Minor Fimbriae of Porphyromonas gingivalis is a novel glycoprotein with DS-SIGN-Targeting Motifs. *National Institute of Dental and Craniofacial Research Trainee Day*. Bethesda, MD.
- Zheng, Ying**, Lilo, S., Brodsky, I., and Bliska, J. (2009) An Isoform of the YopJ in Yersinia pestis Stimulates Inflammatory Apoptosis in Macrophages Through a Process that Involves Inhibition of IKKb and Activation of an ASC/NALP3/Caspase-1 Inflammasome. *Gordon Research Conference for Microbial Adhesion and Signal Transduction*. Newport, RI.

❖ Post-Doctorates Obtained and Professional Appointments

- Czura, Christopher**. (2009) Vice President of Scientific Affairs. *The Feinstein Institute for Medical Research*, Manhasset, NY.
- Feres, Kimberly**. (2009) Instructor. *Community College of Denver*, Denver, CO.
- Karen, Kasey**. (2009) Postdoctoral fellow. Department of Oncology, *Johns Hopkins University School of Medicine*, Baltimore, MD.
- LaRocca, Timothy**. (2009) Postdoctoral fellow. Department of Molecular Genetics and Microbiology, *Stony Brook University*, Stony Brook, NY.
- Lilo, Sarit**. (2009) Postdoctoral fellow. Department of Microbiology, *New York University Medical Center*, New York, NY.
- Lucs, Alexandra**. (2009) Postdoctoral fellow. Laboratory of Papillomavirus Research, *The Feinstein Institute for Medical Research*, Manhasset, NY.
- Mulligan, Elizabeth**. (2009) Postdoctoral fellow. Medical Department, *Brookhaven National Laboratory*, Upton, NY.
- Noel, Betty**. (2009) Biology Teacher. *Marymount School*, New York, NY.
- Rosebrock, Adam**. (2009) Postdoctoral fellow. *Cold Spring Harbor Laboratory*, Cold Spring Harbor, NY..