

ACADEMIC DEGREES

- **Ph.D. (2002) Environmental and Molecular Microbiology**, University of Florida, Gainesville, FL
- **M.Sc. (2000) Environmental Microbiology/Particle Engineering**, University of Florida, Gainesville, FL
- **B.Sc. (1997) Microbiology and Cell Science (*with Honors*)**, University of Florida, Gainesville, FL

POSTDOCTORAL TRAINING

- **Michigan State University (2003-2004)**, Department of Fisheries & Wildlife and Department of Crop and Soil Sciences, East Lansing, MI
- **University of South Florida (2002-2003)**, College of Marine Science, St. Petersburg, FL

EXPERTISE

- **Waterborne Infectious Disease**
- **Environmental Epidemiology**
- **Coastal Restoration/Erosion Control**
- **Surface Chemistry Characterization/Modification**
- **Molecular Biology**
- **Water/Wastewater Treatment**

PROFESSIONAL EXPERIENCE

- **Owner/Director**, Hydros Coastal Solutions, Inc., Miami, Florida 07/08 - present
- **Owner/Director**, Hydros Laboratories, LLC, Miami, Florida 07/11 - present
- **Adjunct Professor**, University of Miami, Dept. of Civil, Architectural, and Environmental Engineering. 01/08 - present
- **Associate Member**, University of Miami, Center for Oceans and Human Health 02/07 – present
- **Scientific Director**, Source Molecular Corporation, Miami, Florida 07/02 – 07/10
- **Owner/Director**, BCS Laboratories, Inc., Gainesville, Florida 03/00 – 01/10
- **Adjunct Professor**, University of Florida, Dept. of Microbiology and Cell Science 01/04 - 01/06

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- American Society for Microbiology (ASM)
- American Water Works Association (AWWA)

PEER-REVIEWED PUBLICATIONS

- Abdelzaher, A.M., M.E. Wright, C. Ortega, A.R. Hasan, H.M. Solo-Gabriele, T. Shibata, J. Kish, K. Withum, G. He, S.M. Elmir, J.A. Bonilla, T.D. Bonilla, C.J. Palmer, **T. Scott**, J. Lukasik, V.J. Harwood, S. McQuaig, C.D. Sinigalliano, M.L. Gidley, D. Wanless, L.R.W. Plano, A.C. Garza, X. Zhu, J.R. Stewart, J.W. Dickerson, Jr., H. Yampara-Iquise, C. Carson, J.M. Fleisher, L.E. Fleming. 2011. Daily measures of microbes and human health at a non-point source marine beach. *J. Wat. Health.* 9(3) 443-457.
- Shah, A.H., A.M. Abdelzaher, M. Phillips, R. Hernandez, H.M. Solo-Gabriele, J. Kish, G. Scorzetti, J.W. Fell, M.R. Diaz, **T.M. Scott**, J. Lukasik, V.J. Harwood, S. McQuaig, C.D. Sinigalliano, M.L. Gidley, D. Wanless, A. Agar, J. Lui, J.R. Stewart, L.R. Plano, and L.E. Fleming. 2011. Indicator microbes correlate with pathogenic bacteria, yeast, and helminthes in sand at a subtropical recreational beach site. *J. Appl. Microbiol.* 110: 1571-83.
- Sinigalliano, C.D., J.M. Fleisher, M.L. Gidley, H.M. Solo-Gabriele, T. Shibata, L.R.W. Plano, S.M. Elmir, D. Wanless, J. Bartkowiak, R. Boiteau, K. Withum, A.M. Abdelzaher, G. He, C. Ortega, X. Zhu, M.E. Wright, J. Kish, J. Hollenbeck, **T. Scott**, L.C. Backer, and L.E. Fleming. 2010. Traditional and Molecular Analyses for Fecal Indicator Bacteria in Non-point Source Subtropical Recreational Marine Water. *Wat. Research.* 44: 3763-3772.
- Shibata, T., H.M. Solo-Gabriele, C.D. Sinigalliano, M. L. Gidley, L.R.W. Plano, J.M. Fleisher, J.D. Wang, S.M. Elmir, G. He, M.E. Wright, A.M. Abdelzaher, C. Ortega, D. Wanless, A.C. Garza, J. Kish, K. Withum, X. Zhu, **T. Scott**, J. Hollenbeck, L.C. Backer, L.E. Fleming. 2010. Evaluation of conventional and alternative monitoring methods for a recreational marine beach in the subtropical environment with non-point source of fecal contamination. *Environ. Sci. Technol.* 1; 44(21): 8175-8181.

- Abdelzaher, A., M. Wright, C. Ortega, H. Solo-Gabriele, G. Miller, S. Elmir, X. Newman, P. Shih, J. Bonilla, T.D. Bonilla, C.J. Palmer, **T. Scott**, J. Lukasik, V.J. Harwood, S. McQuaig, C. Sinigalliano, M. Gidley, L. Plano, X. Zhu, J.D. Wang, and L. Fleming. 2010. Presence of Pathogens and Indicator Microbes at a Non-point Source Subtropical Recreational Marine Beach. *Appl Environ Microbiol.* 76: 724-732.
- **Scott, T.M.**, V.J. Harwood, W. Ahmed, Y. Masago, and J.B. Rose. 2009. Comment On: Environmental Occurrence of the Enterococcal Surface Protein (esp) is an Unreliable Indicator of Human Fecal Contamination. *Environ. Sci. Technol.* 43: 6434G-6435.
- McQuaig, S.M., **T.M. Scott**, J.O. Lukasik, J.H. Paul, and V.J. Harwood. 2009. Quantification of Human Polyomaviruses JCV and BKV by Taqman® Quantitative PCR and Comparison to Other Water Quality Indicators in Water and Fecal Samples. *Appl. Environ. Microbiol.* 75(11):3379-88.
- Abdelzaher, A., H.M. Solo-Gabriele, C.J. Palmer, and **T.M. Scott**. 2009. Simultaneous Concentration of Enterococci and coliphage from marine waters using a dual layer filtration system. *J. Environ Qual.* 38: 2468-73.
- Levine A.D., V.J. Harwood, S.R. Farrah, **T.M. Scott**, and J.B. Rose. 2008. Pathogen and indicator organism reduction through secondary effluent filtration: implications for reclaimed water production. *Water Environ Res.* 80(7):596-608.
- Brownell, M.J., V.J. Harwood, R.C. Kurz, S.M. McQuaig, J. Lukasik, and **T.M. Scott**. 2007. Confirmation of putative stormwater impact on water quality at a Florida beach by microbial source tracking methods and structure of indicator organism populations. *Water Res.* 41:3747-57
- McQuaig, S.M., **T.M. Scott**, V.J. Harwood, S.R. Farrah, and J. Lukasik. 2006. A Novel Method for the Detection of Human Derived Fecal Pollution in Environmental Waters Using a PCR Based Human Polyomavirus Assay. *Appl. Environ. Microbiol.* 72:7567-74.
- Ivanetich, K.M., P. Hsu, K.M. Wunderlich, E. Messenger, W.G. Walkup IV, **T.M. Scott**, J. Lukasik, and J. Davis. 2006. Microbial source tracking by DNA sequence analysis of the *Escherichia coli* malate dehydrogenase gene. *J. Microbiol. Methods* 67:507-26.
- Parveen S, J. Lukasik, **T.M. Scott**, M.L. Tamplin, K.M. Portier, S. Sheperd, K. Braun, and S.R. Farrah. 2006. Geographical variation in antibiotic resistance profiles of *Escherichia coli* isolated from swine, poultry, beef and dairy cattle farm water retention ponds in Florida. *J Appl Microbiol.* 100: 50-7.
- Harwood, V.J., A.D. Levine, **T.M. Scott**, V. Chivukula, J. Lukasik, S.R. Farrah, and J.B. Rose. 2005. Validity of the indicator organism paradigm for pathogen reduction in reclaimed water and public health protection. *Appl. Environ. Microbiol.* 71: 3163-3170.
- Jenkins, T.M., **T.M. Scott**, M.R. Morgan, and J.B. Rose. 2005. Occurrence of alternative fecal indicators and enteric viruses in Michigan Rivers. *J. Great Lakes Res.* 31: 22-3.
- **Scott, T.M.**, T.M. Jenkins, J. Lukasik, and J.B. Rose. 2005. Potential use of a host-associated molecular marker in *Enterococcus faecium* as an index of human fecal pollution. *Environ. Sci. Technol.* 39: 283-287.
- Jenkins, T.M., **T.M. Scott**, J.R. Cole, S.A. Hashsham, and J.B. Rose. 2004. Assessment of Virulence-Factor Activity Relationships (VFARs) for Waterborne Diseases. *Wat. Sci. Tech.* 50: 309-314.
- **Scott, T.M.**, J. Caren, R. Nelson, T.M. Jenkins, and J. Lukasik. 2004. Tracking sources of fecal pollution in a South Carolina watershed by ribotyping *Escherichia coli*: A case study. *Environ. Forensics.* 5: 15-19
- Wetz, J.J., E.K. Lipp, D.W. Griffin, J. Lukasik, D. Wait, M.D. Sobsey, **T.M. Scott**, and J.B. Rose. Presence, Infectivity, and Stability of Enteric Viruses in Seawater: Relationship to Marine Water Quality in the Florida Keys. 2004. *Mar. Pollut. Bull.* 48: 698-704.
- **Scott, T.M.**, M.R. McLaughlin, V.J. Harwood, V. Chivukula, A.D. Levine, A. Gennaccaro, J. Lukasik, S.R. Farrah, and J.B. Rose. 2003. Reduction of pathogens, indicator bacteria, and alternative indicators by wastewater treatment and reclamation processes. *Wat. Sci. Tech: Wat. Supply.* 3: 247-252.
- Quintero-Betancourt, W., A. Gennaccaro, **T.M. Scott**, and J.B. Rose. 2003. Assessment of Methods for Detection of Infectious *Cryptosporidium* Oocysts and *Giardia* Cysts in Reclaimed Effluents. *Appl. Environ. Microbiol.* 69: 5380-5388.

- **Scott, T.M.**, S. Parveen, K.M. Portier, J.B. Rose, M.L. Tamplin, S.R. Farrah, A. Koo, and J. Lukasik. 2003. Geographical variation in ribotype profiles of *Escherichia coli* isolated from humans, swine, poultry, beef, and dairy cattle in Florida. *Appl. Environ. Microbiol.* 69: 1089-1092.
- Lukasik, J., M.L. Bradley, **T.M. Scott**, M. Dea, A. Koo, W.H. Hsu, J. Bartz, S.R. Farrah, and M.L. Tamplin. 2003. The reduction of poliovirus 1, bacteriophage, *Salmonella* Montevideo, and *Escherichia coli* O157:H7 on strawberries by physical and disinfectant washes. *J. Food Prot.* 66: 188-193.
- **Scott, T.M.**, J.B. Rose, T.M. Jenkins, S.R. Farrah, and J. Lukasik. 2002. Microbial Source Tracking: Current methodology and future directions. Mini-review. *Appl. Environ. Microbiol.* 68: 5796-5803.
- **Scott, T.M.**, J. Lukasik, and S.R. Farrah. 2002. Improved method for recovery of bacteriophage from large volumes of water using negatively charged microporous filters. *Can J. Microbiol.* 48: 305-310.
- **Scott, T.M.**, R.C. Sabo, J. Lukasik, C. Boice, K. Shaw, L. Barroso-Giachetti, H. El-Shall, S.R. Farrah, C. Park, B. Moudgil, and B. Koopman. 2002. Performance and Cost-Effectiveness of Ferric and Aluminum Hydroxide Coating on Filter Media to Enhance Virus Removal. *KONA.* 20: 159-167.
- Lukasik, J., M.L. Bradley, **T.M. Scott**, W. Hsu, S.R. Farrah, and M.L. Tamplin. 2001. Elution, detection, and quantification of polio 1, bacteriophages, *Salmonella* Montevideo, and *E. coli* O157:H7 from seeded strawberries and tomatoes. *J. Food Prot.* 64: 292-297.
- Lukasik, J., **T.M. Scott**, D. Andryshak, and S.R. Farrah. 2000. Influence of salts on virus adsorption to microporous filters. *Appl. Environ. Microbiol.* 66: 2914-2920.

BOOK CHAPTERS (Peer-reviewed)

- **Scott, T.M.**, E.K. Lipp, and J.B. Rose. 2004. *The effect of climate change on waterborne disease.* In *Waterborne Microbial Pathogens: Their Detection and Control.* T.E. Cloete, ed. IWA Publishing, London.
- Solo-Gabriele, H.M., A.B. Boehm, **T.M. Scott**, and C.D. Sinigalliano. 2011. *Beaches and Coastal Environments.* In *Microbial Source Tracking: Methods, Applications, and Case Studies.* Eds: C. Hagedorn, A. Blanch, V.J. Harwood. Springer Science & Business Media, LLC.

INVITED PAPERS

- **Scott, T.M.**, and J.B. Rose. 2002. Microbial Issues: New methods of detection of waterborne microbial contaminants. *Water Conditioning and Purification.* June 2002.
- Levine, A.D., **T.M. Scott**, V.J. Harwood, and J.B. Rose. 2003. Keeping the bugs at bay. *Water Environ. Tech.* 15: 63-66.

SELECTED PROCEEDINGS

- Jenkins, T.M., **T.M. Scott**, J.R. Cole, S.A. Hashsham, and J.B. Rose. 2003. Assessment of virulence factor activity relationships (VFARs) for waterborne diseases. In *Proceedings of the International Water Association (IWA) Symposium on Health Related Waterborne Microbiology.* Cape Town, South Africa. Sept. 14-19th, 2003
- Levine, A.E., V.J. Harwood, **T.M. Scott**, and J.B. Rose. 2003. Evaluation of variables that influence the effectiveness of wastewater filtration for the removal of pathogens. *2003 Florida Water Resources Conference.*
- **Scott, T.M.** 2002. Detection of pathogens in the Venice Lagoon: Components for modeling and risk assessment. In *Proceedings of the Bilateral Italy-U.S. workshop on mathematical models for water quality in an isolated environment.* Venice, Italy. Nov. 14-16, 2002.
- **Scott, T.M.**, M.R. McLaughlin, V.J. Harwood, V. Chivukula, A.D. Levine, A. Gennaccaro, J. Lukasik, S.R. Farrah, and J.B. Rose. 2002. Reduction of pathogens, indicator bacteria, and alternative indicators by wastewater treatment and reclamation processes. In *Proceedings of the Regional Symposium on Water Recycling in the Mediterranean Region.* Iraklio, Crete, Greece. September 26-29, 2002.
- Levine, A.D., V. Chivukula, V.J. Harwood, **T.M. Scott**, and J.B. Rose. 2002. Operational variables that influence pathogen reduction in wastewater treatment and reclamation processes. *Reuse Symposium XVII,* Sept. 2002.

- Levine, A.D., J.B. Rose, M.R. McLaughlin, V. Chivukula, T.M. Scott, and V.J. Harwood. 2002. The Water Environment Research Foundation Study of Fate of Pathogens and Indicator Microorganisms in Reclaimed Water: A Status Report. In *Proceedings of the 2002 Water Resources Conference*. Orlando, FL. March 24-27, 2002.

SELECTED PRESENTATIONS AND ABSTRACTS

- Jenkins, T.M., S.A. Hashsham, J.R. Cole, T.M. Scott, and J.B. Rose. 2003. Virulence factor activity relationship (VFAR) database for waterborne pathogens. In *Abstracts of the 103rd General Meeting of the American Society for Microbiology*. May 18th-22nd, 2003.
- Lukasik, G., T.M. Scott, J. Caren, D. Ferguson, and D. Moore. 2003. The evaluation of ribotyping as microbial source tracking methodology for identifying sources of fecal pollution in the San Juan watershed. In *Abstracts of the 103rd General Meeting of the American Society for Microbiology*. May 18th-22nd, 2003.
- Scott, T.M., J. Lukasik, S.R. Farrah, and J.B. Rose. 2002. Geographical variation in ribotype profiles of *Escherichia coli* isolated from humans, swine, poultry, beef, and dairy cattle in Florida. In *Abstracts of the 10th International Congress of Bacteriology and Applied Microbiology*. Paris, France. July 27th – August 1st, 2002.
- Gerba, C.P., I.L. Pepper, and T.M. Scott. 2002. Risk assessment for human enteric viruses in land applied biosolids. In *Abstracts of the 10th International Congress of Bacteriology and Applied Microbiology*. Paris, France. July 27th – August 1st, 2002.

ADVISORY/REVIEW PANELS

- *Bilateral Italy-U.S. Workshop on Mathematical Models for Water Quality in an Isolated Environment*. Venice, Italy. Nov.14-16, 2002.
- *Centers for Disease Control and Prevention Stakeholder's Meeting for Development of a Strategic Plan for Drinking and Recreational Waters*. Atlanta, GA. March 22-23, 2002.
- *Ad-hoc* Reviewer, Applied and Environmental Microbiology (2004 – Present)
- *Ad-hoc* Reviewer, Water Research (2004 – Present)
- *Ad-hoc* Reviewer, Environmental Science and Technology (2004 – Present)

SELECTED PAST AND CURRENT PROJECTS/CLIENTS (Environmental Microbiology/Epidemiology)

- **Water Environment Research Federation (WERF). (2002-2004).** *Reduction of Pathogens, Indicator Bacteria, and Alternative Indicators by Wastewater Treatment and Reclamation Processes*. Monitored several wastewater treatment facilities throughout the US to effectively determine efficiency of the removal of pathogenic organisms by different processes.
- **Gainesville Regional Utilities (GRU). (2003-2005).** *Tracking and Investigating Microbial Sources (TIMS)*. Monitored and identified sources of fecal pollution in multiple tributaries in Gainesville, Florida using molecular microbial source tracking methods.

SELECTED PAST AND CURRENT PROJECTS/CLIENTS (Coastal Restoration)

- **Carnival Corporation, Grand Turk Cruise Center**, Grand Turk, Turks and Caicos Islands, B.W.I. (2011 - present)
- **Iberostar Hotels and Resorts**, Rose Hall, St. James, Jamaica (2011-present)
- **Fiesta Hotel Group, Grand Palladium Jamaica/Lady Hamilton Resort and Spa**, Lucea, Hanover, Jamaica. (2010-present)
- **Tavistock Group, Albany Developer Ltd.**, New Providence, Bahamas. (2008-2010)