M. Behnam Ghasemzadeh, Ph.D.
Curriculum Vitae

Current Position:

Associate Professor, Department of Biomedical Sciences, Marquette University, Milwaukee, WI
Correspondence:
Department of Biomedical Sciences
Marquette University
561 N. 15th Street
Schroeder Health Complex, Room 446
Milwaukee, WI 53233
Tel: (414) 288-6636
Fax: (414) 288-6564

Education:

1990	Ph.D., Bioanalytical Chemistry; Neurochemistry University of Kansas, Lawrence, Kansas 66045 Advisor: Ralph N. Adams, Ph.D.
1986	B.S., Chemistry Jackson State University, Jackson, Mississippi 39203

Professional Experience:

2009-	Associate Professor Department of Biomedical Sciences Marquette University, Milwaukee, WI
2002-2009	Assistant Professor Department of Biomedical Sciences Marquette University, Milwaukee, WI
1998-2002	Research Assistant Professor Department of Neurosciences Medical University of South Carolina, Charleston, SC
1995-1998	Research Assistant Professor Department of Veterinary and Comparative Anatomy, Physiology, Pharmacology Washington State University, Pullman, WA
1992-1995	Research Associate Department of Pharmacology University of Pennsylvania Advisor: Marie-Françoise Chesselet, M.D., Ph.D.
1990-1992	Post-doctoral fellow Department of Pharmacology University of Pennsylvania Mentor: Marc A. Dichter, M.D., Ph.D.

PUBLICATIONS:

Ziegler D, Cullinan WE, **Ghasemzadeh MB** (2008) Distribution of Homer proteins in adult rat brain. Submitted for Publication, Currently Under Revision.

27. **Ghasemzadeh MB**, Mueller CR, Vasudevan P (2009) Behavioral sensitization to cocaine is associated with increased glutamate receptor trafficking to the postsynaptic density after extended withdrawal period. Neuroscience 159: 414-426

26. **Ghasemzadeh MB**, Vasudevan P, Mueller CR, Seubert C, Mantsch JR (2009) Region specific alterations in glutamate receptor expression and subcellular distribution following extinction of cocaine self-administration. Brain Research 1267: 89-102.

25. **Ghasemzadeh MB**, Vasudevan P, Mueller CR (2009) Locomotor sensitization to cocaine is associated with distinct pattern of glutamate receptor trafficking to the postsynaptic density in the prefrontal cortex: early versus late withdrawal effects. Pharmacology, Biochemistry and Behavior 92: 383-392.

24. **Ghasemzadeh MB**, Vasudevan P, Mueller CR, Seubert C, Mantsch JR (2009) Neuroadaptations in the cellular and postsynaptic group1 metabotropic glutamater receptor mGluR5 and Homer proteins following extinction of cocaine self-administration. Neuroscience Letters 452: 167-171.

23. **Ghasemzadeh MB**, Windham LK, Lake RW, Acker CJ, Kalivas PW (2009) Cocaine activates Homer1 immediate early gene transcription in the mesocorticolimbic circuit: differential regulation by dopamine and glutamate signaling. Synapse 63: 42-53.

22. **Ghasemzadeh MB**, Permenter LK, Lake R, Worley PF, Kalivas PW (2003) Homer1 proteins and AMPA receptors modulate cocaine-induced behavioral plasticity. Eur J Neuroscience 18:1645-51.

21. **Ghasemzadeh MB**, Permenter LK, Lake R, Kalivas PW (2003) Nucleus accumbens Homer proteins regulate behavioral sensitization to cocaine. Ann NY Acad Sci 1003:395-397.

20. Crespo JA, Oliva JM, **Ghasemzadeh MB**, Kalivas PW, Ambrosio E (2002) Neuroadaptive Changes in NMDAR1 gene expression after extinction of cocaine self-administration. Ann NY Acad Sci 965:78-91.

19. **Ghasemzadeh MB**, Pierce RC, Kalivas PW (1999) The monoaminergic neurons of the rat brain preferentially express a splice variant of α_{1B} subunit of the N-type calcium channel. J Neurochemistry 73:1718-1723.

18. Hu G, Duffy P, Swanson C, **Ghasemzadeh MB**, Kalivas PW (1999) The regulation of dopamine transmission by metabotropic glutamate receptors. J Pharm Exp Ther 289:412-416.

17. **Ghasemzadeh MB**, Nelson L, Lu X-Y, Kalivas PW (1999) Neuroadaptations in ionotropic and metabotropic glutamate receptor mRNA produced by cocaine treatment. J Neurochemistry 72:57-165.

16. Lu X-Y, **Ghasemzadeh MB**, Kalivas PW (1999) The regional distribution and cellular localization of $GABA_{B1}$ receptor mRNA in the rat brain. J Comp Neurology 407:166-182.

15. Lu X-Y, **Ghasemzadeh MB**, Kalivas PW (1999) Expression of glutamate receptor/subunit messenger RNA's for NMDAR1, GluR1 and mGluR5 by accumbal projection neurons. Brain Research, 63:287-296.

14. Lu X-Y, **Ghasemzadeh MB**, Kalivas PW (1998) Expression of D1, D2, substance P and enkephalin mRNAs in the projection neurons from the nucleus accumbens. Neuroscience 82 :767-780.

13. Sarkar DK, Pastorcic M, De A, Engel M, Moses H, **Ghasemzadeh MB** (1998) Role of Transforming Growth Factor (TGF)-þtype I and TGF-b type II receptors in the TGF-b1-regulated gene expression in pituitary prolactin-secreting lactotropes. Endocrinology 139:3620-3628.

12. **Ghasemzadeh MB**, Sharma S, Surmeier DJ, Eberwine JH, Chesselet M-F (1996) Multiplicity of Glutamate Receptor Subunits in Single Striatal Neurons: An RNA amplification study. Molecular Pharmacology 49:852-859.

11. **Ghasemzadeh MB**, Capella P, Mitchell K, Adams RN (1993) Real-time monitoring of electrically stimulated norepinephrine release in rat thalamus: Part I. Resolution of transmitter and metabolite signal components. J Neurochemistry 60: 442-448.

10. Capella P, **Ghasemzadeh MB**, Adams RN, Wiedemann DJ, Wightman RM (1993) Real-time monitoring of electrically stimulated norepinephrine release in rat thalamus: Part II. Modeling of release and reuptake characteristics of stimulated norepinephrine overflow. J Neurochemistry 60:449-453.

9. Cammack J, **Ghasemzadeh MB**, Adams RN (1992) Electrochemical monitoring of brain ascorbic acid changes with hypoxia, spreading depression and seizure activity. Neurochemical Research 17:23-27.

8. Skiekhatter R, **Ghasemzadeh MB**, Adams RN (1992) Infusion of DOPAC decreases striatal dopamine." Brain Research Bulletin 29:891-896.

7. **Ghasemzadeh MB**, Cammack J, Adams RN (1991) Dynamic changes in extracellular fluid ascorbic acid monitored by in vivo electrochemistry. Brain Research 547:162-166.

6. Cammack J, **Ghasemzadeh MB**, Adams RN (1991) The pharmacological profile of glutamate-evoked ascorbic acid efflux measured by in vivo electrochemistry. Brain Research 565:17-22.

5. Capella P, **Ghasemzadeh MB**, Mitchell K, Adams RN (1990) Nafion-coated carbon fiber electrodes for neurochemical studies in brain tissue. Electroanalysis 2:175-182.

Invited Reviews and Book Chapters

4. Kalivas PW, Toda S, Bowers MS, Baker DA, **Ghasemzadeh MB** (2003) The temporal sequence of changes in gene expression by drugs of abuse, in *Drugs of Abuse: Analysis of Neurological effects*, Methods Mol Med, 79 (2003) 3-11, Ed. Wang, J.Q., Humana Press, Totowa, New Jersey.

3. Kalivas PW, Cornish J, **Ghasemzadeh MB** (1998) Cocaine Craving and Paranoia: a combination of pharmacology and learning. Psychiat Annals 28:569-576.

2. Chesselet M-F, Delfs JM, **Ghasemzadeh MB**, Qin Y, Lenz S, Mercugliano M, Salin P, Soghomonian J-J (1995) Cell specific mRNA expression in the striatum. In: Cellular and Molecular Mechanisms of the Striatum (Surmeier J, ed.), Landers Comp. Biomed. Publishers.

1. Capella P, **Ghasemzadeh MB**, Mitchell K, Adams RN (1990) Nafion-coated carbon fiber electrodes for neurochemical studies in brain tissue. In: Ultramicroelectrodes of electroanalysis (Wang J, ed.), New York: VCH Publishers.

Abstracts/Monographs

59. K.M. Koenigs, A. Purgianto*, **M.B. Ghasemzadeh**,"The role of glutamate signaling in addiction behaviors." Forward thinking session and research exchange, Marquette University, December 2009.

58. P. Vasudevan, C. Seubert*, W.E. Cullinan, J.R. Mantsch, **M.B. Ghasemzadeh**,"Stress mediated alterations in the cellular and postsynaptic plasticity of glutamate receptors following withdrawal from cocaine self-administration." 39th Annual meeting of Society for Neuroscience, 2009. Chicago.

57. **M.B. Ghasemzadeh**, P. Vasudevan, C. Mueller, C. Seubert*, J.R. Mantsch,"Region-specific neuroadaptations in the cellular and postsynaptic glutamate receptors following withdrawal from cocaine self-administration." 39th Annual meeting of Society for Neuroscience, 2009. Chicago.

56. K.M. Koenigs, C. Giles*, A. Purgianto*, J.R. Mantsch, **M.B. Ghasemzadeh**"The mGluR5-Homer interaction regulates cue induced drug seeking behavior." 39th Annual meeting of Society for Neuroscience, 2009, Chicago.

55. **M.B. Ghasemzadeh**, P. Vasudevan, C.R. Mueller, C. Seubert*, J.R. Mantsch,"Alterations in trafficking of nucleus accumbnes glutamatergic proteins during withdrawal from cocaine self-administration." 38th Annual meeting of Society for Neuroscience, 2008. Washington, DC.

54. C.R. Mueller, P. Vasudevan, **M.B. Ghasemzadeh**,"Differential modulation of glutamate receptor trafficking in the mesocorticolimbic circuit in behavioral sensitization to cocaine." 38th Annual meeting of Society for Neuroscience, 2008. Washington, DC.

53. C.R. Mueller, **M.B. Ghasemzadeh**,"Augmented trafficking of glutamate receptors in nucleus accumbens after behavioral sensitization to cocaine." Brain Awareness Week, Society for Neuroscience Milwaukee Chapter, Medical College of Wisconsin, Milwaukee. March 2008.

52. **M.B. Ghasemzadeh**, C.J. Acker*, W.E. Cullinan, J.R. Mantsch,"Chronic variable stress modulates glutamate signaling in nucleus accumbens: relevance to behavioral cross-sensitization to cocaine." Brain Awareness Week, Society for Neuroscience Milwaukee Chapter, Medical College of Wisconsin, Miwaukee. March 2008.

51. C. Giles*, A. Purgianto*, C. Mueller, **M.B. Ghasemzadeh**,"The role of glutamate signaling in behavioral plasticity to drugs of abuse." Forward thinking session and research exchange, Marquette University, December 2007.

50. C.R. Mueller, **M.B. Ghasemzadeh**,"Augmented trafficking of glutamate receptors in nucleus accumbens after behavioral sensitization to cocaine." NIDA symposium on Drug Addiction, 2007, San Diego, California.

49. C.R. Mueller, **M.B. Ghasemzadeh**,"Augmented trafficking of glutamate receptors in nucleus accumbens after behavioral sensitization to cocaine." 37th Annual meeting Society for Neuroscience, 2007, San Diego, California.

48. **M.B. Ghasemzadeh**, C.J. Acker*, W.E. Cullinan, J.R. Mantsch,"Chronic variable stress modulates glutamate signaling in nucleus accumbens: relevance to behavioral cross-sensitization to cocaine." 37th Annual meeting Society for Neuroscience, 2007. San Diego, California.

47. **M.B. Ghasemzadeh**, C.J. Acker*, L.K. Permenter, R. Lake, P.W. Kalivas,"The regulation of Homer1 gene expression after acute and repeated cocaine administration in the mesocorticolimbic circuit." Forward thinking session and research exchange, Marquette University, December 2006.

46. M. Ranade*, C.J. Acker*, U. Gupta, W.E. Cullinan, J.R. Mantsch, **M.B. Ghasemzadeh**," Differential modulation of glutamate signaling in the mesocorticolimbic circuit by chronic stress." Forward thinking session and research exchange, Marquette University, December 2006.

45. C.R. Mueller, **M.B. Ghasemzadeh**,"The role of glutamate receptor trafficking in behavioral sensitization to cocaine." Forward thinking session and research exchange, Marquette University, December 2006.

44. C.R. Mueller, **M.B. Ghasemzadeh**,"The role of glutamate receptor trafficking in behavioral sensitization to cocaine." 36th Annual meeting Society for Neuroscience, 2006. Atlanta, Georgia.

43. C.J. Acker*, D.R. Ziegler, W.E. Cullinan, **M.B. Ghasemzadeh**,"Distribution of Homer protein isoforms in the mesocorticolimbic circuit: relevance to stress and addiction" 36th Annual meeting Society for Neuroscience, 2006. Atlanta, Georgia.

42. **M.B. Ghasemzadeh**, C.J. Acker*, L.K. Permenter, R. Lake, P.W. Kalivas,"The regulation of Homer1 gene expression after acute and repeated cocaine administration in the mesocorticolimbic circuit" 36th Annual meeting Society for Neuroscience, 2006. Atlanta, Georgia.

41. B. Ranade*, C.J. Acker*, U. Gupta, W.E. Cullinan, J.R. Mantsch, **M.B. Ghasemzadeh**, "Differential modulation of glutamate signaling in the mesocorticolimbic circuit by chronic stress" 36th Annual meeting Society for Neuroscience, 2006. Atlanta, Georgia.

40. U. Gupta, **M.B. Ghasemzadeh**,"Repeated administration of phencyclidine modulates glutamate receptors and their scaffolding proteins in the postsynaptic density of prefrontal cortex." 35th Annual meeting Society for Neuroscience, 2005. Washington, DC.

39. **M.B. Ghasemzadeh**, C. Miller*, U. Gupta,"Mutual interactions between dopamine and glutamate signaling in the nucleus accumbens." 35th Annual meeting Society for Neuroscience, 2005. Washington, DC.

38. **M.B. Ghasemzadeh**, W.E. Cullinan, T.Y. Baszler, U. Gupta,"Persistent reduction in nucleus accumbens Homer proteins after chronic variable stress: A link between stress and sensitization." 5th International Meeting on Metabotropic Glutamate Receptors, Sicily-Italy, 2005. *The extended abstract was published in Neuropharmacology 49 (S1): 246, 2005.*

37. A. Dorotheo*, M. Ranade*, S. F. Joyce*, **M. B. Ghasemzadeh**,"The blockade of mGluR5 receptors exacerbates PCP mediated working memory deficits: implications for treatment of schizophrenia." Forward thinking session and research exchange, Marquette Univ., Nov. 2005.

36. M. Ranade*, A. Dorotheo*, S. F. Joyce*, **M. B. Ghasemzadeh**, "Chronic PCP Administration Augments PCP-Induced Deficits in Working Memory: An Animal Model for Schizophrenia." Forward thinking session and research exchange, Marquette University, November 2005.

35. C. Acker*, S. F. Joyce*, U. Gupta, W. E. Cullinan, J. R. Mantsch, **M. B. Ghasemzadeh**, "Chronic Variable Stress Modulates Glutamate Signaling: A Link between Stress and Addiction." Forward thinking session and research exchange, Marquette University, November 2005.

34. **M.B. Ghasemzadeh**, L.K. Permenter, K.E. McChesney, K. Emelianoff,"The KCNQ pottasium channels in nucleus accumbens selectively modulate glutamate receptor mediated locomotor activity." Brain Awareness Week, Society for Neuroscience Milwaukee Chapter, University of Wisconsin, Milwaukee, March 2004.

33. **M.B. Ghasemzadeh**, L.K. Permenter, R. Lake, K. McChesney, P.W. Kalivas,"Nucleus accumbens Homer proteins regulate behavioral sensitization to cocaine." Brain Awareness Week, Society for Neuroscience Milwaukee Chapter, University of Wisconsin, Milwaukee, March 2004.

32. **M.B. Ghasemzadeh**, W.E. Cullinan, T.Y. Baszler, U. Gupta,"Chronic variable stress modulates nucleus accumbens Homer proteins." 34th Annual meeting Society for Neuroscience, 2004. San Diego, California.

31. U. Gupta, T.Y. Baszler, J.P. Lawler*, **M.B. Ghasemzadeh**,"The KCNQ potassium channels in nucleus accumbens modulate dopamine receptor mediated locomotor activity." 34th Annual meeting Society for Neuroscience, 2004. San Diego, California.

30. **M.B. Ghasemzadeh**, L.K. Permenter, R.W. Lake, P.W. Kalivas,"Nucleus accumbens Homer proteins regulate behavioral sensitization to cocaine" New York Academy of Sciences conference, "Glutamate and Disorders of Cognition and Motivation" April 13-15, 2003. New Haven, Connecticut.

29. **M.B. Ghasemzadeh**, L.K. Permenter, K.E. McChesney, K. Emelianoff, " The KCNQ potassium channels in nucleus accumbens selectively modulate glutamate receptor mediated locomotor activity." 33rd Annual meeting Society for Neuroscience, 2003. New Orleans, LA.

28. **M.B. Ghasemzadeh**, L.K. Windham, R. Lake, K.M. McChesney, P.W. Kalivas,"Nucleus accumbens Homer proteins regulate behavioral sensitization to cocaine through control of GluR1 expression." 32nd Annual meeting Society for Neuroscience, 2002. Orlando, FL.

27. **M.B. Ghasemzadeh**, M.S. Bowers, L.K. Windham, K.M. McChesney, R.W. Lake, P.F. Worley, P.W. Kalivas,"Homer proteins and cocaine mediated behavioral plasticity." 4th International meeting on metabotropic glutamate receptors, September 15-20, 2002. Taormina, Sicily, Italy.

26. P.W. Kalivas, S. Mackler, **M.B. Ghasemzadeh**, S. Toda,"Changes in gene expression induced by repeated psychostimulant administration." International Catecholamine Meeting, 2001. Kyoto, Japan.

25. S. Toda, **M.B. Ghasemzadeh**, P.W. Kalivas,"Long-lasting alterations in gene expression in mesolimbic circuitry after chronic cocaine administration: A microarray study." 31th Annual meeting Society for Neuroscience, 2001. San Diego, California.

24. **M.B. Ghasemzadeh**, L.K. Windham, P.W. kalivas,"Nucleus accumbens Homer1 proteins are required for development of behavioral sensitization to cocaine." 31th Annual meeting Society for Neuroscience, 2001. San Diego, California.

23. J.A. Crespo, J.M. Oliva, **M.B. Ghasemzadeh**, P.W. Kalivas, E. Ambrosio,"Changes in the expression of glutamate receptor subunit NMDAR1 produced by long-term cocaine self-administration and its extinction." 30th Annual meeting Society for Neuroscience, 2000. New Orleans, LA.

22. **M.B. Ghasemzadeh**, L.K. Windham, T. Abekawa, P.W. Kalivas,"Role of nucleus accumbens Homer1 proteins in cocaine mediated motor behavior." 30th Annual meeting Society for Neuroscience, 2000. New Orleans, LA.

21. **M.B. Ghasemzadeh**, C.J. Swanson, G. Hu, P.Duffy, P.W. Kalivas."Regulation of locomotor activity and dopamine neurotransmission by metabotropic receptors." 3rd International meeting on metabotropic glutamate receptors, Italy 1999

20. **M. B. Ghasemzadeh**, T. Abekawa, C.J. Swanson, M. Urbina, P.W. Kalivas,"Role of metabotropic glutamate receptors and associated Homer proteins in locomotor activity and cocaine sensitization." 3rd International meeting on metabotropic glutamate receptors, Italy 1999

19. **M.B. Ghasemzadeh**, M. Urbina, P.W. Kalivas,"Induction of Homer1a in nucleus accumbens by cocaine is mediated through D1 dopamine receptors." 29th Annual meeting Society for Neuroscience, 1999. Abstract no. 176.5.

18. T. Abekawa, **M.B. Ghasemzadeh**, P.W. Kalivas,"Effects of microinjection of Homer antisense oligonucleotides into the nucleus accumbens on novelty-induced motor activity." 29th Annual meeting Society for Neuroscience, 1999. Abstract no. 176.7.

17. **M.B. Ghasemzadeh**, R.C. Pierce, S.M. Thompson, P.W. Kalivas,"Preferential expression of a novel N-Type calcium channel in monoaminergic nuclei." 28th Annual Meeting Society for Neuroscience, 1998. Abstract no. 645.10.

16. X.-Y. Lu, **M.B. Ghasemzadeh**, P.W. Kalivas," The regional distribution and cellular localization of $GABA_{B1}$ receptor messenger RNA in the rat brain." 28th Annual Meeting Society for Neuroscience, 1998. Abstract no. 625.6

15. P.W. Kalivas, P.C. Pierce, K. Bell, **M.B. Ghasemzadeh**,"The role of glutamate in the

expression of behavioral sensitization to cocaine." Annual meeting of American College of Neuropsychopharmacology, 1997.

14. **M.B. Ghasemzadeh**, L.C. Nelson, P.W. Kalivas,"Glutamate receptor mRNA expression after behavioral sensitization to cocaine." 27th Annual Meeting Society for Neuroscience, 1997.

13. R.C. Pierce, **M.B. Ghasemzadeh**, E.A. Quick, Z.R. Morgan, D. Reeder, P.W. Kalivas,"The role of calcium/calmodulin-dependent protein kinase II in behavioral sensitization to cocaine." 27th Annual Meeting Society for Neuroscience, 1997.

12. L. Churchill, **M.B. Ghasemzadeh**, P.W. Kalivas,"Glutamate receptor subunits (GluR1 and NMDAR1) increase in the nucleus accumbens of rats 3 weeks after repeated cocaine exposure." 27th Annual Meeting Society for Neuroscience, 1997. Abstract No. 104.3.

11. X.-Y. Lu, **M.B. Ghasemzadeh**, L. Churchill, P.W. Kalivas,"Substance P in the two major subpopulations of projection neurons within the nucleus accumbens." 26th Annual Meeting Society for Neuroscience, 1996. Vol. 22, Abstract No. 611.1

10. **M.B. Ghasemzadeh**, J. Surmeier, J. Eberwine, M.-F. Chesselet,"Glutamate receptors subunit expression in single striatal neurons: A mRNA amplification study." 14th Meeting, International Society for Neurochemistry, 1993. Montpellier, France.

9. **M.B. Ghasemzadeh**, D.J. Surmeier, J. Eberwine, M.-F. Chesselet,"Dopamine and glutamate receptors mRNA in single striatal neurons: An RNA amplification study." 23rd Annual Meeting Society for Neuroscience, 1993. Vol. 19, Abstract No. 302.5

8. **M.B. Ghasemzadeh**, K.S. Wilcox, M.A. Dichter,"Activation of metabotropic receptors differentially modulate excitatory and inhibitory synaptic transmission between hippocampal neurons in culture." 22nd Annual Meeting Society for Neuroscience, 1992. Vol. 18, Abstract No. 572.9.

7. J. Cammack, **M.B. Ghasemzadeh**, R.N. Adams,"The pharmacological profile of glutamate-evoked ascorbic acid efflux measured by in vivo electrochemistry." 21st Annual Meeting Society for Neuroscience, 1991. Vol. 17, Abstract No. 392.13.

6. **M.B. Ghasemzadeh**, M.A. Dichter,"Neurotoxic effects of ascorbic acid on hippocampal neurons in culture." 21st Annual Meeting Society for Neuroscience, 1991.Vol. 17, Abstract No. 112.5.

5. **M.B. Ghasemzadeh**, M.A. Dichter,"High concentration of L-AP4 selectively activates NMDA receptors on rat hippocampal neurons in cell culture." American Epilepsy Society; Epilepsia, 32 (1991) : 47. Abstract No. 3.4.

4. **M.B. Ghasemzadeh**, P. Capella, R.N. Adams,"Release of dopamine from Noradrenergic neurons after dopamine-b-hydroxylase inhibition." 20th Annual Meeting Society for Neuroscience, 1990. Vol. 16, Abstract No. 224.24.

3. J. Cammack, **M.B. Ghasemzadeh**, R.N. Adams,"In vivo electrochemical investigation of ascorbic acid dynamics in rat brain." 20th Annual Meeting Society for Neuroscience, 1990. Vol.16, Abstract No. 354.20.

2. P. Capella, **M.B. Ghasemzadeh**, T. Hu, T. Kuwana and R.N. Adams,"Recent brain studies

with carbon fiber electrodes.", Presented by R.N. Adams at 40th Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, 1989. Abstract No. 1013.

1. **M.B. Ghasemzadeh**, P. Capella, R.N. Adams,"Investigation of electrically stimulated release from the locus coeruleus-norepinephrine system in thalamus using in vivo voltammetry." 19th Annual Meeting Society for Neuroscience, 1989. Vol. 15, Abstract No. 482.10.

AWARDS AND HONORS

2009 Kohler Center for Entrepreneurship Business Plan Competition:
Best Overall Plan Runner-Up (for a drug discovery company)

1986 First year Graduate Student award
Department of Chemistry
University of Kansas

SPEAKING PRESENTATIONS:

2007 Department of Pharmacology, Rosalind Franklin School of Medicine, Chicago
2005 Department of Biology, Marquette University
2005 Center for Addiction and Behavioral Health Research (CABHR), Univ. of Wisconsin, Milwaukee
2003 Department of Psychology, Univ. of Wisconsin, Milwaukee
2002 5th International Meeting on Metabotropic Glutamate Receptors, Taormina, Sicily, Italy

RELATED ACTIVITIES:

2003-Present Neuroanatomical Dissection: Human Brain and Spinal Cord, College of Health Sciences, Marquette University (July 2003, 2004, 2005, 2006, 2007, 2008).

2007 Invited presenter, National Institute on Drug Abuse, Symposium on Addiction, San Diego, CA.

GRADUATE STUDENTS:

Dissertation Committee member:

Committee member for 2 MS and 1 Ph.D. degree students.

GRANT FUNDING:

Title: Glutamate Signaling and Drug Abuse
Funding Agency: NIDA/NIH R01
Total Amount: $ 1,023,327
Duration: 6 years (2002 - 2008)
Role: PI (50% effort)
This grant is currently in the one-year no-cost extension period.

Title: Glutamate Receptor and Chronic Cocaine
Funding Agency: NIDA/NIH R03
Total Amount: $ 100,000
Duration: 2 years (1999 - 2001)
Role: PI (50% effort)

Title: A new N-type calcium channel in monoaminergic neurons
Funding Source: Institutional Research Grant, Medical University of South Carolina
Total Amount: $22,000
Duration: 1 year (2000 - 2001)
Role: PI (50% effort)

Title: Modulation of glutamate receptor gene expression by chronic cocaine treatment
Funding Source: Washington State Alcohol and Drug Abuse Program
Total Amount: $ 25,000
Duration: 1 year (1997 - 1998)
Role: PI (50% effort)

Title: Correlative maturation of dopamine and glutamate receptors in developing striatum: An mRNA Amplification study in defined, single cells.
Funding Source: Scottish Rite Research Foundation
Total Amount: $ 60,000
Duration: 2 years (1993 - 1995)
Role: PI (50% effort)

SERVICE:

University Committees:

Institutional Biosafety Committee: 2007- present
Institutional Animal Committee: 2007- present
University Board of Undergraduate Study: 2009- present

Departmental Committees:

Faculty Search Committee: 2002-2005
Departmental web page Committee: 2005
Undergraduate Student Award Committee (Robert Iorio, chair): 2005
Ad Hoc Committee for the new science building: 2006
Ad Hoc Committee for the new science building animal facility: 2006

Regional:

Community advisory team member: Invited to attend meetings and participate in activities of Starting Point of Ozaukee (formerly Ozaukee Council, Inc.), a private, non-profit organization formed to promote drug and alcohol abuse awareness: 2004-2007

OTHER ACADEMIC/RESEARCH ACTIVITIES:

- Speaker and presenter, Milwaukee Chapter for Society for Neuroscience: 2004, 2008
- Presented at the Marquette University Forward Thinking Poster Session and Research Exchange, November 2005, 2006, 2007.
- Participated in neuroscience outreach activities delivered to area middle and high school students from Milwaukee Academy of Sciences and South Division High School in Milwaukee (2005)
- Presented public lectures as part of the Brain Awareness Week (2003-2006)
- Participated in and assisted with organization of the annual biomedical sciences student/faculty retreat (2003-present).
- Member, Marquette Integrated Neuroscience Research Center (INRC)
- Member, Marquette University, Addiction Research Division

PROFESSIONAL SOCIETY MEMBERSHIP:

Member, Society for Neuroscience, 1989-present
Member, American Association for the Advancement of Science (AAAS), 2003-present

GRANT REVIEW SERVICE (Ad Hoc member):

National Institute on Mental Health (NIMH) - 2005

National Institute on Drug Abuse (NIDA) – 2005