

BIOGRAPHICAL SKETCH

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NAME Paul H. Patterson		POSITION TITLE Anne P. and Benjamin F. Biaggini Professor of Biological Sciences	
eRA COMMONS USER NAME: PATTERSONPH			
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
Grinnell College, Grinnell, Iowa	B.A.		Biology
Johns Hopkins University	Ph.D.		Biochemistry
Harvard Medical School	Postdoctoral		Neurobiology

A. Positions and Honors

1973-1983 Assistant and Associate Professor of Neurobiology, Harvard Medical School
 1983-2005 Professor of Biology, California Institute of Technology
 1989-2000 Executive Officer for Neurobiology, California Institute of Technology
 1999-2001 Vice Chair of the Faculty, California Institute of Technology
 2004-present Research Professor of Neurological Surgery, Keck School of Medicine, U.S.C.
 2005-present Anne P. and Benjamin F. Biaggini Professor of Biological Sciences

1970 Helen Hay Whitney Postdoctoral Fellowship; 1974 Research Career Development Award, NIH; 1979, 1987, 1993 Member, NIH Study Sections; 1979-1983 Research Committee, The Medical Fdn.; 1979 Rita Allen Fdn. Scholar; 1980-1994 Assoc. Editor, *J. Neuroscience*; 1982 Assoc. Editor, *Annu. Rev. Physiology*; 1983, 1985, 1988 McKnight Foundation Neuroscience Development and Research Project Awards; 1984 W. Alden Spencer Award, Center for Neuroscience, Columbia Univ.; 1987-1994 Assoc. Editor, *Neuron*; 1987-88, 1989-90 Biology Undergraduate Student Advisory Committee Excellence in Teaching Award; "Best Professor" Award for Excellence in Teaching, Biology Undergraduate Student Advisory Committee; 1988 Javits Neuroscience Investigator Award, NINDS Council, NIH; 1989 Burton L. Baker Memorial Lecturer, Univ. Michigan; 1991-94, 1996-99, 2002-6, 2009-present Sci. Advisory Board, Hereditary Disease Fdn.; 1992-present Assoc. Editor, *Curr. Opin. Neurobiology*; 1992 Fellow of the AAAS; 1992-1994 Senior Consultant for Neural Development, NIMH; 1994-1999 Editorial Boards, *Develop. Neuroscience* and *Molec. Cell. Neuroscience*; 1995-1998 Council, AAAS; 1998 Ulf von Euler Lectureship, Karolinska Institutet; 1999 Distinguished Investigator Award, National Alliance for Research on Schizophrenia and Depression; 2000 Jerome Sutin Lectureship, Emory Univ.; 2000-present John Douglas French Alzheimer's Fdn. Scientific Advisory Board; 2002 McKnight Fdn. Neuroscience of Brain Disorders Award; 2004-present Cure Autism Now-Autism Speaks Fdn. Sci. Advisory Board; 2004 Visiting Professorship, Institute of Psychiatry, King's College London; 2006-present Assoc. Editor, *The Scientific World Neuroscience*; 2006 Teaching Award Nominee, Associated Students of Caltech; 2006 Director, Calif. Inst. Regenerative Medicine Training Grant; 2009 Keynote James Cuozzo Memorial Lecturer, Ctr. for Research on Reproduction and Women's Health, Univ. Pennsylvania; 2010 Assistant Editor, *J. Exp. Med.*

B. Selected publications (from a total of 146) relevant to this application

Fatemi SH, Earle J, Kanodia R, Kist D, Emamian ES, Patterson PH, Shi L, Sidwell R. (2002) Prenatal viral infection leads to pyramidal cell atrophy and macrocephaly in adulthood: implications for genesis of autism and schizophrenia. *Cell Mol Neurobiol* 22:25-33.
 Shi L, Fatemi SH, Sidwell RW, Patterson PH (2003) A mouse model of mental illness: maternal influenza infection causes behavioral and pharmacological abnormalities in the offspring. *J Neurosci* 23:297-302.
 Shi L, Tu N, Patterson PH (2005) Maternal influenza infection is likely to alter fetal brain development indirectly: the virus is not detected in the fetus. *Intl J Develop Neurosci* 23:299-305.

Principal Investigator/Program Director (Last, First, Middle): Patterson, Paul H.

- Smith SEP, Li J, Garbett K, Mirnics K, Patterson PH (2007) Maternal immune activation alters fetal brain development through interleukin-6. *J Neurosci* 27:10695-702.
- Shi L, Smith SEP, Malkova N, Tse D, Su Y, Patterson PH (2009) Activation of the maternal immune response alters cerebellar development in the offspring. *Brain Behav Immun* 23:116-23.
- Ito HT, Smith SEP, Hsiao E, Patterson PH (2010) Maternal immune activation alters hippocampal information processing in adult offspring. *Brain Behav Immun* 24:930-41. PMC20227486
- Hsiao E, Patterson PH (2011) Activation of the maternal immune system induces endocrine changes in the placenta via IL-6. *Brain Behav Immun*, in press. PMCID 21195166