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**BIOGRAPHICAL SKETCH**


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NAME Gretchen J. Darlington	POSITION TITLE Professor and Interim Director
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**EDUCATION/TRAINING**


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INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Colorado	B.A.	1964	Biology
University Of Michigan	Ph.D.	1970	Human Genetics
Yale University	Post Doc	1970-1972	Somatic Cell Genetics

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**Positions Held**

1972-1974	Research Associate, Yale University.
1974-1980	Assistant Professor of Medicine, Cornell University Medical College, New York, NY.
1980-1982	Associate Professor of Medicine, Cornell University Medical College.
1982-1989	Associate Professor of Pathology, Baylor College of Medicine, Houston, Texas. Associate Professor of Cell Biology, Baylor College of Medicine (BCM).
1985-1989	Associate Professor, Institute of Molecular Genetics, Baylor College of Medicine.
1989-present	Professor of Pathology, Molecular Genetics, and Cell Biology, BCM.
1996-present	Professor, Huffington Center on Aging, BCM
2007	Robert C. Fyfe Professor of Aging
2008-present	Interim Director, Huffington Center on Aging, BCM

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**Honors and NIH Review Service**

Andrew W. Mellon Teacher Scientist Award, 1975-1976.  
 American Heart Association Established Investigator, 1976-1981.  
 Irma T. Hirshl Trust Awardee, 1980-1984.  
 Established Investigator Award, Society for In Vitro Biology, 1998.  
 Member, NIA, Biological and Clinical Aging Review Committee A, 1992-1996  
 Chair, NIA, Biological and Clinical Aging Review Committee A, 1994-1996  
 Member, NIDDK, SRCB, 1998-1999  
 Ellison Medical Foundation Senior Fellow, 1999  
 NIH, GCMB Study Section, 2003-2005  
 Robert C. Fyfe Professor of Aging, Huffington Center on Aging and Professor, Department of Pathology; 2007.

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**Selected Publications**

**Darlington GJ**, Wang N.D., Hanson R.W. C/EBP $\alpha$ : A critical regulator of genes governing integrative metabolic processes. *Curr. Opin. Genet. Dev.* 5:565-570, 1995.  
 Wang N.D., Finegold M.J., Bradley A., Ou C.N., Abdelsayed S.V., Wilde M.D., Taylor L.R., Wilson D.R. and **Darlington GJ**. Impaired energy homeostasis in C/EBP $\alpha$  knockout mice. *Science* 269:1108-1112, 1995.  
 Timchenko N.A., Wilde M., Nakanishi M., Smith J.R. and **Darlington GJ** CCAAT/enhancer binding protein alpha (C/EBP $\alpha$ ) inhibits cell proliferation through the p21 (WAF-1/CIP-1/SDI-1) protein. *Genes Dev.* 10:804-815, 1996.  
 Zhang D., Zhang P., Wang N., Hetherington C.J., **Darlington G.J.** and Tenen D.G. Absence of granulocyte colony-stimulating factor signaling and neutrophil development in CCAAT enhancer binding protein alpha-deficient mice. *Proc. Natl. Acad. Sci. USA* 94:569-574, 1997.  
 Timchenko N.A., Harris T.E., Wilde M., Bilyeu T.A., Burgess-Beusse B.L., Finegold M.J. and

- Darlington G.J.** CCAAT/enhancer binding protein  $\alpha$  regulates p21 protein and hepatocyte proliferation in newborn mice. *Mol. Cell. Biol.* 17:(12)7353-7361, 1997.
- Oesterreicher T.J., Leeper L.L., Finegold M.J., **Darlington G.J.**, Henning S.J. Intestinal maturation in mice lacking CCAAT/enhancer-binding protein alpha (C/EBP $\alpha$ ). *J Biochem* 330:1165-1171, 1998.
- Soriano H.E., Kang D.C., Finegold M.J., Hicks M.J., Wang N.D., Harrison W. and **Darlington G.J.** Lack of C/EBP $\alpha$  gene expression results in increased DNA synthesis and an increased frequency of immortalization of freshly isolated rat hepatocytes. *Hepatology* 27:(2)392-401, 1998.
- Timchenko N.A., Wilde M., Kosai K.-I., Heydari A., Bilyeu T.A., Finegold M.J., Mohamedali K., Richardson A., **Darlington G.J.** Regenerating livers of old rats contain high levels of C/EBP $\alpha$  that correlate with altered expression of cell cycle associated proteins. *Nucleic Acids Res.* 26:3293-3299, 1998.
- Seagroves T.N., Krnacik S., Raught B., Gay J., Burgess-Beusse B., **Darlington G.J.** and Rosen J.M. C/EBP $\beta$ , but not C/EBP $\alpha$ , is essential for ductal morphogenesis, lobuloalveolar proliferation, and functional differentiation in the mouse mammary gland. *Genes Dev.* 12:1917-1928, 1998.
- Darlington G.J.**, Ross S. and MacDougald O.A. The role of C/EBP genes in adipocyte differentiation. *J. Biol. Chem.* 273:(46)30057-30060, 1998.
- Burgess-Beusse B.L. and **Darlington G.J.** C/EBP $\alpha$  is critical for the neonatal acute phase response to inflammation. *Mol. Cell. Biol.* 18:(12)7269-7277, 1998.
- Christoffels V.M., Grange T., Kaestner K.H., Cole T.J., **Darlington G.J.**, Croniger C.M. and Lamers W.H. Glucocorticoid receptor, C/EBP, HNF3, and protein kinase A coordinately activate the glucocorticoid response unit of the carbamoylphosphate synthase I gene. *Mol. Cell. Biol.* 18:(11)6305-6315, 1998.
- Iwama A., Zhang P., **Darlington G.J.**, Maki R., Tenen D.G. Use of RDA analysis of knockout mice to identify myeloid genes regulated in vivo by PU.1 and C/EBP $\alpha$ . *Nucleic Acids Res.* 26(12):3034-3043, 1998.
- Zhang P., Iwama A., Datta M.W., **Darlington G.J.**, Link D.C., Tenen D.G. Upregulation of interleukin 6 and granulocyte colony-stimulating factor receptors by transcription factor CCAAT enhancer binding protein alpha (C/EBP alpha) is critical for granulopoiesis. *J. Exp. Med.* 188(6):1173-84, 1998.
- Burgess-Beusse B.L., Timchenko N.A. and **Darlington G.J.** CCAAT/enhancer binding protein  $\alpha$  (C/EBP $\alpha$ ) is an important mediator of mouse C/EBP $\alpha$  protein isoform production. *Hepatology*, 29:(2)597-601, 1999.
- Welm A.L., Timchenko N.A. and **Darlington G.J.** C/EBP $\alpha$  regulates generation of C/EBP $\beta$  isoforms through activation of specific proteolytic cleavage. *Mol. Cell. Biol.* 19(3):1695-1704, 1999.
- Burgess-Beusse B.L., Timchenko N.A. and **Darlington G.J.** C/EBP $\alpha$  is an important mediator of mouse C/EBP $\beta$  protein isoform production. *Hepatology*, 29:(2)597-601, 1999.
- Wu Z., Rosen E.D., Brun R., Hauser S., Adelmant G., Troy A.E., McKeon C., **Darlington G.J.** and Spiegelman B.M. Cross-regulation of C/EBP $\alpha$  and PPAR $\gamma$  controls the transcriptional pathway of adipogenesis and insulin sensitivity. *Mol. Cell.* 3(2):151-158, 1999.
- Timchenko N.A., Wilde M. and **Darlington G.J.** C/EBP $\alpha$  regulates formation of S-phase-specific E2F-p107 complexes in livers of newborn mice. *Mol. Cell. Biol.* 19:(4)2936-2945, 1999.
- Timchenko N.A., Wilde M., Iakova P., Albrecht J.H., and **Darlington G.J.** E2F/p107 and E2F/p130 complexes are regulated by C/EBP $\alpha$  in 3T3-L1 adipocytes. *Nucleic Acids Res.* 27:(17)3621-3630, 1999.
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- Darlington G.J.** Molecular mechanisms of liver development and differentiation. *Curr Opin Cell Biol.* 11:678-82, 1999.
- Park J.S., Boyer S., Mitchell K., Gilfor D., Birrer M., **Darlington G.**, El Diery W., Firestone G.L., Munger K., Band V., Fisher P.B., Dent P. Expression of human papilloma virus E7 protein causes apoptosis and inhibits DNA synthesis in primary hepatocytes via increased expression of p21(Cip-1/WAF1/MDA6). *J Biol Chem*, 275(1)18-28, Jan 2000.
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