***Roberto Galvez***

Carle Illinois College of Medicine

Psychology Department

Behavioral Neuroscience Division

Neuroscience Program

University of Illinois at Urbana-Champaign

217 244-0391; [rgalvez@illinois.edu](mailto:rgalvez@illinois.edu)

Education

**PhD | 2004 | University of Illinois at Urbana-Champaign**

Major: Neuroscience

**BA | 1996 | University of California, Irvine**

Major: Biological Science

Positions and Employment

**Teaching Assistant Professor**

**MEDICAL EDUCATION FACILITATOR**

**Medical Curriculium Thread Director**

Carle Illinois College of Medicine **| 100%**

Psychology Department | Behavioral Neuroscience Division **| 0%**

University of Illinois at Urbana-Champaign **| 2017-PRESENT**

**Assistant Professor**

Psychology Department | Behavioral Neuroscience Division

University of Illinois at Urbana-Champaign **| 2009-2017**

**Postdoctoral Fellow**

J. Disterhoft, PhD (PI)

Northwestern University Feinberg School of medicine **| 2004-2009**

**RESEARCH ASSISTANT**

W.T. Greenough, PhD (PI)

University of Illinois at Urbana-Champaign **| 1996-2004**

**RESEARCH ASSISTANT**

J.L. McGaugh, PhD (PI)

University of California Irvine **| 1993-1996**

**RESEARCH ASSISTANT**

J.L. Graves, PhD (PI)

University of California Irvine | 1992-1993

Invited Lectures and Conference Presentations

**Dart Neuro Science, LLC | 2017**

* “Neocortical mechanisms mediating learning: a novel role for the kappa opioid receptor in associative learning-induced plasticity​”

**University of Northern Colorado | 2017**

* “Neocortical mechanisms for associative learning”

**Society for Neuroscience Nanosymposium (Mechanisms of Fragile X Syndrome) | 2016**

* “Elevated VEGF-A expression mediates Fragile X Syndrome neuronal and behavioral abnormalities”

**Spastic Paralysis Research Foundation of the Illinois-Eastern Iowa District of Kiwanis International Convention | 2015**

* “A new strategy for alleviating Fragile X Syndrome Abnormalities: Vascular Endothelial Growth Factor A modulation”

**Winter Conference on Brain Research | 2015**

* “VEGF modulation, a novel mechanisms mediating abnormalities in the Fragile X Mental Retardation Syndrome”

**University of Delaware | 2013**

* "Neocortical mechanisms for associative learning"

Patents

US Provisional TF14079-PRO “Treatment for Fragile X and Cognitive Deficits”

Review Panels

Sinauer Associates Publishers | Oxford University Press content reviewer | 2018

Biomedicine Peer-reviewing Advisory Board | 2013

National Science Foundation (NSF) Merit Reviewer | 2009

National Science Foundation (NSF) Merit Reviewer | 2006

Honors, Recognitions, and Outstanding Achievements

Developmental Neurobiology Cover Image (doi: 10.1002/dneu.22585) | 2018

Incomplete List of Teachers Ranked as Excellent, University of Illinois | 2016

Travel Fellow, Winter Conference on Brain Research | 2015

Incomplete List of Teachers Ranked as Excellent, University of Illinois | 2014

Fragile X and Autism-Related Disorders Travel Fellow, Gordon Conference | 2014

Incomplete List of Teachers Ranked as Excellent, University of Illinois | 2013

Incomplete List of Teachers Ranked as Excellent, University of Illinois | 2012

Incomplete List of Teachers Ranked as Excellent, University of Illinois | 2011

Other Experience and Professional Memberships

**Social Studies Advisory Committee | 2013-2015**

* CountrySide School

**Grant Proposal Mentoring Program | 2010-2011**

* Society for Neuroscience

**Fellowship Board Executive Committee | 2002-2003**

* University of Illinois

**American Association for the Advancement of Science | 1990-2003**

**Society for Neuroscience | 1998-present**

Service to Professional Societies

Society for Neuroscience Scholars Program: Mentor | Individual Fellow Support Network | 2017-present

Alliance for Graduate Education and the Professoriate | 2011

Great Lakes Alliances for the Social and Behavioral Sciences discussant | 2011

Society for Neuroscience Career Development: A Mentoring and Networking Event | 2011

Neuroscience Scholars Program | 2010-2012

Society for Neuroscience Mentor | 2009-2013

Science & Engineering Committee on Multicultural Affairs (SECMA) panel member | 2008

Alliances for Graduate Education and the Professoriate (AGEP) panel member | 2008

Catherine Cook School Ambassador Committee | 2006-2007

Service to University of Illinois

**CARLE ILLINOIS COLLEGE OF MEDICINE**

* Subcommittee on Student Conduct | 2018-2019
* Subcommittee on Sexual Misconduct | 2018-2019
* Diversity Committee
  + High School Programs (SPHERES) | 2018- present
  + Research & Clinical Experience for Undergraduates (RCEU) | 2018- present
* Curriculum Oversite Committee
  + Research and Engineering Subcommittee | 2018-present
* Admissions Committee
  + Admissions Diversity Committee | 2017-present
  + Admissions Rating Process Committee | 2017-present
* Showcase Committee | 2017-present

**GRADUATE COLLEGE**

* Faculty Summer Institute | 2018
  + Pre-conference Workshop presenter | “**Problem-Based Learning In Action”**
* University of Illinois iMentor | 2013-2015

**PSYCHOLOGY DEPARTMENT**

* Undergraduate Senior Distinction Review Committee | 2009-2016
* Admissions Committee | 2009-2016
* Judge for the Hohenboken Award | 2010
* Diversity Committee | 2010-2012

**NEUROSCIENCE PROGRAM**

* Illinois Summer Neuroscience Institute (ISNI) ‘Careers in Neuroscience' Panel

Member | 2006, 2007, 2008, 2009, 2010, & 2012

* Neuroscience Program Admissions Committee | 2010
* Chair for Brain Awareness Day | 2010-2012)
* Neuroscience Program Minority Admissions Liaison | 2009-2011

**BECKMAN INSTITUTE**

* Academic Career Mentoring Workshop Faculty Representative | 2010

###### Teaching & Mentoring

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| **SOCIETY FOR NEUROSCIENCE SCHOLARS PROGRAM | 2017-present**  **CURRENT GRADUATE DISTINCTION COMMITTEE MEMBER**   * Sean Collins | 2013-present * Alexandria Lesicko | 2015-present * Sara Westbrook | 2018-present   **BEHAVIORAL NEUROSCIENCE (PSYCH 210) | 2009-2017**   * Introductory course for undergraduates describing fundamental concepts of how the brain can be altered during a learning process.   **MECHANISMS OF MEORY (PSYCH 396) |** 2009-2017   * Upper-division seminar course for undergraduates exploring current theories and mechanism for memory consolidation. |
| **BRAIN LEARNING AND MEMORY (PSYCH 414/NEURO 414) |** 2010-2017   * Upper-division lecture course for graduate students and advanced undergraduates exploring theoretical, anatomical, and molecular mechanisms for how the brain consolidates information. |
| **ADVANCES IN PSYCHOBIOLOGY (PSYCH 510) | 2009-2017**   * Course for non-biological graduate students describing fundamental concepts of how the brain can be altered during a learning process. |

###### Recently Completed Research Support

**THE JEROME LEJEUNE FOUNDATION** 01/2016-01/2018

Galvez, Roberto (PI)

“The Role of VEGFA in Fragile X Syndrome Abnormalities During Development: Implications for Therapeutic Interventions”

The goal of this project is to determine the beneficial effects of modulating VEGF-A during development on cognitive and neuronal abnormalities in Fragile X Syndrome.

Role: PI

**SPASTIC PARALYSIS RESEARCH FOUNDATION OF THE ILLINOIS-EASTERN IOWA DISTRICT OF KIWANIS INTERNATIONAL** 06/2015-05/2018

Galvez, Roberto (PI)

“Use of VEGF-A as a treatment for Fragile X Syndrome abnormalities”

The goal of this project is to explore the use of VEGF-A modulation as a potential treatment for various abnormalities associated with the Fragile X Mental Retardation Syndrome.

Role: PI

**ABBOTT** 8/2014-12/2016

Joshua M Gulley (PI)

“Neuronal mechanisms of nutrient-induced cognitive enhancement”

The goal of this project is to explore the biochemical mechanism for dietary cognitive enhancers.

Role: CPI

###### Publications

### **COMPLETE LIST ALSO AVAILABLE ON MYBIBLIOGRAPHY:** <http://www.ncbi.nlm.nih.gov/sites/myncbi/roberto.galvez.2/bibliography/47629703/public/?sort=date&direction=descending>

Collins, S.M., Belagodu A.P., Reed, S., **Galvez, R.,** SHANK1 is differentially expressed during development in CA1 hippocampal neurons and astrocytes. Developmental Neurobiology, doi: 10.1002/dneu.22564 (2018).

**Cover Image** doi: 10.1002/dneu.22585

Hammerslag, L., Belagodu, A. P., Aladesuyi A. O., Karountzos, A., Guo, Q., **Galvez, R.,** Roberts, B., Gulley, J. Adolescent impulsivity as a sex- and subtype-dependent predictor of impulsivity, alcohol drinking, and dopamine D2 receptor expression in adult rats. *Addiction Biology*. doi: 10.1111/adb.12586 (2017).

Loh, R., Collins, S.M., **Galvez, R.** Neocortical prodynorphin expression is transiently increased with learning: Implications for time- and learning-dependent neocortical kappa opioid receptor activation. *Behavioral Brain Research.* 335 p.145-150 (2017).

Belagodu, A. P., Fleming, S., **Galvez, R.** Neocortical developmental analysis of vasculature and their growth factors offer new insight into fragile X syndrome abnormalities. *Developmental Neurobiology*. doi: 10.1002/dneu.22514 (2017).

Belagodu, A. P., Zendeli, L., Slater, B. J., G**alvez, R.** Blocking elevated VEGF-A attenuates non-vasculature Fragile X Syndrome abnormalities. *Developmental Neurobiology*. 77(1) p.14-25 (2017).

Loh, R., Chau, L., Aijaz, A., Wu, K., **Galvez, R.** Antagonizing the different stages of kappa opioid receptor activation selectively and independently attenuates acquisition and consolidation of associative memories. *Behavioral Brain Research*. 323 p.1-10 (2017).

Belagodu, A. P., Johnson, A. M., **Galvez, R.** Characterization of Ultrasonic Vocalizations of Fragile X Mice. *Behavioural Brain Research*. doi:10.1016/j.bbr.2016.04.016 (2016).

Loh, R.M., **Galvez, R.,** Kappa-Opioid Antagonism Impairs Forebrain-Dependent Associative Learning; a Trace Eyeblink Conditioning Analysis. Behavioral Neuroscience. Behav Neurosci. 129(6) p.692-700 (2015).

Chau, L.S., Prakapenka, A.V., Zendeli, L., Davis, A.S., **Galvez, R.**, Training-dependent associative learning induced neocortical structural plasticity: a trace eyeblink conditioning analysis. *PLoS One*. 9(4), e95317 (2014).

Loh, R.M., **Galvez, R.**, Opioid Antagonism Impairs Acquisition of Forebrain-Dependent Trace-Associative Learning: An Eyeblink Conditioning Analysis. *Pharmacology and Biochemistry and Behavior.* 118 p.46-50 (2014).

Chau, L., Akhtar, O., Mohan, V., Kondilis, A., **Galvez, R.**, Rapid Adult Experience-Dependent Anatomical Plasticity in Layer IV of Primary Somatosensory Cortex. *Brain Research.* 1543, p.93-100 (2014).

Chau, L., Prakapenka, P., Fleming, S.A., Davis, A.S., **Galvez, R**., Elevated Arc/Arg 3.1 Protein Expression in the Basolateral Amygdala Following Auditory Trace-Cued Fear Conditioning. *Neurobiology of Learning and Memory*. 106, p.127-33 (2013).

Chau, L.S., Davis, A.S., **Galvez, R**., Neocortical Synaptic Proliferation Following Forebrain-Dependent Trace Associative Learning. *Behavioral Neuroscience*. 127(2), p.285-92 (2013).

Galvan A.M., **Galvez R.** Neocortical vasculature abnormalities in the Fragile X mental retardation syndrome. *Brain Research.* 1471 p.155-161 (2012).

Chau L.S., **Galvez R.** Amygdala's involvement in facilitating associative learning-induced plasticity: a promiscuous role for the amygdala in memory acquisition. *Frontiers in Integrative Neuroscience*. 6:92. (2012).

McKay, B., Oh, M.M., **Galvez, R.,** Burgdorf, J., Kroes, R., Weiss, C., Adelman, J., Moskal, J.R., Disterhoft, J., Increasing SK2 Channel Activity Impairs Associative Learning. *Journal of Neuroscience,* 108 p.863-70 (2012).

**Galvez, R.,** Nicholson, D.A., Disterhoft, J., Physiological and Anatomical Studies of Associative Learning: Convergence with Learning Studies of W.T. Greenough. *Developmental Psychobiology,* 53:5 p.489-504 (2011).

**Galvez, R.,** Cua, S., Disterhoft, J., Age-related deficits in a forebrain-dependent task, trace-eyeblink conditioning. *Neurobiology of Aging*, 32:10 p.1915-22 (2011).

**Galvez, R.,** Weiss, C., Cua, S., Disterhoft, J., A novel method for precisely timed stimulation of mouse whiskers in a freely moving preparation; application for delivery of the conditioned stimulus in trace eyeblink conditioning. Methods. *Journal of Neuroscience Methods,* 15:177 p.434-9 (2009).

**Galvez, R.,** Weible, A., Disterhoft, J., Cortical barrel lesions impair whisker-CS trace eyeblink conditioning. *Learning & Memory,* 14 p.84-93 (2007).

Weiss, C., Weible, A.P., **Galvez, R**. and Disterhoft, J.F., Forebrain-cerebellar interactions during learning. *Cell science Reviews*, 3 p.200-230 (2006).

**Galvez, R.,** Weiss, C., Weible, A., Disterhoft, J., Vibrissa-signaled eyeblink conditioning induces somatosensory cortical plasticity. *Journal of Neuroscience*, 31:26 p.6062-8 (2006).

**Galvez, R.** and Greenough, W.T. Sequence of abnormal dendritic spine development in primary somatosensory cortex of a mouse model of the fragile X mental retardation syndrome. *American Journal of Medical Genetics A*, 1:135 p.155-160 (2005).

**Galvez, R.,** Smith, R.L., Greenough, W.T. Olfactory bulb mitral cell dendritic pruning abnormalities in a mouse model of the fragile X mental retardation syndrome. *Developmental Brain Research,* June 30(157) p.214-216 (2005).

Irwin, S.A., Christmon, C.A., Grossman, A.W., **Galvez, R.**, Kim, S.H., DeGrush, B.J., Weiler, I.J., and Greenough, W.T. Fragile X mental retardation protein levels increase following complex environment exposure in rat brain regions undergoing active synaptogenesis. *Neurobiology of Learning and Memory,* 83(3) p.180-187 (2005).

**Galvez, R., Gopal, A., Greenough, W.T. Somatosensory cortical barrel dendritic abnormalities in a mouse model of the fragile X mental retardation. *Brain Res*earch, 971:1 p.83-89 (2003).**

Irwin, S.A, **Galvez, R.,** Weiler, I.J., Beckel-Mitchener, A. and Greenough, W.T. Brain structure and the functions of FMRP. In Hagerman, R.J. and Hagerman, P.J. (Eds). Fragile X Syndrome: Diagnosis, Treatment, and Research*, 3rd Edition.* Baltimore:Johns Hopkins University Press, 2002.

Churchill, J. D., Grossman, A.W., Irwin, S.A., **Galvez, R.,** Klintsova, A.Y., Weiler, I.J. and Greenough, W.T. A Converging-Methods Approach to Fragile X Syndrome. *Developmental Psychobiology,* 40:323-338, (2002).

**Churchill, J.D, Galvez, R., Colcombe, S., Swain, R.A., Kramer, A.F., Greenough, W.T. Exercise, experience and the aging brain. *Neurobiology of Aging*, p.1–15 (2002).**

Greenough, W.T., Klintsova, A.Y., Irwin, S.A., **Galvez, R.,** Bates, K.E., Weiler, I.J. Synaptic regulation of protein synthesis and the fragile X protein. *PNAS,* 98: 7101-7106, (2001).

**Irwin, S.A., Galvez, R., Greenough, W.T. Dendritic spine structural anomalies in fragile-X mental retardation syndrome. *Cerebral Cortex: Dendritic Mechanisms in the Understanding of Developmental Disorders*, 10 p. 1038-1044 (2000).**

Quirarte, G.L., **Galvez, R.,** Roozendaal B., McGaugh, J.L., Norepinephrine Release in the amygdala in response to footshock and opioid peptidergic drugs. *Brain Research,* 108 p.134-140 (1998).

[**Galvez, R., Mesches, M.H., McGaugh, J.L., Norepinephrine release in the amygdala in response to footshock stimulation. *Neurobiology of Learning and Memory,* 66 p. 253-257 (1996).**](http://www.idealibrary.com/links/citation/1074-7427/66/253?null)

###### Published Abstracts

Coiado, O.C., Ahmad, K., Yodh, J.G., **Galvez, R.,** Introducing 3D Printing to Prospective Medical Students to Integrate Engineering Concepts into a Multidisciplinary Curriculum. Oct 17-20, 2018. *2018 Biomedical Engineering Society Annual Meeting*. Atlanta, GA.

Yodh, J.G., Coiado, O.C., **Galvez, R.,** Ahmad, K., Rowen, J., Development of Problem-Based Learning Experiences for Prospective Students in the First Engineering-Integrated Medical School. June 9-12, 2018. *22nd IAMSE Annual Meeting.* Henderson, NV.

Ahmad, K., Yodh, J., Aldridge, B., Coiado, O., **Galvez, R.,** Pan, D., Greeley, D., Roberts-Lieb, S., Amos, J., Rowen, J., Pluta, W., Integrating engineering into the Carle Illinois College of Medicine curriculum. March 21-23, 2018. *CGEA 2018 Regional Spring Meeting: Learning and Improvement Across the Continuum.* Rochester, MN.

Collins, S.M., **Galvez, R.,** Neocortical SHANK1 shRNA knockdown impairs associative learning of whisker-trace-eyeblink conditioning. Nov 11-15, 2017. *Annual Meeting of the Society for Neuroscience.* Washington, DC.

Belagodu, A., Fleming, S., **Galvez, R.,** Characterization of Developmental Vascular Properties in a Mouse Model of Fragile X Syndrome. June 5-10, 2016. *Gordon Research Conference: Fragile X and Autism-related Disorders*.

Belagodu, A., Johnson, A., **Galvez, R.,** Detailed Analysis of Fragile X Syndrome Mice Ultrasonic Vocalizations, a Model to Study Speech Deficits. June 5-10, 2016. *Gordon Research Conference: Fragile X and Autism-related Disorders*.

Collins, S.M., Reed, S., **Galvez, R.,** Developmental In vivo cellular localization of Shank1 and Shank2 scaffold proteins. Oct 17-21, 2015. *Annual Meeting of the Society for Neuroscience.* Chicago, IL.

Belagodu, A., Johnson, A., **Galvez, R.,** Detailed spectral analysis of fragile X syndrome mice vocalizations, a model to study speech deficits. Oct 17-21, 2015. *Annual Meeting of the Society for Neuroscience*. Chicago, IL.

Loh, R.M., Shah, S., **Galvez, R.,** Effect of Local Kappa Opioid modulation on forebrain dependent trace associative learning: An eyeblink conditioning analysis. Oct 17-21, 2015. *Annual Meeting of the Society for Neuroscience*. Chicago, IL.

Loh, R., Shah, S., **Galvez, R.,** Neocortical Kappa Inhibition Attenuates Forebrain-Dependent Associative Learning. Sept 17-20, 2015. *Pavlovian Society Meeting.* Portland, OR.

Collins, S., Chau, L., **Galvez, R.,** The role of glial SHANK1 in trace associative learning-induced neocortical synaptic plasticity. Sept 17-20, 2015. *Pavlovian Society Meeting.* Portland, OR.

Kang, S., Wu, M., **Galvez, R.**, Gulley, J.M., Amphetamine exposure during adolescence alters anxiety­ and depression­like behaviors and prefrontal cortex dopamine receptor expression in adulthood. June 13-18, 2015. *77th Annual Meeting - College on Problems of Drug Dependence.* Phoenix, AZ.

**Galvez, R.**, Belagodu, A., VEGF modulation, a novel mechanisms mediating abnormalities in the Fragile X Mental Retardation Syndrome. Jan 24-29, 2015. *Winter Conference on Brain Research.* Big Sky MO.

Kang, S., Sinch, A.P., Soler W.M., Wu, M., Daniels, Z.P., **Galvez, R**., Gulley, J.M., The effects of amphetamine exposure during adolescence on anxiety- and depression-like behavior in young adulthood, Nov 15-19, 2014. *Annual Meeting of the Society for Neuroscience*. Washington, DC.

Loh, R., Shah, S., **Galvez, R.**, Effect of kappa opioid modulation on forebrain dependent trace associative learning: An eyeblink conditioning analysis, Nov 15-19, 2014. *Annual Meeting of the Society for Neuroscience.* Washington DC.

Collins, S.M., **Galvez, R.**, The role of SHANK in trace associative learning-induced neocortical synaptic plasticity, Nov 15-19, 2014. *Annual Meeting of the Society for Neuroscience.* Washington DC.

Belagodu, A., **Galvez, R.**, VEGF inhibition alleviates abnormalities in a mouse model of the fragile X mental retardation syndrome. Nov 15-19, 2014. *Annual Meeting of the Society for Neuroscience.* Washington DC.

**Galvez, R.**, Belagodu, A., Blocking vascular endothelial growth factor alleviates abnormalities in a mouse model of Fragile X. *2014 Gordon Research Conference: Fragile X and Autism-related Disorders*.

Chau, L.S., Prakapenka, A.V., Zendeli, L., **Galvez, R.**, Neocortical synaptic proliferation following trace-associative learning. Nov 9-12, 2013. *Annual Meeting of the Society for Neuroscience.* San Diego, CA.

Loh, R., **Galvez, R.**, Opioid modulation of acquisition of forebrain-dependent associative learning. Nov 9-12, 2013. *Annual Meeting of the Society for Neuroscience.* San Diego, CA.

Belagodu, A., **Galvez, R.**, VEGF inhibition as a potential treatment for FXS neocortical vasculature abnormalities. Nov 9-12, 2013. *Annual Meeting of the Society for Neuroscience.* San Diego, CA.

Fleming, S.A., **Galvez, R.**, Neocortical developmental vasculature abnormalities in a mouse model of fragile X syndrome. Nov 9-12, 2013. *Annual Meeting of the Society for Neuroscience.* San Diego, CA.

**Galvez, R.**, Chau, L.S., Amygdalar Arc expression following trace-fear conditioning. *2013 Pavlovian Society Meeting.* Austin, TX.

Chau, L.S., Prakapenka, A.V., Zendeli, L., **Galvez, R.**, Neocortical synaptic modifications following forebrain-dependent trace-associative learning. *2013 Pavlovian Society Meeting.* Austin, TX.

Prakapenka, A.V., Chau, L.S., Zendeli, L., Davis, A.S., **Galvez, R**. Anatomical Analysis of Learning Induced Dendritic Properties in Mouse Primary Cortex. March 7, 2013. *Society for Neuroscience Chicago Chapter.* Chicago, IL.

Fleming, S., **Galvez, R**., Developmental Analysis of Neocortical Vasculature Abnormalities in a Mouse Model of Fragile X Syndrome. March 7, 2013. *Society for Neuroscience Chicago Chapter.* Chicago, IL.

Davis, A., G**alvez, R.** Abnormal neocortical VEGF expression in Fragile X Syndrome. Oct 13-17, 2012. *Annual Meeting of the Society for Neuroscience.* New Orleans, LA.

Chau, L.S., Hau, A., Prakapenka, A.V. Fleming, S. Chien, R., G**alvez, R.** Amygdala arc expression following declarative memory consolidation: A trace-cued-fear conditioning analysis. Oct 13-17, 2012. *Annual Meeting of the Society for Neuroscience.* New Orleans, LA.

Davis, A., Cua, S., Weiss, C., Disterhoft, J., G**alvez, R.** Learning mediated plasticity in secondary neocortex - a trace-eyeblink conditioning analysis. Oct 13-17, 2012. *Annual Meeting of the Society for Neuroscience.* New Orleans, LA.

Galvan, A.M., **Galvez, R.,** Abnormal blood vessel density in aged Fragile X mice. Nov 12-16, 2011. *Annual Meeting of the Society for Neuroscience.* Washington, DC.

Davis, A., Chau, L.S., **Galvez. R.,** Analysis of conditioning-induced neocortical synapsin I expression. Nov 12-16, 2011. *Annual Meeting of the Society for Neuroscience.* Washington, DC.

Chau, L.S., Khan, A.S., Siraj, K., Khan, A.M., Prakapenka, A.V., **Galvez, R.,** Neocortical Arc Expression Following Associative Learning. Nov 12-16, 2011. *Annual Meeting of the Society for Neuroscience.* Washington, DC.

**Galvez, R**., Chau, L.S., Khan, A.M., Khan, A.S. Neocortical layer specific whisker-deprivation induced FMRP expression. Nov 12-16, 2011. *Annual Meeting of the Society for Neuroscience.* Washington, DC.

Chau, L.S., **Galvez, R.,** Whisker Deprivation induced Experience-Dependent Plasticity alters Synapsin I Expression in the Adult Somatosensory Barrel Cortex, Nov 13-17, 2010*. Annual Meeting of the Society for Neuroscience.* San Diego, CA.

Galvan, A.M., **Galvez, R.,** Analysis of neocortical vascular density in a mouse model of the Fragile X Mental Retardation Syndrome, Nov 13-17, 2010. *Annual Meeting of the Society for Neuroscience.* San Diego, CA.

**Galvez, R.,** Transient Associative Learning Induced Plasticity in Primary Somatosensory Neocortex,Fe 6-13, 2010. *Winter Conference on Neuronal Plasticity.* Aruba.

McKay, B.M**.**, **Galvez, R.,** Wang, W.C., Disterhoft, J.F., The SK channel activator NS309 modulates the firing rate and AHP of CA1 pyramidal neurons and impairs learning of trace eyeblink conditioning, Oct 17-21, 2009*. Annual Meeting of the Society for Neuroscience.* Chicago, IL.

Flores, L.C., **Galvez, R.,** Disterhoft, J.F., Projections of rabbit whisker barrel cortex: Possible targets for trace eyeblink conditioning, Oct 17-21, 2009*. Annual Meeting of the Society for Neuroscience.* Chicago, IL.

**Galvez, R.,** Disterhoft, J.F. Whisker-trace-eyeblink conditioning facilitates examination of aging-associated learning deficits in mice, Feb 18-25, 2009*. Winter Conference on Neuronal Plasticity.* Barbados.

**Galvez, R.,** Weiss, C., Cua, S., Disterhoft, J.F. Age-dependent learning deficits in a forebrain-dependent paradigm, trace eyeblink conditioning, coincide with neocortical plasticity, Nov 15-19, 2008*. Annual Meeting of the Society for Neuroscience.* Washington, DC.

**Galvez, R.,** Weible, A.P., Disterhoft, J.F. Whisker-trace-eyeblink conditioning induced plasticity in cortical barrel neuronal firing patterns, Nov 3-7, 2007. *Annual Meeting of the Society for Neuroscience.* San Diego, CA*.*

**Galvez, R.,** Disterhoft, J.F. Barrel cortex: a site of storage for whisker trace eyeblink conditioning, *Jan* 2007. *Annual Winter Conference on the Neurobiology of Learning and Memory.* Park City, UT.

**Galvez, R.,** Weible, A., Disterhoft, J., Posteromedial barrel subfield lesions inhibit whisker-trace-eyeblink acquisition and hinder performance of already learned associations;   implications for long term memory storage, Oct 14-18, 2006. *Annual Meeting of the Society for Neuroscience.* Atlanta, GA.

**Galvez, R.,** Weiss, C., Weible, A., Disterhoft, J., Vibrissae stimulation is an effective conditioned stimulus for trace eyeblink conditioning and modulates rabbit cortical barrel representations, Nov 12-16, 2005.***Annual Meeting of the Society for Neuroscience.* Washington, DC.**

**Galvez, R.,** Greenough, W.T., Fmr1 cortical barrel expression in a mouse model of the Fragile X Mental Retardation Syndrome, Nov 10-11, 2005. *Barrells XVIII.* Baltimore, MD.

**Galvez, R.,** Szymanek, K., Greenough, W.T., Cortical barrel metabolic and cellular properties in a mouse model of the Fragile X Mental Retardation Syndrome, Nov 12-16, 2005*.* ***Annual Meeting of the Society for Neuroscience.* Washington, DC.**

**Galvez, R.**, Weiss, C., Weible, A., Disterhoft, J., Cortical plasticity induced by trace eyeblink conditioning with vibrissae stimulation, Jan 26, 2005. *Cold Spring Harbor Learning and memory meeting.* Cold Spring Harbor, NY.

**Galvez, R.,** Weiss, C., Disterhoft, J., Vibrissae stimulation in the rabbit supports trace eyeblink conditioning and increases the size of cortical barrel representations, *Oct 21-22,* 2004. *Barrells XVII.* Carlesbad, CA.

Oh, M.M., Weible, A.P., Azzarello, J., **Galvez, R.**, Maccaferri, G., Disterhoft, J.F., Decreased excitability in stratum oriens interneurons of hippocampal slices from aging animals, Oct 23-27, 2004*.* ***Annual Meeting of the Society for Neuroscience.* San Diego, CA.**

**Galvez, R.,** Greenough, W.T. Abnormal dendritic spine development in primary somatosensory cortex of a mouse model of the Fragile X Mental Retardation Syndrome, Oct 23-27, 2004*.* ***Annual Meeting of the Society for Neuroscience.* San Diego, CA.**

**Galvez, R.,** Greenough, W.T. Abnormal dendritic spine development in primary somatosensory cortex of a mouse model of the Fragile X Mental Retardation Syndrome, Oct 23-27, 2004*.* ***Society for Neuroscience*** *Lay Summary Press Book.* San Diego, CA

**Galvez, R.,** Smith, R.L. Greenough, W.T. Abnormal olfactory bulb mitral cell dendritic withdrawl in a mouse model of the Fragile X Mental Retardation Syndrome, Nov 4-9, 2003*.* ***Annual Meeting of the Society for Neuroscience.* New Orleans, LA.**

**Galvez, R.,** Soskin, P.N., Cho, J.H., Grossman, A.W., Greenough, W.T. Voluntary exercise increases the number of new neurons in the adult rat motor cortex in a time dependent fashion. **Nov 2-7, 2002. *Annual Meeting of the Society for Neuroscience.* Orlando, FL.**

Li, Y. Hong, S., **Galvez, R.,** Atkins, N., Avasthi, P., Swimmer, R., Kuntz, W.H., Campos, V.E., Young, E. Development of intrinsinc memberane proteins and thalamocortical synaptic transmission in the cerebral cortex-specific *NMDAR1* knockout mice, Nov 2-7, 2002. ***Annual Meeting of the Society for Neuroscience.* Orlando, FL.**

Greenough, W.T., Churchill, J.D. and **Galvez, R.** Exercise, Learning and the Aging Brain. March, 2002. *Annual Meeting for the American Association on Aging*.

Greenough, W.T., Eberwine, J.H., Weiler, I.J., Beckel-Mitchener, A., Myashiro, K., Klintsova, A.Y., Irwin, S. A. and **Galvez, R**. Morphological and molecular correlates of Fragile X Syndrome and a mouse model. March 25-26, 2002. *NICHD Fragile X Investigators' Meeting,* Potomac, MD.

Greenough, W.T., Weiler, I.J., Eberwine, J.H., Irwin, S.A., **Galvez, R.** and Churchill, J.D. Cellular Substrates of Fragile X Syndrome, "Potential Cellular and Molecular Mechanisms in Autism and Related Disorders," Sept. 6-7, 2001*. NICHD and NIEHS.*  Bethesda, MD.

**Galvez, R., Gopal, A.R. Greenough, W.T. Dendritic abnormalities associated with a mouse model of the fragile X mental retardation syndrome. Nov 10-15, 2001*. Society for Neuroscience Lay Summary Press Book.* San Diego, CA.**

**Galvez, R., Gopal, A.R. Greenough, W.T. Dendritic abnormalities associated with a mouse model of the fragile X mental retardation syndrome. Nov 10-15, 2001*. Annual Meeting of the Society for Neuroscience.* San Diego, CA.**

Atkins. N., Hong, S., Guo, H., Jin, X., **Galvez, R.,** Avasthi, P., Swimmer, R., Kuntz, W.H., Li, Y., Defective barrel formation in cerebral cortex-specific NMDAR1 knockout mice. Nov 4-9, **2000*. Annual Meeting of the Society for Neuroscience.* New Orleans, LA.**

Klintsova, A.Y., Dickson, E., **Galvez, R.,** Henson, C., Greenough, W.T. Complex motor task learning and plasticity in cortex and cerebellum: comparison with the effects of forced or voluntary exercise on BDNF and TrkB expression. Nov 4-9, **2000*. Annual Meeting of the Society for Neuroscience.* New Orleans, LA.**

**Galvez, R., Adrian, C.M., Greenough, W.T. Repetitive non-challenging motor activity and removal from motor learning conditioning causes a down regulation in GluR2 (AMPA) in the motor cortex. Nov 4-9, *2000. Annual Meeting of the Society for Neuroscience*. New Orleans, LA.**

Kodish, I., Briones, T., Irwin, S.A., Christmon, C.A., **Galvez, R**., Greenough, W.T. Activity dependent upregulation of plasticity related proteins in the motor cortex. Oct 23-28, 1999*. Annual Meeting of the Society for neuroscience.* Miami Beach, FL.

**Galvez, R.,** Adrian, C.M., Greenough, W.T. Spine density in the dorsal lateral corpus striatum increases in response to motor activity. Oct 23-28, 1999*. Annual Meeting of the Society for neuroscience.* Miami Beach, FL.

**Galvez, R.,** McNamee, D.M., Kleim, J.A., Greenough, W.T. Motor activity and not learning causes an increase in spine density in the dorsal lateral corpus striatum. Nov 7-12, 1998. *Annual Meeting of the Society for neuroscience.* Los Angeles, CA.

Irwin, S.A., Swain, R.A., Christmon, C.A., Chakravarti, A., **Galvez, R.,** Greenough, W.T. Behavioral alteration of fragile-X mental retardation protein expression. Nov 7-12, 1998. *Annual Meeting of the Society for neuroscience.* Los Angeles, CA.

**Galvez, R.,** Greenough, W.T. Densitometric Evaluation of Immunocytochemical Reactions and *In Situ* Hybridization. Feb 19, 1998*. Workshop on Quantitative Approaches to the Estimation of Changes in Organs, Tissue, and Cells.* University of Illinois, Urbana-Champaign, IL.

Greenough, W.T., Weiler, I.J., Brazelton, T., Irwin, S.A., Harris, J., Patel, B.A., Patel, B.N., **Galvez, R.,** and Cohen, M. "Translation of FMR1 at synapses: Possible role in synapse maturation and pruning", July 11, 1997. *International Conference on Mental Retardation: Genes, Brain, and Behavior,* Staten Island, NY.

**Galvez, R.,** Quirarte, G.L., McGaugh, J.L. Opiates in the Amygdala. March 9-12, 1996. *Conference on the Neurobiology of Learning and Memory,* University of California, Irvine.

Quirarte, G.L., **Galvez, R.,** McGaugh J.L. Variations in footshock intensity and opioid peptidergic drugs: Effects on norepinephrine release within the amygdala. April 26-28 1996 Congreso Nacional de Ciencias Fisiologicas; *Sociedad Mexicana de Ciencias Fisiologicas,* Leon, Guanajuato.

**Galvez, R.,** Quirarte, G.L., McGaugh, J.L. Effects of Different Footshock intensities and Opioid Peptidergic Drugs on Norepinephrine Release within the Amygdala. Nov 16-21, 1996 *Annual Meeting of the Society for Neuroscience*. Washington, DC.

McGaugh, J.L., **Galvez, R.,** Mesches, M.H. Norepinephrine release in the Amygdala in Response to Footshock Stimulation used in Inhibitory Avoidance Training. Nov 11-16, 1995*. Annual Meeting of the Society for Neuroscience*, San Diego CA.