Robert Joseph Griffitt

Curriculum Vitae

joe.griffitt@usm.edu joe.griffitt@outlook.com 228-818-8027 (w) 228-365-5639 (m) Google Scholar Page

EDUCATION

| <u>Institution</u> | <u>Degree</u> | <u>Completed</u> | <u>Field of Study</u> |
|---|---------------|------------------|-------------------------------|
| University of South Carolina | Ph.D. | 2006 | Environmental Health Sciences |
| University of South Carolina | M.S. | 2002 | Marine Science |
| University of North Carolina Wilmington | B.S. | 1997 | Marine Biology |

ADMINISTRATIVE APPOINTMENTS:

| 2019 - 2022: | Director, School of Ocean Science and Engineering, University of Southern |
|--------------|--|
| | 21100001, 0011001 01 000011 00101100 01100 2110111100111100, 011010, 01 00 000110111 |

Mississippi.

2015 – 2019: Associate Director, Division of Coastal Sciences, School of Ocean Science and

Engineering, University of Southern Mississippi.

ACADEMIC APPOINTMENTS:

| 2021 - Present: | Professor, School | l of Ocean Science and | Engineering, Unive | rsity of Southern |
|-----------------|-------------------|------------------------|--------------------|-------------------|
|-----------------|-------------------|------------------------|--------------------|-------------------|

Mississippi.

2014 – 2021: Associate Professor, Division of Coastal Sciences, School of Ocean Science and

Engineering, University of Southern Mississippi.

2008 – 2014: Assistant Professor, Department of Coastal Sciences, University of Southern

Mississippi.

2006 - 2008: Postdoctoral Research Associate, Center for Environmental and Human Toxicology,

University of Florida.

PUBLICATIONS:

Wigren, M., TA Johnson, RJ Griffitt, AG Hay, JA Knott, S Yan, and MS Sepulveda. <u>Limited impact of weathered residues from the Deepwater Horizon oil spill on the gut-microbiome and foraging behavior of sheepshead minnows (Cyprinodon variegatus)</u>. In revision, *Science of the Total Environment*.

Tarnecki, A.M., C. Miller, T.A. Sherwood, R.J. Griffitt, R.W. Schloesser, and D.L. Wetzel. <u>Dispersed Crude Oil Induces Dysbiosis in the Red Snapper Lutjanus campechanus External Microbiota</u>. In revision, *Applied and Environmental Microbiology*.

Allmon, E., G. Walker, R.J. Griffitt, and M.S. Sepulveda. 2022. <u>Oil induced cardiac effects in embryonic sheepshead minnows, Cyprinodon variegatus</u>. *Chemosphere*, *288(1) 132482*. https://doi.org/10.1016/j.chemosphere.2021.132482

Takeshita, R., SJ Bursian, KM Colegrove, TK Collier, K Deak, K M Dean, S De Guise, LM DiPinto, CJ Elferink, AJ Esbaugh, RJ Griffitt, M Grosell, KE Harr, JP Incardona, RK Kwok, J Lipton, CL Mitchelmore, JM Morris, ES Peters, AP Roberts, TK Rowles, JA Rusiecki, LH Schwacke, CR Smith, DL Wetzel, MH Ziccardi, and AJ Hall. 2021. <u>A review of the toxicology of oil in vertebrates: What we have learned</u>

following the *Deepwater Horizon* oil spill. *Toxicology and Environmental Health, Part B.* 24:8, 355-394. https://DOI: 10.1080/10937404.2021.1975182

Allmon, E., J. Serafin, S. Chen, D. Simning, R.J. Griffitt, T. Bosker, S. De Guise, and M.S. Sepulveda. 2021. The influence of hypoxia on the cardiac transcriptomes of two estuarine species - C. variegatus and F. grandis. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics.

Ehiguise, F.O., M.L. Rodgers, C.V.M. Araujo, R.J. Griffitt, and M.L. Martin-Diaz. 2021. <u>Galaxolide and tonalide modulate neuroendocrine activity in marine species from two taxonomic groups</u>. *Environmental Research* 196. https://doi.org/10.1016/j.envres.2021.110960

Rodgers, M.L., Serafin, J., Sepúlveda M.S., Griffitt, R.J. 2021. <u>The Impact of Salinity and Dissolved Oxygen Regimes on Transcriptomic Immune Responses to Oil in Early Life Stage Fundulus grandis</u>. In press, *Comparative Biochemistry and Physiology Part D: Genomics and Proteomics*. https://doi.org/10.1016/j.cbd.2020.100753

Rodgers, ML, TA Sherwood, RJ Griffitt, and DL Wetzel. 2021. <u>Characterizing transcriptomic responses of southern flounder (Paralichthys lethostigma) chronically exposed to Deepwater Horizon oiled sediments</u>. *Aquatic Toxicology 230 105716*. https://doi.org/10.1016/j.aquatox.2020.105716

Allmon, E; J Serafin, S Chen, ML Rodgers, RJ Griffitt, T Bosker, S DeGuise, and MS Sepulveda. 2020. Effects of Polycyclic Aromatic Hydrocarbons and Abiotic Stressors on Fundulus grandis Cardiac Transcriptomes. Science of the Total Environment 752, 142156. https://doi.org/10.1016/j.scitotenv.2020.142156

Barnett, AF; J Gledhill; RJ Griffitt; M Slattery; D Gochfeld, and K Willett. 2020. <u>Combined and independent effects of hypoxia and tributyltin on mRNA expression and physiology of the Eastern oyster (Crassostrea virginica)</u>. *Scientific Reports 10(1) 1-13*. https://doi.org/10.1038/s41598-020-67650-x

Shen, S., W. Wu, DJ Grimes, E.A., Saillant, and RJ Griffitt. 2020. <u>Community composition and antibiotic resistance of bacteria in bottlenose dolphins Tursiops truncatus</u> – potential impact of 2010 BP Oil Spill. *Science of the Total Environment 732 139125*. <u>https://doi.org/10.1016/j.scitotenv.2020.139125</u>

Jones, ER, D Simning, J Serafin, MS Sepulveda, and RJ Griffitt. 2020. <u>Acute exposure to oil induces age and species-specific transcriptional responses in embryolarval estuarine fish</u>. *Environmental Pollution 263, 114325*. https://doi.org/10.1016/j.envpol.2020.114325

Rodgers, ML, D Simning, MS Sepulveda, S De Guise, T Bosker, RJ Griffitt. 2020. <u>Exposure to Oil and Hypoxia Results in Alterations of Immune Transcriptional Patterns in Developing Sheepshead Minnows (Cyprinodon variegatus)</u>. Scientific Reports 10(1) 1-9. https://doi.org/10.1038/s41598-020-61186-w

Grossel, M, RJ Griffitt, T Sherwood, DL Wetzel. 2020. <u>Chapter 33</u>: <u>Digging Deeper than LC/EC50</u>: <u>Assessing pathways of exposure, non-traditional endpoints and non-model species in oil spill toxicology.</u> In: *Deep Oil Spills: Facts, Fate, Effects Volume I.* SA Murawski, D Hollander, A Ainsworth, CB Paris, M Schluter, D Wetzel co-Editors.

Mitchelmore, CL, RJ Griffitt, GM Coelho, DL Wetzel. 2020. <u>Chapter 12: Modernizing Protocols for Aquatic Toxicity Testing of Oil and Dispersant.</u> In: *Deep Oil Spills: Facts, Fate, Effects Volume II.* SA Murawski, D Hollander, A Ainsworth, CB Paris, M Schluter, D Wetzel co-Editors.

Jasperse, L, M Levin, K Rogers, C Perkins, T Bosker, RJ Griffitt, MS Sepulveda, and S DeGuise. 2019. <u>Parental Exposure to Deepwater Horizon Oil in Different Environmental Scenarios Alters</u> <u>Development of Sheepshead Minnow (Cyprinodon variegatus) Offspring.</u> *Marine Environmental Research 150*, 104762

Simning, D, MS Sepulveda, S De Guise, T Bosker, RJ Griffitt. 2019. <u>Combined effects of salinity, hypoxia, and oil exposure on survival and gene expression in developing sheepshead minnows, Cyprinodon variegatus</u>. Aquatic Toxicology 214. https://doi.org/10.1016/j.aquatox.2019.105234

Serafin, J., S Guffey, T Bosker, RJ Griffitt, C Perkins, S De Guise, M Szuter, and MS Sepulveda. 2019. Combined effects of salinity, temperature, hypoxia, and Deepwater Horizon oil on *Fundulus grandis* larvae. *Ecotoxicology and Environmental Safety 181, 106-113.* DOI: 10.1016/j.ecoenv.2019.05.059

Jasperse, L, M Levin, K Rogers, C Perkins, T Bosker, RJ Griffitt, MS Sepulveda, and S DeGuise. 2019. Hypoxia and Reduced Salinity Exacerbate the Effects of Oil Exposure on Sheepshead Minnow (*Cyprinodon variegatus*) Reproduction. *Aquatic Toxicology 212: 175-185*. DOI: 10.1016/j.aquatox.2019.05.002.

Jasperse, L, M Levin, K Rogers, C Perkins, T Bosker, RJ Griffitt, MS Sepulveda, S DeGuise. 2019. <u>Transgenerational Effects of Polycyclic Aromatic Hydrocarbon Exposure on Sheepshead Minnows</u> (<u>Cyprinodon variegatus</u>). Environmental Toxicology and Chemistry 38(3):638-649. DOI 10.1002/etc.4340.

Adamovsky, O, A Buerger, AM Wormington, N Ector, RJ Griffitt, JH Bisesi, and CJ Martyniuk. 2018. <u>The gut microbiome and aquatic toxicology: An emerging concept for environmental health</u>. *Environmental Toxicology and Chemistry 37(11) 2758-2775.* DOI: 10.1002/etc.424

Rodgers, ML, R Takeshita, and RJ Griffitt. 2018. <u>Deepwater Horizon Oil alone and in Conjunction with Vibrio anguillarum Modulates Expression of Immune-Related Genes in Red Snapper (Lutjanus campechanus)</u>. Aquatic Toxicology 204, 91-99.

Rodgers, ML, ER Jones, C Klinkhamer, CT Mahapatra, J Serafin, T Bosker, C Perkins, RJ Griffitt, S DeGuise, and MS Sepuveda. 2018. <u>Combined Effects of Deepwater Horizon Crude Oil and Environmental Stressors on Fundulus grandis Embryos</u>. *Environmental Toxicology and Chemistry* 37(7), 1916-1925. DOI: <u>10.1002/etc.4153</u>

Bosker, T, L Van Balen, M Sepulveda, S DeGuise, C Perkins, and RJ Griffitt. 2017. <u>The Combined Effect of Macondo Oil and Corexit on Sheepshead Minnow (*Cyprinodon variegatus*) During Early Development. *Journal of Toxicology and Environmental Health Part A* 80:9, 477-484.</u>

Jones, ER., CJ Martyniuk, JM Morris, MO Krasnec, and RJ Griffitt. 2017. <u>Exposure to Deepwater Horizon Oil and Corexit 9500 at Low Concentrations Induces Transcriptional Changes and Alters Immune Transcriptional Pathways in Sheepshead Minnows.</u> *Comparative Biochemistry and Physiology Part D: Genomics and Proteomics* (23) 8-16.

Bayha, KM, N Ortell, CN Ryan, KJ Griffitt, M Krasnec, J Sena, T Ramaraj, R Takeshita, GD Mayer, F Shilkey, and RJ Griffitt. 2017. Exposure to crude oil contaminated sediment impairs immune function and increases susceptibility to pathogenic bacteria in Southern Flounder. PLoS ONE 12(5): e0176559

Brown-Peterson, NJ, and RJ Griffitt. 2017. <u>Responses of Juvenile Southern Flounder Exposed to Deepwater Horizon Oil-Contaminated Sediments</u>. *Environmental Toxicology and Chemistry* 36: 1067-1076.

Hedgpeth, B, and RJ Griffitt. 2016. <u>Simultaneous exposure to chronic hypoxia and dissolved PAHs results in reduced egg production and larval survival in the sheepshead minnow (*Cyprinodon variegatus*). *Environmental Toxicology and Chemistry* 35(3): 645-651.</u>

Alloy, MA, I. Boube, RJ Griffitt, JT Oris, and AP Roberts. 2015. <u>Photo-induced Toxicity of Deepwater Horizon Slick Oil to Blue Crab (Callinectes sapidus) Larvae.</u> Environmental Toxicology and Chemistry 34 (9): 2061-2066.

Brown-Peterson, NJ, M Krasnec, R Takeshita, CN Ryan, KJ Griffitt, CL Lay, GD Mayer, KM Bayha, WE Hawkins, JM Morris, and RJ Griffitt. 2015. <u>A multiple endpoint analysis of the effects of chronic exposure to sediment contaminated with Deepwater Horizon oil on juvenile Southern flounder and their associated microbiomes.</u> *Aquatic Toxicology* 165: 197-209.

Brown-Peterson, NJ, RA Brewton, RJ Griffitt, and RS Fulford. 2014. <u>Impacts of the Deepwater Horizon Oil Spill on the Reproductive Biology of Spotted Seatrout (*Cynoscion nebulosus*). Pages 237-252. In: *Impacts of Oil Spill Disasters on Marine Fisheries in North America*. B. Alford, M. S. Peterson, and C. Green, editors. Taylor and Francis Press.</u>

Fulford, RS, RJ Griffitt, NJ Brown-Peterson, H. Perry, and G. Sanchez-Rubio. 2014. <u>Impacts of the Deepwater Horizon oil spill on blue crab, *Callinectes sapidus*, larval settlement in Mississippi, USA. Pages 253-268. In: *Impacts of Oil Spill Disasters on Marine Fisheries in North America*. B. Alford, M. S. Peterson, and C. Green, editors. Taylor and Francis Press.</u>

Boube, II, JM Lotz, AE Pozhitkov, S Li, and RJ Griffitt. 2014. <u>Identification of genes involved in Taura syndrome virus resistance in *Litopenaeus vannamei*. *Journal of Aquatic Animal Health* 26: 137-143.</u>

Brewton, RA, RS Fulford, and RJ Griffitt. 2013. <u>Gene expression and growth as indicators of effects of the BP Deepwater Horizon oil spill on *Cynoscion nebulosus*</u>. *Journal of Toxicology and Environmental Health, Part A: Current Issues.* 76: 1198-1209.

Brown-Peterson, NJ, CS Manning, M Brouwer, and RJ Griffitt. 2013. The effects of pyrene exposure on Sheepshead minnow (*Cyprinodon variegatus*) reproduction. *Journal of Toxicology and Environmental Health, Part A: Current Issues.* 76: 842-852.

Feswick, A., RJ Griffitt, K. Siebein, DS Barber. 2013. <u>Uptake and retention of quantum dots in daphnia is influenced by particle surface functionalization.</u> *Aquatic Toxicology.* 130-131: 210-218.

Griffitt, RJ, CM Lavelle, AS Kane, ND Denslow, DS Barber. 2013. <u>Chronic Nanoparticulate Silver Exposure Results in Tissue Accumulation and Transcriptomic Changes in Zebrafish</u>. *Aquatic Toxicology* 130-131: 192-200.

Griffitt, RJ, RA Ryan, NB Brown-Peterson, I Boube, DA Savin, M Brouwer. 2012. <u>Effects of chronic nanoparticulate silver exposure to juvenile and adult sheepshead minnow</u>. *Environmental Toxicology and Chemistry* 31(1): 160-167. (Invited contribution, special issue on Nanoparticles in the Environment).

Denslow, ND, Griffitt, RJ, Martyniuk, CJ. 2012. <u>Advancing the Omics in aquatic toxicology: SETAC North America 31st Annual Meeting.</u> *Ecotoxicology and Environmental Safety* 76(1): 1-2.

Griffitt, RJ, A Feswick, R Weil, K Hyndman, P Carpinone, K Powers, ND Denslow, DS Barber. 2011. <u>Investigation of acute nanoparticulate aluminum toxicity in zebrafish</u>. *Environmental Toxicology* 26(5): 541-51.

Denslow, ND, RJ Griffitt, and CJ Martyniuk, 2011. <u>Advancing the Omics in Aquatic Toxicology and Ecology</u>. *Environmental Toxicology and Chemistry* 30(2): 263-264. (Special Issue on omics technologies).

Spade DJ, Griffitt RJ, Liu L, Brown-Peterson NJ, Kroll KJ, et al. 2010 Queen Conch (*Strombus gigas*) Testis Regresses during the Reproductive Season at Nearshore Sites in the Florida Keys. Public Library of Science ONE 5(9): e12737.

Carter, B.J., R.J. Griffitt, N.J. Brown-Peterson, H.R. Hammers and D.S. Barber. 2009. <u>Size matters: The outer diameter of multiwalled carbon nanotubes (MWCNTs) affects gene expression in female fathead minnows (*Pimephales promelas*). Pages 387-390 *In* M. Loudon and B. Romanowicz, eds. Nanotech Conference & Expo 2009, Vol 2, Technical Proceedings - Nanotechnology 2009: Life Sciences, Medicine, Diagnostics, Bio Materials and Composites. CRC Press, Boca Raton, FL.</u>

Barber, DS, ND Denslow, RJ Griffitt, and CJ Martyniuk. 2009. *Sources, Fate and Effects of Engineered Nanomaterials in the Aquatic Environment*. Pages 227-246 In: Nanotoxicology: *In Vivo* and *In Vitro* Models to Health Risks. S. Sahu and D. Casciano, Eds. John Wiley & Sons, Ltd.

Griffitt, RJ, K. Hyndman, ND Denslow, DS Barber. 2009. <u>Comparison of molecular and histological changes in zebrafish gills exposed to metallic nanoparticles</u>. *Toxicological Sciences* 107(2): 404-415.

Carter, BJ, HR Hammers, RJ Griffitt, and DS Barber. 2008. <u>Using microarrays to test the effects of acute exposure to multi-walled carbon nanotubes (MWCNTs) on gene expression in the Fathead minnow, Pimephelas promelas.</u> Conference Proceedings, *International Perspectives on Environmental Nanotechnology.*

Garcia-Reyero*, N, Griffitt*, RJ, L Liu, KJ Kroll, WG Farmerie, DS Barber, and ND Denslow. 2008. Construction of a robust microarray from a non-model species (Largemouth Bass) using pyrosequencing technology. *Journal of Fish Biology* 72: 2354-2376. * denotes shared first authorship

Griffitt, RJ, J Liu, J Gao, CW Bonzango, and DS Barber. 2008. <u>Acute toxicity of metallic nanoparticles to aquatic organisms</u>. *Environmental Toxicology and Chemistry* 27(9): 1972-1978.

Griffitt, RJ, RW Weil, K. Hyndman, K Powers, ND Denslow, and DS Barber. 2007. <u>Exposure to copper nanoparticles induce gill injury and acute lethality in zebrafish (Danio rerio)</u>. Environmental Science and Technology 41: 8178-8196.

Griffitt, RJ, TL Greig, GT Chandler, and JM Quattro. 2007. <u>Serial Analysis of Gene Expression (SAGE)</u> reveals identifiable patterns in transcriptome profiles of *Palaemonetes pugio* exposed to three <u>common environmental stressors</u>. *Environmental Toxicology and Chemistry* 26(11): 2413-2419.

Griffitt, RJ, GT Chandler, T.W. Greig, and JM Quattro. 2006. <u>Cathepsin B and Glutathione Peroxidase show differing transcriptional responses in the grass shrimp</u>, *Palaemonetes pugio* following exposure to three xenobiotics. *Environmental Science and Technology* 40: 3640-3645.

Staton JL, Schizas NV, Klosterhaus SL, Griffitt RJ, Chandler GT, Coull BC. 2002. Effect of salinity variation and pesticide exposure on an estuarine harpacticoid copepod, *Microarthridion littorale* (Poppe 1881), in the southeastern US. *Journal of Experimental Marine Biology and Ecology* 278(2): 99-108.

Griffitt, J, M Posey, and T Alphin. 1999. <u>Effects of edge fragmentation on oyster reef utilization by transient nekton</u>. *Journal of the Elisha Mitchell Scientific Society* 99(2): 98-102.

RESEARCH SUPPORT:

<u>Ocean Enterprise Entrepreneurship Program.</u> \$997,436. MS Department of Environmental Quality. 1/1/2022 – 12/31/2025.

<u>Integrating Teleost Transcriptomes to Identify Ecologically Meaningful Responses Following Oil Exposure</u>. \$756, 953. Award Number G-231806 from the Gulf of Mexico Research Initiative. RJ Griffitt, PI, M Sepulveda, co-PI. 1/1/2018 – 6/30/2020.

<u>Building Bridges to Understanding Fishing Communities and Fisheries</u>. \$140,594. J Kastler, PI, RJ Griffitt co-PI. The National Academies. 6/1/2017 – 9/30/2019.

<u>Data Analysis to Support Oyster Cultch Deployment and Oyster Reef Restoration SUBTASK 3.</u> \$456,120. National Fisheries and Wildlife Federation. RJ Griffitt, Pl. 7/16/16 – 8/11/21.

<u>Evaluation of Biomarkers Affecting Fish Populations</u>. \$39, 457. National Council for Air and Stream Improvement. RJ Griffitt, PI. 4/1/14 - 9/31/15.

<u>The combined effect of environmental and anthropogenic stressors on fish health.</u> \$1,385,339. Gulf of Mexico Research Initiative Award Number SA-13-01/GoMRI-009. Sylvain DeGuise, University of Connecticut PI; RJ Griffitt, University of Southern Mississippi; Maria S. Sepulveda, Purdue University; and Chris Perkins, University of Connecticut co-PIs. 1/1/2013 – 12/31/2016.

<u>The Effects of Hydrocarbon Exposure on the Growth and Development of Shrimp.</u> \$86,240. LA Dept of Public Safety & Corrections. RJ Griffitt, Pl. 3/1/2013 – 1/14/2015. LOSCO NRDA Contract.

<u>The Effects of Hydrocarbon Exposure on Shrimp Growth.</u> \$30,000. LA Dept of Public Safety & Corrections. RJ Griffitt, Pl. 1/15/2014 – 7/31/2015.

<u>Toxicity testing in support of the Deepwater Horizon NRDA</u>. \$1,026,084. US Department of Commerce. RJ Griffitt, Pl. 8/1/2012 – 12/1/2015.

<u>The Effects of Hydrocarbon and Bacteria Exposure on Fish Immune Function.</u> \$489,207. LA Dept of Public Safety & Corrections. RJ Griffitt PI, DJ Grimes co-PI. 3/1/2013 – 1/14/2014.

NRDA Microbiology and Toxicology. \$302,805. LA Dept of Public Safety & Corrections. DR Grimes, PI, RJ Griffitt, co-PI. 10/15/2012 – 1/14/2014.

<u>The Effects of Hydrocarbon and Bacteria Exposure on Fish Immune Function.</u> \$384,550. LA Dept of Public Safety & Corrections. RJ Griffitt PI, DJ Grimes co-PI. 1/5/2014- 1/14/2016.

<u>Phase II Fish Health sampling.</u> \$294,480. LA Dept of Public Safety & Corrections. DJ Grimes, PI, RJ Griffitt, co-PI. 1/15/2014 – 1/14/2016.

<u>Development of Methods for conducting toxicity tests with southern flounder.</u> \$30,000. US Department of Commerce. RJ Griffitt, PI. 12/19/2011 – 9/30/2012.

<u>Master Subcontract Agreement S161-2S-1814 with Stratus Consulting, Boulder, CO</u>. \$187,558. LA Dept of Public Safety & Corrections. DJ Grimes PI, RJ Griffitt, co-PI. 9/1/2011 – 12/31/2012.

<u>Investigation of the ecotoxicological impacts of released crude and dispersed oil from the Deepwater Horizon event on estuarine and marine species in the northern GOM</u>. \$763,392. Stratus Consulting. RJ Griffitt, PI. 1/24/2011 - 9/30/2012.

Impacts of the Deepwater Horizon oil spill on the health and growth of estuarine fish and ecosystem functionality. \$83,481. NGI Phase II grant, co-PIs Rich Fulford, Robert J, Griffitt, Nancy Brown-Peterson. 2/2011-2/2012.

Monitoring the impacts of dispersed oil exposure on ecologically and economically important species in the northern Gulf of Mexico: using molecular biomarkers to answer an ecological question. \$58,325. NGI Phase I grant. 1/1/2011 – 2/29/2012.

RAPID: Assessment of the impacts of the Deep Horizon oil spill on Bluecrab, *Callinectes sapidus*, spawning and recruitment in the north central Gulf of Mexico. \$133,140. NSF grant number OCE-1044368. Pl's Richard Fulford, Harriet M. Perry, Robert J. Griffitt. 7/1/2010 – 6/30/2012.

<u>Determination of effects of long-term exposure to sublethal concentrations of metallic nanomaterials on zebrafish.</u> \$73,190. Subaward from NSF grant number 0834-075. 9/1/2008 - 8/31/2013.

PATENTS/LICENSES:

License to EcoArray -- 13,000 largemouth bass genes for microarray analysis, Nancy Denslow, David Barber, Robert J Griffitt, and Natalia Garcia-Reyero. June 2007.

AWARDS:

2014 Don Drapeau Mentorship Award, University of Southern Mississippi Center for Undergraduate Research.

SERVICE:

External:

Co-chair, "Adverse Effects of Chemical on the Microbiome" Session at 38th Annual SETAC Conference (J. Bisesi, C. Martyniuk, O. Adamovsky, co-chairs).

Co-chair, "Special Symposium: Deepwater Horizon Oil Spill – 5 Years Later." Session at 36th Annual SETAC Conference. (Emily Maung-Douglass, LA SEAGRANT, Co-Chair).

Co-Chair, "Public Health, Ecology and Society in the Context of Resilience: a Systems Approach to Assessing the Potential Impact of the Gulf of Mexico Oil Spill". Maureen Lichtveld, Symma Finn, Dale Sandler, Jeff Wickliffe co-chairs. 2014 Gulf of Mexico Oil Spill and Ecosystems Science Conference. January 26-29, 2014. Mobile, AL.

Co-Chair "The Toxicological Impact of Metals, Crude Oil, and Chemical Dispersants from the Gulf of Mexico Oil Crisis on Human and Wildlife Health" session, American Association for the Advancement of Science 2013. (John Wise, co-chair).

Co-Chair "The Toxicological Impact of Metals, Crude Oil, and Chemical Dispersants from the Gulf of Mexico Oil Crisis on Human and Wildlife Health" session, Society of Toxicology 2012. (John Wise, cochair).

Co-Chair "Omics in Aquatic Toxicology" session, Society for Environmental Toxicology and Chemistry 2011. (Chris Martyniuk, co-chair).

Co-Chair "Omics in Aquatic Toxicology" session, Society for Environmental Toxicology and Chemistry 2010. (Chris Martyniuk, Nancy Denslow, co-chairs).

Internal:

USM IACUC Committee, 2017-present

Interim Chair, Department of Coastal Sciences. 2015-2016.

Faculty Senator (GCRL representative). 2015-2016.

Department of Coastal Sciences Molecular Physiology Search Committee, 2011-2012. (Chair)

Department of Coastal Sciences Offshore Fisheries Search Committee, 2011-2012.

Department of Coastal Sciences Quantitative Fisheries Search Committee, 2011-2012.

Department of Coastal Sciences Invertebrate Fisheries Search Committee, 2011-2012.

Gulf Coast Research Laboratory Director Search Committee, 2011-2012.

Gulf Coast Research Laboratory Library Committee, 2012-2015.

Department of Coastal Sciences Research Committee, 2012-2015.

Department of Coastal Sciences Graduate Student Review Committee, 2013-2015. (Chair)

Ad hoc manuscript reviewer for:

PLoS One, Environmental Science and Technology, Aquatic Toxicology, Nanotoxicology, Environmental Health Perspectives, Environmental Toxicology, Environmental Toxicology and Chemistry, Marine Environmental Research, Pesticide Biochemistry and Physiology, Toxicological Sciences, Journal of Aquatic Animal Health, Ecotoxicology and Environmental Safety, Toxicology Letters, Diseases of Aquatic Organisms, Ecotoxicology, Environmental Pollution, Toxicology and Applied Pharmacology, Journal of Toxicology and Environmental Health Part A.

Ad hoc grant reviewer for:

National Institutes of Health National Science Foundation US Army Corps of Engineers Engineer Research and Development Center Hungarian Scientific Research Fund Connecticut SeaGrant, Puerto Rico SeaGrant

POSTDOCTORAL RESEARCH ASSOCIATES MENTORED:

Keith M Bayha, 2013-2014.

Natalie Ortell, 2014 - 2016.

Maria Rodgers, 2016 - 2020.

GRADUATE STUDENTS ADVISED:

Idrissa I Boube, MS awarded Spring 2011.

<u>Thesis Title</u>: *Identification of transcriptomic pathways involved in Taura Syndrome virus resistance in Litopenaeus vannamei.*

Winner, Best Presentation, Department of Coastal Sciences 2010 Grad Student Research Symposium.

Winner, Academic Excellence Award from The Afro-American Student Organization at USM

Current Position: Environmental Scientist, Bureau of Ocean Energy Management.

Art K Karels, PhD awarded Spring 2012.

<u>Dissertation Title</u>: *Effects of hypoxia and 4-tert-octylphenol on gene expression profiles of the sheepshead minnow (Cyprinodon variegatus*).

Current Position: Science Professor for Biology at the Mississippi Gulf Coast Community College

Rachel A Brewton, MS awarded Fall 2012.

Thesis Title: Gene expression and growth as indicators of effects of the BP Deepwater Horizon oil spill on Cynoscion nebulosus.

<u>Current Position</u>: Fisheries Research Specialist, Center for Sportfish Science and Conservation Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi.

Bryan A Hedgpeth, MS awarded Spring 2013.

Thesis Title: Response of CYP1A and VEGF in Sheepshead Minnow (Cyprinodon variegatus) when

exposed to source/dispersed oil and hypoxia.

Current Position: Research Technician, ExxonMobil Biomedical Sciences.

Danielle Simning, MS awarded Fall 2017.

Thesis Title: Impacts of oil exposure during early life development stages in Sheepshead minnows (Cyprinodon variegatus) under different environmental factors.

Winner, 2016 James D. Watkins Student Award for Excellence in Research.

Current Position: Research Scientist and Bioassay Lab Manager, National Council for Air and Stream

Improvements

Jeremy Johnson, MS awarded Summer 2019.

Thesis Title: *Effects of Atorvastatin Exposure on Steroidogenesis in Frogs.*

Winner, Departmental Graduate Assistantship, Department of Coastal Sciences (competitive).

Winner, 2016 NSF Graduate Research Fellowship.

Elizabeth Jones, PhD awarded Summer 2019.

Dissertation title: *Epigenetic responses to Deepwater Horizon oil contamination in estuarine fish.*

Winner, Society for Environmental Toxicology and Chemistry Student Travel Award, November 2017

Winner, Gulf of Mexico Oil Spill and Ecosystem Science Conf. Student Presenter Award, Oct. 2016

Winner, Nick Baron Scholarship Award, May 2016

Winner, University of Southern Mississippi, Graduate Student Symposium, March 2016

Winner, Marine and Estuarine Graduate Student Association Research Award, March 2015

Samantha Ells, MS in progress

Thesis title: The Influence of PAH Contaminant Loads and Water Source in Eastern Oyster Gut *Microbiome Compositions.*

GRADUATE STUDENT COMMITTEE MEMBER:

Past

Agnes Bardon (PhD, Eric Saillent, adviser) Will Thompson (MS, Jeff Lotz, adviser) Tina Sibuea (MS, Jeff Lotz, adviser) Saori Mine (PhD, Jeff Lotz, adviser) Nick Noreia (PhD, Jay Grimes, adviser) Corey Russo (PhD, Jay Grimes, adviser) Rachel Ryan (PhD, Sherry Herron, adviser) (PhD, Richard Heard, adviser) TI Fayton Tershara Matthews (PhD, Robin Overstreet, adviser) Andrew Ouaid (MS, Karen Orcutt, adviser) (MS, Andy Evans, adviser) Faith Lambert Kelsey Burns (PhD, Chet Rakocinski, adviser) Yimu Yang (MS, Jay Grimes, adviser) Alvssa Bennet (MS, Chet Rakocinski, adviser) Shuo Shen (Phd, Wei Wu, adviser)

Angie Hoover (MS, Frank Hernandez, adviser) Maggie Wigren (MS, Marisol Sepulveda, adviser, Purdue University)

Jaime Smith (MS, Robin Overstreet, adviser)

Lindsay Jasperse (PhD, Sylvain DeGuise, adviser, University of Connecticut)

Helen Olmi (PhD, Zack Darnell, adviser) Rachel Mugge (PhD, Leila Hamdan, adviser)

Elizabeth Allmon (PhD, Marisol Sepulveda, adviser, Purdue University)

UNDERGRADUATE STUDENTS MENTORED:

Claire Rankin (Southeast Missouri State, Summer, 2018), Charlotte Love (Grinnell College, Summer, 2017), Stephanie Rich (NW Missouri State, Summer 2017), Naomi Bruijnooge (University of Leiden, 2015), Wilhelmina van Wijlen (University of Leiden, 2015), Jessica Holland (USM 2014), Liselotte van Balen (University of Leiden, 2014), Robin Vroom (University of Leiden, 2014), Christina Thompson (USM, 2013), Jeremy Johnson (USM 2012-2014), Lyndsay Carrigee (USM 2012-2014; **winner, 2014 Eagle SPUR award**), Jennifer Lyndsay (USM 2012-2013), Nina Crain (USM, 2012-2013), Jeremy Lindsey (MGCCC, 2009), Heather McDonald (MGCCC 2010), Sean Farrell (MGCCC 2011), Harris McDonnel (MGCCC 2011), Callie Greenough (MGCCC 2012).

NOAA/NGI Diversity Internship Program:

Idrissa Boube (2009), Veronica Alston (2012).

INVITED PRESENTATIONS:

Griffitt, RJ, and MS Sepulveda. 2019. *Identifying conserved transcriptional profiles among different fish species following exposure to oil.* **Invited Platform Presentation.** Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, Feb. 4-7.

Griffitt, RJ, R Takeshita, and D Wetzel. 2018. *Comparing transcriptional profiles of lab exposed and field collected flounder following the Deepwater Horizon incident.* **Invited Platform Presentation.** 39th Annual Society of Environmental Contamination and Toxicology Meeting. Sacramento, CA, Nov. 4-9, 2018.

Griffitt, RJ. 2017. *Effects of exposure to Deepwater Horizon oil on the global transcriptional profiles of estuarine fish.* **Invited Platform Presentation.** 147th Annual American Fisheries Society Meeting, Tampa, FL, August 20-24, 2017.

Ortell, N., KM Bayha, R Takeshita, and RJ Griffitt. 2016. *Linking Contaminant induced microbiome shifts to host health*. **Poster Presentation** at the 37th Annual Society of Environmental Contamination and Toxicology Meeting. Orlando, FL, Nov. 6- 10, 2016.

Griffitt, RJ. 2016. *Design and interpretation of laboratory-based toxicology exposures in the aftermath of Deepwater Horizon*. **Invited Session Keynote Speaker**, Gulf of Mexico Research Initiative Conference. Tampa, FL, February 1-4.

Griffitt, RJ. 2015. *Effects of Exposure to Deepwater Horizon oil on the Global Transcriptional Profiles of Estuarine Fish.* **Invited Platform Presentation**, Environmental Mutagenesis and Genomics Society. New Orleans, LA. September 26-30 2015.

Griffitt, RJ. 2015. *One Fish, Two Fish, Red Fish, Dead Fish*. **Seminar Speaker**, University of Southern Mississippi Department of Marine Sciences. October 19, 2015. Hattiesburg, MS

- Griffitt, RJ. 2015. *One Fish, Two Fish, Red Fish, Dead Fish*. **Seminar Speaker**, University of Southern Mississippi Department of Biological Sciences. Apr. 10, 2015. Hattiesburg, MS.
- Griffitt, RJ. 2015. *One Fish, Two Fish, Red Fish, Dead Fish*. **Invited Speaker**, Columbia Environmental Research Center, USGS. Feb. 24, 2015. Columbia, MO.
- Griffitt, RJ, A Feswick, K Seibein, DS Barber. 2014. *Particle surface functionalization influences uptake, retention and internalization of quantum dots in Daphnia*. **Invited Presentation**. Ocean Science Meeting. Honolulu, HI, Feb. 23-28, 2014.
- Griffitt, R.J., B Hedgpeth, NB Brown-Peterson. 2013. *Effects of crude and dispersed oil on estuarine fish species*. **Invited platform presentation**, American Association for the Advancement of Science Conference. Boston, MA, Feb. 14-18, 2013.
- Griffitt, RJ. Dec. 2012. *Investigating emerging issues in aquatic toxicology: Using small fish to understand the environmental impacts of xenobiotic exposure.* **Invited speaker**, University of North Carolina Greensboro Biology Department.
- Griffitt, RJ. Dec. 2012. *Investigating emerging issues in aquatic toxicology: Using small fish to understand the environmental impacts of xenobiotic exposure.* **Invited speaker**, University of Florida Center for Human and Environmental Toxicology.
- Griffitt, RJ. Oct. 17 2012. *Toxicogenomics responses of small fish exposed to nanoparticulate silver: Investigating an emerging issue in aquatic toxicology*. **Invited seminar speaker**, University of Southern Maine.
- Griffitt, R.J., NB Brown-Peterson, I Boube, S Manning. 2012. *Effects of crude and dispersed oil on estuarine fish species*. **Invited platform presentation**, 51st Annual Society of Toxicology Conference. San Francisco, CA, Mar. 11-15.
- Griffitt, RJ. Jan. 17 2012. *Toxicogenomics effects of nanoparticulate silver on small fish: Using molecular tools to investigate an emerging issue in aquatic toxicology*. **Invited seminar speaker**, Southern California Coastal Water Restoration Project.
- Griffitt, RJ. December 19, 2011. *Toxicogenomics effects of nanoparticulate silver on small fish*. **Invited seminar speaker**, Marine Biology Laboratory.
- Griffitt, RJ. 2011. *A (Very) Brief Overview of Dispersant Toxicity Studies*. **Invited presentation**, Science Seminar: Impacts of the Deepwater Horizon Oil Spill, sponsored by the Metcalf Institute for Marine & Environmental Reporting. Cochodrie, LA, Apr 6-8. 2011.
- Griffitt, RJ, Rachel Ryan, Andrew Kane, David S Barber. 2010. *Effects of chronic exposure to nanoparticulate silver in zebrafish*. **Invited platform presentation**, 31st Annual Society for Environmental Toxicology and Chemistry Conference, Portland, OR, Nov. 7-11.
- Griffitt, RJ. 2010. *miRNA expression profiles in fathead minnows exposed to estradiol*. **Invited platform presentation**, 31st Annual Society for Environmental Toxicology and Chemistry Conference, Portland, OR, Nov. 7-11.
- Griffitt, RJ. September, 2010. **Invited seminar speaker**, Auburn University Department of Fisheries.
- Griffitt, RJ, Nancy Brown-Peterson, Rachel Ryan, Steve Manning, Marius Brouwer. 2010. *Effects of chronic nanoparticulate silver exposure to adult and juvenile sheepshead minnow.* **Invited platform presentation**, 5th Annual International Conference for Nanotoxicity. Clemson, SC, August 22-26, 2010.

Griffitt, RJ. October, 2009. *Toxicology of metallic nanoparticles to aquatic and estuarine species.* **Invited seminar speake**r, USM Department of Marine Science.

Griffitt, RJ. 2009. *Environmental nanotoxicology: Using molecular tools to investigate an emerging issue in aquatic toxicology.* **Invited seminar speake**r, School of Public Health, Tulane University.

Griffitt, RJ, K. Hyndman, ND Denslow, K Powers, and DS Barber. 2007. *Comparative analysis of the effects of sublethal nanoparticulate metal exposure to zebrafish gills.* **Invited platform presentation**, 30th Annual Society for Environmental Toxicology and Chemistry Conference, Milwaukee, WI, Nov. 11-15.

Griffitt, RJ. 2007. *Environmental toxicology of metallic nanoparticles in aquatic species*. **Invited platform presentation**, Mid-Atlantic Society of Toxicology Conference, Jersey City, NJ, October 10-11.

SUBMITTED PRESENTATIONS/ABSTRACTS:

Rodgers, M.L., R.J. Griffitt. 2019. *The Impact of Various Oiled Sediments on Immune-Related Transcriptional Responses in Southern flounder (Paralichthys lethostigma*). **Platform presentation**. 40th Annual Society for Environmental Toxicology and Chemistry Conference, Toronto, CA, Nov. 4-9.

Rodgers, M.L., Simning, D., Sepúlveda M.S., DeGuise, S., Bosker, T., Griffitt, R.J. 2019. *Exposure to Oil and Hypoxia Results in Alterations of Immune Transcriptional Patterns in Developing Sheepshead Minnows (Cyprinodon variegatus)*. **Platform Presentation** at Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, Feb. 4-7.

Jones, ER, DJ Simning, RJ Griffitt. 2018. *Oil-induced methylation of the aryl hydrocarbon receptor repressor (ahrr) promoter in Cyprinodon variegatus.* **Platform presentation**. 39th Annual Society for Environmental Toxicology and Chemistry Conference, Sacramento, CA, Nov. 4-9.

Barnett, AF, J Gledhill, RJ Griffitt, K Willett, M Slattery, and D Gochfeld. 2018. *The independent and interactive effects of TBT and hypoxia on the oyster Crassostrea virginica*. **Poster Presentation**. 39th Annual Society for Environmental Toxicology and Chemistry Conference, Sacramento, CA, Nov. 4-9.

Rodgers, ML, MS Sepulveda, RJ Griffitt. 2018. *Conserved & Differential Transcriptional Immune Responses In Commercially & Recreationally Important Fish Species Exposed to Oil, a Pathogen, or Both.* **Platform presentation**. 39th Annual Society for Environmental Toxicology and Chemistry Conference, Sacramento, CA, Nov. 4-9.

Johnson, J, RJ Griffitt. 2018. *Effects of Atorvastatin on steroidogenesis in Xenopus laevis*. **Poster Presentation**. 39th Annual Society for Environmental Toxicology and Chemistry Conference, Sacramento, CA, Nov. 4-9.

Gledhill, J, AF Barnett, RJ Griffitt, D Gochfeld, M Slattery, K Willett. 2018. *Effects of hypoxia on the immune response of the eastern oyster (Crassostrea virginica)*. **Poster Presentation**. 39th Annual Society for Environmental Toxicology and Chemistry Conference, Sacramento, CA, Nov. 4-9.

Wigren, M., ML Rodgers, ER Jones, RJ Griffitt, MS Sepulveda. 2018. *Effects of oil on gut and gill microbiome of three pelagic Gulf of Mexico fish*. **Poster Presentation**. 39th Annual Society for Environmental Toxicology and Chemistry Conference, Sacramento, CA, Nov. 4-9.

Rodgers, ML, RJ Griffitt. 2018. A *Comparative Analysis of Gill and Gut Microbiomes Across Fish Species Exposed to Oil, a Pathogen, or Both.* **Platform presentation**. 39th Annual Society for Environmental Toxicology and Chemistry Conference, Sacramento, CA, Nov. 4-9.

- Jones, E. R., Simning D., Griffitt, R. J. 2017. *The effects of oil and hypoxia exposure on establishment of DNA methylation patterns in developing sheepshead minnows (Cyprinodon variegatus).* **Platform presentation**. 38th Annual Society for Environmental Toxicology and Chemistry Conference, Minneapolis, MN, Nov. 12-16.
- Rodgers, M. L., Ortell, N., Takeshita R., Griffitt, R. J. 2017 *An Overview of Oil Immunotoxicity in Three Commercially and Recreationally Important Fish Species*. **Platform Presentation**, 38th Annual Society of Environmental Toxicology and Chemistry North America Meeting. Nov 12-16, Minneapolis, MN.
- Jones, ER, C Martyniuk, MO Krasnec, J Morris, and RJ Griffitt. 2017. *Alterations to the Sheepshead Minnow (Cyprinodon variegatus) Transcriptome After Corexit and Oil Exposure*. **Poster presentation** at the Gulf of Mexico Oil Spill and Ecosystems Science Conference. Feb 5-9, New Orleans, LA.
- Jones, ER, D Simning, and RJ Griffitt. 2017. *DNA Methyltransferase Gene Expression in Larval Sheepshead Minnows (Cyprinodon variegatus) Following Oil Exposure*. **Poster presentation** at the Gulf of Mexico Oil Spill and Ecosystems Science Conference. Feb 5-9, New Orleans, LA.
- Simning, D., C Perkins, T Bosker, M Sepúlveda, S DeGuise, and RJ Griffitt. 2016. Synergist Effects of Oil Exposures and Suboptimal Environmental Conditions during Early Life Stage in sheepshead minnows (Cyprinodon variegatus). **Platform Presentation** at the Gulf of Mexico Oil Spill & Ecosystem Science Conference. Tampa, FL, Feb. 1-4, 2016
- Simning, D., C Perkins, T Bosker, M Sepúlveda, S DeGuise, and RJ Griffitt. 2016. Evidence for competitive inhibition in Cyprinodon variegatus in response to hypoxia and oil exposures as a function of age.
- Jones, ER, C Martyniuk, MO Krasnec, J Morris, and RJ Griffitt. 2016. Microarray analysis of transcriptional changes in adult sheepshead minnows (Cyprinodon variegatus) following 7 day oil or Corexit exposure. **Poster presentation** at the 37th Annual Society of Environmental Contamination and Toxicology. Orlando, FL, Nov. 6-10, 2016.
- Simning, D, C. Perkins, T. Bosker, M. Sepulveda, S. DeGuise, and RJ Griffitt. 2015. *Impacts of oil exposure during early life development stages in sheepshead minnows (Cyprinodon variegatus) under different environmental factors*. **Poster presentation** at the 36th Annual Society of Environmental Contamination and Toxicology. Salt Lake City, UT, Nov. 1-5, 2015.
- Ortell, N, KM Bayha, C Ryan, R Takeshita, GD Mayer, and RJ Griffitt. 2015. *Investigating the immunosuppressive effects of exposure to Deepwater Horizon oil on northern Gulf of Mexico fish.* **Platform presentation** at the 36th Annual Society of Environmental Contamination and Toxicology. Salt Lake City, UT, Nov. 1-5, 2015.
- Vroom, R., L van Balen, T Bosker, S DeGuise, C. Perkins, M. Sepulveda, and J Griffitt. 2015. *The combined effect of anthropogenic and environmental stressors on fish health*. Poster presentation at the Gulf of Mexico Oil Spill and Ecosystems Science Conference. Feb 16-19, Houston, TX.
- Bayha, KM, KJ Griffitt, R Takeshita, M Krasnec, J Morris, J Lipton, and RJ Griffitt. 2014. *Examining the effects of oil exposure on immune function and susceptibility to pathogenic bacteria of Gulf of Mexico fishes*. **Poster presentation** at the 2014 Ocean Science Meeting. Honolulu, HI, Feb. 23-28.
- Hedgpeth, BA, and RJ Griffitt. 2014. Simultaneous exposure to chronic hypoxia and dissolved PAHs results in reduced egg production and larval survival in the Sheepshead Minnow (Cyprinodon variegatus). **Platform presentation** at the Gulf of Mexico Oil Spill and Ecosystems Science Conference. January 26-29, 2014. Mobile, AL.

Klinkhammer, C, T Bosker, S DeGuise, C Perkins, RJ Griffitt, and M Sepulveda. 2014. Combined effects of low dissolved oxygen and oil contaminants in the Gulf Killifish *Fundulus grandis*. **Poster presentation** at the Gulf of Mexico Oil Spill and Ecosystems Science Conference. January 26-29, 2014. Mobile, AL.

DeGuise, S, T Bosker, M Sepulveda, RJ Griffitt, and C Perkins. 2014. *The combined effects of anthropogenic stressors on fish health*. **Poster presentation** at the Gulf of Mexico Oil Spill and Ecosystems Science Conference. January 26-29, 2014. Mobile, AL.

Griffitt, RJ, NJ Brown-Peterson, B Bailey, M Krasnec, I Lipton, R Takeshita, J Lipton, and JM Morris. 2013. *Exposure to sediment contaminated with Deepwater Horizon oil alters growth and survival of the Southern Flounder*. **Platform presentation** at the 34th Annual Society of Environmental Contamination and Toxicology. Nashville, TN, Nov. 17-21, 2013.

Brown-Peterson, N.J.*, R.A. Brewton, R.J. Griffitt and R.S. Fulford. 2013. *Spotted seatrout reproductive biology impacted by the Deepwater Horizon oil spill.* **Platform presentation** at 143rd conference of the American Fisheries Society, September 2013. Little Rock, AR.

Wise, Sr., J.P. and Griffitt, J. 2013. *The Toxicological Impact of Metals, Crude Oil, and Chemical Dispersants from the Gulf of Mexico Oil Crisis on Human and Wildlife Health*. Proceedings of the annual meeting of the American Association for the Advancement of Science (AAAS), p 72.

Wise, J., Wise, S.S., Xie, H., Griffitt, J., and Wise, Sr., J.P. 2013. *Chemical Dispersants Used in the Gulf of Mexico Are Cytotoxic to Human Lung and Skin Fibroblasts*. Toxicological Sciences, 132: 32.

Wise, J., Wise, S.S., Xie, H., Griffitt, J., and Wise, Sr., J.P. *Chemical Dispersants Used in the Gulf of Mexico Oil Crisis Response Are Cytotoxic to Human Skin Fibroblasts.* Presented at the annual meeting of the Society of Environmental Toxicology and Chemistry (SETAC), November, 2012.

Brewton, RA, RF Fulford, and RJ Griffitt. 2012. *Gene expression and growth as indicators of effects of the BP Deepwater Horizon oil spill on Cynoscion nebulosus*. **Platform presentation**. Gulf Estuarine Research Society. Nov 9-11, 2012. Dauphin Island, AL.

Wise, Sr., J.P. and Griffitt, J. 2012. *The Toxicological Impact of Metals, Crude Oil, and Chemical Dispersants from the Gulf of Mexico Oil Crisis on Human and Wildlife Health*. Toxicological Sciences, 126: 379.

Wise, J., Wise, S.S. Xie, H., Griffitt, J. and Wise, Sr., J.P. 2012. *Are Chemical Dispersants Used in the Gulf of Mexico Cytotoxic and Genotoxic to Human Lung and Skin Fibroblasts*? Toxicological Sciences, 126: 580.

Brewton, R, R. Fulford and R. J. Griffitt. 2011. *Gene expression and growth as indicators of effects of the BP Deepwater Horizon oil spill on Cynoscion nebulosus*. **Poster presentation**. Society of Environmental Toxicology and Chemistry North America Meeting. Boston, MA.

Brown-Peterson, N.J.*, R.J. Griffitt, I. Boube, C.S. Manning, H. Perry and R.S. Fulford. 2011. *Laboratory exposures to dispersed oil in fish, shrimp and crabs: implications for survival and growth in oil-impacted estuaries*. Presented at the 141st meeting of the American Fisheries Society, September 2011. Seattle, WA.

Brewton, R, R. Fulford and R. J. Griffitt. 2011. *Survival and growth of estuarine fish following exposures of chemically enhanced dispersed oil from the Deepwater Horizon oil spill*. **Platform presentation**. Coastal and Estuarine Research Federation International Meeting. Daytona Beach, FL.

Brewton, R, R. J. Griffitt and R. Fulford. 2011. *Impacts of Deepwater Horizon oil spill on the health and growth of estuarine fish and ecosystem functionality*. Northern Gulf Institute Annual Meeting. Mobile, Alabama.

- Wise, J., Wise, S., Xie, H., Griffitt, J. and Wise, Sr., J.P. *Chemical Dispersants Used in the Gulf of Mexico Are Cytotoxic and Genotoxic to Human Skin Fibroblasts*. Proceedings of the University of Southern Maine's 8th Annual Thinking Matters Conference: USM Research, Scholarship, and Creativity Symposium, April, 2011.
- Brewton, R.A., R. J. Griffitt, and R.S. Fulford . 2010. *Impacts of Deepwater Horizon oil spill to estuarine fish growth and ecosystem functionality*. American Fisheries Society Southern Division Spring Meeting. January 14, 2010. Tampa, Florida.
- Barber, DS, A Feswick, RJ Griffitt, P Carpinone, K Powers. 2009. *What matters?-dosimetry in aquatic toxicity of silver nanoparticles*. **Platform presentation**, 30th Annual Society for Environmental Toxicology and Chemistry Conference, New Orleans, LA, Nov. 11-15.
- R. J. Griffitt, A. Feswick, N.D. Denslow, D.S. Barber. 2008. *Gill accumulation and toxicity of nanoparticulate copper and silver in zebrafish*. **Platform presentation**, 29th Annual Society for Environmental Toxicology and Chemistry Conference, Tampa Bay, FL Nov. 16-20, 2008.
- R.J. Griffitt, N.D. Denslow, K. Kroll, D.S. Barber. 2008. *Identification of molecular markers of follicle maturation and incipient spawning in Largemouth bass.* **Poster presentation**, 29th Annual Society for Environmental Toxicology and Chemistry Conference, Tampa Bay, FL Nov. 16-20, 2008.
- A. Feswick, J. Griffitt, J. Luo, D.S. Barber . 2008. *Nanoparticle Physical Characteristics Affect Interactions with Aquatic Organisms*. **Platform presentation**, 29th Annual Society for Environmental Toxicology and Chemistry Conference, Tampa Bay, FL Nov. 16-20, 2008.
- D.J. Spade, R.J. Griffitt, D.S. Barber, N.D. Denslow. 2008. *Genomic Response to Reproductive Stress in Neuroganglia and Testis of Queen Conch (Strombus gigas)*. **Platform presentation**, 29th Annual Society for Environmental Toxicology and Chemistry Conference, Tampa Bay, FL Nov. 16-20, 2008.
- R.J. Griffitt, N.D. Denslow, and D.S. Barber. 2008. *Identifying genes predictive of imminent spawning in LMB*. **Platform presentation**, Southeast SETAC Ann. Mtg. Gainesville, FL.
- Spade, D.J., Griffitt, R.J., Liu, L., Kroll, K.J., Glazer, R.A., Brown-Peterson, N.J., Barber, D.S., and Denslow, N.D. 2008. *Toxicogenomic Investigation of Reproductive Failure in South Florida Queen Conch*. **Platform presentation**, Southeast SETAC Ann. Mtg. Gainesville, FL.
- Griffitt, RJ, K. Hyndman, ND Denslow, K Powers, and DS Barber. 2008. *Differential toxicity of metallic nanoparticles to aquatic species*. **Poster presentation**, 47th annual Society of Toxicology Conference, Seattle, WA, Mar 17-20.
- Griffitt, RJ, KA Hyndman, ND Denslow, K Powers, and DS Barber. 2007. *Environmental toxicity of metallic nanoparticles to aquatic species*. **Platform presentation**, International Symposium on Nanotechnology in Environmental Protection and Pollution. Dec. 11-13, 2007. Fort Lauderdale, FL, USA.
- Griffitt, RJ, R Weil, J Luo, ND Denslow, K Powers, and DS Barber. 2007. *Toxic effects of nanocopper on the zebrafish (Danio rerio)*. **Platform presentation**, 46th Annual Society of Toxicology Conference, Charlotte, NC, Mar 25-29.
- Griffitt, RJ, R Weil, J Luo, ND Denslow, K Powers, and DS Barber. 2007. *Toxic effects of nanocopper on the zebrafish (Danio rerio)*. **Platform presentation**, Southeast SETAC Conference, Athens, GA, Apr 11-13.
- Griffitt, RJ, R Weil, K Hyndman, N Reyero-Garcia, N. D. Denslow, and DS.Barber. 2006. *Effects of metallic nanomaterials on zebrafish*. **Poster presentation**, 27th Annual Society for Environmental Toxicology and Chemistry Conference, Montreal, Canada, Nov. 5-10.

Griffitt, RJ, TW Greig, GT Chandler, and JM Quattro. 2005. *Identification of differentially expressed genes in Palaemonetes pugio following xenobiotic exposure using Serial Analysis of Gene Expression (SAGE)*. Platform presentation, 26th Annual Society for Environmental Toxicology and Chemistry Conference, Baltimore, MA.

Griffitt, RJ, GT Chandler, MA Roberts, and JM Quattro. 2004. *Transcriptome profiles as a function of xenobiotic exposure in the grass shrimp, Palaemonetes pugio, using Serial Analysis of Gene Expression (SAGE)*. **Platform presentation**, 25th Annual Society for Environmental Toxicology and Chemistry Conference, Portland, OR, Nov. 18-23.

Griffitt, RJ, MA Roberts, GT Chandler, and JM Quattro. 2003. *Serial Analysis of Gene Expression (SAGE)* for quantitative assessment of gene expression profiles and intensities in estuarine crustaceans. **Poster presentation** at 24th annual Society for Environmental Toxicology and Chemistry Conference, Austin, TX, Nov. 14-18.

Griffitt, RJ, DS Block, GT Chandler. 2003. *Effects of pesticides on P-glycoprotein expression levels in sediment-dwelling invertebrate species.* **Platform presentation** at 9th annual Carolina SETAC Conference, April 12, 2003.

Block, DS, RJ Griffitt, and GT Chandler. 2003. *P-glycoprotein expression and activity as a function of pesticide exposure in the amphipod, Leptocheirus plumulosus.* **Poster presentation** at 24th annual Society for Environmental Toxicology and Chemistry Conference, Austin, TX, Nov. 14-18.

Griffitt, RJ, JL Staton, and BC Coull. 2001. *Isolation of a \beta-like GABA receptor from the estuarine nematode, Cylindrothurestis miamiensis*. **Platform presentation** at 11th International Meiofauna Conference. Boston, MA, July 12-16.