

## CURRICULUM VITAE AND BIBLIOGRAPHY

**DATE:** August 2009

**NAME:** Michael B. Fallon, M.D.

**PRESENT TITLE:** Professor of Medicine  
Dan and Lillie Sterling Professor of Gastroenterology  
Director, Division of Gastroenterology, Hepatology and Nutrition

**ADDRESS:** The University of Texas Health Science Center at Houston Medical School  
Department of Internal Medicine  
Division of Gastroenterology, Hepatology and Nutrition  
6431 Fannin, MSB 4.234  
Houston, TX 77030

**CITIZENSHIP:** United States of America

### UNDERGRADUATE EDUCATION:

June 1980            *Degree:* Bachelor in Science  
Vanderbilt University  
Nashville, Tennessee

### MEDICAL EDUCATION

June 1984            *Degree:* Doctor in Medicine (MD)  
University of Virginia School of Medicine  
Charlottesville, Virginia

### POST GRADUATE EDUCATION

1979                 *Summer Research Fellow*  
Howard Hughes Institute  
Vanderbilt University

1984-1987           *Resident in Internal Medicine*  
Yale-New Haven Hospital  
New Haven, Connecticut

1987-1988           *Chief Resident*  
Yale-New Haven Hospital  
New Haven, Connecticut

1988-1990            *Fellow in Digestive Diseases*  
Department of Internal Medicine  
Yale University School of Medicine  
New Haven, Connecticut

**ACADEMIC APPOINTMENTS:**

1990-1991            Instructor  
Division of Digestive Diseases  
Department of Internal Medicine  
Yale University School of Medicine  
New Haven, Connecticut

1991-1994            Assistant Professor  
Division of Digestive Diseases  
Department of Internal Medicine  
Yale University School of Medicine  
New Haven, Connecticut

1995-1999            Assistant Professor  
Gastroenterology and Hepatology  
Department of Medicine  
University of Alabama at Birmingham

1999-2005            Associate Professor  
Gastroenterology and Hepatology

1998-2008            Chief  
Gastroenterology and Hepatology, BVAMC  
Department of Medicine  
University of Alabama at Birmingham

2001-2008            Director  
Section of Hepatology  
University of Alabama at Birmingham

2005-2008            Professor of Medicine, Gastroenterology and Hepatology  
Dept. of Medicine, University of Alabama at Birmingham

**HOSPITAL APPOINTMENTS:**

Present	Attending Physician, Gastroenterology, Hepatology Memorial Hermann Hospital Houston, Texas
1994-2008	Attending Physician, Medicine UAB Hospital Birmingham, Alabama
1990-1994	Yale-New Haven Hospital New Haven, Connecticut

**LICENSURE:**

Licensed, Texas N1316  
Licensed, Connecticut 027688  
Licensed, Alabama 18655

**BOARD CERTIFICATION:**

1988	Diplomate, American Board of Internal Medicine
2001	Diplomate, Certified in Sub-specialty of Gastroenterology American Board of Internal Medicine
2008	Diplomate, Certified in Transplant Hepatology

**PROFESSIONAL ORGANIZATIONS:**

American Medical Association  
American Gastroenterological Association  
American Federation for Clinical Research  
American Association for the Study of Liver Disease  
American Association for the Advancement of Science

**HONORS AND AWARDS:**

1980	<i>Phi Beta Kappa</i>
1984	<i>Alpha Omega Alpha</i>
1988	Dean Thiel Foundation Postdoctoral Research Fellow, American Liver Foundation

1991-1996	Physician Scientist Award, National Institutes of Health
1997-1998	Outstanding Division Teacher, UAB Dept. Medicine
1998-1999	Outstanding Division Teacher, UAB Dept. Medicine
1999-2000	Top Ten Outstanding Teachers, UAB Dept. Medicine

**NATIONAL MEMBERSHIPS AND COMMITTEES:**

	American Medical Association
	American Gastroenterological Association
	American Federation for Clinical Research
	American Association for the Study of Liver Disease
	American Association for the Advancement of Science
7/95-7/97	Secretary, Alabama Chapter, American Liver Foundation
4/97- 4/00	Education Committee, American Association for the Study of Liver Disease
4/98- 4/00	Governance Task Force, American Association for the Study of Liver Disease
5/01-present	Pulmonary hepatic Disorders Task force: European Respiratory Society
11/01-present	Editorial Board <i>Hepatology</i>
1/01-present	Southern Society for Clinical Investigation
1/03-12/05	Chairman Education Committee, American Association for the Study of Liver Disease
5/03-12/05	Scientific Program Committee, American Association for the Study of Liver Disease
3/91-present	<i>ad hoc</i> reviewer for: <i>Gastroenterology</i> , <i>Hepatology</i> , <i>Journal of Hepatology</i> , <i>Annals of Internal Medicine</i> , <i>American Journal of Physiology</i>
5/04-present	Editorial Board <i>Gut</i>
6/04-present	Hepatology SEP Test-Writing Committee, American Board of Internal Medicine
7/04	National Institutes of Health Working Group Action Plan for Liver Disease Research
9/04-present	Strategic Planning Committee, American Association for the Study of Liver Disease
1/05	Nominating Committee, American Association for the Study of Liver Disease
5/06-present	Member VA Merit Gastroenterology Grant Review Committee
4/06 – present	Chairman, Portal Hypertension Experimental Abstract Review Committee, American Association for the Study of Liver Disease
4/06 – present	Journals Publication Committee, American Association for the Study of Liver Disease
6/07-present	Senior Associate Editor, <i>Clinical Gastroenterology and Hepatology</i>

## PRESENTATIONS

- 3/93 University of Alabama School of Medicine  
(Gastroenterology Grand Rounds;  
Gastroenterology Research Conference)  
Birmingham, Alabama
- 5/94 Emory University (Gastroenterology Grand Rounds)  
Atlanta, Georgia
- 5/97 American Gastroenterological Association: Meet the Professor  
Luncheon: The Hepatopulmonary Syndrome
- 5/97 J.L. Boyer Symposium Yale University: Hepatopulmonary  
Syndrome
- 10/97 Mayo Clinic Symposium "Pulmonary Vascular  
Complications of Liver Disease", Rochester, Minn.: Animal  
Models of Hepatopulmonary Syndrome
- 4/00 Alabama Chief Residents Society Annual Meeting: "Prevention in Liver  
Disease"
- 6/00 Alabama ACP Meeting: "Hepatitis C: Diagnosis and Treatment"
- 9/00 World Conference on Lung Health Assembly Symposium: "Pathogenesis of  
Pulmonary Complications in Hepatic Diseases", Florence, Italy
- 9/00 Alberta Society of Gastroenterology Annual Meeting "Hepatopulmonary  
Syndrome", Calgary, Canada
- 3/01 Duke University Gastroenterology Grand Rounds, "Hepatopulmonary  
Syndrome" Durham, NC
- 11/01 American Association for the Study of Liver Disease Post-Graduate Course  
"Hepatopulmonary Syndrome and Portopulmonary Hypertension", Dallas, TX
- 4/02 Pulmonary Hepatic Disorders Task force Workshop European Respiratory  
Society: "Clinical Research Planning" Madrid, Spain
- 5/02 American Association for the Study of Liver Diseases Clinical Research  
Workshop: Methodology in the Investigation of Portal Hypertension  
"Hepatopulmonary Syndrome" San Francisco, CA

- 1/03 Pulmonary Hepatic Disorders Task force Workshop European Respiratory Society: "Pathogenesis of Hepatopulmonary Syndrome" Barcelona, Spain
- 2/03 Italian Association for the Study of the Liver Annual Meeting: "Hepatopulmonary Syndrome" Rome, Italy
- 5/03 Vanderbilt University Pulmonary Research Conference: "Hepatopulmonary Syndrome" Nashville, TN
- 9/03 International Meeting on Therapy in Liver Diseases: "Hepatopulmonary Syndrome: Is Medical Therapy Possible?" Barcelona, Spain
- 1/04 Mississippi Gastroenterology Society Meeting: "Hepatopulmonary Syndrome and Portopulmonary Hypertension" and "Fulminant Hepatic Failure" Jackson, MS
- 1/04 University of Michigan Gastroenterology Grand Rounds: "Hepatopulmonary Syndrome" Ann Arbor, MI
- 8/04 University of California at Los Angeles Transplant Grand Rounds: "Pulmonary Vascular Complications of Liver Disease"
- 9/04 VISN 7 VA Conference on Colorectal Cancer Screening and management "Resident Supervision at the VA"
- 11/04 University of North Carolina GI Grand Rounds: "Hepatopulmonary Syndrome"
- 03/05 Northwestern University GI Grand Rounds: "Hepatopulmonary Syndrome"
- 04/05 Yale University Digestive Diseases Reunion: "Mechanisms of Hepatopulmonary Syndrome"
- 04/05 Baveno IV International Consensus Workshop and II Postgraduate Course on Portal Hypertension
- 5/05 Texas A&M University Medical Grand Rounds "Pulmonary Vascular Complications of Cirrhosis"
- 7/05 Medical College of Virginia Mock GCRC Site Visit
- 3/06 ITLS MELD Exception Meeting, "MELD Exception for Hepatopulmonary Syndrome", Chicago, IL

5/06	Piedmont Hospital Transplantation Conference: “Hepatopulmonary Syndrome”, Atlanta, GA
9/06	AASLD Transplant CAQ review Course, “Pulmonary Vascular Complications of Liver Disease”, Chicago, IL
2/07	Wake Forest University Gastroenterology Grand Rounds, “Pulmonary Vascular Complications of Liver Disease
2/07	Transplant Teaching Conference, Medical College of Virginia “Pulmonary Vascular Complications of Liver Disease”
3/07	Update In Hepatobiliary Disease, University of Miami “Pulmonary Vascular Complications of Liver Disease”
5/07	Medical Grand Rounds, University of South Alabama “Pulmonary Vascular Complications of Liver Disease”
10/07	Medical Grand Rounds, Carolinas Medical Center, Charlotte, NC “Pulmonary Vascular Complications of Liver Disease”

### Sponsorship of Postdoctoral Fellows

Name	Degree at Entry	Training Period	Research Topic	Current Position, Institution, Support
Ming Zhang, M.D., Ph.D.	M.D.	1997-1999	ETI eNOS interactions in the lung	M.D., Ph.D. Research Assistant Professor University of Michigan
John McGrath, M.D.	M.D.	1994-1995	Models of Hepatopulmonary Syndrome	M.D., Private Practice
Zhiying Hou, M.D.	M.D.	1995-1997	eNOS Expression in the lung	M.D., Research Assistant Professor
Joseph Barney, M.D.	M.D.	2005-2006	Chemokines in Lung and HPS	Assistant Professor, UAB
Junlan Zhang, M.D., Ph.D.	M.D., Ph.D.	2005-2006	HO1 Expression and Function in the lung	Assistant Research Professor

**TEACHING RESPONSIBILITIES:**

Complications of Liver Cirrhosis  
Inpatient/Outpatient Services with Residents and Fellows  
Supervise and Mentor for Gastroenterology Intestinal Translational Clinical Research Program  
Supervise Endoscopic Procedures Related to Liver Disease

**CURRENT GRANT SUPPORT:**

4/06 – 4/10 VA Merit Review 2<sup>nd</sup> renewal: Hepatic Mechanisms of Hepatopulmonary Syndrome. Principal Investigator: Michael B. Fallon, M.D.

9/04– 7/09 NIH (NIDDK) 2RO1 DK056804-01: Mediators of Pulmonary Vasodilatation in Liver Disease, M. Fallon, Principal Investigator The major goals of this project are to define the role of the endothelin system in the pathogenesis of intrapulmonary vasodilatation in liver disease

11/03 – 10/08 NIH (NCCAM) RO1 AT001235-01A2: Allicin and NO Modulation of Pulmonary Vasoactivity, D.D. Ku Principal Investigator (Michael B. Fallon, MD co-investigator). This project deals mainly with the investigation into the vasoprotective role of garlic and its active metabolite allicin against pulmonary vasoconstriction and hypertension.

**PAST GRANT SUPPORT:**

1/04 – 12/07 NIH RO3 DK065958-01 :Hepatopulmonary Syndrome Investigative Group, M. Fallon, Principal Investigator. The broad goal of this project is to understand the epidemiology, natural history, and pathogenesis of HPS in order to maximize patient outcomes and develop effective therapies. To accomplish this goal we will establish an alliance of academic centers with expertise in advanced liver disease, liver transplantation and pulmonary vascular disease to study HPS.

**PUBLICATIONS:**

**Peer-Reviewed Original Articles**

Honey RN, **Fallon MB** and Weir GC. Effects of exogenous insulin on somatostatin and glucagon in the perfused chicken pancreas. *Metabolism* 19:1242-1246, 1980.

**Fallon MB**, Mennone A and Anderson JM. Altered expression and immunolocalization of the tight junction protein ZO-1 after common bile duct ligation. *Am J Physiol (Cell Physiol.* 33):C1439-C1447, 1993.

Nathanson MH, **Fallon MB**, Padfield P and Maranto A. Localization of the type 3

inositol 1,4,5-trisphosphate receptor in the  $\text{Ca}^{2+}$  wave trigger zone of pancreatic acinar cells. *J Biol Chem* 269:4693-4696, 1994.

Nathanson MH, Burgstahler A and **Fallon MB** Multi-step mechanism of polarized  $\text{Ca}^{++}$  wave patterns in hepatocytes. *Am J Physiol* (Gastrointest Liver Physiol 30); G338-G349, 1994.

**Fallon MB**, Nathanson MH, Mennone A, Saez J and Anderson JM. Altered expression and function of hepatocyte gap junctions following common bile duct ligation. *Am J Physiol*. (Cell Physiol. 37); C1186-C1194, 1995.

**Fallon MB**, Gorelick FS, Anderson JM, Mennone A, Saluja A and Steer M. Effect of cerulein hyperstimulation on the paracellular barrier of rat exocrine pancreas. *Gastroenterology*. 108:1863-1872, 1995.

Nathanson MH, Burgstahler AD, Mennone A, **Fallon MB**, and Saez JC.  $\text{Ca}^{2+}$  waves are organized in the intact organ. *Am J Physiol*. 269 (Gastrointest Liver Physiol.) G167-171, 1995.

Abrams GA, Jaffe CC, Hoffes PB, Binde HJ and **Fallon MB**. Diagnostic utility of contract echocardiography and lung perfusion scan in hepatopulmonary syndrome. *Gastroenterology*. 109: 1283-1288, 1995.

**Fallon MB**, Brecher AR, Balda MS, Matter K and Anderson JM. Altered localization and expression of the putative tight junction sealing protein occludin after common bile duct ligation. *Am J Physiol*. 269 (Cell Physiol. 38): C1057-C1062, 1995.

Baron TH, Koehler RE, Rodgers WH, **Fallon MB**, and Ferguson SM. Mast cell cholangiopathy: Another cause of sclerosing cholangitis. *Gastroenterology*. 109: 1677-1681, 1995.

Abrams GA, Concato J and **Fallon MB**. Muscle cramps in patients with cirrhosis. *Am J Gastro*. 91: 1363-1366, 1996.

**Fallon MB**, Abrams GA, Hou Z and Luo B. Common bile duct ligation in the rat: A model of intrapulmonary vasodilatation and the hepatopulmonary syndrome. *Am J Physiol*. 272 (Gastrointest Liver Physiol. 35): G779-G784, 1997.

**Fallon MB**, Abrams GA, Luo B, Hou Z, Dai J and Ku DD. The role of endothelial nitric oxide synthase in the pathogenesis of a rat model of hepatopulmonary syndrome. *Gastroenterology*. 113; 606-614, 1997.

Abrams GA, Nanda NC, Dubovsky EV, Krowka MJ and **Fallon MB**. Use of macroaggregated albumin lung perfusion scan to diagnose hepatopulmonary syndrome: a new approach. *Gastroenterology*. 114; 305-310, 1998.

Blackard WG, Sood GK, Crowe RD and **Fallon MB**. Tacrine: a cause of fatal hepatotoxicity? *J Clin Gastroenterol*. 26: 57-59, 1998

Abrams GA and **Fallon MB**. Treatment of hepatopulmonary syndrome with allium sativum L. (garlic): a pilot trial. *J Clin Gastroenterol* 27:232-35, 1998

Luo B, Abrams GA and **Fallon MB**. Endothelin-1 in the rat bile duct ligation model of hepatopulmonary syndrome: correlation with pulmonary dysfunction. *J Hepatol.* 29:571-578,1998

**Fallon MB**, Abrams GA, Abdel-Razek TT, Dai J, Chen SJ, Chen YF, Luo B, Oparil S, and Ku DD. Garlic prevents pulmonary hypertension in rats. *Am J. Physiol.* 275 [Lung Cell. and Mol. Physiol.] L283-L287,1998.

Raymond RS, **Fallon MB** and Abrams GA. Oral thymic extract in the treatment of patients previously treated with interferon for chronic Hepatitis C: A double blind randomized placebo controlled trial. *Ann Int. Med.* , 129:797-800, 1998

Arguedas MR, **Fallon MB**. Hepatitis A vaccination: Is it A-OK? *Adv Gastroenterol Hepatol Clin Nutr* 1998; 3:255-7.

Zhang, M, Luo, B, Chen, S and **Fallon, MB**. Endothelin –1 stimulation of endothelial nitric oxide synthase. A pathogenetic mechanism in experimental hepatopulmonary syndrome. *Am J Physiol.* 277 [Gastrointest. Liver Physiol] G944-G953,1999

Abrams, GA, Rose, K, **Fallon, MB**, McGuire, BM, Bloomer, JR, Van Leeuwen, DJ, Tutton,T, Sellers, MT, Eckhoff, DE and Bynon JS. Hepatopulmonary syndrome and venous emboli causing intracerebral hemorrhages after liver transplantation. *Transplantation.* 68: 1809-1811, 1999

**Fallon MB**. Methylene blue and Hepatopulmonary Syndrome: Pathophysiologic insights and therapeutic dilemmas. *Ann Int. Med.* 133:738-9, 2000

Arguedas, MR and **Fallon, MB**. Prevention in Liver Disease. *Am J Med Sci*, 321:145-151, 2001

Liu, L., Zhang, M., Luo, B., Abrams, G.A. and **Fallon, M.B**. Biliary cyst fluid from common bile duct ligated rats stimulates endothelial nitric oxide synthase in pulmonary artery endothelial cells: a potential role in hepatopulmonary syndrome. *Hepatology*, 33:722-727, 2001

Arguedas, MR, McGuire, BM, **Fallon, MB** and Abrams GA. The use of screening and preventive therapies for gastroesophageal varices in patients referred for evaluation of orthotopic liver transplantation. *Am J Gastro*, 96:833-37, 2001

Arguedas MR, McGuire BM, **Fallon MB**. Implementation of vaccination in patients with cirrhosis. *Dig Dis Sci*, 47:384-7, 2002.

Arguedas MR, Heudebert GR, Eloubeidi MA, Abrams GA, **Fallon MB**. Cost-Effectiveness of Screening, Surveillance and Primary Prophylaxis Strategies for Esophageal Varices *Am J Gastro*, 97:2441-2452, 2002.

Arguedas MR, **Fallon MB**, Heudebert GR, Stinnett A. Cost-effectiveness of Hepatitis A vaccination in patients with chronic HCV infection. *Am J Gastro* 97:721-8,2002.

Arguedas MR, Johnson A, Eloubeidi M, **Fallon MB**. Immunogenicity of Hepatitis A Vaccination in Decompensated Cirrhotic patients. *Hepatology*, 34:28-31, 2001.

Abrams GA, Sanders MK, **Fallon MB**. Utility of pulse oximetry in the detection of arterial hypoxemia in liver transplant candidates. *Liver Transplantation*, 8:391-6, 2002.

Arguedas MR, Chen VK, Eloubeidi MA, **Fallon MB**. Cost-effectiveness of screening strategies for hepatocellular carcinoma in patients with hepatitis C cirrhosis. *Am J Gastro*, 96:833-37, 2002.

Hicken BA, Sharara A, Eloubeidi MA, Abrams GA, **Fallon MB**, Arguedas MR. HVPG measurements to assess response to primary prophylaxis in patients with cirrhosis: a decision analytic study. *Aliment Pharmacol Ther* 17:145-53, 2003.

Arguedas, MR, Abrams, GA, Krowka, MJ, **Fallon, MB**. Prospective evaluation of outcomes and predictors of mortality in patients with hepatopulmonary syndrome undergoing liver transplantation. *Hepatology* 37:192-7, 2003.

Arguedas MR, Chen VK, Eloubeidi MA, **Fallon MB**. Screening for hepatocellular carcinoma in patients with hepatitis C cirrhosis: a cost-utility analysis. *Am J Gastroenterol* 98(3):679-90, 2003.

Luo B, Liu L, Tang L, Zhang J, Stockard CR, Grizzle WE, **Fallon MB**. Increased pulmonary vascular endothelin B receptor expression and responsiveness to endothelin-1 in cirrhotic and portal hypertensive rats: A potential mechanism in experimental hepatopulmonary syndrome. *J Hepatol*. 38(5):556-63, 2003.

Zhang J, Ling Y, Luo B, Tang L, Stockard CR, Grizzle WE, **Fallon MB**. Analysis of heme oxygenase-1 and nitric oxide synthase alterations in experimental hepatopulmonary syndrome. *Gastroenterology* 125(5):1441-51, 2003

Luo B, Liu L, Tang L, Zhang J, Ling Y, **Fallon MB**. Endothelin-1 and tumor necrosis factor alpha in heptaopulmonary syndrome: analysis in prehepatic portal hypertension, biliary and nonbiliary cirrhosis is rats. *Am J Physiol* 286(2):G294-303, 2004.

Krowka MJ, Mandell MS, Ramsay MA, Kawaut SM, **Fallon MB**, Manzarbeitia C, Pardo M Jr, Marotta P, Uemoto S, Stoffel MP, Benson JT. Hepatopulmonary syndrome and portopulmonary hypertension: a report of the multicenter liver transplant database. *Liver Transpl*. 10(2):174-82, 2004.

Ling Y, Zhang J, Luo B, Song D, Liu L, Tang L, Stockard C, Grizzle W, Ku D and **Fallon MB**. The role of endothelin-1 and the endothelin B receptor in the pathogenesis of hepatopulmonary syndrome in the rat. *Hepatology* 39:1593-1602, 2004.

Imamura M, Luo B, Limbird JN, Vitello AM, Oka M, Ivy DD, McMurtry IF, Garat CV, **Fallon MB**, Carter EP. Hypoxic Pulmonary Hypertension is prevented in rats with common bile duct ligation. *J Appl Physiol.* 98:739-47, 2005.

Imamura M, Vitello AM, Limbird JN, Ivy DD, **Fallon MB**, Carter EP. Endothelin-B receptor overexpression prevents hypoxic pulmonary hypertension in cirrhotic rats. *Chest* 128:580S-581S, 2005

Arguedas MR, Drake BB, Kapoor A, and **Fallon MB** Carboxyhemoglobin Levels in Cirrhotic Patients With and Without Hepatopulmonary Syndrome. *Gastroenterology* 128:328-33, 2005

Luo B, Tang L, Wang Z, Zhang J, Ling Y, Feng W, Sun JZ, Stockard CR, Frost AR, Chen YF, Grizzle WE, **Fallon MB**. Cholangiocyte Endothelin 1 and Transforming Growth Factor beta 1 Production in Rat Experimental Hepatopulmonary Syndrome. *Gastroenterology* 129:682-95, 2005

Martinez-Palli G, Drake BB, Garcia-Pagan JC, Barbera JA, Arguedas MR, Rodriguez-Roisin R, Bosch J, Fallon MB. Effect of transjugular intrahepatic portosystemic shunt on pulmonary gas exchange in patients with portal hypertension and hepatopulmonary syndrome. *World J Gastroenterol* 11:6858-62, 2005.

Fallon MB. Hepatopulmonary Syndrome: more than just a matter of tone? *Hepatology* 43:912-4, 2006.

Krowka MJ, **Fallon MB**, Mulligan DC, Gish RG. Model for end-stage liver disease (MELD) exception for portopulmonary hypertension. *Liver Transpl. Suppl* 3:S114-6, 2006.

Fallon MB, Mulligan DC, Gish RG, Krowka MJ. Model for end-stage liver disease (MELD) exception for hepatopulmonary syndrome. *Liver Transpl. Suppl* 3:S105-7, 2006.

Zhang J, Ling Y, Tang L, Luo B, **Fallon MB**. Pentoxifylline attenuation of experimental hepatopulmonary syndrome. *J Appl Physiol* 102(3): 949-55, 2007.

Tang L, Luo B, Patel RP, Ling Y, Zhang J, **Fallon MB**. Modulation of pulmonary endothelial endothelin B receptor expression and signaling: implications for experimental hepatopulmonary syndrome. *Am J Physiol* 292 (6):L1467-72, 2007.

Roberts DN, Arguedas MR, **Fallon MB**. Cost-effectiveness of screening for hepatopulmonary syndrome in liver transplant candidates. *Liver transpl.* 13:206-214, 2007.

Arguedas MR, Singh H, Faulk DK, **Fallon MB**. Utility of pulse oximetry screening for hepatopulmonary Syndrome. *Clin Gastroenterol Hepatol.* 5:749-54, 2007.

Koch DG, Arguedas MR, **Fallon MB**. Risk of aspiration pneumonia in suspected variceal hemorrhage: the value of prophylactic endotracheal intubation prior to endoscopy. *Dig Dis Sci.* 52:2225-8, 2007.

Lang JD, Teng X, Chumley P, Crawford JH, Isbell TS, Chacko BK, Liu Y, Jhala N, Crowe DR, Smith AB, Cross RC, Frenette L, Kelley EE, Wilhite DW, Hall CR, Page GP, **Fallon MB**, Bynon JS, Eckhoff DE, Patel RP. Inhaled NO accelerates restoration of liver function in adults following orthotopic liver transplantation. *J Clin Invest.* 11:2583-91, 2007.

Northup PG, Sundaram V, **Fallon MB**, Reddy KR, Balogun RA, Sanyal AJ, Anstee QM, Hoffman MR, Ikura Y, Caldwell SH, The Coagulation in Liver Disease Group. Hypercoagulation and thrombophilia in liver disease. *J Thrombosis and Haemostasis.* 6:2-9, 2008.

Palma DT, Philips GW, Arguedas MR, Harding SM, **Fallon MB**. Oxygen desaturation during sleep in hepatopulmonary syndrome. *Hepatology in press.*

Kawut SM, Krowka MJ, Trotter JF, Roberts KE, Benza RL, Badesch DB, Taichman DB, Horn EM, Zacks S, Kaplowitz N, Brown RS, **Fallon MB** for the Pulmonary Vascular Complications of Liver Disease Study Group. Clinical Risk Factors for Portopulmonary Hypertension. *Hepatology in press.*

Tanikella R, Philips GM, Faulk DK, Kawut SM, **Fallon MB**. Pilot study of pentoxifylline in hepatopulmonary syndrome. *Liver transpl. in press*

Rybak D, **Fallon MB**, Krowka MJ, Brown RS, Reinen J, Stadheim L, Faulk D, Nielsen C, Al-Naamani N, Roberts K, Zacks S, Perry T, Trotter J, Kawut SM. Risk factors and impact of chronic obstructive pulmonary disease in candidates for liver transplantation. *Liver Transpl.* 14:1357-65, 2008

**Fallon MB**, Krowka MJ, Brown RS, Trotter JF, Zacks S, Roberts KE, Shah VH, Kaplowitz N, Forman L, Wille K, Kawut SM for the Pulmonary Vascular Complications of Liver Disease Study Group. Impact of Hepato-pulmonary Syndrome on Quality of Life and Survival in Liver Transplant Candidates. *Gastroenterology.* 135: 1168-75, 2008

Zhang J, Luo B, Tang L, Wang Y, Stockard C, Kadish I, Van Groen T, Grizzle W, Ponnazhagan S, **Fallon MB** Pulmonary angiogenesis in rat experimental hepatopulmonary syndrome. *Gastroenterology in press*

Zhang J, Ling Y, Tang L, Luo B, Pollock DM, **Fallon MB**. Attenuation of experimental hepatopulmonary syndrome in endothelin B receptor-deficient rats. *Am J. Physiol. in press*

Shaik S, Soltan T, Chaturvedi G, Totapally B, Hagood J, Andrews W, Athar M, Voitenok N, Killingsworth C, Patel R, **Fallon MB**, Maheshwari A. Low-intensity shear stress increases endothelial ELR+ CXC chemokine production via a FAK-P38<sup>β</sup>MAPK-NF- $\kappa$ B pathway *J. Biol Chem. in press*  
Voitenok N, Akalovich S, Shaik S, Randolph D, Sims B, Patel R, Killingsworth C, **Fallon MB**, Ohls R, Maheshwari, A. Developmental Changes in Circulating IL-8/CXCL8 isoforms in Neonates. *Cytokine in press*

Roberts KE, **Fallon MB**, Krowka MJ, Benza RL, Knowles JA, Badesch DB, Brown RS, Taichman DB, Trotter JF, Zacks S, Horn EM, Kawut SM for the PVCLD Study Group. Serotonin transporter polymorphisms in patients with portopulmonary hypertension. *Chest in press*

Roberts KE, **Fallon MB**, Krowka MJ, Brown RS, Trotter JF, Peter I, Tighiouart H, Knowles JA, Rabinowitz D, Benza RL, Badesch DB, Taichman DB, Horn EM, Zacks S, Kaplowitz N, Kawut SM for the PVCLD Study Group. Genetic risk factors for portopulmonary hypertension in patients with advanced liver disease. *Am J Resp Crit Care Med in press*

**VISITING LECTURESHIPS/ PRESENTATIONS:**

- 3/93 University of Alabama School of Medicine  
(Gastroenterology Grand Rounds;  
Gastroenterology Research Conference)  
Birmingham, Alabama
- 5/94 Emory University (Gastroenterology Grand Rounds)  
Atlanta, Georgia
- 5/97 American Gastroenterological Association: Meet the Professor  
Luncheon: The Hepatopulmonary Syndrome
- 5/97 J.L. Boyer Symposium Yale University: Hepatopulmonary  
Syndrome
- 10/97 Mayo Clinic Symposium "Pulmonary Vascular  
Complications of Liver Disease", Rochester, Minn.: Animal  
Models of Hepatopulmonary Syndrome
- 4/00 Alabama Chief Residents Society Annual Meeting: "Prevention in Liver Disease"
- 6/00 Alabama ACP Meeting: "Hepatitis C: Diagnosis and Treatment"
- 9/00 World Conference on Lung Health Assembly Symposium: "Pathogenesis of  
Pulmonary Complications in Hepatic Diseases", Florence, Italy
- 9/00 Alberta Society of Gastroenterology Annual Meeting "Hepatopulmonary Syndrome",  
Calgary, Canada
- 3/01 Duke University Gastroenterology Grand Rounds, "Hepatopulmonary Syndrome"  
Durham, NC
- 11/01 American Association for the Study of Liver Disease Post-Graduate Course  
"Hepatopulmonary Syndrome and Portopulmonary Hypertension", Dallas, TX
- 4/02 Pulmonary Hepatic Disorders Task force Workshop European Respiratory Society:  
"Clinical Research Planning" Madrid, Spain
- 5/02 American Association for the Study of Liver Diseases Clinical Research Workshop:  
Methodology in the Investigation of Portal Hypertension "Hepatopulmonary  
Syndrome" San Francisco, CA

- 1/03 Pulmonary Hepatic Disorders Task force Workshop European Respiratory Society: “Pathogenesis of Hepatopulmonary Syndrome” Barcelona, Spain
- 2/03 Italian Association for the Study of the Liver Annual Meeting: “Hepatopulmonary Syndrome” Rome, Italy
- 5/03 Vanderbilt University Pulmonary Research Conference: “Hepatopulmonary Syndrome” Nashville, TN
- 9/03 5<sup>th</sup> International Meeting on Therapy in Liver Diseases: “Hepatopulmonary Syndrome: Is Medical Therapy Possible?” Barcelona, Spain
- 1/04 Mississippi Gastroenterology Society Meeting: “Hepatopulmonary Syndrome and Portopulmonary Hypertension” and “Fulminant Hepatic Failure” Jackson, MS
- 1/04 University of Michigan Gastroenterology Grand Rounds: “Hepatopulmonary Syndrome” Ann Arbor, MI
- 8/04 University of California at Los Angeles Transplant Grand Rounds: “Pulmonary Vascular Complications of Liver Disease”
- 9/04 VISN 7 VA Conference on Colorectal Cancer Screening and management “Resident Supervision at the VA”
- 11/04 University of North Carolina GI Grand Rounds: “Hepatopulmonary Syndrome”
- 03/05 Northwestern University GI Grand Rounds: “Hepatopulmonary Syndrome”
- 04/05 Yale University Digestive Diseases Reunion: “Mechanisms of Hepatopulmonary Syndrome”
- 04/05 Baveno IV International Consensus Workshop and II Postgraduate Course on Portal Hypertension
- 5/05 Texas A&M University Medical Grand Rounds “Pulmonary Vascular Complications of Cirrhosis”
- 7/05 Medical College of Virginia Mock GCRC Site Visit
- 3/06 ITLS MELD Exception Meeting, “MELD Exception for Hepatopulmonary Syndrome”, Chicago, IL
- 5/06 Piedmont Hospital Transplantation Conference: “Hepatopulmonary Syndrome”, Atlanta, GA

- 9/06 AASLD Transplant CAQ review Course, “Pulmonary Vascular Complications of Liver Disease”, Chicago, IL
- 2/07 Wake Forest University Gastroenterology Grand Rounds, “Pulmonary Vascular Complications of Liver Disease”
- 2/07 Transplant Teaching Conference, Medical College of Virginia “Pulmonary Vascular Complications of Liver Disease”
- 3/07 Update In Hepatobiliary Disease, University of Miami “Pulmonary Vascular Complications of Liver Disease”
- 5/07 Medical Grand Rounds, University of South Alabama “Pulmonary Vascular Complications of Liver Disease”
- 10/07 Medical Grand Rounds, Carolinas Medical Center, Charlotte, NC “Pulmonary Vascular Complications of Liver Disease”

**MAJOR RESEARCH INTERESTS:**

Basic research studies are aimed at understanding the pathogenesis of vascular alterations in chronic liver disease. A major specific focus has been defining and characterizing endothelial dysfunction in the pulmonary vasculature that results in vasodilatation and the hepatopulmonary syndrome. Clinical research interests include diagnosis, and therapy of the hepatopulmonary syndrome and prevention and treatment of complications of chronic liver disease.

**Research Projects Ongoing or Completed During the Last 3 Years:**

"Mediators of Pulmonary Vasodilatation in Liver Disease"

Principal Investigator: Michael B. Fallon, M.D.

Agency: NIH (NIDDK) Type:1RO1 DK56804-05, Period 9/01/04-8/30/09

Goals of this renewal are to define the role of pulmonary microvascular endothelial endothelin B receptor overexpression in the pathogenesis of intrapulmonary vasodilation in liver disease by 1) defining the cellular mechanisms / consequences of pulmonary vascular endothelin B receptor overexpression in cirrhosis and portal hypertension; 2) determining if ET-1 and endothelin B receptor contribute to adhesion and activation of monocytes/macrophages in the pulmonary vascular endothelium; 3) assess the role of endothelin B receptor overexpression in the pathogenesis of experimental HPS in vivo.

“Molecular Pathogenesis of Hepatopulmonary Syndrome”

Principal Investigator: Michael B. Fallon, M.D.

Agency: Veterans Administration Type: Merit Review renewal Period: 4/06-4/10

Major goal of this project is to define the mechanisms through which hepatic injury results in the production of endothelin-1 in cell types in the liver in experimental hepatopulmonary syndrome. The specific aims are: 1) define the relationship between hepatic production and release of ET-1 and the

development of hepatopulmonary syndrome in normal, prehepatic portal hypertensive, biliary cirrhotic, non-biliary cirrhotic and reversible biliary injury/proliferation models *in vivo*; 2) assess the cellular source of hepatic ET-1 production in normal, prehepatic portal hypertensive, biliary cirrhotic, non-biliary cirrhotic and reversible biliary injury/proliferation models; 3) investigate the regulation of ET-1 expression/production by TGF- $\beta$ 1 in normal, prehepatic portal hypertensive, biliary cirrhotic, non-biliary cirrhotic and reversible biliary injury/proliferation models.

“Allicin and NO Modulation of Pulmonary Vasactivity”

Principal Investigator D.D. Ku (Michael Fallon – Co-Investigator)

Agency: NIH (NCCAM) Type: RO1 AT001235-01A2, Period 11/03 – 10/08

This project deals mainly with the investigation into the vasoprotective role of garlic and its active metabolite allicin against pulmonary vasoconstriction and hypertension.

“Hepatopulmonary Syndrome Investigative Group”

Principal Investigator: Michael B. Fallon, MD

Agency: NIH (NIDDK) Type: RO3 DK065958-01, Period 01/04 – 12/07

The broad goal of this project is to understand the epidemiology, natural history, and pathogenesis of HPS in order to maximize patient outcomes and develop effective therapies. To accomplish this goal we will establish an alliance of academic centers with expertise in advanced liver disease, liver transplantation and pulmonary vascular disease to study HPS.