
Curriculum Vitae

Ming Li

Current Position: Associate Professor of Psychology
Area adviser: Neuroscience and Behavior program

Address: Psychology Department
238 Burnett Hall
University of Nebraska-Lincoln
Lincoln, NE. 68588-0308

Telephone: 402-472-3144
Fax: 402-472-4637
E-mail: mli2@unl.edu
Lab website: www.unl.edu/biopsy

Areas of Research Interests:

Psychopharmacology of Antipsychotic Drugs, Animal Models of Schizophrenia, Anxiety and Depression, Co-morbidity of Substance Use and Schizophrenia, Neurobiology of Rodent Maternal Behavior

Positions and Employment

2011 – present	Associate Professor of Psychology, University of Nebraska-Lincoln, USA
2005 – 2011	Assistant Professor of Psychology, University of Nebraska-Lincoln, USA
1991 – 1993	Lecturer in Psychology at Leshan Teachers College, China

Education

2002-July, 2005	Postdoctoral Fellow Centre for Addiction and Mental Health, Toronto, Canada Supervisors: Professor Shitij Kapur, and Dr. Paul J. Fletcher
1996-2002	Ph.D. Department of Psychology, University of Toronto, Canada Supervisor: Professor Alison S. Fleming
1993-1996	M.S. Department of Psychology, Beijing University, Beijing, China Supervisor: Professor Xiao Jian
1987-1991	B.S.

Department of Psychology, Beijing University, Beijing, China

Awards and Honors

- 2004 D. G. Marquis Behavioral Neuroscience Award for the best paper published in *Behavioral Neuroscience*.
- 2002-2005 Ontario Mental Health Foundation Postdoctoral Fellowship
- 2006-2007 Recipient of the UNL Parents Association “*Certificate of Recognition for Contributions to Students*”

Extramural Grants

1. Title: “Behavioral mechanisms of antipsychotic action”
Role: **Principal Investigator**
Agency: DHHS-Nat Inst Mental Health
Type: **R01MH085635**
Period: 03/22/2010-01/31/2015
Total cost: \$1,447,532
2. Title: “Iptakalim for nicotine use in schizophrenia: A preclinical test”
Role: **Principal Investigator**
Agency: Nebraska Health and Human Services
Type: **Research grant**
Period: 07/01/2010-06/30/2011
Total cost: \$40,000
3. Title: “Anxiolytic Property of Atypical Antipsychotics”
Role: **Principal Investigator**
Agency: DHHS-Nat Inst Mental Health
Type: **R21 MH079894**
Period: 01/01/2008-12/31/2010
Total cost: \$362,145
4. Title: “Antipsychotic Drugs and Maternal Behavior: A Preclinical Investigation”
Role: **Principal Investigator**
Agency: DHHS-Nat Inst Mental Health
Type: **R03 MH080822**
Period: 09/15/2007-07/31/2010
Total cost: \$132,750
5. Title: “Iptakalim: A Potential Antipsychotic Drug with Novel Mechanisms”
Role: **Principal Investigator**
Agency: Stanley Medical Research Institute
Type: **Research grant**

Period: 08/2007-07/2010
Total cost: \$150,000

6. Title: “Behavioral Mechanisms of Action of Atypical Antipsychotics: A Preclinical Investigation”

Role: **Principal Investigator**
Agency: National Alliance for Research on Schizophrenia and Depression (NARSAD)
Type: **Young Investigator Award**
Period: 07/2007-06/2010
Total cost: \$60,000

7. Title: “Nicotine Effects in Adolescent and Adult Rats”

Role: **Principal Investigator**
Agency: Nebraska Health and Human Services
Type: **Research grant (2008-03B)**
Period: 07/01/2008-06/30/2009
Total cost: \$40,000

Intramural Grants

1. UNL Life Sciences Competitive Grants (Role: **co-PI**: 07/2011-06/2013): Gene Therapy Against Neurodegenerative Disorders Associated with Pesticide Exposure, \$72,000

2. Faculty seed grant (role: **PI**, 2008-2009): Characterizing Reconsolidation of Persistent Avoidance Responding, \$9,943

3. Faculty seed grant (role: **PI**, 2006-2007): How Antipsychotic Drugs Work Psychologically?----- An Animal Behavioral Investigation, \$9,980

4. UNL Layman award (role: **PI**, co-I: Dr. Bevins, June 2006-May 2007): Persistent Avoidance Responding as an Animal Model of Schizophrenia. \$9,995

Editorial Service:

Board member of “Advances in Psychological Science” (China)

Journal Review Service:

Neuropsychopharmacology; Psychopharmacology; Biological Psychiatry; Hormone and Behavior; Developmental Psychobiology; Physiology and Behavior; Pharmacology, Biochemistry, & Behavior; Behavioural Pharmacology; Hippocampus; Neuroscience Letters; Brain Research, Biochemical Pharmacology; Behavioural Brain Research; Pharmacological Research; Journal of Neural Transmission; Clinical and Experimental Pharmacology and Physiology; Journal of the Experimental Analysis of Behavior

Invited Talks

1. **Li, M:** Tuesday Night Neuroscience, Omaha, April 17, 2007
2. **Li, M:** Midwestern Psychological Association Conference, May 1 - 3, 2008, Chicago.
3. **Li, M:** Ecology, Evolution & Behavior seminar at the School of Biological Sciences, University of Nebraska-Lincoln, Jan 30, 2009.
4. **Li, M:** Barrow Neurological Institute, April 13, 2010.
5. **Li, M:** Institute of Psychology, Chinese Academy of Sciences, July 1, 2010.
6. **Li, M:** Shanghai Institute of Mental Health, Jan 27, 2011.
7. **Li, M:** Rosaline Franklin University of Medicine and Science, April 6, 2011
8. **Li, M:** Cognitive Science Beijing Symposium, Beijing June 17-18, 2011
9. **Li, M:** Institute of Psychology, Southwest University, Chongqing, June 28, 2011

International Collaborations

2007-2010: PhD supervisor for Tao Sun (*Nanjing Medical University*)
 2008-2010: PhD supervisor for Jing Chen and Chen Zhang (*Shanghai Jiaotong University*)
 2010-present: PhD supervisor for Min Feng (*Institute of Psychology, Chinese Academy of Sciences*)
 2011-present: Graduate student supervisors for Qing Shu (*Nanjing Medical University*) and Jing Qiao (*Southwest University*)

Professional Membership

Society for Neuroscience
 Society of Biological Psychiatry
 Association for Psychological Science
 Midwestern Psychological Association

Teaching Experience

Psyc 465/865, Bio 419/819 Behavioral Neuroscience
 Psyc 464 Psychopharmacology
 Psyc 904 Graduate Seminar on Physiological Psychology

2010-present Mentor of Dr. Nathan Sparkman (Research assistant professor)
 2008-2010 Mentor of Dr. Changjiu Zhao (Postdoctoral fellow)
 2006-present Undergraduate UCARE supervisor:
 Wei He, Katherine Heupel, Alex Mayhan, Kyle Brummet

University and Department Services

University Level:

2007-present Member of IACUC at UNL
 2008-present Member of NUgrant Advisory Board

Department Level:

2005-present Member of Department of Psychology Fellowship Committee

2007-present	Member of Colloquium Committee, UNL Psychology Department
2005-present	Master and PhD thesis committees: Jennifer Murray (2005), Carmela Reichel (2005), Alexa Mead (2006), Kate Wilson (2007), Amanda Struthers (2006), Petra Kleinlein (2007), Mark Shepherd (2008), Scott Barrett (2010), Sergios Charntikov (2010), Nathashia Swalve (2009), Steve Pittenger (2011)
2006-present	Undergraduate thesis supervisor: Rebecca Munro (2006), Ashley Rappana (2007), Justine Schulte (2008), Laura Olsen (2010)
2006-2007	Chair of Colloquium Committee, UNL Psychology Department
1998- 2001	Student Representative to the Animal Care Committee, University of Toronto at Mississauga

Publications (Note: “*” denotes the corresponding author)

Peer reviewed:

1. **Li, M***, Sun, T, and Mead, A (accepted): Clozapine, but not olanzapine disrupts conditioned avoidance response in rats by antagonizing 5-HT_{2A/2C} receptors, *Journal of Neural Transmission*.
2. Charntikov, S, Tracy, M, Zhao, CJ, **Li, M**, Bevins, R (accepted): Conditioned response evoked by nicotine conditioned stimulus preferentially induces c-Fos expression in medial regions of caudate-putamen, *Neuropsychopharmacology*.
3. Grant, K, LeVan, T, Wells, S, **Li, M**, Stoltenberg, S, Gendelman, H, Carlo, G and Bevins, R (accepted): Methamphetamine-associated psychosis, *Journal of Neuroimmune Pharmacology*.
4. **Li, M***, He, W, and Chen, J (2011): Time course of prepulse inhibition disruption induced by dopamine agonists and NMDA antagonists: Effects of drug administration regimen, *Pharmacology, Biochemistry and Behavior*, 99(3), 509-518.
5. **Li, M***, He, W, and Heupel, K (2011): Administration of clozapine to a mother rat potentiates pup ultrasonic vocalization in response to separation and re-separation: Contrast with haloperidol, *Behavioural Brain Research*, 2011 Apr 4.
6. **Li, M***, He, W, and Volf, N (2011): Time course of the attenuation effect of repeated antipsychotic treatment on prepulse inhibition disruption induced by repeated phencyclidine treatment, *Pharmacology, Biochemistry and Behavior*, 2011 Mar 21;98(4):559-569.
7. Kathryn Wilson, David Hansen and **Ming Li** (2011): The Traumatic Stress Response in Child Maltreatment and Resultant Neuropsychological Effects, *Aggression and Violent Behavior*, 16 (2011) 87–97.
8. Zhang, C, Fang, YR, and **Li, M*** (2011): Behavioral mechanisms of the disruptive effect of olanzapine and risperidone in the rat conditioned avoidance response model: further evidence, *Pharmacology, Biochemistry and Behavior*, 2011 Mar;98(1):155-60. Epub 2010 Dec 29.

9. **Li, M***, Sun, T, Zhang, C, Hu, G (2010): Distinct neural mechanisms underlying acute and repeated administration of antipsychotic drugs in rat avoidance conditioning. *Psychopharmacology*, Sep;212(1):45-57.
10. Sun, T, He, W, Hu, G, **Li, M*** (2010): Anxiolytic property of risperidone and olanzapine as examined in multiple measures of fear in rats. *Pharmacology, Biochemistry and Behavior*, 2010 May;95(3):298-307.
11. Sun, T, Zhao, CJ, Hu, G, **Li, M*** (2010): Iptakalim: A potential antipsychotic drug with novel mechanisms? *European Journal of Pharmacology*, 2010 May 25;634(1-3):68-76.
12. Zhao, CJ, **Li, M*** (2010): C-FOS identification of neuroanatomical sites associated with haloperidol and clozapine disruption of maternal behavior in the rat. *Neuroscience*, 2010 Apr 14;166(4):1043-55.
13. Chen, J, Wang, ZC, and **Li, M*** (2011): Multiple "hits" during postnatal and early adulthood periods disrupt the normal development of sensorimotor gating ability in rats. *Journal of Psychopharmacology*, 2011;25:379-92.
14. Zhao, CJ, **Li, M*** (2009): The receptor mechanisms underlying the disruptive effects of haloperidol and clozapine on rat maternal behavior: A double dissociation between dopamine D2 and 5-HT_{2A/2C} receptors. *Pharmacology, Biochemistry and Behavior*, 2009 Oct;93(4):433-42. Epub 2009 Jun 17.
15. **Li, M***, He, W, Mead, A (2009) An investigation of the behavioral mechanisms of antipsychotic action using a drug-drug conditioning paradigm. *Behavioural Pharmacology*, 2009 Mar;20(2):184-94.
16. Mead A, **Li M*** (2010) Avoidance-Suppressing Effect of Antipsychotic Drugs is Progressively Potentiated after Repeated Administration: an Interoceptive Drug State Mechanism. *Journal of Psychopharmacology*, 2010 Jul;24(7):1045-53. Epub 2009 Mar 27.
17. **Li, M***, He, W, Mead, A (2009) Olanzapine and risperidone disrupt conditioned avoidance responding in phencyclidine or amphetamine pretreated rats by selectively weakening motivational salience of conditioned stimulus. *Behavioural Pharmacology*, 20: 84-98.
18. Sun, T, Hu, G, **Li, M*** (2009): Repeated antipsychotic treatment progressively potentiates inhibition on phencyclidine-induced hyperlocomotion, but attenuates inhibition on amphetamine-induced hyperlocomotion: Relevance to animal models of antipsychotic drugs. *European Journal of Pharmacology*, 602:334-342.
19. Zhao, CJ, **Li, M*** (2009): Sedation and disruption of maternal motivation underlie the disruptive effects of antipsychotic treatment on rat maternal behavior. *Pharmacology, Biochemistry and Behavior*, 92: 147-156.
20. Mead, A, **Li, M***, Kapur, S (2008): Clozapine and Olanzapine Exhibit an Intrinsic Anxiolytic Property in Two Conditioned Fear Paradigms: Contrast with Haloperidol and Chlordiazepoxide. *Pharmacology, Biochemistry and Behavior*, 90 (2008) 551–562

21. **Li, M***, He, W and Munro, R (2008): Amphetamine Selectively Enhances Avoidance Responding to a Less Salient Stimulus in Rats. *Journal of Neural Transmission*, 2008 May;115(5):773-6.
22. Parada, M, King, S, **Li, M** and Fleming, A (2008): The roles of accumbal dopamine D1 and D2 receptors in maternal memory in rats. *Behavioral Neuroscience*, Apr;122(2):368-76.
23. **Li, M**, Fletcher PJ, Kapur S (2007) Time Course of the Antipsychotic Effect and the Underlying Behavioral Mechanisms. *Neuropsychopharmacology*, 2007, Feb;32(2):263-72.
24. Smith AJ, **Li M**, Becker S, Kapur S (2007) Linking Animal Models of Psychosis to Computational Models of Dopamine Function. *Neuropsychopharmacology*, 2007 Jan;32(1):54-66
25. Smith A, **Li, M**, Becker S, Kapur S (2006) Dopamine, prediction error and associative learning: A model-based account. *Network* 17:61-84.
26. **Li, M**, Budin, R, Fleming, A, and Kapur, S (2005) Effects of novel antipsychotics, amisulpiride and aripiprazole, on maternal behavior in rats. *Psychopharmacology* (Berl). 2005, 181(3) 600-10.
27. **Li, M.**, Budin, R, Fleming, A, and Kapur, S (2005) Effects of chronic typical and atypical antipsychotic drug treatment on maternal behavior in rats. *Schizophrenia Research*, 75/2-3 pp 325-336.
28. **Li, M.** Parkes, J, Fletcher, PJ, and Kapur, S. (2004) Evaluation of the motor initiation hypothesis of APD-induced conditioned avoidance decreases. *Pharmacology, Biochemistry and Behavior*, 78(4), 811-819.
29. Smith, A, **Li, M**, Becker, S and Kapur, S. (2004) A Model of Antipsychotic Action in Conditioned Avoidance: A Computational Approach. *Neuropsychopharmacology*, 2004 Jun, 29(6) 1040-9.
30. **Li, M.**, Davidson, P, Budin, R, Kapur, S and Fleming, A (2004) Effects of typical and atypical antipsychotic drugs on maternal behavior in postpartum female rats. *Schizophrenia Research*, 2004 Sep 1;70(1):69-80.
31. **Li, M.** and A.S. Fleming (2003) The nucleus accumbens shell is critical for normal expression of pup-retrieval in postpartum female rats. *Behavioural Brain Research*, 2003. 145(1-2): p. 99-111.
32. **Li, M.** and A.S. Fleming (2003) Differential involvement of nucleus accumbens shell and core subregions in maternal memory in postpartum female rats. *Behavioral Neuroscience*, 2003. 117(3): p. 426-45.
33. Lee, A., **Li, M.** Watchus, J, Fleming AS (1999) Neuroanatomical basis of maternal memory in postpartum rats: selective role for the nucleus accumbens. *Behavioral Neuroscience*, 1999. 113(3): p. 523-38.

Invited papers

34. **Li, M***, Mead, A, Bevins, RA (2009) Individual Differences in Responding to Nicotine: Tracking Changes from Adolescence to Adulthood. *Acta Pharmacol Sin* 2009, Jun; 30 (6): 868–878
35. Kapur, S, Agid, O, Mizrahi, R, and **Li, M** (2006) How antipsychotics work—From receptors to reality. *NeuroRx*, 3 (1), 10-21.
36. Kapur, S, Mizrahi, R, and **Li, M** (2005) From dopamine to salience to psychosis - Linking biology, pharmacology and phenomenology of psychosis. *Schizophrenia Research*, 2005 Nov 1;79(1):59-68.

Book chapters

37. Fleming, A, and Li, M (2002). Psychobiology of maternal behavior in non-human mammals. Handbook of Parenting (second edition, eds. [Marc H. Bornstein](#)), Mahwah, N.J.: Lawrence Erlbaum Associates, 2002.

Conference Presentations

1. **Li, M** and He, W: Time course of the attenuation effect of repeated antipsychotic treatment on prepulse inhibition disruption induced by repeated phencyclidine treatment, Society of Biological Psychiatry, May 11-14, 2011, San Francisco.
2. Zhang, C, Fang, YR, and **Li M**: Sensitization Induced by Haloperidol and Olanzapine is Context-Dependent, Midwestern Psychological Association Conference, May 5-7, 2011, Chicago.
3. Swalve, N and **Li, M**: Characterization of the sensitization-like effect of antipsychotics using the conditioned avoidance response model, Society for Neuroscience, November 13-17, 2010, San Diego.
4. Zhao, CJ, Sun, T, and **Li, M**: Neuroanatomical mechanisms underlying the inhibitory effect of repeated antipsychotic treatment on repeated phencyclidine-induced hyperlocomotion, Society for Neuroscience, November 13-17, 2010, San Diego.
5. **Li, M** and Zhao, CJ: c-Fos identification of neuroanatomical sites associated with haloperidol and clozapine disruption of maternal behavior in the rat, Society of Behavioral Endocrinology, July 18-21, 2010, Toronto, Canada.
6. **Li, M**, Sun, T, Zhao, CJ, and Hu, G: Distinct neural mechanisms underlying acute and repeated administration of antipsychotic drugs in rat avoidance conditioning, Society of Biological Psychiatry, May 20-23, 2010, New Orleans.
7. **Li, M**, He, W, and Chen, J: Effects of different regimens of repeated amphetamine and phencyclidine treatment on prepulse inhibition in rats, Society for Neuroscience, October 16-21, 2009, Chicago.
8. Zhao, CJ, and **Li, M**: The receptor mechanisms underlying the disruptive effects of haloperidol and clozapine on rat maternal behavior: A double dissociation between dopamine D2 and 5-HT_{2A/2C} Receptors, Society for Neuroscience, October 16-21, 2009, Chicago.
9. **Li, M**, Tao, S, and Hu, G: Repeated antipsychotic treatment progressively potentiates inhibition on phencyclidine-induced hyperlocomotion, but attenuates inhibition on amphetamine-induced hyperlocomotion: Relevance to animal models of antipsychotic drugs, Society for Neuroscience, Nov. 14-18, 2008, Washington, DC.
10. **Li, M**, Munro, R, Mead, A, and He, W: Sensitization to amphetamine, but not phencyclidine, enhances avoidance responding to a less salient stimulus but does not impair social interaction and social memory in rats, Society for Neuroscience, Nov. 3-7, 2007, San Diego.

11. Mead, A, and **Li, M**: Avoidance-suppressing effect of antipsychotic drugs is enhanced after repeated administration: an interoceptive drug memory mechanism, Society for Neuroscience, Nov. 3-7, 2007, San Diego.
12. Munro R, He W, and **Li M**, "Amphetamine sensitization leads to abnormally heightened response to a less salient stimulus but does not impair social interaction and social memory", Midwestern Psychological Association Conference, May 3 - 5, 2007, Chicago.
13. **Li, M**, Mead, A, and Weishahn, Anxiolytic property of atypical antipsychotics: A preclinical investigation, Colorado Springs, Mar. 28-April 1, 2007
14. **Li, M**, Fletcher, P, and Kapur, S. Examining the time course of antipsychotic treatment in schizophrenia using conditioned avoidance response model, Program No. 453.17. Washington, DC: Society for Neuroscience, Nov. 12-16, 2005.
15. Ni X, **Li M**, Han J, Lu Y, Dixon L, Kapur S, Kennedy JL. Investigation of correlations between gene expression of gap junctions and acquisition and performance scores of conditioned avoidance response in rats. 60th Annual meeting of Society of Biological Psychiatry: Pathogenesis and Prevention of Major Mental Disorders, Atlanta, Georgia, USA, May 19-21, 2005.
16. Smith A., **Li M**, and Kapur, S. Understanding the Early-Onset of Antipsychotic Action: An Animal and Computational Model, 10th International Congress on Schizophrenia Research, Savannah, Georgia, USA, April 2-6, 2005.
17. **Li, M**, Budin, R, Fleming, AS, and Kapur S. (2004) Effects of chronic typical and atypical antipsychotic drug treatment on maternal behavior in rats, Society of Biological Psychiatry's 59th Annual Scientific Convention, New York, April 28-May 1, 2004.
18. Smith A. J, Becker S, **Li M**, et al. (2004) A computational model of dopamine in conditioned avoidance and impulsivity, Society of Biological Psychiatry's 59th Annual Scientific Convention, New York, April 28-May 1, 2004.
19. **Li, M**, Fletcher, PJ, and Kapur, S. (2003) Antipsychotics suppress stimulus incentive salience: Implications for their therapeutic actions in schizophrenia, 9th International Congress on Schizophrenia Research, Colorado Springs, March 29-April 2, 2003.
20. Budin R, Li, M, Davidson, P. Fleming, AS, and Kapur, S (2003) Effects of typical and atypical antipsychotics on maternal behavior in postpartum female rats, 9th International Congress on Schizophrenia Research, Colorado Springs, March 29-April 2, 2003.
21. **Li, M**, Davidson, P, Fleming, A, and Kapur, S (2002) Effects of typical and atypical antipsychotic drugs on maternal behavior: implications for behavioral mechanisms of antipsychotics, Orlando, Society for Neuroscience Conference, Nov, 2-7.
22. **Li, M**, Smith, M-L, and Fleming, A. (2001) Nucleus accumbens shell mediates the consolidation of maternal experiences, San Diego, Society for Neuroscience Conference, Nov, 9-15.
23. **Li, M**, Kapur, S, and Fleming, A (2001). Antipsychotics interfere with maternal and social behaviors in rats: Differential effects of haloperidol and clozapine. 8th International Congress on Schizophrenia Research, Whistler Resort, British Columbia, Canada, April 28-May 2, 2001.
24. **Li, M**. and Fleming, A. (1999) Effects of lesions of two different subregions of the nucleus accumbens on maternal experience in postpartum rats. Abstracts of Society for Behavioral Neuroendocrinology, 236, 3rd annual meeting, University of Virginia, Charlottesville, Virginia.

Volunteer activity

1. Classroom helper for Maxey elementary school
2. Substitute teacher of CSSA UNL Chinese School