

CURRICULUM VITAE

Name: HINES, Ian N.

Office Address: Department of Nutrition Sciences
East Carolina University
Health Sciences 4165F, Mail Stop 668
Greenville, NC 27858
hinesi@ecu.edu
Phone: 252-744-1041
Fax: 252-744-6018

Academic Degrees:

B.A. 1994 – 1998 University of North Carolina at Asheville, Asheville, North Carolina
(**Biology – Magna cum laude**)

Ph.D. 1998 –2002, Louisiana State University Health Sciences Center, Shreveport Louisiana
(**Molecular and Cellular Physiology**)

Work Experience:

Research:

Graduate Research Assistant: Louisiana State University Health Sciences Center-Shreveport, Department of Molecular and Cellular Physiology, from 8-98 to 12-02

- Defined mechanisms of acute ischemic injury to the liver focusing on oxidative stress and immune cell activation

Post-doctoral fellow: University of North Carolina at Chapel Hill, Bowles Center for Alcohol Studies, from 2-03 to 6-06

- Investigated influence of immune cell activation on liver regenerative response with emphasis on identification of hepatic progenitor cell contribution

Post-doctoral fellow: University of North Carolina at Chapel Hill, Department of Medicine, Division of Gastroenterology and Hepatology, from 7-06 to 6-07

- Explored mechanisms of stellate cell activation and hepatic fibrogenesis with emphasis on PI3 kinase signaling in this response

Assistant Professor: University of North Carolina at Chapel Hill, Department of Medicine, Division of Gastroenterology and Hepatology, 7-07 to 6-10.

- Investigated the role of T cell and NKT cell activation during acute and chronic liver disease and the influence which secondary factors such as steatosis have on these immune responses.

Assistant Professor: East Carolina University, Department of Nutrition, 7-10 to 6-15.

- Developed novel models of hepatic lipid accumulation, explored influence of extracellular matrix and growth factors on liver immune cell responses in the acutely and chronically damaged liver as well as in the regenerating microenvironment.

Associate Professor: East Carolina University, Department of Nutrition, 7-15 to present.

- Define novel interactions among extracellular matrix, macrophage function, and liver fibrosis resolution; investigate potential regulation of matrix remodeling by immune cell networks; establish novel in vitro systems to understand immune cell – matrix interactions and key intracellular regulatory networks within.

Teaching:

2000 – 2002 Allied Health Physiology: Cell and Membrane Physiology, Muscle Cell Physiology – LSU School of Public Health, Shreveport, LA

2006 - Nutrition Special Topics Course – Guest Lecture, Autoimmune diabetes – Role of Natural Killer T cells – Department of Nutrition, University of North Carolina

2007-2014 – Nutrition 610 – Alcoholic liver disease, heart failure and hypertension – Guest lecturer, Department of Nutrition, University of North Carolina; Melinda Beck / Liza Makowski course directors

Courses regularly taught at East Carolina University

2010-present Nutrition 6105 – Advanced Nutrition in Physiology and Metabolism

2011-present Nutrition 2105 – Introductory Nutrition

2013 Nutrition 3105 – Nutritional Biochemistry

2015-present Nutrition 2400 – Nutritional Assessment

Administrative:

Director, MS in Nutrition Science Program – 2014- present.

- Manage MS program, revise course curriculum, collect and report assessment data for university accreditation.

Service:***Journal Peer Review***

Journal of Physiology

American Journal of Physiology

Free Radical Biology and Medicine

BMC Clinical Gastroenterology

Experimental Biology and Medicine

Alcohol Research: Current Reviews

Hepatology

Pathophysiology

Gut

PLOS One

Int. Immunopharmacology

Editorial Board

Journal of Human Nutrition and Food Science (assoc. editor)

Grant Review

Medical Research Council (UK) – Ad hoc reviewer

ZAA1 Study Section – NIAAA – Ad hoc reviewer

AA1 Study Section – NIAAA – Ad hoc reviewer

Raine Medical Foundation (Aus) – Ad hoc reviewer

Wellcome Trust Fund (UK) – Ad hoc reviewer

NIAAA Alcohol Center Reviewer – 2012-2013

NIGMS (ZGM1) Center for Biomedical Excellence – 2014

Miscellaneous

National Institute of Environmental Health and Safety Career Fair – Guest Panelist – Academic Career Section – April 25, 2008, Durham North Carolina

North Carolina Society of Toxicology Career Panel Discussion – October 13, 2009, Durham North Carolina

The Franciscan School – Science Fair Judge – 2013-2014.
East Carolina University Faculty Senate Representative – 2012 – 2015.

Undergraduate Students Trained:

Dyna Kim – UNC Chapel Hill Work-study Student Program – Histology and Immunohistochemical Techniques. Chapel Hill, NC September 2008 – May

Sheena Neil – UNC Chapel Hill Undergraduate Research Program – Interrelation between T_h cytokine phenotype, ethanol, and bile acids on hepatic stellate cell function *in vitro*. Chapel Hill, NC Sept 2008 - present

Aaron Rodgers – UNC Chapel Hill Undergraduate Research Program – Influence of gut bacteria on hepatic T lymphocyte function. Chapel Hill, NC Oct 2008 – present.

Cecil Rambarat – UNC Chapel Hill Undergraduate Research Program – Smad3 enhances Kupffer cell activation following LPS challenge and promotes ethanol induced liver injury. Chapel Hill, NC Jan 2009 – present.

Bhushan Desai – UNC Chapel Hill Undergraduate Research Program – Ethanol promotes T helper 2 type cytokine production by natural killer T cells. Chapel Hill, NC Nov 2008 – June 2010.

Kelley Johnson – East Carolina University Undergraduate Research Assistant – Role of integrin signaling in hepatic T cell function and cytokine production. Greenville, NC Sept 2010 – May 2011. ***East Carolina Undergraduate Research Award Recipient, Fall 2010***

Amber Norris – East Carolina University Undergraduate Research Assistant – Involvement of integrin linked kinase signaling in hepatic macrophage function. Greenville, NC Sept 2010 to present. ***East Carolina Undergraduate Research Award Recipient, Spring 2013.***

Sherri Moore – East Carolina University Undergraduate Research Assistant – Mechanisms of ethanol-induced liver injury (co-mentor). Greenville, NC October 2010 to July 2011. ***East Carolina Undergraduate Research Award Recipient Spring 2010.***

Edward Sanderlin – East Carolina University Undergraduate Research Assistant – Role of natural killer T cells in fibrotic liver disease. Greenville, NC January 2011 to present. ***East Carolina Undergraduate Research Award Recipient, Spring 2012.***

Emily Lafella – East Carolina University Undergraduate Research Assistant – Role of integrin signaling in macrophages in the resolution of hepatic fibrogenesis. 2013-2014. ***East Carolina Undergraduate Research Award Recipient, Spring 2014.***

Kelsey Cossio – East Carolina University Undergraduate Research Assistant – Influence of the extracellular matrix on macrophage phenotype and matrix remodeling response. 2015-present. ***East Carolina Undergraduate Research Award Recipient, Spring 2015.***

Graduate Students Trained:

Christopher McPherson – Environmental Toxicology Graduate Student – Role of CX₃CR₁ in Inflammatory Liver Disease – Fall 2005

Douglas Gillis – Department of Nutrition Graduate Student – Impact of Tlr4 signaling on the regulation of hepatic T cell function and cytokine production – December 2010 to August 2011.

Sherri Moore – IDPBS Graduate Student – Regulation of immune cell function by fatty acid binding protein members – August 2011 to present. Committee member and co-mentor.

Christina Orcino – Health and Human Performance Graduate student – Regulation of hepatic macrophage function by Bmal – August 2013 to July 2014. Committee member.

Post-doctoral Fellows trained:

Michael Kremer – UNC Department of Medicine, Division of Gastroenterology and Hepatology – Interactions of hepatic lipid accumulation and liver lymphocyte function. Chapel Hill, NC July 2007- December 2007.

Gakuhei Son – UNC Department of Medicine, Division of Gastroenterology and Hepatology – Mechanisms of stellate cell activation and hepatic fibrogenesis. Chapel Hill, NC May 2009 – June 2010.

Kun Zhang – ECU Department of Nutrition Science – Mechanisms of immune cell regulation in the chronically damaged liver. Greenville, NC July 2011 – August 2012.

Professional Society Memberships:

American Physiological Society
American Gastroenterological Association
Sigma Xi

Awards and Achievements:

Harry Henry Johnson Award for Excellence in Biology – UNC Asheville – 1998

Caroline tum Suden / Frances Hellebrandt Professional Opportunity Award – Experimental Biology – 2001

Proctor and Gamble Professional Opportunity Award – Gastrointestinal section – Experimental Biology – 2001

Poster of Distinction – Liver Microcirculation Section – Digestive Disease Week – 2001

LSUHSC Graduate Research Day Award – Preproposal Class – LSU Health Sciences Center – 2001

Oxygen Society Young Investigator Award – 8th Annual Meeting of the Oxygen Society – 2001

Poster of Distinction – Liver Microcirculation Section – Digestive Disease Week – 2002

Ruth L. Kirchenstein National Research Service Award – National Institute on Alcohol Abuse and Alcoholism – Liver Stem Cell Response to Inflammation and Alcohol – 2004-2006

Society for Experimental Biology and Medicine – Young Investigator Award - Experimental Biology – 2006

Poster of Distinction – Biliary Tract Disease Section – Digestive Disease Week – 2007

Dissertation Title: Role of Reactive Metabolites of Oxygen and Nitrogen in the Pathophysiology of Post-ischemic Liver Injury. Department of Molecular and Cellular Physiology, Louisiana State University Health Sciences Center.

Original Manuscripts:

1. Kawachi S, **Hines IN**, Laroux FS, Hoffman J, Bharwani S, Gray L, Leffer D, Grisham MB. 2000. Nitric oxide and Post-ischemic Liver Injury. *Biochem. Biophys. Res. Comm.* 276 (3): 851-854. *Cited by 90.*
2. **Hines IN**, Harada H, Bharwani S, Pavlick KP, Hoffman JM, Grisham MB. 2001. Enhanced Post-ischemic Liver Injury in iNOS-deficient Mice: A Cautionary Note. *Biochem. Biophys. Res. Comm.* 284 (4): 972-976. *Cited by 49.*
3. Harada H, Pavlick KP, **Hines IN**, Hoffman JM, Bharwani S, Gray L, Wolf RE, Grisham MB. 2001. Selected Contribution: Effects of Gender on Reduced-size Liver Ischemia and Reperfusion Injury. *J. Appl. Physiol.* 91: 2816-2822. *Cited by 76.*
4. **Hines IN**, Kawachi S, Harada H, Pavlick KP, Hoffman JM, Bharwani S, Wolf RE, Grisham MB. 2002. Role of Nitric Oxide in Liver Ischemia and Reperfusion Injury. *Mol. Cell. Biochem.* 234-235: 229-237. *Cited by 82.*
5. **Hines IN**, Hoffman JM, Scheerens H, Day BJ, Harada H, Pavlick KP, Bharwani S, Wolf R, Gao B, Flores S, McCord JM, Grisham MB. 2003. Regulation of Post-ischemic Liver Injury Following Different Durations of Ischemia. *Am J Physiol Gastrointest Liver Physiol.* 284(3): G536-545. *Cited by 48.*
6. Harada H, Pavlick KP, **Hines IN**, Lefer DJ, Hoffman JM, Bharwani S, Wolf RE, Grisham MB. 2003. Sexual Dimorphism in Reduced Size Liver Ischemia and Reperfusion Injury in Mice: Role of Endothelial Cell Nitric Oxide Synthase. *Proc. Nat. Acad. Sciences.* 100(2): 739-744. *Cited by 46.*
7. Sharp CD, **Hines I**, Houghton J, Warren A, Jackson TH, Jawahar A, Nanda A, Elrod JW, Long A, Minagar A, and Alexander JS. 2003. Glutamate Causes a Loss in Human Cerebral Endothelial Barrier Integrity through Activation of the N-Methyl-D-Aspartate Receptor (NMDAR). *Am J Physiol Heart Circ Physiol.* 285(6): H2592-8. *Cited by 89.*
8. Harada H, **Hines IN**, Flores S, Gao B, McCord J, Scheerens H, and Grisham MB. 2004. Role of NADPH oxidase-derived superoxide in reduced size liver ischemia and reperfusion injury. *Arch Biochem Biophys.* 423(1):103-8. *Cited by 43.*

9. Tanai H, **Hines IN**, Nimura Y, Gao B, Flores SC, McCord JM, Grisham MB, and Aw TY. 2004. Susceptibility of murine periportal hepatocytes to hypoxia-reoxygenation injury: role of NO and Kupffer cell derived oxidants. *Hepatology* 39(6):1544-52. *Cited by 49*.
10. **Hines IN**, Harada H, Gao B, Flores SC, McCord JM, Grisham MB. 2005. Endothelial nitric oxide synthase protects the post-ischemic liver: potential interactions with superoxide. *Biomed Pharmacotherapy* 59(4):183-9. *Cited by 49*.
11. Isayama F*, **Hines IN***, McKim SE, Bradford BU, Milton RJ, Yamauchi M, Arteel GE, Brenner DA, Wheeler MD. 2006. LPS signaling enhances hepatic fibrogenesis caused by experimental cholestasis in mice. *Am J Physiol Gastrointest Liver Physiol*. 290(6): G1318-1328. *equally contributing authors. *Cited by 81*.
12. Kremer M, **Hines IN**, Milton RJ, Wheeler MD. 2006. Favored T helper 1 response in a mouse model of hepatosteatosis is associated with enhanced T cell mediated hepatitis. *Hepatology*. 44(1):216-27. *Cited by 55*.
13. Conzelman LC, **Hines IN**, Kremer M, LeMasters JJ, Wheeler MD. 2007. Hepatic Progenitor Cell Proliferation in Reduced Size Liver Transplantation in the Mouse. *Exp Biol Med*. 232(4): 571-580. *Cited by 9*.
14. **Hines IN**, Isayama F, Kremer M, Milton RJ, Byrd CL, Black AL, Perry AW, Wheeler MD. 2007. Impaired liver regeneration and increased oval cell numbers following T cell-mediated hepatitis. *Hepatology*, 46(1): 229-241. *Cited by 26*.
15. Kremer M, Perry AW, Milton RJ, Rippe RA, Wheeler MD, **Hines IN**. 2008. Pivotal role of Smad3 during T cell-mediated hepatitis. *Hepatology*, 47(1): 113-126. *Cited by 20*.
16. Jung Y, Brown KD, Witek RP, Omenetti A, Yang L, Vandongen M, Milton RJ, **Hines IN**, Rippe RA, Spahr L, Rubbia-Brandt L, Diehl AM. 2008. Accumulation of hedgehog-responsive progenitors parallels alcoholic liver disease severity in mice and humans. *Gastroenterology*, 134(5): 1532-1543. *Cited by 80*.
17. Abe Y, **Hines IN**, Zibari G, Pavlick K, Gray L, Kitagawa Y, Grisham MB. 2008. Mouse model of liver ischemia and reperfusion injury: method to study reactive oxygen and nitrogen metabolites in vivo. *Free Rad Bio Med*. 46(1):1-7. Epub 2008 Oct 10. *Cited by 38*.
18. Son G, **Hines IN**, Schrum LW, Lindquist J, Rippe RA. 2009. Inhibition of phosphatidylinositol 3-kinase signaling in hepatic stellate cells blocks the progression of hepatic fibrosis. *Hepatology* 50(5): 1512-1523. *Cited by 46*.
19. Check J, Byrd CL, Menio J, Rippe RA, **Hines IN**, Wheeler MD. 2010. Src kinase participates in LPS-induced activation of NADPH oxidase. *Mol Immunol* 47(4): 756-762. *Cited by 19*.
20. Kremer M, Thomas E, Milton RJ, Perry AW, van Roojen N, Wheeler MD, Zacks S, Rippe RA, and **Hines IN**. 2010. Kupffer cell mediated interleukin-12 dependent loss of resident natural killer T cells in a model of hepatosteatosis. *Hepatology* 51(1): 130-141. *Cited by 57*.

21. **Hines IN**, Hartwell HJ, Feng Y, Theve EJ, Hall GA, Hashway S, Connolly J, Fecteau M, Fox JG, Rogers AB. 2011. Insulin resistance and metabolic hepatocarcinogenesis with parent-of-origin effects in AxB mice. *Am. J. Pathology*, 179(6): 2855-2865. *Cited by 5*.
22. Kremer M, Son G, Zhang K, Moore SM, Norris A, Manzini G, Wheeler MD, and **Hines IN**. 2014. Smad3 signaling in the regenerating liver: implications for regulation of IL6 expression. *Transplant int.*, 27(7): 748-758.
23. Moore SM, Holt VV, Malpass LR, **Hines IN**, Wheeler MD. 2015. Fatty acid binding protein 5 limits the anti-inflammatory response in murine macrophages. *Mol. Immunol.*, 67,Pt 2: 265-275.
24. Isayama F, Moore SM, **Hines IN**, Wheeler. 2015. Involvement of Fas – FasL interactions in alcohol-induced liver injury. *Am. J. Pathology*. Accepted.
25. Park EI, Carlson NN, and **Hines IN**. 2015. Asialoglycoprotein receptor subunit-2 deficiency increases the concentration of cytokines and exacerbates dextran sodium sulfate induced colitis. *Inflammatory Bowel Disease*. Submitted to *Journal of Inflammation*.
26. Kremer M, Son G, Milton RJ, Perry AW, Rippe RA, and **Hines IN**. 2015. Multifunctional role of Smad3 in cholestatic liver disease. Submitted to *Pathophysiology*.
27. Kremer, Zhang K, Moore SM, Wheeler M, and **Hines IN**. 2015. Role of interleukin 12 in cholestatic liver disease. To be submitted June 2016.

Reviews:

1. Laroux FS, Pavlick KP, **Hines IN**, Kawachi S, Harada H, Bharwani S, Hoffman JM, Grisham MB. 2001. Role of Nitric Oxide in Inflammation. *Acta. Physiol. Scand.* 173 (1): 113-118. *Cited by 146*.
2. **Hines IN**, Harada H, Wolf R, and Grisham MB. 2003. Superoxide and Post-ischemic Liver Injury: Potential Therapeutic Target for Liver Transplantation. *Curr. Medicinal Chem.* 10: 2661-2667. *Cited by 32*.
3. **Hines IN**, Wheeler MD. 2004. Recent Advances in Alcoholic Liver Disease III. Role of the innate immune response in alcoholic hepatitis. 2004. *Am J Physiol Gastrointest Liver Physiol.* 287(3): G310-314. *Cited by 140*.
4. **Hines IN**, Rippe RA. 2008. Role of hedgehog signaling in bile ductular cells. *Gut* 57(9): 1198-1199. *Cited by 2*.
5. Abe Y, **Hines IN**, Zibari G, Grisham MB. 2008. Hepatocellular protection by nitric oxide or nitrite in ischemia and reperfusion injury. *Arch Biochem Biophys.* In press. *Cited by 25*.
6. Son G, Kremer M, **Hines IN**. 2010. Influence of gut bacteria on acute and chronic liver pathologies. *Gastroenterology Research and Practice*, 2010. pii: 453563. Epub 2010 Jul 28. *Cited by 28*.

7. **Hines IN**, Grisham MB. 2011. Divergent roles of superoxide and nitric oxide in liver ischemia and reperfusion injury. *J. Clin Biochem & Nutrition*. 48(1). *Cited by 10*.
8. Moore SM, Kremer M, Sanderlin EJ, Wheeler MD, and **Hines IN**. 2013. Emerging roles for Lipids in the Hepatic Innate Immune Response. *Journal of Human Nutrition and Food Science*. In press.
9. Morris NL, Ippolito JA, Curtis B, Chen MM, Friedman SL, **Hines IN**, Haddad GE, Chang SL, Brown LA, Waldschmidt T, Mandrekar P, Kovacs EJ, Choudry MA. 2014. Alcohol and Inflammatory Responses: Summary of the 2013 Alcohol and Immunology Research Interest Group (AIRG) meeting. *Alcohol*. In press.

Book Chapters:

1. **Hines IN**, Harada H, Hoffman JM, Bharwani S, Grisham MB. “Role of superoxide in the post-ischemic liver.” Therapeutic Applications of SOD. Salvemini, D. Ed. In press.
2. Kremer M, Perry AW, Wheeler MD, **Hines IN**. “Crossroads of innate and regulatory immunity in the steatotic liver – impact on tissue injury and hepatic fibrogenesis.” Research Advances in Hepatology. Mohan RM, Ed. In press.
3. **Hines IN**, Grisham MB. 2010. “Reactive metabolites of oxygen and nitrogen in liver ischemia and reperfusion injury.” Nitric oxide. Ignarro L.J. ed. Nitric oxide: biology and pathobiology 2nd edition. ISBN: 978-0-12-373866-0.

Abstracts:

1. Laroux FS, **Hines IN**, Hoffman JM, Merrill D, Fuseler J, Grisham MB. 2000. Superinduction of Heme Oxygenase-1 and Inducible Nitric Oxide Synthase (iNOS) in Livers of eNOS-deficient (eNOS^{-/-}) Mice Treated with Lipopolysaccharide (LPS). *Free Radical Biology and Medicine* 29 (S1): S71.
2. **Hines IN**, Harada H, Gray L, Pavlick KP, Bharwani S, Grisham MB. 2001. Role of Nitric Oxide in Regulating Cytokine Expression and Tissue Injury in Post-ischemic Liver Injury. *Gastroenterology* 120 (5; Part I): A-547.
3. **Hines IN**, Harada H, Hoffman JM, Pavlick KP, Eppihimer M, Scheerens H, Grisham MB. 2001. Pro-inflammatory Cytokines in the Post-ischemic Liver. *Hepatology* 34 Number 4, Part II: 297A.
4. Harada H, Pavlick KP, **Hines IN**, Bharwani S, Hoffman JM, Gray L, Grisham MB. 2001. Effects of Gender on Reduced-size Liver Ischemia and Reperfusion Injury in Mice: Roles of Estrogen and Nitric Oxide. *Hepatology* 34 Number 4, Part II: 239A.
5. Harada H, Pavlick KP, **Hines IN**, Hoffman JM, Gray L, Eppihimer M, Grisham MB. 2001. Role of Interleukin 12 in Reduced Size Liver Ischemia and Reperfusion Injury in Mice. *Hepatology* 34 Number 4, Part II: 297A.

6. Pavlick KP, **Hines IN**, Harada H, Nadler SG, Grisham MB. 2001. Inhibition of NF- κ B Nuclear Translocation Enhances Post-ischemic Liver Injury. *Hepatology* 34 Number 4, Part II: 347A.
7. **Hines IN**, Pavlick KP, Harada H, Nadler S, Grisham MB. 2001. Role of eNOS and NF- κ B in Modulating Post-ischemic Liver Injury. *Free Radical Biology and Medicine* 31 Number 1: S69.
8. **Hines IN**, Harada H, Pavlick KP, Schereens H, Eppihimer M, Grisham MB. 2002. Pro-inflammatory cytokine expression in post-ischemic liver: differential effects depending on length of ischemia. *The FASEB Journal* 16 (4; Part I): A455.
9. Harada H, Pavlick KP, **Hines IN**, Hoffman JM, Gray L, Grisham MB. 2002. Roles of pro-inflammatory cytokines in reduced-size liver ischemia and reperfusion injury. *The FASEB Journal* 16 (4; Part I): A456.
10. Sharp CD, **Hines IN**, Warren A, Elrod JW, Jennings M, Laroux FS, Jawahar A, Fowler M, Alexander JS. 2002. NMDA receptor (NMDAR1) dependent oxygen radicals disrupt junctional barrier in human brain endothelial monolayers. *The FASEB Journal* 16 (4; Part II): A1124.
11. **Hines IN**, Hoffman JM, Harada H, Bharwani S, Gao B, Flores B, McCord J, Grisham MB. 2002. Role of Kupffer cell-associated NADPH oxidase in the post-ischemic liver. *Gastroenterology* 122 (4; Suppl. I): A-665.
12. Harada H, Pavlick KP, **Hines IN**, Lefer D, Hoffman JM, Gray L, Grisham MB. 2002. Pravastatin attenuates reduced-size liver ischemia and reperfusion injury in mice: role of hepatic eNOS expression. *Gastroenterology* 122 (4; Suppl. I): A-666.
13. Harada H, Pavlick KP, **Hines IN**, Hoffman JM, Gray L, Grisham MB. 2002. Pleiotropic role of tumor necrosis factor- α in reduced size liver ischemia and reperfusion injury in mice. *Gastroenterology* 122 (4; Suppl. I): A-666.
14. Taniai H, **Hines IN**, Gao B, Flores S, McCord JM, Nimura Y, Grisham MB, Aw TY. 2002. Differential susceptibility of murine hepatic zones to ischemia-reperfusion: kupffer cell derived oxidants mediate periportal injury. *Gastroenterology* 122 (4; Suppl. I): P-188.
15. Harada H, **Hines IN**, Hoffman JM, Gao B, Flores S, McCord JM, Grisham MB. 2002. Role of NADPH oxidase-derived superoxide in reduced size liver ischemia and reperfusion injury in mice. *Hepatology* 36 (4): 175A.
16. **Hines IN**, Harada H, Hoffman JM, Gao B, Flores S, McCord JM, Grisham MB. 2002. Genetically-engineered polycationic manganese SOD attenuates post-ischemic tumor necrosis factor- α expression and hepatocellular injury. *Hepatology* 36 (4): 175A.
17. Harada H, Pavlick KP, **Hines IN**, Hoffman JM, Grisham MB. 2002. Protective role of estrogen receptor- α in reduced size liver ischemia and reperfusion injury. *Hepatology* 36 (4): 210A.

18. **Hines IN**, Milton RJ, Isayama F, Wheeler MD. 2004. Concanavalin A enhances CD117 and stem cell antigen 1 (Sca-1) positive cell proliferation within the regenerating mouse liver. *The FASEB Journal* 18 Abstract #441.9.
19. **Hines IN**, Isayama F, Milton RJ, Wheeler MD. 2004. Concanavalin A (ConA) enhances hepatic stem cell proliferation in response to partial hepatectomy: inhibitory role of liver natural killer cells. *Alcohol Clin Exp Res* 28(5; suppl.) #691.
20. Isayama F, Milton RJ, **Hines IN**, Wheeler MD. 2004. T cells correlate with the severity of alcoholic fibrosis. *Alcohol Clin Exp Res* 28(5; suppl.) #686.
21. **Hines IN**, Milton RJ, Kremer M, Wheeler MD. 2005. Role of interleukin 4 in early cholestatic liver disease in mice. *The FASEB Journal* 19 Abstract #408.15.
22. **Hines IN**, Milton RJ, Byrd CL, Black AL, Kremer M, Wheeler MD. 2005. Role of peroxisome proliferator activated receptor alpha in concanavalin A mediated hepatitis. *The FASEB Journal* 19 Abstract #550.21.
23. Milton RJ, **Hines IN**, Arteel GA, Kremer M, Wheeler MD. 2005. Tumor necrosis factor alpha signaling is involved in choline deficient diet induced hepatic steatosis. *The FASEB Journal* 19 Abstract #407.2. **Oral presentation.**
24. Kremer M, **Hines IN**, Milton RJ, Wheeler MD. 2005. Hepatocellular fat accumulation exacerbates T helper 1 cell mediated hepatitis in mice. *The FASEB Journal*. Late breaking abstract.
25. **Hines IN**, Kremer M, Milton RJ, Perry AM, Black AL, Wheeler MD. 2006. Adoptive transfer of splenic T cells restores the hepatic fibrogenic response to chronic cholestasis in severe combined immunodeficient mice. *The FASEB Journal*. 20(5) Abstract #686.15.
26. **Hines IN**, Kremer M, Milton RJ, Perry AM, Wheeler MD. 2006. Deficiency in CD1d enhances cholestasis-induced hepatic tissue injury and fibrosis. *The FASEB Journal*. 20(5) Abstract #410.8. **Oral presentation.**
27. Kremer M, **Hines IN**, Milton RJ, Wheeler MD. 2006. Choline deficient diet induced hepatosteatosis reduces hepatic natural killer T cell numbers – role of interleukin 12. *The FASEB Journal*. 20(5) Abstract #410.9
28. **Hines IN**, Kremer M, Perry AM, Milton RJ, Weinmann SA, Wheeler MD. 2006. Hepatitis C virus core protein expression enhances diet-induced hepatic steatosis and fibrosis. *Alcohol Clin Exp Res* 30(6) Abstract #858.
29. Kremer M, **Hines IN**, Milton RJ, Wheeler MD. 2006. Lymphocytes are the primary source for T-helper 1 associated cytokines in the hepatosteatosis and are involved in the induction of fatty liver degeneration. *Alcohol Clin Exp Res* 30(6) Abstract #655. **Oral presentation.**
30. Kremer M, **Hines IN**, Milton RJ, Wheeler MD. 2006. Longitudinal characterization of choline-deficient diet induced hepatosteatosis in mice. *Alcohol Clin Exp Res* 30(6) Abstract #859.

31. Kremer M, Wood AW, Milton RJ, Wheeler MD, **Hines IN**. 2007. Pivotal role of Smad3 during T cell mediated hepatitis. FASEB Journal 21(5) Abstract #867.12.
32. **Hines IN**, Kremer M, Wood AW, Milton RJ, Wheeler MD. 2007. Smad3 is crucial for cholestasis-induced hepatic tissue injury and fibrosis. FASEB Journal 21(5) Abstract #381.6. **Oral presentation.**
33. **Hines IN**, Kremer M, Perry AW, Milton RJ, Wheeler MD. 2007. IL4-dependent Stat6 activation is critical for cholestasis-induced hepatic fibrosis. Gastroenterology 132(4, Sup2) Abstract #S1502. **Poster of Distinction.**
34. Kremer M, Perry AW, Milton RJ, Wheeler MD, **Hines IN**. 2007. Kupffer cell and interleukin 12 dependent loss of resident natural killer T cells in hepatosteatosis – a new mechanism in fatty liver pathophysiology. Gastroenterology 132(4, Sup2) Abstract #T1094. **Poster of Distinction.**
35. Kremer M, Nickkholgh A, Milton RJ, Weinmann SA, Rippe RA, **Hines IN**. 2008. Impaired hepatic lipid metabolism by hepatitis C virus in mice and humans: implications for modulation of transcriptional processes. Gastroenterology. 134(4) Abstract A750. **Oral presentation.**
36. **Hines IN**, Kremer M, Son G, Milton RJ, Rippe RA. 2008. Natural killer T cell activation promotes a fibrinolytic phenotype within the cholestatic liver. Gastroenterology. 134(4) A764. **Oral presentation.**
37. **Hines IN**, Kremer M, Son G, Milton RJ, Rippe RA. 2008. Acute ethanol alters hepatic natural killer T cell function: role of Smad3 signaling. Alcohol Clin Exp Res 32(6 Suppl 1) Abstract 171A.
38. Kremer M, Desai B, **Hines IN**. 2009. Smad3 contributes to tumor necrosis factor alpha (TNF α) production by Kupffer cells and promotes ethanol-induced liver injury. Alcohol Clin Exp Res 33(6) 158A.
39. Roberts A, Son G, Milton RJ, **Hines IN**. 2009. Gut bacteria promote Concanavalin A-induced T cell mediated hepatitis in mice. Hepatology 50(4) 882A.
40. Kremer, M., Son, G., Rambarat, C., & **Hines, I. N**. 2010. TGF β promotes Kupffer cell-associated TNF α production and ethanol induced liver injury. Alcohol Clin Exp Res 33(6).
41. Pope, B., Menio, J., **Hines, I.**, & Wheeler, M. 2010. Circadian regulator Per2 plays a critical role in regulating fat metabolism and the occurrence of fatty liver disease. Alcohol Clin Exp Res 33(6).
42. Kremer M, Son G, Roberts A, and Hines IN. 2011. Influence of toll-like receptor 4 signaling during T cell mediated hepatitis. Alcohol Clin Exp Res 34(6).
43. Moore S, Hines IN, and Wheeler MD. 2011. Differential expression of FABP in both parenchymal and non-parenchymal liver cells following ethanol exposure. Alcohol Clin Exp Res 34(6).

44. Hines IN, Son G, Fong A, Wheeler MD, and Kremer M. 2011. CX3CL1 promotes macrophage accumulation and stellate cell activation in BDL-induced hepatic fibrogenesis. *FASEB J.* 25; 366.3 ***Oral presentation.***
45. Hines IN. 2013. Macrophage-matrix interactions in alcoholic liver disease and early fibrogenesis. *Alcohol* 47 (7), 571. ***Symposium presentation.***

Invited Seminar Presentations:

1. Role of Reactive Metabolites of Oxygen and Nitrogen in the Modulation of Cytokine Expression and Tissue Injury in the Post-ischemic Liver. Department of Molecular and Cellular Physiology Spring Seminar Series; April 19, 2001; Shreveport, Louisiana.
2. Role of Nitric Oxide in the Modulation of Post-ischemic Cytokine Responses and Tissue Injury. Graduate Student Research Day – Louisiana State University Health Sciences Center; September 25, 2001; Shreveport, Louisiana.
3. Differing roles of superoxide and nitric oxide in the pathophysiology of post-ischemic liver injury. 3rd Conference on Superoxide Dismutase. June 11, 2004; Paris, France.
4. Stem cell response during hepatic inflammation and fibrosis – relevance to alcoholic liver disease. Bowles Center for Alcohol Studies Fall Seminar Series – September 27, 2004. Chapel Hill, North Carolina.
5. Immune cell regulation of hepatic fibrogenesis. Eckerd College and Sigma Xi Invited Lecture Series. April 20, 2006. Tampa Bay, Florida.
6. Immunological basis for fibrotic liver disease: role of T cells and T cell-derived cytokines. Center for Gastrointestinal Biology and Disease Seminar Series. August 31, 2006. Chapel Hill, North Carolina.
7. Immunological basis for fibrotic liver disease. Louisiana State University Department of Surgery Spring Seminar Series. January 22, 2007. Shreveport, Louisiana.
8. Immunobiology of NKT cells in Liver Steatosis and Fibrosis. Center for Gastrointestinal Biology and Disease Seminar Series. October 18, 2007. Chapel Hill, NC.
9. Liver lymphocytes: Friends or Foes in Liver Disease. Center for Gastrointestinal Biology and Disease Seminar Series. February 26, 2009. Chapel Hill, NC.
10. Gut-derived bacteria promote T cell mediated liver injury in the mouse. Center for Gastrointestinal Biology and Disease Scientific Review Committee Meeting. June 30, 2009. Chapel Hill, NC.
11. Influence of ethanol on hepatic natural killer T cell function. Research Society on Alcoholism, San Antonio, Texas. June 27, 2010.
12. Involvement of integrin signaling in alcoholic liver disease. Research Society on Alcoholism, San Francisco, California. July 2, 2012.

13. Matrix – Integrin interactions in alcoholic liver disease and fibrogenesis. Cleveland Clinic, Departments of Nutrition and Pathology and Laboratory Medicine Seminar Series, Cleveland, Ohio. April 15, 2013.
14. Matrix-macrophage interactions in hepatic alcohol spectrum disease. Alcohol and Immunity Research Interest Group Meeting. Loyola University, Chicago, Illinois. November 21, 2013.

Research Support:

1. T32-AA07573 (Fulton T. Crews, PI)
NIAAA
Institutional Training Grant – Bowles Center for Alcohol Studies
Post-doctoral training in alcohol research
February 2003 – March 2004
Status: Ended
2. 1 F32 AA015005-01 (Ian N Hines, PI)
NIAAA
Individual Ruth L. Kirchenstein National Research Service Award
Hepatic stem cell response to inflammation and alcohol.
April 2004 – March 2006
\$112,450
Status: Ended
3. AA016563-01 (Ian N Hines, PI)
NIAAA
Involvement of natural killer T cells in hepatic fibrogenesis
July 2007 – June 2014
\$566,212
Status: Funded
4. AA016563-03S1 (Ian N Hines, PI)
NIAAA
Involvement of natural killer T cells in hepatic fibrogenesis – role of SOCS3 signaling
January 2011 – December 2012
\$27,000.00
Status: Ended
5. Alcohol Beverage Medical Research Foundation (Ian N Hines, PI)
Modulation of hepatic natural killer T cell function by ethanol
January 2008 – June 2012
\$100,000
Status: Ended
6. Center for Gastrointestinal Biology and Disease (Ian N Hines, PI)
Modulation of hepatic lymphocytes by intestinal bacteria
Pilot and Feasibility Grant
November 1, 2008 – October 31, 2009
\$30,000
Status: Ended

7. University Research Council (Ian N Hines, PI)
Kupffer cell and IL12 mediated depletion of natural killer T cells in hepatosteatosis
Research Publication Grant
January 2010 – June 2010
\$5000.00
Status: Ended

8. University Research Council (Ian N Hines, PI)
Novel targeting of hepatic natural killer T cells using lentiviral vectors for *in vivo* study
Research Grant
December 1, 2008 – November 30, 2009
\$5,000.00
Status: Ended

Pending Support:

1. National Institute on Alcohol abuse and Alcoholism (Ian N Hines, PI)
Matrix regulation of macrophage polarization
\$275,000
Status: Under revision for resubmission, June 2016.

2. National Institute on Alcohol abuse and alcoholism (Ian N Hines, PI)
Roles and regulators of natural killer T cell function in the alcoholic liver.
\$300,000
Status: Under revision for resubmission October 2016.