Lowering the Barrier to Innovation:

Low-cost but compelling tasks

- Small vocabulary, to reduce decoding costs
- Complex enough that other researchers & gov't sponsors will care about the results
- Training data must be public, test data must be changing
- Define task to avoid encouraging a simple "data collection" solution, e.g. cross-corpora tests

A more community-minded culture

- Reviewing (it's not a zero-sum game)
  - Diversity is healthy!
    - Value breadth as well as depth in research… both can lead to deeper understanding
    - Make room for many players, big and small
  - Multi-disciplinary work takes more time
  - Academic resources are more limited than industry
- Intellectual exchange
  - Comparing notes leads to better understanding
- Value/reward infrastructure contributions

For our industrial colleagues…

- It's difficult to do interesting ASR work in US universities without help from industry
- Notice that there are more academic players now
- Though times are tough, you can still support the academic innovation you need
  - Small $$: hardware & software gifts, internships, …
  - Infrastructure: lattices, forced alignments, software, …
  - Provide baselines: publish on small tasks, publish results on intermediate systems
  - Knowledge: advisory boards, thesis committees, tutorial lectures

Possible Points for Discussion

- What is the goal? Speech as a communication process, general audio, ….
- How do you do something radically new when people have had decades of tuning on HMMs?
- How can the community work together to push big programs (e.g. dialog systems, multi-modal systems) in the absence of large DARPA programs?
- How can companies & universities work together more effectively?