

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Benjamin Wolozin, M.D., Ph.D.		POSITION TITLE Professor	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Wesleyan University, Middletown, CT	B.A.	1980	Chemistry
Albert Einstein College of Medicine, New York,	M.D., Ph.D.	1988	Neuroscience

A. POSITIONS AND HONORS:**Academic Appointments**

2004 – present Professor, Department of Pharmacology and Neurology, Boston University School of Medicine
 2002-2004 Professor, Department of Pharmacology, Loyola University School of Medicine
 1996-2002 Associate Professor, Dept. of Pharm., Loyola University School of Medicine, Maywood, IL.
 1990-1996 Commissioned Officer, PHS and Section Geriatric Psychiatry, LCS, NIMH, NIH, Bethesda, Maryland.
 1989-1996 Staff Fellow, Section on Clin. Neuropharm., LCS, NIMH, NIH, Bethesda, Maryland.
 1988-1989 Postdoctoral Fellow, Mt. Sinai Medical Center, New York, New York.

Awards and Other Professional Activities:

1980 Latin Honors: Magna Cum Laude (Wesleyan) Departmental Honors: Chemistry; Hawk Prize (Wesleyan).
 1981 Medical Scientist Training Program Fellowship (M.D.-Ph.D.); NSF Graduate Fellowship (subsequently delined)
 1987 Honorable Mention, Sheard Sanford Award Competition, American Society of Clinical Pathologists.
 1988 Donald B. Lindsley Prize, Society for Neuroscience.
 1993 Commissioned Officer Commendation Award.
 1993 A. E. Bennett Award, Society for Biological Psychiatry.
 1998 – present: Member of NIH study sections: CDIN (standing member), NSD-B, MDCN-1, NLS1
 2000 Teacher of the Year, Dept. Pharmacology; Graduate Faculty of the Year, LUMC
 2001-3 Editorial Board Member of Neurochemical Research; 2003- present Editorial Board: Neurodegeneration
 2003-present Editorial Board Member of Journal of Biological Chemistry

B. SELECTED PEER-REVIEWED PUBLICATIONS (selected from 80 publications).

Wolozin, B.L. and Pasternak, G.W.: Classification of multiple morphine and enkephalin binding sites in the central nervous system. PNAS 78(10):6181-6185, 1981.
Wolozin, B.L., et al: A neuronal antigen in the brains of Alzheimer patients. Science 232:648-650, 1986.
Wolozin, B.L., Lesch, K.P., Lebovics, R.S. and Sunderland, T.: Olfactory neuroblasts from Alzheimer donors: Studies on APP processing and cell regulation. Biol. Psychiatry. 34:824-838, 1993.
 Games, D., Adams, D., Alessandrini, R., (multiple authors), Wolozin, B.L. and Zhao, J.: Development of neuropathology similar to Alzheimer's Disease in transgenic mice overexpressing the 717_{V-F} β -amyloid precursor protein. Nature 373:523-8, 1995.
 Vawter, M.P., Basaric-Keys, J., Li, Y., Lebovics, R.S., Lesch, K.P., Kulaga, H., Freed, W.J., Sunderland, T., Wolozin, B. Human olfactory neuroepithelial cells: Tyrosine phosphorylation and process extension are increased by the combination of IL1 α IL6, NGF and β FGF. Exp. Neurol. 142:179-194, 1996.
 Vito, P., Wolozin, B.L., Ganji, K., Iwasaki, K., Lacana, E. and D'Adamio, L.: Requirement of the familial Alzheimer' Disease gene PS-2 for apoptosis. J. Biol. Chem. 271:31025-31028, 1996.
Wolozin, B.L., et al: Participation of Presenilin-2 in apoptosis: Enhanced basal activity conferred by Alzheimer mutation. Science, 274:1710-1713, 1996.

- Luo, Y., Hawver, D. B., Iwasaki, K., Sunderland, T., Roth, G. S. and Wolozin, B.L.: Physiological levels of β -amyloid peptide stimulate protein kinase C in PC12 cells. *Brain Res.* 769:287-95, 1997.
- Wallace, W., Akar, C., Lyons, W.E., Kole, W.E., Egan, J., Wolozin, B.L.: Amyloid precursor protein requires the insulin signaling pathway for neurotrophic activity. *Molecular Brain Research* 52: 213-227, 1997.
- Goldstein, B.J., Wolozin, B.L., Schwob, J.E. FGF2 suppresses neuronogenesis of a cell line derived from rat olfactory epithelium. *J. Neurobiol.* 33:411-8, 1997
- Murayama, M., Tanaka S., Palacino, J., Murayama, O., Honda, T., Sun, X., Yasutake, K., Nihonmatsu, N., Wolozin, B.L. and Takashima. A.: Direct association of presenilin-1 with beta-catenin. *FEBS Lett* 14: 433:73-7, 1998.
- Takashima, A., Murayama, M., Murayama, O., Kohno, T., Honda, T., Yasutake, K., Nihonmatsu, N., Mercken, M., Yamaguchi, H., Sugihara, S., Wolozin, B.L.: Presenilin 1 Associates with Glycogen Synthase Kinase-3. *PNAS*, 95:9637-41, 1998.
- Wolozin, B., et al., Physiologic levels of β -amyloid augment platelet aggregation: Reduced activity of familial angiopathy-associated mutants. *Mol. Psych.* 3: 500-507, 1998
- Ostrerova, N., Petrucelli, L., Farrer, M., Mehta, N., Palacino, J., Hardy, J. and Wolozin, B.L.: α -Synuclein shares physical and functional homology with 14-3-3 proteins. *J. Neurosci.* 19: 5782-91, 1999.
- Palacino, J., Berechid, B., Eckman, C., Younkin, S., Alexander, P., Nye, J. and Wolozin, B.L.: Regulation of APP processing by presenilin 1 and 2 presenilin 1 knockout cells. *J. Biol. Chem.* 275: 215-222, 2000.
- Ostrerova-Golts, N., Petrucelli, L., Hardy, J., Lee, J.M., Farrer, M. and Wolozin, B.: The A53T α -Synuclein Mutation Increases Iron-dependent Aggregation and Toxicity. *Journal of Neurosci.*, 16:6048-6054, 2000.
- Choi, P., Ostrerova-Golts, N., Sparkman, D., Cochran, E., Lee, J.M., Wolozin, B.L.: Parkin is metabolized by the ubiquitin/proteasome system. *NeuroReport*, 11: 2635-2639, 2000.
- Wolozin, B.L., Kellman, W., Ruosseau, P., Celesia, G.G. and Siegel, G.: Decreased prevalence of Alzheimer's disease, Associated with HMG-CoA reductase inhibitors. *Archives Neurol.*, 57: 1439-1443, 2000.
- Wolozin, B., Golts, N., Iron and Parkinson's disease, *The Neuroscientist* 8(1): 22-32 (2002).
- Choi, P., Golts, N., Snyder, H., Petrucelli, L., Chong, M., Hardy, J., Sparkman, D., Cochran, E., Lee, J.M. and Wolozin, B.: Co-association of parkin and α -synuclein. *NeuroReport* 12: 2839-45, 2001.
- Palacino, J.J., Murphy, M.P., Murayama, O., Iwasaki, K., Fukowa, M., Takashima, A., Golde, T.E., and Wolozin, B.: Presenilin 1 Regulates β -Catenin-Mediated Transcription in a GSK3 β -Independent Fashion *JBC* 276:38563-9 (2001).
- Wolozin, B., A fluid connection: Cholesterol and $A\beta$, *PNAS* 98:5371-3, 2001.
- Golts, N., Snyder, H., Frasier, M., Choi, P. and Wolozin, B.: Inhibition of α -synuclein aggregation by magnesium. *277:16116-23* (2002).
- Petrucelli, L., O'Farrell, C., Kehoe, K., Vink, L., Lockhart, P.J., Baptista, M., Wolozin, B. Choi, P., Farrer, M., Hardy, J., Cookson, M.R., Parkin protects against the toxicity associated with over-expression of synuclein: Proteasome dysfunction selectively affects dopaminergic neurons. *Neuron* 36:1007-19 (2002).
- Snyder, H., Mensah, K., Theisler, C., Lee, J. M., Matouschek, A. and Wolozin, B., Aggregated and Monomeric α -Synuclein bind to the S6' Proteasomal Protein and Inhibit Proteasomal Function. *J. Biol. Chem.* 278:11753-9 2003.
- Choi P., Petrucelli L., Chong M., Snyder, H., Zhang Y., Lim K., Chung K., Kehoe K., L. D'Adamio, Lee J.M., Cochran E., Bowser R., Dawson T., Wolozin, B., Parkin Binds Cell Division Control-Related Protein 2 binds Parkin and Inhibits Ubiquitination. *Mol. Brain Res.* 117:179-89 (2003).
- Pappolla MA, Bryant-Thomas TK, Herbert D, Pacheco J, Fabra Garcia M, Manjon M, Girones X, Henry TL, Matsubara E, Zambon D, Wolozin B, Sano M, Cruz-Sanchez FF, Thal LJ, Petanceska SS, Refolo LM. Mild hypercholesterolemia is an early risk factor for the development of Alzheimer amyloid pathology. *Neurology.* 61:199-205 (2003).
- Petrucelli, L., Dickson, D., Kehoe, K., Taylor, J., Snyder, H., Grover, A., McGowan, E., Lewis, J., Dillman, W., Browne, S.E., Voellmey, R., Tsuboi, Y., Dawson, T.M., Wolozin, B., Hardy, J., Hutton, M., CHIP and Hsp70 regulate tau ubiquitination, degradation and aggregation. *Human Molecular Genetics* 13:703-14(2004).
- Brown, J., Theisler, C., Silberman, S., Magnuson, D., Russell, D.W., Marquez-Sterling, N., Lee, J.M., Yager, D., Crowley, J., Sambamurti, K., Rahman, M., Reiss, A.B., Eckman, C.B., Wolozin, B., Differential Expression of Cholesterol Hydroxylases in Alzheimer's disease. *JBC* 279: 34674-81 (2004).
- Frasier, M, Walzer, M, McCarthy, L, Magnuson, D, Lee, JM, Haass, C, Kahle, P, Wolozin, B. Tau phosphorylation increases in symptomatic mice over-expressing A30P α -synuclein. *Exp. Neurol.* In press (2005).
- Poon, HF, Frasier, M, Sherve, N, Calebrese, V, Wolozin, B. Butterfield, AD, Mitochondrial associated Metabolic Proteins are Selectively Oxidized in A30P -Synuclein Transgenic Mice – A Model of Familial Parkinson's Disease, *Neurobio. Dis.* (In press).

C. RESEARCH SUPPORT.

Ongoing Research Support

“Regulation of Ubiquitination and Receptor Signaling by Parkin”

Principle Investigator: Benjamin Wolozin Agency: NIH/NINDS

Type: Government Grant Period: June 1, 2001 - May 31, 2005

The objective of this grant proposal is to investigate the function of parkin a protein implicated in Parkinson’s disease.

“Regulation of APP processing by presenilins”

Principle Investigator: Benjamin Wolozin Agency: NIH/NIA

Type: Government Grant Period: Aug 1, 2001 - July 31, 2005

This grant proposal investigates the role of presenilin 1 in the processing of amyloid precursor protein.

“Mechanisms of a-synuclein aggregation and toxicity”

Principle Investigator: Benjamin Wolozin Agency: US Army

Type: Government Grant Period: July 1, 2001 - June 30, 2005

The objective of this grant proposal is to investigate the interaction of α -synuclein with metals.

“Epidemiological Screen for Medicines that Modify the Course of Alzheimer’s disease”

Principle Investigator: Benjamin Wolozin Agency: Fidelity Foundation

Type: Foundation Grant Period: January 1, 2005 – December 31, 2005

The objective of this grant proposal is to identify medicines that modify the risk of Alzheimer’s disease.

Completed Research Support

Retirement Research Foundation, 1999-2001, α -Synuclein: A Key to Parkinson’s Disease,

Falk Foundation, 1999-2000, Identifying Genes Involved in Autism,

Alzheimer Association, 1999-2002, A role for presenilin 2 in the processing of amyloid precursor protein,

National Parkinson Foundation, 1998, α -Synuclein-mediated Cell Death

Neuroscience and Education Foundation, 1997, Programmed Cell Death in Neurons and Immune Cells: Actions of Wildtype and Mutant Presenilin-1.