

Bruno Olshausen, UC Davis  
(joint work with David Field)

### **What is the other 85% of V1 doing?**

A wide variety of papers have reviewed what is known about the function of primary visual cortex. In this talk, rather than stating what is known, we shall attempt to estimate how much is still unknown about V1 function. In particular, we identify five problems with the current view of V1 that stem largely from experimental and theoretical biases, in addition to the contributions of nonlinearities in the cortex that are not well understood. Our purpose is to open the door to new theories, a number of which we describe along with some proposals for testing them.