

**BIOGRAPHICAL SKETCH**

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NAME Michael S. Fanselow	POSITION TITLE Professor		
eRA COMMONS USER NAME fanselow2			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Brooklyn College-City University of New York, Brooklyn, NY	B.S. magna cum laude	1976	Psychology Honors
University of Washington, Seattle, Washington	Ph.D.	1980	Biobehavioral Psychology

**A. Positions and Honors.****Positions and Employment**

- 1980 – 1981 Assistant Professor, Dept of Psychology, Rensselaer Polytechnic Institute.  
 1981 – 1986 Assistant Professor, Dept of Psychology, Dartmouth College.  
 1986 – 1988 Associate Professor, Dept of Psychology, Dartmouth College.  
 1988 – 1989 Associate Professor, Dept of Psychology, UCLA.  
 1989 – Present Professor, Dept of Psychology & Brain Research Institute, UCLA.  
 2001 – Present Director, Behavioral Testing Core, UCLA.

**Honors, Other Experience and Professional Memberships**

- 1979 Recipient of the first annual Edwin B. Newman Award for Excellence in Research. American Psychological Association and Psi Chi.  
 1983 Recipient of the D.O. Hebb Young Scientist Award of the American Psychological Association.  
 1985 Recipient of the American Psychological Association's Distinguished Scientific Award for an Early Career Contribution to Psychology Los Angeles.  
 Elected Fellow of the American Psychological Association (Divisions 1, 3, 6, & 28)  
 1992 – 1993 Fellow, Center for Advanced Study in the Behavioral Sciences. Stanford, California.  
 1994 Elected Fellow of the American Association for the Advancement of Science “for seminal contributions to...behavioral neuropharmacology of fear and fear motivated learning.”  
 1995 Recipient of the Troland Research Award of the National Academy of Sciences.  
 1998 President of the Division of Behavioral Neuroscience and Comparative Psychology of the American Psychological Association.  
 2001 President-elect of the Pavlovian Society.  
 2001 – 2002 Fellow Hanse-Wissenschaftskolleg (Hanse Institute for Advanced Study) Delmenhorst, Germany.

**B. Selected peer-reviewed publications (in chronological order).**

1. Anagnostaras SG, Craske MG, **Fanselow MS**. Anxiety: At the intersection of genes and experience. *Nat Neurosci* 1999;2:780-782.
2. **Fanselow MS**, LeDoux JE. Why we think plasticity underlying Pavlovian fear conditioning occurs in the basolateral amygdala. *Neuron* 1999;23:229-232.
3. Li HH, Yu W-H, Rozengurt N, Zhao H-Z, Lyons KM, Anagnostaras S, **Fanselow MS**, Suzuki K, Vanier MT, Neufeld EF. Mouse model of Sanfilippo syndrome type B produced by targeted disruption of the gene encoding alpha -N-acetylglucosaminidase *Proc Natl Acad Sci USA* 1999;96:14505-14510.
4. **Fanselow MS**. Contextual fear, gestalt memories, and the hippocampus. *Behav Brain Res* 2000;110:73-81
5. **Fanselow MS**, Gale GD. Amygdala. In: Fink G (Ed.), *Encyclopedia of Stress*. San Diego: Academic Press, 2000, pp 178-182.
6. Godsil BP, Quinn JJ, **Fanselow MS**. Body temperature as a conditional response measure for Pavlovian fear conditioning. *Learn Mem* 2000;7:353-356.

7. Anagnostaras SG, Gale GD, **Fanselow MS**. Hippocampus and contextual fear conditioning: Recent controversies and advances. *Hippocampus* 2001;11:8-17
8. Dutton RC, Maurer AJ, Sonner JM, **Fanselow MS**, Laster MJ, Eger EI. The concentration of isoflurane required to suppress learning depends on the type of learning. *Anesthesiology* 2001;94:514-519.
9. Wiltgen BJ, Sanders MJ, Behne NS, **Fanselow MS**. Sex differences. Context preexposure, and the immediate shock deficit in Pavlovian context conditioning with mice. *Behav Neurosci* 2001;115:26-32.
10. Fanselow MS. Toward a neurobiology of functional behavior systems: Contrasting Pavlovian emotional and motor learning. In: Steinmetz JE, Gluck MA (Eds.), *Model Systems and the Neurobiology of Associative Learning: A Festschrift in Honor of Richard F. Thompson*. Mahwah, NJ: Erlbaum, 2001, pp 379-393.
11. Petrie J, Sapp DW, Tyndale RF, Park MK, **Fanselow MS**, Olsen RW. Altered GABA(A) receptor subunit and splice variant expression in rats treated with chronic intermittent ethanol. *Alcohol Clin Exp Res* 2001;25:819-828.
12. Gale GD, Anagnostaras SG, **Fanselow MS**. Cholinergic modulation of Pavlovian fear conditioning: Effects of intrahippocampal scopolamine infusion. *Hippocampus* 2001;11:371-376.
13. Quinn JJ, Oommen SS, Morrison GE, **Fanselow MS**. Post-training excitotoxic lesions of the dorsal hippocampus attenuate forward trace, backward trace, and delay fear conditioning in a temporally specific manner. *Hippocampus* 2002;12:495-504.
14. Dutton RC, Maurer AJ, Sonner JM, **Fanselow MS**, Laster MJ, Eger EI 2<sup>nd</sup>. Isoflurane causes anterograde but not retrograde amnesia for pavlovian fear conditioning. *Anesthesiology* 2002;96:1223-1229.
15. Dutton RC, Maurer AJ, Sonner JM, **Fanselow MS**, Laster MJ, Eger EI 2<sup>nd</sup>. Short-term memory resists the depressant effect of the nonimmobilizer 1-2-dichlorohexafluorocyclobutane (2N) more than long-term memory. *Anesth Analg* 2002;94:631-639.
16. Eger EI 2<sup>nd</sup>, Xing Y, Pearce R, Shafer S, Laster MJ, Zhang Y, **Fanselow MS**, Sonner JM. Isoflurane antagonizes the capacity of flurothyl or 1,2-dichlorohexafluorocyclobutane to impair fear conditioning to context and tone. *Anesth Analg* 2003;96:1010-1018.
17. Godsil BP, Tinsley MR, **Fanselow MS**. Motivation. In: Healy AF, Proctor RW (Eds.), *Handbook of Psychology: Volume 4: Experimental Psychology*. Hoboken, NJ: John Wiley & Sons, 2003, pp 33-60.
18. **Fanselow MS**, Gale GD. The amygdala, fear and memory. *Ann NY Acad Sci* 2003;985:125-134.
19. Gonzalez F, Quinn JJ, **Fanselow MS**. Differential effects of adding and removing components of a context on the generalization of conditional freezing. *J Exp Psychol Anim Behav Processes* 2003;29:78-83.
20. Sanders MJ, Wiltgen BJ, **Fanselow MS**. The place of the hippocampus in fear conditioning. *Eur J Pharmacol* 2003;463:217-223.
21. Sanders MJ, **Fanselow MS**. Pre-training prevents context fear conditioning deficits produced by hippocampal NMDA receptor blockade. *Neurobiol Learn Mem* 2003;80:123-9.
22. Meffert MK, Chang JM, Wiltgen BJ, **Fanselow MS**, Baltimore D. NF-kappa B functions in synaptic signaling and behavior. *Nat Neurosci* 2003;6:1072-8.
23. Mayer EA, **Fanselow MS**. Dissecting the components of the central response to stress. *Nat Neurosci* 2003;6:1011-2.
24. Han CJ, O'Tuathaigh CM, van Trigt L, Quinn JJ, **Fanselow MS**, Mongeau R, Koch C, Anderson DJ. Trace but not delay fear conditioning requires attention and the anterior cingulate cortex. *Proc Natl Acad Sci U S A* 2003;100:13087-92.
25. Tinsley MR, Quinn JJ, **Fanselow MS**. The role of muscarinic and nicotinic cholinergic neurotransmission in aversive conditioning: comparing pavlovian fear conditioning and inhibitory avoidance. *Learn Mem* 2004;11:35-42.
26. Stote DL, **Fanselow MS**. NMDA receptor modulation of incidental learning in Pavlovian context conditioning. *Behav Neurosci* 2004;118:253-7.
27. Gale GD, Anagnostaras SG, Godsil BP, Mitchell S, Nozawa T, Sage JR, Wiltgen B, **Fanselow MS**. Role of the basolateral amygdala in the storage of fear memories across the adult lifetime of rats. *J Neurosci* 2004;24:3810-5.
28. Godsil BP, **Fanselow MS**. Light stimulus change evokes an activity response in the rat. *Learn Behav* 2004;32:299-310.
29. **Fanselow MS**, Poulos AM. The neuroscience of mammalian associative learning. *Annu Rev Psychol* 2005;56:207-234.

## **C. Research Support**

### **Ongoing Research Support**

PO1 GM47818 Eger (PI)

07/01/00 – 06/30/05

Definition of Inhaled Anesthetic Sites of Action

The major goal of this project is to test the hypothesis that specific proteins/receptors mediate two primary effects of inhaled anesthetics: a) suppression of movement, and b) production of amnesia.

Role: Consultant

T32 MH015795:24 Fanselow (PI)

07/01/00 – 06/30/05

NIMH

Training in Behavioral Neuroscience

The purpose of this proposal is to fund graduate students that are training in Behavioral Neuroscience in UCLA's Psychology Department.

Role: PI

R01 MH62122-02 Fanselow (PI)

09/01/01 – 08/31/05

NIMH

Anterograde Amnesia for Contextual Fear

The major goal of this project is to determine how neocortical systems can compensate for the amnesia produced by hippocampal damage.

Role: PI

5 P50 DA05010-17 Evans (PI)

09/30/02 – 05/31/07

NIH/NIDA

Center for Study of Opioid Receptors and Drugs of Abuse (CSORDA)

Using a multidisciplinary and collaborative approach, the Center's research objective is to contribute insights into the mechanisms of action of opioid drugs and their receptors with the ultimate goal of discerning molecular processes that contribute to opiate addiction, tolerance and withdrawal.

Role: Investigator

5 P50 DA05010-17 Evans (PI)

09/30/02 – 05/31/07

NIH/NIDA

Center for Study of Opioid Receptors and Drugs of Abuse (CSORDA)

Mutant Animal Breeding Core (M. Fanselow, Core Director)

Using a multidisciplinary and collaborative approach, the Center's research objective is to contribute insights into the mechanisms of action of opioid drugs and their receptors with the ultimate goal of discerning molecular processes that contribute to opiate addiction, tolerance and withdrawal. The core breeds opioid receptor mutant animals.

Role: Director

1 R24 AT002681 Mayer (PI)

09/15/04 – 07/31/09

NCCAM

Mind/Brain/Body Interactions in Stress-Related Disorders

Animal Models Core (M. Fanselow, Core Director)

The goal of this infrastructure grant is to develop 4 research cores (Health Outcomes, Neuroimaging, Animal Models, Psychophysiology and Pain Assessment) to provide novel, cutting edge expertise and technologies to UCLA investigators interested in the study of mind brain body interactions. After the full build up of the cores, there will be a Pilot and Feasibility program for years 3-5 of the grant with 4 annual awards. These projects will utilize the resources of the cores as well as the expertise of the involved faculty. In addition, a career development program in form of a Named New Investigator award is included, as well as several developmental and public infrastructure components. The purpose of the Animal Models Core is to develop and maintain animals, principally mice with mutations of stress hormone systems, for investigating the effects of stress on behavior.

Role: Director

Principal Investigator/Program Director (Last, First, Middle):

**Completed Research Support**

IBN-0091487 Faselow (PI)

09/01/01 – 08/31/04

NSF

Retrograde Amnesia for Trace Fear Conditioning

The major goal of this project is to characterize the role of the hippocampus in trace fear conditioning.

Role: PI