



# NIMBioS

National Institute for Mathematical  
and Biological Synthesis



## Olfactory Modeling A NIMBioS Investigative Workshop

March 2-4, 2015

NIMBioS at the Univ. of Tennessee, Knoxville

The olfactory system provides specific advantages for understanding learning and memory, one of the most important goals in neuroscience. Technological advances have led to a wealth of information about how olfactory coding takes place in the mammalian nervous system, where experimental approaches range from large-scale measurement of neural activity during behavior to manipulation of activity via optogenetics. Integration of these data through comprehensive models of the neural networks involved in olfactory processing will advance our understanding of olfaction, including the relationship between neural activity and behavior. This workshop will review the current state of the mathematical approaches and tools for modeling olfaction, identify tasks that will maximize the impact of individual projects, and establish collaborations for large-scale modeling of this system, with a focus on incorporating realistic biophysical mechanisms for learning and memory.

Participation in the workshop is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within two weeks of the application deadline. If needed, financial support for travel, meals, and lodging is available for workshop attendees.

**Application deadline: December 14, 2014**

For more information about the workshop and a link to the online application form, go to [http://www.nimbios.org/workshops/WS\\_olfaction](http://www.nimbios.org/workshops/WS_olfaction)

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