

BIOGRAPHICAL SKETCH

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NAME Alex B. Lentsch	POSITION TITLE Professor of Surgery		
eRA COMMONS USER NAME lentsch	Vice Chairman for Research		
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Northern Kentucky University	B.S.	1987-1991	Biological Sciences
University of Louisville	Ph.D.	1992-1996	Physiology & Biophysics
University of Michigan	Post-doc	1996-1998	Immunopathology

A. Positions and Honors.Positions and Employment

1992-96 Graduate Research Assistantship, Dept. of Physiology & Biophysics, Univ. of Louisville, KY
 1996-98 Research Fellowship, Department of Pathology, University of Michigan, Ann Arbor, MI
 1998-02 Assistant Professor, Department of Surgery, University of Louisville, KY
 1998-02 Associate, Center for Applied Microcirculatory Research, University of Louisville, KY
 1998-02 Associate, Department of Physiology & Biophysics, University of Louisville, KY
 2002-07 Associate Professor, Department of Surgery, University of Cincinnati, Cincinnati, OH
 2002-06 Director of Laboratory Research, Division of Trauma & Critical Care, University of Cincinnati, OH
 2002- Director, Trauma, Sepsis & Inflammation Research Group, University of Cincinnati, OH
 2006- Vice Chairman for Research, Department of Surgery, University of Cincinnati, OH
 2007- Professor (with tenure), Department of Surgery, University of Cincinnati, Cincinnati, OH

Other Experience

2000-01 Ad hoc, The Wellcome Trust Expert Advisory Panel
 2001- Member, Editorial Board, Journal of Investigative Surgery
 2001 Member, NIH/NIDDK Special Emphasis Panel ZDK1-GRB7 (M1)
 2002 Member, NIH/NIDDK Special Emphasis Panel ZDK1-GRB6 (M1)
 2003 Ad hoc, NIH Study Section General Medicine A-3
 2004 Primary Review Panel, Action Plan for Liver Disease Research, NIH/NIDDK
 2004-05 Ad hoc, NIH Study Section Gastrointestinal Cell and Molecular Biology
 2004- Ad hoc, NIH Study Section Hepatobiliary Pathophysiology
 2004-05 Ad hoc, NIH Study Section Surgery, Anesthesia and Trauma
 2004-06 Member, Editorial Board, HEPATOLOGY
 2005- Member, Editorial Board, World Journal of Gastroenterology
 2006 Member, NIH/NCCAM Special Emphasis Panel ZAT1 DB (23)
 2007 Ad hoc, NIH Study Section ZRG1 SBIB-E (03)
 2007- Member, Editorial Board, Current Pharmaceutical Design

Honors

1987-91 Athletic Scholarship, Baseball, Northern Kentucky University, Highland Heights, KY
 1990-91 Dean's List, Northern Kentucky University, Highland Heights, KY
 1991 Honors, Northern Kentucky University, Highland Heights, KY
 2001 Hugh C. Williams Scientific Advancement Award, Dept. Surgery, University of Louisville, KY
 2002 Professional Achievement Award, Northern Kentucky University Alumni Association

B. Selected peer-reviewed publications (in chronological order).

1. Anderson, J.A., **A.B. Lentsch**, D.J. Hadjiminis, F.N. Miller, A.W. Martin, M.J. Edwards. The role of cytokines, chemokines, and adhesion molecules in interleukin-2-induced organ specific lymphocytic infiltration in C57BL/6 mice. *J. Clin. Invest.* 97: 1952-1959, 1996.

2. **Lentsch, A.B.**, Shanley, T.P, Sarma, V., P.A. Ward. In vivo suppression of NF- κ B and preservation of I κ B α by interleukin-10 and interleukin-13. *J. Clin. Invest.* 100: 2443-2448, 1997.
3. **Lentsch, A.B.**, F.N. Miller, M.J. Edwards. Interleukin-2-induced hepatic injury involves temporal patterns of cell adhesion in the microcirculation. *Am. J. Physiol.* 272: G727-731, 1997.
4. **Lentsch, A.B.**, M.J. Edwards, D.E. Sims, F.N. Miller. N^o-nitro-L-arginine methyl ester inhibits inflammatory liver injury induced by interleukin-2. *J. Leukoc. Biol.* 63: 22-30, 1998.
5. **Lentsch, A.B.**, H. Yoshidome, W.G. Cheadle, F.N. Miller, M.J. Edwards. Chemokine involvement in hepatic ischemia/reperfusion injury in mice: Roles for macrophage inflammatory protein-2 and KC. *Hepatology* 27: 1172-1177, 1998.
6. **Lentsch, A.B.**, B.J. Czermak, J. Jordan, P.A. Ward. Regulation of lung inflammatory injury by endogenous interleukin-13. *J. Immunol.* 162: 1071-1076, 1999.
7. **Lentsch, A.B.**, J. Jordan, B.J. Czermak, K.M. Diehl, V. Sarma, P.A. Ward. Inhibition of NF κ B and augmentation of I κ B β by secretory leukocyte protease inhibitor during lung inflammation. *Am. J. Pathol.* 154: 239-247, 1999.
8. Yoshidome, H., A. Kato, M.J. Edwards, **A.B. Lentsch**. Interleukin-10 suppresses hepatic ischemia/reperfusion injury in mice: Implications for a central role of NF κ B. *Hepatology* 30:203-208, 1999.
9. **Lentsch, A.B.**, H. Yoshidome, A. Kato, R.L. Warner, W.G. Cheadle, P.A. Ward, M.J. Edwards. Requirement of interleukin-12 in the pathogenesis of hepatic ischemia/reperfusion injury. *Hepatology* 30:1448-1453, 1999.
10. Yoshidome, H., A. Kato, M.J. Edwards, **A.B. Lentsch**. Interleukin-10 inhibits pulmonary NF- κ B activation and lung injury induced by hepatic ischemia-reperfusion. *Am. J. Physiol.* 277:L919-L923, 1999.
11. **Lentsch, A.B.**, H. Yoshidome, R.L. Warner, P.A. Ward, M.J. Edwards. Secretory leukocyte protease inhibitor in mice regulates local and remote organ inflammatory injury induced by hepatic ischemia/reperfusion. *Gastroenterology* 117:953-961, 1999.
12. **Lentsch, A.B.**, A. Kato, B. Davis, W. Wang, C. Chao, M.J. Edwards. STAT4 and STAT6 regulate systemic inflammation and protect against lethal endotoxemia. *J. Clin. Invest.* 108: 1475-1482, 2001.
13. Kato, A., S. Sing, K.R. McLeish, M.J. Edwards, **A.B. Lentsch**. Mechanism of hypothermic protection against ischemic liver injury. *Am. J. Physiol.* 282: G608-G616, 2002.
14. Kato, A., M.J. Edwards, **A.B. Lentsch**. Gene deletion of NF- κ B p50 does not alter the hepatic inflammatory response to ischemia/reperfusion. *J. Hepatol.* 37: 48-55, 2002.
15. Kato, A., C. Gabay, T. Okaya, **A.B. Lentsch**. Specific role for IL-1 in hepatic neutrophil recruitment after ischemia/reperfusion. *Am. J. Pathol.* 161: 1797-1803, 2002.
16. Kato, A., T. Okaya, **A.B. Lentsch**. Endogenous IL-13 protects hepatocytes and vascular endothelial cells during ischemia/reperfusion injury. *Hepatology* 37: 304-312, 2003.
17. Okaya, T., **A.B. Lentsch**. Peroxisome proliferator-activated receptor- α (PPAR α) regulates ischemic liver injury. *Am. J. Physiol.* 286: G606-G612, 2004.
18. Shen, H., **A.B. Lentsch**. Progressive dysregulation of the transcription factors NF- κ B and STAT1 in prostate cancer cells causes pro-angiogenic production of CXC chemokines. *Am. J. Physiol.* 286: C840-C847, 2004.
19. Okaya, T., **A.B. Lentsch**. Hepatic expression of S32A/S36A I κ B α does not reduce post-ischemic liver injury. *J. Surg. Res.* 124: 244-249, 2005.
20. Husted, T.L., **A.B. Lentsch**. Anti-inflammatory approaches for the prevention of ischemia/reperfusion injury in solid organ transplantation. *Curr. Opin. Invest. Drugs* 6:508-512, 2005.
21. Williams, M.A., C.M. Cave, G. Quaid, C. Robinson, T. Daly, D. Witt, **A.B. Lentsch**, J.S. Solomkin. IL-8 dimerization as a mechanism for regulation of neutrophil adherence-dependent oxidant production. *Shock* 23: 371-376, 2005.
22. Caldwell, C.C., T. Okaya, A. Martignoni, T. Husted, R. Schuster, **A.B. Lentsch**. Divergent functions of CD4+ T lymphocytes in acute liver inflammation and injury after ischemia-reperfusion. *Am. J. Physiol.* 289:G969-G976, 2005.
23. Okaya, T., J. Blanchard, R. Schuster, S. Kuboki, T. Husted, C.C. Caldwell, B. Zingarelli, H. Wong, J.S. Solomkin, **A.B. Lentsch**. Age-dependent responses to hepatic ischemia/reperfusion injury. *Shock* 24: 421-427, 2005.

24. Mallakin, A., L.W. Kutcher, S.A. McDowell, S. Kong, R. Schuster, **A.B. Lentsch**, B.J. Aronow, G.D. Leikauf, S.E. Waltz. Gene expression profiles of Mst1r deficient mice during nickel-induced acute lung injury. *Am. J. Resp. Cell Mol. Biol.* 34:15-27, 2006.
25. Shen, H., R. Schuster, K.F. Stringer, S.E. Waltz, **A.B. Lentsch**. The Duffy antigen/receptor for chemokines (DARC) regulates prostate tumor growth. *FASEB J.* 20: 59-64, 2006.
26. Husted, T.L., **A.B. Lentsch**. The role of cytokines in pharmacological modulation of ischemia/reperfusion injury. *Curr. Pharm. Des.* 12: 2867-2873, 2006.
27. Solomkin, J.S., C.T. Robinson, C.M. Cave, K. Umanskiy, K. Matlin, M.A. Williams, **A.B. Lentsch**. Formation of focal adhesion-like structures in human neutrophils after severe injury: triggering of a tissue-phase response in the vascular space. *Shock* 25: 440-445, 2006.
28. Husted, T.L., J. Blanchard, R. Schuster, H. Shen, **A.B. Lentsch**. Potential role for IL-23 in hepatic ischemia/reperfusion injury. *Inflamm. Res.* 55: 177-178, 2006.
29. Shen, H., R. Schuster, B. Lu, S.E. Waltz, **A.B. Lentsch**. Critical and opposing roles of the chemokine receptors CXCR2 and CXCR3 in prostate tumor growth. *Prostate* 66: 1721-1728, 2006.
30. **Lentsch, A.B.** CXC chemokines and prostate cancer: growth regulators and potential biomarkers. *Future Oncol.* 2: 651-658, 2006.
31. Kuboki, S., T. Okaya, R. Schuster, J. Blanchard, A. Denenberg, H. Wong, **A.B. Lentsch**. Hepatocyte NF- κ B activation is hepatoprotective during ischemia/reperfusion injury and is augmented by ischemic hypothermia. *Am. J. Physiol. Gastrointest. Liver Physiol.* 292: g201-g207, 2007.
32. **Lentsch, A.B.**, P. Pathrose, S. Kuboki, S. Kader, M.H. Collins, S.E. Waltz. Ron regulates acute lung injury by inhibiting NF- κ B activation. *Shock* 27: 274-280, 2007.
33. Kuboki, S., R. Schuster, J. Blanchard, T.A. Pritts, H.R. Wong, **A.B. Lentsch**. Role of heat shock protein 70 in hepatic ischemia/reperfusion injury in mice. *Am. J. Physiol. Gastrointest. Liver Physiol.* 292: G1141-G1149, 2007.
34. Caldwell, C.C., J. Tschoep, **A.B. Lentsch**. Lymphocyte function during hepatic ischemia/reperfusion injury. *J. Leukoc. Biol.* 82: 457-464, 2007.
35. Kuboki, S., T. Shin, N. Huber, T. Eismann, E. Galloway, R. Schuster, J. Blanchard, B. Zingarelli, **A.B. Lentsch**. Peroxisome proliferator-activated receptor- γ protects against hepatic ischemia/reperfusion injury. *Hepatology* 47: 215-224, 2008.
36. Shin, T., S. Kuboki, **A.B. Lentsch**. Roles of NF- κ B in the post-ischemic liver. *Hepatology Res.* 2008, In press.

C. Research Support.

Ongoing

- | | | |
|---|-------------------|------------|
| R01 DK56029-06-10; Lentsch (PI) | 09/30/04-08/31/09 | 25% effort |
| NIH/NIDDK | | |
| Title: Regulation of hepatic ischemia/reperfusion injury | | |
| The major goals of this project are to determine the soluble mediator pathways (IL-12) and signal transduction events (NF- κ B and PPARs) that regulate the liver inflammatory response to ischemia and reperfusion in mice. | | |
| Role: PI | | |
| R01 AG025881; Lentsch (PI) | 06/01/05-04/31/10 | 20% effort |
| NIH/NIA | | |
| Title: Age effects on liver inflammation and injury | | |
| The major goals of this project are to determine the cellular and molecular mechanisms by which age alters the hepatic inflammatory response to ischemia/reperfusion. | | |
| Role: PI | | |
| R01 GM072760; Caldwell (PI) | 09/01/05-08/31/10 | 10% effort |
| NIH/NIGMS | | |
| Title: Role of HIF-1 α in T cells during sepsis | | |
| The major goal of this project is to delineate the function of hypoxia inducible factor-1alpha in lymphocyte function during sepsis. | | |
| Role: Co-Investigator | | |

R01 DK055030; Schuschke (PI) 07/01/07-03/31/09 7.5% effort
NIH/NIDDK

Title: Leukocyte adhesion in the copper deficient microcirculation

The main goal of this project is to determine the effects of copper-deficiency on the vasculature and induction of inflammation.

Role: Co-Investigator

T32 GM08478; Solomkin (PI) 07/01/03-6/30/08 0% effort
NIH/NIGMS

Title: Host response to trauma research training program

The goal of this project is to provide basic science training to postdoctoral fellows and surgical residents in the field of trauma to prepare them for academic/research careers.

Role: Co-Program Director

Completed

K02 HL72552; Lentsch (PI) 07/01/02-06/30/07
NIH/NHLBI

Title: Hepatic ischemia/reperfusion-induced lung injury

The major goals of this project are to investigate the mechanisms by which ischemia/reperfusion of the liver induces acute lung injury.

Role: PI

PC010047; Lentsch (PI) 07/01/02-06/30/05
DOD/PRCP

Title: Chemokines and prostate tumor growth

The major goals of this project are to delineate the function of CXC chemokines and their receptors in angiogenesis and growth of prostate tumors using a mouse model (TRAMP) of prostate cancer.

Role: PI

R01 DK56029-01-05; Lentsch (PI) 09/01/00-06/30/04
NIH/NIDDK

Title: Regulation of hepatic ischemia/reperfusion injury

The major goals of this project are to determine the soluble mediator pathways and signal transduction events that regulate the liver inflammatory response to ischemia and reperfusion in mice.

Role: PI

Merit Review; Edwards (PI) 2000-2003
VAMC

Title: Mechanisms of interleukin-2 microvascular and systemic effects

This project examined the cellular and molecular effects of IL-2 on leukocyte adhesion and the subsequent toxicities associated with IL-2 administration.

Role: Co-Investigator

9720; Lentsch (PI) 1999-2001
Alliant Community Trust Fund

Title: Mediators of hepatic ischemia/reperfusion injury

This project examined the roles of soluble pro- and anti-inflammatory mediators in the control of the inflammatory response to liver ischemia and reperfusion.

Role: PI