

CURRICULUM VITAE

Michael D. Wheeler, Ph.D.

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Education

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|------------------------------|-------|------|--------------|
| University of North Carolina | Ph.D. | 2000 | Pharmacology |
| Appalachian State University | B.S. | 1996 | Chemistry |

Professional Positions

East Carolina University, College of Human Ecology,
Associate Dean of Research and Graduate Studies
2012-2015

Oversee college research initiatives of nearly 140 full-time and part-time faculty. Direct reports include the Grants Management Specialist and Budget officer. Key areas of responsibility include fiscal management, junior faculty research development, research productivity reporting, research start up package management, IRB and animal welfare research ethics compliance, graduate student recruitment, retention, and success, and research strategic planning.

East Carolina University, Department of Nutrition Science
Associate Professor (tenured)
2008-

Vertical Impact, Las Vegas, Nevada
Leadership and Grant Writing Consultant
2005-2008

Develop partnerships among local faith based organizations, community groups and philanthropic organizations for the purpose of strengthening at-risk families and teenagers within Las Vegas, NV. Key areas of responsibility included needs assessment, proposal development, and project implementation.

University of North Carolina, Department of Nutrition
Assistant Professor
2004-2006

University of North Carolina, Department of Medicine
Research Assistant Professor
2002-2006 ,

University of North Carolina, Gastrointestinal Biology and Disease Center and Gene Therapy Center

Post-doctoral Fellow

2000- 2002

NIH F31 Post-doctoral fellow, University of North Carolina

1999-2002

NIH F30 Pre-doctoral fellow, University of North Carolina

1998-1999

Pharmacia & UpJohn Inc., Clayton, North Carolina

Research Technician, Research and Development

1996

Publications

a. Refereed papers

Isayama, F., Milton, J.M., Gillis, D.A., Moore, S., Hines, I.N. and Wheeler, M.D. Fas regulates the M2-macrophage and fibrogenic phenotype in a model of chronic ethanol-induced hepatocellular injury. *Amer. J. Pathol.* Accepted.

Myers, K., Goad, T.N., Cox, J.J., Hickner, R.C., Ivanescu, A.E., Wheeler, M.D. and Cortright, R.N. Dietary Omega-3 Intakes in Southern African American and Southern Caucasian Women. *Nutr. Research.* Accepted.

Moore, S., Milpass, L.R., Holt, V.V., Hines, I.N., and Wheeler, M.D. Fatty acid binding protein-5 limits the anti-inflammatory response in murine macrophages. *Molecular Immunol.* 67 (2):265-75, 2015.

Kremer, M., Son, G., Zhang, K., Moore, S. S., Norris, A., G. Manzini, MD Wheeler and IN Hines. Smad3 signaling in the regenerating liver: Implications for regulation of IL6 expression. *Transplant International.* 27(7):748-58, 2014.

Schemmer P, Zhong Z, Galli U, Wheeler MD, Xiangli L, Bradford BU, Conzelmann LO, Forman D, Boyer J, Thurman RG. Glycine reduced platelet aggregation. *Amino Acids* . 44(3):925-31, 2013.

Kremer M, Thomas E, Milton RJ, Perry AW, Rooijen NV, Wheeler MD, Zacks S, Fried M, Rippe RA and Hines IN. Kupffer cell and IL12-dependent loss of natural killer T cells in hepatosteatosis. *Hepatology*, 51(1):130-41. 2010.

Check J, Byrd CL, Hines IN, and. Wheeler MD. Src kinase participates in LPS-induced activation of NADPH oxidase. *Mol. Immunology.* 47: 756-62. 2010.

Kremer M, Perry AW, Milton RJ, Rippe RA, Wheeler MD, Hines IN. Pivotal role of Smad3 in a mouse model of T cell-mediated hepatitis. *Hepatology* 47:113-26. 2008.

Hines I.N., Kremer M., Isayama F., Perry A.W., Milton R.J., Black A.L., Byrd C.L., Wheeler M.D. Impaired liver regeneration and increased oval cell numbers following T cell-mediated hepatitis. *Hepatology*. Jul;46(1):229-41. 2007.

Froh M, Conzelmann L, Walbrun P, Netter S, Wiest R, Wheeler MD, Lehnert M, Uesugi T, Scholmerich J, Thurman RG. Heme oxygenase-1 overexpression increases liver injury after bile duct ligation in rats. *World J Gastroenterol*. Jul 7;13(25):3478-86. 2007.

Conzelmann LO, Hines IN, Kremer M, Perry AW, Lemasters JJ, Wheeler MD. Extrahepatic cells contribute to the progenitor/stem cell response following reduced-size liver transplantation in mice. *Exp Biol Med*. Apr;232(4):571-80. 2007.

Conzelmann, L.O., Lehnert, M., Kremer, M., Zhong, Z., Wheeler, M.D., Lemasters, J.J. Graft tumor necrosis factor receptor-1 protects after mouse liver transplantation whereas host tumor necrosis factor receptor-1 promotes injury. *Transplantation*. 82(9):1214-20, 2006.

Crews, F.T., Bechara,R. Brown, L.A., Guidot, D.M., Mandrekar, P., Oak,S., Qin,L., Szabo,G. Wheeler, M.D. and Zou, J. Cytokines and Alcohol. *Alc.Clin.Exp.Res*. 4: 720-730, 2006.

Kremer M, Hines IN, Milton RJ, Wheeler MD. Favored T helper 1 response in a mouse model of hepatosteatosis is associated with enhanced T cell mediated hepatitis. *Hepatology*. 44(1):216-27, 2006.

Isayama, F., Hines, I.N., Milton,R.J. McKim,S.E., Parsons,C. Rippe,R.A., Wheeler, M.D. LPS signaling enhances hepatic fibrogenesis caused by experimental cholestasis in mice. *Amer. J. Physiol.* 290:G1318-28. 2006.

Bradford B.U., H. Kono, F. Isayama, O. Kosyk, M.D. Wheeler, T.E. Akiyama, L. Bleye, K.W. Krausz, F.J. Gonzalez, D.R. Koop and I.Rusyn. Cytochrome P450 CYP2E1, but not nicotinamide adenine dinucleotide phosphate oxidase, is required for ethanol-induced oxidative DNA damage in rodent liver *Hepatology* ;41:336-344,2005.

Isayama, F., M. Froh, M.Yin, L.O. Conzelmann, R. J. Milton, S.E. McKim, and M.D. Wheeler. TNF α -induced Ras activation caused by chronic ethanol promotes hepatocellular proliferation independently of liver injury in mice. *Hepatology*. 39:721-31 2004.

McKim SE, E. G  bele, F. Isayama, J.C. Lamber, L.M. Tucker, M.D. Wheeler, H.D. Connor, R.P. Mason, M.A. Doll, D.W. Hein and G.E. Arteel. Inducible nitric oxide synthase is required in alcohol-induced liver injury: studies with knockout mice. *Gastroenterology*, 125(6):1834-44, 2003.

Froh, M. M.D. Wheeler and R.G. Thurman. A new method of delivering gene altered Kupffer cells to rat liver: Studies in an ischemia-reperfusion model. *Gastroenterology*. 124:172-83, 2003.

M.D Wheeler and R.G. Thurman. Upregulation of CD14 due to acute ethanol in mice involves oxidant-dependent activation of AP-1. *J. Biol. Chem.* 278: 8435-41, 2003.

Lehmann, T.G., M.D. Wheeler, M. Froh, R. Schwabe, H. Bunzendahl, R.J. Samulski, J.J. Lemasters, D.A. Brenner and R.G. Thurman. Effects of three superoxide dismutase genes delivered with an adenovirus on graft function after transplantation of fatty livers in the rat. *Transplantation*. 76:28-37, 2003.

Conzelmann, L.O., Z. Zhong, H. Bunzendahl, M.D. Wheeler and J.J. Lemasters. Reduced-size liver transplantation in the mouse. *Transplantation*, 76: 496-501, 2003.

Wheeler, M.D. O.M. Smutney and R.J. Samulski. Secretion of extracellular superoxide dismutase from muscle transduced with recombinant adenovirus inhibits the growth of B16 melanomas in mice. *Mol Cancer Research*. 1(12):871-81, 2003.

Isayama F., M. Froh, B.U. Bradford, S.E. McKim, M.B. Kadiiska, H.D. Connor, R.P. Mason, D.R. Koop, M.D. Wheeler, G.E. Arteel. The CYP inhibitor 1-aminobenzotriazole does not prevent oxidative stress associated with alcohol-induced liver injury in rats and mice. *Free Radic Biol Med*. 35(12):1568-81, 2003.

Zhong, Z, M. Froh, M.D. Wheeler, R.J. Samulski and R.G. Thurman. Viral gene delivery of superoxide dismutase attenuates experimental cholestasis-induced liver fibrosis in the rat. *Gene Therapy*. 2002, 9:183-91.

Uesugi, T., M. Froh, G.E. Arteel, B.U. Bradford, M.D. Wheeler, E. Gabele, F. Isayama and R.G. Thurman. Role of lipopolysaccharide binding protein in early ethanol-induced liver injury in mice. *J. Immunol.* 168:2963-9. 2002.

Arteel, G.E., T. Uesugi, L.N. Bevan, E. Gabele, M.D. Wheeler, S.E. McKim and R.G. Thurman. Green tea extract protects against early alcohol-induced liver injury in rats. *Biol. Chem.* 383:663-70, 2002.

Israel Y, F.T. Crews, R.G. Thurman, G.C. Tu, E. Garver, B. Ponnappa, E. Karahanian, R. Rubin, B. Hoplight, M. Sethna, R. Hanes, M.B. Wilkie, M.D. Wheeler. Gene and antisense delivery in alcoholism research. *Alcohol Clin. Exp. Res.* 26:582-5, 2002.

Froh, M., M.D. Wheeler and R.G. Thurman. Molecular evidence for glycine-gated chloride channels in macrophages and leukocytes. *Amer. J. Physiol.* 283: G856-63, 2002.

Wheeler, M.D., O.M. Smutney, R. Schoonhoven, R. Schulte-Hermann and R.G. Thurman. Impaired Ras function and liver regeneration following partial hepatectomy in PPAR α deficient mice. *Amer. J. Physiol.* 283:G856-63, 2002.

Wheeler M. D., H. Kono, M. Yin, H. Connor, I. Rusyn, R. J. Samulski and R. G. Thurman. Delivery of the Cu/Zn-superoxide dismutase gene with adenovirus reduces early alcohol-induced liver injury. *Gastroenterology* 120(5):1241-50, 2001.

Wheeler, M.D., S. Yamashina, I. Rusyn and R. G. Thurman Adenoviral gene delivery can inactivate Kupffer cells: Role of oxidants in NF κ B activation and cytokine production. *J. Leuk Biol.* 69(4):622-30. 2001.

Zhi, Z., M.D. Wheeler, H.D. Connor, R. P. Mason and R. G. Thurman. Viral delivery of superoxide dismutase reduces cyclosporin A – induced nephotoxicity *Kidney Int.* 59(4):1397-1404. 2001.

Yin, M. B.U. Bradford, M.D. Wheeler, T. Uesugi, M. Froh, S. Goyert. and R.G. Thurman. Reduced early alcohol-induced liver injury in CD14-deficient mice. *J. Immunol.* 166(7):4737-42. 2001.

Xiangli, L., B.U. Bradford, M.D. Wheeler, S.A. Stimpson, H.M. Pink, T.A. Brodie, J.H. Schwab and R.G. Thurman. Glycine prevents peptidoglycan polysaccharide-induced reactive arthritis in the rat: Role for a glycine-gated chloride channel. *Infect. Immun.* 69:5883-91. 2001.

Wheeler, M.D. *, M. Nakagami*, B. U. Bradford, H.D. Connor, A. Dikalova, M. Kadiiska, R.P. Mason, and R.G. Thurman. Overexpression of manganese superoxide dismutase prevents alcohol-induced liver injury in rats. *J. Biol. Chem.* 276: 36664-72. 2001. * equally contribution authors.

Yin, M. E. Gabelle, M.D. Wheeler, H. Connor, B.U. Bradford, A. Dikalova, I. Rusyn, R.P. Mason and R.G. Thurman. Alcohol-induced free radicals: direct toxicants or signaling molecules? *Hepatology*, 34:935-42, 2001.

Yamashima, S., Rusyn, I, Wheeler, M. D., Rusyn, E. V., Cox, A. D. and R. G. Thurman. Endothelial cells contain a glycine-gated chloride channel. *Nutr. Cancer.* 2001, 40:197-204.

Yin, M., M. D. Wheeler, H.D. Connor, Z. Zhong, H. Bunzendahl, A. Dikalova, R. J. Samulski, R. Schoonhoven, R.P. Mason, J.A. Swenberg and R. G. Thurman. Adenoviral gene delivery of Cu/Zn-superoxide dismutase attenuates ischemia/reperfusion-induced acute renal failure in the rat. *Kid. Int.* 12:2691-700, 2001.

Uesugi T, M. Froh, G.E. Arteel, B.U. Bradford, E. Gabele, M.D. Wheeler and R.G. Thurman. Delivery of IkappaB superrepressor gene with adenovirus reduces early alcohol-induced liver injury in rats. *Hepatology*. 34:1149-57, 2001.

Wheeler, M.D., M. Katuna, O.M. Smutney, H.R. Connor, R.P. Mason and R.G. Thurman. Comparison of gene delivery of SOD isoforms in a model of acute hepatic oxidative stress. *Human Gene Ther.* 12:2167-77, 2001.

Wheeler, M. D., R.F. Stachlewitz, S. Yamashima, K. Ikejima, A.L. Morrow and R. G. Thurman. Glycine-gated chloride channels in neutrophils attenuate calcium influx and superoxide production. *FASEB J.* 14: 476-84, 2000.

Yin, M., K. Ikejima, M. D. Wheeler, B. U. Bradford, V. Seabra, D. T. Forman, N. Sato, and R. G. Thurman. Estrogen is involved in early alcohol-induced liver injury in a rat enteral feeding model. *Hepatology* 31: 117-123, 2000.

Lehmann, T. G., M. D. Wheeler, R. Schoonhoven, H. Bunzendahl, R. J. Samulski, and R. G. Thurman. Delivery of Cu/Zn-superoxide dismutase genes with a viral vector minimizes liver injury and improves survival after liver transplantation in the rat. *Transplantation* 69: 1051-1056, 2000.

Kono, H. N. Enomoto, H. D. Connor, M. D. Wheeler, B. U. Bradford, C.A. Rivera, M.B. Kadiiska, R.P. Mason, and R.G. Thurman. Medium-chain triglycerides inhibit free radical formation and TNF α production in rats given enteral ethanol. *Am. J. Physiol.* 278: G467-76. 2000.

Kono, H., M. D. Wheeler, I. Rusyn, M. Lin, V. Seabra, C. A. Rivera, B. U. Bradford, and R. G. Thurman. Gender differences in early alcohol-induced liver injury: Role of CD14, NF- κ B and TNF- α . *Am.J.Physiol.* 278: G652-G661, 2000.

Wheeler, M.D., M. L. Rose, S. Yamashima, N. Enomoto, V. Seabra, J. Madron, and R. G. Thurman. Glycine differentially activates white blood cell glycine-gated chloride channels: implications in endotoxin shock model. *Am. J. Physiol.* 279: L390-8. 2000

Wheeler, M. D., H. Kono, I. Rusyn, G.A. Arteel, , D. McCarty, R. J. Samulski and R. G. Thurman. Chronic ethanol increases adeno-associated viral transgene expression in rat liver via oxidant and NF-kappa B dependent mechanisms. *Hepatology* 32(5):1050-9, 2000.

Lehmann, T.G., M.D. Wheeler, R.F. Schwabe, H.D. Connor, R. Schoonhoven, H. Bunzendahl, D.A. Brenner, R.J. Samulski and R.G. Thurman. Gene delivery of Cu/Zn-superoxide dismutase improves graft function after transplantation of fatty livers in the rat. *Hepatology*, 32(6):1255-64, 2000.

Yamashima, S., Wheeler, M. D. and R. G. Thurman. Ethanol-induced tolerance and sensitization to LPS: Involvement of IRAK. *Biochem Biophys Res Commun.* 277(3):686-90 2000.

Yin, M., M. D. Wheeler, H. Kono, B. U. Bradford, R. M. Gallucci, M. I. Luster, and R. G. Thurman. Essential role of tumor necrosis factor α in alcohol-induced liver injury. *Gastroenterology* 117: 942-952, 1999.

Wheeler, M. D. and R. G. Thurman. Production of superoxide and TNF α from alveolar macrophages is blunted by glycine. *Am.J.Physiol.* 277: L952-L959, 1999.

Rivera, C. A., M. D. Wheeler, N. Enomoto, and R. G. Thurman. A choline-rich diet improves survival in a rat model of endotoxin shock. *Am J Physiol* 275: G862-G867, 1998.

b. Book chapters and reviews (refereed)

Moore, S., Kremer, M., Sanderlin, E. J., Wheeler, M. D., & Hines, I. N. Emerging roles for lipids in the hepatic innate immune response. *Journal of Human Nutrition and Food Science*, 12, 1009-101, 2014.

Wheeler, MD and Blackburn G.L. Physiology and Food Intake. In: Colby, S, ed; *Food Behaviors*. Kendall Hunt Publishers.

Crews FT, Bechara R, Brown LA, Guidot DM, Mandrekar P, Oak S, Qin L, Szaba G, Wheeler, MD and Zao J. Cytokines and Alcohol. *Alc Clin Exp Res* 30: 720-730, 2006.

Wheeler, M.D. Ethanol and Hepatic C: The Perfect Storm. *Gastroenterology*. 2004.

Hines, I.N. and M.D. Wheeler. Recent advances in alcoholic liver disease III. Role of the innate immune response in alcoholic hepatitis. *Am J Physiol*. 287(2):G310-42004

Wheeler, M.D. Endotoxin and alcoholic liver disease. *Alcohol Research and Health*. 27(4):300-6, 2003.

Zhong, Z., Wheeler, M.D., Li, X., Froh, M., Schemmer, P., Yin, M., Bunzendaal, H., Bradford, B. and Lemasters J.J. L-Glycine: a novel antiinflammatory, immunomodulatory, and cytoprotective agent. *Curr Opin Clin Nutr Metab Care*. 6(2):229-40, 2003.

Wheeler M.D., H. Kono, M. Yin, M. Nakagami, T. Uesugi, G.E. Arteel, E. Gäbele, I. Rusyn, S. Yamashina, M. Froh, Y. Adachi, Y. Iimuro, B.U. Bradford, H.D. Connor, R.P. Mason, S.M. Goyert, J. M. Peters, F.J. Gonzalez and R.G. Thurman. The role of Kupffer cell oxidant production in early ethanol-induced liver disease: a toxicant or a signal? *Free Rad. Biol. Med.* 31:1544-1549, 2001.

M. Yin, M.D. Wheeler, H. Kono, I. Rusyn, B.Bradford, G. Galluchi, M. Luster, S. Goyert, S. Holland, J. Peters, F.J. Gonzalez and R. G. Thurman. Role of Kupffer cells, endotoxin and TNF α in alcoholic liver disease: studies with knockout mice. In Wisse, E., D. L. Knook, R. de Zanger and M.J.P. Arthur, eds. *Cells of the hepatic sinusoid*. Leiden, The Netherlands, The Kupffer Cell Foundation. 2001, 71-74.

Wheeler, M. D., S. Yamashina, I. Rusyn, and R. G. Thurman. Adenoviral gene delivery can activate Kupffer cells: role of oxidants in NF κ B activation and cytokine production. In Wisse, E., D. L. Knook, R. de Zanger and M.J.P. Arthur, eds. *Cells of the hepatic sinusoid*. Leiden, The Netherlands, The Kupffer Cell Foundation. 2001, 148-151.

Wheeler, M. D., V. Seabra, and R. G. Thurman. Molecular evidence for glycine-gated chloride channel in Kupffer cells. In Wisse, E., D. L. Knook, and K. Wake, eds. *Cells of the hepatic sinusoid*. Leiden, The Netherlands, The Kupffer Cell Foundation. 1999, 153-155

Wheeler, M. D., K. Ikejima, N. Enomoto, R. F. Stachlewitz, V. Seabra, Z. Zhong, P. Schemmer, M. L. Rose, I. Rusyn, B. U. Bradford, and R. G. Thurman. Glycine: a new anti-inflammatory immunonutrient. *Cell Mol. Life Sci.* 56: 843-856, 2000.

Wheeler, M. D., V. Seabra, and R. G. Thurman. Molecular evidence for glycine-gated chloride channel in Kupffer cells. In Wisse, E., D. L. Knook, and K. Wake, eds. Cells of the hepatic sinusoid. Leiden, The Netherlands, The Kupffer Cell Foundation. 1999, 153-155.

c. Proceedings and Abstracts.

Moore, S.A., Hines, I.N. and M.D. Wheeler. Differential expression of FABP in both parenchymal and non-parenchymal liver cells following chronic ethanol exposure. *Alc. Clin. Exp. Res.* 2011.

Gearhart, K., Menio, J.E. and M.D. Wheeler. Loss of TNFR1 up-regulates hepatic SIRT1 expression: possible role of micro inhibitory RNA processing factor DICER. *FASEB* 2011.

Moore, S.A., Hines, I.N. and M.D. Wheeler. Role of FABP in liver immune cell activation following ethanol exposure. *FASEB* 2011.

Romano E., Menio J.E., Threadgill D.W., and M.D. Wheeler. Phenotypic linkage of hepatic fibrogenesis to circadian rhythm and circadian loci in CxB RI mice. *Alc. Clin. Exp. Res.* 2010.

Menio J.E, Hines, IN and and M.D.Wheeler. The role of TNF α in circadian rhythmic responses and the regulation of metabolic regulator SIRT1 in liver. *FASEB*. 2010.

Pope B.A., Menio, J.E, Ding J, and M.D. Wheeler. Circadian regulator PER2 plays a critical role in regulating fat metabolism and the development of fatty liver disease. *FASEB*. 2010.

Hines, I.N., Milton, R.J., Byrd, C.L. Black, A.L., Kremer, M., and M.D. Wheeler. Deficiency in PPAR α prevents conconavolin A mediated hepatitis. *Alc. Clin Exp Res.* 2006.

Hines, I.N., Milton, R.J., Black, A.L., Kremer, M., and M.D. Wheeler. Opposing roles for IFN γ and IL4 in the development of cholestasis-induced hepatic fibrosis. *Alc. Clin Exp Res.* 2006.

Kremer M., Hines, I.N., Milton, R.J., and M.D. Wheeler. Hepatocellular fat accumulation exacerbates T helper 1 cell mediated hepatitis in the mouse. *Alc. Clin Exp Res.* 2006.

Milton, R.J., I.N. Hines and M.D. Wheeler. Tumor Necrosis Factor alpha Signaling is Involved in Choline Deficient Diet Induced Steatosis. *FASEB J.* 2005

Hines, I.N., R.J. Milton and M.D. Wheeler. Role of Interleukin 4 in Early Cholestatic Liver disease in Mice *FASEB J* 2005.

Wheeler, M.D. Redox regulation of AP-1 by ethanol: Control of CD14 expression. *Alc. Clin. Exp. Res.* 2004.

Isayama, F., R.J. Milton, I.N. Hines, and M.D. Wheeler. Possible interaction between T cell influx and apoptosis in alcohol-induced hepatic fibrosis. *Alc. Clin. Exp. Res.* 2004.

Hines, I.N., F. Isayama, R.J. Milton and M.D. Wheeler. ConA enhances hepatic stem cell proliferation in response to partial hepatectomy: Inhibitory role of liver natural killer cells. *Alc. Clin. Exp. Res.* 2004.

Milton, R.J., C. Monroe and M.D. Wheeler. Fatty liver intensifies CCl₄-induced hepatic fibrosis and infiltration of cytotoxic CD8⁺ T cells. *Alc. Clin. Exp. Res.* 2003.

Wheeler, M.D., J. Check and C.L. Byrd. The role of PI3 kinase and src kinase in LPS-induced activation of NADPH oxidase in macrophages. *FASEB J.* 2004.

Isayama, F., M. Froh, M. Yin, L.O. Conzelmann, R. J. Milton, S.E. McKim, and M.D. Wheeler. TNF α -induced Ras activation caused by chronic ethanol promotes hepatocellular proliferation independently of liver injury in mice. *Alc. Clin. Exp. Res.* 2003.

Wheeler, M.D., M. Yin and M. Froh. Differential activation of H-, K-, N-, and R- Ras isoforms following chronic ethanol in TNF-R1 deficient mice. *Alcohol. Clin. Exp. Res.* 2002.

Wheeler M.D. PI3-Kinase associates with activated CD14 receptor complex and is required for LPS-induced activation of NADPH oxidase in macrophages. *Alcohol. Clin. Exp. Res.* 2002.

L.O. Conzelmann, O.M. Smutney, J.Wang, J.J. Lemasters, M.D. Wheeler. GFP⁺ transgenic-derived stem cells require IL-6 but not TNF α to repopulate reduced-size transplanted mouse livers. *Hepatology* 36: 201A, 2002.

L.O. Conzelmann, O.M. Smutney, Z. Zhong, J.J. Lemasters, M.D. Wheeler. Role of TNF α in hepatic regeneration after full-size and reduced-size liver transplantation and partial hepatectomy in knockout mice. *Hepatology* 36: 201A, 2002.

Lehman, T.G., M.D. Wheeler, R.F. Schwabe, H. Bunzeldahl, R.J. Samulski, D.A. Brenner and J.J. Lemasters. Inhibition of NF-KB alone does not reduce ischemia/reperfusion injury after liver transplantation in the rat. *Hepatology* 36: 214A, 2002.

Isayama, F., S.E. McKim, M.D. Wheeler, B.U.Bradford, D.A. Brenner, G.E. Arteel. Role of LPS binding protein in cholestatic liver fibrosis in mice. *Hepatology* 36: 260A, 2002.

Clark, J.B., M.D. Wheeler, D.A. Gerber, J.H. Fair, B.A. Cairns, X. Zeng and J. Wang. Hepatic progenitor proliferation regulated by peroxisome proliferator-activated receptor alpha, possibly via TGF β 1 and IL6. *Hepatology* 36: 428A, 2002.

Wheeler, M. D. Nakagami, M., Uesugi, T. and Thurman, R. G. Delivery of manganese-superoxide dismutase by adenovirus reduced alcohol-induced liver injury in rats. *Toxicologist*. 60, 346. 2001.

Smutney, OM, Rusyn, I, Wheeler, MD, Schoonhoven, R, and Thurman, RG. Adenoviral delivery of superoxide dismutase prevents hepatic cell proliferation due to the peroxisome proliferator WY-14,643. *Toxicologist* 60:760, 2001

Bradford, BU, Wheeler, MD, and Thurman, RG. The role of tumor necrosis factor alpha in fatty acid metabolism in the isolated perfused rat liver. *Alcohol. Clin. Exp. Res.* 25:132A, 2001.

Wheeler, M.D. Yamashina, S. and Thurman, R.G. Sensitization of LPS due to acute ethanol is mediated by oxidative stress in mouse liver. *Alc Clin Exp Res.* 25: 132A, 2001.

Thurman, R.G., and M.D. Wheeler. Glycine: a new anti-inflammatory immunonutrient. *Shock,* 13 :160, 2000.

Wheeler, M. D., Yamashina, S., and Thurman, R. G. Kupffer cell production of TNF α and activation of NF- κ B is oxidant dependent: Studies with adenoviral vectors. *Alcohol Clin Exp Res.* 24: 65A. 2000.

Arteel, G.E., Nakagami, M., Wheeler, M.D., and Thurman, R.G. Activation of nuclear factor (NF)- κ B by chronic alcohol in the pancreas. *Alcohol.Clin.Exp.Res.*, 24: 132A, 2000.

Zhong, Z., Wheeler, M.D., Connor, H.D., Yin, M., Mason, R.P., and Thurman, R.G. Viral gene delivery of superoxide dismutase prevents cyclosporin A (CsA)-induced hydroxyl radical production in the rat kidney. *FASEB J.*, 14: A200, 2000.

Yin, M., Wheeler, M.D., Kono, H., Rusyn, I., Bradford, B.U., Gallucci, R.M., Luster, M.I., Goyert, S.M., Holland, S.M., and Thurman, R.G. Role of Kupffer cells, endotoxin and tumor necrosis factor in alcohol-induced liver injury: studies with knockout mice. *Jpn.J.Alcohol Drug Dep.*, 35:133, 2000.

Yamashina, S., Wheeler, M.D., and Thurman, R.G. Ethanol-induced tolerance and sensitization to LPS in the mouse Kupffer cells involves IRAK. *Hepatology* 32:409A, 2000

Lehmann, T.G., Wheeler, M.D., Schwabe, R.F., Schoonhoven, R., Bunzendahl, H., Brenner, D.A., Samulski, R.J., and Thurman, R.G. Gene delivery of Cu/Zn-superoxide dismutase protects against primary organ failure after transplantation of fatty livers in the rat. *Hepatology* 32:207A, 2000.

Yin, M., Bradford, B.U., Wheeler, M.D., Uesugi, T., Goyert, S.M., and Thurman, R.G. Important role of CD14 receptor in early alcohol-induced liver injury. *Hepatology* 32:408A, 2000

Zhong ,Z, Froh, M, Wheeler, MD, and Thurman, RG. Viral Gene Delivery of Superoxide Dismutase Prevents Experimental Cholestasis-Induced Liver Injury in the Rat. *Hepatology* 32:180A, 2000.

Wheeler, M. D., Kono, H., McCarthy, D., Samulski, R. J., and Thurman, R. G. Gene delivery of superoxide dismutase blunts injury in the liver due to ischemia-reperfusion and chronic ethanol. *Alcohol Clin Exp Res* 23,113A. 1999.

Wheeler, M. D., Kono, H., McCarty, D, Samulski, R. J., and Thurman, R. G. Chronic enteral ethanol causes transduction of adeno-associated virus in the liver. *Toxicologist* 48, 196. 1999.

Yamashina, S., Rusyn, I., Wheeler, M. D., and Thurman, R. G. Endothelial cells have a glycine-gated chloride channel. *Hepatology* 30, 253A. 1999.

Wheeler, M. D., Kono, H., and Thurman, R. G. Recombinant adenovirus transduces Kupffer cells via alpha V beta 5 integrins. *Hepatology* 30, 339A. 1999.

Lehmann, T. G., Wheeler, M. D., Schoonhoven, R., Bunzendahl, H., Samulski, R. J., and Thurman, R. G. Adenoviral gene delivery of Cu/Zn-superoxide dismutase minimizes liver injury and improves survival after liver transplantation in the rat. *Hepatology* 30, 298A. 1999.

Wheeler, M. D., Stacklewitz, R. F., and Thurman, R. G. Glycine blunts alveolar macrophage activation by a mechanism involving a glycine-gated chloride channel. *Toxicologist* 37, 346. 1998.

d. Invited lectures

- 2014 Research Society on Alcoholism
- 2007 University of California San Diego, Department of Medicine
- 2005 Research Society on Alcoholism
- 2005 Case Western Reserve University
- 2004 Research Society on Alcoholism
- 2004 Research Society on Alcoholism
- 2004 Wake Forest University School of Medicine
- 2004 British Toxicological Society
- 2003 Duke University, Department of Medicine
- 2003 Appalachian State University
- 2003 Research Society on Alcoholism
- 2003 National Institute of Alcoholism and Alcohol Abuse
- 2002 Research Society on Alcoholism
- 2002 Juntendo University, Tokyo Japan
- 2002 Research Society on Alcoholism, RG Thurman Memorial Symposium
- 2002 Wake Forest University, Department of Internal Medicine
- 2001 Association of Clinical Sciences
- 2000 Raleigh Christian Academy
- 2000 International Symposia on Cells of the Hepatic Sinusoid
- 1999 Appalachian State University
- 1999 NIAAA Trainee Workshop, Indiana University

East Carolina University

- 2011 Department of Pharmacology
- 2009 Sleep Center Interdisciplinary Conference
- 2008 Department of Nutrition

University of North Carolina

- 2004 Department of Nutrition
- 2003 Department of Cell Biology and Physiology
- 2003 Center for Gastrointestinal Biology and Disease
- 2002 Center for Alcohol Studies
- 2001 Department of Pathology
- 1998 Center for Alcohol Studies

1998 Department of Genetics
 1997 Gene Therapy Center
 1997 Department of Pharmacology

Research Grants, Contracts and Fellowships

- 2010-2013 R21AA019474, Genetic control of hepatic fibrosis
 PI-Michael Wheeler
 \$350,152 (Total budget)
- 2010-2013 R15,AA019559, Hepatic lymphocytes and fatty liver disease
 PI-Michael Wheeler
 \$215,250 (Total budget)
- 2004-2009 R01, ES012686, Molecular mechanisms of phthalate-induced carcinogenesis
 Co-investigator (PI-Ivan Rusyn)
 \$1,632,191 (total budget)
- 2003-2008 R01, DK055686, Hepatic stellate cell activation induced by HCV
 Subcontract PI- Michael Wheeler (Primary- David Brenner, Columbia Univ.)
 \$190,846 (total budget)
- 2003-2008 R01, AA014243, Acute ethanol-induced innate immune response in liver
 PI- Michael Wheeler
 \$1,326,765 (total budget)
- 2003-2008 P50 AA011605, Molecular and Cellular Pathogenesis and Alcoholism,
 Co-investigator (Research Component 2), PI- Fulton Crews
 \$9,985,928 (total budget)
- 2002-2007 K01 AA13667, NIAAA, Cell type gene delivery and alcoholic liver disease
 PI- Michael Wheeler
 \$561,164 (total budget)
- 2004-2006 Pilot/Feasibility, Genetic analysis of alcoholic liver disease in mice.
 Co-investigator (PI-Ivan Rusyn)
 \$15,000 (total budget)
- 2001-2003 P30 DK34987, Pilot/ Feasibility Grant, Hepatic gene delivery using recombinant AAV serotypes, \$12,000 (total budget for funding period)
- 2001-2002 Post-doctoral Fellowship, University of North Carolina, Curriculum in Toxicology
- 2001-2003 Post-doctoral Fellowship, University of North Carolina, Center for Alcohol Studies

- 1999-2000 F31-AA05551, Recombinant AAV and Oxidative Stress, \$19,265 (total for funding period)
- 1998-1999 F30-AA-07573, Pre-doctoral Fellowship, University of North Carolina, Center for Alcohol Studies
- 1994-1996 A.R. Smith Research Scholar

Service and Professional Activities

a. Editorial/Review Activities

2006- Ad Hoc Reviewer for NIH (NIAAA/NIDDK)

2003- Ad Hoc Reviewer for EPA/FDA Scientific Advisory Council

1998- Occasional Ad Hoc Reviewer for:

Alcoholism: Clinical and Experimental Research
American Journal of Physiology
Carcinogenesis
Gastroenterology
FASEB Journal
Hepatology
Journal of Clinical Investigations

b. Professional Meetings Attended

- 2014 Research Society on Alcoholism, Bellevue, WA
 2011 Research Society on Alcoholism, Atlanta, GA
 2011 Experimental Biology, Washington, DC
 2010 Research Society on Alcoholism, San Antonia, TX
 2010 Experimental Biology, Anaheim, CA
 2005 Research Society on Alcoholism, Santa Barbara, CA
 2005 Experimental Biology, San Diego CA
 2004 Research Society on Alcoholism, Vancouver, British Columbia
 2004 British Toxicological Society, Edinburgh UK
 2004 Experimental Biology, Washington DC
 2003 Research Society of Alcoholism, Ft. Lauderdale Florida
 2002 American Association for the Study of Liver Diseases, Boston, Massachusetts
 2002 Society of Toxicology, Nashville, Tennessee
 2002 International Ronald G. Thurman Memorial Symposium, Tokyo Japan
 2001 Research Society on Alcoholism, San Francisco, California
 2001 American Association for the Study of Liver Diseases, Dallas, Texas
 2001 Research Society on Alcoholism, Montreal, Canada
 2001 Association of Clinical Sciences, Chapel Hill, North Carolina
 2001 Society of Toxicology, San Francisco, California
 2000 10th International Meeting of Cells of the Hepatic Sinusoid, Southampton, England
 2000 Research Society on Alcoholism, Denver, Colorado
 1999 Society of Toxicology, New Orleans, Louisiana
 1999 Research Society on Alcoholism, Santa Barbara, California
 1999 American Association for the Study of Liver Diseases, Dallas, Texas
 1999 NIAAA Workshop, Indianapolis, Indiana

- 1998 9th International Symposia on Cells of the Hepatic Sinusoid, Christchurch, New Zealand
 1998 Research Society on Alcoholism, Hilton Head, South Carolina
 1998 Society of Toxicology, Seattle, Washington
 1997 Research Society on Alcoholism, San Francisco, California
 1996 North Carolina American Chemical Society, Greenville, North Carolina
 1996 Organic Chemistry Symposium, Blacksburg, Virginia

Teaching Activities

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|------------|--|
| 2014- | Nutrition and Disease (NUTR 4700) ECU |
| 2009- | Nutrition Science (NUTR 2105) ECU |
| 2009- | Nutritional Metabolism and Biochemistry (NUTR 3105) ECU |
| 2008- | Nutritional Metabolism and Biochemistry (NUTR 6105) ECU |
| 2006 | Mechanism of Disease (Nutr 305) UNC |
| 2004-2006 | Nutritional Biochemistry (Nutr 110) UNC |
| 2003 | Biochemical and Molecular Toxicology, UNC |
| 1999 | Grant Writing, Department of Pharmacology, UNC (lecture) |
| 1995- 1996 | Organic Chemistry Laboratory, Appalachian State University (lecture) |
| 1994- 1996 | General Chemistry, Appalachian State University (lecture) |

Laboratory Alumni

a. Post-doctoral fellows (and subsequent positions)

- | | |
|--|------------|
| Michael Kremer, M.D. Department of Surgery University of Heidelberg Heidelberg, Germany | 2004- 2006 |
| Ian Hines, Ph.D. Department of Medicine University of North Carolina Chapel Hill, NC | 2003- 2006 |
| Fuyumi Isayama, M.D. Juntendo University Department of Surgery Tokyo, Japan | 2002- 2004 |
| Akira Konno, M.D. Juntendo University Department of Medicine Tokyo, Japan | 2002 |

b. Graduate Students (degree, graduation date)

- | | |
|------------------------------|-------|
| Sherri Moore (PhD candidate) | 2011- |
|------------------------------|-------|

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|---|-----------|
| Christina Orchina, MS | 2013-2014 |
| Brittny Pope, MS Medical College of South Carolina | 2010-2011 |
| Michelle Loyd, MS | 2010-2011 |
| Christopher McPherson, PhD | 2006 |

c. Undergraduate students

| | |
|--|------------|
| Emma Shirley | 2014- |
| Alexandra Helms | 2014- |
| Caroline McCall | 2013-2015 |
| Chelsea Poole Duke University School of Nursing Durham, NC | 2012-2013 |
| Eileen Romano Physician's Assistant Program Northwestern University Chicago, IL | 2009-2011 |
| Jade Menio Registered Dietetics Program SUNY, Buffalo Buffalo, New York | 2008-2010 |
| Maria Arellano-Banks | 2008-2009 |
| Ashley Wood Durham County School | 2005-2006 |
| Christy Byrd ECU School of Nursing Greenville, NC | 2003-2006 |
| Richard Milton Gordon Cromwell Theological Chicago, Illinois | 2003- 2006 |
| Courtney Munroe School of Pharmacy Wingate University Monroe, North Carolina | 2002- 2004 |
| Stephen McKim UNC Medical School Chapel Hill, North Carolina | 2001-2003 |

Jennifer Check
UNC Medical School
Chapel Hill, North Carolina

2001-2002