

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.
Follow the sample format on for each person. (See attached sample). **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE		
Mark G. Barad		Assistant Professor		
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)				
INSTITUTION AND LOCATION		DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Harvard University, Cambridge, MA		B.A. magna cum laude	1979	English and American Languages and Literatures
Yale University, New Haven, CT		M.D./Ph.D.	1991	Human Genetics
Center for Neurobiology and Behavior, Columbia University, New York, NY		Post-Doc	1992 – 1996	Neurobiology
Dept. of Psychiatry, Columbia University and NY State Psychiatric Institute, New York, NY		Resident	1996 – 1999	Psychiatry

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

1980 – 1982	Volunteer in Public Health, United States Peace Corps, Zaire
1982 – 1984	Research Assistant in the laboratory of Adelbert Ames III, M.D., Department of Neurosurgery, Massachusetts General Hospital, Boston
1985 – 1991	Graduate Research Assistant in the laboratory of William McGinnis, Ph.D., Yale University, New Haven
1991 – 1992	Intern in Internal Medicine, Yale-New Haven Hospital, Yale University, New Haven
1992 – 1996	Post-doctoral fellow in the laboratory of Dr. Eric Kandel, M.D., Center for Neurobiology and Behavior, Howard Hughes Medical Institute, Columbia University, New York
1996 – 1999	Resident in Psychiatry, Department of Psychiatry, Columbia University and New York State Psychiatric Institute
1999 – Present	Assistant Professor, Department of Psychiatry and Biobehavioral Sciences, University of California at Los Angeles, Los Angeles, CA

Honors

1984 – 1991	National Institutes of Health Medical Scientist Training Program
1991	Society for Academic Emergency Medicine Award for excellence of a medical student in emergency medicine
1994 – 1996	National Alliance for Research on Schizophrenia and Depression (NARSAD) Young Investigator Award
1999 – 2000	UCLA School of Medicine Frontiers of Science Seed Grant
2000 – 2002	National Alliance for Research on Schizophrenia and Depression (NARSAD) Young Investigator Award
2001 – 2002	West Coast College of Biological Psychiatry, Forest Laboratories Junior Faculty Research Award
2002 – 2004	Tennenbaum Scholar, Tennenbaum Family Research Initiative

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

1. **Barad M**, Martin K. Budimu mBupita Buanga: Bansonolodi; Budimu mBupita Buanga: Baleleshi; Prevenir Vaut Mieux Que Guerir. Catholic Press, Kananga, Zaire, 1982.
2. Ames A III, Walseth TF, Heyman RA, **Barad M**, Graeff RM, Goldberg ND. Light-induced increases in cGMP metabolic flux correspond with electrical responses of photoreceptors. J Biol Chem 1986;261:13034-13042.
3. Ames A III, **Barad M**. Metabolic flux of cyclic GMP and phototransduction in rabbit retina. J Physiol 1988;406:163-170.

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

4. **Barad M**, Jack T, Chadwick R, McGinnis W. A novel, tissue-specific, *Drosophila* homeobox gene. *EMBO J* 1988;7:2151-2161.
5. **Barad M**, Erlebacher A, McGinnis W. Despite expression in embryonic visceral mesoderm, H2.0 is not essential for *Drosophila* visceral muscle morphogenesis. *Developmental Genetics* 1991;12:206-211.
6. Abel T, Nguyen PV, **Barad M**, Deuel TAS, Kandel ER, Bourtchuladze R. Genetic demonstration of a role for PKA in the late phase of LTP and in hippocampus-based long-term memory. *Cell* 1997;88:615-626.
7. Martin KC, Michael D, Rose JC, **Barad M**, Casadio A, Zhu H, Kandel ER. MAP kinase translocates into the nucleus of the presynaptic cell and is required for long term facilitation in *Aplysia*. *Neuron* 1997;18:899-912.
8. **Barad M**, Bourtchuladze R, Winder DG, Golan H, Kandel ER. Rolipram, a type IV-specific phosphodiesterase inhibitor, facilitates establishment of long-lasting long-term potentiation and improves memory. *Proc Natl Acad Sci USA* 1998;95:15020-15025.
9. Bach ME, **Barad M**, Son J, Zhuo M, Lu Y-F, Shih R, Mansuy I, Hawkins RD, Kandel ER. Age-related defects in spatial memory are correlated with defects in the late phase of hippocampal long-term potentiation and are attenuated by drugs that enhance the cAMP signaling pathway. *Proc Natl Acad Sci USA* 1999;96:5280-5285.
10. Martin KC, **Barad M**, Kandel ER. Local protein synthesis and its role in synapse-specific plasticity. *Curr Opin Neurobiol* 2000;10:587-592.
11. Cain CK, Blouin AM, **Barad M**. L-type voltage-gated calcium channels are required for extinction, but not acquisition or expression, of conditional fear in mice. *Journal of Neuroscience* 2002;15:9113-21.
12. **Barad M**. Later developments: Molecular keys to age-related memory loss. *Alzheimer Disease and Associated Disorders* 2003. (In Press)
13. Moccia R, Chen D, Lyles V, Kapuya E, E Y, Kalachikov S, Spahn CMT, Frank J, Kandel ER, **Barad M**, Martin KC. An unbiased cDNA library prepared from isolated *Aplysia* sensory neuron processes is enriched for cytoskeletal and translational mRNAs. *Journal of Neuroscience* 2003. (In Press)
14. Cain CK, Blouin AM, **Barad M**. Temporally massed CS presentations generate more fear extinction than spaced presentations. *Journal of Experimental Psychology: Animal Behavior Processes* 2003. (In Press)

C. Research Support

Ongoing Research Support

RO1 AA12716 Martin (PI)

9/1999 – 9/2003

NIH

cDNA Libraries Prepared from Pure Neuronal Processes

The major goal of this library is to prepare cDNA libraries of mRNAs localized in axons or dendrites of neurons from *Aplysia Californica* and mouse.

Role: Co-Investigator

Tennenbaum Scholarship Barad (PI)

6/2002 – 6/2004

UCLA

Interdisciplinary research in anxiety

The goals of this scholarship are to develop translational initiatives to apply my basic science work in extinction to anxiety disorder treatment.

Role: PI

K08 MH64532:01A1 Barad (PI)

9/2002 – 8/2005

NIMH

Rodent models of anxiety disorder treatment

The goals of this career development award were to support my career development as a psychiatrist doing basic science research in extinction, to develop robust behavioral extinction protocols, improve the sophistication of my pharmacological knowledge and technique, to add electrophysiological analysis and to develop integration with clinical research.

Role: PI

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

Completed Research Support

Young Investigator Award Barad (PI)

7/2000 – 6/2003

NARSAD Young Investigator Award

Mouse models of post-traumatic stress disorder and phobia

The major goals of this project are to set up behavioral models of extinction of fear conditioning and of the pathogenesis of post-traumatic stress disorder.

Role: PI

Junior Faculty Research Award Barad (PI)

7/2001 – 6/2002

West Coast College of Biological Psychiatry

Molecular dissection of the extinction of fear conditioning

The major goal of this project is to identify molecules involved in extinction using systemic drug injections.

Role: PI