CURRICULUM VITAE

PATRICK GILES SULLIVAN, Ph.D.

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741 South Limestone Street
Spinal Cord & Brain Injury Research Center (SCoBIRC) and
The Department of Anatomy & Neurobiology
University of Kentucky Chandler Medical Center
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EDUCATION

2000	Ph.D. University of Kentucky (Anatomy and Neurobiology)
1996	B.S. University of Kentucky (Biology)

PROFESSIONAL EXPERIENCE AND ACADEMIC APPOINTMENTS

2006 – present	*Associate Professor (tenured);* Department of Anatomy & Neurobiology and Endowed Chair in the Spinal Cord & Brain Injury Research Center, University of Kentucky Chandler Medical Center.
2006 – present	*Associate Director;* Spinal Cord & Brain Injury Research Center, University of Kentucky Chandler Medical Center.
2002 – 2006	*Assistant Professor;* Spinal Cord & Brain Injury Research Center and Department of Anatomy & Neurobiology, University of Kentucky Chandler Medical Center.
2000 – 2002	*Postdoctoral Fellow;* Reeve-Irvine Research Center, University of California at Irvine, in the laboratory of Dr. Oswald Steward.
1998 – 2000	*Research Assistant*; Department of Anatomy & Neurobiology, University of Kentucky, in the laboratory of Dr. Stephen Scheff.
1997 – 1998	*Teaching Assistant*; Neuroanatomy, Department of Anatomy & Neurobiology, University of Kentucky, with Dr. Harold Traurig, Dr. James Hyde, and Dr. Stephen Scheff.
1996 – 2000	*Graduate Student (Ph.D.)*; Department of Anatomy & Neurobiology, University of Kentucky.

AWARDS AND HONORS

2006	Charles T. Wethington Excellence in Research Award; University of Kentucky.
2005	Charles T. Wethington Research Excellence Award; University of Kentucky.
2004	Appointment to Spinal Cord and Head Injury Endowed Chair.
2004	Charles T. Wethington Research Award Recipient; University of Kentucky.
2001	Young Investigator Award; National Neurotrauma Society.
2001	Selected Participant in the Techniques in Mitochondrial Physiology Course, Buck Institute on Aging and MitoKor.
2001 – 2000	NeoTherapeutics Fellowship Recipient.
1999	Finalist, Student Presentation; National Neurotrauma Seventeenth Annual Symposium.
1999	Young Investigator Award; National Neurotrauma Society.
1998	First Place Winner, Student Presentation; National Neurotrauma Sixteenth Annual Symposium.
1997	Finalist, Student Presentation; National Neurotrauma Fifteenth Annual Symposium.

RESEARCH INTERESTS

The Role of Mitochondrial Dysfunction in the Neuropathology of Acute Brain and Spinal Cord Injury.
Mitochondrial Uncoupling Proteins and the Ketogenic Diet in Epilepsy.
Mitochondrial Aging and the CNS.

GRANTS (Presently Funded)

Title: Mitochondrial Uncoupling as a Therapeutic Target in TBI
P.I. Patrick G. Sullivan, Ph.D., James Pauly, Ph.D., Co-PI
Agency: NIH/NINDS (R01 NS048191)
Period: 2004-2009
Total: $1,871,797
The goal of this project is to test the hypothesis that mitochondrial uncoupling can be neuroprotective following traumatic brain injury.
Role: PI

Title: UK Spinal Cord & Brain Injury Research Center Core Grant
P.I. Edward D. Hall., Patrick G. Sullivan, Core 4 Director, Microscopy, Image Analysis & Stereology
Agency: NIH/NINDS (P30 NS051220)
Period: 2005-2010
Total Direct: $890,000 for Core 4
This grant will be used to purchase state of the art equipment and to staff an image analysis, microscopy and stereology facility for the Center.
Role: Director, Core 4

Title: Response of the Aging Nervous System to Trauma
P.I. Stephen W. Scheff, Ph.D., Patrick G. Sullivan, Ph.D., Co-PI
Agency: NIH/NIA (R01 AG021981)
Period: 2003-2008
Total: $1,875,000
The main goal of this project is to determine age-associated changes in mitochondrial bioenergetics following traumatic brain injury.
Role: Co-PI

Title: Peroxynitrite-Induced Oxidative Damage in TBI
P.I. Ed D. Hall, Ph.D., Patrick G. Sullivan, Ph.D., Co-PI
Agency: NIH/NINDS (R01 NS046566)
Period: 2004-2008
Total: $1,361,368
The goal of this project is to test the hypothesis that mitochondrial dysfunction is a consequence of TBI that leads to generation of the potent reactive oxygen species peroxynitrite.
Role: Co-PI

Title: Mitochondria, ROS, Ca^{2+}, and Calpain in the Aging CNS
P.I. Philip Landfield, Ph.D., Project 4 Leader, James W. Geddes, Ph.D. Co-Leader, Patrick G. Sullivan, Ph.D.
Agency: NIH/NINDS (P50 AG10836)
Period: 2004-2009
Total Direct: $890,000 for Project 4
The fundamental goal of this PPG is to determine the role of mitochondria in aging of the CNS.
Role: Co-Project Leader

Title: Therapeutic Strategies for Neurodegeneration Training Grant
P.I. Edward D. Hall, Ph.D.
Agency: National Institutes of Health-NIDA (1T32 DA022738)
Period: 2006-2011
Total Direct: $1,200,467
This is a Broad-based training in modern research concepts regarding the pathophysiology of neurotrauma and neurodegenerative disorders and potential molecular targets for discovery of pharmacological and gene therapeutic strategies by which the devastating effects of these conditions can be ameliorated.
Role: Training Faculty

GRANTS (Pending)

Title: Mitochondrial Targeted Therapeutic Interventions in Spinal Cord Injury
P.I. Patrick G. Sullivan, Ph.D., Alexander G. Rabchevsky, Ph.D., Edward D. Hall, Ph.D., Co-PIs
Agency: NIH/NINDS
Period: 2006-2011
Total Direct: $1,250,000

The goal of this project is to test the hypothesis reducing mitochondrial Ca^{2+} and oxidative damage is neuroprotective following spinal cord injury.
Role: PI

Title: Synaptic Change in Mild Cognitive Impairment
P.I. Stephen W. Scheff, Ph.D., Patrick G. Sullivan
Agency: NIH/NIA
Period: 2006-2011 (Pending; 1.02 score, 0.86 percentile)
Total Direct: $1,250,000
The goal of this project is to test the hypothesis mitochondrial aging plays a critical role in the loss of synaptic plasticity in aging and Alzheimer disease.
Role: Co-PI

Title: Mitochondrial Uncouplers as Therapy in Cerebral Ischemia
P.I. William F. Maragos, M.D., Ph.D., Patrick G. Sullivan, Ph.D., Co-PI, L. Creed Pettigrew, M.D., Co-PI, Peter A. Crooks, Ph.D., Co-PI
Agency: NIH/NINDS
Period: 2005-2010 (Pending)
Total Direct: $1,250,000
The goal of this project is to test the hypothesis that uncoupling may afford neuroprotection following ischemia which building upon my current RO1 in traumatic brain injury.
Role: Co-PI

Grants (Completed)

Title: Oxidative Stress and the Ketogenic Diet
P.I. Patrick G. Sullivan, Ph.D., Jong Rho, M.D., Ph.D., Co-PI
Agency: NIH/NINDS (R21 NS046426)
Period: 2004-2006
Total: $451,000
The fundamental goal of this R21 project was to determine whether a ketogenic diet can decrease mitochondrial oxidative damage in the hippocampus of developing epileptic mice.
Role: PI

TEACHING EXPERIENCE

2005 – present	*Course Lecturer;* Neurobiology of CNS Injury and Repair, ANA 605, Department of Anatomy & Neurobiology, University of Kentucky.
2005	*Course Lecturer;* Seminar in Anatomy, ANA 600, Department of Anatomy & Neurobiology, University of Kentucky.
2004 – present	*Course Lecturer;* Advanced Pharmacotherapy, PHR 958-959, College of Pharmacy, University of Kentucky.
2003 – present	*Course Co-Director;* Physical Therapy Neuroanatomy, ANA 802, Department of Anatomy & Neurobiology, University of Kentucky.
2003 – present	*Course Lecturer;* Anatomy of the Nervous System, ANA 516, Department of Anatomy & Neurobiology, University of Kentucky.

2002 – 2004	*Course Lecturer;* Diseases Processes II, PHR 962, College of Pharmacy, University of Kentucky.
2002 – 2003	*Course Director;* Seminar in Anatomy, ANA 600, Department of Anatomy & Neurobiology, University of Kentucky.
2001	*Course Lecturer;* Spinal Cord Injury Techniques Course, Reeve-Irvine Research Center, University of California at Irvine.
1998	*Teaching Assistant*; Physical Therapy Neuroanatomy ANA 802, Department of Anatomy & Neurobiology, University of Kentucky.
1997	*Teaching Assistant*; Medical Neuroanatomy MD 817, Department of Anatomy & Neurobiology, University of Kentucky.

MENTORING

Postdoctoral Fellows:
Evelyn Perez, Postdoctoral Fellow, University of Kentucky,
2006 – Present, Mentor.
Jignesh Pandya, Postdoctoral Fellow, University of Kentucky,
2005 – Present, Mentor.
Natasa Dragicevic, Postdoctoral Fellow, University of Kentucky,
2002 – 2004, Mentor.

Graduate Students:
Andrew Sauerbeck, Anatomy and Neurobiology graduate student, University of Kentucky,
IBS Rotation, June 2006 – present, Mentor/Advisor.
Rachel Ahmed, IBS graduate student, University of Kentucky,
IBS Rotation, 2006, Mentor.
Laurie Davis, Anatomy and Neurobiology graduate student (2^{nd} year), University of Kentucky,
June 2004 – present, Mentor/Advisor.
Heather Davis, IBS graduate student, University of Kentucky,
IBS Rotation, 2004, Mentor.
Sara Yount, IBS graduate student, University of Kentucky
IBS Rotation, 2004, Mentor.
Laurie Davis, IBS graduate student, University of Kentucky,
IBS Rotation, 2003 – 2004, Mentor.
Maile Brown, Gerontology graduate student, University of Kentucky,
January 2003 – May 2005, Co-Mentor.
Vidya Nag Nukala, Anatomy and Neurobiology graduate student (4th year), University of Kentucky,
November 2002 – present, Mentor/Advisor.
April Richardson IBS graduate student, University of Kentucky,
IBS Rotation, 2002, Mentor.
Kristina Dorenbos, Molecular Neurobiology graduate student, University of California at Irvine,
2001 – 2002, Mentor.

Undergraduates:
Readnower, Ryan, Biology undergraduate student/prospective IBS graduate student, University of Kentucky, June – 2006 to present, Mentor.

Chris Johnson, Honors biology program, Bluegrass United Academic Center, January 2006 – present, Mentor.
Kyle Freugh, Biology undergraduate student, University of Kentucky, 2005 – present, Mentor.
Olga Del Rio, Biology undergraduate student, University of California at Irvine,
2001 – 2002, Mentor.
Kathleen Cardosa, SURF student, Loyola Marymount University,
May – August 2001, Mentor.

Doctoral Thesis Advisor:
Andrew Sauerbeck, Anatomy and Neurobiology graduate student, University of Kentucky,
IBS Rotation, June 2006 – present, Mentor/Advisor.
Laurie Davis, Anatomy and Neurobiology graduate student, University of Kentucky,
2004 – present, Mentor/Advisor.
Vidya Nag Nukala, Department of Anatomy and Neurobiology, University of Kentucky,
2003 – present, Mentor/Advisor.
Maile Brown, Gerontology graduate student, University of Kentucky,
January 2003 – May 2005, Co-Mentor.

Ph.D. Dissertation Committees:
Leslie Gilmer, Department of Anatomy and Neurobiology, University of Kentucky,
2006 – present.
Tom Woodcock, Department of Pharmaceutical Sciences, University of Kentucky,
2005 – present.
Yiqin Xiong, Department of Anatomy and Neurobiology, University of Kentucky,
2004 – present.
Lamin Han Mbye, Department of Anatomy and Neurobiology, University of Kentucky,
2004 – present.
Ying Deng, Department of Anatomy and Neurobiology, University of Kentucky,
2004 – present.
Wycliffe Omondi Opii, Department of Chemistry, University of Kentucky,
2003 – December 2006.
Michael Smith, Department of Anatomy and Neurobiology, University of Kentucky,
2003 – January 2006.
Maile Brown, Department of Gerontology, Sanders-Brown Center on Aging, University of Kentucky,
2003 – May 2005.

TRAINING OF VISITING SCIENTISTS

2005	Dr. Timothy Simone, Barrow Neurological Institute, Phoenix, AZ
2004	Dr. Zane Andrews, Yale College of Medicine, Yale University, New Haven, CT
2004	Dr. Keseng Zhoa, Cornell University, White Plains, NY
2004	Dr. Robert Colvin, Department of Biological Sciences, Ohio University, OH

ADMINISTRATIVE DUTIES AND SERVICE

Departmental:
2006 Associate Director; Spinal Cord and Brain Injury Research Center.

2006	Organizing Committee Member for the 2007 Kentucky Spinal Cord and Brain Injury Research Trust Fund Symposium.
2005	Director; Sterology and Imaging Center, Spinal Cord and Brain Injury Research Center.
2005	Organizing Committee Member for the 2006 Kentucky Spinal Cord and Brain Injury Research Trust Fund Symposium.
2005	Co-Chair of the Organizing Committee for Anatomy & Neurobiology NIA-sponsored Aging Symposium; The Mitochondrial Perspective of Life and Death.
2004	Holsinger Teaching Award Committee Member
2003 – 2004	Organizing Committee Member for the 2004 Kentucky Spinal Cord and Brain Injury Research Trust Fund Symposium.
2002 – 2006	Co-Director of Anatomy and Neurobiology Seminar Series.

College of Medicine:

2005 – present	Early Mobility Task Force Committee Member
2002 – present	Interviewer, IBS Graduate Student Program.

University:

2006 – present	Full Member of Graduate Faculty Council.
2004 – present	External Review Committee Member for College of Health Sciences Department of Rehabilitation Sciences.
2003	Judge for student presentations, Spring Neuroscience Day.
2002 – 2006	Associate Member of Graduate Faculty Council.

Outreach:

2005	Speaker at KY Brain Injury Association, Brain Injury Summit, Cardinal Hill Rehabilitation Hospital, Lexington, KY.
2004	Quest Speaker for Careers in Science Program at Lindsey Wilson College, Columbia, KY
2003 – present	Judge, Kentucky-American Water Company Science Fair, Lexington, KY.
2001	Participated in the Ask a Scientist Program, Tustin High School, Tustin, CA.
1999	Presenter, Lexington Children's Museum, Brain Awareness Week, Lexington, KY.

PROFESSIONAL SERVICE

NIH Study Sections:

2006	ZRG1 MDCN Special Emphasis Panel member
2005 – 2006	ZRG1 NOMN Study Section Regular Panel member
2004	MDCN-E; Special Emphasis Panel member
2004	NDBG; Special Emphasis Panel member

Grant Reviewer (non-NIH)

2006	VA Neurobiology C Merit Review committee
2005	Kristie Foundation, New Zealand
2005	MIPS Foundation, Maryland

Journal Reviewer > 40/year:
Experimental Neurology
Brain Research
Neuroscience
Journal of Comparative Neurology
Journal of Neurochemistry
Journal of Neuroscience
Journal of Neurotrauma
Glia
Neurobiology of Disease
Annals of Neurology
Journal of Neuroscience Research
FASEB Journal
Journal of Neuroscience Methods
Epilepsia
Journal of Cerebral Blood Flow & Metabolism
Journal of Gerontology: Biological Sciences
Spinal Cord
Journal of Biomedicine and Biotechnology
Experimental Gerontology
Molecular Therapy
Progress in Neurobiology
Proceedings of the National Academy of Science
Nature Neuroscience Reviews
Science

Other Service (National):
Abstract and program committee member for the 24th Annual National Neurotrauma Society Symposium (2006)
Session Chair for the 23rd Annual National Neurotrauma Society Symposium (2005).
Member of Organizing Committee for the 23rd Annual National Neurotrauma Society Symposium (2004-2005).
Session Co-Chair, National Neurotrauma Seventeenth Annual Symposium, October 1999.

PROFESSIONAL AFFILIATIONS

Society for Neuroscience (1996-present).
National Neurotrauma Society (1997-present).
American Epilepsy Society (2004-present)

INVITED PRESENTATIONS

2006 University of Cincinnati Career Day Symposium, University of Cincinnati, Cincinnati, Ohio.

2006 4th Annual Safar Symposium, University of Pittsburgh School of Medicine, Pittsburgh, PA, (Symposium Speaker).

2006 Barrow Neurological Institute and St. Joseph's Hospital & Medical Center, Phoenix, AZ, (Grand Rounds Speaker, CME course).

2005 Burke Medical Research Institute, Cornell University, White Plains, NY, (Research Symposium).

2005 Robarts Neurological Institute, London, Ontario (Research Seminar).

2005 23rd Annual National Neurotrauma Society Symposium, Washington, DC, (Symposium Speaker).

2005 Barrow Neurological Institute and St. Joseph's Hospital & Medical Center, Phoenix, AZ, (Neuroscience Conference Speaker).

2005 University of Kentucky, Anatomy & Neurobiology NIA-sponsored Aging Symposium; The Mitochondrial Perspective of Life and Death (Symposium Speaker).

2005 Brain Injury Association of Kentucky, Brain Injury Summit, Cardinal Hill Rehabilitation Center, Lexington, KY, (Symposium Speaker).

2004 58th Annual American Epilepsy Meeting, New Orleans, LA, (Faculty Member/Speaker, CME).

2004 NIA, Gerontology Research Center, Baltimore, MD, (Research Seminar).

2004 Tenth Annual Kentucky Spinal Cord & Head Injury Symposium, Lexington, KY, (Symposium Speaker).

2004: Center on Aging Research, University G. d'Annunzio Chieti, Chieto Scalo, Italy, (Research Seminar).

2004: Tenth Annual Canine Cognition and Aging Conference, Toronto, Canada, (Symposium Speaker).

2004: Sixth International Meeting for Brain Metabolism, Heraklion, Crete, Greece, (Symposium Speaker).

2004 University of Kentucky, Department of Physiology, Lexington, KY, (Research Seminar).

2004 Mitochondria and Neuroprotection Symposium, Ft. Lauderdale, FL, (Symposium Speaker).

2004 Hot Topics in Epilepsy NIH Symposium, University of California at Irvine Epilepsy Research Center (EpiCenter) Irvine, CA, (Symposium Speaker).

2003: Fourth Annual International Zinc Signals Meeting, Cayman Islands, (Symposium Speaker).

2003 Ninth Annual Canine Cognition and Aging Conference, Laguna Beach, CA, (Symposium Speaker).

2003: University of Maryland, Center on Neuroprotection, Baltimore, MA, (Research Seminar).

2002: University of Kentucky, Department of Biology, Lexington, KY, (Research Seminar).

2002: Sixth International Neurotrauma Symposium, Orlando, FL, (Symposium Speaker).

2002: 35th annual Winter Conference on Brain Research, Aspen, CO, (Symposium Speaker).

2002: University of Kentucky, Department of Anatomy and Neurobiology, Lexington, KY, (Research Seminar).

2001: University of Washington, Department of Neurosurgery, Seattle, WA, (Research Seminar).

2001: Buck Institute on Aging, Novato California, San Francisco, CA, (Research Seminar).

2001: Invited Speaker; National Neurotrauma Eighteenth Annual Symposium, New Orleans, LA, (Symposium Speaker).
2001: University of California at Irvine, Dept of Pediatrics, Irvine, CA, (Research Seminar).
2000: University of Florida, Florida Brain Institute, Gainesville, FL, (Research Seminar).
2000: University of California at Irvine, Reeve-Irvine Spinal Cord Research Center, Irvine, CA, (Research Seminar).
2000: University of California at Irvine, Department of Neurobiology of Learning and Memory, Irvine, CA, (Research Seminar).

OTHER SCIENTIFIC PRESENTATIONS

2005 National Neurotrauma Twenty Third Annual Symposium, Washington, DC.
2005 Society for Neuroscience Annual Meeting, Washington, DC.
2004 American Epilepsy Society International Meeting, New Orleans, LA.
2004 National Neurotrauma Twenty Second Annual Symposium, San Diego, CA.
2004 Society for Neuroscience Annual Meeting, San Diego, CA.
2003 National Neurotrauma Twenty First Annual Symposium, Biloxi, MS.
2003 Society for Neuroscience Annual Meeting, New Orleans, LA.
2003 American Epilepsy Society International Meeting, Boston, MA.
2002 35th Annual Winter Conference on Brain Research, Aspen, CO.
2002 American Epilepsy Society International Meeting, Seattle, WA.
2002 Sixth International Neurotrauma Symposium, Orlando, FL.
2002 Society for Neuroscience Annual Meeting, Orlando, FL.
2001 National Neurotrauma Nineteenth Annual Symposium, San Diego, CA.
2001 Society for Neuroscience Annual Meeting, San Diego, CA.
2000 National Neurotrauma Eighteenth Annual Symposium, New Orleans, LA.
2000 Society for Neuroscience Annual Meeting, New Orleans, LA.
1999 National Neurotrauma Seventeenth Annual Symposium, Miami Beach, FL.
1999 Society for Neuroscience Annual Meeting, Miami Beach, FL.
1998 National Neurotrauma Sixteenth Annual Symposium, Los Angeles, CA.
1998 Society for Neuroscience Annual Meeting, Los Angeles, CA.
1997 National Neurotrauma Fifteenth Annual Symposium, New Orleans, LA.
1997 Society for Neuroscience Annual Meeting, New Orleans, LA.

PROFESSIONAL SYMPOSIA AND WORKSHOPS ATTENDED

2006 Twelve Kentucky Spinal Cord and Head Injury Research Symposium, University of Kentucky, Lexington, KY.
2005 Eleventh Kentucky Spinal Cord and Head Injury Research Symposium, University of Louisville, Louisville, KY.
2004 Tenth Annual Kentucky Spinal Cord and Head Injury Research Symposium, University of Kentucky, Lexington, KY.
2004 Tenth Annual Canine Cognition and Aging Conference, Toronto, Canada.
2004 Sixth International Meeting for Brain Metabolism, Heraklion, Crete, Greece.
2004 Mitochondria and Neuroprotection Symposium, Ft. Lauderdale, FL.
2004 Hot Topics in Epilepsy NIH Symposium, University of California at Irvine Epilepsy Research Center (EpiCenter) Irvine, CA.
2003 Ninth Annual Canine Cognition and Aging Conference, Laguna Beach, CA.
2003 Ninth Annual Kentucky Spinal Cord and Head Injury Research Symposium, University of Louisville, Louisville, KY.

2001 Advanced Course on Techniques in Mitochondrial Physiology, Buck Institute on Aging, San Francisco, CA.
2001 Neurobiology of Learning and Memory Symposium, University of California at Irvine, Irvine, CA.
2001 Roman Reed Foundation Symposium on Advances in Spinal Cord Injury Research, University of California at Irvine, Irvine, CA.
2000 Sixth Annual Kentucky Spinal Cord and Head Injury Research Symposium, University of Kentucky, Lexington, KY.
1999 Fifth Annual Kentucky Spinal Cord and Head Injury Research Symposium, University of Louisville, Louisville, KY.
1998 Fourth Annual Kentucky Spinal Cord and Head Injury Research Symposium, University of Kentucky, Lexington, KY.
1997 Messengers of Life and Death: Protective and Toxic Neuron Signaling Pathways Workshop and Symposium, University of Kentucky, Lexington, KY.
1997 Third Annual Kentucky Spinal Cord and Head Injury Research Symposium, University of Louisville, Louisville, KY..
1996 Second Annual Kentucky Spinal Cord and Head Injury Trust Symposium, University of Kentucky, Lexington, KY.
1996 University of Kentucky Symposium on the Biology of Aging, University of Kentucky, Lexington, KY.

DOCTORAL DISSERTATION

Mitochondrial Dysfunction Following Traumatic Brain Injury in Rodents. University of Kentucky, (2000).

PUBLICATIONS (peer reviewed):

Baldwin, S.A, Gibson,T.R., Callihan, C.T., **Sullivan, P.G.,** Palmer, E., Scheff, S.W., (1997). Neuronal Cell Loss in the CA3 Subfield of the Hippocampus Following Cortical Contusion Utilizing the Optical Dissector. *Journal of Neurotrauma,* 14(6), 385-398.

Sullivan, P.G., Keller, J.N., Mattson, M.P., Scheff, S.W., (1998). Traumatic Brain Injury Alters Synaptic Homeostasis: Implications for Impaired Mitochondrial and Transport Function. *Journal of Neurotrauma*, 15(10), 789-798.

Sullivan, P.G., Bruce-Keller, A.J., Rabchevsky, A.G., Christakos, S., St. Clair, D.K., Mattson, M.P., Scheff, S.W., (1999). Exacerbation of Damage and Altered NFκB Activation in Mice Lacking Tumor Necrosis Factor Receptors after Traumatic Brain Injury. *Journal of Neuroscience,* 19(15), 6248-6256.

Scheff, S.W., **Sullivan, P.G.,** (1999). Cyclosporin A Significantly Ameliorates Cortical Damage Following Experimental Traumatic Brain Injury in Rodents. *Journal of Neurotrauma,* 16(9), 783-792.

Sullivan, P.G., Thompson, M.B., Scheff, S.W., (1999). Cyclosporin A Attenuates Acute Mitochondrial Dysfunction following Traumatic Brain Injury. *Experimental Neurology,* 160, 226-234.

Sullivan, P.G., Thompson, M.B., Scheff, S.W., (2000). Continuous Infusion of Cyclosporin A Post Injury Significantly Ameliorates Cortical Damage following Traumatic Brain Injury. *Experimental Neurology*, 161, 631-637.

Albensi, B.C., **Sullivan, P.G.,** Thompson, M.B., Scheff, S.W., Mattson, M.P., (2000). Cyclosporin Ameliorates Traumatic Brain Injury-Induced Alterations of Hippocampal Synaptic Plasticity. *Experimental Neurology*, 162, 385-389.

Sullivan, P.G., Geiger, J.D., Mattson, M.P., Scheff, S.W., (2000). Dietary Supplement Creatine Protects against Traumatic Brain Injury. *Annals of Neurology*, 48(5), 723-729.

Verbois, S.L., **Sullivan, P.G.,** Scheff, S.W., Pauly, J.R., (2000). Chronic Nicotine Treatment Attenuates the Loss of Hippocampal $\alpha 7$ Nicotinic Cholinergic Receptors after Traumatic Brain Injury. *Journal of Neurotrauma*, 17(11), 1001-1012.

Sullivan, P.G., Rabchevsky, A.G., Hicks, R.R., Gibson, T.R., Fletcher-Turner, A., Scheff, S.W., (2000). Dose Response Curve and Optimal Dosing Regimen of Cyclosporin A after Traumatic Brain Injury. *Neuroscience*, 101(2), 289-295.

Rabchevsky, A.G., Fugaccia, I., **Sullivan, P.G.,** Scheff, S.W., (2001). Cyclosporin (CsA) Treatment following Spinal Cord Injury to the Rat: Behavioral effects and Stereological Assessment of Tissue Sparing. *Journal of Neurotrauma*, 18(5), 513-522.

Jiang, D., **Sullivan, P.G., (co-first author),** Sensi, S.L., Steward, O., Weiss, J.H., (2001). Zn^{2+} Induces PTP opening and Release of Pro-apoptotic Peptides from Neuronal Mitochondria. *Journal of Biological Chemistry*, December 276(50), 47524-47529.

McCullers, D.L., **Sullivan, P.G.,** Scheff, S.W., Herman, J.P., (2002). Mifepristone protects CA1 Hippocampal Neurons following Traumatic Brain Injury in Rat. *Neuroscience*, 109(2), 219-230.

Rabchevsky, A.G., Fugaccia, I., **Sullivan, P.G.,** Blades, D.A., Scheff, S.W., (2002). Efficacy of Methylprednisolone Therapy for the Injured Rat Spinal Cord. *Journal of Neuroscience Research*, 68(1), 7-18.

Thompson, J.S., Brown, S.A., Khurdayan, V., Zeynalzadedan, A., **Sullivan, P.G.,** Scheff, S.W., (2002). Early effects of Tribromoethanol, Ketamine/xylazine, Pentobarbital, and Isoflurane Anesthesia on Hepatic and Lymphoid Tissue in ICR Mice. *Comparative Medicine*, 52(1), 63-67.

McCullers, D.L., **Sullivan, P.G.,** Scheff, S.W., Herman, J.P., (2002). Traumatic Brain Injury Regulates Adrenocorticosteroid Receptor mRNA Levels in Rat Hippocampus. *Brain Research*, 947, 41-47.

Sullivan, P.G., Keller, J.N., Bussen, W.L., Scheff, S.W., (2002). Cytochrome C Release and Caspase Activation after Traumatic Brain Injury. *Brain Research*, 949, 88-96.

Sullivan, P.G., Dube, C., Dorenbos, K.D., Steward, O., Baram, T.Z., (2003). Mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death. *Annals of Neurology*, 53, 711-717.

Sensi, S.L.,Ton-That, D., **Sullivan P.G.**, Jonas, E.A., Gee, K.R., Kaczmarek, L.K., Weiss J.H., (2003). Modulation of mitochondrial function by endogenous Zn^{2+} pools. *Proceeding National Academy of Science*, 100, 6157-6162.

Rabchevsky, A.G., **Sullivan, P.G.,** Fugaccia, I., Scheff, S.W., (2003). Creatine diet supplement for spinal cord injury: influences on functional recovery and tissue sparing in rats. *J Neurotrauma*, 20, 659-669.

Sullivan, P.G., Rippy, N.A., Rho, J.M., (2004). The Ketogenic Diet Enhances Increases Mitochondrial Uncoupling Protein Levels And Activity In Mouse Hippocampus. *Annals of Neurology*, 55, 576-580.

Sullivan, P.G., Rabchevsky, A.G., Keller, J.N., Lovell, M.A., Scheff, S.W., (2004). Intrinsic Differences in Isolated Brain and Spinal Cord Mitochondria: Implication for Therapeutic Interventions following Injury. *Journal of Comparative Neurology*, 474, 524-534.

Sullivan, P.G., Dragicevic, N.B., Deng, J.H, Bai, Y., Dimayuga, E., Keller, J.N., (2004). Proteasome Inhibition alters Neural Mitochondrial Homeostasis and Increases Dependence on Glycolysis. *Journal of Biological Chemistry*, 279, 20699-21707.

Brown, M.B., **Sullivan, P.G., (co-first author),** Dorenbos, K.A., Modafferi, E.F., Geddes, J.W., Steward, O., (2004). Nitrogen Disruption of Synaptoneurosomes: An Alternative Method to Isolate Total or Synaptic Brain Mitochondria. *Journal of Neuroscience Methods*, 137, 299-303.

Brown, M.B., Geddes, J.W., **Sullivan, P.G.,** (2004). Brain region-specific, age-related, alterations in mitochondrial responses to elevated calcium. *Journal of Bioenergetics and Biomembranes*, 36, 401-406.

Jin, Y., McEwen, M.L., Nottingham, S.A., Maragos, W.F., Dragicevic, N.B., **Sullivan, P.G.,** Springer, J.E., (2004). The Mitochondrial Uncoupling Agent 2,4-Dinitrophenol Improves Mitochondrial Function, Attenuates Oxidative Damage, and Increases White Matter Sparing in the Contused Spinal Cord. *Journal of Neurotrauma*, 21, 1396-1404.

Rho, J.M., Sarnat H.B., **Sullivan, P.G.,** Robbins, C.A., Kim, D.W., (2004). Lack Of Long-Term Histopathological Changes In Brain and Skeletal Muscle of Mice Treated with a Ketogenic Diet. *Journal of Child Neurology*, 19, 555-557.

Sullivan, P.G., Rabchevsky, A.G., Waldmeier, P.C., Springer, J.E., (2005). Mitochondrial Permeability Transition in CNS Trauma: Cause or Effect of Neuronal Cell Death? *Journal of Neuroscience Research*, 79, 213-239.

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