

**BIOGRAPHICAL SKETCH**

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NAME Popko, Brian J.		POSITION TITLE Professor	
eRA COMMONS USER NAME BPOPKO			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Pennsylvania State Univ., State College, PA	B.S.	1980	Microbiology
Univ. of Miami School of Medicine, FL	Ph.D.	1984	Microbiology

**Employment History**

1985-1988 Research Fellow, Division of Biology, California Institute of Technology, Pasadena, CA;  
Supervisor: Dr. Leroy Hood

1988-1995 Assistant Professor of Biochemistry and Biophysics; Research Scientist, UNC Neuroscience Center; Member, Program in Molecular Biology and Biotechnology; Member, Lineberger Cancer Research Center

1995-2000 Associate Professor of Biochemistry and Biophysics, UNC-Chapel Hill

2000-2001 Professor of Biochemistry and Biophysics, UNC-Chapel Hill

2000-2001 Director, Functional Genomics Core Facility, Neuroscience Center, UNC-Chapel Hill

2002-Present Professor, Department of Neurology, The University of Chicago

2002-Present Director, Jack Miller Center for Peripheral Neuropathy, The University of Chicago

2003-Present Associate Chair for Research, Department of Neurology, The University of Chicago

**Awards/Honors**

1980 Dean's Fellowship, University of Miami School of Medicine

1983 & 1984 1st Place Student Paper Competition, Florida Branch of the Amer Soc of Microbiol

1984 Sigma Xi Honor Society, Research Award

1985-1988 NIH Postdoctoral Fellowship

1988 NIH First Award

1989 Junior Faculty Development Award, University of North Carolina at Chapel Hill

1991-1993 Alfred P. Sloan Neuroscience Research Fellowship

1993-1998 Research Career Development Award (NINDS)

1993 Folch-Pi Award, American Society for Neurochemistry

1997-1998 Kenan Research and Study Leave, University of North Carolina at Chapel Hill

2002 - Jack Miller Professorship, The University of Chicago

2003 Grass Traveling Scientist, Society for Neuroscience

2004 - Member, Faculty of 1000

**Publications (from a total of 81 peer reviewed articles, 12 book chapters and 1 book.)**

Toews AD, Lee SY, Popko B, Morell P: Tellurium-induced neuropathy: A model for reversible reductions in myelin protein gene expression. *J Neurosci Res* 26:501-507, 1990

Fremeau RT, Popko B: In-situ analysis of myelin basic protein gene expression in myelin deficient oligodendrocytes: Antisense hnRNA and readthrough transcription. *EMBO J* 9:3533-3538, 1990

Shine HD, Readhead C, Popko B, Hood L, Sidman RL: Morphometric analysis of normal, mutant, and transgenic CNS: Correlation of myelin basic protein expression to myelinogenesis. *J Neurochem* 58:342-349, 1990.

Principal Investigator/Program Director (Last, First, Middle): Popko, Brian, J.

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- Hayes C, Kelly D, Murayama S, Suzuki K, Popko B: Expression of the *neu* oncogene under the transcriptional control of the myelin basic protein gene in transgenic mice: Generation of transformed glial cells. *J Neurosci Res* 31:175-187, 1992
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- Popko B, Goodrum JF, Bouldin TW, Zhang SH, Maeda N: Nerve regeneration occurs in the absence of apolipoprotein E in mice. *J Neurochem* 60:1155-1158, 1993
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- Stahl N, Jurevics H, Morell P, Suzuki K, Popko B: Isolation, characterization, and expression of cDNA clones that encode rat UDP-galactose:ceramide galactosyltransferase. *J Neurosci Res* 38:234-242, 1994
- Bennett E, Stenvers KL, Lund PK, Popko B: Cloning and characterization of a cDNA encoding a novel fatty acid binding protein from rat brain. *J Neurochem* 63:1616-1624, 1994
- Goodrum JF, Bouldin TW, Zhang SH, Maeda N, Popko B: Nerve regeneration and cholesterol reutilization occur in the absence of apolipoproteins E and A-1 in mice. *J Neurochem* 64:408-416, 1995
- Li Y, Atashi J, Hayes C, Reap E, Hunt III S, Popko B: Morphological and molecular response of the MOCH-1 oligodendrocyte cell line to serum and interferon- $\gamma$ : Possible implications for demyelinating disorders. *J Neurosci Res* 40:189-198, 1995
- Rath EM, Kelly D, Bouldin TW, Popko B: Impaired peripheral nerve regeneration in a mutant strain of mice (*Enr*) with a Schwann cell defect. *J Neurosci* 15:7226-7237, 1995
- Fujita F, Suzuki K, Vanier MT, Popko B, Maeda N, Klein A, Henseler M, Sandhoff K, Nakayasu H, Suzuki K: Targeted disruption of the mouse sphingolipid activator protein gene: A complex phenotype, including severe leukodystrophy and wide-spread storage of multiple sphingolipids. *Hum Mol Genet* 5:711-725, 1996
- Coetzee T, Li X, Fujita N, Marcus JR, Suzuki K, Francke U, Popko B: Molecular cloning, chromosomal mapping, and characterization of the mouse UDP-galactose:ceramide galactosyltransferase gene. *Genomics* 35:215-222, 1996
- Corbin JG, Kelly D, Rath EM, Baerwald KD, Suzuki K, Popko B: Targeted CNS expression of interferon-gamma in transgenic mice leads to hypomyelination, reactive gliosis, and abnormal cerebellar development. *Mol Cell Neurosci* 7:354-370, 1996
- Coetzee T, Fujita N, Dupree J, Shi R, Blight A, Suzuki K, Suzuki K, Popko B: Myelination in the absence of galactocerebroside and sulfatide: Normal structure with abnormal function and regional instability. *Cell* 86:209-219, 1996
- Xu P-T, Schmechel D, Rothrock-Christian T, Burkhart DS, Qiu H-L, Popko B, Sullivan P, Maeda N, Saunders AM, Roses AD, Gilbert JR: Human apolipoprotein E2, E3 and E4 isoform specific transgenic mice: Human-like pattern of neuronal immunoreactivity in central nervous system not observed in wild type mice. *Neurobiol Dis* 3:229-245, 1996 Taniike M, Marcus JR, Popko B, Suzuki K: Expression of major histocompatibility complex class I antigens in the demyelinating twitcher CNS and PNS. *J Neurosci Res* 47:539-546, 1997
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- Coetzee T, Suzuki K, Popko B: New perspectives on the function of myelin galactolipids. *Trends Neurosci* 21:126-130, 1998

Principal Investigator/Program Director (Last, First, Middle): Popko, Brian, J.

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- Dupree JL, Suzuki K, Popko B: Galactolipids in the formation and function of the myelin sheath. *Microsc Res Tech* 41:431-440, 1998 (cover article)
- Coetzee T, Dupree JL, Popko B: Demyelination and altered expression of myelin-associated glycoprotein isoforms in the CNS of galactolipid-deficient mice. *J Neurosci Res* 54:613-622, 1998
- Dupree JL, Coetzee T, Suzuki K, Popko B: Myelin abnormalities in mice deficient in galactocerebroside and sulfatide. *J Neurocytol* 27:649-659, 1998
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Principal Investigator/Program Director (Last, First, Middle): Popko, Brian, J.

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- Balabanov R, Strand K, Kemper A, Lee JY, Popko B: Suppressor of cytokine signaling 1 expression protects oligodendrocytes from the deleterious effects of interferon-gamma. *J Neurosci* 26:5143-52, 2006
- Levedakou EN, Popko B: Rewiring *enervated*: thinking LARGER than myodystrophy. *J Neurosci Res* 84:237-243, 2006
- Traka M, Seburn LK, Popko B: *Nmf11* is a novel ENU-induced mutation in the mouse glycine receptor alpha 1 subunit. *Mamm Genome* 17:950-5, 2006
- Lin W, Bailey SL, Ho H, Harding HP, Ron D, Miller SD, Popko B: The integrated stress response prevents demyelination by protecting oligodendrocytes against immune-mediated damage, *J Clin Invest* 117(2):448-456, 2007
- Balabanov R, Strand K, Goswami R, McMahan E, Bgolka W, Miller SD, Popko B: Interferon-gamma-oligodendrocyte interactions in the regulation of experimental autoimmune encephalomyelitis. *J Neurosci* 27(8):2013-2024, 2007
- Ghashghaei HT, Weimer JM, Schmid RS, Yokota Y, Kudlow JE, Popko B, Anton ES: Regaining of radial glial identity in the mature cerebral cortex: Reinduction of ErbB2 in astrocytes promotes radial glial progenitor identity. *Genes and Dev* 21(24):3258-71, 2007
- Chen XJ, Levedakou EN, Millen KJ, Wollmann RL, Soliven B, Popko B: Proprioceptive Sensory Neuropathy in Mice with a Mutation in the Cytoplasmic Dynein Heavy Chain 1 Gene. *J Neurosci* 27(52):14515-14524, 2007