

CURRICULUM VITAE
David Allen Brenner, M.D.

Business Address **UCSD Health Sciences**
9500 Gilman Drive (MC0602)
1318A Biomedical Sciences Building
La Jolla, CA 92093-0602
Telephone: (858) 534-1501; Fax: 858-822-0084
E-mail: dbrenner@ucsd.edu

Professional Experience:

June 1973 – January 1974
Scientific crew, Lamont-Doherty Geological Observatory, Oceanographic Research Ship, R.V. Vema

September 1971 – May 1975
B.S. Cum laude with Departmental Honors in Biology, Yale College, New Haven, CT

September 1975 – May 1979
M.D. Yale University School of Medicine
Student Editor, Yale Journal of Biology and Medicine
Recipient, Harry S.N. Greene Prize for outstanding thesis (Advisor, J.R. Bloomer)

June 1979 – June 1982
Resident, Department of Internal Medicine, Yale-New Haven Medical Center, New Haven, Connecticut

July 1982 – June 1985
Medical Staff Fellow Research Associate, Genetics and Biochemistry Branch (Advisor, R.D. Camerini-Otero) National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, Maryland

June 1985 – June 1986
Gastroenterology Fellow, University of California, San Diego, California

June 1986 - June 1990
Assistant Professor of Medicine in Residence, University of California, San Diego, California

July 1987 – December 1992
Staff Physician, Veteran's Administration Medical Center, San Diego, California

June 1988 – June 1989
Acting Assistant Chief of Medicine, Veteran's Administration Medical Center, San Diego, California. Recipient, Chief Medical Resident's Teaching Award

June 1990 – December 1992
Associate Professor of Medicine, University of California, San Diego, California

January 1992 – December 1992
Clinical Investigator, Veteran's Admin Med Ctr, San Diego, California

January 1993 – March 2003
Professor of Medicine and Biochemistry and Biophysics, Chief, Division of Digestive Diseases and Nutrition, University of North Carolina at Chapel Hill

January 1994 – June 2003
Co-Director, Center for Gastrointestinal Biology and Disease, University of North Carolina at Chapel Hill and North Carolina State University

June 1998 – June 1999
Kenan Fellow in support of sabbatical

June 2000 – June 2003
Nina C. and John T. Sessions Distinguished Professor of Digestive Diseases and Nutrition

June 2001–June 2006
Editor-in-Chief, **Gastroenterology**

June 2002 – March 2003
Director, UNC Center for Digestive Diseases and Nutrition

March 2003- February 2007
Samuel Bard Professor and Chairman, Department of Medicine, Columbia University

June 2003- February 2007

Member: Herbert Irving Comprehensive Cancer Center: Experimental Therapeutics, Gastrointestinal Cancer.

December 2003 - February 2007

Member, Columbia University Institute of Nutrition

February 2007-present

Vice Chancellor for Health Sciences and Dean, UCSD School of Medicine, University of California, San Diego, California

Distinguished Professor, Department of Medicine, University of California, San Diego, California

December 2014-present

Adjunct Professor, Salk Institute for Biological Studies

Board Certification:

American Board of Internal Medicine, 1982

Subspecialty, Gastroenterology, 1986

Professional Membership:

Association of American Physicians, councilor, secretary, and president (2005-)

American Federation for Clinical Research, National Counselor (1989-92)

American Society for Clinical Investigation

American Gastroenterological Association, member of the Research, Governing Board (2006-2010), Nominating Committee (2012) Committee (1992-1995), Teaching and Education Committee (1995-1997), and Chair, Manpower and Training Committee (1997-2000), Chair-elect, Research Policy Committee (2006-2010)

American Association for the Study of Liver Diseases, member of the Research Committee (1991-95), member of the Public Policy Committee (1996-2000).

Glaxo Institute for Digestive Health Scientific Advisory Board (1994-2007), President (2004-2007)

Fellow, American College of Physicians

American Clinical and Climatological Association (2009-)

Alpha1 Foundation, Board of Directors (2004-2013), Executive Board of Directors (2006-2013)

Alcoholic Beverage Medical Research Foundation, Board of Directors (2006-)

Association of Professors of Medicine

Rady Children's Hospital and Health Center Board of Trustees (2007-)

California Institute for Regenerative Medicine, Citizens Oversight Committee (2007-)

CONNECT Board of Directors (2007-)

BioCom Board of Directors (2009-2014)

National Academy of Medicine (2012-)

San Diego Symphony Board of Directors (2013-)

UCSD Athletics Board Member (2013-)

National Institutes of Health Advisory Council, NIDDK (2014-)

Scientific Advisory Board member: Promedior Inc., Nitto Denko Technical Corp., HLI, Metacrine, Pliant.

External Advisory Board member for NIH centers: USC (2000-2008), AECOM (2004-2009), U Michigan (2001-2007), U Penn (2000-), Washington U (2002-).

Reviewer:

NIH ALCB-1 Alcohol Biomedical Research Review Committee (1991-1995)

AGA Industry Scholar Grants Review Panel (1992-1994, 1997-1999)

Crohn's and Colitis Foundation of America Research Career Development Committee (1990-1995)

ALF Grant Review Committee and Scientific Advisory Committee (1994-1997)

GMA2 Review Committee (ad hoc)

Veterans Administration Merit Review (ad hoc)

Journal of Clinical Investigation, Journal of Cell Biology, Molecular and Cell Biology,
Molecular Endocrinology, Biochemistry, Gastroenterology, Hepatology
Alcoholic Beverage Medical Advisory Committee (1998-2004)
Alpha1 Foundation's Grant Advisory Committee (2008-)

Editorial Board Member:

American Journal of Physiology, Associate Editor (1997-2000)
Gastroenterology (1992-1997, 2006-2011), Editor in Chief (2000-2005)
Archives of Biochemistry and Biophysics (1991-2001)
Hepatology (1997-2001)
Journal of Clinical Investigation (1998-2007)
Journal of Hepatology (1999-2004)
FASEB Journal (2002-2007)
World Journal of Gastroenterology and Hepatology (2006-2007)
GI & Hepatology News, Associate Editor (2007-2012)
World Journal of Gastroenterology, (2010-2013)

Sources of Research Support:

Pew Scholar in the Biomedical Sciences (1986-1991)
March of Dimes (1987-1990)
American Gastroenterological Association/Sandoz Research Award
(1986-1989)
University of California Academic Senate (1986-1989)
National Institutes of Health (1988-present)
Veteran's Administration (1987-1992)
North Carolina Biotechnology Center (1992-1996)
Bayer Pharmaceuticals (1996-1999)
Signal Pharmaceuticals (2001)
American Liver Foundation (2002-2003)

Research Interests:

Regulation of Gene Transcription
Hepatic Fibrogenesis
Porphyrias

Grants

Ongoing Research Support

2 P50 AA011999-16 Brenner (PI) 04/01/2009-12/31/2018
NIH/NIAAA/USC

Southern California Research Center for ALPD and Cirrhosis – Res Proj 2

Major goals: To identify the molecular factors that may prevent HSC activation into myofibroblasts, or revert
HSC activation into quiescent-like state.

Role: Subaward PI

5 P42 ES010337-13 Tukey (PI) 04/26/2012-03/31/2017
NIH/NIEHS

Detection and Models of Toxicant Exposure

Major goals: To study the exacerbating effects of CCl₄ in promoting liver fibrosis in animal models that are already developing liver disease. We will also create early detection systems in mice. The tools developed will provide new models and tools to examine the contribution of Superfund toxicants towards the initiation of liver toxicity.

Role: Project Leader

5 U01 AA021856-02 Schnabl/Brenner (Multi-PI) 06/01/2013-05/31/2018
NIH/NIAAA

Microbiome as Therapeutic Target in Alcoholic Hepatitis

Major goals: To investigate the role of microbial changes in animal models and patients with alcoholic hepatitis.

Role: PI

Sub 29709 (Subcontract) Brenner (PI) 09/01/2012-08/31/2017

Alpha-1 Foundation/St. Louis University

Alpha-1 Antitrypsin Deficiency Adult Clinical Genetic Linkage Study

Major goals: To define the natural history of a1AT deficiency liver disease in a large cohort (>1,000) of adult patients, to follow this cohort prospectively including a sub set with liver biopsies, and to identify specific genes and environmental factors associated with increased liver injury. A secondary objective is to gather data in the cohort on other psychosocial and quality of life aspects of alpha-1-antitrypsin deficiency.

Role: Subcontract PI

Completed Research Support

5 R01 GM041804-26 Brenner (PI) 04/01/1989-12/31/2014
NIH/NIGMS

Molecular Mechanisms by which TNF α Modulates Fibrosis

Major goal: The major goal of this project is to determine molecular mechanisms by which TNF- α inhibits fibrosis by examining intracellular signal transduction and gene expression.

Role: PI

R24 DK090962 Olefsky/Brenner/Evans/Saltiel (Multi-PI) 09/30/2010-08/31/2012
NIH/NIDDK

Molecular Mechanisms of Inflammation, Steatosis and Hepatic Insulin Resistance

Major goals: To understand the cellular, metabolic, molecular and genetic basis of chronic inflammation, insulin resistance and fatty liver disease.

Role: PI

R01 DK072237 Brenner (PI) 09/15/2005-06/30/2011
NIH/NIDDK

Angiotensin II and NADPH Oxidase in Hepatic Fibrosis

The major goals of this study are to define the components of the NADPH oxidase complex in hepatic stellate cells, to assess the effect of inhibiting Ang II on hepatic fibrosis and hepatic stellate cell apoptosis, to assess the effect of titrating the angiotensinogen gene in models of hepatic fibrosis, and to determine if other mediators of hepatic fibrosis in addition to Ang II activate NADPH oxidase.

Role: PI

R01 AA015055 Brenner (PI) 09/30/2003-08/31/2009
NIH/NIAAA

Hepatic Stellate Cell Activation Induced by HCV

The goal is to assess the role of HCV proteins in activating hepatic stellate cells.

Role: PI

R01 DK046454 Brenner (PI) 09/01/1989-08/31/2004
NIH NIDDK

Molecular Defects in Protoporphyrin

The major goal of this project is to study the expression of the ferrochelatase gene and the molecular defects in patients with protoporphyria by cloning the ferrochelatase cDNA and gene and then cloning and characterizing mutant ferrochelatase cDNAs and genes from patients.

Role: PI

Patents

Compositions and Methods For Treating Steatohepatitis, Liver Fibrosis, and Hepatocellular Carcinoma (HCC)
T Kisseleva, D Brenner
US Patent 20,150,004,133

Publications

Original Articles:

1. Brenner DA, Valiela I and Van Raalte CD. Grazing by Talorchestia Longicornis on an algal mat in a New England salt marsh. *J Exp Mar Biol Ecol* 22:1261-169, 1976.
2. Bloomer JR, Brenner DA and Mahoney MJ. Studies of factors causing excess protoporphyrin accumulation in culture fibroblasts from patients with protoporphyria. *J Clin Invest* 50:1354-1361, 1977.
3. Brenner DA and Bloomer JR. Heme content of normal and porphyric cultured skin fibroblasts. *Biochem Genet* 15:1061-1071, 1977.
4. Brenner DA and Bloomer JR. Comparison of human and bovine protoporphyria. *Yale J Biol Med* 42:449-454, 1979.
5. Brenner DA and Bloomer JR. A fluorometric assay for measurement of protoporphyrinogen oxidase activity in mammalian tissue. *Clin Chim Acta* 100:259-266, 1980.
6. Brenner DA and Bloomer JR. The enzymatic defect in variegate porphyria: Studies with human cultured skin fibroblasts. *N Engl J Med* 302:765-769, 1980.
7. Brenner DA, Kato S, Anderson RA, Smigocki AC and Camerini-Otero RD. The recombination and integration of DNAs introduced into mouse L cells. *Cold Spring Harbor Symp Quant Biol* 49:151-160, 1984.
8. Brenner DA, Smigocki AC and Camerini-Otero RD. Effect of insertions, deletions, and double-strand breaks on homologous recombination in mouse L cells. *Mol Cell Biol* 5:684-691, 1985.
9. Brenner DA, Smigocki AC and Camerini-Otero RD. Double-strand gap repair results in homologous recombination in mouse L cells. *Proc Natl Acad Sci USA* 83:1762-1766, 1986.
10. Brenner DA and Chojkier M. Acetaldehyde increases collagen gene transcription in cultured human fibroblasts. *J Biol Chem* 262:17690-17695, 1987.
11. Solis-Herruzo JA, Brenner DA and Chojkier M. Tumor necrosis factor α inhibits collagen gene transcription and collagen synthesis in cultured human fibroblasts. *J Biol Chem* 263:5841-5845, 1988.
12. Chojkier M, Flaherty M, Peterkofsky B, Majmudar G, Spanheimer R and Brenner DA. Different mechanisms decrease hepatic collagen and albumin production in fasted rats. *Hepatology* 8:1040-1045, 1988.
13. Brenner DA, O'Hara M, Angel P, Chojkier M and Karin M. Prolonged activation of jun and collagenase genes by tumor necrosis factor α . *Nature* 337:661-663, 1989.

14. Volk BA, Brenner DA and Kagnoff MF. Analysis of RNA transcripts for HLA class II genes in human small intestinal biopsies. *Gut* 30:1220-1224, 1989.
15. Rippe RA, Lorenzen S-I, Brenner DA and Breindl M. Regulatory elements in the 5'-flanking region and the first intron contribute to transcriptional control of the mouse α 1 type I collagen gene. *Mol Cell Biol* 9:2224-2227, 1989.
16. Brenner DA, Koch KS and Leffert HL. Transforming growth factor-alpha stimulates proto-oncogene *c-jun* expression and a mitogenic program in primary cultures of adult rat hepatocytes. *DNA* 8:279-285, 1989.
17. Chojkier M, Brenner DA and Leffert HL. Vasopressin inhibits type-I collagen and albumin gene expression in primary cultures of adult rat hepatocytes. *J Biol Chem* 264:9583-9591, 1989.
18. Chojkier M, Houghlum K, Solis-Heruzzo JA and Brenner DA. Stimulation of collagen gene expression by ascorbic acid in cultured fibroblasts. A role for lipid peroxidation? *J Biol Chem* 264:16957-16962, 1989.
19. Brenner DA, Rippe RA and Veloz L. Analysis of the collagen α 1(I) promoter. *Nucl Acids Res* 17:6055-6064, 1989.
20. Brenner DA, Buck M, Feitelberg S and Chojkier M. Tumor necrosis factor α inhibits albumin gene expression in a murine model of cachexia. *J Clin Invest* 85:248-255, 1990.
21. Rippe RA, Brenner DA and Leffert HL. DNA-mediated gene transfer into adult rat hepatocytes in primary culture. *Mol Cell Biol* 10:689-695, 1990.
22. Brenner DA, Alcorn JM, Feitelberg SP, Leffert HL and Chojkier M. Expression of collagen genes in the liver. *Mol Biol Med* 7:105-115, 1990.
23. Alcorn JM, Feitelberg SP and Brenner DA. Transient induction of *c-jun* during hepatic regeneration. *Hepatology* 11:909-915, 1990.
24. Stearns NA, Dong J, Pan J-X, Brenner DA and Sahagian GG. Comparison of cathepsin L synthesized by normal and transformed cells at the gene, message, protein, and oligosaccharide levels. *Arch Biochem Biophys* 283:447-457, 1990.
25. Omary MB, Brenner DA, de Grandpre L, Roebuck KA, Richman DD and Kagnoff MF. Human immunodeficiency virus-1 infection and expression in human colonic cells: Infection and expression in CD4 positive and CD4 negative cell lines. *AIDS* 5:275-281, 1991.
26. Hattori M, Tugores A, Veloz L, Karin M and Brenner DA. A simplified method for the preparation of transcriptionally active liver nuclear extracts. *DNA and Cell Biol* 9:777-781, 1990.
27. Houghlum K, Brenner DA and Chojkier M. *d*- α -tocopherol inhibits collagen α 1(I) gene expression in cultured human fibroblasts. *J Clin Invest* 87:2230-2235, 1991.
28. Brenner DA and Frasier F. Cloning of murine ferrochelatase. *Proc Natl Acad Sci USA* 88:849-853, 1991.
29. Nehls MC, Rippe RA, Veloz L and Brenner DA. Transcription factors Nuclear Factor I and Sp1 interact with the murine collagen α 1(I) promoter. *Mol Cell Biol* 11:4065-4073, 1991.
30. Lohr M, Maekawa R, Brenner DA, Rooney JF, Nelson JA and Oldstone MBA. Tissue processing of biopsies obtained by endoscopy for *in vitro* DNA amplification. *Endoscopy* 24:779-782, 1992.
31. Koch KS, Lux P, Brenner DA and Leffert HL. Differential expression of the transfected liver-specific 1-inhibitor III gene in normal hepatocytes and hepatoma cells in culture. *Biochem Biophys Res Commun* 183:184-192, 1992.

32. Brenner DA, Didier JM, Frasier F, Christensen SR, Evans GA, and Dailey HA. A molecular defect in protoporphyria. *Am J Human Genetics* 50:1203-1210, 1992.
33. Nehls MC, Grapilon ML and Brenner DA. NF- κ B/SPI Switch Elements Regulate Collagen α 1(I) gene expression. *DNA and Cell Biol* 11:443-452, 1992.
34. Lin A, Frost J, Deng T, Al-Alawi N, Smeal T, Kikkawa U, Hunter T, Brenner DA and Karin, M. Casein kinase II is a negative regulator of cJun DNA binding and AP-1 activity. *Cell* 70:777-789, 1992.
35. Hattori M, Tugores A, Westwick J, Veloz L, Leffert HL, Karin M and Brenner DA. Activation of AP-1 during the hepatic acute phase response. *Am J Physiol* 264:G95-G103, 1993.
36. Koch KS, Fletcher RF, Grond M, Inyang AI, Lu XP, Brenner DA and Leffert HL. Inactivation of plasmid gene expression by one to three benzo [a] pyrene diol-epoxide DNA adducts in adult rat hepatocyte systems. *Cancer Res* 53:2279-2286, 1993.
37. Brenner DA, Veloz L, Jaenisch R and Alcorn JM. Stimulation of collagen 1(I) endogenous gene and transgene in CC4-induced hepatic fibrosis. *Hepatology* 17:287-292, 1993.
38. Roebuck KA, Brenner DA, Kagnoff MF. Identification of c-fos responsive elements downstream of tar in the long terminal repeat of human immunodeficiency virus type-1. *J Clin Invest* 92:1336-1348, 1993.
39. Nehls MC, Brenner DA, Gruss HJ, Dierbach H, et al. Mithramycin selectively inhibits collagen- α 1(I) gene expression in human fibroblast. *J Clin Invest* 92:2916-2921, 1993.
40. Westwick JK, Cox AD, Der CJ, Cobb MH, Hibi M, Karin M, Brenner DA. Oncogenic ras activates c-Jun via a separate pathway from the activation of extracellular-signal regulated kinases. *Proc Natl Acad Sci USA* 91:6030-6034, 1994.
41. Magness ST, Tugores A, Christensen SR, Wagner-McPherson C, Evans GA, Naylor EW, Brenner DA. Deletion of the ferrochelatase gene in a patient with protoporphyria. *Human Molecular Genetics* 3:1695-1697, 1994.
42. Tugores A, Brenner DA. A method for in vitro DNase I footprinting analysis on supercoiled templates. *Biotechniques* 17:410-412, 1994.
43. Westwick JK, Weitzel C, Minton A, Karin M, Brenner DA. Tumor necrosis factor α stimulates AP-1 activity through prolonged activation of the c-Jun kinase. *J Biol Chem* 269:26396-26401, 1994.
44. Rhodes K, Rippe RA, Umezawa A, Nehls M, Brenner DA, Breindl M. DNA methylation represses murine α 1(I) collagen promoter by an indirect mechanism. *Mol Cell Biol* 14:5950-5960, 1994.
45. Diehl AM, Yin M, Fleckenstein J, Yang SQ, Lin Hz, Brenner DA, Westwick J, Bagby G, Nelson S. Tumor necrosis factor α induces c-jun during the regenerative response to liver injury. *Am J Physiol* 267:G552-G561, 1994.
46. Cox AD, Garcia AM, Westwick JK, Kowalczyk JJ, Lewis MD, Brenner DA, Der CJ. The CAAX peptidomimetic compound B581 specifically blocks farnesylated, but not geranylgeranylated or myristylated, oncogenic ras signaling and transformation. *J Biol Chem* 269:19203-19206, 1994.
47. Tugores A, Magness ST, Brenner DA. A single promoter directs both housekeeping and erythroid preferential expression of the human ferrochelatase gene. *J Biol Chem* 269:30789-30797, 1994.
48. Westwick JK, Weitzel C, Leffert HL, Brenner DA. Activation of Jun kinase is an early event in hepatic regeneration. *J Clin Invest* 95:803-810, 1995.

49. Rippe RA, Almounajed G, Brenner DA. Sp1 binding activity increases in activated Ito Cells. *Hepatology* 22:241-251, 1995.
50. Westwick JK, Bielawski A, Dbaibo , Hannun YA, Brenner DA. Ceramide activates the stress-activated protein kinases. *J Biol Chem* 270:22689-22692, 1995.
51. Magness ST, Brenner DA. Ferrochelatase cDNA delivered by adenoviral vector corrects biochemical defect in protoporphyric cells. *Hum Gene Therapy* 6:1285-1290, 1995
52. Simmons JG, Hoyt EC, Westwick JK, Brenner DA, Pucilowska JB, Lund PK. Insulin-like growth factor-I (IGF-I) and epidermal growth factor (EGF) interact to regulate growth and gene expression in IEC-6 intestinal crypt cells. *Mol Endocrinol* 9:1157-1165, 1995.
53. Kandil HM, Argenzio RA, Chen W, Berschneider HM, Stiles AD, Westwick JK, Rippe RA, Brenner DA, Rhoads JM. L-glutamine and L-asparagine stimulate ODC activity and proliferation in a porcine jejunal enterocyte line. *Am J Physiol* 269:G591-G599, 1995.
54. Hellerbrand C, Wang SC, Tsukamoto H, Brenner DA, Rippe RA. Expression of intercellular adhesion molecule 1 by activated hepatic stellate cells. *Hepatology*, 24:670-676, 1996.
55. Westwick JK, Fleckenstein J, Yin M, Lin HZ, Bradham CA, Brenner DA, Diehl AM. Differential regulation of hepatocyte DNA synthesis by cAMP *in vitro* and *in vivo*. *Am J Physiol* 271:G780-G790, 1996.
56. Iimuro Y, Bradford BU, Gao W, Kadiiska M, Mason RP, Stefanovic B, Brenner DA, Thurman RG. Detection of α -hydroxyethyl free radical adducts in the pancreas after chronic exposure to alcohol in the rat. *Mol Pharmacol* 50:656-661, 1996.
57. Mallat A, Pr eaux A-M, Serradeil-Le Gal C, Raufaste D, Gallois C, Brenner DA, Bradham C, Maclouf J, Lourgenko V, Fouassier L, Dhumeaux D, Mavier P, Lotersztajn S. Growth inhibitory properties of endothelin-1 in activated human hepatic stellate cells: a cyclic adenosine monophosphate-mediated pathway. Inhibition of both extracellular signal-regulated kinase and c-Jun kinase and upregulation of endothelin B receptors. *J Clin Invest* 98:2771-2778, 1996.
58. Rippe RA, Umezawa A, Kimball JP, Breindl M, Brenner DA. Binding of upstream stimulatory factor to an E-box in the 3'-flanking region stimulates α 1(I) collagen gene transcription. *J Biol Chem* 272: 1753-1760, 1997.
59. Licato LL, Keku TO, Wurzelmann JI, Murray SC, Woosley JT, Sandler RS, Brenner DA. *In vivo* activation of JNK and ERK MAP kinases in gastrointestinal neoplasia. *Gastroenterology* 113: 1589-1598, 1997.
60. Rhoads JM, Argenzio RA, Chen W, Rippe RA, Westwick JA, Cox AD, Berschneider HM, Brenner DA. L-Glutamine stimulates intestinal cell proliferation and activates mitogen-activated protein kinases. *American Journal of Physiology* 272: 943-953, 1997.
61. Bradham CA, Stachlewitz RF, Gao W, Qian T, Jayadev S, Jenkins G, Hannun Y, Lemasters JJ, Thurman RG, Brenner DA. Reperfusion after liver transplantation in rats differentially activates the mitogen-activated protein kinases. *Hepatology* 25: 1128-1135, 1997.
62. Stefanovic B, Hellerbrand C, Holcik M, Briendl M, Liebhaber SA, Brenner DA. Posttranscriptional regulation of collagen alpha 1 (I) mRNA in hepatic stellate cells. *Mol Cell Biol* 17: 5201-5209, 1997.
63. Xu Y, Bradham C, Brenner DA, Czaja M. Hydrogen peroxide-induced liver cell necrosis is dependent on AP-1 activation. *American Journal of Physiology* 273:G795-G803, 1997.

64. Jobin C, Panja A, Hellerbrand C, Iimuro Y, Didonato J, Brenner DA, Sartor RB. Inhibition of proinflammatory molecule production by adenovirus-mediated expression of an NF κ B super repressor in human intestinal epithelial cells. *J Immun* 160: 410-418, 1998.
65. Iimuro Y, Nishiura T, Hellerbrand C, Behrns KE, Schoonhoven R, Grisham JW, Brenner DA. NF κ B prevents apoptosis and liver failure during liver regeneration. *J Clin Invest*. 101: 802-811, 1998.
66. Trautwein C, Rakemann T, Brenner DA, Streetz K, Licato L, Manns MP, Tiegs G. Concanavalin A-induced liver cell damage: activation of intracellular pathways triggered by tumor necrosis factor in mice. *Gastroenterology* 114: 1035-1045, 1998.
67. Hellerbrand C, Jobin C, Iimuro Y, Licato L, Sartor RB, Brenner DA. Inhibition of NF κ B in activated rat hepatic stellate cells by proteasome inhibitors and a κ B super-repressor. *Hepatology* 27: 1285-1295, 1998.
68. Bloomer JR, Bruzzone C, Zhu L, Scarlett Y, Magness ST, Brenner DA. Molecular defects in ferrochelatase in patients with protoporphyria requiring liver transplantation. *J Clin Invest* 102: 107-114, 1998.
69. Ikejima K, Enomoto N, Iimuro Y, Ikejima A, Fang D, Xu J, Forman DT, Brenner DA, Thurman RG. Estrogen increases sensitivity of hepatic Kupffer cells to endotoxin. *Am J Physiol* 274: G669-G676, 1998.
70. Hellerbrand C, Jobin C, Licato LL, Sartor RB, Brenner DA. Cytokines induce NF- κ B in activated but not quiescent rat hepatic stellate cells. *Am J Physiol* 275: G269-G278, 1998.
71. Licato LL, Brenner DA. Analysis of signaling protein kinases in human colon or colorectal carcinomas. *Dig Dis Sci* 43: 1454-1464, 1998.
72. Jobin C, Hellerbrand C, Licato LL, Brenner DA, Sartor RB. NF- κ B mediates cytokine-induced expression of ICAM-1 in an intestinal epithelial cell line, a process blocked by proteasome inhibitors. *Gut* 42:779-787, 1998.
73. Enomoto N, Ikejima K, Bradford B, Rivera C, Hiroshi K, Brenner DA, Thurman RG. Alcohol causes both tolerance and sensitization of rat Kupffer cells via mechanisms dependent on endotoxin. *Gastroenterology* 115:443-451, 1998.
74. Magness ST, Tugores A, Diala ES, Brenner DA. Analysis of the human ferrochelatase promoter in transgenic mice. *Blood* 92:320-328, 1998.
75. Xu Y, Bialik S, Jones BE, Iimuro Y, Kitsis RN, Srinivasan A, Brenner DA, Czaja MJ. NF- κ B inactivation converts a hepatocyte cell line TNF- α response from proliferation to apoptosis. *Am J Physiol* 275:C1058-C1066, 1998.
76. Bradham CA, Qian T, Streetz K, Trautwein C, Brenner DA, Lemasters JJ. The mitochondrial permeability transition is required for tumor necrosis factor alpha-mediated apoptosis and cytochrome c release. *Mol Cell Biol* 18:6353-6364, 1998.
77. Hellerbrand C, Stefanovic B, Giordano F, Burchardt ER, Brenner DA. The role of TGF β 1 in initiating hepatic stellate cell activation *in vivo*. *J Hepatology* 30:77-87, 1999.
78. Magness ST, Brenner DA. Targeted disruption of the mouse ferrochelatase gene producing an exon 10 deletion. *Biochimica et Biophysica Acta* 1453: 161-174, 1999.
79. Ikejima K, Nobuyuki E, Seabra V, Ikejima A, Brenner DA, Thurman RG. Pronase destroys the Lipopolysaccharide receptor CD14 on Kupffer cells. *Am J Physiol* 276: G591-G598, 1999.

80. Stefanovic B, Hellerbrand C, Brenner DA. Regulatory role of the conserved stem-loop structure at the 5' end of collagen $\alpha 1(I)$ mRNA. *Mol Cell Biol* 19:434-4344, 1999.
81. Bradham CA, Thurman RG, Brenner DA. The activation of NF κ B during orthotopic liver transplantation in rats is protective and does not require Kupffer cells. *Liver Transpl Surg* 5:282-293, 1999.
82. Jobin C, Holt L, Bradham CA, Streetz K, Brenner DA, Sartor RB. TNF Receptor-Associated Factor-2 is Involved in Both IL-1 β and TNF- α signaling cascades leading to NF- κ B activation and IL-8 expression in human intestinal epithelial cells. *J Immunol* 162:4447-4454, 1999.
83. Enomoto N, Yamashina S, Kono H, Schemmer P, Rivera CA, Enomoto A, Nishiura T, Nishimura T, Brenner DA, Thurman RG. Development of a new, simple rat model of early alcohol-induced liver injury based on sensitization of Kupffer cells. *Hepatology* 29:1680-1689, 1999.
84. Batra RK, Guttridge DC, Brenner DA, Dubinett SM, Baldwin AS, Boucher RC. IkappaB α gene transfer is cytotoxic to squamous-cell lung cancer cells and desensitizes them to tumor necrosis factor- α -mediated cell death. *Am J Respir Cell Mol Biol* 21:238-245, 1999.
85. Uzawa K, Grzesik WJ, Nishiura T, Kuznetsov SA, Robey Pg, Brenner DA, Yamauchi M. Differential expression of human lysyl hydroxylase genes, lysine hydroxylation, and cross-linking of Type I collagen during osteoblastic differentiation In vitro. *J Bone Miner Res* 14:1272-1280, 1999.
86. Jobin C, Bradham CA, Russo MP, Juma B, Narula AS, Brenner DA, Sartor RB. Curcumin blocks cytokine-mediated NF- κ B activation and proinflammatory gene expression by inhibiting Inhibitory FactorI-kappa B Kinase activity. *J Immunol* 163:3474-3483, 1999.
87. Enomoto N, Yamashina S, Schemmer P, Rivera CA, Bradford BU, Enomoto A, Brenner DA, Thurman RM. Estriol sensitizes rat Kupffer cells via gut-derived endotoxin. *Am J Physiol* 277:G671-677, 1999.
88. Solis-Herruzo JA, Rippe RA, Schrum LW, de La Torre P, Garcia I, Jeffrey JJ, Munoz-Yague T, Brenner DA. Interleukin-6 increases rat Metalloproteinase-13 gene expression through stimulation of activator protein 1 transcription factor in cultured fibroblasts. *J Biol Chem* 274:30919-30926, 1999.
89. Rippe RA, Schrum LW, Stefanovic B, Solis-Herruzo JA, Brenner DA. NF- κ B inhibits expression of the alpha 1(I) collagen gene. *DNA Cell Biol* 18:751-61, 1999.
90. Rusyn I, Bradham CA, Cohn L, Schoonhoven R, Swenberg JA, Brenner DA, Thurman RG. Corn oil rapidly activates NF- κ B in hepatic Kupffer cells by oxidant-dependent mechanisms. *Carcinogenesis* 20:2095-2100, 1999.
91. Stefanovic B, Lindquist J, Brenner DA. The 5' stem-loop regulates expression of collagen alpha 1(I) mRNA in mouse fibroblasts cultured in a three-dimensional matrix. *Nucleic Acids Res*: 28:641-647, 2000.
92. Krempe K, Grotkopp D, Hall K, Bache A, Gillan A, Rippe RA, Brenner DA, Breindl M. Far upstream regulatory elements enhance position-independent and uterus-specific expression of the murine alpha 1(I) collagen promoter in transgenic mice. *Gene Expression* 8:151-163, 1999.
93. Rhoads JM, Argenzio RA, Chen W, Graves LM, Licato LL, Blikslager AT, Smith J, Gatzky J, Brenner DA. Glutamine Metabolism Stimulates Intestinal Cell MAPKs by a cAMP-inhibitable, Raf-independent mechanism. *Gastroenterology*. 118:90-100, 2000.
94. Magness ST, Tugores A and Brenner DA. Analysis of ferrochelatase expression during hematopoietic development of embryonic stem cells. *Blood* 95:3568-3577, 2000.
95. Schrum LW, Black D, Iimuro Y, Rippe RA, Brenner DA, Behrns KE. c-Jun does not mediate hepatocyte apoptosis following NF- κ B inhibition and partial hepatectomy *Journal of Surgical Research* 88:142-149, 2000.

96. Nishimura T, Nishiura T, DeSerres S, Nakagawa T, Brenner DA, Meyer AA. Impact of burn injury on hepatic TGF- β 1 expression and plasma TGF- β 1 levels. *J Trauma* 48:39-44, 2000.
97. Brenner DA, Waterboer T, Choi SK, Lindquist JN, Stefanovic B, Burchardt E, Yamauchi M, Gillan A, Rippe RA. New aspects of hepatic fibrosis. *J Hepatol* 32: (1 Supplement) 32-38, 2000.
98. Imuro Y, Bradford BU, Yamashina S, Rusyn I, Nakagami M, Enomoto N, Knon H, Forman D, Brenner DA, Thurman RG. The glutathione precursor L-2-oxothiazolidine-4-carboxylic acid protects against liver injury due to chronic enteral ethanol exposure in the rat. *Hepatology* 31:391-398, 2000.
99. Nishiura T, Nishimura T, deSerres S, Godfrey V, Bradham CA, Nakagawa T, Brenner DA, Meyer AA. Gene expression and cytokine and enzyme activation in the liver after a burn injury. *J Burn Care Rehabil.* 21:135-41, 2000.
100. Böcker U, Schottelius A, Watson JM, Holt L, Licato LL, Brenner DA, R. Sartor RB, Jobin C. Cellular Differentiation Causes a Selective Down-regulation of Interleukin (IL)-1-mediated NF-B Activation and IL-8 Gene Expression in Intestinal Epithelial Cells. *J. Biol. Chem.* 2000 275: 12207-12213, 2000.
101. Hatano E, Bradham CA, Stark S, Imuro Y, Lemasters JJ, Brenner DA. The Mitochondrial Permeability Transition Augments Fas-induced Apoptosis in Mouse Hepatocytes. *J. Biol. Chem.* 275: 11814-11823, 2000.
102. Enomoto N, Ikejima K, Yamashina S, Enomoto A, Nishiura T, Nishimura T, Brenner DA, Schemmer P, Bradford BU, Rivera CA, Zhong Z, Thurman RG. Kupffer cell-derived prostaglandin E(2) is involved in alcohol-induced fat accumulation in rat liver. *Am J Physiol.* 279:G100-106, 2000.
103. Xu LH, Yang X, Bradham CA, Brenner DA, Baldwin AS Jr, Craven RJ, Cance WG. The focal adhesion kinase suppresses transformation-associated, anchorage-independent apoptosis in human breast cancer cells: involvement of death receptor-related signaling pathways. *J Biol Chem.* 275:30597-30604, 2000.
104. Lang A, Schoonhoven R, Tuvia S, Brenner DA, Rippe RA. NF- κ B in proliferation, activation, and apoptosis in rat hepatic stellate cells. *J Hepatol:* 33:49-58, 2000.
105. Streetz K, Leifeld L, Grundmann D, Ramakers J, Eckert K, Spengler U, Brenner DA, Manns M, Trautwein C. Tumor necrosis factor α in the pathogenesis of human and murine fulminant hepatic failure. *Gastroenterology* 119:446-460, 2000.
106. Lindquist JN, Kauschke SG, Stefanovic B, Burchardt ER, Brenner DA. Characterization of the interaction between alphaCP(2) and the 3'-untranslated region of collagen alpha1(I) mRNA. *Nucleic Acids Res.* 28:4306-4316, 2000.
107. Lehmann TG, Wheeler MD, Schwabe RF, Connor HD, Schoonhoven R, Bunzendahl H, Brenner DA, Jude Samulski R, Zhong Z, Thurman RG. Gene delivery of Cu/Zn-Superoxide Dismutase improves graft function after transplantation of fatty livers in the rat. *Hepatology.* 32:1255-1264, 2000.
108. Nagaki M, Naiki T, Brenner DA, Osawa Y, Imose M, Hayashi H, Banno Y, Nakashima S, Moriwaki H. TNF- α prevents Tumor Necrosis Factor Receptor-mediated mouse hepatocyte apoptosis, but not Fas-mediated apoptosis: role of NF- κ B. *Hepatology.* 32:1272-1279, 2000.
109. Lang A, Schrum LW, Schoonhoven R, Tuvia S, Solis-Herruzo JA, Tsukamoto H, Brenner DA, Rippe RA. Expression of small heat shock protein alphaB-crystallin is induced after hepatic stellate cell activation. *Am J Physiol Gastrointest Liver Physiol.* 279:G1333-G1342, 2000.
110. Schwabe RF, Bennett BL, Manning AM, Brenner DA. Differential role of IkappaB kinase 1 and 2 in primary rat hepatocytes. *Hepatology.* 33:81-90, 2001.

111. Schrum LW, Bird MA, Salcher O, Burchardt ER, Grisham JW, Brenner DA, Rippe RA, Behrns KE. Autocrine expression of activated transforming growth factor-beta(1) induces apoptosis in normal rat liver. *Am J Physiol Gastrointest Liver Physiol.* 280:G139-G148, 2001.
112. Hatano E, Bennett BL, Manning AM, Qian T, Lemasters JJ, Brenner DA. Nf-kappaB stimulates inducible nitric oxide synthase to protect mouse hepatocytes from TNF- α and fas-mediated apoptosis. *Gastroenterology* 120:1251-62, 2001.
113. Kono H, Nakagami M, Rusyn I, Connor HD, Stefanovic B, Brenner DA, Mason RP, Arteel GE, Thurman RG. Development of an animal model of chronic alcohol-induced pancreatitis in the rat. *Am J Physiol Gastrointest Liver Physiol* 280:G1178-86, 2001.
114. Schwabe RF, Schnabl B, Kweon YO, Brenner DA. CD40 Activates NF- κ B and c-Jun N-Terminal Kinase and Enhances Chemokine Secretion in Activated Human Hepatic Stellate Cells. *J Immunol.*166:6812-9, 2001.
115. Osawa Y, Banno Y, Nagaki M, Brenner DA, Naiki T, Nozawa Y, Nakashima S, Moriwaki H J. TNF- α -induced sphingosine 1-phosphate inhibits apoptosis through a phosphatidylinositol 3-kinase/Akt pathway in human hepatocytes. *Immunol* 167:173-80, 2001.
116. Schnabl B, Kweon YO, Frederick JP, Wang XF, Rippe RA, Brenner DA The role of Smad3 in mediating mouse hepatic stellate cell activation. *Hepatology* 34:89-100, 2001.
117. Enomoto N, Schemmer P, Ikejima K, Takei Y, Sato N, Brenner DA, Thurman RG. Long-term alcohol exposure changes sensitivity of rat Kupffer cells to lipopolysaccharide. *Alcohol Clin Exp Res.* 25:1360-7, 2001.
118. Schnabl B, Bradham CA, Bennett BL, Manning AM, Stefanovic B, Brenner DA. TAK1/JNK and p38 have opposite effects on rat hepatic stellate cells. *Hepatology.* 2001 Nov;34(5):953-63.
119. Bradham CA, Hatano E, Brenner DA. Dominant-negative TAK1 induces c-Myc and G(0) exit in liver. *Am J Physiol Gastrointest Liver Physiol.* 281:G1279-89, 2001.
120. Hatano E, Brenner DA . Akt protects mouse hepatocytes from TNF- α - and Fas-mediated apoptosis through NK- κ B activation. *Am J Physiol Gastrointest Liver Physiol* 281:G1357-68, 2001.
121. Kweon YO, Goodman ZD, Dienstag JL, Schiff ER, Brown NA, Burkhardt E, Schoonhoven R, Brenner DA, Fried MW. Decreasing fibrogenesis: an immunohistochemical study of paired liver biopsies following lamivudine therapy for chronic hepatitis B. *J Hepatol* 35:749-755, 2001.
122. Schnabl B, Choi YH, Olsen JC, Hagedorn CH, Brenner DA. Immortal activated human hepatic stellate cells generated by ectopic telomerase expression. *Lab Invest* 82:323-33, 2002.
123. Russo MP, Bennett BL, Manning AM, Brenner DA, Jobin C. Differential requirement for NF- κ B-inducing kinase in the induction of NF- κ B by IL-1 β , TNF- α , and Fas. *Am J Physiol Cell Physiol* 283(1):C347-57, 2002.
124. Stefanovic B, Schnabl B, Brenner DA. Inhibition of Collagen alpha 1(I) Expression by the 5' Stem-Loop as a Molecular Decoy. *J Biol Chem* 277(20):18229-37, 2002.
125. Schwabe RF, Brenner DA. Role of glycogen synthase kinase-3 in TNF- α -induced NF- κ B activation and apoptosis in hepatocytes. *Am J Physiol Gastrointest Liver Physiol* 283(1):G204-11, 2002.
126. Liedtke C, Plumpe J, Kubicka S, Bradham CA, Manns MP, Brenner DA, Trautwein C. Jun kinase modulates tumor necrosis factor-dependent apoptosis in liver cells. *Hepatology* 36(2):315-25, 2002.

127. Magness ST, Maeda N, Brenner DA. An exon 10 deletion in the mouse ferrochelatase gene has a dominant-negative effect and causes mild protoporphyria. *Blood* 100(4):1470-7, 2002.
128. Samson CM, Schrum LW, Bird MA, Lange PA, Brenner DA, Rippe RA, Behrns KE. Transforming growth factor-beta1 induces hepatocyte apoptosis by a c-Jun independent mechanism. *Surgery* 132: 441-9, 2002.
129. Osawa Y, Nagaki M, Banno Y, Brenner DA, Asano T, Nozawa Y, Moriwaki H, Nakashima S. Tumor necrosis factor alpha-induced interleukin-8 production via NF- κ B and phosphatidylinositol 3-kinase/Akt pathways inhibits cell apoptosis in human hepatocytes. *Infect Immun* 70(11):6294-301, 2002.
130. Kim YS, Schwabe RF, Qian T, Lemasters JJ, Brenner DA. TRAIL-mediated apoptosis requires NF- κ B inhibition and the mitochondrial permeability transition in human hepatoma cells. *Hepatology* 36(6):1498-508, 2002.
131. Stefanovic B, Brenner DA. 5' stem-loop of collagen alpha-1(I) mRNA inhibits translation in vitro but is required for triple helical collagen synthesis in vivo. *J Biol Chem* 278(2):927-33, 2003.
132. Yata Y, Scanga A, Gillan A, Yang L, Reif S, Breindl M, Brenner DA, Rippe RA. DNase I-hypersensitive sites enhance α 1(I) collagen gene expression in hepatic stellate cells. *Hepatology* 37(2):267-276, 2003.
133. Jimuro Y, Nishio T, Morimoto T, Nitta T, Stefanovic B, Choi SK, Brenner DA, Yamaoka Y. Delivery of matrix metalloproteinase-1 attenuates established liver fibrosis in the rat. *Gastroenterology* 124(2):445-58, 2003.
134. Schnabl B, Purbeck CA, Choi YH, Hagedorn CH, Brenner DA. Replicative senescence of activated human hepatic stellate cells is accompanied by a pronounced inflammatory but less fibrogenic phenotype. *Hepatology* 37(3):653-64, 2003.
135. Schwabe RF, Bradham CA, Uehara T, Hatano E, Bennet BL, Schoonhoven R, Brenner DA. c-Jun-N terminal kinase drives cyclin D1 expression and proliferation during liver regeneration. *Hepatology* 37(4):824-32, 2003.
136. Luedde T, Rodriguez ME, Tacke F, Xiong Y, Brenner DA, Trautwein C. p18(INK4c) collaborates with other CDK-inhibitory proteins in the regenerating liver. *Hepatology* 37(4):833-41, 2003.
137. Nishio T, Jimuro Y, Nitta T, Harada N, Yoshida M, Hirose T, Yamamoto N, Morimoto T, Brenner DA, Yamaoka Y. Increased expression of collagenase in the liver induces hepatocyte proliferation with cytoplasmic accumulation of beta-catenin in the rat. *J Hepatol* 38(4):468-75, 2003.
138. Osawa Y, Nagaki M, Banno Y, Brenner DA, Nozawa Y, Moriwaki H, Nakashima S. Expression of the NF- κ B target gene X-Ray-inducible immediate early response factor-1 short enhances TNF- α -induced hepatocyte apoptosis by inhibiting Akt activation. *J Immunol* 170(8):4053-4060, 2003.
139. Oh KW, Qian T, Brenner DA, Lemasters JJ. Salicylate enhances necrosis and apoptosis mediated by the mitochondrial permeability transition. *Toxicol Sci* 73(1):44-52, 2003.
140. Bataller R, Gabele E, Schoonhoven R, Morris T, Lehnert M, Yang L, Brenner DA. Prolonged infusion of angiotensin II into normal rats induces stellate cell activation and pro-inflammatory events in the liver. *Am J Physiol Gastrointest Liver Physiol* 285(3):G642-51, 2003.
141. Paik YH, Schwabe RF, Bataller R, Russo MP, Jobin C, Brenner DA. Toll-like receptor 4 mediates inflammatory signalling by bacterial lipopolysaccharide in human hepatic stellate cells. *Hepatology* 37(5):1043-55, 2003.
142. Lehmann TG, Wheeler MD, Froh M, Schwabe RF, Bunzendahl H, Samulski RJ, Lemasters JJ, Brenner DA, Thurman RG. Effects of three superoxide dismutase genes delivered with an adenovirus on graft function after transplantation of fatty livers in the rat. *Transplantation* 76(1):28-37, 2003.

143. Schwabe RF, Bataller R, Brenner DA. Human hepatic stellate cells express CCR5 and RANTES to induce proliferation and migration. *Am J Physiol Gastrointest Liver Physiol* 285(5):G949-58, 2003.
144. Kweon YO, Paik YH, Schnabl B, Qian T, Lemasters JJ, Brenner DA. Gliotoxin-mediated apoptosis of activated human hepatic stellate cells. *J Hepatol* 39(1):38-46, 2003.
145. Imose M, Nagaki M, Naiki T, Osawa Y, Brenner DA, Asano T, Hayashi H, Kato T, Moriwaki H. Inhibition of NF- κ B and phosphatidylinositol 3-kinase/Akt is essential for massive hepatocyte apoptosis induced by tumor necrosis factor alpha in mice. *Liver Int* 23(5):386-96, 2003.
146. Bataller R, Schwabe RF, Choi YH, Yang L, Paik YH, Lindquist J, Qian T, Schoonhoven R, Hagedorn CH, Lemasters JJ, Brenner DA. NADPH oxidase signal transduces angiotensin II in hepatic stellate cells and is critical in hepatic fibrosis. *J Clin Invest* 112(9):1383-94, 2003.
147. Lindquist JN, Parsons CJ, Stefanovic B, Brenner DA. Regulation of alpha 1(I) collagen mRNA decay by interactions with alpha CP at the 3'untranslated region. *J Biol Chem* 279(22):23822-9, 2004.
148. Bataller R, Paik YH, Lindquist JN, Lemasters JJ, Brenner DA. Hepatitis C virus core and nonstructural proteins induce fibrogenic effects in hepatic stellate cells. *Gastroenterology* 126(2):529-40, 2004.
149. Stefanovic B, Stefanovic L, Schnabl B, Bataller R, Brenner DA. TRAM2 protein interacts with endoplasmic reticulum Ca²⁺ pump Serca2b and is necessary for collagen type I synthesis. *Mol Cell Biol* 24(4):1758-68, 2004.
150. Schwabe RF, Uchinami H, Qian T, Bennett BL, Lemasters JJ, Brenner DA. Differential requirement for c-Jun NH2-terminal kinase in TNFalpha- and Fas-mediated apoptosis in hepatocytes. *FASEB J* 18(6):720-2, 2004.
151. Black D, Bird MA, Samson CM, Lyman S, Lange PA, Schrum LW, Qian T, Lemasters JJ, Brenner DA, Rippe RA, Behrns KE. Primary cirrhotic hepatocytes resist TGF β -induced apoptosis through a ROS-dependent mechanism. *J Hepatol* 40(6):942-51, 2004.
152. Black D, Bird MA, Hayden M, Schrum LW, Lange P, Samson C, Hatano E, Rippe RA, Brenner DA, Behrns KE. TNF α -induced hepatocyte apoptosis is associated with alterations of the cell cycle and decreased stem loop binding protein. *Surgery* 135(6):619-28, 2004.
153. Uehara T, Xi Peng X, Bennett B, Satoh Y, Friedman G, Currin R, Brenner DA, Lemasters J. c-Jun N-terminal kinase mediates hepatic injury after rat liver transplantation. *Transplantation* 78(3):324-332, 2004.
154. Parsons C, Bradford B, Pan C, Cheung E, Schauer M, Knorr A, Krebs B, Kraft S, Mei B, Cho M, Ramamoorthi R, Roldan G, Ng P, Lum P, Hirth-Dietrich C, Tomkinson A, Feirt N, Brenner DA. Antifibrotic effects of a tissue inhibitor of metalloproteinase-1 antibody on rats with established liver fibrosis. *Hepatology* 40(5):1106-15, 2004.
155. Magness ST, Bataller R, Yang L, Brenner, DA. A dual reporter gene transgenic mouse demonstrates heterogeneity in hepatic fibrogenic cell populations. *Hepatology* 40(5):1151-9, 2004.
156. Harada N, Hatano E, Koizumi N, Nitta T, Yoshida M, Yamamoto N, Brenner DA, Yamaoka Y. Akt activation protects rat liver from ischemia/reperfusion injury. *J Surg Res* 121(2):159-70, 2004.
157. Sanz S, Pucilowska JB, Liu S, Rodriguez-Ortigosa CM, Lund PK, Brenner DA, Fuller CR, Simmons JG, Pardo A, Martinez-Chantar ML, Fagin JA, Prieto J. Expression of insulin-like growth factor I by activated hepatic stellate cells reduces fibrogenesis and enhances regeneration after liver injury. *Gut* 54(1):134-41, 2004.

158. Gabele E, Reif S, Tsukada S, Bataller R, Yata Y, Morris T, Schrum LW, Brenner DA, Rippe RA. The role of p70S6K in hepatic stellate cell collagen gene expression and cell proliferation. *J Biol Chem* 280(14):13374-13382, 2005.
159. Luedde T, Assmus U, Wuestefeld T, Zu Vilsendorf A, Roskams T, Schmidt-Supprian M, Rajewsky K, Brenner DA, Manns MP, Pasparakis M, Trautwein C. Deletion of IKK2 in hepatocytes does not sensitize these cells to TNF-induced apoptosis but protects from ischemia/reperfusion-injury. *J Clin Invest* 115(4):849-859, 2005.
160. Li Y, Schwabe RF, Devries-Seimon T, Yao PM, Gerbod-Giannone MC, Tall AR, Davis RJ, Flavell R, Brenner DA, Tabas I. Free cholesterol-loaded macrophages are an abundant source of TNF- α and IL-6. Model of NF- κ B- and MAP kinase-dependent inflammation in advance atherosclerosis. *J. Biol Chem* 280(23):21763-21772, 2005.
161. Bataller R, Gabele E, Parsons CJ, Morris T, Yang L, Schoonhoven R, Brenner DA, Rippe RA. Systemic infusion of angiotensin II exacerbates liver fibrosis in bile duct-ligated rats. *Hepatology* 41(5):1046-1055, 2005.
162. Siegmund SV, Uchinami H, Osawa Y, Brenner DA, Schwabe RF. Anandamide induces necrosis in primary hepatic stellate cells. *Hepatology* 41(5):1085-1095, 2005.
163. Uehara T, Bennett B, Sakata ST, Satoh Y, Bilter GK, Westwick JK, Brenner DA. JNK mediates hepatic ischemia reperfusion injury. *J Hepatol* 42(6):850-859, 2005.
164. Yang L, Bataller R, Dulyx J, Coffman TM, Gines P, Rippe RA, Brenner DA. Attenuated hepatic inflammation and fibrosis in angiotensin type 1a receptor deficient mice. *J Hepatol* 43(2):317-323, 2005.
165. Osawa Y, Uchinami H, Bielawski J, Schwabe RF, Hannun YA, Brenner DA. Roles for C16-ceramide and sphingosine-1-phosphate in regulating hepatocyte apoptosis in response to TNF- α . *J Biol Chem* 280(30):27879-87, 2005.
166. Yang L, Magness ST, Bataller R, Rippe RA, Brenner DA. NF- κ B activation in Kupffer cells after partial hepatectomy. *Am J Physiol Gastrointest Liver Physiol* 289(3):G530-8, 2005.
167. Stefanovic L, Brenner DA, Stefanovic B. Direct hepatotoxic effect of KC chemokine in the liver without infiltration of neutrophils. *Exp Biol Med (Maywood)* 230(8):573-586, 2005.
168. Bataller R, Sancho-Bru P, Gines P, Brenner DA. Liver fibrogenesis: a new role for the Renin-Angiotensin system. *Antioxid Redox Signal* 7(9-10):1346-1355, 2005.
169. Schnabl B, Hu K, Muhlbauer M, Hellerbrand C, Stefanovic B, Brenner DA, Scholmerich J. Zinc finger protein 267 is up-regulated during the activation process of human hepatic stellate cells and functions as a negative transcriptional regulator of MMP-10. *Biochem Biophys Res Commun* 335(1):87-96, 2005.
170. Osawa Y, Hannun YA, Proia RL, Brenner DA. Roles of AKT and sphingosine kinase in the antiapoptotic effects of bile duct ligation in mouse liver. *Hepatology* 42(6):1320-8, 2005.
171. Lehmann TG, Luedde T, Schwabe RF, Bunzendahl H, Samulski RJ, Lemasters JJ, Brenner DA. Minimizing oxidative stress by gene delivery of superoxide dismutase accelerates regeneration after transplantation of reduced-size livers in the rat. *Liver Transpl* 12(4):550-9, 2006.
172. Lehnert M, Uehara T, Bradford BU, Lind H, Zhong Z, Brenner DA, Marzi I, Lemasters JJ. Lipopolysaccharide-binding protein modulates hepatic damage and the inflammatory response after hemorrhagic shock and resuscitation. *Am J Physiol Gastrointest Liver Physiol* 291(3):G456-63, 2006.
173. Paik YH, Lee KS, Lee HJ, Yang KM, Lee SJ, Lee DK, Han KH, Chon CY, Lee SI, Moon YM, Brenner DA. Hepatic stellate cells primed with cytokines upregulate inflammation in response to peptidoglycan or lipoteichoic acid. *Lab Invest* 86(7):676-86, 2006.

174. Klein S, Mittendorfer B, Eagon JC, Patterson B, Grant L, Feirt N, Seki E, Brenner DA, Korenblat K, McCrea J. Gastric bypass surgery improves metabolic and hepatic abnormalities associated with nonalcoholic fatty liver disease. *Gastroenterology* 130(6):1564-72, 2006.
175. Sancho-Bru P, Bataller R, Colmenero J, Gasull X, Moreno M, Arroyo V, Brenner DA, Gines P. Norepinephrine induces calcium spikes and proinflammatory actions in human hepatic stellate cells. *Am J Physiol Gastrointest Liver Physiol* 291(5):G877-84, 2006.
176. Kisseleva T, Uchinami H, Feirt N, Quintana-Bustamante O, Segovia JC, Schwabe RF, Brenner DA. Bone-marrow derived fibrocytes participate in pathogenesis of liver fibrosis. *J Hepatol* 429-38, 2006.
177. Zhong Z, Schwabe RF, Kai Y, He L, Yang L, Bunzendahl H, Brenner DA, Lemasters JJ. Liver regeneration is suppressed in small-for-size liver grafts after transplantation: involvement of c-Jun N-terminal kinase, cyclin D1, and defective energy supply. *Transplantation* 82(2): 241-50, 2006.
178. Uchinami H, Seki E, Brenner DA, D'Armiento J. Loss of MMP 13 attenuates murine hepatic injury and fibrosis during cholestasis. *Hepatology* 44(2):420-9, 2006.
179. DeMinicis S, Seki E, Uchinami H, Kluwe J, Zhang Y, Brenner DA, Schwabe RF. Gene expression profiles during hepatic stellate cell activation in culture and in vivo. *Gastroenterology* 132(5):1937-46, 2007.
180. Tacke F, Gabele E, Bataille F, Schwabe RF, Hellerbrand C, Klebl F, Straub RH, Luedde T, Manns MP, Trautwein C, Brenner DA, Scholmerich J, Schnabl B. Bone morphogenetic protein 7 is elevated in patients with chronic liver disease and exerts fibrogenic effects on human hepatic stellate cells. *Dig Dis Sci* 52(12):3404-15, 2007.
181. Adachi M, Osawa Y, Uchinami H, Kitamura T, Accili D, Brenner DA. The forkhead transcription factor FoxO1 regulates proliferation and transdifferentiation of hepatic stellate cells. *Gastroenterology* 132(4):1434-46, 2007.
182. Tacke F, Trautwein C, Yagmur E, Hellerbrand C, Wiest R, Brenner DA, Schnabl B. Up-regulated eotaxin plasma levels in chronic liver disease patients indicate hepatic inflammation, advanced fibrosis and adverse clinical course. *J Gastroenterol Hepatol* 22(8):1256-64, 2007.
183. Seki E, De Minicis S, Osterreicher CH, Kluwe J, Osawa Y, Brenner DA, Schwabe RF. TLR4 enhances TGF- β signaling and hepatic fibrosis. *Nat Med* 13(11):1324-32, 2007.
184. Mencin A, Seki E, Osawa Y, Kodama Y, De Minicis S, Knowles M, Brenner DA. Alpha-1 antitrypsin Z protein (PiZ) increases hepatic fibrosis in a murine model of cholestasis. *Hepatology* 46(5):1443-52, 2007.
185. Miura K, Yoshino R, Hirai Y, Goto T, Ohshima S, Mikami K, Yoneyama K, Watanabe D, Sato M, Senoo H, Kodama Y, Osawa Y, Brenner DA, Watanabe S. Epimorphin, a morphogenic protein, induces proteases in rodent hepatocytes through NF-kappaB. *J Hepatol* 47(6):834-43, 2007.
186. Sancho-Bru P, Bataller R, Fernandez-Varo G, Moreno M, Ramalho LN, Colmenero J, Mari M, Claria J, Jimenez W, Arroyo V, Brenner DA, Gines P. Bradykinin attenuates hepatocellular damage and fibrosis in rats with chronic liver injury. *Gastroenterology* 133(6):2019-28, 2007.
187. Adachi M, Brenner DA. High Molecular weight adiponectin inhibits proliferation of hepatic stellate cells via activation of adenosine monophosphate-activated protein kinase. *Hepatology* 47(2):677-85, 2008.
188. Adler DH, Cogan JD, Phillips JA, Schnetz-Boutaud N., Milne GL, Iverson T, Stein JA, Brenner DA, Morrow JD, Boutaud O, Oates JA. Inherited human cPLA(2alpha) deficiency is associated with impaired eicosanoid biosynthesis, small intestinal ulceration, and platelet dysfunction. *J Clin Invest* 118(6):2121-2131, 2008.

189. Miura K, Taura K, Kodama Y, Schnabl B, Brenner DA. Hepatitis C virus-induced oxidative stress suppresses hepcidin expression through increased histone deacetylase activity. *Hepatology* 48(5):1420-9, 2008.
190. Taura K, De Minicis S, Seki E, Hatano E, Iwaisako K, Osterreicher CH, Kodama Y, Miura K, Ikai I, Uemoto S, Brenner DA. Hepatic stellate cells secrete angiopoietin 1 that induces angiogenesis in liver fibrosis. *Gastroenterology* 135(5):1729-38, 2008.
191. Lin SL, Kisseleva T, Brenner DA, Duffield JS. Pericytes and perivascular fibroblasts are the primary source of collagen-producing cells in obstructive fibrosis of the kidney. *Am J Pathol* 173(6):1617-27, 2008.
192. De Minicis S, Seki E, Oesterreicher C, Schnabl B, Schwabe RF, Brenner DA. Reduced nicotinamide adenine dinucleotide phosphate oxidase mediates fibrotic and inflammatory effects of leptin on hepatic stellate cells. *Hepatology* 48(6):2016-26, 2008.
193. Gäbele E, Froh M, Arteel GE, Uesugi T, Hellerbrand C, Schölmerich J, Brenner DA, Thurman RG, Rippe RA. TNF- α is required for cholestasis-induced liver fibrosis in the mouse. *Biochem Biophys Res Commun* 378(3): 348-53, 2009.
194. Brandl K, Rutschmann S, Li X, Du X, Xiao N, Schnabl B, Brenner DA, Beutler B. Enhanced sensitivity to DSS colitis caused by a hypomorphic *Mtpts1* mutation disrupting the ATF6-driven unfolded protein response. *Proc Natl Acad Sci USA* 106(9):3300-5, 2009.
195. Adler DH, Phillips JA 3rd, Cogan JD, Iverson TM, Schnetz-Boutaud N, Stein JA, Brenner DA, Milne GL, Morrow JD, Boutaud O, Oates JA. The enteropathy of prostaglandin deficiency. *J Gastroenterol* 44 Suppl 19:1-7, 2009.
196. Kodama Y, Taura K, Miura K, Schnabl B, Osawa Y, Brenner DA. Antiapoptotic effect of c-Jun N-terminal Kinase-1 through Mcl-1 stabilization in TNF-induced hepatocyte apoptosis. *Gastroenterology* 136(4):1423-34, 2009.
197. Seki E, De Minicis S, Inokuchi S, Taura K, Miyai K, van Rooijen N, Schwabe RF, Brenner DA. CCR2 promotes hepatic fibrosis in mice. *Hepatology* 50(1):185-97, 2009.
198. Seki E, De Minicis S, Gwak GY, Kluwe J, Inokuchi S, Bursill CA, Llovet JM, Brenner DA, Schwabe RF. CCR1 and CCR5 promote hepatic fibrosis in mice. *J Clin Invest*. 119(7):1858-70, 2009
199. Colmenero J, Bataller R, Sancho-Bru P, Dominguez M, Moreno M, Forns X, Bruguera M, Arroyo V, Brenner DA, Ginès P. Effects of losartan on hepatic expression of non-phagocytic NADPH oxidase and fibrogenic genes in patients with chronic hepatitis C. *Am J Physiol Gastrointest Liver Physiol*. 2009 Jul 23. [Epub ahead of print]
200. Öesterreicher C, Taura K, De Minicis S, Seki E, Penz-Öesterreicher M, Kluwe J, Oudit G, Penninger JM, Brenner DA. Angiotensin-converting-enzyme 2 is a negative regulator of chronic liver injury. *Hepatology*. 50(3):929-38, 2009.
201. Brafman DA, de Minicis S, Seki E, Shah KD, Teng D, Brenner D, Willert K, Chien S. Investigating the role of the extracellular environment in modulating hepatic stellate cell biology with arrayed combinatorial microenvironments. *Integr Biol (Camb)*. 1(8-9):513-24, 2009.
202. Kodama Y, Kisseleva T, Iwaisako K, Miura K, Taura K, De Minicis S, Osterreicher CH, Schnabl B, Seki E, Brenner DA. JNK1 from hematopoietic cells mediates progression from hepatic steatosis to steatohepatitis and fibrosis in mice. *Gastroenterology*. 137(4):1467-1477.e5, 2009.

203. Sancho-Bru P, Juez E, Moreno M, Khurdayan V, Morales-Ruiz M, Colmenero J, Arroyo V, Brenner DA, Gines P, Bataller R. Hepatocarcinoma cells stimulate the growth, migration and expression of pro-angiogenic genes in human hepatic stellate cells. *Liver Int.* 30(1):31-41, 2010.
204. Taura K, Miura K, Iwaisako K, Oesterreicher CH, Kodama Y, Penz-Öesterreicher M, Brenner DA. Hepatocytes do not undergo epithelial-mesenchymal transition in liver fibrosis in mice. *Hepatology.* 51(3):1027-36, 2010.
205. Moreno M, Gonzalo T, Kok RJ, Sancho-Bru P, van Beuge M, Swart J, Prakash J, Temming K, Fondevlia C, Beljaars L, Lacombe M, van der Hoeven P, Arroyo V, Poelstra K, Brenner DA, Gines P, Bataller R. Reducation of advance liver fibrosis by short-term targeted delivery of an angiotensin receptor blocker to hepatic stellate cells in rats. *Hepatology.* 51(3):942-52, 2010.
206. Inokuchi S, Aoyama T, Miura K, Osterreicher CH, Kodama Y, Miyai K, Akira S, Brenner DA, Seki E. Disruption of TAK1 in hepatocytes causes hepatic injury, inflammation, fibrosis, and carcinogenesis. *Proc Natl Acad Sci U S A.* 107(2):844-9, 2010.
207. Zhong Z, Tsukada S, Rehman H, Parsons CJ, Theruvath TP, Rippe RA, Brenner DA, Lemasters JJ. Inhibition of transforming growth factor-beta/Smad signaling improves regeneration of small-for-size rat liver grafts. *Liver Transpl.* 16(2):181-90, 2010.
208. Miura K, Kodama Y, Inokuchi S, Schnabl B, Aoyama T, Ohnishi H, Olefsky JM, Brenner DA, Seki E. Toll-Like Receptor 9 Promotes Steatohepatitis by Induction of Interleukin-1beta in Mice. *Gastroenterology.* 139(1):323-34.e7, 2010.
209. Loomba R, Rao F, Zhang L, Khandrika S, Ziegler MG, Brenner DA, O'Connor DT. Genetic covariance between gamma-glutamyl transpeptidase and fatty liver risk factors and B2-adrenergic receptor genetic variations in twins. *Gastroenterology.* 139(3):836-45, 845.e1, 2010.
210. Scholten D, Osterreicher CH, Scholten A, Iwaisako K, Gu G, Brenner DA, Kisseleva T. Genetic Labeling Does Not Detect Epithelial-to-Mesenchymal Transition (EMT) of Cholangiocytes in Liver Fibrosis in Mice. *Gastroenterology.* 139(3):987-98, 2010.
211. Aoyama T, Inokuchi S, Brenner DA, Seki E. CX3CL1-CX3CR1 interaction prevents carbon tetrachloride-induced liver inflammation and fibrosis in mice. *Hepatology.* 52(4):1390-400, 2010.
212. De Minicis S, Seki E, Paik YH, Osterreicher CH, Kodama Y, Kluwe J, Torozzi L, Miyai K, Benedetti A, Schwabe RF, Brenner DA. Role and cellular source of nicotinamide adenine dinucleotide phosphate oxidase in hepatic fibrosis. *Hepatology.* 52(4):1420-30, 2010.
213. Zhang EE, Liu Y, Dentin R, Pongsawakul PY, Liu AC, Hirota T, Nusinow DA, Sun X, Landais S, Kodama Y, Brenner DA, Montminy M, Kay SA. Cryptochrome mediates circadian regulation of cAMP signaling and hepatic gluconeogenesis. *Nat Med.* 16(10):1152-6, 2010.
214. Osawa Y, Seki E, Kodama Y, Suetsugu A, Miura K, Adachi M, Ito H, Shiratori Y, Banno Y, Olefsky JM, Nagaki M, Moriwaki H, Brenner DA, Seishima M. Acid sphingomyelinase regulates glucose and lipid metabolism in hepatocytes through AKT activation and AMP-activated protein kinase suppression. *FASEB J.* 25(4):1133-44, 2011.
215. Österreicher CH, Penz-Österreicher M, Grivennikov SI, Guma M, Koltsova EK, Datz C, Sasik R, Hardiman G, Karin M, Brenner DA. Fibroblast-specific protein 1 identifies an inflammatory subpopulation of macrophages in the liver. *Proc Natl Acad Sci U S A.* 108(1):308-13, 2011.

216. Parsons CJ, Stefanovic B, Seki E, Aoyama T, Latour AM, Marzluff WF, Rippe RA, Brenner DA. Mutation of the 5'-untranslated region stem-loop structure inhibits $\alpha 1(I)$ collagen expression in vivo. *J Biol Chem.* 286(10):8609-19, 2011.
217. Yan AW, Fouts DE, Brandl J, Stärkel P, Torralba M, Schott E, Tsukamoto H, Nelson KE, Brenner DA, Schnabl B. Enteric dysbiosis associated with a mouse model of alcoholic liver disease. *Hepatology.* 53(1):96-105, 2011.
218. Miura K, Seki E, Ohnishi H, Brenner DA. Role of toll-like receptors and their downstream molecules in the development of nonalcoholic Fatty liver disease. *Gastroenterol Res Pract.* 2010:362847, 2011.
219. Paik YH, Iwaisako K, Seki E, Inokuchi S, Schnabl B, Osterreicher CH, Kisseleva T, Brenner DA. The nicotinamide adenine dinucleotide phosphate oxidase (NOX) homologues NOX1 and NOX2/gp91(phox) mediate hepatic fibrosis in mice. *Hepatology.* 53(5):1730-41, 2011.
220. Meng F, Wang J, Ge J, Fan X, Wang B, Han L, Kisseleva T, Paik Y, Brenner DA, Wang K. Alteration of interferon- α/β receptors in chronic hepatitis B patients. *J Clin Immunol.* 31(3):521-32, 2011.
221. Inokuchi S, Tsukamoto H, Park E, Liu ZX, Brenner DA, Seki E. Toll-like receptor 4 mediates alcohol-induced steatohepatitis through bone marrow-derived and endogenous liver cells in mice. *Alcohol Clin Exp Res.* 35(8):1509-18, 2011.
222. Kisseleva T, von Köckritz-Blickwede M, Reichart D, McGillivray SM, Wingender G, Kronenberg M, Glass CK, Nizet V, Brenner DA. Fibrocyte-like cells recruited to the spleen support innate and adaptive immune responses to acute injury or infection. *J Mol Med (Berl).* 89(10):997-1013, 2011.
223. Scholten D, Reichart D, Paik YH, Lindert J, Bhattacharya J, Glass CK, Brenner DA, Kisseleva T. Migration of fibrocytes in fibrogenic liver injury. *Am J Pathol.* 179(1):189-98, 2011.
224. Dong MH, Bettencourt R, Brenner DA, Barrett-Connor E, Loomba R. Serum Levels of Alanine Aminotransferase Decrease with Age in Longitudinal Analysis. *Clin Gastroenterol Hepatol.* 10(3):285-90.e1, 2012.
225. Iwaisako K, Haimerl M, Paik YH, Taura K, Kodama Y, Sirlin C, Yu E, Yu RT, Downes M, Evans RM, Brenner DA, Schnabl B. Protection from liver fibrosis by a peroxisome proliferator-activated receptor δ agonist. *Proc Natl Acad Sci U S A.* 109(21):E1369-76, 2012.
226. Fouts DE, Torralba M, Nelson KE, Brenner DA, Schnabl B. Bacterial translocation and changes in the intestinal microbiome in mouse models of liver disease. *J Hepatol.* 56(6):1283-92, 2012.
227. Kisseleva T, Cong M, Paik Y, Scholten D, Jiang C, Benner C, Iwaisako K, Moore-Morris T, Scott B, Tsukamoto H, Evans SM, Dillmann W, Glass CK, Brenner DA. Myofibroblasts revert to an inactive phenotype during regression of liver fibrosis. *Proc Natl Acad Sci U S A.* 109(24):9448-53, 2012.
228. Permutt Z, Le TA, Peterson MR, Seki E, Brenner DA, Sirlin C, Loomba R. Correlation between liver histology and novel magnetic resonance imaging in adult patients with non-alcoholic fatty liver disease - MRI accurately quantifies hepatic steatosis in NAFLD. *Aliment Pharmacol Ther.* 36(1):22-9, 2012.
229. Meng F, Wang K, Aoyama T, Grivennikov SI, Paik Y, Scholten D, Cong M, Iwaisako K, Liu X, Zhang M, Osterreicher CH, Stickel F, Ley K, Brenner DA, Kisseleva T. Interleukin-17 signaling in inflammatory, Kupffer cells, and hepatic stellate cells exacerbates liver fibrosis in mice. *Gastroenterology.* 143(3):765-76.e1-3, 2012.
230. Seki E, Brenner DA, Karin M. A liver full of JNK: signaling in regulation of cell function and disease pathogenesis, and clinical approaches. *Gastroenterology.* 143(2):307-20, 2012
231. Hirota T, Lee JW, St John PC, Sawa M, Iwaisako K, Noguchi T, Pongsawakul PY, Sonntag T, Welsh DK, Brenner DA, Doyle FJ 3rd, Schultz PG, Kay SA. Identification of small molecule activators of cryptochrome. *Science.* 337(6098):1094-7, 2012.

232. Aoyama T, Paik YH, Watanabe S, Laleu B, Gaggini F, Fioraso-Cartier L, Molango S, Heitz F, Merlot C, Szyndralewicz C, Page P, Brenner DA. Nicotinamide adenine dinucleotide phosphate oxidase in experimental liver fibrosis: GKT137831 as a novel potential therapeutic agent. *Hepatology*. 56(6):2316-27, 2012.
233. Hartmann P, Haimerl M, Mazagova M, Brenner DA, Schnabl B. Toll-like receptor 2-mediated intestinal injury and enteric tumor necrosis factor receptor I contribute to liver fibrosis in mice. *Gastroenterology*. 143(5):1330-40.e1, 2012.
234. Ludin A, Itkin T, Gur-Cohen S, Mildner A, Shezen E, Golan K, Kollet O, Kalinkovich A, Porat Z, D'Uva G, Schajnovitz A, Voronov E, Brenner DA, Apte RN, Jung S, Lapidot T. Monocytes-macrophages that express α -smooth muscle actin preserve primitive hematopoietic cells in the bone marrow. *Nat Immunol*. 13(11):1072-82, 2012.
235. Miura K, Yang L, van Rooijen N, Brenner DA, Ohnishi H, Seki E. Toll-like receptor 2 and palmitic acid cooperatively contribute to the development of nonalcoholic steatohepatitis through inflammasome activation. *Hepatology*. 57(2):577-89, 2013.
236. Patel NS, Peterson MR, Brenner DA, Heba E, Sirlin C, Loomba R. Association between novel MRI-estimated pancreatic fat and liver histology-determined steatosis and fibrosis in non-alcoholic fatty liver disease. *Aliment Pharmacol Ther*. 37(6):630-9, 2013.
237. Meurer SK, Alsamman M, Sahin H, Wasmuth HE, Kisseleva T, Brenner DA, Trautwein C, Weiskirchen R, Scholten D. Overexpression of Endoglin Modulates TGF- β 1-Signalling Pathways in a Novel Immortalized Mouse Hepatic Stellate Cell Line. *PLoS One*. 8(2):e56116, 2013.
238. Conigliaro A, Amicone L, Costa V, De Santis Puzzonina M, Mancone C, Sacchetti B, Cicchini C, Garibaldi F, Brenner DA, Kisseleva T, Bianco P, Tripodi M. Evidence for a common progenitor of epithelial and mesenchymal components of the liver. *Cell Death Differ*. 20(8):1116-23, 2013.
239. Nouredin M, Lam J, Peterson MR, Middleton M, Hamilton G, Le TA, Bettencourt R, Changchien C, Brenner DA, Sirlin C, Loomba R. Utility of magnetic resonance imaging versus histology for quantifying changes in liver fat in nonalcoholic fatty liver disease trials. *Hepatology*. 58(6):1930-40, 2013.
240. Fordtran JS, Goyal RK, Feldman M, Soll AH, Trier JS, Ockner RK, Larusso NF, Podolsky DK, Brenner DA, Rustgi AK, Omary MB. Gastroenterology's editors-in-chief: historical and personal perspectives of their editorships. *Gastroenterology*. 145(1):16-31, 2013.
241. De Minicis S, Rychlicki C, Agostinelli L, Saccomanno S, Trozzi L, Candelaresi C, Bataller R, Millán C, Brenner DA, Vivarelli M, Mocchegiani F, Marzoni M, Benedetti A, Svegliati-Baroni G. Semaphorin 7A contributes to TGF- β -mediated liver fibrogenesis. *Am J Pathol*. 183(3):820-30, 2013.
242. Liu X, Xu J, Brenner DA, Kisseleva T. Reversibility of Liver Fibrosis and Inactivation of Fibrogenic Myofibroblasts. *Curr Pathobiol Rep*. 1(3):209-214, 2013.
243. Madsen DH, Leonard D, Masedunskas A, Moyer A, Jürgensen HJ, Peters DE, Amornphimoltham P, Selvaraj A, Yamada SS, Brenner DA, Burgdorf S, Engelholm LH, Behrendt N, Holmbeck K, Weigert R, Bugge TH. M2-like macrophages are responsible for collagen degradation through a mannose receptor-mediated pathway. *J Cell Biol*. 202(6):951-66, 2013.
244. Liu C, Chen X, Yang L, Kisseleva T, Brenner DA, Seki E. Transcriptional Repression of the TGF- β Pseudoreceptor BAMBI by NF- κ B p50 Enhances TGF- β Signaling in Hepatic Stellate Cells. *J Biol Chem*. 289(10):7082-91, 2014.
245. Moore-Morris T, Guimarães-Camboa N, Banerjee I, Zambon AC, Kisseleva T, Velayoudon A, Stallcup WB, Gu Y, Dalton ND, Cedenilla M, Gomez-Amaro R, Zhou B, Brenner DA, Peterson KL, Chen J, Evans SM. Resident fibroblast lineages mediate pressure overload-induced cardiac fibrosis. *J Clin Invest*. 1;124(7):2921-34, 2014.

246. Lopez-Sanchez I, Dunkel Y, Roh YS, Mittal Y, De Minicis S, Muranyi A, Singh S, Shanmugam K, Aroonsakool N, Murray F, Ho SB, Seki E, Brenner DA, Ghosh P. GIV/Girdin is a central hub for profibrogenic signalling networks during liver fibrosis. *Nat Commun.* 21;5:4451, 2014.
247. Inokuchi-Shimizu S, Park EJ, Roh YS, Yang L, Zhang B, Song J, Liang S, Pimienta M, Taniguchi K, Wu X, Asahina K, Lagakos W, Mackey MR, Akira S, Ellisman MH, Sears DD, Olefsky JM, Karin M, Brenner DA, Seki E. TAK1-mediated autophagy and fatty acid oxidation prevent hepatosteatosis and tumorigenesis. *J Clin Invest.* 1;124(8):3566-78, 2014
248. Iwaisako K, Jiang C, Zhang M, Cong M, Moore-Morris TJ, Park TJ, Liu X, Xu J, Wang P, Paik YH, Meng F, Asagiri M, Murray LA, Hofmann AF, Iida T, Glass CK, Brenner DA, Kisseleva T. Origin of myofibroblasts in the fibrotic liver in mice. *Proc Natl Acad Sci U S A.* 12;111(32):E3297-305, 2014.
249. Loomba R, Wolfson T, Ang B, Hooker J, Behling C, Peterson M, Valasek M, Lin G, Brenner D, Gamst A, Ehman R, Sirlin C. Magnetic resonance elastography predicts advanced fibrosis in patients with nonalcoholic fatty liver disease: a prospective study. *Hepatology.* 60(6):1920-8, 2014.
250. Mazagova M, Wang L, Anfora AT, Wissmueller M, Lesley SA, Miyamoto Y, Eckmann L, Dhungana S, Pathmasiri W, Sumner S, Westwater C, Brenner DA, Schnabl B. Commensal microbiota is hepatoprotective and prevents liver fibrosis in mice. *FASEB J.* 2015 Mar;29(3):1043-55.
251. Loomba R, Sirlin CB, Ang B, Bettencourt R, Jain R, Salotti J, Soaft L, Hooker J, Kono Y, Bhatt A, Hernandez L, Nguyen P, Nouredin M, Haufe W, Hooker C, Yin M, Ehman R, Lin G, Valasek M, Brenner D, Richards L; San Diego Integrated Research Consortium (SINC). Ezetimibe for the treatment of nonalcoholic steatohepatitis: Assessment by novel MRI and MRE in a randomized trial (MOZART Trial). *Hepatology.* 2015 Apr;61(4):1239-50.
252. Fang S, Suh JM, Reilly SM, Yu E, Osborn O, Lackey D, Yoshihara E, Perino A, Jacinto S, Lukasheva Y, Atkins AR, Khvat A, Schnabl B, Yu RT, Brenner DA, Coulter S, Liddle C, Schoonjans K, Olefsky JM, Saltiel AR, Downes M, Evans RM. Intestinal FXR agonism promotes adipose tissue browning and reduces obesity and insulin resistance. *Nat Med.* 2015 Feb;21(2):159-65.
253. Verna EC, Patel J, Bettencourt R, Nguyen P, Hernandez C, Valasek MA, Kisselva T, Brenner DA, Loomba R. Novel association between serum pentraxin-2 levels and advanced fibrosis in well-characterised patients with non-alcoholic fatty liver disease. *Aliment Pharmacol Ther.* 2015 Sep;42(5):582-90.
254. Lan T, Kisseleva T, Brenner DA. Deficiency of NOX1 or NOX4 Prevents Liver Inflammation and Fibrosis in Mice through Inhibition of Hepatic Stellate Cell Activation. *PLoS One.* 2015 Jul 29;10(7):e0129743.
255. Schnabl B, Farshchi-Heydari S, Loomba R, Mattrey RF, Hoh CK, Sirlin CB, Brenner DA, Behling CA, Vera DR. Staging of fibrosis in experimental non-alcoholic steatohepatitis by quantitative molecular imaging in rat models. *Nucl Med Biol.* 2016 Feb;43(2):179-87.
256. Wang L, Fouts DE, Stärkel P, Hartmann P, Chen P, Llorente C, DePew J, Moncera K, Ho SB, Brenner DA, Hooper LV, Schnabl B. Intestinal REG3 Lectins Protect Against Alcoholic Steatohepatitis by Reducing Mucosa-Associated Microbiota and Preventing Bacterial Translocation. *Cell Host Microbe.* 2016 Feb 10;19(2):227-39.
257. Loomba R, Cui J, Wolfson T, Haufe W, Hooker J, Szeverenyi N, Ang B, Bhatt A, Wang K, Aryafar H, Behling C, Valasek MA, Lin GY, Gamst A, Brenner DA, Yin M, Glaser KJ, Ehman RL, Sirlin CB. Novel 3D Magnetic Resonance Elastography for the Noninvasive Diagnosis of Advanced Fibrosis in NAFLD: A Prospective Study. *Am J Gastroenterol.* 2016 Jul;111(7):986-94.
258. Kim RG, Nguyen P, Bettencourt R, Dulai PS, Haufe W, Hooker J, Minocha J, Valasek MA, Aryafar H, Brenner DA, Sirlin CB, Loomba R. Magnetic resonance elastography identifies fibrosis in adults with alpha-1 antitrypsin deficiency liver disease: a prospective study. *Aliment Pharmacol Ther.* 2016 Aug;44(3):287-99.

259. Cui J, Philo L, Nguyen P, Hofflich H, Hernandez C, Bettencourt R, Richards L, Salotti J, Bhatt A, Hooker J, Haufe W, Hooker C, Brenner DA, Sirlin CB, Loomba R. Sitagliptin vs. placebo for non-alcoholic fatty liver disease: A randomized controlled trial. *J Hepatol.* 2016 Aug;65(2):369-76.
260. Cui J, Chen CH, Lo MT, Schork N, Bettencourt R, Gonzalez MP, Bhatt A, Hooker J, Shaffer K, Nelson KE, Long MT, Brenner DA, Sirlin CB, Loomba R, For The Genetics Of Nafld In Twins Consortium. Shared genetic effects between hepatic steatosis and fibrosis: A prospective twin study. *Hepatology.* 2016 Nov;64(5):1547-1558.
261. Kim IH, Xu J, Liu X, Koyama Y, Ma HY, Diggle K, You YH, Schilling JM, Jeste D, Sharma K, Brenner DA, Kisseleva T. Aging increases the susceptibility of hepatic inflammation, liver fibrosis and aging in response to high-fat diet in mice. *Age (Dordr).* 2016 Aug;38(4):291-302.
262. Decaris ML, Li KW, Emson CL, Gatmaitan M, Liu S, Wang Y, Nyangau E, Colangelo M, Angel TE, Beyens C, Cui J, Hernandez C, Lazaro L, Brenner DA, Turner SM, Hellerstein MK, Loomba R. Identifying nonalcoholic fatty liver disease patients with active fibrosis by measuring extracellular matrix remodeling rates in tissue and blood. *Hepatology.* 2017 Jan;65(1):78-88.

Invited Articles, Reviews, and Chapters:

1. Riely CA and Brenner DA. The porphyrias made simple. *Diagnosis* 4:51-61, 1982.
2. Brenner DA. Total parenteral nutrition at home. *Outpatient Therapy Medicine* 2:1-8, 1987.
3. Chojkier M and Brenner DA. Therapeutic strategies for hepatic fibrosis. *Hepatology* 8:176-182, 1988.
4. Kagnoff MF, Rodgers VD and Brenner DA. Lymphocyte populations and HIV growth in the intestinal mucosa in the acquired immunodeficiency syndrome. In: *AIDS in Gastroenterology and Hepatology*, M. Classen and H. Dancygier (eds.), pp. 11-13, 1989.
5. Brenner DA and Alcorn JM. Therapy for hepatic fibrosis. *Seminars in Liver Disease.* 10:75-83, 1990.
6. Leffert MF, Koch KS, Lu XP, Brenner DA, Karin M, Skelly HF, Rippe RA, Fey G and Chojkier M. Cellular and molecular biology of hepatocyte growth, regeneration and gene expression. *Adv. Sec. Mess. Phosphoprotein Res.* 24:352-358, 1990.
7. Rippe RA, Roebuck KA and Brenner DA. The future role of gene therapy for inherited liver diseases. *Contemporary Gastroenterology*, 4:15-22, 1991.
8. Brenner DA. Tumor necrosis factor α mediates the decreased albumin gene expression in a model of cachexia. *Liver Update* 4:7, 1990.
9. Koch KS, Lu XP, Brenner DA, Fey G, Leffert HL and Martinez-Conde A. Mitogens and hepatocyte growth control in vivo and in vitro. *In Vitro Cell & Develop Biol* 26:1011-1023, 1990.
10. Brenner DA and Alcorn JM. Pathogenesis of hepatic fibrosis. In: *Liver & Biliary Diseases*, N. Kaplowitz (ed.), Williams & Wilkins, Baltimore. 118-130, 1992.
11. Kagnoff MF, Omary MB, Roebuck KA, de Grandpre L, Richman DD and Brenner DA. HIV-1 infection and expression in human colonic epithelial cell lines. In: *Frontiers of Mucosal Immunology*, Vol. 1, M. Tsuchiya, H. Nagura, T. Hibi and I. Moro (eds.), Excerpta Medica, Amsterdam, pp. 623-625, 1991.
12. Brenner DA. Book review of *The Laboratory Investigation of Liver Disease* by PJ Johnson and IG McFarlane. *Gastrointestinal Endoscopy* 36:550, 1990.
13. Lyche KD and Brenner DA. The logical approach to the jaundiced patient. *Cont. Int. Med.* 43-58, 1992.

14. Brenner DA. Molecular and cell biology of the small intestine. *Current Opinion in Gastroenterology* 7:202-206, 1991.
15. Kagnoff MF, Omary MB, de Grandpre LY, Roebuck KA, Richman DD and Brenner DA. Expression of HIV-1 in human colonic cells. *Immunologic Research* 10:452-455, 1991.
16. Brenner DA. Transforming growth factor and hepatic fibrosis: Cause and effect? *Hepatology* 14:740-742, 1991.
17. Houglum KP, Brenner DA and Chojkier M. Ascorbic acid stimulation of collagen biosynthesis independent of hydroxylation. *Am J Clin Nutrition* 54:51141-51143, 1991.
18. Brenner DA and Traber PG. Molecular and cell biology of the small intestine. *Curr Opinion in Gastroenterology*, 8:208-212, 1992.
19. Brenner DA, Westwick JK and Breindl M. Type I collagen gene regulation and the molecular pathogenesis of cirrhosis. *Am J Physiol* G589-595, 1993.
20. Zimmerman E and Brenner DA. Molecular and cell biology of the small intestine. *Curr Opinion in Gastroenterology*, 9:195-200, 1993.
21. Brenner DA. Transforming growth factor β : There is regulation beyond transcription. *Hepatology* 17:164-166, 1993.
22. Brenner DA, Boyle WJ. Molecular and cell biology of the small intestine. *Curr Opinion in Gastroenterology* 10:149-155, 1994.
23. Brenner DA, Rippe RA, Rhodes K, Trotter JF, Breindl M. Fibrogenesis and type I collagen gene regulation. *J Lab Clin Med* 124:755-760, 1994.
24. Brenner DA, Rippe, RA. Pathogenesis of hepatic fibrosis. In: *Liver and Biliary Diseases*. Neil Kaplowitz, Ed. Williams and Wilkins, Baltimore, 1994.
25. Boyle WJ, Brenner DA. Molecular and cell biology of the small intestine. *Curr Opinion in Gastroenterology* 11:121-127, 1995.
26. Trotter JF, Brenner DA. Prospective therapy for cirrhosis. *Comprehen Ther* 21:303-307, 1995. Stefanovic B, Hellerbrand C, Brenner DA. Post-transcriptional regulation of collagen alpha 1(I) mRNA in hepatic stellate cells. *Nucl Acids Sym* 33:212-214, 1995.
27. Westwick JK, Brenner DA. Methods for analyzing c-Jun kinase. WE Balch, Channing Der, and Allen Hall, eds. IN: *Methods in Enzymology*, Chap. 35: Cell expression and analysis *in vitro*. Vol. 25, Part A, pp. 342-359, 1995, Academic Press, Inc.
28. Scarlett Y, Christensen SR, Brenner DA. A Clinician's Approach to the Porphyrrias. *Contemp Int Med* 8:29-36, 1996.
29. Brenner DA. New functions for the aryl hydrocarbon receptor. *Hepatology Elsewhere* 23:376-382, 1996.
30. Brenner DA, Boyle WJ. Molecular and cellular biology of the small intestine. *Curr Opinion in Gastroenterology* 12:115-121, 1996.
31. Licato LL, Brenner DA. Molecular and cellular biology of the small intestine. *Curr Opin in Gastroenterology* 12:90-93, 1997.

32. Scarlett Y, Brenner DA, Bloomer J. Hepatic Porphyrias. In: Clinics in Liver Disease. Rosen HR, Martin P (eds), W.B. Saunders, Philadelphia. 77-102,1998.
33. Scarlett Y, Brenner DA. Molecular and cellular biology of the small intestine. *Curr Opin in Gastroenterology* 13: 90-93, 1998.
34. Behrns KE, Brenner DA. Biochemical and molecular basis of hepatic regeneration. In: Therapy in Liver Diseases: The pathophysiological basis of therapy. Arroyo V, Bosch J, Brugerra M, Rodes J. (eds.), Masson, Barcelona. 197-210,1997.
35. Lemasters JJ, Nieminen A, Qian T, Trost LC, Imore SP, Nishimura Y, Crowe RA, Cascio WE, Bradham CA, Brenner DA, Herman B. The mitochondrial permeability transition in cell death: a common mechanism in necrosis, apoptosis, and autophagy. *Biochimica et Biophysica Acta* 1366: 177-196, 1998.
36. Bradham CA, Plumpe J, Manns MP, Brenner DA, Trautwein C. Mechanisms of hepatic toxicity-I.TNF-induced liver injury. *Am J Physiol* 275: G387-G392, 1998.
37. Behrns KE, Rippe RA, Brenner DA. Cellular and molecular basis of hepatic fibrosis and therapeutic implications. In: "Future Trends in Gastroenterology". Pharmacology and Therapeutics. The 83rd General Meeting of Japanese Society of Gastroenterology. Saburo Nakazawa, Ed. Life Science Publishing, Tokyo, Japan. pp. 19-20, 1998.
38. Brenner DA. Signal transduction during liver regeneration. *J Gastroenterol Hepatol Suppl*: S93-5, 1998.
39. Rippe RA, Behrns K, Brenner DA. Molecular Biology for the GI clinician. *Gastroenterology Update* vol 3, 2:1- 13. 1998.
40. Scarlett YV, Brenner DA. Porphyrias. *J Clin Gastro.* 27: 192-198, 1998.
41. Lemasters JJ, Qian T, Elmore SP, Trost LC, Nishimura Y, Herman B, Bradham CA, Brenner DA, Nieminen AL. Confocal microscopy of the mitochondrial permeability transition in necrotic cell killing, apoptosis and autophagy. *Biofactors* 8: 283-5, 1998.
42. Thurman RG, Bradford BU, Jimuro Y, Knecht KT, Arteel GE, Yin M, Connor HD, Wall C, Raleigh JA, Frankenberg MV, Adachi Y, Forman DT, Brenner D, Kadiiska M, Mason RP. The role of gut-derived bacterial toxins and free radicals in alcohol-induced liver injury. *J Gastroenterol Hepatol.*: S39-50, 1998.
43. Jobin C., Behrns K. Brenner DA. Molecular and cellular biology of the small intestine. *Current Opinion in Gastroenterology* 15:103-107, 1999.
44. Lang A and Brenner DA. Gene regulation in hepatic stellate cell. *Ital J Gastroenterol Hepatol* 31:173-9, 1999.
45. Lemasters JJ, Qian T, Bradham CA, Brenner DA, Cascio WE, Trost LC, Nishimura Y, Nieminen A-L, Herman B. Mitochondrial dysfunction in the pathogenesis of necrotic and apoptotic cell death. *J Bioenergetics and Biomembranes* 31:305-319, 1999.
46. Brenner DA. Therapeutic strategy for liver fibrosis. *J Gastroenterology and Hepatology* 14S: A279-80, 1999.
47. Lemasters JJ, Qian T, Trost LC, Herman B, Cascio WE, Bradham CA, Brenner DA, Nieminen AL. Confocal microscopy of the mitochondrial permeability transition in necrotic and apoptotic cell. *Biochem Soc Symp.* 66:205-222, 1999.
48. Lindquist JN, Stefanovic B, Brenner DA. Regulation of collagen α 1(I) expression in hepatic stellate cells. *J Gastroenterology* 35S12: 80-83, 2000.

49. Enomoto N, Ikejima K, Bradford BU, Rivera CA, Kono H, Goto M, Yamashina S, Schemmer P, Kitamura T, Oide H, Takei Y, Hirose M, Shimizu H, Miyazaki A, Brenner DA, Sato N, Thurman RG. Role of Kupffer cells and gut-derived endotoxins in alcoholic liver injury. *J Gastroenterol Hepatol*: 15 Suppl:D20-5, 2000.
50. Brenner DA. Moderate Alcohol Drinking: Effects on the Heart and Liver. *Gastroenterology*. 119:1399-1401, 2000.
51. Brenner DA, Hatano E, Bradham CA, Qian T, Schwabe R, Behrns K, Lemasters JJ. New aspects of signal transduction in the liver. T. Andus, G Rogler, K Schlottman, E Frick, Eds. *Falk Symposium 113; Cytokines and Cell Homeostasis in the Gastrointestinal Tract*. Kluwer Academic Pub, Boston. pp. 336-346, 2000.
52. Rippe RA, Brenner DA, Tugores A. Techniques to Measure Nucleic Acid-Protein and Specificity: Nuclear Extract Preparations, DNase I Footprinting, and Mobility Shift Assays. In: Nuclease Methods and Protocols, Schein CH, ed., Humana Press, Totowa, New Jersey; pp. 459-479, 2001.
53. Neuman MG, Brenner DA, Rehmann B, Taieb J, Chollet-Martin S, Cohard M, Garaud JJ, Poynard T, Katz GG, Cameron RG, Shear NH, Gao B, Takamatsu M, Yamauchi M, Ohata M, Saito S, Maeyama S, Uchikoshi T, Toda G, Kumagi T, F Akbar SM, Abe M, Michitaka K, Horiike N, Onji M. Mechanisms of Alcoholic Liver Disease: Cytokines Alcohol. *Clin Exp Res*. 25:251S-253S, 2001.
54. Brenner DA. Comment from the editors. *Gastroenterology*121:3, 2001.
55. Bataller R, Brenner DA. Hepatic stellate cells as a target for the treatment of liver fibrosis. *Semin Liver Dis*. 21:437-52, 2001.
56. Brenner DA, Zimmer D. Gastro-Central, one year later. *Gastroenterology*. 2002 Jul; 123(1):5-6.
57. Brenner DA, Camilleri M. Joint statement on missions and submissions of papers to AGA journals. *Gastroenterology*. 2002 Sep;123(3):877-8.
58. Lemasters JJ, Brenner DA. Ronald G. Thurman (1941-2001). *Alcohol Alcohol*. 2002 Nov-Dec; 37(6):624-5.
59. Lemasters JJ, Qian T, He L, Kim JS, Elmore SP, Cascio WE, Brenner DA. Role of mitochondrial inner membrane permeabilization in necrotic cell death, apoptosis, and autophagy. *Antioxid Redox Signal*. 2002 Oct;4(5):769-81.
60. Gabele E, Brenner DA, Rippe RA. Liver fibrosis: signals leading to the amplification of the fibrogenic hepatic stellate cell. *Front Biosci*. 2003 Jan 1;8:D69-77.
61. Bataller R, North KE, Brenner DA. Genetic Polymorphisms and the progression of liver fibrosis: a critical appraisal. *Hepatology*. 2003 Mar;37(3):653-64.
62. Morgan TR, Brenner DA, Everhart J, French SW, Fried MW, Gretch DR, Koziel MJ, McClain CJ, Peters MG, Weinman SA, Lucas DL. Hepatitis C and alcohol: fundamental and translational research directions. *Alcohol Clin Exp Res*. 2003 Apr;27(4):726-31.
63. Stefanovic B, Lindquist J, Brenner DA. Regulation of collagen expression in hepatic stellate cells. In: Progress in the Treatment of Liver Diseases. Arroyo V et al Ed. Ars Medica, Barcelona, Spain; pp 179-186, 2003.
64. Brown RS Jr, Brenner DA. MELD and the practicing gastroenterologist. *Gastroenterology*. 2003 Oct;125(4):1009.
65. Rippe R, Brenner DA. Pathogenesis of Hepatic Fibrosis. In: Textbook of Gastroenterology Vol 1. Yamada T et al. Ed. Lippincott Williams and Wilkins, United States: pp 605-620.

66. Rippe R, Behrns K, Brenner DA. Molecular Biologic Approaches to the Diagnosis and Treatment of Gastrointestinal Diseases. In: Textbook of Gastroenterology Vol 2. Yamada T et al. Ed. Lippincott Williams and Wilkins, United States: pp 2790-2801.
67. Brenner DA. Gastrointestinal Basic Science 2002-2003: The Year in Review. *Clinical Gastroenterology and Hepatology*. 2004 Jan;2:9-13.
68. Stefanovic B, Lindquist J, Rippe R, Schnabl B, Schwabe R, Bataller R, Brenner DA. Mechanisms of fibrogenesis. In: *Prevention of Progression in Chronic Liver Disease. An Update on SNMC (Stronger Neo-Minophagen C)*. Hayashi N, Manns M Eds. Kluwer Academic Publishers, The Netherlands: pp 6-17.
69. Rippe RA, Brenner DA. From quiescence to activation: Gene regulation in hepatic stellate cells. *Gastroenterology*. 2004 Oct;127(4):1260-2.
70. Brenner DA. Data from arrays: an embarrassment of riches. *Gastroenterology*. 2004 Dec;127(6):1659.
71. Bataller R, Brenner DA. Liver fibrosis. *J Clin Invest*. 2005 Feb;115(2):209-218.
72. Modlin IM, Adler G, Alexander K, Arnold R, Brenner DA, Corazziari E, Floch MH, LaPorte RE, Peterson WL, Quigley EM, Shapiro MD, Spechler SJ, Spiller RC, Tytgat GN, Wiegers W. Information assimilation and distribution challenges and goals for real and virtual journals. *J Clin Gastroenterol*. 2005 Mar; 39(3):181-188.
73. Varga J, Brenner DA, Phan SH Eds. Fibrosis Research: Methods and Protocols. 2004. The Humana Press, Totowa, New Jersey.
74. Siegmund SV, Dooley S, Brenner DA. Hepatische Fibrose. In: Singer MV, Teysen S, eds. *Alkohol und Alkoholfolge-krankheiten*. 2nd ed. Heidelberg, Germany: Springer Medizin Verlag;1999,2005:230-246.
75. Siegmund SV, Brenner DA. Molecular pathogenesis of alcohol-induced hepatic fibrosis. *Alcohol Clin Exp Res*. 2005 Nov;29(11 Suppl):102S-109S.
76. Seki E, Brenner DA, Schwabe RF. Toll-like receptor signaling in the liver. In: O'Neill LAJ, Brint E, eds. *Toll-like Receptors in Inflammation*. Basel, Switzerland: Birkhauser Verlag; 2005:125-142.
77. Singer MV, Brenner, DA. Editors. *Alcohol and the Gastrointestinal Tract. Digestive Diseases*: 2005;23(3-4):157-312.
78. Purohit V, Brenner DA. Mechanisms of alcohol-induced hepatic fibrosis: a summary of the Ron Thurman Symposium. *Hepatology*. 2006 Apr;43(4):872-8.
79. Schwabe RF, Brenner DA. Mechanisms of Liver Injury. I. TNF-alpha-induced liver injury: role of IKK, JNK, and ROS pathways. *Am J Physiol Gastrointest Liver Physiol*. 2006 Apr;290(4):G583-9.
80. Schwabe RF, Seki E, Brenner DA. Toll-like receptor signaling in the liver. *Gastroenterology*. 2006 May;130(6):1886-900.
81. Brenner DA. The future of gastroenterology and *Gastroenterology*. *Gastroenterology*. 2006 May;130(6):1562.
82. De Minicis S, Bataller R, Brenner DA. NADPH oxidase in the liver: defensive, offensive, or fibrogenic? *Gastroenterology*. 2006. Jul;131(1):272-5.
83. Osterreicher CH, Stickel F, Brenner, DA. Genomics of liver fibrosis and cirrhosis. *Semin Liver Dis*. 2007 Feb;27(1):28-43.

84. Osterreicher CH, Brenner DA. The genetics of nonalcoholic fatty liver disease. *Annals of Hepatology*. 2007 Apr-Jun;6(2):83-88.
85. Schwabe RF, Brenner DA. Nuclear factor- κ B in the liver: friend or foe? *Gastroenterology*. 2007 Jun; 132(7):2601-4.
86. Seki E, Brenner DA. The role of NF- κ B in hepatocarcinogenesis: promoter or suppressor? *J Hepatol*. 2007 Aug;47(2):307-9.
87. De Minicis S, Brenner DA. NOX in liver fibrosis. *Arch Biochem Biophys*. 2007 June 15; 462(2):266-72.
88. Kaplan LM, Klein S, Boden G, Brenner DA, Gostout CJ, Lavine JE, Popkin BM, Schirmer BD, Seeley RJ, Yanovski Z, Comineli F. Report of the American Gastroenterological Association (AGA) Institute Obesity Task Force. *Gastroenterology*. 2007 May; 132(6):2272-5.
89. Osterreicher CH, Brenner DA. The genetics of nonalcoholic fatty liver disease. *Annals of Hepatology* 2007; 6(2):83-88.
90. Kisseleva T, Brenner DA. Role of hepatic stellate cells in fibrogenesis and the reversal of fibrosis. *Journal of Gastroenterology and Hepatology*. 22 (2007) Supplement 1:S73-S78.
91. Kisseleva T, Brenner DA. Mechanisms of fibrogenesis. *Exp Biol Med (Maywood)*. 2008 Feb; 233(2): 109-22. Review.
92. Kisseleva T, Brenner DA. Fibrogenesis of parenchymal organs. *Proc Am Thorac Soc*. 2008 April 15; 5(3):338-42.
93. Adler DH, Cogan JD, Phillips JA 3rd, Schnetz-Boutaud N, Milne GL, Iverson T, Stein JA, Brenner DA, Morrow JD, Boutaud O, Oates JA. Inherited human cPLA(2 α) deficiency is associated with impaired eicosanoid biosynthesis, small intestinal ulceration, and platelet dysfunction. *J Clin Invest*. 2008 Jun;118(6):2121-31.
94. Purohit V, Bode JC, Bode C, Brenner DA, Choudhry MA, Hamilton F, Kaing YJ, Keshavarzia A, Rao R, Sartor RB, Swanson C, Turner JR. Alcohol, intestinal bacterial growth, intestinal permeability to endotoxin, and medical consequences: Summary of a symposium. *Alcohol*. 2008 May 24.
95. Iimuro Y, Brenner DA. Matrix metalloproteinase gene delivery for liver fibrosis. *Pharm Res*. 2008. June 19; 9311-7.
96. De Minicis S, Brenner DA. Oxidative stress in alcoholic liver disease: Role of NADPH oxidase complex. *Journal of Gastroenterology and Hepatology*. 23 (2008) Supplement 1:S98-S103.
97. Seki E, Brenner DA. Toll-like receptors and adaptor molecules in liver disease: update. *Hepatology*. 2008. July;48(1):322-35.
98. Scholten D, Brenner DA. Current concept of hepatic fibrogenesis in mouse models of liver fibrosis. *Liver Cirrhosis: From Pathophysiology to Disease Management*. 2008. 130-143.
99. Schnabl B, Scholten D, Brenner DA. What is the potential role of antifibrotic agents for the treatment of liver disease? *Nat Clin Pract Gastroenterol Hepatol*. 2008 Sep;5(9):496-7.
100. Miura K, Taura K, Kodama Y, Schnabl B, Brenner DA. Hepatitis C virus-induced stress suppresses hepcidin expression through increased histone deacetylase activity. *Hepatology*. 2008 Nov;48(5):1420-9.

101. Taura K, De Minicis S, Seki E, Hatano E, Iwaisako K, Osterreicher CH, Kodama Y, Miura K, Ikai I, Uemoto S, Brenner DA. Hepatic stellate cells secrete angiopoietin 1 that induces angiogenesis in liver fibrosis. *Gastroenterology*. 2008 Nov; 135(5): 1729-38.
102. Lin SL, Kisseleva T, Brenner DA, Duffield JS. Pericytes and perivascular fibroblasts are the primary source of collagen-producing cells in obstructive fibrosis of the kidney. *Am J Pathol*. 2008 Dec; 173(6): 1617-27.
103. De Minicis S, Seki E, Oesterreicher C, Schnabl B, Schwabe RF, Brenner DA. Reduced nicotinamide adenine dinucleotide phosphate oxidase mediates fibrotic and inflammatory effects of leptin on hepatic stellate cells. *Hepatology*. 2008 Dec; 48(6): 2016-26.
104. Gäbele E, Froh M, Arteel GE, Uesugi T, Hellerbrand C, Schölmerich J, Brenner DA, Thurman RG, Rippe RA. TNFalpha is required for cholestasis-induced liver fibrosis in the mouse. *Biochem Biophys Res Commun*. 2009 Jan 16; 378(3): 348-53.
105. Kodama Y, Brenner DA. C-Jun N-terminal kinase signaling in the pathogenesis of nonalcoholic fatty liver disease: Multiple roles in multiple steps. *Hepatology*. 2009 Jan; 49(1):6-8.
106. Brandl K, Rutschmann S, Li X, Du X, Xiao N, Schnabl B, Brenner DA, Beutler B. Enhanced sensitivity to DSS colitis caused by a hypomorphic Mbtps1 mutation disrupting the ATF6-driven unfolded protein response. *Proc Natl Acad Sci U S A*. 2009 Mar 3; 106(9):3300-5.
107. Adler DH, Phillips JA 3rd, Cogan JD, Iverson TM, Schnetz-Boutaud N, Stein JA, Brenner DA, Milne GL, Morrow JD, Boutaud O, Oates JA. The enteropathy of prostaglandin deficiency. *J Gastroenterol*. 2009; 44 Suppl 19: 1-7.
108. Kodama Y, Taura K, Miura K, Schnabl B, Osawa Y, Brenner DA. Antiapoptotic effect of c-Jun N-terminal Kinase-1 through Mcl-1 stabilization in TNF-induced hepatocyte apoptosis. *Gastroenterology*. 2009 Apr; 136(4):1423-34.
109. Seki E, De Minicis S, Inokuchi S, Taura K, Miyai K, von Rooijen N, Schwabe RF, Brenner DA. CCR2 promotes hepatic fibrosis in mice. *Hepatology*. 2009 Jul; 50(1): 185-97.
110. Kodama Y, Kisseleva T, Iwaisako K, Miura K, Taura K, De Minicis S, Schnabl B, Seki E, Brenner DA. JNK1 from hematopoietic cells mediates progression from hepatic steatosis to steatohepatitis and fibrosis in mice. *Gastroenterology*. 2009 Jun 21. Epub ahead of print.
111. Seki E, De Minicis S, Gwak GY, Kluwe J, Inokuchi S, Bursill CA, Llovet JM, Brenner DA, Schwabe RF. CCR1 and CCR5 promote hepatic fibrosis in mice. *J Clin Invest*. 2009 Jul; 119(7): 1858-70.
112. Colmenero J, Bataller R, Sancho-Bru P, Dominguez M, Moreno M, Forns X, Bruguera M, Arroyo V, Brenner DA, Ginès P. Effects of losartan on hepatic expression of non-phagocytic NADPH oxidase and fibrogenic genes in patients with chronic hepatitis C. *Am J Physiol Gastrointest Liver Physiol*. 2009 July 23. Epub ahead of print.
113. Osterreicher CH, Taura K, De Minicis S, Seki E, Penz-Osterreicher M, Kodama Y, Kluwe J, Schuster M, Oudit GY, Penninger JM, Brenner DA. Angiotensin-converting-enzyme 2 inhibits liver fibrosis in mice. *Hepatology*. 2009 Sep; 50(3):929-38.
114. Bataller R, Brenner DA. Pathogenesis of hepatic fibrosis. In: Textbook of Gastroenterology Vol 1. 5th ed. Yamada T et al. Ed. Wiley-Blackwell Publishing Ltd, Hoboken, New Jersey; pp 658-679, 2009.
115. Brenner DA, Schwabe RF, Oesterreicher C. Molecular biological approaches to the diagnosis and treatment of gastrointestinal diseases. In: Textbook of Gastroenterology Vol 1. 5th ed. Yamada T et al. Ed. Wiley-Blackwell Publishing Ltd, Hoboken, New Jersey; pp 709-718, 2009.

116. Osawa Y, Seki E, Brenner DA. Apoptosis in liver injury and liver disease. In: Essentials of Apoptosis: A Guide for Basic and Clinical Research (2nd Ed). Yin XM, Dong Z (Eds.) The Humana Press, Totowa, New Jersey; pp 547-564, 2009.
117. Brenner DA. Molecular pathogenesis of liver fibrosis. *Trans. Am Clin Climatol Assoc*; 120:361-8, 2009. Review.
118. Kisseleva T, Gigante E, Brenner DA. Recent advances in liver stem cell therapy. *Curr Opin Gastroenterol*; 26(4):395-402, 2009. Review.
119. Miura K, Seki E, Ohnishi H, Brenner DA. Role of toll-like receptors and their downstream molecules in the development of nonalcoholic Fatty liver disease. *Gastroenterol Res Pract*. 2010:362847, 2010.
120. Miura K, Seki E, Ohnishi H, Brenner DA. Role of toll-like receptors and their downstream molecules in the development of nonalcoholic Fatty liver disease. *Gastroenterol Res Pract*; 2010:362847. Epub 2011 Jan 17. Review.
121. Gao B, Seki E, Brenner DA, Friedman S, Cohen JI, Nagy L, Szabo G, Zakhari S. Innate immunity in alcoholic liver disease. *Am J Physiol Gastrointest Liver Physiol*. 300(4):G516-25, 2011.
122. Chau BN, Brenner DA. What goes up must come down: the emerging role of microRNA in fibrosis. *Hepatology*. 53(1):4-6, 2011.
123. Kisseleva T, Brenner DA. Is it the end of the line for the EMT? *Hepatology*. 53(5):1433-5, 2011. Kisseleva T, Brenner DA. Anti-fibrogenic strategies and the regression of fibrosis. *Best Pract Res Clin Gastroenterol*. 25(2):305-17, 2011.
124. Paik YH and Brenner DA. NADPH oxidase mediated oxidative stress in hepatic fibrogenesis. *Korean J Hepatol*. 2011 Dec;17(4):251-7.
125. Brenner DA, Seki E, Taura K, Kisseleva T, Deminici S, Iwaisako K, Inokuchi S, Schnabl B, Oesterreicher CH, Paik YH, Miura K, Kodama Y. Non-alcoholic steatohepatitis-induced fibrosis: Toll-like receptors, reactive oxygen species and Jun N-terminal kinase. *Hepatol Res*. 41(7):683-6, 2011.
126. DeLeve LD, Jaeschke H, Kalra VK, Asahina K, Brenner DA, Tsukamoto H. 15th International Symposium on Cells of the Hepatic Sinusoid, 2010. *Liver Int*. 31(6):762-72, 2011.
127. Nelson D, Teckman J, Di Bisceglie A, Brenner DA. Diagnosis and Management of Patients with α 1-Antitrypsin (A1AT) Deficiency. *Clin Gastroenterol Hepatol*. 10(6):575-80, 2012.
128. Brenner DA, Kisseleva T, Scholten D, Paik HY, Iwaisako K, Inokuchi S, Schnabl B, Seki E, De Minicis S, Oesterreicher C, Taura K. Fibrogenesis & Tissue Repair 2012, 5(Suppl 1):S17 <http://www.fibrogenesis.com/content/5/S1/S17>.
129. Iwaisako K, Brenner DA, Kisseleva T. What's new in liver fibrosis? The origin of myofibroblasts in liver fibrosis. *J Gastroenterol Hepatol*. 27 Suppl 2:65-8, 2012.
130. Kisseleva T, Brenner DA. The phenotypic fate and functional role for bone marrow-derived stem cells in liver fibrosis. *J Hepatol*. 56(4):965-72, 2012.
131. Seki E, Brenner DA, Karin M. A Liver Full of JNK: Signaling in Regulation of Cell Function and Disease Pathogenesis, and Clinical Approaches. *Gastroenterology*. 143(2):307-20, 2012.
132. Brenner DA. Next-generation academic medicine. *J Clin Invest*. 122(11):4280-2, 2012.
133. Brenner DA, Kisseleva T, Scholten D, Paik YH, Iwaisako K, Inokuchi S, Schnabl B, Seki E, De Minicis S, Oesterreicher C, Taura K. Origin of myofibroblasts in liver fibrosis. *Fibrogenesis Tissue Repair*. 6:5 Suppl 1:S17, 2012.

134. Schnabl B, Brenner DA. Fibroblast growth factor inducible 14 as potential target in patients with alcoholic hepatitis. *Gut*. 62(3):335-6, 2013.
135. Kisseleva T, Brenner DA. Inactivation of myofibroblasts during regression of liver fibrosis. *Cell Cycle*. 16;12(3), 2013.
136. Brenner DA. Fra, Fra away: the complex role of activator protein 1 in liver injury. *Hepatology*. 59(1):19-20, 2014.
137. Paik YH, Kim J, Aoyama T, De Minicis S, Bataller R, Brenner DA. Role of NADPH Oxidases in Liver Fibrosis. *Antioxid Redox Signal*. 2014 Jun 10;20(17):2854-72
138. Schnabl B, Brenner DA. Interactions Between the Intestinal Microbiome and Liver Diseases. *Gastroenterol Hepatol (N Y)*. 2013 Nov;9(11):737-9.
139. Brenner DA. Reversibility of liver fibrosis. *Gastroenterol Hepatol (N Y)*. 9(11):737-9, 2013.
140. Xu J, Cong M, Park TJ, Scholten D, Brenner DA, Kisseleva T. Contribution of bone marrow-derived fibrocytes to liver fibrosis. *Hepatobiliary Surg Nutr*. 2015 Feb;4(1):34-47.
141. Kim IH, Kisseleva T, Brenner DA. Aging and liver disease. *Curr Opin Gastroenterol*. 2015 May;31(3):184-91.
142. Koyama Y, Brenner DA. New therapies for hepatic fibrosis. *Clin Res Hepatol Gastroenterol*. 2015 Sep;39 Suppl 1:S75-9.
143. Brenner DA, Paik YH, Schnabl B. Role of Gut Microbiota in Liver Disease. *J Clin Gastroenterol*. 2015 Nov-Dec;49 Suppl 1:S25-7.
144. Floch MH, Walker WA, Sanders ME, Nieuwdorp M, Kim AS, Brenner DA, Qamar AA, Miloh TA, Guarino A, Guslandi M, Dieleman LA, Ringel Y, Quigley EM, Brandt LJ. Recommendations for Probiotic Use--2015 Update: Proceedings and Consensus Opinion. *J Clin Gastroenterol*. 2015 Nov-Dec;49 Suppl 1:S69-73.
145. Seki E, Brenner DA. Recent advancement of molecular mechanisms of liver fibrosis. *J Hepatobiliary Pancreat Sci*. 2015 Jul;22(7):512-8.
146. Liang S, Kisseleva T, Brenner DA. The Role of NADPH Oxidases (NOXs) in Liver Fibrosis and the Activation of Myofibroblasts. *Front Physiol*. 2016 Feb 2;7:17. Review.
147. Wang P, Koyama Y, Liu X, Xu J, Ma HY, Liang S, Kim IH, Brenner DA, Kisseleva T. Promising Therapy Candidates for Liver Fibrosis. *Front Physiol*. 2016 Feb 16;7:47. Review.
148. Liu X, Brenner DA. Liver: DNA methylation controls liver fibrogenesis. *Nat Rev Gastroenterol Hepatol*. 2016 Mar;13(3):126-8.
149. Koyama Y, Xu J, Liu X, Brenner DA. New Developments on the Treatment of Liver Fibrosis. *Dig Dis*. 2016;34(5):589-96. 2016 Jun 22.
150. Koyama Y, Brenner DA. Liver inflammation and fibrosis. *J Clin Invest*. 2017 Jan 3;127(1):55-64.