EMORY UNIVERSITY SCHOOL OF MEDICINE
STANDARD CURRICULUM VITAE FORMAT

[The following order is required; may omit non-applicable sections]

Name: Shan Ping Yu
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E-mail Address:
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Citizenship:
USA

Current Titles and Affiliations:

a. Academic appointments:

I. Primary appointments:
Professor
O. Wayne Rollins Chair for Cancer Pain Research
Department of Anesthesiology
Department of Hematology and Oncology (Joint appointment since January 1, 2011)
Emory University School of Medicine
08/15/2008

Professor and Research Biologist
Center for Excellence for Visual and Neurocognitive Rehabilitation
Atlanta VA Medical Center

Previous Academic and Professional Appointments:

1993 - 1998 Assistant Professor
Department of Neurology
School of Medicine, Washington University
St. Louis, MO, USA

1999- 2002 Associate Professor
Department of Neurology
School of Medicine, Washington University
St. Louis, MO, USA

2002-2005 Associate Professor
Department of Pharmaceutical Sciences
Medical University of South Carolina
Charleston, SC, USA

2005-2008 Associate Professor (with tenure)
Department of Pharmaceutical Sciences
Medical University of South Carolina
Charleston, SC, USA

2003-2008 Associate Professor (joint appointment)

Department of Pathology
Medical University of South Carolina
Charleston, SC, USA
2005-present Honorary Professor
ZheJiang University School of Medicine
Hong Zhou, China
2006-present Honorary and Lecture Professor
Capital University of Medical Sciences
Beijing, China

Education:

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	Supervisor
Capital Institute of Medicine, Institute of Pharmacology & Toxicology, Beijing, China	MD & MS	1982	Dr. Chuan-qui Liu
Beijing Friendship Hospital, Beijing, China	Internship	1980	
State University of New York at Stony Brook, NY	PhD	1990	Dr. William Van der Koot
Howard Hughes Medical Institute	POSTDOCTORAL TRAINING	1992	Dr. Paul Adams

Postgraduate Training:

1985 - 1986 Research Associate of Neuropharmacology
Department of Pharmacology
University of Lund
Lund, Sweden
1986 - 1987 Research Associate of Neurophysiology
Department of Physiology and Biophysics
SUNY at Stony Brook
Stony Brook, NY, USA
1990 - 1992 Postdoctoral Research Associate
Howard Hughes Medical Institute
Stony Brook, NY, USA

Committee Memberships:

a. National and International:
Nation Institute of Health
Study Section (2005) - American Heart Association/Stroke and Neurovascular Diseases
Study Section (2005, 2006) - American Heart Association/Heart and Ion Channel Regulation
Study Section (2006, 2007, 2008) – American Heart Association/Brain 2
Study Section member (2008-2011) – NIH/NINDS: BDCN Study Section
Study Section member (2007-2014) – NIH/NINDS: BINP Study Section; Regular charter member
Study Section (2015) - NIH/SREA Study Section
The Netherlands Organization for Health Research and Development, Netherlands (2013)
TAS DB Program ZonMw, Netherlands (2014)
Study Section: National VA Brain Injury (2015)
Czech Science Foundation, Czech Republic (2015)
National Natural Science Foundation, China (2012-2015).
Missouri Spinal Cord Injury/Disease Research Program (SCIDRP), MO, USA (2015)
Oak Ridge Associated Universities (ORAU), PA, USA (2014-2015)

b. Editorships and Editorial Boards:
Editorships:
OMICS Group Publisher: Editorial Board member (2011 -)
Book Editor: Brain Hypoxia and Ischemia: Emphasis on Developmental Aspects, Humana Press, 2008
Book Editor: Stem Cells and Ion Channels, Stem Cell Publisher, 2013

Member of Editorial Board:
International Journal of Physiology, Pathophysiology and Pharmacology (2008-present)
The Journal of Neuroscience Research (2007 – present)
Translational Stroke Research (2010 – present)
Journal of Pain & Relief (2011 – present)
Acta Pharmaceutica Sinica (2011 – present)
Journal of Stem Cell Research (2011 – present)
Journal of Pain & Relieve (2011 -)
Frontiers in Biology (2012 -)
Annual of Neurobiology and Neuroscience (2015-)

Manuscript reviewer: 1995 to present

- Apoptosis
- Brain Research
- Cellular and Molecular Life Sciences
- Experimental Neurology
- Experimental Cell Research
- EMBO Journal
- Journal of Cell Biology
- Journal of Cellular Physiology
- Journal of Cerebral Blood Flow & Metabolism
- Journal of Cellular Biochemistry
- Journal of Neurochemistry
- Journal of Neuroscience Research
- Journal of Neuroscience
- Journal of Pharmacology and Experimental Therapeutics
- Journal of Neurophysiology
- Life Sciences
- Leukemia
- Molecular Pharmacology
- Neurobiology of Disease
- Physiological Genomics
- Proceedings of the National Academy of Sciences of America (PNAS)
- Stroke
- Toxicology
- The American Journal of Physiology: Cell Physiology
- Translational Stroke Research
- Neurochemical Research
- PLOS ONE
- Stem Cells
- Stem Cell Research and Therapeutics

Honors and Awards:
The World Health Organization (WHO) Postdoctoral Fellowship (1985)
American Heart Association and Bugher Award (2000)
Honorary Professor, ZheJiang University School of Medicine, Hong Zhou, China (2005)
Honorary and Lecture Professor Capital University of Medical Sciences, Beijing, China (2006)

Society Memberships:

Member of Society for Neuroscience, USA (1987 to present)
Member of American Association for the Advancement of Science, USA (1987 to present)
Member of American Association for Neurochemistry, USA (2005 to present)
Member of The American Society for Pharmacology and Experimental Therapeutics (2005 to present)
Member of International Society for Stem Cell Research
Member of British Pharmacological Society

Organization of National or International Conferences:

a. Administrative positions:

Chair of Organizing Committee
Chair of Program Committee
The 29th Annual Meeting of Southeastern Society for Pharmacology (2008)
Symposium Organize Committee; 2011 ACRM-ASNR Annual Conference (American Congress of Rehabilitation Medicine) (2011)
Co-Chair of local organizing committee
The 46the Annual Meeting of American Society of Neurochemistry, Atlanta, GA (2014-2015)

b. Sessions as chair:

Symposium for neuroscientists worldwide, Hong Kong/Guanzhou, China (2004)
Symposium for neuroscientists worldwide, Hong Kong/Guanzhou, Kuenming, China (2006)
35th Annual Meeting of Society for Neuroscience (Symposium Chair and Speaker): symposium: “Ion Channels, Mitochondria and Neuronal Cell Death”, Washington DC (2005)
The 29th Annual Meeting of Southeastern Society for Pharmacology (2008)
The 8th Asia Pacific Symposium on Neural Regeneration & The 5th Pan Pacific Symposium on Stem Cells and Cancer Research: Session Chair and invited speaker, Taipei, Taiwan (2012)
5th Annual Congress of Regenerative Medicine and Stem Cell, Guangzhou, China (2012)
NeuroTalk International Conference, Xi'an, China (2013)
Membrane mechanism and cell death, 46th Annual Meeting of American Society of Neurochemistry, Atlanta, 2015
Pharmacological hypothermia as session chair; 46th Annual Meeting of American Society of Neurochemistry, Atlanta, 2015
Stem cell therapy as session chair; 46th Annual Meeting of American Society of Neurochemistry, Atlanta, 2015
Optogenetics Workshop: 46th Annual Meeting of American Society of Neurochemistry, Atlanta, 2015
Pan Pacific Symposium on Stem Cells and Cancer Research 2015 (PPSSC), Hsinchu, Taiwan, 2015
13th International Symposium on Neural Transplantation and Repair, Beijing, China (2015)

Research focus:

My research has been focused on ionic and molecular mechanisms underlying cell death and neurodegeneration related to brain disorders and cancer pain regulation. Specifically, we are interested in apoptotic regulation of potassium channels, NMDA receptor channels and Na^+,K^+-ATPase in neuronal and cancer cells. In this regard, we have been investigating the roles of channels/receptors in cell differentiation, migration, pain sensation, and have integrated our research into stem cell therapy for CNS and PNS injuries.

In our cancer pain related research, we have been investigating the mechanism of cancer cell survival and developing novel therapies for increasing apoptotic cell death among cancer cells. We have submitted a paper to report our discovery that the hormone erythropoietin, EPO, has a pain-relieving effect, likely due to its neuroprotective and anti-inflammatory actions. We have identified a membrane receptor that plays an important role in regulating pain sensation. We are now working on translating the basic knowledge of the analgesic effect of EPO into clinical treatments for cancer and post-surgery pain. A five year R01 research proposal has been developed for NIH funding in order to perform the translational research project in animal models and patients.

Grant Support:

[Investigator status (P.I., Co-P.I.), source, title, award type, amount, year(s)]

a. Active support:

I. Federally funded:

R0 NS085568 01/01/2015 to 12/31/2019 2.16 cal months
NIH/NINDS $218,750/year (Direct cost)
Application of optogenetics in iPS cell transplantation therapy for ischemic stro
The overall goal of this investigation is to test the hypothesis that cell and time specific optogenetic stimulation can promote neuronal differentiation and therapeutic benefits of iPS cell transplantation after ischemic stroke.
Role: PI (Multiple PIs: Ling Wei and Robert Gross)

R42 NS073378-03A1 05/01/2015 to 04/30/2017 2.4 cal months
NIH/NINDS $348,000/Year
Stroke Treatment by Chemically-induced Hypothermia
Role: PI

National Merit Grant RX000666 01/01/2014 to 12/31/2018 2.4 cal months
VA National Center $275,000/year
Protect the Brain by Chemical Hypothermia
The overall goal of this investigation is to examine chemical induced hypothermia in CNS injury models of rats.
Role: PI

R21 NS092385 10/01/2015 - 09/30/2017 1.2 cal months
NIH/NINDS $125,000/Year
Non-invasive transcranial magnetic stimulation as protective and regenerative treatment of stroke
Role: PI (multiple PIs: Cathrin M. Buetefisch and Shan Ping Yu)

R01 NS088413-01 07/01/2014 to 06/30/2018 1.8 cal months
NIH/NINDS $341,250/year
GPR37 & GPR37L1 signaling pathways promoting cell survival: relevance to stroke
The overall goal of this study is to examine the novel role of GPR37 and GPR37L genes in neuroprotection against ischemic stroke.
Role: Co-investigator (PI: Randy A. Hall)

R01 NS091585 03/01/2016 to 02/28/2020
$250,000/year
Stem cell transplantation therapy via intranasal delivery after stroke
The overall of this investigation is to investigate the novel intranasal delivery of stem cells and neural progenitors into the brain bypassing the blood brain barrier for enhanced therapeutic benefits and clinical translation.
Role: Co-investigator (PI: Ling Wei)

II. Private foundation funded:

GRNT12060222 07/01/2012 to 08/30/2015 1.68 cal months
AHA Grant-in-Aid $82,500/year (non-cost extension)
Novel Stroke Therapy using Human Adult Induced Pluripotent Stem Cells
Role: Principal Investigator

III. Contracts:

IV. Other:

- TBS seed grant 10/2014-09/2015
  Effect of erythropointin on post-operative and chronic pain
  Role: PI

b. Previous Support

- R01 NS057255 NIH/NINDS 09/01/2007 to 10/30/2014
  Neuroprotection of NR3A in cultured neurons and ischemic neonates
  PI: Shan Ping Yu

- R41 NS073378-01A1 NIH/NINDS 09/012011 to 08/30/2014
  Stroke Treatment by Chemically-Induced Hypothermia
  PI: Shan Ping Yu (multiple PIs with Dr. Thomas Dix at Medical University of South Carolina)

- R01 NS 058710 NIH/NINDS `` 10/01/2008 – 09/30/2013
  Combination Therapy in Human ES cell Transplantation after Neonatal Stroke
  Role: Co-Investigator; (PI: Ling Wei)

- R01 NS062097-01 NIH/NINDS 02/01/2010 to 01/31/2015
  Transplantation of Pre-conditioned Bone Marrow Mesenchymal Stem Cells after Ischemia.
  Role: Co-Investigator; (PI: Ling Wei)

- R21NS75338 NIH/NINDS 08/01/2011 to 07/30/2013
  Axonal Growth after Stem Cell Transplantation into the Ischemic Brain
  Role: Co-Investigator; (PI: Ling Wei)

- University Research Committee Seed Grant 2012 - 2014
  Emory University
  Non-invasive brain stimulation for neuroprotection in an acute stroke model
  Role: PI

P51 NIH/Yerkes National Center 05/01/2010 to 04/30/2012
Hypothermia therapy for ischemic stroke
PI: Shan Ping Yu

R01 NS 045155 –01 07/01/03 to 06/30/09
NIH/NINDS
Function restoration by stem cell implant after focal ischemia.
Role: Co-Investigator (PI: Ling Wei)

R21 NS42236-01 Shan Ping Yu (PI) 08/02/01 to 07/31/06
NIH/NINDS
Chloride channel modulation and neuronal apoptosis
Role: PI

0170064N Shan Ping Yu (PI) 01/01/01 to 12/31/05
American Heart Association (AHA-Bugher Award)
K^+ channel modulation in apoptosis and effects of K^+ channel blockers on ischemic cell death.

Role: PI

IBN-9817151 Shan Ping Yu (PI) 10/01/99 to 09/31/04
National Science Foundation
Membrane-delimited modulation of non-NMDA receptors by metabotropic glutamate receptors.
Role: PI

Pilot Investigation; Shan Ping Yu (PI) 01/31/99 to 12/31/99
NIH and Alzheimer's Disease Research Center
Potassium channel modulation in β-amyloid toxicity
Role: PI

9950207N; Shan Ping Yu (PI) 1/1/99 – 12/31/01
American Heart Association
Membrane-delimited modulation of AMPA/kainate receptor channels by metabotropic glutamate receptors.
This grant ended early because of the funding of the AHA-Bugher Award.
Role: PI

R01NS031622-13A2 12/1993 – 5/2012
Role of Proteinase in Spinal Cord Injury
Role: Co-investigator (PI: Naren Banik; may not be transferable to Emory)

R01NS056176-02 8/2006 – 1/2011
Attenuation of Axonal Damage and Neuronal Death in EAE
Role: Co-investigator (PI: Naren Banik, MUSC, may not be transferable to Emory)

R01; Dennis Choi (PI) 1995 to 2000
NIH/NINDS
Cell-cell Interaction and Hypoxic Brain Injury
Role: Co-investigator

R01; Dennis Choi (PI) 2000-2005
NIH/NINDS Program Project
ES cells and spinal cord injury
Role: Co-investigator

R01; Chung Y. Hsu (PI) 2001-2005
NIH
Amyloid-induced cerebroendothelial degeneration"
Role: Co-investigator

Formal Teaching:

[Activity, year(s)]

a. Medical Student Teaching
b. Graduate Program

Course Coordinator and Instructor (2004 - 2008): Environmental Stress Signaling and Cellular Consequences (PHMSC-715; Elective graduate course, spring semesters, MUSC; 3 credits). My duties included selection of instructors, organizing course subject and syllabus, preparation of lecture materials and exams, grading and analyzing students' exams, and fill the final report to school. I have also taught the topic of Mechanism of Cell Death: Apoptosis and Necrosis in this course (4 lectures, 3 hrs each lecture).

Instructor (2003 - 2008): 4 lectures (2 hrs each lecture) in Rational Drug Design, Pharmacogenomics and Toxicology, MUSC

Instructor (2003 - 2008): Cell death the central nervous system (3 hr lecture in Organ Systems Toxicology, PCOL-736, Pharmacy/Pharmacology course, MUSC)

Instructor (2003 - 2008): Apoptosis (3 hr lecture in Foundation of Biomedical Sciences: Mechanism of Disease, Pathology Unit CGS70GU17, MUSC)

Instructor (2004, 2007, 2008): Cell death and protection (2-hr lecture in Medicinal Chemistry II; Pharmacy professional course PHRSC-651; 77 pharmacy students, MUSC)

Instructor (2007, 2008): Endocrine and calcium (4-hr lectures in Pharmacology; Pharmacy professional course; >100 pharmacy students, MUSC)

Instructor (2008): Opioid and pain regulation (4 hrs lectures in Pharmacology; Pharmacy professional course; >100 pharmacy students, MUSC)

Training programs
Residency program

c. Other categories

[Physician assistant, physical therapist, etc.]

Supervisory Teaching:

a. Ph.D. and Master students directly supervised:

Michelle Hedrick, Ph.D. Student (Graduated in 2006, MUSC, currently an Assistant Professor at University of Virginia.
Rally V. Whitaker, Master student (graduated in 2006, MUSC, currently a Research Associate in Research Triangle, North Carolina)
Christian C. Keogh, PhD student (graduated in 2007, MUSC, currently a science editor in New York)
Xin Zhou, fourth year PhD Student (MUSC, 2005 -2011)
Adrian D. Sproul, fourth year MD/PhD student (MUSC, 2005 -2011), currently a resident at MUSC.
Kavin Francis, PhD Student (MUSC, 2005 -2010); currently an Assistant Professor at University of South Dakota
Howard Ying, MD/PhD student, graduated in 1999; Washington University in St. Louis; currently a neurologist at Barns Hospital, St. Louis, MO
Frank Gottron, PhD student (graduated in 2000; Washington University, St. Lois;
Osama Mohamad, MD/PhD student (graduated in 2014), Emory University; currently a resident doctor at MD Anderson Cancer Center, Texas.

b. Post-doctoral fellows directly supervised:

Minke Song, Ph.D. (2009-2015). Post-doctoral fellow.
Zheng Z. Wei, PhD, (2012-2015). Post-doctoral fellow.
Xue Qing Wang, Ph.D. (2000 – 2004). Current position: postdoctoral fellow in Department of Neurobiology, the University of Chicago, Chicago, IL.
Tomoni Ichinose, M.D., Ph.D. (1999 – 2001). Current position: Assistant Professor in Department of Ophthalmology, Washington University School of Medicine, St. Louis, MO.
Shun Yu, M.D., Ph.D. (2001-2003). Current position: Director of Neuroscience Division, Beijing Xuang Wu Hospital, Beijing, China.
Toshihiro Takata (2001 –2004); Current position: Assistant Professor, Kobe University Graduate School of Medicine, Kobe, Japan

Ai Ying Xiao, M.D., Ph.D. (2000 – 2002). Current position: Postdoctoral fellow in Department of Neurology, Washington University, St. Louis, MO.
Chuan-Shu Sun, M.D. (2004 – 2005). Postdoctoral Fellow
Yan Zhou, Ph.D. (2004 – 2005). Research Assistant Professor, MUSC
Jiang-feng Wei (2004-2007) Research Associate. Current position: Attending doctor and assistant professor, Zhejiang University School of Medicine, Hangzhou, China

c. Residency Program
d. Other \

Visiting Professors trained and collaborated:
Da-jun Ying, M.D. (Jan - Dec, 2000). Visiting Professor. Currently a Professor in Department of Neuroanatomy, The Third Military Medical University, Chongqing, China.
Xiao Zhang, M.D., Ph.D. (Sep – Dec, 2004). Visiting Associate Professor. Currently an Associate Professor in Division of Molecular Neuropharmacology, Karolinska Institutet, Stockholm, Sweden.
Jin-ping Li, M.D., Ph.D. (Nov – Dec, 2004). Visiting Associate Professor. Currently an Associate Professor in Department of Biochemistry, Biomedical Center, Uppsala University, Sweden.

Summer research program:
Joylaina Speaks (Minority undergraduate research program; 2005)
Kaja Richard (Minority undergraduate research program; 2006)
Eric Wang (MUSC summer research program; 2007)
Adams Cho (MUSC summer research program; 2008)

Lectureships, Seminar Invitations, and Visiting Professorships (last 5 years):

- Title: Mitochondrial Damage in Brain Ischemic Stroke
  Capital University of Medical Sciences
  Beijing, China (2005, 2006, 2007, 2008)
- Title: Mechanism of Neuronal Cell Death
  Department of Cardiovascular Diseases
  Zhejiang University, China (2006)
- Title: Ionic Mechanism of Apoptosis: Ionic homeostasis and K^+ channels
  Department of Neurological Surgery
  University of Louisville (2007)
- Regulation of Ionic Homeostasis and Neurodegeneration
  Department of Nephrology (2008)
  University of Virginia, VA
- Department of Neurosurgery
  Waisman Center
  University of Wisconsin (2009)
- Department of Cellular Biology and Anatomy
  Louisiana State University (2010)
- Division of Neuroscience
  Ligancy Health System
  Portland, OR (2010)
- Department of Neurology
  Okayama University
  Okayama, Japan (2012)
- Department of Chemistry
  Center for Diagnostics & Therapeutics (CDT)
  Center for Advanced Biotechnology and Drug design
  Georgia State University (2013)
- Department of Pharmacology & Neuroscience
  University of North Taxes Health Science Center (2014)

- Institute of Molecular Medicine
  The Brown Foundation, The University of Texas (2015)
- Department of Pharmaceutical Sciences
  University of Georgia (2015)

Invitations to National or International Conferences (last 5 years):

- Title: Novel Ionic Homeostasis in Apoptosis
  Apoptosis European/International Conference, Luxembourg (2004)
- Title: Critical Role of Na+/K+-ATPase in Apoptosis
  World Congress of Pharmaceutical Sciences
  Kyoto, Japan (2004)
- Title: K+ Channels and Na+/K+-ATPase in Neuronal Apoptosis
  35th Annual Meeting of Society for Neuroscience (Symposium Chair and Speaker)
  Symposium: “Ion Channels, Mitochondria and Neuronal Cell Death”
  Washington DC (2005)
- Title: Regulation of NMDA Receptor K+ permeability
  Winter Conference for Neuroscience
  Steamboat, CO (2006)
- Title: Mechanism of Cell Death in Ischemic Stroke
  The Second International Stroke Summit
  Nanjing, China (2006)
- Title: Critical Roles of Src Kinases in Stem Cell Neuronal Differentiation
  National Conference of Stem Cell Research
  Hongzhou, China (2006)
- Title: Hypoxic-preconditioning as a Novel Strategy for Stem Cell Transplantation
  International Conference of Brain 07
  Osaka, Japan, 2007
- Title: The Ionic Mechanism of Apoptosis
  The 21th Annual Meeting of International Society for Neurochemistry
  Cancun, Mexico (2007)
- Title: Critical Role of Kv2.1 Channel in Cell Migration
  37th Annual Meeting of Society for Neuroscience
  San Diego, CA (2007)
- Title: Hypoxic-preconditioning for Stem Cell Transplantation Therapy
  Keystone Symposia: Hypoxia and Cellular Response
  Vancouver, Canada (2008)
- Title: Shanghai International Neurodegenerative Diseases Symposium
  Shanghai, China (2009)
- World Forum on Cerebral Blood Flow & Metabolism (CBFM)
  Kyoto, Japan (2010)
- ACRM-ASNR Annual Conference (2011)
- 8th International Stroke Summit, Nanjing, China (2012)
- Biomedical Center, Uppsala University, Uppsala, Sweden (2012)
- The 11th biennial meeting of Asian Pacific Society for Neurochemistry (APSN) and 55th Meeting of Japanese Society of Neurochemistry (2012)
- 5th Annual Congress of Regenerative Medicine and Stem Cell, Guangzhou, China (2012)
- The 2nd Pangu Stroke Summit; Beijing China (2013)
- Third Biotechnology World Congress, Dubai, UAE (2013)
- International Conference on Neuroscinces, Cuttack, India (2013) Session Chair
- 5th Annual International Congress of Cardiology, Rome, Italy (2013)
- 45th Annual Meeting of American Society for Neurochemistry, Long Beach, CA (2014)
- Adaptive Responses in Biology and Medicine Conference, University of Massachusetts at Amherst (2014).

- 46th Annual Meeting of American Society for Neurochemistry, Atlanta (2015)
- 25th International Society for Neurochemistry, Cairns, Australia (2015)
- 13th International Symposium on Neural Transplantation and Repair, Beijing, China (2015)
-

Other Activities:
Bibliography:

a. Published and accepted research articles (clinical, basic science, other) in refereed journals:

1. **Yu, S.P.** & Lui, C.G. Direct action of soman on the neuromuscular junction of the isolated rat's diaphragm. *Medical J. Chinese P.L.A.* 8(4): 245-248, 1983

2. **Yu, S.P.** & Lui, C.G. Antagonism of non-depolarization muscle relaxants and aminoglycoside antibiotics to the neuromuscular block of rat's diaphragm caused by soman. *Acta Pharmacologica Sinica* 6(1): 11-16, 1985

3. Lupa, M.T. & **Yu, S.P.** A comparison of miniature end plate potentials at normal, denervated, and long-term botulinum toxin poisoned neuromuscular junctions. *Pflugers Arch* 407:476-481, 1986

4. Lupa, M.T., Tabti, N., Thesleff, S., Vyskocil, F & **Yu, S.P.** The nature and origin of calcium-insensitive miniature end-plate potentials at rodent neuromuscular junctions. *J. Physiol.* 381: 607-618, 1986

5. Tabti, N., Lupa, M.T., **Yu, S.P.** & Thesleff, S. Pharmacological characterization of the calcium-insensitive, intermittent acetylcholine release at the rat neuromuscular junction. *Acta Physiol. Scand*. 128: 429-436, 1986

6. **Yu, S.P.** & Van der Kloot, W. Increase in quantal size produced by hypertonic solutions and its antagonism by AH5183 and Na^+/K^+ exchange pump inhibition at mouse neuromuscular junctions. *Federation Proceedings* 46(3): 337, 1987

7. **Yu, S.P.** & Van der Kloot, W. Non-quantal acetylcholine release at mouse neuromuscular junction: effects of elevated quantal release and aconitine. *Neurosci. Letter.* 117: 111-116, 1990

8. **Yu, S.P.** & Van der Kloot, W. Increasing quantal size at the mouse neuromuscular junction and role of choline. *J. Physiol.* 433: 677-704, 1991

9. Csernansky, C.A., Canzoniero, L.M.T., Sensi, S.L., **Yu, S.P.** & Choi, D.W. Delayed application of aurintricarboxylic acid reduces glutamate-induced neuronal injury. *J. Neurosci. Res.* 38: 101-108, 1994

10. **Yu, S.P.**, O'Malley, D.M. & Adams, P.R. M current regulation by intracellular calcium in bullfrog sympathetic neuron. *J. Neurosci.* 14: 3487-3499, 1994

11. Lynch III, J.J., **Yu, S.P.**, Canzoniero, L.M.T., Sensi, S.L., & Choi, D.W. Sodium channel blockers reduce oxygen-glucose deprivation-induced cortical neuronal injury when combined with glutamate receptor antagonists. *J. Pharmacol. Exp. Ther.* 273: 554-560, 1995

12. Gubitosi-Klug, R., **Yu, S.P.**, Choi, D.W. & Gross, R.W. Concomitant acceleration of the activation and inactivation kinetics of the human delayed rectifier K^+ channel (Kv1.1) by Ca2+-independent phospholipase A_2. *J.Biol. Chem.* 270: 2885-2888, 1995

13. Buisson, A., **Yu, S.P.** & Choi, D.W. DCG-IV selectively attenuates rapidly-triggered NMDA-induced neurotoxicity on cortical neurons. *Eur. J. Pharmacol.* 8: 138-143, 1995

14. **Yu, S.P.** Roles of arachidonic acid, lipoxygenases and phosphatases in calcium-dependent modulation of M current in bullfrog sympathetic neurons. *J. Physiol.* 487: 797-811, 1995

15. Dugan, L.L., Gabrielsen, J.K., **Yu, S.P**., Lin, T-S. & Choi, D.W. Buckminsterfullerenol free radical scavengers reduce excitotoxic and apoptotic death of cultured cortical neurons. *Neurobiol. Dis.* 3: 129-135, 1996

16. **Yu, S.P.**, Sensi, S.L., Canzoniero, L.M.T., Buisson, A. & Choi, D.W. Membrane-delimited modulation of NMDA receptor currents by metabotropic glutamate receptor subtype 1/5 in mouse cortical neurons. *J. Physiol.* 499: 721-732, 1997

17. **Yu, S.P.** & Choi, D.W. Na^+-Ca^{2+} exchanger currents in cortical neurons: concomitant forward and reverse operation and effect of glutamate. *Eur. J. Neurosci.* 9: 1273-1281, 1997

18. **Yu, S.P.**, Yeh, C-H., Sensi, S.L., Gwag, B., Canzoniero, L.M.T., Farhangrazi, Z.S., Ying, H.S., Tian, M., Dugan, L.L. & Choi, D.W. Mediation of neuronal apoptosis by enhancement of outward potassium current. *Science* 278: 114-117, 1997

19. Sensi, S.L., Canzoniero, L.M.T., **Yu, S.P.**, Ying, H., Koh, J.Y. and Choi, D.W. Modulation of intracellular free zinc in living cultured cortical neurons: routes of entry. *J. Neurosci.* 17: 9554-9564, 1997

20. **Yu, S.P.** and Kerchner, G.A. Endogenous Voltage-gated Potassium Channels in Human Embryonic Kidney (HEK293) Cells. *J. Neurosci. Res.* 52: 612-617, 1998

21. **Yu, S.P.**, Farhangrazi, Z.S., Ying, H.S. & Choi, D.W. Enhancement of outward potassium current participates in ß-Amyloid peptide-induced cortical neurons death. *Neurobiol. Dis*, 5: 81-88, 1998

22. **Yu, S.P.**, Yeh, C-H., Strasser, U. and Choi, D.W. NMDA receptor mediated K^+ efflux and neuronal apoptosis. *Science* 284: 336-339, 1999

23. **Yu, S.P.**, Yeh, C-H. Gottron, F., Wang, X., Margaret, M. and Choi, D.W. Role of the outward delayed rectifier K^+ current in ceramide-induced caspase activation and apoptosis in cultured cortical neurons. *J. Neurochem.* 73: 933-941, 1999

24. Behrens, M.M., Strasser, U., Heidinger, V., Lobner, D., **Yu, S.P**., McDonald, J.W., Won, M. and Choi, D.W. Selective activation of group II mGluRs with LY354740 does not prevent neuronal excitotoxicity. *Neuropharmacol*. 38: 1621-1630, 1999

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