Methods of Engaging Students (Session 2)
What are the goals of the lab?

- Learn to think “like a chemist”
- Become proficient in basic lab skills
- Generate curiosity
- “Cool” labs VS. Skills based labs
  - Find a happy medium
Engaging Students

- Make the labs a positive experience
- Limit lecturing at the beginning of lab
- Quizzes part-way through the lab
- Use of incentives to encourage participation in pre-lab discussion
  - e.g. use of balance/instrument first
Lab Design

- Visually interesting
  - Coloured products/reactions and things that go ‘boom’

- Use of relevant and/or real-world examples
  - Practical applications, coffee, pharmaceuticals, etc.

- Relate theory to what they can observe
  - Macroscopic to microscopic

- Use of new technologies in the lab
  - 3D glasses, new gadgets, etc.
Lab Design con’t

- Synch the lecture and the lab
  - OR... Prof spends time in lecture discussing upcoming labs

- Topic oriented teaching

- Research style labs
  - Interdisciplinary labs
  - Independent projects

- Collaboration with industry and government