

# CENTER FOR COGNITIVE SCIENCE

University at Buffalo, State University of New York

Wednesday, August 30, 2000  
280 Park Hall  
North Campus  
2:00 pm –3:30 pm

## **“Cortical Reorganization of Visual and Language Functions after Early Auditory Deprivation”**

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Studies of adults who have altered sensory and language experience, such as congenitally deaf individuals, suggest that different brain systems within vision and within language display different degrees of experience-dependent modification. Within vision, the organization of systems involved in processing peripheral space and in sustaining spatial attention is most altered following auditory deprivation. Within language, altered language experience such as the exposure to a visio-manual language (American Sign Language) does not alter the bias of the left hemisphere to process natural languages. However, in contrast to English, ASL strongly recruits the right hemisphere indicating that the specific processing requirements of the language can also influence the organization of the language systems of the brain. Hypotheses concerning the origins of differential effects of early experience will be discussed.

**Refreshments will be available  
Everyone is welcome to attend!**

For information please call the Cognitive Science Office at (716) 645-3794 or check  
<http://www.cogsci.buffalo.edu/>