Anne Smith, Ph.D.

Clinical Interests Dr. Smith is conducting research into applied mathematics, biomathematics and neurobiology.

Title Adjunct Assistant Professor

Department Anesthesiology

Division General Anesthesiology

Education Ph.D., University of Virginia School of Medicine, Charlottesville, Virginia, 1993
B.Sc., University of Manchester, Manchester, 1987
M.S., University of Virginia, Charlottesville, Virginia, 1989

Fellowships Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts, 1994

Select Recent Publications

Smith AC, Wirth S, Suzuki WA, Brown EN. Bayesian analysis of interleaved learning and response bias in behavioral experiments. Journal of Neurophysiology, 97(3): 2516-24., 2007.

Smith AC, Smith P. A set probability technique for detecting relative time order across multiple neurons. Neural Computation, 18, 1197-1214., 18(5): 1197-214, 2006.

Barter LS, Mark LO, Smith AC, Antognini JF. Isoflurane potency in the Northern leopard frog Rana pipiens is similar to that in mammalian species. Vet Res Commun, 31(6): 757-63., 2006.

Law JR, Flanery MA, Wirth S, Yanike M, Smith AC, Frank LM, Suzuki WA, Brown EN, Stark CEL. Functional magnetic resonance imaging activity during the gradual acquisition and expression of paired-associate memory. Journal of Neuroscience, 25(24):5720-5729.

Smith AC, Stefani MR, Moghaddam B, Brown EN. Analysis and design of behavioral experiments to characterize population learning. J Neurophysiol, 93(3):1776-92.

Smith AC, Wu XB, Levy WB. Controlling activity fluctuations in large, sparsely connected random networks. Network: Computation in Neural Systems; 11:63-81.

Wirth S, Yanike M, Frank LM, Smith AC, Brown EN, Suzuki WA. Single neurons in the monkey hippocampus and learning of new associations. Science, 300(5625):1578-81.

Smith AC, Brown EN. Estimating a state-space model from point process observations. Neural Comput, 15(5):965-91.

Smith AC, Frank LM, Wirth S, Yanike M, Hu D, Kubota Y, Graybiel AM, Suzuki WA, Brown EN. Dynamic analysis of learning in behavioral experiments. J Neurosci, 24(2):447-61.

Smith AC, Gerrard JL, Barnes CA, McNaughton BL. Effect of age on burst firing characteristics of rat hippocampal pyramidal cells. Neuroreport, 11(17):3865-71.

UCDAVIS HEALTH SYSTEM

Anne Smith, Ph.D.

Smith AC, Roberts WW. Computational modeling of fiber formation in spunbonding of polypropylene with crystallization: Comparison with experiments. International Nonwovens Journal, 6(1):31-41.
Smith AC, Roberts WW. Straightening of crimped and hooked fibers in converging transport ducts: Computational modeling. Textile Research Journal; 64(6):325-334.

© 2015 UC Regents

UCDAVIS
HEALTH SYSTEM