

Curriculum Vitae

Shantanu Jadhav, Ph.D

Post-doctoral Scholar, W.M. Keck Center for Integrative Neuroscience and Department of Physiology, University of California San Francisco (UCSF), San Francisco, CA, 94143
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EDUCATION

- Mar 2009 - Present** **University of California, San Francisco (UCSF)**, San Francisco, CA.
Post-doctoral Research Scholar, Department of Physiology and W.M. Keck Center for Integrative Neuroscience (Lab: Dr. Loren Frank).
- Aug 2008 - Feb 2009** **University of California, Berkeley (UCB)**, Berkeley, CA.
Post-doctoral Research Fellow, Dept. of Molecular and Cellular Biology, and Helen Wills Neuroscience Institute (Lab: Dr. Daniel Feldman).
- 2003-2008** **University of California, San Diego (UCSD)**, La Jolla, CA.
Ph.D. Computational Neurobiology (Research Advisor: Dr. Daniel Feldman).
- 1998-2002** **Indian Institute of Technology (IIT), Bombay**, India.
Bachelor of Technology, Engineering Physics (GPA: 9.44/10).

HONORS AND AWARDS

- 2009** **Ernest Gallo Clinic and Research Center Fellow Award**, UCSF.
- 2006-2007** **La Jolla Interfaces In Science (LJIS) Pre-Doctoral Award (Burroughs-Wellcome Fund)**, UCSD, TSRI, Salk Institute, SDSC.
- 2004** **Ray Thomas Edwards Graduate Student Travel Award**, UCSD, for attending the 'Society for Neuroscience' Meeting.
- 2003-2005** **NSF-IGERT Training Grant**, Computational Neurobiology Program, UCSD.
- 2003** Offered **Hopfield fellowship**, California Institute of Technology, declined.
- 2003** Offered **Presidential Fellowship**, Duke University, declined.
- 2002-2003** **Graduate Traineeship**, National Center for Biological Sciences, India.
- Jun-Aug 2001** **Undergraduate Research Program (URP)**, Cold Spring Harbor Laboratory, NY.
- Jun-Aug 2000** **Visiting Students Research Fellowship (VSRP)**, Tata Institute of Fundamental Research, Bombay, India.
- 1995** **National Talent Search Scholarship**, India.

PUBLICATIONS (Peer-reviewed Journals)

1. **Shantanu P. Jadhav** and Daniel E. Feldman, “*Texture coding in the whisker system*”, **Current Opinion in Neurobiology**. Epub, Mar 16, 2010.
2. Lu Li*, Kevin J. Bender*, Patrick J. Drew, **Shantanu P. Jadhav**, Emily Sylwestrak, Daniel E. Feldman, “*Endocannabinoid signaling is required for development and critical period plasticity of the whisker map in somatosensory cortex*”, **Neuron**. Nov 2009, vol. 65, pp. 537-549.
3. **Shantanu P. Jadhav** and Loren M. Frank, “*Reactivating Memories for Consolidation*”, **Neuron**. Jun 2009, vol. 62, pp. 745-746 (Preview Article).
4. **Shantanu P. Jadhav**, Jason Wolfe, and Daniel E. Feldman, “*Sparse Temporal Coding of Elementary Tactile Features during Active Whisker Sensation*”. **Nature Neuroscience**. May 2009, vol. 12, pp. 792-800.
5. Laetitia Gabernet, **Shantanu P. Jadhav**, Daniel E. Feldman, Matteo Carandini, and Massimo Scanziani, “*Somatosensory Integration Controlled by Dynamic Thalamocortical Feed-Forward Inhibition*”, **Neuron**, Oct 2005, vol. 48, pp. 315-327.
6. Ajai Vyas*, **Shantanu Jadhav*** & Sumantra Chattarji, “*Prolonged chronic stress induces amygdaloid neuronal hypertrophy and enhanced anxiety-like behavior*”, **Neuroscience**, December 2006, vol. 143, pp. 387-393. (* = Equal Contributors).
7. Rupshi Mitra, **Shantanu Jadhav**, Bruce S. McEwen, Ajai Vyas, and Sumantra Chattarji, “*Stress duration modulates the spatiotemporal patterns of spine formation in the basolateral amygdala*”, **PNAS**, June 2005, vol. 102 (26), pp. 9371-9376.

RESEARCH EXPERIENCE

- Mar 2009-
Present** **University of California San Francisco**
Post-Doctoral Research Scholar
Advisor: Loren Frank
Role of interactions of the hippocampus and pre-frontal cortex in learning, memory and decision-making using behavior, *in vivo* physiology, opto-genetic and computational techniques.
- 2003-2008** **University of California Berkeley**
Post-Doctoral Research Fellow
University of California San Diego / Salk Institute

Graduate Student (Computational Neurobiology)

Advisor: Daniel Feldman

Research focusing on plasticity and processing in the rat vibrissa system. Thesis - Neural coding during active sensation in the somatosensory system using various experimental (behavioral training, acute and chronic awake-behaving electrophysiological recordings) and computational techniques (quantitative analysis of physiology data and modeling).

2002-2003

National Center for Biological Sciences (NCBS), Bangalore, India

Junior Research Fellow, Laboratory of Cellular Neurophysiology

Advisor: Sumantra Chattarji

Neuroanatomical, physiological and molecular changes in the hippocampus and amygdala underlying memory impairments and anxiety during stress and depression.

Jun-Aug 2001

Cold Spring Harbor Laboratory, New York

Undergraduate Research Program (URP)

Advisor: Anthony Zador

Statistical properties of natural sounds and design of psychophysical experiments to study the effect of attention on auditory processing.

2000-2002

Indian Institute of Technology (IIT), Bombay, India

Bachelor's and Junior Thesis' Projects

Advisors: G. Mukhopadhyay and R. Varma, Dept of Physics

Models of biological ageing in age-structured populations, and

Mathematical analysis of DNA and protein sequences.

Jun-Aug 2000

Tata Institute of Fundamental Research (TIFR), Bombay, India

Visiting Students Research Program (VSRP)

Advisor: K.S. Krishnan

Research in neurogenetics; genetic screen in *Drosophila* for isolating temperature sensitive mutations in genes involved in synaptic processing.

Research Courses

Summer 2005

Advanced Course in Computational Neuroscience, IBRO/FENS, Arcachon, France

4-week training course in neural modeling methods; developed a simplified computational model of somatosensory cortex.

January 2001

Center for Cellular and Molecular Biology (CCMB), Hyderabad, India

Mathematical and Computational Biology Workshop

Jul 1999

National Center for Biological Sciences (NCBS), Bangalore, India

Computational Neuroscience Workshop

Advisors: Upinder Bhalla, Dave Beeman

Developed a model of the spinal reflex arc using the Genesis neural simulator.

TEACHING EXPERIENCE

- Spring 2005** **Advanced Systems Neurophysiology, UCSD.**
- Winter 2005** **Systems Neurobiology, UCSD.**
- Winter 2003** **Biophysics, NCBS, India.**

REFERENCES

Daniel E. Feldman
Associate Professor
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Terrence J. Sejnowski
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