

## Department of Biomedical Engineering      Division of Biokinesiology and Physical Therapy

Engineering  
Neuroscience & Health

Seminar Series

Presents:

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Monday

October 27, 2008

4:00 p.m.

Refreshments  
will be served 3– 4 p.m.

Locations:

*Seminar is simultaneously presented***UPC: HNB 100 – LIVE**

Hedco Neurosciences Building

UPC Campus Map/Directions: <http://www.usc.edu/about/visit/upc/>**HSC: 147 – Video Conference**

Center for the Health Professional

HSC Campus Map/Directions: <http://www.usc.edu/about/visit/hsc/>**Linguistic structuring of speech articulation**

As research in speech production becomes more integrated with linguistic theory, it has become increasingly clear that speech articulation cannot be understood independently of complex linguistic structure. This structure occurs at different levels of granularity ranging from the internal structuring of words to the informational or prosodic structuring of utterances. Influences of high-level linguistic organization pervade low-level articulatory behavior. We will consider particulars of how linguistic structure conditions the temporal realization of articulatory movement during speaking. Specifically, we will use kinematic studies of articulation to illuminate the interaction of syllable structure, which is phonological in nature, and phrasal structure, which is prosodic in nature. Experiments using articulatory kinematic data and concomitant modeling of their results provide a profile of the manner in which the temporal patterning of articulatory gestures is shaped. Understanding the organization of articulation as a function of the linguistic structuring of utterances is critical to developing a unified account of how abstract linguistic structure is communicated in spoken language.

**Web Cast**<http://capture.usc.edu/college/Catalog/?cid=af180d48-ceff-42b9-a35c-eb199daed320>**Information about all seminars can be found at**<http://www-clmc.usc.edu/~heiko/ENH>