

## **Universals Workshop**

**Lisa Davidson (NYU)**

**Monday, January 30, 3:30-5pm**

**Location: Boylston 104**

### Phonation patterns and laryngeal gestural specification in American English obstruents

This research presents a detailed acoustic analysis of phonation in obstruents in American English (AE) to investigate the contextual factors that enhance or inhibit phonation. The current study examines the appearance of phonation in obstruents for in a corpus of read speech with 37 AE speakers. Linguistic factors such as phrase and word position, stress, and the preceding phoneme are examined and are shown to condition the presence and degree of phonation during the constriction period of stops and fricatives. A comparison of voiced and voiceless obstruents shows similar patterns, though the overall amount of phonation is considerably lower for voiceless obstruents. The amount of phonation present is further analyzed by characterizing where in the constriction interval phonation appears. Carryover phonation (or “bleed”) from a preceding sonorant is most common for stops, while a “trough” pattern (phonation that dies out and then begins again before the end of the closure) is more prevalent for fricatives. These acoustic patterns, together with previous reports of laryngeal articulation and airflow measures, are the basis for a sketch of laryngeal timing in a gestural phonology framework.