CURRICULUM VITAE: Farah Domonique Lubin

University of Alabama at Birmingham (UAB)
Shelby Interdisciplinary Biomedical Research Building
1825 University Boulevard
Birmingham, AL 35294
(205) 996-6084
E-mail: flubin@nrc.uab.edu
Citizenship: USA

MAJOR RESEARCH INTEREST

Epigenetic mechanisms of neural plasticity
Epigenetic mechanisms mediating the effects of epilepsy
Neurobiology of learning and memory
Epigenetic links between immune and brain functions to mediate behavior

EDUCATION

1996-2001	Ph.D., Cell/Molecular Biology Binghamton University (SUNY), Binghamton, NY Advisor: Dennis W. McGee, Ph.D. *Dissertation Title:* The Co-Regulatory Effect of Extracellular Matrix Proteins and Integrins with Interleukin-1β on Cytokine Secretion by Epithelial Cells
1992-1996	BS, Major: Biology Minor: Chemistry, *summa cum laude* (Senior Honor Thesis) Alabama State University, Montgomery, AL

POSITIONS HELD

2009-Present	Assistant Professor, Department of Neurobiology, University of Alabama-Birmingham, Birmingham, AL
2009-Present	Investigator, McKnight Brain Institute, University of Alabama at Birmingham, Birmingham, AL
2009-present	Assistant Professor, Dept. of Cell Biology, University of Alabama at Birmingham, Birmingham, AL
2006-2008	Postdoctoral Fellow, Advisor: J. David Sweatt, Ph.D., Department of Neuroscience, Baylor College of Medicine, Houston, TX Department of Neurobiology, University of Alabama-Birmingham, Birmingham, AL
2002-2005	Postdoctoral Fellow, Cain Foundation Labs/Texas Children's Hospital**,** Advisor: Anne E. Anderson, M.D.**,** Department of Pediatrics-Neurology, Baylor College of Medicine, Houston, TX
1996-2001	Research Assistant, Advisor: Dennis W. McGee, Ph.D., Mucosal Immunology Lab, (Clark Fellowship program), Binghamton University, Binghamton, NY
1995-1996	Research Assistant, Advisor: Eddie Moore, Ph.D., Molecular Biology Lab (MARC/NIH program), Alabama State University, Montgomery, AL
Summer 1995	Research Assistant, Molecular Embryology Lab (MARC/NIH program), Memorial Sloan Kettering Cancer Center, New York, NY

AWARDS AND HONORS

2009- Present	Cell Science Journal Review Board
2008-2011	NIMH/NIH Pathway to independence Award (K99/R00 MH082106)
2008	FASEB/MARC Postdoctoral Professional Development and Enrichment Award
2005-2007	NINDS/NIH Research Award (F32NS48811)
2004-2005	NINDS/NIH Microarrays Supplemental Research Award (RO1NS39942)

2004-2005	AES/Milken Epilepsy Foundation Award
2002-2005	METPAC SFN Travel Fellowship Grant
2002	Gordon Conference Travel Award (Synaptic Transmission)
2002	UNCF-Merck Post-doctoral Science Research Fellowship (alternate)
2002-2003	NINDS Post-doctoral Supplemental Research Award (RO1NS39942)
2000	Robert L. Szymanski III memorial Travel Award
1998	Clifford D. Clark Fellowship Research Award
1996-2001	Clifford D. Clark Fellowship Academic Award
1993-1994	Minority Biomedical Research Services Award (MBRS; 2T34GM008167)
1994-1996	Minority Access to Research Careers Award (MARC; 5T35HL007801)

SOCIETY MEMBERSHIP

2002- Present	Society for Neuroscience
2002- Present	American Epilepsy Society
2002- Present	Women in Neuroscience
2005- Present	Molecular and Cellular Cognition Society
2005- Present	Comprehensive Neuroscience Center-UAB
2008- Present	American Physiological Society
2009- Present	Society for Cell Science

AD HOC REVIEWER

Cell Science
Lancet Neurology
Life Sciences
Nature Neuroscience
Neurobiology of Learning and Memory
Journal of Neurochemistry
Journal of Neuroscience

TEACHING EXPERIENCE

2010-Present	Course Director: NEUR 707 Cognition and Cognitive Disorders JC, 10 students, University of Alabama at Birmingham, Alabama, AL
2009	Co-Instructor: NEUR 707 Cognition and Cognitive Disorders JC, 12 students, Ling Li as course director, University of Alabama at Birmingham, Alabama, AL
2009-Present	Instructor: NBL 798 Dissertation Research, 2 students, University of Alabama at Birmingham, Alabama, AL
2009	Co-Instructor: NBL 740 Mechanisms of Learning and Memory, 14 students, 4 credit hours, David Sweatt as course director, University of Alabama at Birmingham, Alabama, AL
Summer 2009	Instructor: STH 395, Science and Honor Technology Proposal Preparation, 4 students, 1 credit hour, Diane Tucker as Course director, University of Alabama at Birmingham, Alabama, AL
2009	Co-Instructor: NEUR 723, Experimental Design, 14 students, 2 credit hours, Candace Floyd as Course director, University of Alabama at Birmingham, Alabama, AL
2007-2009	Co-Instructor: STH 299, Science and Honor Technology Program-Mechanisms of Learning and Memory, University of Alabama at Birmingham, Alabama, AL
2002-2007	Teaching: There were no formal teaching requirements during this postdoctoral training period. However, I had the opportunity to teach various techniques to rotating graduate students and junior post-docs in the lab.
1998-1999	Teaching Assistant: Immunology, Binghamton University, Binghamton, NY
1995-1996	Teaching Assistant: Physics, Chemistry**,** Alabama State University, Montgomery, AL

UNIVERSITY SERVICES

2009-present Neuroscience Graduate Admissions Committee, University of Alabama-Birmingham, Birmingham, AL: The role of the neuroscience admissions committee is to screen potential graduate student applications, and to make recommendations to the Graduate Biomedical Sciences admissions committee.

2009-present Neurobiology department secondary faculty appointment committee, University of Alabama-Birmingham, Birmingham, AL: The role of the secondary faculty appointment committee is to review faculty applications for secondary faculty appointment in the neurobiology department and make recommendations to the committee chair (John Hablitz).

2009 Postdoctoral Seminar: Obtaining a NIH/K99 Award, Sponsored by Postdoctoral Association at the University of Alabama-Birmingham, Birmingham, AL.

2006-present Summer Program in Neuroscience (SPIN), University of Alabama-Birmingham, Birmingham, AL. SPIN is funded by the National Science Foundation Research Experience for Undergraduates (REU) program. Each summer, I provide motivated undergraduates who have demonstrated excellent scientific aptitude with the opportunity to experience independent research in the neurosciences.

2007 Alzheimer's Disease Research Center (ADRC) Harper Fellowship. University of Alabama-Birmingham, Birmingham, AL. I provided undergraduates, many on their way to medical school, the opportunity to experience basic science research for the first time in a laboratory setting.

2005-2006 Oral qualifying preparatory course, Baylor College of Medicine, Houston, TX.I provided first and secondary graduate students a forum by which they could develop critical reasoning skills through critical reading of the literature and methods for developing research plans and experimental design. All of these skills are instrumental in the preparation for their oral qualifying exams.

PUBLIC SERVICES

2008-Present African-American Civic Empowerment Inaugural Fund. The purpose of this organization is to raise money to send young African-American adults from Alabama to national and regional public service and political trainings, conventions and other events so that we are better able to represent and benefit the State in all aspects of public service and politics.

2007-Present Faculty Women's Club. The UAB Faculty Women's Club helps create a sense of community among UAB women through programs to welcome newcomers, children's playgroups, intellectually diverse programs, interest groups, and service activities including our scholarship program for deserving women returning to college.

2007-Present International League Against Epilepsy (ILAE)-North American Commission initiative in Haiti. This is an effort of the North American Commission, born out of the ILAE, to increase epilepsy awareness in Haiti. A group of Haitian intellects called the Haitian League have organized to write grants and facilitate EEG monitoring of patients in rural parts of Haiti.

PUBLICATIONS

20. S. Gupta, S.Y. Kim, S. Artis, D.L. Molfese, A. Schumacher, J.D. Sweatt, R.E. Paylor, and **F. Lubin***. Histone Methylation regulates memory formation. 2009, *J. Neurosci*. In Press. ***Corresponding author**
19. T. L. Roth, **F. Lubin**, A. Funk, and J. D. Sweatt. Lasting epigenetic influence of early-life adversity on the BDNF gene. 2009, *Biol. Psychiatry*, May 1;65(9):760-69.
18. **F. Lubin***, T.L. Roth, and J.D. Sweatt. Epigenetic regulation of BDNF gene transcription in the consolidation of fear memory. 2008, *J. Neurosci*, 28(42):10576-10586. ***Corresponding author**
17. Y. Jiang, B. Langley, **F. Lubin**, W. Renthal, M.A. Wood, D.H. Yasui, A. Kumar, E.J. Nestler, S. Akbarian, A.C. Beckel-Mitchener. Epigenetics in the Nervous System. 2008, *J. Neurosci*, 28(46):11753-11759.

16. H.J. Ahn, C. Hernandez, J. Levenson, **F. Lubin**, H.C. Liou, and J.D. Sweatt. c-Rel, an NF-κB Family Transcription Factor, is Required for Hippocampal Long-term Synaptic Plasticity and Memory Formation. 2008, *Learning and Memory*, 11;15(7):539-49.
15. A.P. Nicholas*, **F. Lubin***, P.J. Hallett, P. Vattem, A.R. Crossman, P. Ravenscroft, E. Bezard, S. Zhou, J.M. Brotchie, J.D. Sweatt, and D.G. Standaert. Striatal Histone Post-Translational Modifications in MPTP Models of Levodopa-Induced Dyskinesia.
***Co-First author.** 2008, *J. Neurochem*,106, 486–494.
14. Y.C. Lai, **F. Lubin**, Y. Ren, W.L Lee, A.E. Anderson. Nuclear factor-kappa B regulated transcriptomes in hippocampus during status epilepticus. 2007, *Epilepsia*, 48: 265-266.
13. **F. Lubin** and J.D. Sweatt. The IκB kinase regulates chromatin structure during reconsolidation of conditioned fear memories. 2007, *Neuron*, 20; 55(6):942-57.
12. **F. Lubin**, Y. Ren, X. Xu, and A.E. Anderson. Nuclear Factor-κB regulates seizure threshold and gene transcription following convulsant stimulation. 2007, *J. Neurochem*, 103 (4); 1381-1395.
11. M. Stulic, **F. Lubin**, P. O'Donnell, S. P. Tammariello, and D. W. McGee. Effect of the α3β1 integrin on the IL-1 stimulated activation of the c-Jun N-Terminal Kinase (JNK) in Caco-2 cells. 2007, *Cytokines*, 37(2):163-70.
10. J.M. Levenson, T. Roth, **F. Lubin**, C. Miller, I-Chia Huang, P. Desai, J.D. Sweatt. Evidence that (Cytosine-5) Methyltransferase regulates Synaptic plasticity in the CNS. 2006, *J. Biol. Chemistry*, 9;281(23):15763-73.
9. Y. Ren, L.F. Barnwell, J. Alexander, **F. Lubin**, P.J. Pfaffinger, J.P. Adelman, J.D. Sweatt, L. A. Schrader, A. E. Anderson. cAMP-dependent protein kinase phosphorylates small-conductance Ca^{2+}-activated potassium channel, SK2. 2006, *J. Biol. Chemistry*, 28;281(17):11769-79.
8. L. F. Barnwell, X. Xu, **F. Lubin**, and A.E. Anderson. Activity-dependent alterations in kv4.2: A candidate role in epilepsy. 2005, *Epilepsia*, 46: 272-273.
7. **F. Lubin**, L. D. Johnston, J. D. Sweatt, and A.E. Anderson. Kainate mediates NF-κB activation in hippocampus via PI3K and ERK. 2005, *Neuroscience*, 133(4):969-981.
6. **F. Lubin,** X. Xu, and A.E. Anderson. NF-κB gene regulation in status epilepticus. 2005, *Epilepsia*, 46: 113-114.
5. G. Li, **F. Lubin**, and D.W. McGee. α3β1 integrin induced suppression of the Caco-2 epithelial cell IL-1 signaling pathway leading to NF-κB activation. 2004, *Cellular Immunology*, 231(1-2):30-9.
4. **F. Lubin**, V.Leung, and A.E. Anderson. Modulation of hippocampal NF-κB transcriptional activity in the kainate model of epilepsy. 2004, *Epilepsia*, 45:10-10.
3. **F. Lubin**, M. Segal, and D. McGee. Regulation of epithelial cell cytokine responses by the α3β1 integrin. 2003, *Immunology*, 108(2):204-10.
2. D. McGee, **F. Lubin**, and G. Li. Suppression of epithelial cell cytokine responses by the alpha 3 beta 1 integrin is mediated through suppressed NF-kappa B activation. 2001, *Mol. Biol. Cell*, 12:2520-2521.
1. **F. Lubin**, C. Goess , M. Segal, D. W. McGee. Differential effect on IL-6, IL-8, and MCP-1 secretion in intestinal epithelial cell lines by extracellular matrix proteins. 2000, *FASEB* 14 (6)**:** A1200-A1200.

WRITTEN REPORTS ABOUT MY WORK

7. Neurology Today 2008: By Tom Valeo. Epigenetic regulation of gene expression in memory formation.
6. Dana Foundation 2008: By Tom Valeo. Certain genes apparently predispose some people to mental illness, as family inheritance patterns suggest, but new research demonstrates that environmental influences can alter the way genes express themselves.
This process, known as epigenetics, involves chemical "marks" on the DNA that either stifle or enhance the activity of genes. Epigenetic changes in the brain can affect development, memory and fear, and contribute to mental disorders, according to research presented at Neuroscience 2008, sponsored by the Society for Neuroscience.

For example, altering the methylation of the gene for BDNF, a protein crucial for learning, can block the formation of a normal fear response, according to Farah Lubin, a neurobiologist at the University of Alabama. Aberrant regulation of this gene has been implicated in the development of mental illness. "In mental disorders including schizophrenia and depression, fear processing is especially relevant," she says.

Lubin and her colleagues induced fear in a rat by inflicting a mild foot shock whenever the animal was placed in a particular training chamber. However, after receiving Zebularine, a cancer drug that affects the methylation of DNA, the rat failed to produce sufficient BDNF in its hippocampus to consolidate the experience into a long-term memory, and therefore did not develop the normal fear response. Since aberrant BDNF gene expression is suspected in psychiatric disorders including schizophrenia, depression and bipolar disorder, manipulating the epigenetic process may lead to new therapies, Lubin said.

5. Faculty of 1000 Biology: evaluations for Lubin FD et al *J Neurosci* 2008 Oct 15 28 (42):10576-86 ***"Epigenetic regulation of BDNF gene transcription in the consolidation of fear memory.***" http://www.f1000biology.com/article/id/1124557/evaluation
4. *Nature Reviews Neuroscience p.816-817.* Research highlights **in** Learning and Memory ***"Remodel to reconsolidate"*** November 2007:8 (11).
3. *Cell p.197,199.* Leading Edge, Neurobiology Select ***"A Frightful Change in Chromatin Behavior"*** October 19, 2007: 131 (2). Summary: Emerging roles for epigenetic modifications and chromatin remodeling in the nervous system provide the focal point for this issue's Neurobiology Select. Recent evidence shows that changes in chromatin structure are critical to the reconsolidation of fear memories. Other new papers characterize the regulation of neural stem cells by histone acetylation and establish roles for epigenetic modifications and chromatin remodeling in the formation of dendrites and synapses.
2. *Neuroscience Gateway (Nature).* October 2007. "***Converging roads in a yellow wood".*** Featured Article: Lubin, F.D. & Sweatt, J.D. The IκB kinase regulates chromatin structure during reconsolidation of conditioned fear memories**.** Neuron 55, 942–957 (2007).
1. UAB News The Kaleidoscope p.1,3. ***"Study eyes retrieval of memories, impact on brain, and immune system".*** September 25, 2007: 42 (34).

REVIEWS AND BOOK CHAPTERS

6. **F. Lubin**. 2010. DNA-methylation and memory formation. Role of DNA-Demethylation in Cancer and Development; Samir K Patra (Editor), Moshe Szyf (Co-editor), and Cristina Alves dos Santos (Publishing editor, Springer). Invited review in *Press*.
5. S. Gupta, R. Parrish, and **F. Lubin**. 2009. Epigenetics and Translational Medicine. Translational Medicine: Applications in Psychiatry, Neurology and Neurodevelopmental Disorders; James Barrett, Joe Coyle and Mike Williams (Co-Editors), Cambridge University Press. Invited review in *Press*.
4. T.L. Roth**, F. Lubin**, M. Sodhi, and J.E. Kleinman. 2009. Epigenetics Mechanisms in Schizophrenia. Invited review in BBA. Sep;1790(9):869-77
3. N.M. Grissom and **F. D. Lubin**. 2009. The dynamics of HDAC activity on memory formation. *Cell Science*, Commentary on Guan et al. *Nature* 2009. July 27; 6(1): ISSN 1742-8130.
2. **F. Lubin**, E.D. Roth, J.D. Sweatt, and T.L. Roth. 2008. A novel approach to understanding neural plasticity: epigenetic regulation of the *BDNF* gene. Neural Pathways Research; Editor: Florian L. Pichler. Nova Science Publishers, Inc., NY.
1. T. Patel, S. Morse, and **F. Lubin**. Epigenetics and Age-Related Long-Term Memories. In preparation to *Neurobiology of Learning and Memory*.

MANUSCRIPTS SUBMITTED/ IN PREPARATION

2. D.L. Molfese, J.D. Sweatt, and **F. Lubin**. Histone Methylation as an epigenetic marker of memory extinction. *Neurobiol. of Learning and Memory*

1. S. Gupta and **F. Lubin**. Regulation of histone methylation during memory formation in the Entorhinal Cortex. *J. Neurosci.*

INVITED PRESENTATIONS/LECTURES

2011. **F.D. Lubin**. Protein Methylation in Memory formation. Keystone Symposium on "Environmental Epigenomics and Disease Susceptibility". Asheville, NC. Invited by Drs. Randy L. Jirtle, Moshe Szyf and Frederick L. Tyson.
2010. **F. Lubin**. Histones on "Meth": Epigenetic Mechanisms in Memory formation. Michigan State University, Melbourne, MI.
2010. **F. Lubin**. Epigenetic mechanisms in the brain: Implications in memory formation and cognitive disorders. Alabama State University, Montgomery, AL.
2009. **F. Lubin**. Epigenetic mechanisms in the functioning brain: Implications in memory formation. Meites Lectureship Series at Michigan State University.
2008. **F. Lubin**. Linking the epigenetic code of Gene regulation to Fear memory formation. Minisymposium. The Society for Neuroscience Annual Meeting, Washington, DC.
2008. **F. Lubin**. Epigenetic mechanisms in the functioning brain: Implications in memory formation and epilepsy. Center for Learning and Memory, Institute for Neuroscience. University of Texas at Austin, Austin, TX.
2008. **F. Lubin**. Epigenetic molecular mechanisms in adult behavior.University of Alabama-Birmingham, Birmingham, AL. Neurology Department, Schizophrenia meeting.
2007 **F. Lubin**. Linking the Epigenetic Code of Exon-Specific BDNF DNA Methylation to Fear Memory Formation. Molecular and Cellular Cognition Society Meeting, San Diego, CA.
2007 **F. lubin**. Epigenetic mechanisms in memory formation. Science and Technology Honors Program, University of Alabama-Birmingham, Birmingham, AL.
2006 **F. Lubin** and J.D. Sweatt. NF-κB Activation and Epigenetic Mechanisms in Memory Formation. University of Alabama-Birmingham, Birmingham, AL. Neurobiology departmental retreat.
2002 **F. Lubin**, L.D. Johnston, V.W. Leung, J.D. Sweatt, and A.E. Anderson. NF-κB Activation Following Kainate-Treated Hippocampus. The Society for Neuroscience Annual Meeting, Orlando, FL.
1999 **F. Lubin**, J. Wong, and D.W. McGee. Extracellular matrix proteins and the α3β1 integrin receptor modulate Caco-2 cell cytokine secretion. Binghamton University Fall Biological Symposium.
1996 **F. Lubin** and D.W. McGee. Regulation of intestinal epithelial cell cytokine secretion by ECM proteins. Binghamton University Fall Biological Symposium.

SELECTED RESEARCH ABSTRACTS

34. R. Ryley Parrish and **F. Lubin**. Epigenetic regulation of the NR2B gene in hippocampus following kainate-induced status epilepticus. *American Epilepsy Society* Annual Meeting, Boston, MA, December 2009
33. S. Gupta and **F. Lubin**. Histone Methylation is dynamically regulated in the entorhinal cortex during consolidation of Long-term Memory. *The Society for Neuroscience* Annual Meeting, Chicago, IL. October 2009.
32. R. Ryley Parrish and **F. Lubin**. NR2B-Chromatin Structure Regulation in the Kainate-model of Epilepsy. *The Society for Neuroscience* Annual Meeting, Chicago, IL. October 2009.
31. M.R. Penner, T.L. Roth, **F. Lubin**, E.D. Roth, L.T. Hoang, J.D. Sweatt, and C.A. Barnes. DNA methylation of Zif268 is not dynamically regulated within the aged hippocampus following spatial behavior. *The Society for Neuroscience* Annual Meeting, Chicago, IL. October 2009.
30. D.L. Molfese, J.D.Sweatt, and **F. Lubin**. Histone methylation in hippocampus during memory extinction. *NIDA Mini-Convention*, Washington, DC. November 2008.
29. **F. Lubin**. Epigenetic Regulation of Genes in Seizure-induced Fear Memory Processing. *Gordon Research Conference* "Mechanisms in Epilepsy and neuronal synchronization." Maine August 2008.
28. D.L. Molfese, J.D.Sweatt, and **F. Lubin**. The molecular persistence of memory: Histone methylation, memory formation, and the molecular markers of extinction. *The Society for Neuroscience* Annual Meeting, Washington, DC. November 2008.
27. L. Pozzo-Miller, **F. Lubin**, S. Campbell, and G. Calfa. HDAC activity is required for BDNF to increase dendritic spine density and quantal neurotransmitter release onto CA1 pyramidal neurons. *The Society for Neuroscience* Annual Meeting, Washington, DC. November 2008.

26. D.L. Molfese, J.D.Sweatt, and **F. Lubin**. The molecular persistence of memory. *18th Annual Rush Record Neuroscience Forum*, Baylor College of Medicine, Houston, TX. February 2008.
25. **F. Lubin**, T.L. Roth, and J.D. Sweatt. Linking the epigenetic code of exon-specific *BDNF* DNA methylation to fear memory formation. *The Society for Neuroscience* Annual Meeting, San Diego, CA. November 2007.
24. T.L. Roth, **F. Lubin**, A. Funk, J.D. Sweatt. The molecular scars of early stress: persisting changes in DNA methylation in a model of maternal maltreatment. *The Society for Neuroscience* Annual Meeting, San Diego, CA. November 2007.
23. D.L. Molfese, J.D.Sweatt, and **F. Lubin**. Regulation of histone methylation in the hippocampus during memory consolidation. *The Society for Neuroscience* Annual Meeting, San Diego, CA. November 2007.
22. D. L. Molfese, J.D. Sweatt, and **F. Lubin**. Regulation of histone methylation during memory formation in the hippocampus. *17th Annual Rush Record Neuroscience Forum*, Baylor College of Medicine, Houston, TX. March 2007.
21. D.L. Molfese, J. Levenson, **F. Lubin**, and J.D. Sweatt. NF-κB trafficking and DNA binding in long-term memory. *The Society for Neuroscience* Annual Meeting, Atlanta, GA. October 2006.
20. **F. Lubin** and J.D. Sweatt. Participation of the NF-κB signaling pathway in histone regulation during long-term memory reconsolidation. *The Society for Neuroscience* Annual Meeting, Atlanta, GA. October 2006.
19. **F. Lubin**, J.D. Sweatt, and A.E. Anderson. Recruitment of NF-κB to BDNF gene promoter regions in experimental temporal lobe epilepsy. *Gordon Research Conference* "Mechanisms in Epilepsy and neuronal synchronization." Maine August 2006.
18. **F. Lubin**, X. Xu, and A. E. Anderson. NF-κB gene regulation triggered early by status epilepticus. *The Society for Neuroscience* Annual Meeting, Washington D.C. November 2005.
17. **F. Lubin**, X. Xu, and A.E. Anderson. NF-κB gene regulation in status epilepticus. *The American Epilepsy Society* Annual Meeting, Washington D.C. December 2005.
16. D.W. McGee, M. Stulic, **F. Lubin**, P.M. O'Donnell, and B. Rafferty. Effect of activating the α3β1 integrin on IL-1 stimulated JNK signaling in Caco-2 cells. *The Society for Mucosal Immunology's 12th International Congress of Mucosal Immunology*, Boston, MA. June 2005.
15. **F. Lubin**, V. W. Leung, and A. E. Anderson. NF-κB activation and gene regulation in the kainate epilepsy model. *The Society for Neuroscience* Annual Meeting, San Diego, CA. October 2004.
14. **F. Lubin**, V.W. Leung, L.D. Johnston, A. Varga, C.L. Lee and A.E. Anderson. Kainate-Mediated Transcriptional Activation in Hippocampus. *The American Epilepsy Society* Annual Meeting, Boston, MA. December 2003.
13. K.L. Williams, **F. D. Lubin**, V.W. Leung, M.W. Swank, A.E. Anderson. Proteomic Identification of a Novel Hippocampal MAPK Substrate, TOAD-64, in the Kainate Epilepsy Model. *The Society for Neuroscience Annual Meeting*, New Orleans, LA. November 2003.
12. **F. Lubin**, V.W. Leung, L.D. Johnston J.D. Sweatt, and A. E. Anderson. MAPK Activation and Transcriptional Regulation in the Kainate Model of Epilepsy. *The Society for Neuroscience* Annual Meeting, New Orleans, LA. November 2003.
11. **F. Lubin**, L.D. Johnston, J.D. Sweatt, and A.E. Anderson. Modulation of NF-κB Activation in Rat Hippocampus. *6th Annual Pediatrics Fellow's Day*, Baylor College of Medicine, Houston, TX, April 2003.
10. **F. Lubin**, L.D. Johnston, J.D. Sweatt, and A.E. Anderson. Modulation of NF-κB Activation in Hippocampus. *13th Annual Rush Record Neuroscience Forum*, Baylor College of Medicine, Houston, TX. March 2003.
9. **F. Lubin**, L.D. Johnston, V.W. Leung, and A.E. Anderson. Kainate Modulation of NF-κB Activation in Rat Hippocampus. *The American Epilepsy Society* Annual Meeting, Seattle, WA, December 2002.
8. A.E. Anderson, **F. Lubin**, L.D. Johnston, V. Leung, M.W. Swank. Proteomic Analysis of Novel Hippocampal Protein Kinase Substrates in a Kainate Model of Epilepsy. *The Society for Neuroscience Annual* Meeting, Orlando, FL. November 2002.

7. **F. Lubin**, L.D. Johnston, V.W. Leung, J.D. Sweatt, and A.E. Anderson. Modulation of Hippocampal Transcriptional Activation: A Candidate Mechanism in epileptogenesis. *5th Annual Pediatrics Fellow's Day*, Baylor College of Medicine, Houston, TX, April 2002.
6. **F. Lubin**, L. D. Johnston, V.W. Leung, J.D. Sweatt, and A.E. Anderson. Modulation of Hippocampal Transcriptional Activation: A Candidate Mechanism in the Kainate Model of Epilepsy. *12th Annual Rush Record Neuroscience Forum*, Baylor College of Medicine, Houston, TX. March 2002.
5. D.W. McGee, **F. Lubin** and G. Li. Suppression of epithelial cell cytokine secretion by the α3β1 integrin is mediated through suppressed NF-κB activation. *Cell Biology* Annual Meeting, Washington D.C. December 2001.
4. D.W. McGee, and **F. Lubin**. A novel role for the α3β1 integrin receptor in the regulation of cytokine secretion by epithelial cells. *AAI/CIS* Joint Annual Meeting, FL. April 2001.
3. **F. Lubin**, C. Goess, M. Segal and D.W. McGee. Differential effect on IL-6, IL-8, and MCP-1 secretion in intestinal epithelial cell lines by extracellular matrix proteins. Immunology 2000 *AAI/CIS* Joint Annual Meeting, Seattle, WA. May 2000.
2. D.W. McGee, **F. Lubin** and J. Wong. Extracellular Matrix Proteins and integrins modulate intestinal epithelial cell cytokine secretion. *Binghamton University Fall Biological Symposium*. November 1999.
1. **F. Lubin**, and S. Singh. Evaluation of the Evolutionary Conservation of TRAF*amn*/CD40bp/CRAF1. American Society of Microbiology (ASM) Annual Meeting,Washington D.C. Fall 1995.

MENTORED POST-DOCTORAL FELLOWS

Nicola Grissom (PhD, 2009)	Neurobiology Department, UAB. Farah D. Lubin, Mentor.
Gaston Calfa (PhD, 2006)	Neurobiology Department, UAB. Lucus Pozzo-Miller, Farah D. Lubin, Co-Mentors.
Joaquin Lugo (PhD, 2006)	Neuroscience Section, Baylor College of Medicine. Anne Anderson, Farah D. Lubin, Co-Mentors.

MENTORED GRADUATE STUDENTS

Ryley Parrish (2009-present)	Neuroscience Program, UAB. Farah D. Lubin, Mentor.
Swati Gupta (2008-present)	Cellular and Molecular Biology Program, UAB. Farah D. Lubin, Mentor.
Hyung Jin Ahn (PhD, 2007)	Neuroscience department, Baylor College of Medicine. Currently Postdoctoral Fellow at the University of Texas, Austin, TX. J. David Sweatt, Farah D. Lubin, Co-Mentors.
David L. Molfese (MS, 2003)	Neuroscience department, Baylor College of Medicine and Neurobiology Program, School of Medicine, UAB. Currently a Ph.D. candidate. J. David Sweatt, Farah D. Lubin, Co-Mentors.
Adam Funk (2007)	Cellular and Molecular Biology Program, UAB. Rotation student January-April 2007

MENTORED UNDERGRADUATE STUDENTS

Sarah Morse, Program Science and Technology, UAB. December 2008-Present.
Toral Patel, Program Science and Technology, UAB. December 2008-Present.
Brittney Carver, Program Science and Technology, UAB. December 2009-Present.
Amanda Benton, Curriculum Biology, UAB. September 2007-Present.
Dominik Rose, Curriculum Respiratory Therapy, UAB. December 2006-May 2008.
Carmella Montgomery, Curriculum Biology, UAB. April 2007-May 2008.
Rahel Lynes, Summer Program in Neuroscience, UAB. Oakwood College, Huntsville, AL. June-August 2007.
Sonja Artis, Summer Program in Neuroscience, UAB. Oakwood College, Huntsville, AL. June-August 2006.

Kelli Baalman, Summer Program in Neuroscience, UAB. Rockhurst University, Kansas City, MO. June-August 2006.
Aswin Sundarakrishnan, Neuroscience department, Baylor College of Medicine. Drexel University. November 2005-April 2006.

Ph.D. THESIS ADVISORY COMMITTEES

University of Alabama at Birmingham (UAB): R. Ryley Parrish, Neuroscience Program (Ph.D. candidate)
University of Alabama at Birmingham (UAB): Shay Hyman, Neurobiology (Ph.D. candidate)
University of Alabama (UA): Nakia R. Marshall-Robinson (Ed.D. candidate)

Distinguished Individual Fellowships:

Toral Patel, J.L. Bedsole Scholars fellowship Award; **Sarah Morse**, UAB Center for Aging Award; **Swati Gupta**, Molecular and Cellular Cognition Society Winter School Scholar Program Award, Zurich Switzerland; **Nicola Grissom, Ph.D**., Travel Award to the National Summit on Gender and the Postdoctorate, sponsored by the National Postdoctoral Association (NPA) and the National Science Foundation

RESEARCH PROJECTS AND FUNDING

Ongoing Research Support

R00 MH082106-02 Lubin (PI) 01/01/09-12/31/12
NIH/NIMH $250,000/3-years
This proposal continues to investigate the role of epigenetic mechanisms of gene regulation in the process of memory formation and storage.
Status: Active.
Role:PI

Repligen Lubin (PI) 10/01/09-09/31/10
$50,000
This proposal seeks to identify the specific HDAC isoform involved in memory deficits associated with epilepsy
Status: Pending arrival of funds
Role:PI

Completed Research Projects

Pathway to independence
K99 MH082106-01 Lubin (PI) 01/01/08-10/01/09
NIH/NIMH $90,000
This proposal seeks to understand epigenetic mechanisms of gene regulation in the process of memory formation and storage (consolidation).
Status: Active.
Role:PI

Postdoctoral NRSA
F32 NS048811-01A1 Lubin (PI) 12/14/04-12/13/07
NIH/NINDS $153,000
The overall goal of these studies is to further characterize the cellular and molecular mechanisms by which NF-κB is activated in hippocampus and to determine whether NF-κB contributes to altered gene expression in memory formation.
Role: PI

RO1NS39942-02 (Minority postdoctoral supplement) 04/01/02-04/30/04
Anderson (PI) $164,455
NIH/NINDS
The MAPK Cascade in Epilepsy
This research supplement proposal relates to the specific research goals and objectives of the parent grant. Using results from the parent grant, studies further evaluated the effects of MAPK inhibition and other potential downstream effectors, such as transcription factors, of MAPK in epilepsy.
Role: Co-Investigator

RO1NS39942-02 (Microarray supplement) Anderson (PI) 07/01/04-06/30/05
NIH/NINDS $50,000
The MAPK Cascade in Epilepsy
This research supplement proposal does not relate to the specific research goals and objectives of the parent grant. The goal of this supplement is to use DNA microarray analysis to profile CREB- and NF-κB-responsive genes during epileptogenesis.
Role: Co-Investigator

AES/Milken Epilepsy Foundation Award Lubin (PI) 07/01/04-06/30/05

NF-κB Activation in Epilepsy $40,000

These studies focus on cell signals that couple to specific NF-κB-regulated gene changes in epilepsy. The overall goal is to elucidate mechanisms involved in the development of epilepsy and to identify potentially novel therapeutics targets.

Role: PI