



Speech Production and Perception Breakout Session

Our Charge



- **Identify most promising (revolutionary) directions of research**
- **Discuss a roadmap for technology dissemination**
 - To students, educators, and researchers
 - For teaching, research, and application development

General Discussions



- **Production research can help ASR**
 - Timing information
 - Pronunciation modeling
- **Audio/visual symbiosis**
- **Structure of production models are not precise (e.g., aerodynamics) and are computationally costly**
- **Perception research focuses on discrimination**

Production: Research Directions



- **Create infrastructure for studying production**
 - Large corpora of simultaneously recorded acoustic and articulatory data
- **Characterize inter- and intra-speaker variabilities**
- **Articulation, syllable structure, and multi-tier interactions**
- **Understand the articulatory basis of “disfluency”**
- ...

Perception: Research Directions



- **More Miller/Nicely-like studies (using nonsense words)**
- **Lexical access strategies**
- **Combining perception and production research**