CURRICULUM VITAE

Douglas C. Lobner

BORN: August 31, 1962 Wisconsin Rapids, WI

ADDRESS: OFFICE: Marquette University
Dept. of Biomedical Sciences
561 N. 15th St., Rm. 426
Milwaukee, WI 53233

HOME: 1215 E. Vienna Ave.
Milwaukee, WI 53202

PRESENT POSITION: Professor
Dept. of Biomedical Sciences
Marquette University
Milwaukee, WI

EDUCATION:

1980-1984 B.S., Marquette University
Milwaukee, Wisconsin
Biomedical Engineering

1984-1986 M.S., University of Wisconsin-Madison
Madison, Wisconsin
Biomedical Engineering

1986-1991 Ph.D., University of Wisconsin-Madison
Madison, Wisconsin
Physiology
ADVISOR: Peter Lipton, Ph.D.
TITLE: Interaction Between Calcium and Glutamate During Ischemia in the Rat Hippocampal Slice

PROFESSIONAL EXPERIENCE:

1991-1997 Postdoctoral Fellow
Washington University School of Medicine
St. Louis, MO
Neurology
ADVISOR: Dennis W. Choi, M.D., Ph.D.

1997-2004 Assistant Professor
Dept. of Biomedical Sciences
Marquette University

2004-present Associate Professor
Dept. of Biomedical Sciences
Marquette University

2007-2009 Associate Chair
Dept. of Biomedical Sciences
Marquette University

TEACHING:

BISC 145, 4145 Human Physiology (Undergraduate)
BISC 160, 4160 Molecular Pathology
BISC 423, Human Physiology (Dental School)
BISC 425-426, 7517, 7518 Biomedical System 3 & 4
PHTH 560 Integrated Medical Neuroscience
BIOL 215, Neuroscience I
BIOL 250, Techniques in Neuroscience Research
BIOL 251, Advanced Survey of Neuroscience 1
BIOL 252, Advanced Survey of Neuroscience 2
BIOL 350, Glutamate as a Neurotransmitter
BIOL 350, The Neurobiology of Stress

Course Director:
BISC 423: 1998-2004
BISC 425: 2005-2008
BISC 145: 2008-2009
BIOL 251: 2006-2009
BIOL 252: 2006-2009
BIOL 350: 2008, 2009

BISC 195 - Independent Study
I have served as mentor for approximately 15 undergraduate students taking Independent study for credit.

Thesis Director for the following Masters degree students:

Mahshid Asrari, DDS, Endodontics Resident, Marquette University School of Dentistry, Master of Science in Dentistry degree awarded in May 2003.

Mark Hanson, DDS, Orthodontics Resident, Marquette University School of Dentistry, Master of Science in Dentistry degree awarded in May 2004.

Alexis David, DDS, Orthodontics Resident, Marquette University School of Dentistry, Master of Science in Dentistry degree awarded in May 2004.

Doug Barden, DDS, Orthodontic Resident, Marquette University School of Dentistry, Master of Science in Dentistry degree awarded in May 2005.

Smita Cabrera, DDS, Orthodontic Resident, Marquette University School of Dentistry, Master of Science in Dentistry degree awarded in May 2006.

David Mershon, DDS, Orthodontic Resident, Marquette University School of Dentistry, Master of Science in Dentistry degree awarded in May 2007.

Thesis committee for the following PhD students:

2002-2003: Geraldine Liot – PhD, Neuroscience, University of Caen, France
2007-2011: Aric Madayag. Marquette University
2009-present: John Resch, Marquette University
2011-present: Yulin
2011-present: Ling-Hi Kong
2012-present: Man Wu

Thesis director for the following PhD students:

2007-2011: Travis Rush, Marquette University
2008-2012: XiaoQian Liu, Marquette University
2010-present: Rebecca Albano, Marquette University

COMMITTEES:

University: Institutional Animal Care and Use Committee (1998-present), Chair (2008-present)
Committee on Research (2003-present)
Chair (2011-present)
Radiation Safety Committee (2008-present)
University Board of Undergraduate Studies (2008)
Office of Research Compiance director search committee (2008)
Biological Sciences Graduate Affairs Committee (2007-present)
Taking research at Marquette from good to great (2006)
Graduate Dean Search Committee (2005)
Bridge Committee – Science and Engineering (2000)
Organization of Animal Care Oversight Committee (2001-2002)

College: College of Health Sciences Dean Scearch Committee (2006-2007)
Department of Physical Therapy Faculty Search Committee (2003)
Department of Exercise Science Faculty Search Committee (2002)

Department: Department of Biomedical Sciences Faculty Search

Committee (1999-present), Chair (2005-2007)
Department of Biological Sciences Graduate Recruitment Committee, Neuroscience Track (2006-2007)
Dental School Curriculum Committee (2000-2009)
Graduate Program Steering Committee, Chair (2008-present)
Advising Committee (2008-present)
Promotion and Tenure Committee (2008-present)
Joint Biomedical/Biological Sciences exploratory committee resonsable for constructing the specialization in neuroscience PHD program (2005-2006).
Joint Biomedical Sciences/Dental School committee responsible for developing a new dental curriculum (2002-2003).

SERVICE (other):

Advisor for approximately 40 undergraduate students.

Advisor for all first year neuroscience graduate students (2007-2009).

Teaching mentor for new faculty in Biomedical Sciences: (2007-present)

Organize BISC 195 (Indepent Study) presentations each semester (2003-present).

Judged poster competitions for Dental School Research Day (2000-2007), College of Health Sciences Summer Research Program (2005-2007), and Forward Thinking Poster Competition (2006).

Reviewer for the Midwest Association of Graduate Schools Distinguished Master's Thesis Competition (2003, 2005, 2007).

Organized a series of career seminar speakers for Biomedical Sciences majors. Speakers included an optometrist, podiatrist, physical therapist, pharmaceutical company scientist, and a clinical laboratory technician (1998).

REVIEWER:

Grants: National Institutes of Health/National Institute on Aging
Binational Science Foundation (United States – Israel)
Wellcome Trust
US Army Medical Research and Materiel Command

Journals: Annals of Medical and Health Sciences Research (2014)

Annals of Neurology (2001)
Antioxidants & Redox Signalling (2011, 2012)
Biochimie (2010, 2001)
Brain Research (1999, 2002, 2003, 2004, 2006, 2008, 2009, 2014)
Brain Research Bulletin (2012)
Cell Biology and Toxicology (2009)
Cellular and Molecular Life Sciences (2013)
Chemical Resarch in Toxicology (2011)
Clinical Cancer Research (2011)
Environmental Toxicology and Pharmacology (2009; 2012)
Experimental Neurology (2000; 2008)
FASEB Journal (2002)
Food and Chemical Toxicology (2012)
Free Radical Biology and Medicine (2004)
IEE Transactions on Plasma Sciences (2004)
International Journal of Environmental Research and Public Health (2010)
Journal of Applied Oral Science (2010)
Journal of Contemporary Dental Practice (2006)
Journal of Neurochemistry (1999-present, multiple manuscripts each year)
Journal of Neuroscience (2003)
Journal of Neuroscience Methods (2001)
Journal of Neuroscience Research (2002, 2006, 2010)
Journal of Orthodontics (2006, 2008)
Journal of Paediatric Dentistry (2012)
Journal of Physiology and Pharmacology (2012)
Life Sciences (2006, 2008)
Molecular Brain Research (2005)
Neurobiology of Disease (2008, 2009, 2010)
Neurochemistry International (2004)
Neuroscience (1998, 2002, 2014)
Neurotoxicology (2008)
Neurotoxicology and Teratology (2011)
Neurotoxicity Research (2010)
The Angle Orthodontist (2004)
PLoS One (2010, 2011)
Scientific Reports (2012)
Toxicology Letters (2004)
Toxicological Sciences (2009)
Toxicon (2010)

College: I was asked to be an external reviewer for the Biomedical Sciences major at the State University of New York - Courtland.

GRANTS AWARDED:

Doug Lobner (PI)
Regular Research Grant 7/1/99-6/30/00
Marquette University $2,500
Growth factor effects on cell death in hippocampal neurons.

Doug Lobner (PI)
Seed Grant 7/1/99-6/30/00
College of Health Sciences $1,500
Support for undergraduate research

Doug Lobner (PI)
Seed Grant 11/1/99-10/31/00
American Paraplegia Society $10,800
Effects of growth factors on death of spinal cord neurons.

Doug Lobner (PI)
Regular Research Grant 7/1/00-6/30/00
Marquette University $2,500
Effects of bFGF on neuronal cell death.

Doug Lobner (Co-PI)
Collaborative Research Grant 7/1/01-6/30/02
Integrative Neuroscience Research Center $1,200
In vivo and in vitro effects of GABA ligands.
Co-PI with Linda Vaughn

Doug Lobner (PI)
RO1 8/01/00-6/30/06
NIH/NIA $1,020,000
Mechanisms of injury potentiation by growth factors

William Cullinan (PI), Doug Lobner (Co-PI)
S10RR017955 (Equipment Grant) 3/1//03
NIH $250,474
Laser scanning confocal imaging system.

Doug Lobner (PI)
R15 8/1/08-7/31/11
NIH/NIDCR $223,500
Effects of growth factors on dental pulp cells.

Steven R. Pollack (PI),
Promentis Pharmaceuticals, Inc. 9/24/08-6/30/10

R43 (SBIR) $500,000
NIH/NIMH
Development of Compounds Targeting xc- for the Treatment of Schizophrenia
Doug Lobner (Consultant), Annual Direct Costs: $28,000

Multiple PI grant (David Baker, James Cook, Rita Fuchs Lokensfgard, Lalitha Iyer, Doug Lobner, John Mantsch)
RO1 8/1/09-7/31/11
NIH/NIDA $1,800,000
Targeting System xc- for the Treatment of Addiction
Doug Lobner – Total Direct Costs: $145,158

Chad Beyer, David Baker (PIs)
Promentis Pharmaceuticals, Inc. 9/14/12-6/30/15
SBIR (Phase 2) $1,800,000
NIH/NIMH
Targeting System xc- for the Treatment of Schizophrenia
Doug Lobner (Consultant

Chad Beyer (PI)
Promentis Pharmaceuticals, Inc. 9/1/12-8/31/13
Michael J. Fox Foundation $300,000
Targeting System xc- for the treatment of Parkinson's Disease
Doug Lobner (Consultant)

INVITED LECTURES:

"Growth factor effects on neuronal death" presented to the Laboratorie de Neurosciences at the Universite de Caen, France, 1999.

"Mechanisms of growth factor potentiation of neuron death" presented to the Department of Biology, Marquette University, 2000.

"Treatment strategies for neuronal degeneration" presented at continuing education course – Neuroanatomical dissection: Human brain and spinal cord, Marquette University, 2000-2008.

"Functional recovery from stroke and other neuropathologies" presented at continuing education course - Neuroscience: its applications to communicative disorders, Marquette University, 2001-2003.

"Mechanisms of growth factor potentiation of neuron death" presented to the Department of Biological Sciences, University of Wisconsin - Milwaukee, 2001.

"The science of stem cells" presented to the Marquette University Women's Council, 2002.

"The science of stem cells" presented to the Peter Favre Forum, 2002.

"Current therapies for neurological diseases" presented at Marquette University Brain awareness week, 2002-2003.

"Mechanisms of growth factor potentiation of neuronal death" presented to the Department of Neurology, Medical College of Wisconsin, 2004

"Mechanisms of growth factor potentiation of neuronal death" presented to the Center for the Interventional Therapy of Stroke and Alzheimers Disease, Ajou University School of Medicine, San 5, Wonchondong, Paldalgu, Suwon, Kyungkido 442-749, South Korea. 2005.

"Growth factors for the the treatment of Parkinson's disease" presented to the Biomedical Technology Alliance, Milwaukee, 2006

"Mechanism of BMAA toxicity" presented at the Fifth international conference on BMAA. The Institute for Ethnomedicine. Jackson Hole. 2008.

"BMAA induces oxidative stress through system xc-" presented at the Sixth International Conference on BMAA in Miami on November 3, 2009.

"Role of environmental neurotoxins in neurodegenerative diseases" presented at the University of Wisconsin Milwaukee on Feb 19, 2010.

Potentiation of neurotoxic insults by BMAA. Eighth International Conference on Plant Medicine. Coral Galbes. Nov/2011.

Synergistic toxicity of the environmental neurotoxins methylmercury and BMAA. 22nd International Symposium on ALS/MND. Sydney, Nov/2011

"Role of the environmental toxin β-N-methylamino-L-alanine (BMAA) in neurodegenerative diseases" presented at the University of Wisconsin – Madison, Sept 18, 2012.

BIBLIOGRAPHY:

Author of 51 peer reviewed publications.

51. Liu XQ*, Albano R*, Lobner D. FGF-2 induces neuronal death through upregulation of system xc-. Brain Res. 2014;1547:25-33.

50. Albano R*, Liu XQ*, Lobner D. Regulation of system x_c^- in the SOD1-G93A mouse model of ALS. Exper Neurol. 2013;250:69-73.

49. Bridges R, Lutgen V, Lobner D, Baker DA. Thinking outside the cleft to understand synaptic activity: contribution of the cystine-glutamate antiporter (System xc-) to normal and pathological glutamatergic signaling. Pharmacol Rev. 2012;64:780-802.

48. Rush T, Liu XQ, Nowakowski AB, Petering DH, Lobner D. Glutathione-mediated neuroprotection against methylmercury neurotoxicity in cortical culture is dependent on MRP1. Neurotoxicology. 2012;33:476-481.

47. Rush T, Liu XQ, Lobner D. Synergistic toxicity of the environmental neurotoxins methylmercury and β-N-methylamino-L-alanine. *Neuroreport.* 2012;23:216-219.

46. Liu X, Resch J, Rush T, Lobner D. Functional upregulation of system xc- by fibroblast growth factor-2. *Neuropharmacology.* 2012;62:901-906.

45. Pauly K, Fritz K, Furey A, Lobner D. Insulin-like growth factor 1 and transforming growth factor-b stimulate cystine/glutamate exchange activitiy in dental pulp cells. *J Endo.* 2011;37:943-947.

44. Furey A, Hjelmhaug J, Lobner D. Flow Line, Durafill VS, and Dycal toxicity to dental pulp cells: effects of growth factors. *J Endo*. 2010;36:1149-1153.

43. Slotkin TA, Lobner D, Seidler FJ. Transcriptional profiles of glutamate transporters reveal differences between organophosphates but similarities with unrelated neurotoxicants. *Brain Res Bull*. 2010;83:76-83.

42. Rush T, Liu X, Hjelmhaug J, Lobner D. Mechanisms of chlorpyrifos and diazinon induced neurotoxicity in cortical culture. *Neuroscience*. 2010;166:899-906.

41. Madayag A, Kau K, Lobner D, Mantsch J, Baker D. Drug-Induced Plasticity Contributing to Heightened Relapse Susceptibility: Neurochemical Changes & Augmented Reinstatement in High-Intake Rats. *J Neurosci*. 2010;30:210-217.

40. Liu X, Rush T, Ciske J, Lobner D. Selective death of cholinergic neurons induced by β-methylamino-L-alanine. *Neuroreport.* 2010;21:55-58.

39. Lobner D. Mechanisms of beta-N-methylamino-L-alanine induced neurotoxicity. *Amyotrophic Lateral Sclerosis*. 2009;Suppl 2:56-60.

38. Connaughton K, Foronda J, Lobner D. Response to protocol review scenario: Not a shortcut. *Lab Anim*. 2009;38:226-227.

37. Rush T, Hjelmhaug J, Lobner D. Effects of chelators on mercury, iron, and lead

neurotoxicity in cortical culture. *Neurotox.* 2009; 30:47-51.

36. Liu X, Rush T, Zapata J, Lobner D. beta-N-methylamino-L-alanine induces oxidative stress and glutamate release through action on system Xc(-). *Exp Neurol.* 2009;217:429-433.

35. Leveille F, El Gaamouch F, Gouix E, Lecocq M, Lobner D, Nicole O, Buisson A. Neuronal viability is contolled by a functional relation between synaptic and extrasynaptic NMDA receptors. *FASEB J*. 2008;22:4258-4271.

34. Madayag A, Lobner D, Kau KS, Mantsch JR, Abdulhameed O, Hearing M, Grier MD, Baker DA. Repeated N-acetylcysteine administration alters plasticity-dependent effects of cocaine. *J Neurosci.* 2007;27:13968-13976.

33. Fogal B, Li J, Lobner D, McCullough LD, Hewett SJ. System x(c)-activity and astrocytes are necessary for interleukin-1 beta-mediated hypoxic neuronal injury. *J Neurosci*. 2007;27:10094-10105.

32. Lobner D, Piana PMT, Salous AK, Peoples WR. β-methylamino-L-alanine enhances neurotoxicity through multiple mechanisms. *Neurobiology of Disease.* 2007;25:360-366.

31. Cabrera S, Barden D, Wolf M, Lobner D. Effects of growth factors on dental pulp cell sensitivity to amalgam toxicity. *Dental Materials.* 2007;23:1205-1210.

30. Lobner D, Liot G. Role of MAPK/ERK in neurotrophin-4 potentiation of necrotic neuronal death. *Neurochem Res*. 2004;29:2291-2297.

29. Hanson M, Lobner D. In vitro neuronal cytotoxicity of latex and non-latex orthodontic elastics. *Amer J Orthod Dentofacial Orthopedics.* 2004;126:65-70.

28. David A, Lobner D. In vitro cytotoxicity of orthodontic archwires in cortical cell cultures. *Euro J Orthodontics.* 2004;26:421-426.

27. Asrari M, Lobner D. In vitro neurotoxic evaluation of root-end filling materials. *J Endo*. 2003;29:743-746.

26. Lobner D, Golner S, Hjelmhaug J. Neurotrophic factor effects on oxidative stress-induced neuronal death. *Neurochem Res.* 2003;28:749-756.

25. Lobner D, Asrari M. Neurotoxicity of dental amalgam is mediated by zinc. *J Dental Res*. 2003;82:243-246.

24. Lobner D. Saturation of neuroprotective effects of adenosine in cortical culture. *Neuroreport.* 2002;13:2075-2078.

23. Lobner D, Ali C. Mechanisms of bFGF and NT-4 potentiation of necrotic neuronal death. *Brain Research*. 2002;954:42-50.

22. Grabb MC, Lobner D, Turetsky DM, Choi DW. Preconditioned resistance to oxygen-glucose deprivation-induced cortical neuronal death: alterations in vesicular GABA and glutamate release. *Neuroscience*. 2002;115:173-183.

21. Asrari M, Lobner D. Calcitonin potentiates oxygen-glucose deprivation-induced neuronal death. *Exper Neurol*. 2001;167:183-188.

20. Lobner D. Comparison of the LDH and MTT assays for quantifying cell death: validity for neuronal apoptosis? *J Neurosci Meth*. 2000;96:147-152.

19. Lobner D, Canzoniero LM, Manzerra P, Gottron F, Ying H, Knudson M, Tian M, Dugan LL, Kerchner GA, Sheline CT, Korsmeyer SJ, Choi DW. Zinc-induced neuronal death in cortical neurons. *Cell Mol Biol*. 2000;6:797-806.

18. Behrens MM, Strasser U, Lobner D, Dugan LL. Neurotrophin-mediated potentiation of neuronal injury. *Micro Res Tech*. 1999;45:276-284.

17. Behrens MM, Strasser U, Heidinger V, Lobner D, Yu SP, McDonald JW, Won M, Choi DW. Selective activation of group II mGluRs with LY354740 does not prevent neuronal excitotoxicity. *Neuropharm*. 1999;38:1621-1630.

16. Strasser U, Lobner D, Behrens MM, Canzoniero LM, Choi DW. Antagonists for group I mGluRs attenuate excitotoxic neuronal death in cortical cultures. *Eur J Neurosci*. 1998; 10:2848-2855.

15. McDonald JW, Bhattocharyya T, Sensi SL, Lobner D, Ying HS, Canzoniero LM, Choi DW. Extracellular acidity potentiates AMPA receptor-mediated cortical neuronal death. *J Neurosci*. 1998;18:6290-6299.

14. Snider BJ, Lobner D, Yamada K, Choi DW. Conditioning heat stress reduces excitotoxic and apoptotic components of oxygen-glucose deprivation-induced neuronal death in vitro. *J Neurochem*. 1998;70:120-129.

13. Dugan LL, Turetsky DM, Du C, Lobner D, Wheeler M, Almli CR, Shen CK-F, Luh T-Y, Choi DW, Lin T-S. Carboxyfullerenes as neuroprotective agents. *Proc. Natl. Acad. Sci. USA*. 1997;94:9434-9439.

12. Muir JK, Lobner D, Monyer H, Choi DW. $GABA_A$ receptor activation attenuates excitotoxicity but exacerbates oxygen-glucose deprivation- induced neuronal injury in vitro. *J Cereb Blood Flow Metab.* 1996;6:1211-1218.

11. Hewett SJ, Muir JK, Lobner D, Symons A, Choi DW. Potentiation of oxygen-glucose deprivation-induced neuronal death after induction of iNOS. *Stroke.* 1996,27:1586-1591.

10. Lobner D, Choi DW. Preincubation with protein synthesis inhibitors protects cortical neurons against oxygen-glucose deprivation-induced death. *Neuroscience*. 1996,72:335-341.

9. Gwag BJ, Koh JY, Chen MM, Dugan LL, Behrens MM, Lobner D, Choi DW. BDNF or IGF-I potentiates free radical-mediated injury in cortical cell cultures. *Neuroreport*. 1995;7:93-96.

8. Gwag BJ, Lobner D, Koh JY, Wie MB, Choi DW. Blockade of glutamate receptors unmasks neuronal apoptosis after oxygen-glucose deprivation in vitro. *Neuroscience*. 1995;68:615-619.

7. Rokkas CK, Cronin CS, Nitta T, Helfrich LR, Lobner DC, Choi DW, Kouchouckos NT. Profound systemic hypothermia inhibits the release of neurotransmitter amino acids in spinal cord ischemia. *J Thorac Cardiovasc Surg*. 1995;110:27-35.

6. Koh J, Gwag BJ, Lobner D, Choi DW. Potentiated necrosis of cultured cortical neurons by neurotrophins. *Science*. 1995;268:573-575.

5. Lobner D, Choi DW. Dipyridamole increases oxygen-glucose deprivation induced injury in cortical cell culture. *Stroke*. 1994;25:2085-2090.

4. Rokkas CK, Helfrich LR, Lobner D, Choi DW, Wareing TH, Kouchoukos NT. Dextrorphan inhibits the release of excitatory amino acids in spinal cord ischemia. *Ann Thorac Surg* 1994;58:312-320.

3. Lobner D, Lipton P. Intracellular calcium levels and calcium fluxes in the CA1 region of the rat hippocampal slice during in vitro ischemia: relationship to electrophysiological damage. *J Neurosci*. 1993;13:4861-4871.

2. Lobner D, Lipton P. Sigma ligands and non-competitive NMDA antagonists inhibit glutamate release during cerebral ischemia. *Neurosci Lett*. 1990;117:169-174.

1. Lipton P, Lobner D. Mechanisms of intracellular calcium accumulation in the CA1 region of rat hippocampus. *Stroke*. 1990;21(III):III-60-III-64.

ABSTRACTS:

47. Liu X, Rush T, Hjelmhaug J, Lobner D. Neurotoxic mechanisms of organophosphate pesticides. *Soc Neurosci Abs*. 2008;755.9.

46. Rush TJ, Liu X, Hjelmhaug J, Lobner D. Mercury produces compound-specific alterations to glutathione in cultured neurons and astrocytes. *Soc Neurosci Abs*. 2008;755.8.

45. Hjelmhaug JA, Rush T, Lobner D. Effects of chelators on metal toxicity in cortical cultures. *Soc Neurosci Abs*. 2008;755.7.

44. Madayag A,Rush T, Lobner D, Abdulhameed O, Baker D. Modulation of cystine-glutamate exchange by d1-like dopamine receptors: system xc- as a potential site for dopamine-glutamate interactions. *Soc Neurosci Abs*. 2008;663.26.

43. Kau KS, Abdulhameed O, Lobner DC, Baker DA. Repeated N-Acetylcysteine administration prevents cocaine induced neurochemical and behavioral plasticity. *Soc Neurosci Abs*. 2007;815.5.

42. Madayag A, Lobner DC, Baker DA. Dopamine and extrasynaptic glutamate interaction: dopamine receptor activation regulates cystine-glutamate antiporters. *Soc Neurosci Abs*. 2007;815.4.

41. Rush T, Hjelmhaug J, Lobner DC. The organophosphate pesticide chlorpyrifos induces excitotoxicity in cortical culture. *Soc Neurosci Abs*. 2007;604.10.

40. Zapata J, Hjelmhaug JA, Lobner D. Role of the cystine-glutamate antiporter in β-N-methylamino-L-alanine (BMAA) toxicity. *Soc Neurosci Abs*. 2007;604.9.

39. Fogal B, Lobner DC, Hewett SJ. Astrocytic signaling and an enhancement of system x_c- activity contribute to the deleterious effects of IL-1beta to neurons under hypoxic conditions. *Soc Neurosci Abs*. 2007;378.15.

38. Hjelmhaug J, Lobner D. Similarities and differences between neurotoxicity of inorganic, methyl mercury, and ethyl mercury. *Soc Neurosci Abs*. 2006;91.14.

37. Piana PMT, Lobner D. β-N-methylamino-L-alanine enhances neurotoxicity through multiple mechanisms. *Soc Neurosci Abs*. 2006;91.15.

36. Lobner D, Hjelmhaug J. Concentration-dependent effects of estrogen and progestins on cell death in cortical cultures. *Soc Neurosci Abs*. 2005;96.8.

35. Hjelmhaug JA, Reed EN, Lobner D. Concentration dependent effects of estrogen on cell death in cortical cultures. *Soc Neurosci Abs*. 2004;104.4.

34. Lobner D, Reed EN, Hjelmhaug JA. The endogenous cannabinoid anandamide is protective against NMDA toxicity in cortical cultures. *Soc Neurosci Abs*. 2004;104.5.

33. Lobner D, Hjelmhaug J, Salous A. Concentration dependent effects of estrogen and progestins on cell death in cortical cultures. International Conference on Cerebral Ischemia and Blood Flow. 2004.

32. Hjelmhaug J, Lobner D. Effects of hepatocyte growth factor on apoptotic and necrotic death in cortical culture. *Soc Neurosci Abs*. 2003;738.1.

31. Hjelmhaug J, Golner S, Lobner D. Protection against free radical induced neuronal death by cobalt. *Soc Neurosci Abs.* 2002;201.6.

30. Lobner D, Asrari M. Neurotoxicity of dental amalgam is mediated by zinc. *Soc Neurosci Abs.* 2002;205.6.

29. Asrari M, Bahcall J, Lobner D. Neurotoxic evaluation of root-end filling materials in cortical cell cultures. *J Endodontics.* 2002;28:PR18.

28. Kelly JA, Jaunberzins A, Bahcall JK, Lobner D. The effect of three root-end filling materials on mice osteoblast cells. *J Endodontics.* 2002;28:PR17.

27. Hjelmhaug JA, Golner S, Junk D, Scheehle M, Lobner D. Role of MEK in growth factor potentiation of necrotic neuronal death. *Soc Neurosci Abs.* 2001;764.4.

26. Lobner D, Golner S, Hjelmhaug J, Junk D, Scheehle M. Growth factor effects on free radical mediated neuronal death. *Soc Neurosci Abs*. 2001;764.3.

25. Lobner D, Alunkal M, Frasco C. Different mechanisms of bFGF and NT-4 potentiation of necrotic neuronal death. *Soc Neurosci Abs.* 2000;26:1884.

24. Lobner D, Asrari M. Effects of calcitonin on neuronal cell death in cortical culture. *Soc Neurosci Abs.* 1999;25:1848.

23. Branda EM, Ramza JT, Lobner DC, Vaughn LK, Tseng LF, Quock RM. Nitrous oxide (N_2O) antinociception in mice: Antagonism by dynorphin (DYN) antisera and potentiation by endopeptidase 24.11-inhibitor. *Soc Neurosci Abs.* 1998;24:890.

22. Grabb MC, Lobner D, Choi DW. K^+-induced GABA release is enhanced following "ischemic preconditioning" in cortical cell cultures. *Soc Neurosci Abs.* 1998;24:218.

21. Strasser U, Lobner D, Behrens MM, Dugan LL, Choi DW. Block of group I mGluRs attenuates NMDA-induced neuronal death in cortical cultures. *Soc Neurosci Abs.* 1997;23:2302.

20. Lobner D, Gottron F, Ying H, Tian M. Dugan LL, Knudson CM, Korsmeyer SJ, Choi DW. Zinc-induced neuronal apoptosis or necrosis in cortical culture. *Soc Neurosci Abs.* 1997;23:2255.

19. Grabb MC, Lobner D, Choi DW. Effects of ischemic tolerance on extracellular glutamate accumulation during oxygen-glucose deprivation in cortical cell culture. *Soc Neurosci Abs.* 1997;23:2182.

18. Yeh CH, Lobner D, Choi DW. Attenuation of neuronal apoptosis by desipramine and chlorpromazine. *Soc Neurosci Abs.* 1997;23:1715.

17. Behrens MM, Strasser U, Dugan LL, Lobner D, Choi DW. Protein kinase C inhibition blocks BDNF activation of trkB receptors. *Soc Neurosci Abs.* 1997;23:58.

16. Lobner D, Choi DW. Saturation of A1 receptor-mediated neuroprotection by endogenous adenosine in cortical cultures exposed to oxygen-glucose deprivation. *Soc Neurosci Abs.* 1996;22:1433.

15. Dugan LL, Turetsky DM, Du C, Lin TT, Lobner D, Almli R, Wheeler M, Choi DW. Carboxy-buckminsterfullerenes: novel antioxidants with neuroprotective efficacy in vitro and in a mouse model of ALS. *Soc Neurosci Abs.* 1996;22:2142.

14. Ying HS, Gwag BJ, Behrens MM, Koh J, Lobner D, Choi DW. Neurotrophins induce NMDA receptor expression in cultured rat neocortical neurons. *Soc Neurosci Abs.* 1995;21:1031.

13. Lobner D, Gwag BJ, Koh J, Ying HS, Behrens MM, Choi DW. BDNF potentiation of oxygen-glucose deprivation-induced neuronal death: involvement of gene expression and nitric oxide synthase. *Soc Neurosci Abs*. 1995;21:1032.

12. Muir JK, Lobner D, Choi DW. Muscimol attenuates excitotoxicity, but exacerbates oxygen-glucose deprivation neuronal injury in cortical cell cultures. *Soc Neurosci Abs*. 1994;20:181.

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