UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES
GRADUATE FACULTY APPLICATION

1. Name: Qiang Gu, Ph.D.

2. UAMS Graduate Program Sponsor: Paul Drew Major field: Neurotoxicology

3. Present UAMS academic title or administrative position: NA

Date appointed this rank/position: Employed by: FDA/NCTR

4. **Comments of Department Chair/Head or Program Director including: evidence of scholarly development, effectiveness as a teacher, quality of publications and reallocation of duties if this application is approved.**

Dr. Gu is a highly accomplished scientist with expertise concerning neurotoxicology. Dr. Gu previously held faculty positions at the University of British Columbia and Wake Forest University School of Medicine. Dr. Gu is currently a Biologist at the FDA National Center for Toxicological Research. Dr. Gu has received grants from FDA, NIH, and private foundations to support his research. He has an extensive publication record in high impact journals. Dr. Gu has extensive teaching experience as indicated in his Curriculum Vitae. He also has extensive experience mentoring undergraduate, graduate, and medical student research. Dr. Gu is interested in mentoring graduate students and serving on the committee of graduate students in the GPIBS program at UAMS. Dr. Gu has expressed interest and willingness to be involved in the mission to teach graduate students. I strongly support Dr. Gu's application to become a member of the UAMS Graduate Faculty.

Paul Drew, Director, GPIBS Neuroscience Track	3/20/18	Melanie Macnicol
Department Chair/Head or Program Director	Date	Graduate Council Representative

I have read the comments of my Department Chair/Head or Program Director and I do, do not (circle one) wish to supply additional information in support of my application.

Applicant's Signature	3/21/2018 Date

Approvals

M. MacNicol	5/17/18
Chair, Graduate Faculty Committee	Date
M. MacNicol	5/17/18
Chair, Graduate Council	Date
[signature]	5-17-2018
Dean of the Graduate School	Date

Approved 5/30/96
Updated 02/02/06

INSTRUCTIONS FOR COMPLETION OF THE COMPUTERIZED FORM FOR APPLICATION TO THE UAMS GRADUATE FACULTY

1. Please read the form carefully and answer all questions. The form begins on the next page.

2. The form has been designed with fields for your responses, and these are indicated in blue and gray shading. Use the "tab" key to move between fields. The form will automatically expand to accommodate your entries. IF YOU NEED HELP IN ANY OF THE FIELDS, PRESS THE F1 KEY AND A HELP WINDOW WILL OPEN.

3. When you have completed the form, save it as a document on your own disk for future reference.

4. Print the document, and then obtain the appropriate signatures before submitting the form to the Graduate Office.

Approved 5/30/96
Updated 02/02/06

5. **List your planned involvement in graduate education (courses, theses, dissertations):**

Dr. Gu will primarily train UAMS graduate students as a mentor or committee member. Dr. Gu has also expressed an interest and willingness to assist with didactic teaching if needed.

6. **Briefly summarize your experience in graduate-level classroom teaching:**

Dr. Gu has extensive experience with didactic teaching at the University of British Columbia and Wake Forest University School of Medicine. This teaching experience is documented in his Curriculum Vitae. His teaching experience is primarily focused on Neuroscience but he also has teaching experience in other area including Cell Biology and Pathology

7. **Briefly summarize your experience in research and student research mentoring:**

Dr. Gu has extensive experience mentoring student research at the University of British Columbia and Wake Forest University School of Medicine. This research mentoring experience is documented in his Curriculum Vitae.

8. **Attach Curriculum Vita** showing educational background (including institutions attended, degrees awarded and dates), honors or awards received, scholarly or professional organization affiliations, teaching experience (give school, dates and advanced and graduate subjects taught), including student theses and/or dissertations supervised. Cite publications and research in progress.

CURRICULUM VITAE

Qiang Gu, Ph.D.
Division of Neurotoxicology
National Center for Toxicological Research
U.S. Food and Drug Administration
3900 NCTR Road
Jefferson, AR 72079
Office: (870) 543-7832
Cell: (276) 206-4426
Email: qiang.gu@fda.hhs.gov

EDUCATION

BSc, Biology/Biophysics, Justus Liebig University, Giessen, Germany, 1985
PhD, Neuroscience, Max Planck Institute for Brain Research, Frankfurt, Germany, 1989

EMPLOYMENT

2008 – Present	Biologist, FDA National Center for Toxicological Research, Jefferson, AR
2002 – 2008	Assistant Professor, Department of Neurobiology and Anatomy, Wake Forest University School of Medicine, Winston-Salem, NC
1994 – 2002	Assistant Professor, Department of Ophthalmology, University of British Columbia, Vancouver, Canada
1990 – 1994	Postdoctoral Fellow, Department of Ophthalmology, University of British Columbia, Vancouver, Canada
1986 – 1989	Pre-doctoral Fellow, Department of Neurophysiology, Max Planck Institute for Brain Research, Frankfurt, Germany
1984 – 1985	Research Assistant, Institute of Biophysics, Justus Liebig University, Giessen, Germany

ONGOING RESEARCH

FDA/NCTR Approved Concept Paper C17021: Evaluation and application of tissue clearing techniques for neurotoxicity assessments. Role: PI

FDA/NCTR Protocol # E0763101: Study of vascular dysfunction in brain of two transgenic rodent models of Alzheimer's disease (AD): dietary impact and relevance to human AD. Role: Co-investigator (PI: Sumit Sarkar)

FDA/NCTR Protocol # E0765601: Self-administration of nicotine in rats: adolescent exposure and ex vivo confirmation. Role: Co-investigator (PI: Takato Hiranita)

FDA/NCTR Protocol # E0755701: Toxicity assessment of graphene sheets using primary striatal neurons. Role: Co-investigator (PI: Syed Ali)

RECENTLY COMPLETED RESEARCH

FDA/NCTR Protocol # E0747701: Identification of potential protein biomarkers for neurotoxicity assessments using a high-throughput antibody microarray approach. Role: PI

FDA/NCTR Protocol # E0746001: Proteomic assessment of the cytotoxic effects of nanoparticles on cells of the blood-brain barrier. Role: PI

FDA/NCTR Protocol # E0752401: Development of a simple in-vitro approach for the rapid detection of neurotoxicity. Role: PI

FDA/NCTR Protocol # E0746601: Modulation of the effects of Parkinson's disease medications by nicotine. Role: Co-investigator (PI: Syed Imam)

FDA/NCTR Protocol # E0751201: Evaluation and characterization of blood-brain barrier pathology in MPTPprobenecid--induced Parkinson's disease-like conditions in a mice model and its potential amelioration by endoplasmic reticulum stress reducers (molecular chaperones) and other putative anti-Parkinson therapeutics. Role: Co-investigator (PI: Sumit Sarkar)

PREVIOUSLY FUNDED RESEARCH AS THE PRINCIPAL INVESTIGATOR

Tab Williams Jr. and Family Neuroscience Research Endowment (2007 – 2008)
National Institutes of Health - National Eye Institute (2004 – 2007)
Wake Forest University Health Sciences (2002 – 2005)
British Columbia Health Research Foundation (1995 – 2002)
Brain Research Center, University of British Columbia (1998 – 2000)
Canadian National Institute for the Blind (1998 – 1999)
Vancouver Hospital & Health Sciences Center (1997 – 1999)
Natural Science and Engineering Research Council of Canada (1995 – 1999)
NeuroScience Network of Centers of Excellence (1995 – 1998)
Fight-For-Sight, National Society to Prevent Blindness (1994 – 1995)

INSTITUTIONAL AND SCIENTIFIC COMMUNITY SERVICE

- Editorial Board Member
  NeuroToxicology
  International Journal of Current Toxins Research

- *Ad Hoc* Reviewer
  Annals of Neurology
  Brain Research
  Canadian Journal of Ophthalmology
  Cellular Physiology and Biochemistry
  Developmental Brain Research
  Journal of Comparative Neurology
  Journal of Neurobiology
  Journal of Neuroscience
  Journal of Proteome Research

Journal of Proteomics
Neurobiology of Learning and Memory
NeuroToxicology
Omics: A Journal of Integrative Biology
Proteomics
Restorative Neurology and Neuroscience
Science
Toxicological Sciences
Toxicology in Vitro

- Grant Reviewer
  SAFE-Initiative, European Union, 2015

  Genomics Research and Development Initiative, Health Canada, 2014

  Epilepsy Pre-proposal Review Committee, U.S. Congressionally Directed Medical Research Programs and Department of Defense, American Institute of Biological Sciences, 2012

  Epilepsy-Basic Research Committee, U.S. Congressionally Directed Medical Research Programs and Department of Defense, American Institute of Biological Sciences, 2011

  Alcoholism and Substance Abuse Research Committee, U.S. Congressionally Directed Medical Research Programs and Department of Defense, American Institute of Biological Sciences, 2008

  Canadian National Institute for the Blind, 1996

  Medical Research Council of Canada, 1995, 1996

- Professional Society Service
  Member, Society for Neuroscience Trainee Professional Development Awards Selection Committee, 2017-2019

  Treasurer, Society for Neuroscience Arkansas Chapter, 2017-2018

  Counselor, Society of Toxicology South Central Chapter, 2016-2018

- Institutional Committee Member
  FDA/NCTR Animal Care and Use Committee (IACUC), 2013 – 2016

  Supervisory Committee, Neuroscience Graduate Program, Wake Forest University School of Medicine, 2006-2008

  Admission Committee, Neuroscience Graduate Program, Wake Forest University School of Medicine, 2002-2005

  Supervisory Committee, Neuroscience Graduate Program, University of British Columbia, 1996-2002

  Graduate Supervisory Committee, Department of Surgery, University of British Columbia, 1996-2000

TEACHING EXPERIENCE

Wake Forest University School of Medicine
- Cell Biology - NBAT710 (2005-2008)
- Development and Anatomy of the Sensory Systems - NBAT735 (2004-2008)
- Introduction to Neuroscience - NUSC713 (2003-2008)
- Research Design in Neurobiology - NBAT761 (2003-2008)
- Standardized Patient Assessment for Medical Students (2003-2008)
- Sensory Neuroscience - NBAT741 (2002-2008)
- Sensory Neuroscience Journal Club - NBAT747 (2002-2008)
- Neuroscience Tutorial - NUSC715 (2002 - 2003)
- Basic and Clinical Science Problem-Based Learning Courses (2002-2008)

University of British Columbia
- Pathology - 548B (1990-2002)
- Brain and Behavior, Foundations of Medicine - 426 (1999-2001)
- Neuroscience - 501 (1997-2001)
- Integument, Foundations of Medicine - 422 (1999)
- Ophthalmology (1995-1999)
- Basic Science Lectures for Ophthalmology Residents (1995-1997)
- Neuro-Ophthalmology - 475 (1996)

SUPERVISORY EXPERIENCE

Undergraduate Student
- Danyal Smani 2016 (Summer Research)
- Edward Lu, 2015 (Summer Research)
- Abigail Cline, 2007-2008 (Undergraduate Research and Summer Research)
- Bryan Lamoreau, 2007-2008 (Undergraduate Research)
- Jessica Haymore, 2006-2007 (Undergraduate Research)
- Veena Nagendrappa, 2006 (Summer Research)
- Reema Sikka, 2005 (Summer Research)
- Matthew Talbert, 2004 (Summer Research)
- Hon Sing Leong, 2000 (Direct-Study)
- Peter Lee, 1999 (Summer Research)
- Peter Leong-Sit, 1998 (Summer Research)
- Citrad Kaderabek, 1998 (Direct-Study)
- Amy Huang, 1996-1997 (Summer Research)
- David Mak, 1996-1997 (Summer Research)
- Eleni Chui, 1994 (Summer Research)

Medical Student
- Edward Luke Bradbury, 2005, 2007, 2008 (Summer Research)
- Caroline Kim, 2006 (Summer Research)
- Chris Drummond, 2006-2008 (Faculty Advisor)
- Matt Baker, 2005-2007 (Faculty Advisor)
- Catherine Ngo, 2002-2004 (Faculty Advisor)
- Rodney Remington, 1995 (Summer Research)

Graduate Student
Heather Knupp, 2007
Crystal Hayes, 2004
Ping Li, 2000-2002
Eugene Kwong, 1996-1998

Postdoctoral Fellow
Thamil Mani Sivanandam, Ph.D., 2005-2007
Ali Al-Housseini, M.D., 2003-2005
Benduan Yang, M.D., 1995-1997

Technician
Kathy Widmer, 2004
Lavanya Coodly-Gusdon, 2002-2003
Angela King, 2001-2002
Virginia Booth, 1997-2000
Yuling Li, 1995-1997

HONOR AND AWARD

NCTR Outstanding Service Award, for outstanding efforts in organizing the 2016 Fall Meeting of South Central Chapter (SCC) of the Society of Toxicology (SOT) as a member of the SCC-SOT Annual Meeting Organizing Committee, 2017

Outstanding Service Award, for outstanding service to the NCTR scientific community in reviewing an extraordinary number of animal protocols and amended protocols as a member of the NCTR Institutional Animal Care and Use Committee Team – Food and Drug Administration, 2016

Outstanding Service Group Recognition Award, as a member of the NCTR Institutional Animal Care and Use Committee, for exemplary team effort and outstanding performance in achieving full re-accreditation from the Association for Assessment and Accreditation of Laboratory Animal Care International – Food and Drug Administration, 2014

Basic Science Research Award – Department of Ophthalmology, University of British Columbia, 2002

Joint Scholar Award – British Columbia Health Research Foundation and Vancouver Hospital & Health Sciences Center, 1999

Investigator Award – Vancouver Hospital & Health Sciences Center, 1998

Scientist Retention Award – Vancouver Hospital & Health Sciences Center, 1997

Certificate of Recognition – Faculty of Medicine, University of British Columbia, 1996

Long-Term Fellowship – International Human Frontier Science Program, 1991-1993

Fellowship – NeuroScience Network of Centers of Excellence, 1990

Fellowship – Max Planck Society, 1986-1989

PROFESSIONAL SOCIETY MEMBERSHIP

Society for Neuroscience
Society for Neuroscience Arkansas Chapter
Society of Toxicology
Society of Toxicology South Central Chapter
International Brain Research Organization
Federation of American Societies for Experimental Biology

PUBLICATION

Gu Q, Wang C. The NMDA receptors: physiology and neurotoxicology in the developing brain. In *Handbook of Developmental Neurotoxicology.* Editors: Slikker W Jr, Paule MG, and Wang C, Elsevier/Academic Press, San Diego, 2018, pp207-214.

Smani D, Sarkar S, Raymick J, Kanungo J, Paule MG, **Gu Q**. Down-regulation of 14-3-3 proteins in a kainic acid-induced neurotoxicity model. *Molecular Neurobiology* 2018, 55:122-129.

Lu E, Sarkar S, Raymick J, Paule MG, **Gu Q**. Decreased Mcl-1 protein level in the striatum of a Parkinson's disease animal model. *Brain Research* 2018, 1678:432-439.

Robinson BL, Dumas M, Ali SF, Paule MG, **Gu Q**, Kanungo J. Mechanistic studies on ketamine-induced mitochondrial toxicity in zebrafish embryos *Neurotoxicology and Teratology* (in press).

Wang C, Liu F, Frisch-Daiello JL, Martin S, **Gu Q**, Liu S, Paterson TA, Paule MG, Hanig JP, Slikker W Jr, Crawford PA, Wang C, Han X. Lipidomics reveals a systemic energy deficient state that precedes neurotoxicity in neonatal monkeys after sevoflurane exposure. *Analytica Chimica Acta* (in press).

Guo X, Dumas M, Robinson BL, Ali SF, Paule MG, **Gu Q**, Kanungo J. Acetyl L-carnitine targets adenosine triphosphate synthase in protecting zebrafish embryos from toxicities induced by verapamil and ketamine: An *in vivo* assessment. *Journal of Applied Toxicology* 2017, 37:192-200.

Robinson BL, Dumas M, Ali SF, Paule MG, **Gu Q**, Kanungo J. Cyclosporine exacerbates ketamine toxicity in zebrafish: Mechanistic studies on drug-drug interaction. *Journal of Applied Toxicology* 2017, 37:1438-1447.

Gu Q. Neural Cell Lines (Lineage). In *Neural Cell Biology,* Editors: Wang C and Slikker W Jr. CRC Press, Taylor & Francis Group, New York, 2016, pp169-186.

Ahmadi E, Katnani HA, Besheli LD, **Gu Q**, Atefi R, Villeneuve MY, Eskandar E, Lev MH, Golby AJ, Gupta R, and Bonmassar G. An Electrocorticography Grid with Conductive Nanoparticles in a Polymer Thick Film on an Organic Substrate Improves CT and MR Imaging. *Radiology* 2016, 280:595-601.

Robinson BL, Dumas M, Cuevas E, **Gu Q**, Paule MG, Ali SF, and Kanungo J. Distinct effects of ketamine and acetyl L-carnitine on the dopamine system in zebrafish. *Neurotoxicology and Teratology* 2016, 54:52-60.

Gu Q, Yu L-R. Proteomics quality and standard: from a regulatory perspective. *Journal of Proteomics,* 2014, 96:353-359.

Gu Q, Sivanandam T. Optimizing scan parameters for antibody microarray experiments: Accelerating robust systems diagnostics for life sciences. *OMICS: A Journal of Integrative Biology* 2014, 18:385-398.

Gu Q, Lantz-McPeak S, Rosas-Hernandez H, Cuevas E, Ali SF, Paule MG, Sarkar S. In vitro detection of cytotoxicity using FluoroJade-C. *Toxicology In Vitro* 2014, 8:469-472.

Gu Q, Schmued LC, Sarkar S, Paule MG, Raymick B. One-step labeling of degenerative neurons in unfixed brain tissue samples using Fluoro-Jade C. *Journal of Neuroscience Methods* 2012, 208:40-43.

Gu Q. High-throughput identification of molecular targets of brain disorders using antibody-based microarray analyses. *Expert Review of Neurotherapeutics* 2008, 8:1281-1283.

Al-Housseini AM, Sivanandam T, Bradbury EL, Tannenberg RK, Dodd PR, **Gu Q.** Upregulation of β-catenin levels in superior frontal cortex of chronic alcoholics. *Alcoholism: Clinical and Experimental Research* 2008, 32:1180-1190.

Gu Q, Sivanandam T, Haymore J. Experimental approach for assessing the outcome accuracy of antibody microarray experiments. *Journal of Proteome Research* 2007, 6:4210-4217.

Su J, Richter K, Zhang C, **Gu Q**, Li L. Differential regulation of interleukin-1 receptor associate kinase 1 (IRAK1) splice variants. *Molecular Immunology* 2007, 44:900-905.

Gu Q. Serotonin involvement in plasticity of the visual cortex. In: *Monoaminergic Modulation of Cortical Excitability* (Editors: Tseng K-Y and Atzori M), Springer, New York, 2007, pp113-124.

Li P, Prasad SS, Mitchell DE, Hachisuka A, Sawada J, Al-Housseini A, **Gu Q.** Postnatal expression profile of OBCAM implies its involvement in visual cortex development and plasticity. *Cerebral Cortex* 2006, 16:291-299.

Gu Q, Sivanandam T, Kim CA. Signal stability of Cy3 and Cy5 on antibody microarrays. *Proteome Science* 2006, 4:21.

Yang B, **Gu Q.** Contribution of glutamate-receptors to BDNF-induced elevation of intracellular calcium levels. *NeuroReport* 2005, 16:977-980.

Gu Q. Contribution of acetylcholine to visual cortex plasticity. *Neurobiology of Learning and Memory* 2003, 80:291-301.

Boyd JD, **Gu Q**, Matsubara JA. Overview of the central visual pathways. In: *Adler's Physiology of the Eye, 10th Edition* (Editors: Kaufman PL and Alm A), Mosby, St. Louis, 2003, pp641-645.

Gu Q, Matsubara JA, Boyd JD. Visual deprivation. In: *Adler's Physiology of the Eye, 10th Edition* (Editors: Kaufman PL and Alm A), Mosby, St. Louis, 2003, pp697-709.

Gu Q. Neuromodulatory transmitter systems in the cortex and their role in cortical plasticity. *Neuroscience* 2002, 111:815-835.

Prasad SS, Kojic L, Li P, Mitchell DE, Hachisuka A, Sawada J-I, **Gu Q**, Cynader MS. Gene expression patterns during enhanced period of visual cortex plasticity. *Neuroscience* 2002, 111:35-45.

Kojic L, **Gu Q**, Douglas RM, Cynader MS. Laminar distribution of cholinergic- and serotonergic-dependent plasticity within kitten visual cortex. *Developmental Brain Research* 2001, 126:157-162.

Durand J, Kojic L, Wang Y, Lee P, Cynader MS, **Gu Q.** Confocal imaging of N-methyl-D-aspartate receptors in living cortical neurons. *Neuroscience* 2000, 97:11-23.

Forooghian F, Kojic L, **Gu Q**, Prasad SS. Identification of a novel truncated isoform of trkB in the cat visual cortex. *Journal of Molecular Neuroscience* 2001, 17:81-88.

Kojic L, Dyck R, **Gu Q**, Douglas RM, Matsubara J, Cynader MS. Columnar distribution of serotonin-dependent plasticity within kitten striate cortex. *Proceedings of the National Academy of Sciences USA* 2000, 97:1841-1844.

Forooghian F, Kojic L, **Gu Q**, Wong CA, Prasad SS. Molecular analysis of trkC in the cat visual cortex. *Journal of Molecular Neuroscience* 2000, 14:39-51.

Kwong E, **Gu Q.** Activity-dependent and use-dependent regulation of dopamine-receptor clustering. *NeuroReport* 2000, 11:2703-2706.

Gu Q, Liu Y, Dyck RH, Booth V, Cynader MS. Effects of tetrodotoxin treatment in LGN on neuromodulatory receptor expression in developing visual cortex. *Developmental Brain Research* 1998, 106:93-99.

Chen Z, **Gu Q**, Kaufman PL, Cynader MS. Histochemical mapping of NADPH-diaphorase activity in monkey and human eyes. *Current Eye Research* 1998, 17:370-379.

Wang Y-C, **Gu Q**, Cynader MS. Blockade of serotonin-2c receptors by mesulergine reduces ocular dominance plasticity in kitten visual cortex. *Experimental Brain Research* 1997, 114:321-328.

Kojic L, **Gu Q**, Douglas RM, Cynader MS. Serotonin facilitates synaptic plasticity in kitten visual cortex: an in vitro study. *Developmental Brain Research* 1997, 101:299-304.

Wang Y, **Gu Q**, Mao F, Cynader MS. Regulation mechanisms of adrenergic alpha 1 receptors in cultured cortical neurons. *Developmental Brain Research* 1997, 102:35-46.

Liu YL, Meiri KF, Cynader MS, **Gu Q.** Nerve growth factor induced modification of presynaptic elements in adult visual cortex in vivo. *Brain Research* 1996, 732:36-42.

Gu Q. Involvement of nerve growth factor in visual cortex plasticity. *Reviews in the Neurosciences* 1995, 6:329-351.

Gu Q, Singer W. Involvement of serotonin in neuronal plasticity of visual cortex. *European Journal of Neuroscience* 1995, 7:1146-1153.

Gu Q, Liu YL, Cynader MS. Induction of ocular dominance plasticity in adult cat visual cortex by infusion of nerve growth factor. *Proceedings of the National Academy of Sciences USA* 1994, 91:8408-8412.

Gu Q, Liu YL, Cynader MS. A study of tachykinin-Immunoreactivity in the cat visual cortex. *Brain Research* 1994, 640:336-340.

Wang Y, **Gu Q**, Mao F, Haugland RP, Cynader MS. Activity-dependent expression and distribution of M1 muscarinic ACh receptors in visual cortex neuronal cultures. *Journal of Neuroscience* 1994, 14:4147-4158.

Liu YL, Jia WG, **Gu Q**, Cynader MS. Involvement of muscarinic receptors in regulation of kitten visual cortex plasticity. *Developmental Brain Research* 1994, 79:63-71.

Gu Q, Perez-Velazquez JL, Angelides KJ, Cynader MS. Immunohistochemical study of $GABA_A$ receptors in the cat visual cortex. *Journal of Comparative Neurology* 1993, 333:94-108.

Gu Q, Singer W. Effects of intracortical infusion of anticholinergic drugs on neuronal plasticity in kitten striate cortex. *European Journal of Neuroscience* 1993, 5:475-485.

Liu YL, **Gu Q**, Cynader MS. An improved staining technique for cytochrome C oxidase. *Journal of Neuroscience Methods* 1993, 49:181-184.

Gu Q, Cynader MS. Immunocytochemical localization of enkephalin in the cat visual cortex. *Brain Research* 1993, 620:155-158.

Goto S, Singer W, **Gu Q**. localization of calcineurin in the adult and developing primary visual cortex of cats. *Experimental Brain Research* 1993, 96:377-386.

Gu Q, Velazquez JL, Angelides KJ, Cynader MS. $GABA_A$ receptor immunoreactivity in the white matter. *NeuroReport* 1992, 3:169-172.

Gu Q, Patel B, Singer W. The laminar distribution and postnatal development of serotonin-immunoreactive axons in the cat primary visual cortex. *Experimental Brain Research* 1990, 81:257-266.

Bear MF, Kleinschmidt A, **Gu Q**, Singer W. Disruption of experience-dependent synaptic modifications in striate cortex by infusion of an NMDA receptor antagonist. *Journal of Neuroscience* 1990, 10:909-925.

Gu Q, Singer W. The role of muscarinic receptors in ocular dominance plasticity. EXS, 1989, 57:305-314.

Gu Q, Bear MF, Singer W. Blockade of NMDA-receptors prevents ocularity changes in kitten visual cortex after reversed monocular deprivation. *Developmental Brain Research* 1989, 47:281-288.

Singer W, Artola A, Greuel J, **Gu Q**. Gating of NMDA-receptor mediated neuronal plasticity. In: *Frontiers in Excitatory Amino Acid Research* (Editors: Cavalheiro EA, Lehmann J, and Turski L), Alan R. Liss, New York, 1988, pp443-450.

Abstracts:

Gu Q, Cuevas E, Raymick J, Smani D, Kanungo J, Paule MG, Sarkar S. Downregulation of 14-3-3 protein levels in an animal model of neurodegeneration and in human Alzheimer's brains. *Toxicologist_Supplement to Toxicological Sciences* 2018, #1452.

Sarkar S, **Gu Q**, Raymick J, Hanig J, Paule MG. Evaluation of olfactory pathway neuropathology in a transgenic rat model of Alzheimer's disease. *Toxicologist_Supplement to Toxicological Sciences* 2018, #1451.

Kanungo J, Robinson BL, Ali SF, Paule MG, **Gu Q**, and Dumas M. Cyclosporine exacerbates ketamine toxicity in zebrafish. *Society for Neuroscience Abstracts* 2017, 35.10.

Wang C, Wang C, Han X, Liu F, Gu Q, Liu S, Paterson T, Paule MG, Hanig JP, Slikker W Jr. Identifying potential biomarkers and mechanisms associated with anesthetic-induced neurotoxicity in nonhuman primate. *Society for Neuroscience Abstracts* 2017, 463.10.

Gu Q, Lantz S, Cuevas E, Ali SF, Kanungo J, Paule MG, Zhang Y, Krauthamer V. Antibody microarray analysis of protein level changes in vitro from blood-brain barrier endothelial cells following exposures to silver-nanoparticles: focusing on apoptosis. *FDA Science Forum*, 2017, P#1.

Slikker W, Wang C, Han X, Liu F, **Gu Q**, Liu S, Patterson T, Paule M, Hanig J, Wang C. Changes in serum lipid profiles in neonatal monkeys associated with sevoflurane-induced neurotoxicity. *Birth Defects Research* 2017, 109:665.

Wang C, Han X, Liu F, **Gu Q**, Liu S, Paterson T, Paule MG, Hanig JP, Slikker W. Changes of serum lipid profiles in neonatal monkeys associated with sevoflurane-induced neurotoxicity. *Toxicologist_Supplement to Toxicological Sciences* 2017, 150, 2645.

Kanungo J, Dumas M, Ali SF, Paule MG, **Gu Q**, Robinson BL. Cyclosporine exacerbates ketamine toxicity in zebrafish. *Society for Neuroscience Abstracts* 2017, 35.10.

Wang C, Wang C, Han X, Liu F, **Gu Q**, Liu S, Paterson T, Paule MG, Hanig JP, Slikker W Jr. Identifying potential biomarkers and mechanisms associated with anesthetic-induced neurotoxicity in nonhuman primate. *Society for Neuroscience Abstracts* 2017, 463.10.

Gu Q, Lu E, Sarkar S, Raymick J, Paule MG. Decreased Mcl-1 expression in the striatum of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP)-treated mice. *Transactions of the American Society for Neurochemistry*, 2016, PS15-02, pp101.

Gu Q, Smani D, Sarkar S, Raymick J, Kanungo J, Paule MG. Down-regulation of 14-3-3 proteins in a kainic acid-induced neurotoxicity model. *12th International Conference on Neuroprotective Agents* 2016, pp63.

Gu Q, Lantz S, Cuevas E, Ali SF, Kanungo J, Paule MG, Zhang Y, Krauthamer V. Antibody microarray analysis of protein level changes in vitro from blood-brain barrier endothelial cells following exposures to silver-nanoparticles: focusing on apoptosis signaling proteins. *Arkansas Bioinformatics Consortium Annual Conference* 2016, pp14-15.

Gu Q, Liu F, Sarkar S, Liu S, Kanungo J, Wang C, Slikker W Jr., Paule MG. Inhaled anesthetic sevoflurane-induced up-regulation of pro-apoptosis proteins in infant monkey brains. *Society for Neuroscience Abstracts* 2016, 42, 423.05.

Kanungo J, Robinson BL, **Gu Q**, Ali SF, Paule MG, Guo X. Acetyl l-carnitine targets ATP synthase in protecting zebrafish embryos from ketamine-induced toxicities. *Society for Neuroscience Abstracts* 2016, 42, 597.12.

Lu E, Sarkar S, Raymick J, Paule MG, **Gu Q**. Down-regulation of myeloid cell leukemia 1 (Mcl-1) protein in substantia nigra following treatment with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). *Toxicologist_Supplement to Toxicological Sciences* 2016; 2334/P305.

Sarkar S, Lu E, Raymick J, Schmued L, Hanig J, Paule M, **Gu Q**. ERK ½ activation is evident in the activated microglia of striatum and substantia nigra of acute and chronically induced MPTP model for PD in mice. *Toxicologist_Supplement to Toxicological Sciences* 2016; 2334/P306.

Smani D, Sarkar S, Raymick J, **Gu Q**. Down-regulation of 14-3-3 proteins following exposure of kainic acid in a rat model of status epilepticus. *Central Arkansas Undergraduate Summer Research Symposium Abstract* 2016.

Lu E, Sarkar S, Raymick J, Paule MG, **Gu Q**. Down-regulation of myeloid cell leukemia 1 (Mcl-1) protein in substantia nigra following treatment with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). *South Central Chapter of the Society of Toxicology Annual Meeting* 2016, pp55.

Sarkar S, Lu E, Raymick J, Schmued L, Hanig J, Paule M, **Gu Q**. ERK 2/3 activation is evident in the activated microglia of striatum and substantia nigra of acute and chronically induced MPTP model for PD in mice. *Society for Neuroscience Arkansas Chapter Annual Meeting*, Little Rock, AR, 2016.

Ahmadi E, Katnani HA, Daftaribesheli L, **Gu Q**, Atefi R, Villeneuve MY, Eskandar E, Lev MH, Golby AJ, Gupta R, Bonmassar G. A novel electrocorticography grid using deposition of conductive nanoparticles on an organic substrate improves CT and MR imaging. *Eastern Neuroradiological Society Annual Meeting* 2015; September 4-7, 2015, Newport, Rhode Island.

Gu Q, Sarkar S, Paule MG, Raymick B. Analysis of apoptosis-associated protein levels in the striatum of C57BL/6 mice treated with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. *9th International Brain Research Organization World Congress Neuroscience Abstracts* 2015, 496.

Gu Q, Lantz-McPeak S, Cuevas E, Ali SF, Paule MG, Kanungo J, Zhang Y, and Krauthamer V. Silver-nanoparticle exposure-induced alteration of apoptosis-associated proteins in an in vitro model of the blood-brain barrier. *Sixth Nanotechnology for Health Care Conference* 2015, pp47.

Ahmadi E, Katnani HA, Besheli LD, **Gu Q**, Atefi R, Villeneuve MY, Eskandar E, Lev MH, Golby AJ, Gupta R, and Bonmassar G. A novel electrocorticography grid using conductive nanoparticles in a polymer-thick film on an organic substrate improves CT and MR imaging. *Radiological Society of North America Annual Meeting* 2015, SSE19-01.

Gu Q, Lantz-McPeak S, Cuevas E, Ali SF, Paule MG, Kanungo J, Zhang Y, and Krauthamer V. Antibody microarray analysis of apoptosis-associated proteins in brain-derived microvessel endothelial cells following exposure to silver-nanoparticles. *Joint Meeting of the Lone Star Chapter and the South Central Chapter of the Society of Toxicology* 2015, pp21,

Gu Q, Cuevas E, Ali SF, Paule MG, Krauthamer V, Jones Y, Zhang Y. A simple approach for the detection of nanoparticle-induced cytotoxicity in vitro. *FDA Science Forum* 2015, pp72.

Gu Q, Cuevas E, Ali SF, Paule MG, Krauthamer V, Jones Y, Zhang Y. A new approach for the detection of nanoparticle-induced cytotoxicity in vitro. *FDA 2nd Nanotechnology Regulatory Science Research Symposium* 2015, 14.

Lu E, Sarkar S, Raymick J, **Gu Q**. Upregulation of phosphorylated extracellular signal-regulated kinase (ERK) in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced Parkinson's disease models. *Central Arkansas Undergraduate Summer Research Symposium* 2015.

Lu E, Sarkar S, Raymick J, Paule MG, **Gu Q**. Upregulation of phosphorylated extracellular signal-regulated kinase (ERK) in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced Parkinson's disease models. *Society for Neuroscience Arkansas Chapter Annual Conference* 2015.

Gu Q, Lantz-McPeak S, Cuevas E, Ali SF, Paule MG, Krauthamer V, Zhang Y. Alteration of protein expression levels in an in vitro blood-brain barrier model following exposures to silver-nanoparticles: Apoptosis signaling proteins. *Society for Neuroscience Abstracts* 2014; 40, 146.03.

Gu Q, Cuevas E, Ali SF, Paule MG, Krauthamer V, Zhang Y. N-acetylcysteine reduces silver nanoparticle-induced cytotoxicity in an in vitro blood-brain barrier model. *12th International Conference on Neuroprotective Agents* 2014; p39.

Gu Q, Lantz-McPeak S, Cuevas E, Ali SF, Paule MG, Krauthamer V, Zhang Y. Alteration of protein expression levels in an in vitro blood-brain barrier model following exposures to silver-nanoparticles: Apoptosis signaling proteins. *Society for Neuroscience Arkansas Chapter Annual Conference* 2014.

Gu Q, Lantz-McPeak S, Cuevas E, Rosas-Hernandez H, Ali SF, Sarkar S, Paule MG, Zhang Y. A simple approach for the determination of nanoparticle-induced cytotoxicity in vitro. *Fifth Nanotechnology for Health Care Conference* 2014.

Gu Q, Lantz-McPeak S, Cuevas E, Rosas-Hernandez H, Ali SF, Sarkar S, Paule M, Zhang Y. simple approach for the determination of nanoparticle-induced cytotoxicity in vitro. *Toxicologist_Supplement to Toxicological Sciences* 2014; 138, 159.

Rosas-Hernandez H, Cuevas E, Lantz-McPeak S, Paule M, **Gu Q**, Imam SZ, Kanungo J, Ali SF, Gonzalez C. Methamphetamine induces neurotoxicity in blood-brain barrier endothelial cells: Protective role of prola. *Toxicologist_Supplement to Toxicological Sciences* 2014; 138, 98.

Cuevas E, Rosas-Hernandez H, Lantz-McPeak S, Paule M, **Gu Q**, Gonzalez C, Imam SZ, Kanungo J, Ali SF. Changes of tight junctions in the blood-brain barrier are mediated by Aβ25-35-RAGE Interaction. *Toxicologist_Supplement to Toxicological Sciences* 2014; 138, 244-245.

Gu Q, Lantz S, Rosas-Hernandez H, Cuevas E, Sarkar S, Schmued L, Krauthamer V, Paule M, Ali SF. A novel approach for the determination of cytotoxicity in an in vitro blood-brain barrier model. *Society for Neuroscience Abstracts* 2013; 39, 282.01.

Gu Q, Lantz S, Paule MG, Schmued L. A simple in-vitro approach for the rapid detection of neurotoxicity. *Toxicologist_Supplement to Toxicological Sciences* 2013; 132, 191-192.

Ali SF, Hernandez H-R, Lantz S, Paule M, **Gu Q**, Gonzalez C, Santamaria A, Cuevas E. Ros production induced by aβ25-35 is mediated by receptor advanced glycation end (rage) products in a rat blood-brain barrier model. *Society for Neuroscience Abstracts* 2013; 39, 134.13.

Rosas-Hernandez H, Cuevas E, Lantz S, Paule M, **Gu Q**, Imam SZ, Ali SF, Gonzalez C. Methamphetamine induces neurotoxicity in blood-brain barrier endothelial cells: Protective role of prolactin. *Society for Neuroscience Abstracts* 2013; 39, 157.23.

Gu Q, Sarkar S, Schmued LC, Paule MG, Raymick B. One-step labeling of degenerative neurons in unfixed brain tissue samples. *Toxicologist_ Supplement to Toxicological Sciences* 2012; 126, 224-225.

Gu Q. Antibody microarray analysis of neurological disorders. *US Human Proteome Organization 4th Annual Conference "Proteomics & Beyond"* 2008; Abstr. 36.

Gu Q, Al-Housseini AM, Sivanandam T, Bradbury EL, Tannenberg RK, Dodd PR. Antibody microarray analysis of Wnt/beta-catenin signaling associated proteins in superior frontal cortex of chronic alcoholics. *Keystone Symposium: Wnt/beta-Catenin Signaling in Development and Disease* 2008; Abstr. 206.

Al-Housseini AM, Dodd PR, **Gu Q**, Lewohl JM, Mayfield RD, Harris RA. Upregulation of beta-catenin in superior frontal cortex of chronic alcoholics. *Alcoholism: Clinical and Experimental Research* 2006; 30:218A.

Gu Q. Latest developments in the protein microarray analysis of neurological disorders. *Journal of Neurochemistry Supplements* 2006; 98, 50-51.

Sivanandam T, **Gu Q**. Postnatal changes of signaling protein levels which may be of particular importance for neural growth and differentiation in the developing visual cortex. *Society for Neuroscience Abstracts* 2006; 32, 518.14.

Gu Q. Antibody microarray analyses of neural development and neurological disorders. *Keystone Symposium: Proteomics and Bioinformatics* 2005; Abstr. 130.

Gu Q, Al-Housseini AM, Hayes C, Widmer KM, Bell WL, Glazier SS. Upregulation of erbB2 in temporal lobe epilepsy. *Society for Neuroscience Abstracts* 2005; 31, 244.8.

Al-Housseini AM, Dodd PR, **Gu Q**. Upregulation of beta-catenin in superior frontal cortex of chronic alcoholics. *Society for Neuroscience Abstracts* 2005; 31, 798.9.

Gu Q, Al-Housseini A, Widmer K. Validation of antibody microarray results derived from young and adult visual cortex. *Society for Neuroscience Abstracts* 2004; 30, 695.4.

Widmer K, Al-Housseini A, Tytell M, Bell W, Glazier S, **Gu Q**. Up-regulation of signal transduction proteins in human hippocampus with epileptic seizures revealed by antibody microarrays. *Society for Neuroscience Abstracts* 2004; 30, 695.2.

Al-Housseini A, Widmer K, **Gu Q**. Antibody microarray analysis of differential protein levels in frontal cortex of Alzheimer's Disease and control subjects. *Society for Neuroscience Abstracts* 2004; 30, 695.3.

Gu Q. Differential protein expression in young and adult visual cortex revealed by antibody microarrays. *Society for Neuroscience Abstracts* 2003; 29, 567.24.

Li P, Prasad SS, Mitchell DE, Hachisuka A, Sawada J, **Gu Q**. Opioid binding cell adhesion molecule is a candidate for visual cortex plasticity. *Society for Neuroscience Abstracts* 2002; 28, 131.18.

Zhu B, Li P, Prasad SS, **Gu Q**. Postnatal development of interleukin-11 in cat primary visual cortex. *Society for Neuroscience Abstracts* 2002; 28, 131.19.

Li P, Prasad SS, Hachisuka A, Sawada JI, **Gu Q**. Immunocytochemical study of OBCAM in cat primary visual cortex during postnatal development. *Society for Neuroscience Abstracts* 2001; 27:475.

Prasad SS, Kojic L, Mitchell DE, **Gu Q**, Cynader MS. Cluster analysis of gene expression patterns during enhance period of visual cortex plasticity. *Society for Neuroscience Abstracts* 2001; 27, 27.23.

Gu Q, Kojic L, Sabunciyan S, Douglas RM, Cynader MS. Effect of nerve growth factor on ocular dominance plasticity in long-term monocularly deprived cats. *Society for Neuroscience Abstracts* 2000; 28:825.

Kojic L, **Gu Q**, Douglas RM, Cynader MS. Zinc modulates synaptic plasticity within kitten striate cortex. *Society for Neuroscience Abstracts* 2000; 26:29.

Sabunciyan S, **Gu Q**, Cynader M. Stripes of beta-catenin protein expression in the developing cat visual cortex. *Society for Neuroscience Abstracts* 1999; 25:702.

Kojic L, **Gu Q**, Douglas RM, Cynader MS. Laminar distribution of cholinergic- and serotonergic-dependent plasticity within kitten visual cortex. *Society for Neuroscience Abstracts* 1999; 25:793.

Prasad SS, Kojic L, Lee SS, Hetherington PA, Mitchell DE, **Gu Q**, Cynader MS. Molecular analysis using high-density cDNA arrays of genes expressed during the enhanced period of visual cortex plasticity. *Society for Neuroscience Abstracts* 1999; 25:702.

Gu Q, Kojic L, Cynader MS. Nerve growth factor application promotes recovery from the effects of monocular deprivation in visual cortex of adult cats. *Investigative Ophthalmology & Visual Science* 1998; 39/4:1500.

Kwong E, **Gu Q**. Activity-dependent and use-dependent regulation of dopaminergic D1-like and D2-like receptor expression in developing cortical neurons. *Society for Neuroscience Abstracts* 1998; 24:340.

Chen Z, **Gu Q**, Kaufman PL, Cynader MS. Immunoreactivity of the neurotrophin receptors trkA and trkB in human and monkey eyes. *Investigative Ophthalmology & Visual Science* 1998; 39/4:1842.

Sabunciyan S, Tetzlaff W, **Gu Q**, Cynader M. Involvement of homeobox and segment polarity genes in the postnatal development of the cat visual cortex. *Society for Neuroscience Abstracts* 1998; 24:31.

Kojic L, **Gu Q**, Douglas RM, Matsubara J, Cynader MS. Activation of muscarinic M1 receptors facilitates synaptic plasticity in layer 2/3 of kitten visual cortex. *Society for Neuroscience Abstracts* 1998; 24:620.

Gu Q, Kojic L, Forooghian F, Prasad SS. Molecular analysis of trkB and trkC receptors in cat visual cortex. *Society for Neuroscience Abstracts* 1997; 23:566.

Kojic L, **Gu Q**, Douglas RM, Cynader M. Serotonin facilitates either LTP or LTD in a patchy distribution within kitten striate cortex. *Society for Neuroscience Abstracts* 1997; 23:149.

Yang B, Kojic L, **Gu Q**. Involvement of glutamatergic receptors in BDNF-induced increase of intraneuronal calcium concentrations. *Society for Neuroscience Abstracts* 1997; 23:667.

Chen Z, **Gu Q**, Giaschi D, Cynader M. High-affinity neurotrophin receptor immunoreactivity in human retina. *Society for Neuroscience Abstracts* 1997; 23:670.

Kojic L, **Gu Q**, Douglas RM, Matsubara J, Cynader M. Serotonin facilitates synaptic plasticity in kitten striate cortex. *Annual Meeting NeuroScience Network of Centers of Excellence* 1997:5.

Gu Q, Cynader MS. Nerve growth factor induces up-regulation of trkA receptor expression in adult visual cortex in vivo. *Annual Meeting NeuroScience Network of Centers of Excellence* 1996; 63.

Kojic L, **Gu Q**, Douglas R, Matsubara J, Cynader M. Serotonin-induced plasticity in the kitten visual cortex is associated with an activation of NMDA receptors and voltage-dependent calcium channels. *Society for Neuroscience Abstracts* 1996; 22:135.

Gu Q, Li Y, Cynader M. Immunoreactivity of high-affinity neurotrophin receptors (trkA, trkB and trkC) in cat visual cortex during postnatal development. *Society for Neuroscience Abstracts* 1996; 22:587.

Yang B, Remington R, Kojic L, Cynader M, **Gu Q**. Brain derived neurotrophic factor induces a transient calcium increase in cortical neurons. *Society for Neuroscience Abstracts* 1996; 22:397.

Chen Z, **Gu Q**, Kaufman PL, Cynader MS. The localization of nitric oxide synthase (NOS) in human and monkey eye. *Investigative Ophthalmology & Visual Science* 1996; 37/3:1511.

Gu Q, Kojic L, Douglas RM, Cynader MS. Serotonin facilitates synaptic plasticity in kitten visual cortex: an in vitro study. *Society for Neuroscience Abstracts* 1995; 21:650.

Durand J, **Gu Q**, Kojic L, Wang Y, Cynader MS. Confocal imaging of NMDA receptors in living neurons. *Society for Neuroscience Abstracts* 1995; 21:238.

Wang YH, **Gu Q**, Cynader MS. Regulation of muscarinic M1 and adrenergic α1 receptor expression in living visual cortex neuronal cultures. *Society for Neuroscience Abstracts* 1995; 21:449.

Gu Q, Liu YL, Meiri KF, Cynader MS. Nerve growth factor induced modification of presynaptic markers in adult visual cortex in vivo. *Annual Meeting NeuroScience Network of Centers of Excellence* 1995; 55.

Gu Q, Liu YL, Wang YC, Cynader MS. Immunocytochemical localization of nerve growth factor receptor in cat visual cortex. *Investigative Ophthalmology & Visual Science* 1994; 35:2402.

Gu Q, Liu Y, Dyck R, Booth V, Cynader M. Developmental expression of transmitter receptors in visual cortex is determined by LGN input. *Society for Neuroscience Abstracts* 1994; 20:203.

Wang YC, **Gu Q**, Liu Y, Douglas R, Cynader M. Electrophysiological evidence for serotonin-2c receptors in modulation of neuronal activities of cells in kitten visual cortex: in vivo and in vitro studies. *Society for Neuroscience Abstracts* 1994; 20:136.

Wang Y, **Gu Q**, Yang B, Tan J, Mao F, Haugland RP, Cynader MS. Activity-dependent expression and distribution of 1adrenergic receptors in visual cortex neuronal cultures. *Society for Neuroscience Abstracts* 1994; 20:297.

Gu Q, Liu L, Meiri KF, Cynader MS. Nerve growth factor induces activity dependent plasticity in adult cat visual cortex. *Investigative Ophthalmology & Visual Science* 1993; 34/4:455.

Gu Q, Liu YL, Cynader MS. Nerve growth factor causes activity-dependent synaptic modification in adult cat visual cortex. *Society for Neuroscience Abstracts* 1993; 19:690.

Gu Q, Liu YL, Meiri KF, Cynader MS. ANGF induces activity-dependent synaptic modification in adult cat visual cortex. *Annual Meeting Network of Centers of Excellence for Neural Regeneration and Functional Recovery*, Montreal, Canada 1993; 23.

Wang Y, **Gu Q**, Cynader MS. Specific 5-HT1c receptor blockade prevents ocular dominance plasticity in the kitten primary visual cortex. *Society for Neuroscience Abstracts* 1993; 19:370.

Wang Y, **Gu Q**, Mao F, Haugland RH, Cynader MS. Activity-dependent expression and distribution of M1 muscarinic ACh receptors in visual cortex neuronal cultures. *Society for Neuroscience Abstracts* 1993; 19:459.

Liu YL, **Gu Q**, Meiri KF, Cynader MS. Nerve growth factor (NGF) stimulation of GAP-43 phosphorylation in adult cat visual cortex. *Society for Neuroscience Abstracts* 1993; 19:370.

Gu Q, Liu YL, Cynader MS. Recreation of neuronal plasticity in adult cat visual cortex by nerve growth factor. *Annual Meeting Network of Centers of Excellence for Neural Regeneration and Functional Recovery*, Toronto, Canada 1992, 13a.

Gu Q, Liu YL, Cynader MS. Nerve growth factor induces neuronal plasticity in adult cat visual cortex. *Society for Neuroscience Abstracts* 1992; 18:556.

Gu Q, Cynader M. Fluorescence imaging of benzodiazepine binding sites in living rate cortex slices using confocal microscopy. *Society for Neuroscience Abstracts* 1991; 17:171.

Gu Q, Angelides KJ, Velazquez J, Cynader MS. GABA-A receptor immunoreactivity in cat visual cortex. *3rd International Brain Research Organization World Congress Neuroscience Abstracts* 1991, P62.26.

Gu Q, Cynader MS. Investigating the role of nerve growth factors in visual cortical plasticity. *Annual Meeting Network of Centers of Excellence for Neural Regeneration and Functional Recovery*, Montreal, Canada 1991.

Gu Q, Singer W. Involvement of serotonin in neuronal plasticity of kitten visual cortex. *3rd International Brain Research Organization World Congress Neuroscience Abstracts* 1991, P47.7.

Gu Q, Cynader M. Fluorescence imaging of neurotransmitter receptor binding sites in living rat cortex slices using confocal microscopy. *Satellite Symposium: Neuronal Function and Three-Dimensional Microanatomy*, New Orleans, LA 1991, pp7.

Gu Q, Patel B, Singer W. The postnatal development of serotonin-immunoreactive axons in the cat primary visual cortex. In: *Dynamics and Plasticity in Neuronal Systems* (Editors: Elsner N, Singer W), New York, NY: Thieme 1989, pp364.

Gu Q, Singer W. Blockade of muscarinic receptors disrupted neuronal plasticity in kitten visual cortex. *International Symposium: Central Cholinergic Synaptic Transmission*, Tegernsee, Germany, 1988, 40.

Gu Q, Singer W. Blockade of muscarinic receptors prevents ocular dominance plasticity of kitten visual cortex. *European Journal of Neuroscience Supplements* 1988; 1, 73:3.

Gu Q, Singer W. Blockade of muscarinic acetylcholine receptors prevents neuronal plasticity of kitten striate cortex. In: *Sense Organs Interfaces Between Environment and Behavior* (Editors: Elsner N, Barth GF), New York, NY: Thieme 1988, pp260.

Gu Q, Bear MF, Singer W. Intracortical infusion of APV prevents ocular dominance shift in kitten visual cortex after monocular reverse suture. *8th European Winter Conference of Brain Research,* Tignes, France 1988; 8, p62.

Bear MF, **Gu Q**, Kleinschmidt A, Singer W. Effects of intracortical infusion of APV on synaptic modifications in kitten striate cortex. *Society for Neuroscience Abstracts* 1987; 13:344.

IMPACT

Total Citations = 1720 (Web of Science, February 2018)
H-Index = 20 (Google Scholar)