

Cynthia A. Bradham
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Education

1988	B.S.	University of Wisconsin	Biology and Chemistry
1998	Ph.D.	University of North Carolina	Biochemistry & Biophysics

Research Experience

- 2000-present Postdoctoral fellow, Developmental, Cell & Molecular Biology Group, Duke University (embryogenesis, axial specification, pattern formation, signal transduction)
- 1998-2000 Postdoctoral fellow, Dept. of Medicine and CGIBD, University of North Carolina, Chapel Hill, NC (TNF signaling, proliferation, and apoptosis)
- 1993-1998 Graduate Research, Dept.s of Medicine and Biochemistry & Biophysics, University of North Carolina, Chapel Hill, NC (TNF signaling, apoptosis, gene therapy)
- 1990-1993 Research Technician, Molecular Genetics Laboratory, Blood Center of Southeastern Wisconsin, Milwaukee WI (TCR gene rearrangement, molecular biology)
- 1988-1990 Research Technician, Dept. of Anatomy & Cell Biology, Medical College of Wisconsin, Milwaukee WI (embryology and neural development, protein biochemistry)
- 1986-1988 Undergraduate Research, Dept. of Microbiology, University of Wisconsin, Milwaukee WI (bacterial membranes and enzyme kinetics)

Support

J. Irving Levine Fellowship 1993
NSF Fellowship 1994-1997
American Liver Foundation Fellowship 1997
CGIBD Pilot Feasibility Grant 1998
NIH T32 CGIBD Training Grant 1998-2000
Hargett Fellowship 2000-2001
NIH F32 NRSA 2001-2003

Awards

Phi Eta Sigma 1983
Ruth Walker Memorial Award 1986
James D. Anthony Award 1987
Phi Beta Kappa 1988
Winner, CGIBD Research Competition 1995
Winner, CGIBD Research Competition 1996

Research Papers (first authorship)

1. **Bradham CA** and DR McClay. 2005. p38 MAPK is Essential for Secondary Axis Specification and Patterning in Sea Urchin Embryos. *Development (in press)*.
2. **Bradham CA**, Miranda EL, and DR McClay. 2004. PI3K Inhibitors Block Skeletogenesis But Not Patterning In Sea Urchin Embryos. *Developmental Dynamics* 229 (4): 713-21.
3. **Bradham CA**, Hatano E, and DA Brenner. 2001. Dominant Negative TAK1 Induces c-Myc and G0 Exit in the Liver. *Am J Physiol Gastrointest Liver Physiol.* 281(5):G1279-89.
4. **Bradham CA**, Schemmer P, Stachlewitz RF, Thurman RG, and DA Brenner. 1999 The activation of NF- κ B during orthotopic liver transplantation in rats is protective and does not require Kupffer cells. *Liver Transplant. & Surg.* 5:282-93.
5. **Bradham CA**, Qian T, Streetz K, Trautwein, C., Brenner DA and JJ Lemasters. 1998. The mitochondrial permeability transition is required for TNF α -mediated apoptosis and cytochrome *c* release. *Mol. Cell. Biol.* 18:6353-64
6. **Bradham C**, Stachlewitz RF, Gao W, Qian T, Jayadev S, Jenkins G, Hannun Y, Lemasters JJ, Thurman RG, and DA Brenner. 1997. Reperfusion after liver transplantation in rats differentially activates the mitogen-activated protein kinases. *Hepatology* 25:1128-1135

Research Papers (middle authorship)

1. Schwabe RF, **Bradham CA**, Uehara T, Hatano E, Bennett BL, Schoonhoven R, Brenner DA. 2003. c-Jun-N-terminal kinase drives cyclin D1 expression and proliferation during liver regeneration. *Hepatology* 37(4):824-32.
2. Liedtke C, Plumpe J, Kubicka S, **Bradham CA**, Manns MP, Brenner DA, Trautwein 2002. c-Jun kinase modulates tumor necrosis factor-dependent apoptosis in liver cells. *Hepatology*. 36(2):315-25.
3. Liu H, Rubashevsky E, Jones BE, **Bradham C**, and MJ Czaja. 2002. Increased cytochrome P-450 2E1 expression sensitizes hepatocytes to c-Jun-mediated cell death from TNF-alpha. *Am J Physiol Gastrointest Liver Physiol*. 282(2):G257-66.
4. Schnabl B, **Bradham CA**, Bennett BL, Manning AM, Stefanovic B, Brenner DA. 2001. TAK1/JNK and p38 have opposite effects on rat hepatic stellate cells.. *Hepatology*. 34(5):953-63.
5. Hatano E, **Bradham CA**, Stark A, Iimuro Y, Lemasters JJ, Brenner DA. 2000. The mitochondrial permeability transition augments Fas-induced apoptosis in mouse hepatocytes. *J Biol Chem*. 275:11814-23.
6. Xu LH, Yang X, **Bradham CA**, Brenner DA, Baldwin AS Jr, Craven RJ, Cance WG. 2000. 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*. 275:30597-604.
7. Nishiura T, Nishimura T, deSerres S, Godfrey V, **Bradham CA**, Nakagawa T, Brenner DA, Meyer AA. 2000. Gene expression and cytokine and enzyme activation in the liver after a burn injury. *J. Burn Care Rehabil*. 21:135-41.
8. Rusyn I, **Bradham CA**, Cohn L, Schoonhoven R, Swenberg JA, Brenner DA, and RG Thurman. 1999. The tumor promoter corn oil rapidly activates NF- κ B in hepatic Kupffer cells by oxidant-dependent mechanisms. *Carcinogenesis* 20:2095-100.
9. Jobin C, **Bradham CA**, Russo MP, Juma B, Narula AS, Brenner DA, Sartor RB. 1999. Curcumin blocks cytokine-mediated NF-kappa B activation and proinflammatory gene expression by inhibiting inhibitory factor κ B kinase activity. *J Immunol*. 163:3474-83.
10. Stachlewitz RF, Seabra V, Bradford B, **Bradham CA**, Rusyn IR, Germolec D, and RG Thurman. 1999. Glycine and uridine prevent D-galactosamine hepatotoxicity in the rat: role of Kupffer cells. *Hepatology* 29:737-45.
11. Jobin C, Holt L, **Bradham CA**, Streetz K, Brenner DA, and RB Sartor. 1999. Traf-2 is involved in both IL-1 α and TNF α -signaling cascades leading to NF- κ B activation and IL-8 expression in human intestinal epithelial cells. *J. Immunol*. 163:3474-83
12. Xu Y, **Bradham C**, Brenner D and M Czaja. 1997. Hydrogen peroxide-induced liver cell necrosis is dependent on AP-1 activation. *Am. J. Physiol*. 273: G795-G803
13. Mallat A, Preaux AM, Serradeil-LeGal C, Raufaste D, Gallois C, Brenner D, **Bradham C**, Maclouf J, Iourgenko V, Fouassier L, Dhumeaux D, Mavier P, and S Lotersztajn. 1996. Growth inhibitory properties of endothelin-1 in activated human stellate cells: a cyclic adenosine monophosphate-mediated pathway. *J. Clin. Invest*. 98: 2771-2778